



Uisenis Wind Farm

Volume 2

Supplementary Environmental Information Chapters

June 2024

Uisenis Power Limited



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Introduction

- 1.1 In August 2023, Uisenis Power Limited (the applicant) submitted an application to the Scottish Government Energy Consents Unit (ECU) for Section 36 consent under the Electricity Act 1989, to install and operate a wind farm (the proposed development) on the Isle of Lewis, within the Comhairle nan Eilean Siar (CnES), Western Isles Council administrative area. A request was also made by the applicant that planning permission for the proposed development be deemed to be granted under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997.
- 1.2 The proposed development would be located on the Eisgein (Eishken) Estate, CnES administrative area, centred on National Grid Reference (NGR) NB 31366 12772. The application for consent (ECU Reference: ECU00004568) comprised 25 turbines – 23 turbines with a proposed blade tip height of up to 200m and three turbines with a proposed blade tip height of up to 180m – and associated infrastructure. The application was accompanied by an Environmental Impact Assessment (EIA) Report which was prepared in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations).

Purpose of Supplementary Environmental Information

- 1.3 The EIA Regulations include provision for the preparation of Supplementary Environmental Information (SEI), where further work in relation to the likely environmental effects has been undertaken. This may reflect the fact that a project has been modified since the original application was submitted, and updates to the EIA are necessary. It may also be as a result of further information being requested by the determining authority or a consultee.
- 1.4 This SEI has been prepared to provide further information to the EIA Report (as submitted in August 2023), including amendments to the proposed development since the original application was submitted, and made to address certain information requests from consultees during the consultation period.
- 1.5 The SEI is intended to be read alongside and complement the EIA Report, to ensure that all relevant environmental information is available for consideration by the determining authority. Unless otherwise stated, the information contained in the EIA Report remains valid.
- 1.6 In summary, this SEI for the proposed development is intended to provide additional information relating to the EIA Report, explain the amendments to the proposed development (and where appropriate re-assess effects) and address the key points that have been raised by consultees during the consultation process for the application.
- 1.7 In each chapter of this SEI, details are provided where relevant, on the consultation responses received during the application consultation period and how these have been addressed, if necessary.
- 1.8 The information contained in this SEI is considered to be substantive information for the purposes of the EIA Regulations. It will therefore be published as additional information in terms of Regulation 20 of the EIA Regulations and publicly advertised as the same.

Responsibility for the Supplementary Environmental Information

- 1.9 This SEI has been prepared by SLR Consulting, and the associated specialists who contributed to the EIA Report, as follows:
- SLR: the introductory chapters (Chapters 1-6), Ecology (Chapter 8), Hydrology, Hydrogeology, Geology and Soils (Chapter 10), Cultural Heritage and Archaeology (Chapter 11), Socio-Economics and Land Use (Chapter 14), Other Issues (Chapter 16) and Schedule of Commitments (Chapter 17);
 - Land Use Consultants (LUC): Landscape and Visual (Chapter 7);
 - MacArthur Green: Ornithology (Chapter 9);
 - Pell Frischmann: Site Access, Traffic and Transport (Chapter 12);
 - Bow Acoustics: Noise (Chapter 13); and
 - Wind Business: Aviation (Other Issues – Chapter 15).

Statement of Expertise

1.10 In the context of the EIA Regulations, **Table 1-1** below outlines the relevant expertise and / or qualifications of the experts who prepared the EIA Report and have contributed to this SEI. The SEI team is led by SLR with assistance from specialist consultants. **Table 1-1** demonstrates the relevant competency for each technical discipline covered in the EIA Report and this SEI.

Table 1-1: EIA / SEI Team Competency

| Discipline | Specialist Assessor | Qualifications | Years of Experience |
|---|--------------------------------|-------------------------------------|---------------------|
| Renewable Energy and Planning Policy | SLR: | | |
| | - Michael Fenny | MA(Hons), MSc, MRTPI | 17 years |
| | - Alastair Smith | BSc (Hons), MSc, LRTPI | 6 years |
| Landscape and Visual | - Emma Quinn | BSc (Hons), MSc, AIEEMA | 6 years |
| | LUC: | | |
| - Dan Walker | BSc (Hons), MLA, CMLI | 14 years | |
| - Allison Palenske | IMFA, BLA, Associate MLI, CMLI | 6 years | |
| Ecology | SLR: | | |
| | - Duncan Watson | BSc (Hons) MSc CEnv MCIEEM | 21 years |
| | - Sara Toule | BSc (Hons), MRes, ACIEEM | 14 years |
| - Kirstie Hazelwood | BMus (Hons), MSc, PhD, ACIEEM | 9 years | |
| Ornithology | MacArthur Green: | | |
| | - Rafe Dewar | BSc (Hons), MSc | 18 years |
| Hydrology, Hydrogeology and Soils (including Peat Landslide Hazard Risk Assessment) | SLR: | | |
| | - Gordon Robb | BSc (Hons), MSc, MBA, FCIWEM, C.WEM | 31 years |
| | - Alan Huntridge | BSc (Hons), MSc | 16 years |
| | - Ruari Watson | BSc (Hons) | 11 years |
| - Katy Rainford | | 6 years | |

| | | | |
|---|--|--|-------------------------------------|
| Cultural Heritage and Archaeology | SLR: - Chris Morley - Beth Gray | BA (Hons), MPhil, MCIfA MA (Hons), ACIfA | 16 years 8 years |
| Noise and Vibration | Bow Acoustics: - Richard Carter | CEng, BEng (Hons), MIOA | 19 years |
| Site Access, Traffic and Transport | Pell Frischmann: - Gordon Buchan - Stephen Cochrane - Cezary Noremberg | BEng (Hons), MSc, FCIHT, CMILT BSc (Hons), HND, CMILT, MCIHT BEng (Hons) | 27 years 22 years 6 years |
| Socio-Economics, Tourism, Recreation and Land Use | SLR: - Anne Dugdale - Ben Wyper Development Economics: - Steve Lucas | BSc, MA, FIQ, MRTPI BSc, MSc BSc, MSc | 36 years 3 years 33 years |
| Aviation | Wind Business: - Ian Fletcher | B. Eng Mechanical Engineering | 22 years |
| Carbon Emissions | SLR: - Ruari Watson | BSc (Hons) | 11 years |
| Infrastructure, Telecommunications and Broadcast Services | SLR: - Alastair Smith | BSc (Hons), MSc, LRTPI | 6 years |
| Shadow Flicker | SLR: - Tim Doggett | BSc, MSc | 16 years |
| GIS | SLR: - Jon Salter - Sophie Humphry | BSc BSc, MSc | 9 years 7 years |

Structure and Presentation of the Supplementary Environmental Information

- 1.11 All of the EIA Report chapters have been reviewed to identify the need to update or replace content in light of the amendments to the proposed development and / or address the relevant consultees responses since the EIA Report was completed and submitted. Where an EIA Report chapter or assessment does not need updated, supplemented or replaced, no changes have been made (this will be explained in the relevant SEI chapter) as it is not the intention of this SEI to repeat information contained in the EIA Report that remains valid. As a consequence, whilst the structure and chapter numbering of the SEI reflects that of the EIA Report, the format and level of detail in the SEI chapters does vary.
- 1.12 Where Technical Appendices and Figures from the EIA Report have been updated, the original numbering has also been retained (but prefixed with 'SEI'). Where new Technical Appendices and Figures have been added, their numbering follows on from those in the EIA Report (and are prefixed with 'SEI'). Technical Appendices and Figures from the EIA Report that are not updated as part of this SEI remain valid, and this is clearly stated in the introductory text for each SEI chapter.

- 1.13 This SEI comprises four volumes, the first containing the SEI Non Technical Summary (NTS)¹, the second containing the SEI Chapters, the third containing the SEI Figures and Technical Appendices, and the fourth containing the SEI wirelines and photomontages.
- 1.14 The content of the SEI chapters, including the extent to which they update, or supplement information in the EIA Report is set out below, adopting the original chapter numbering:
- **SEI Chapter 1: Introduction (this Chapter)**, provides a brief introduction to the purpose of the SEI, the reasons for submitting SEI in relation to the proposed development, the format of the SEI, and how the SEI is being advertised and consulted on;
 - **SEI Chapter 2: Site Description and Design Evolution**, sets out the amendments to the site layout of the proposed development, and if the design principles remain as per the EIA Report;
 - **SEI Chapter 3: Description of Development**, includes further details of the amendments to the proposed development;
 - **SEI Chapter 4: Renewable Energy and Planning Policy**, considers relevant new policy documents, and updates on meeting renewable energy targets, that have become available / been adopted, since the submission of the S36 application in August 2023.
 - **SEI Chapter 5: Environmental Impact Assessment**, discusses the need for EIA and sets out the approach to assessment, within the SEI, taken in respect of the proposed development;
 - **SEI Chapter 6: Scoping and Consultation**, outlines consultation responses following the submission of the Uisenis Wind Farm application in August 2023, and identifies where in the SEI relevant information can be found;
 - **SEI Chapter 7: Landscape and Visual**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 7 of the EIA Report.
 - **SEI Chapter 8: Ecology**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 8 of the EIA Report;
 - **SEI Chapter 9: Ornithology**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 9 of the EIA Report;
 - **SEI Chapter 10: Hydrology, Hydrogeology, and Geology**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 10 of the EIA Report;
 - **SEI Chapter 11: Cultural Heritage and Archaeology**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 11 of the EIA Report;

¹ The SEI NTS provides a brief, easy to understand overview of the SEI. It is not designed to replace the original EIA Report NTS in its entirety.

- **SEI Chapter 12: Site Access, Traffic and Transport**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 12 of the EIA Report;
- **SEI Chapter 13: Noise**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 13 of the EIA Report;
- **SEI Chapter 14: Socio-Economics, Tourism, Recreation and Land Use**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 14 of the EIA Report;
- **SEI Chapter 15: Aviation**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 15 of the EIA Report; and
- **SEI Chapter 16: Other Issues**, considers the implications of the proposed amendments to the proposed development for the assessment findings presented in Chapter 16 of the EIA Report; and
- **SEI Chapter 17: Schedule of Commitments**, considers and updates the summary of proposed mitigation, compensation and enhancement measures proposed in the EIA Report, to take account of the amendments to the proposed development.

Status of the Documents that were Submitted Alongside the EIA Report

- 1.15 The EIA Report NTS should be read in conjunction with the SEI NTS. The original Design and Access Statement (DAS) remains unchanged, however should be read in conjunction with Chapter 2 of this SEI. The original Pre-Application Consultation (PAC) Report remains unchanged. The original Planning Statement remains unchanged. The original Project Comparison Report remains unchanged, however should be read in conjunction with all chapters of this SEI.

Approach to the Supplementary Environmental Information

- 1.16 The approach to EIA set out in Chapter 5 of the EIA Report describes the methodology used to conduct the EIA in accordance with legislation, policy and accepted good practice. This approach has also been adopted for the preparation of the SEI, as appropriate.
- 1.17 Overall, each SEI chapter seeks to:
- provide a revised assessment, where required, taking into account the amendments that have been made to the proposed development; and
 - provide new or additional information, where required, to address consultation responses, or to supplement what was previously provided within the EIA Report.
- 1.18 For completeness, a summary of changes to the significance of effects (if there are any) as presented in the EIA Report, is provided at the end of each SEI topic chapter.
- 1.19 Figures have not been updated where amendments to the layout of the proposed development will have no effects on the findings of the EIA Report. Figures prefixed 'SEI' and with the same number as those included in the EIA Report means that the original EIA Report Figure has been superseded.

- 1.20 Unless otherwise stated, the overall scope of the EIA and SEI remains as stated in Chapter 1 of the EIA Report and Chapter 1 of the SEI.

Consultation on the Application (Including SEI)

- 1.21 Although not all consultation responses to the Uisenis Wind Farm application have resulted in the production of additional information, an overview of the consultee comments on the application is provided in each SEI topic chapter where relevant, as well as details on how the issues have been addressed.
- 1.22 This SEI will be advertised and a notice published as follows:
- on the project website: <https://eurowindenergy.com/uk/our-projects/uisenis-wind-farm>;
 - in the Edinburgh Gazette; and
 - in the Stornoway Gazette.
- 1.23 This SEI is being made available for viewing in hard copy format at the following locations, during their opening hours:
- Comhairle nan Eilean Siar Council Building, Sandwick Road, Stornoway, Isle of Lewis, HS1 2BW;
 - Kinloch Historical Society, Community Hub, Balallan HS2 9PN;
 - North Lochs Community Association, Leurbost HS2 9NU; and
 - Ravenspoint Café, Kershader, South Lochs HS2 9QA.
- 1.24 A copy of the SEI volumes will be made available for download from the project website at: <https://eurowindenergy.com/uk/our-projects/uisenis-wind-farm>.
- 1.25 Paper copies of the SEI NTS are available free of charge from:
- SLR Consulting Limited
Office 4.04, Clockwise Offices,
Savoy Tower,
77 Renfrew St,
Glasgow,
G2 3BZ
- Tel: 07718 482283
- 1.26 Paper copies of the SEI may be purchased by arrangement from the above address for £500 per copy, or £15 per disk/USB memory stick copy. The price of the paper copy reflects the cost of producing all of the Landscape and Visual photomontages at the recommended size. As such, a CD/USB memory stick version is recommended.
- 1.27 The submission of this SEI will trigger another public consultation period of 30 days, during which members of the public and consultees will have the opportunity to make representations to the ECU on its content. The 30 day consultation period will run from the

date of the final public notice (which will be published as per paragraph 1.22 and via the project website: <https://eurowindenergy.com/uk/our-projects/uisenis-wind-farm>).

References

Electricity Act 1989.

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

Town and Country Planning (Scotland) Act 1997.

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Introduction

- 2.1 **Chapter 2: Site Description and Design Evolution**, of the Environmental Impact Assessment (EIA) Report sets out the design strategy for the proposed development which is to balance achieving maximum energy yield whilst creating a layout which limits (where possible) visual effects and effects on other environmental constraints. The design strategy for the proposed development remains the same as set out in the EIA Report.
- 2.2 This SEI Chapter sets out the changes to the proposed development following consultee responses to the Uisenis Wind Farm application.

Design Changes to the Proposed Development

- 2.3 Consultees NatureScot, Scottish Environment Protection Agency (SEPA), and the Royal Society for the Protection of Birds all responded to the Uisenis Wind Farm application consultation, requesting/recommending that some of the proposed infrastructure be moved, in order to address specific concerns. Further to this, all three of these consultees also requested/recommended that additional areas be proposed for peat bog restoration.
- 2.4 **Table 2-1** details a summary of the relevant consultee responses from NatureScot, SEPA and RSPB. Only responses where a direct request/recommendation for something that would result in a change to the 2023 Application Layout or application boundary, are included in **Table 2-1**.

Table 2-1: Summary of NatureScot, SEPA and RSPB Consultation Responses

| Consultee | Date | Consultee Response |
|-----------|------------------|---|
| SEPA | 21 November 2023 | <p>[Part A]: The peatland quality information provided to us by the developer shows that much of the site is near natural condition blanket bog. T13, T16, T18, T19 and T24 have no impact on near natural blanket bog. We therefore seek modifications to the turbine layout to clearly demonstrate how steps have been taken to avoid near natural condition habitat. This advice applies to relocation or modification of construction compounds and borrow pits.</p> <p>[Part B]: Peat depth on site is variable and there are a large number of smaller pockets of deeper peat on site. It is recommended that infrastructure is moved to avoid the deepest areas of peat / or information is provided to demonstrate that the current layout minimises the volume of peat to be disturbed, which we note is currently estimated to be 194,942m³. The dimensions or exact location of the North construction compound should be amended to avoid the deeper areas of peat.</p> <p>[Part C]: Focus on relocating infrastructure proposed on near natural habitat located on peat over 1m in depth.</p> <p>[Part D]: Peatland restoration proposals (not accounting for grazing management) should be significantly expanded.</p> |

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| | | <p><i>[Part E]:</i></p> <p>At T2 we consider that a buffer of 10m between the proposed clearance area and watercourse is not large enough to put in place measures to protect the water environment.</p> <p>T2 infrastructure should be repositioned to increase the buffer; and drawing provided showing the site specific to protect the water environment.</p> |
| SEPA | 10 April 2024 | <p><i>[A letter detailing potential design amendments was issued to SEPA in March 2024 – This response is a summary of SEPA’s comments with regards to infrastructure]</i></p> <p>Overall...we are supportive of all the amendments proposed...[however]...there would seem to be a number of locations where further amendments could be made to improve the finalised layout and I encourage you to consider these.</p> <p><i>[The following are the potential improvements suggested by SEPA]:</i></p> <p>Turbine No.1 - Could flipping the crane hard standing to the other side of the road reduce area of near nature habitat impacted – while not significantly increasing peat disturbance volumes?</p> <p>Turbine No.3 - Could moving all the infrastructure slightly further south reduce the area of near natural habitat impacted?</p> <p>Turbine No.5 - Could moving infrastructure further north or/and west reduce the area of near natural habitat impacted?</p> <p>Turbine No.6 - Could moving infrastructure further north and east reduce the area of near natural habitat impacted?</p> <p>Turbine No.7 - Could moving infrastructure further west reduce the area of near natural habitat impacted?</p> <p>Turbine No.10 - Could moving infrastructure further north reduce the area of near natural habitat impacted without significantly increasing peat excavation?</p> <p>Turbine No.22 - Could moving the infrastructure further west reduce the area of near natural habitat impacted without significantly increasing peat excavation?</p> <p>Turbine No.23 - Could moving the infrastructure further west reduce the area of near natural habitat impacted without significantly increasing peat excavation?</p> <p>Turbine No.24 - Could moving the infrastructure further south reduce peat excavation?</p> |

SEI SITE DESCRIPTION AND DESIGN EVOLUTION 2

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|--|------------------|--|
| | | Turbine No.25 - Could moving the infrastructure further north reduce peat excavation? |
| NatureScot Part I | 04 December 2023 | The oHMP should include enhancement, which we would recommend is in the region of 10% of the baseline assessment of peatland within the site, which is quoted as being 758.2ha, therefore 75.82ha required for enhancement. |
| | | <p>We recommend reduction or removal of the southern turbine cluster (T19-T25), as this would significantly reduce collision risk for golden eagle and likelihood of abandonment of one range.</p> <p>If these turbines are included in any consent granted, we recommend that the plan to paint one blade black on each turbine should not be progressed.</p> <p>This proposed mitigation measure both exacerbates adverse visual impacts, and is unlikely to deliver the mitigation of ornithological impacts that are intended.</p> |
| NatureScot – Part II (White tailed Eagle Specific) | 07 February 2024 | It is clear that the southern cluster of turbines, T19-T25, makes a disproportionate contribution to the total predicted collision mortality. Our advice is that removing these would significantly reduce the impacts on white-tailed eagle arising from this development proposal. |
| RSPB | 08 December 2023 | The Outline Habitat Management Plan should be revised to include actions to provide foraging habitat away from the proposed turbine array (both eagle species). |
| | | Consideration should be given to painting additional turbine blades black within the northern array. |
| | | We suggest those closest to roost sites and frequent flight areas, i.e., the outer most turbines. |
| | | Suggested removal of turbines within 1km of Golden Eagle nest sites and consideration of removing some turbines within the 2km core territory range from nest sites. |
| | | Loss of good/well-used Golden Eagle habitat would be reduced by removing further turbines from the scheme i.e. eastern and western outlying turbines T7, 12, 13 and 18, and any possible from the southern array. |

Consultee Response Driven Design Changes

2.5 In order to address the consultee responses detailed in **Table 2-1**, the following, detailed in **Table 2-2** to **Table 2-5**, are the amendments to the proposed development (from that set out in the EIA Report):

Table 2-2: Amendments to Wind Turbines and Crane Pads

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---|--|
| Turbine No.2 (and associated crane pad) | <p>Relocation of Turbine No.2 and its associated crane pad approximately 57m north west from 132350, 914561 to 132296, 914578.</p> <p>This design amendment was primarily made to address SEPAs response dated 21 November 2023 and detailed as 'Part E' in Table 2-1 above. The design amendment moves turbine infrastructure further from watercourses to meet the industry</p> |

SEI SITE DESCRIPTION AND DESIGN EVOLUTION 2

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--|--|
| | standard that SEPA refers to and near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Turbine No.3 (and associated crane pad) | Relocation of Turbine No.3 and its associated crane pad approximately 25m south from 131037, 914236 to 131032, 914211. This design amendment was made to address SEPA's letter dated 10 April 2024, specifically the section in relation to Turbine No.3. The design amendment moves some of the turbine infrastructure further from near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Turbine No.4 (and associated crane pad) | Relocation of Turbine No.4 and its associated crane pad approximately 23m east from 131599, 914371 to 131621, 914367. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part B' in Table 2-1 above. The design amendment moves turbine infrastructure away from deeper peat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Turbine No.8 (and associated crane pad) | Relocation of Turbine No.8 and its associated crane pad approximately 39m north east from 132352, 913719 to 132374, 913751. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Parts A, B and C' in Table 2-1 above. The design amendment moves turbine infrastructure away from deep peat and near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Turbine No.14 (and associated crane pad) | Relocation of Turbine No.14 and its associated crane pad approximately 24m north, from 131384, 912882 to 131380, 912859. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Parts A, B and C' in Table 2-1 above. The design amendment moves turbine infrastructure away from deep peat and near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Turbine No.25 (and associated crane pad) | Relocation of Turbine No.25 and its associated crane pad approximately 21m north, from 131764, 911402 to 131772, 911422. This design amendment was made to address SEPA's letter dated 10 April 2024, specifically the section in relation to Turbine No.25. The design amendment moves some of the turbine infrastructure further from near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Crane pad associated with Turbine No. 16 | Rotation of the crane pad associated with Turbine No.16 approximately 35m east. This design amendment was made to |

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| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|---|
| | address SEPA’s response dated 21 November 2023 and detailed as ‘Part B’ in Table 2-1 above. The design amendment moves turbine infrastructure away from deeper peat and avoids the need for floated track. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |

- 2.6 A comparison of the previous 2023 Application Layout (as set out in the EIA Report) and the 2024 SEI Layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**.
- 2.7 **SEI Figure 2.9a-j** shows the new turbine and crane pad locations (as well as all other changes to the 2023 Application Layout detailed in the tables below) compared to their previous locations, in relation to peat depth and watercourses. **SEI Figure 2.10a-h** shows the new turbine and crane pad locations (as well as all other changes to the 2023 Application Layout detailed in the tables below) compared to their previous locations, in relation to peat bog habitat condition.
- 2.8 **SEI Figure 3.1** shows the 2024 SEI Layout.
- 2.9 The amendments to the turbine locations can also be seen in the updated comparative wirelines which are provided in Volume 4 of the SEI in order to support **SEI Chapter 7: Landscape and Visual**.
- 2.10 Some consultees (RSPB and NatureScot) recommended the removal of Turbines No.19 to No.25 in order to reduce impacts on white tailed and golden eagles. This request has been considered, however in order for the proposed development to remain financially viable, the applicant has advised that these turbines can not be removed.
- 2.11 NatureScot, in their response set out in **Table 2-1**, advise that the proposals for painted blade mitigation to be applied to some of the wind turbines, be removed. However, following subsequent discussions with NatureScot, it has been decided to keep the proposed painted blade mitigation.
- 2.12 The potential site layout improvements, suggested by SEPA (see **Table 2-1**) in their response dated 10 April 2024, were all considered, however due to other constraints such as topography, telecommunications, landscape and visual, and aviation constraints, it was deemed that only Turbines No.3 and No.25 could be relocated (see **Table 2-2** for detail on the changes to these two turbines).

Table 2-3: Amendments to Temporary Construction Compounds

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--------------------------------------|--|
| Temporary Construction Compound No.1 | Reduction in the size of what was previously called the northern temporary construction compound (and adding a track spur) from approximately 1.44ha to 0.64ha. This design amendment was made to address SEPA’s response dated 21 November 2023 and detailed as ‘Parts A, B and C’ in Table 2-1 above. The design amendment moves the temporary construction compound out of near natural peat bog habitat and out of deeper areas of peat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |

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| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--------------------------------------|--|
| Temporary Construction Compound No.2 | Reorientation and reduction in the size of what was previously called the southern temporary construction compound (and adding a track spur) from approximately 1.20ha to 0.28ha. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part A' in Table 2-1 above. The design amendment moves the temporary construction compound out of near natural peat bog habitat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Temporary Construction Compound No.3 | Addition of a new temporary construction compound (called No.3) at 132556, 914299 of approximately 0.63ha. This additional temporary construction compound is required due to the reduction in the size of the originally proposed compounds detailed above. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |

2.13 A comparison of the previous 2023 Application Layout (as set out in the EIA Report) and amended 2024 SEI Layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**. These Figures show the new and revised temporary construction compound locations/sizes, in relation to peat depth and watercourses, and peat bog habitat condition respectively.

2.14 **SEI Figure 3.1** shows the 2024 SEI Layout.

Table 2-4: Amendments to Borrow Pits

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|--|
| Borrow Pit No.1 | Borrow pit no.1 has reduced in size from 0.93ha to 0.66ha. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part A' in Table 2-1 above. The design amendment moves the borrow pit out of near natural peat bog. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Borrow Pit No.2 | Borrow pit no.2 has reduced in size from 0.79ha to 0.40ha. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part A' in Table 2-1 above. The design amendment moves the borrow pit out of near natural peat bog. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Borrow Pit No.4 | Borrow pit no.4 has been relocated approximately 117m to the north, and has reduced in size from 0.85ha to 0.33ha. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part A' in Table 2-1 above. The design amendment moves the borrow pit out of near natural peat bog. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Borrow Pit No.5 | Borrow pit no.5 has reduced in size from 2.25ha to 1.28ha. |

SEI SITE DESCRIPTION AND DESIGN EVOLUTION 2

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|--|
| | This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Parts A, B and C' in Table 2-1 above. The design amendment moves the borrow pit out of near natural peat bog and away from deeper peat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Borrow Pit No.6 | An additional borrow pit, borrow pit no.6 is located at approximately 130584, 911784 and is 0.60ha in size. This additional borrow pit is required due to the reduction in the size of the originally proposed compounds detailed above. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Borrow Pit No.7 | An additional borrow pit, borrow pit no.7 is located at approximately 131871, 915688 and is 1.78ha in size. This additional borrow pit is required due to the reduction in the size of the originally proposed compounds detailed above. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |

2.15 A comparison of the previous 2023 Application Layout (as set out in the EIA Report) and amended 2024 SEI Layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**. These Figures show the new and revised borrow pit search area locations/sizes, in relation to peat depth and watercourses, and peat bog habitat condition respectively.

2.16 **SEI Figure 3.1** show the 2024 SEI Layout.

Table 2-5: Amendments to Access Tracks

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|--|
| Access Track | An additional approximately 232m of track going from the Eishken road to the additional substation compound is proposed. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Access Track | An additional spur of track, approximately 293m, going from the Eishken road to the relocated Turbine No.2. This is as a result of moving Turbine No.2 to address SEPA's response dated 21 November 2023 and detailed as 'Part E' in Table 2-1 above. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |
| Access Track | The track from the Eishken road to Turbine No.16 has been amended, with the track now shortened from approximately 468m to 347m. The new track alignment was made to address SEPA's response dated 21 November 2023 and detailed as 'Parts B and C' in Table 2-1 above. The design amendment avoids the need to float the track by altering the track route to be through an area of shallower peat. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout. |

SEI SITE DESCRIPTION AND DESIGN EVOLUTION 2

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|--|
| Access Track | <p>The track spur to Turbine No.14 has moved slightly west as a result of Turbine No.14 being relocated to address SEPA's response dated 21 November 2023 and detailed as 'Parts A, B and C' in Table 2-1 above.</p> <p>The track length is now approximately 370m compared to 351m previously. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout.</p> |
| Access Track | <p>The turning head for Turbine No.20 has been flipped to the other side of the track and moved approximately 38m west. This design alteration was made to address SEPA's response dated 21 November 2023 and detailed as 'Part A' in Table 2-1 above. The design amendment moves the turning head out of near natural peat bog.</p> <p>See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout.</p> |
| Access Track | <p>There are now track spurs going to temporary construction compounds no.1 and no.2. These are approximately 15m and 41m long respectively. This is as a result of resizing the temporary construction compounds to address SEPA's response dated 21 November 2023 and detailed as 'Parts A, B and C' in Table 2-1 above.</p> <p>See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout.</p> |
| Access Track | <p>There is an additional 0.46km of floated track proposed. Approximately 194m of this is immediately north of Turbine No.11, and approximately 267m across two sections of track between Turbine No.21 and Turbine No.24. This design amendment was made to address SEPA's response dated 21 November 2023 and detailed as 'Part B and C' in Table 2-1 above.</p> <p>See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout.</p> |

2.17 A comparison of the previous 2023 Application Layout (as set out in the EIA Report) and amended 2024 SEI Layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**. These Figures show the amended access track alignment (including floated track), in relation to peat depth and watercourses, and peat bog habitat condition respectively.

2.18 **SEI Figure 3.1** show the 2024 SEI Layout.

Application Boundary / Site Area

2.19 The application boundary has expanded in order to include additional areas for proposed peat bog restoration, and an expansion of the fenced off area for reduced grazing of wet heath habitat (see **SEI Chapter 8**), and also to encompass an additional substation compound (covered in **Table 2-6** below). These amendments have been made to address SEPA's response dated 21 November 2023 and detailed as 'Part D' in **Table 2-1**. These amendments also address, in part, the responses from NatureScot (dated 04 December 2023) and RSPB (dated 08 December 2023).

SEI SITE DESCRIPTION AND DESIGN EVOLUTION 2

- 2.20 As a result the Site area (and consequently the application boundary) has increased from 1,420ha (as presented in the EIA Report) to 1,647ha.
- 2.21 **SEI Figure 2.11** shows the amended application boundary, with the detail of where the application boundary has been expanded. **Figure 1.2** of the EIA Report can be viewed to see the now superseded application boundary, and compared to **SEI Figure 2.11**.
- 2.22 **SEI Figure 3.1** shows the 2024 SEI Layout.

Non-Consultee Response Driven Design Changes

- 2.23 The following, detailed in **Table 2-6**, are the design amendments to the proposed development (from that set out in the EIA Report) which are not as a result of consultee comments:

Table 2-6: Amendments to Substation Compounds

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--------------------------|--|
| Substation Compound No.2 | <p>Since the submission of the Uisenis Wind Farm application, Scottish Hydro Electric Transmission Limited (SHETL) have advised that they require a larger footprint for their substation than previously envisaged. The proposed substation compound location identified in the EIA Report was not sufficient in size for both the Eurowind Energy Substation and the larger SHETL substation, and the compound could not be expanded without encroaching watercourse buffers and deep peat.</p> <p>As a result, a second substation compound has been included in the site layout of the proposed development. The additional substation compound is proposed to the north of the turbine array, at 131881, 915692. The additional substation compound footprint is 85m x 145m (1.23ha) and is located at 131881,915692. See SEI Figure 2.9a-j and SEI Figure 2.10a-h for a comparison of the 2023 Application Layout and the 2024 SEI Layout.</p> |

- 2.24 A comparison of the previous 2023 Application Layout (as set out in the EIA Report) and amended 2024 SEI Layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**. These Figures show the additional substation compound, in relation to near natural condition peat bog habitat, peat depth, and watercourses respectively.
- 2.25 **SEI Figure 3.1** show the 2024 SEI Layout.

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Introduction

- 3.1 **Chapter 3: Description of Development**, of the Environmental Impact Assessment (EIA) Report sets out the components of the proposed development for which Section 36 consent is being sought and which have been assessed in the EIA Report.
- 3.2 This Supplementary Environmental Information (SEI) Chapter provides further information in relation to the proposed amendments to the proposed development. The proposed description of the development remains largely unchanged from the EIA Report, with only minor amendments which are detailed in this SEI Chapter. All the information contained in Chapter 3 of the EIA Report remains valid unless stated otherwise in this SEI Chapter.
- 3.3 The amendments to the proposed development are detailed in **SEI Chapter 2**, and set out in **Table 3-1** below.

Table 3-1: Overview of Changes to Site Infrastructure from EIA Report to SEI

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--|---|
| Turbine No.2 (and associated crane pad) | Relocation of Turbine No.2 and its associated crane pad approximately 57m north west from 132350, 914561 to 132296, 914578. This design amendment moves turbine infrastructure further from watercourses and near natural peat bog habitat. |
| Turbine No.3 (and associated crane pad) | Relocation of Turbine No.3 and its associated crane pad approximately 25m south from 131037, 914236 to 131032, 914211. This design amendment moves some of the turbine infrastructure further from near natural peat bog habitat. |
| Turbine No.4 (and associated crane pad) | Relocation of Turbine No.4 and its associated crane pad approximately 23m east from 131599, 914371 to 131621, 914367. This design amendment moves turbine infrastructure away from deeper peat. |
| Turbine No.8 (and associated crane pad) | Relocation of Turbine No.8 and its associated crane pad approximately 39m north east from 132352, 913719 to 132374, 913751. This design amendment moves turbine infrastructure away from deep peat and near natural peat bog habitat. |
| Turbine No.14 (and associated crane pad) | Relocation of Turbine No.14 and its associated crane pad approximately 24m north, from 131384, 912882 to 131380, 912859. This design amendment moves turbine infrastructure away from deep peat and near natural peat bog habitat. |
| Turbine No.25 (and associated crane pad) | Relocation of Turbine No.25 and its associated crane pad approximately 21m north, from 131764, 911402 to 131772, 911422. This design amendment moves some of the turbine infrastructure further from near natural peat bog habitat. |
| Crane pad associated with Turbine No. 16 | Rotation of the crane pad associated with Turbine No.16 approximately 35m east. This design amendment moves turbine infrastructure away from deeper peat and avoids the need for floated track. |
| Temporary Construction Compound No.1 | Reduction in the size of what was previously called the northern temporary construction compound (and adding a track spur) from approximately 1.44ha to 0.64ha. This design amendment moves the temporary construction compound out of near natural peat bog habitat and out of deeper areas of peat. |

SEI DESCRIPTION OF DEVELOPMENT 3

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|--------------------------------------|---|
| Temporary Construction Compound No.2 | Reorientation and reduction in the size of what was previously called the southern temporary construction compound (and adding a track spur) from approximately 1.20ha to 0.28ha. This design amendment moves the temporary construction compound out of near natural peat bog habitat. |
| Temporary Construction Compound No.3 | Addition of a new temporary construction compound (called No.3) at 132556, 914299 of approximately 0.63ha. This additional temporary construction compound is required due to the reduction in the size of the originally proposed compounds detailed above. |
| Borrow Pit No.1 | Borrow pit no.1 has reduced in size from 0.93ha to 0.66ha. This design amendment moves the borrow pit out of near natural peat bog. |
| Borrow Pit No.2 | Borrow pit no.2 has reduced in size from 0.79ha to 0.40ha. This design amendment moves the borrow pit out of near natural peat bog. |
| Borrow Pit No.4 | Borrow pit no.4 has been relocated approximately 117m to the north, and has reduced in size from 0.85ha to 0.33ha. This design amendment moves the borrow pit out of near natural peat bog. |
| Borrow Pit No.5 | Borrow pit no.5 has reduced in size from 2.25ha to 1.28ha. This design amendment moves the borrow pit out of near natural peat bog and away from deeper peat. |
| Borrow Pit No.6 | An additional borrow pit, borrow pit no.6 is located at approximately 130584, 911784 and is 0.60ha in size. This additional borrow pit is required due to the reduction in the size of the originally proposed compounds detailed above. |
| Borrow Pit No.7 | An additional borrow pit, borrow pit no.7 is located at approximately 131871, 915688 and is 1.78ha in size. This additional borrow pit is required due to the reduction in the size of the originally proposed compounds detailed above. |
| Substation Compound No.2 | Since the submission of the Uisenis Wind Farm application, as discussed at our meeting on 26 February 2024, SHETL have advised that they require a larger footprint for their substation than previously envisaged. As a result, a second substation compound has been included in the site layout of the proposed development. The additional substation compound is proposed to the north of the turbine array, at 131881, 915692. The additional substation compound footprint is 85m x 145m (1.23ha) and is located at 131881,915692. |
| Access Track | An additional approximately 232.22m of track going from the Eishken road to the additional substation compound is proposed. |
| Access Track | An additional spur of track, approximately 292.54m, going from the Eishken road to the relocated Turbine No.2. |
| Access Track | The track from the Eishken road to Turbine No.16 has been amended, with the track now shortened from approximately 468.28m to 347.08m. The new track alignment avoids the need to float the track. |
| Access Track | The track spur to Turbine No.14 has moved slightly west as a result of Turbine No.14 being relocated. The track length is now approximately 369.53m compared to 350.91m previously. |

SEI DESCRIPTION OF DEVELOPMENT 3

| Site Infrastructure | Summary of Changes from EIA Report to SEI |
|---------------------|---|
| Access Track | The turning head for Turbine No.20 has been flipped to the other side of the track and moved approximately 38m west. |
| Access Track | There are now track spurs going to temporary construction compounds no.1 and no.2. These are approximately 15m and 41m long respectively. |
| Access Track | There is an additional 0.40km of floated track proposed. Approximately half of this is immediately north of Turbine No.11, and the rest being split across two sections of track between Turbine No.21 and Turbine No.24. |

- 3.4 No other changes to the site layout (turbines and associated infrastructure) are proposed.
- 3.5 **SEI Figure 3.1: Site Layout**, shows the amended site layout of the proposed development. **Figure 3.1** of the EIA Report is now superseded by **SEI Figure 3.1**. **Figures 3.10a, 3.10b, and 3.11b** are all superseded by **SEI Figures 3.10a, 3.10b, and 3.11b** respectively. **Figures 3.9a to 3.9d** are all superseded by **SEI Figures 3.9a to 3.9d**. The following new Figures are presented as part of this SEI Chapter: **SEI Figure 3.9f, SEI Figure 3.9g, SEI Figure 3.10c, and SEI Figure 3.12**. All other Figures associated with Chapter 3 of the EIA Report remain unchanged and valid.
- 3.6 **SEI Chapters 7 to 16** consider the amendments to the proposed development and if there are any changes to the effects as predicted in the EIA Report.
- 3.7 **Technical Appendix 3.1 Outline Construction Environmental Management Plan (CEMP)** associated with Chapter 3 of the EIA Report has been revised to reflect the amendments to the proposed development (i.e. project description, temporary compounds, access tracks, turbine hardstanding in watercourse, monitoring and reinstatement). The updated CEMP is presented as **SEI Technical Appendix 3.1**.

Site Area / Application Boundary

- 3.8 The application boundary has been amended to include additional areas of proposed peat bog restoration, extended fencing to reduce grazing on wet heath habitat, and an additional substation compound. **SEI Figure 3.1: Site Layout**, shows the new additional substation compound (and amended application boundary). The additional proposed peat bog restoration areas and extended wet heath habitat fencing are shown on **SEI Figure 8.5.1**.
- 3.9 The Site area (the area within the application boundary) has increased from 1,420ha to 1,647ha.

Wind Turbine Relocations

- 3.10 Due to the reasons outlined in **SEI Chapter 2** and **Table 3-1** above, six turbines (Turbine No.2, Turbine No.3, Turbine No.4, Turbine No.8, Turbine No.14 and Turbine No.25) and their associated crane pads, have been relocated (microsited). These turbine moves range from approximately 22m to approximately 56m and are therefore within the requested micrositing allowance of 75m.
- 3.11 There are no other changes to any turbine locations or turbine specifications (including hub height and tip height) from what was presented in the EIA Report.

SEI DESCRIPTION OF DEVELOPMENT 3

3.12 **Table 3-2** provides the amended turbine coordinates and specifications for the proposed development (only the coordinates for Turbine No.2, Turbine No.3, Turbine No.4, Turbine No.8, Turbine No.14 and Turbine No.25 have changed from what was presented in the EIA Report – these have been highlighted green in **Table 3-2** below).

Table 3-2: Turbine Coordinates and Specifications

| Turbine No. | Easting | Northing | Tip Height (m) | AOD (m) |
|-------------|---------|----------|----------------|---------|
| T1 | 131931 | 914665 | 180 | 47 |
| T2 | 132296 | 914578 | 200 | 40 |
| T3 | 131032 | 914211 | 200 | 89 |
| T4 | 131621 | 914367 | 200 | 60 |
| T5 | 131931 | 914002 | 200 | 56 |
| T6 | 132871 | 914180 | 200 | 42 |
| T7 | 133314 | 913950 | 200 | 38 |
| T8 | 132374 | 913751 | 200 | 63 |
| T9 | 131259 | 913846 | 200 | 68 |
| T10 | 131096 | 913430 | 200 | 89 |
| T11 | 131818 | 913429 | 200 | 50 |
| T12 | 130527 | 912958 | 180 | 140 |
| T13 | 130811 | 912781 | 200 | 117 |
| T14 | 131380 | 912859 | 200 | 58 |
| T15 | 131988 | 913015 | 200 | 42 |
| T16 | 132490 | 912962 | 200 | 64 |
| T17 | 132994 | 913371 | 200 | 63 |
| T18 | 133378 | 913187 | 200 | 40 |
| T19 | 131279 | 912006 | 180 | 127 |
| T20 | 130825 | 911882 | 200 | 106 |
| T21 | 130267 | 911675 | 200 | 131 |
| T22 | 130033 | 911225 | 200 | 123 |
| T23 | 130556 | 911241 | 200 | 112 |
| T24 | 131203 | 911364 | 200 | 76 |
| T25 | 131772 | 911422 | 200 | 91 |

3.13 **SEI Figure 2.9a-j** and **2.10a-h** show the amended turbine locations in relation to peat habitats and peat depth, respectively.

3.14 **SEI Chapters 7 to 16** consider the relocation of Turbines No.2, No.3, No.4, No.8, No.14, and No.25, and if there are any changes to the effects as predicted in the EIA Report.

Additional Substation Compound

- 3.15 Due to the reasons outlined in **SEI Chapter 2** and **Table 3-1** above, an additional substation compound is proposed to the north of the turbine array, at 131881, 915692. The additional substation compound footprint is up to 85m x 145m. The compound would include an area for car parking and High Voltage (HV) equipment, such as transformers and circuit breakers as well as a control building. This indicative onsite substation compound is shown on **SEI Figure 3.12**.
- 3.16 The main control building would be single storey, built on a pre-cast concrete base and would measure approximately 16m x 30m and 8m high (pitched roof which would be 8m high at its tallest point). It is proposed that the buildings would have a rendered finish; the final external finishes would be agreed with CnES, via condition, in the event of consent being granted.
- 3.17 **Table 3-3** details the changes in terms of number of proposed substation compounds and the associated land take, when comparing the previous (EIA Report) proposals and amended (SEI) proposals.

Table 3-3: Proposed Substation Compound Comparison

| Previous (EIA Report) Proposed Substation Compounds | | Amended (SEI) Proposed Substation Compounds | |
|---|--------|---|--------|
| EWE Substation Compound | 0.75ha | EWE Substation Compound | 0.75ha |
| | | SHETL Substation Compound | 1.23ha |
| Total | 0.75ha | Total | 1.98ha |

Amended Temporary Construction Compounds

- 3.18 Due to the reasons outlined in **SEI Chapter 2** and **Table 3-1** above, the two temporary construction compounds that were proposed in the EIA Report, have been re-sized and re-orientated. The northern temporary construction compound (now called temporary construction compound no.1), has been reduced in size and is now 0.64ha. The southern temporary construction compound (now called temporary construction compound no.2), has been reduced in size and is now 0.28ha. It has also been re-orientated to a more north-south direction.
- 3.19 An additional temporary construction compound (called temporary construction compound no.3) has been included in the proposed development and is 0.63ha.
- 3.20 **SEI Figures 3.10a, 3.10b** and **3.10c** illustrate the indicative temporary construction compounds, although the layout may differ depending onsite topography and contractor requirements.
- 3.21 **Table 3-4** details the changes in terms of number of proposed temporary construction compounds and the associated land take, when comparing the previous (EIA Report) proposals and amended (SEI) proposals.

Table 3-4: Proposed Temporary Construction Compound Comparison

| Previous (EIA Report) Proposed Temporary Construction Compounds | | Amended (SEI) Proposed Temporary Construction Compounds | |
|---|---------------|---|---------------|
| Temporary Construction Compound 1 | 1.44ha | Temporary Construction Compound 1 | 0.64ha |
| Temporary Construction Compound 2 | 1.20ha | Temporary Construction Compound 2 | 0.28ha |
| | | Temporary Construction Compound 3 | 0.63ha |
| Total | 2.64ha | Total | 1.55ha |

Amended Borrow Pit Locations

- 3.22 Due to the reasons outlined in **SEI Chapter 2** and **Table 3-1** above, the five borrow pits search areas that were proposed in the EIA Report, have been re-sized or relocated. Of these five borrow pit search areas four have been re-sized or relocated (borrow pit no.3 remains unchanged), and an additional two borrow pit search areas proposed.
- 3.23 Borrow pits no.1, no.2 and no.5 have been re-sized (all have been reduced in size), as follows:
- Borrow pit no.1 has reduced in size from 0.93ha to 0.66ha, and the volume of material anticipated to be won has been increased from 33,882m³ to 36,817 m³;
 - Borrow pit no.2 has reduced in size from 0.79ha to 0.40ha, and the volume of material anticipated to be won has been reduced from 18,459m³ to 16,721 m³;
 - Borrow pit no.5 has reduced in size from 2.25ha to 1.28ha, and the volume of material anticipated to be won has been increased from 106,040m³ to 116,519m³;
- 3.24 Borrow pit no.4 has been relocated approximately 117m to the north, and has reduced in size from 0.85ha to 0.33ha, and the volume of material anticipated to be won has been reduced from 16,797m³ to 9,655m³.
- 3.25 The two additional borrow pits proposed are borrow pit no.6 and borrow pit no.7:
- Borrow pit no.6 is located at approximately 130584, 911784 and is 0.60ha in size. The volume of material anticipated to be won is 32,007m³; and
 - Borrow pit no.7 is located at approximately 131871, 915688 and is 1.78ha in size. The volume of material anticipated to be won is 107,982m³. The additional substation compound is to be located here once quarrying operations cease.
- 3.26 Quarrying these borrow pits would provide a greater volume of rock than would be needed for the construction of the proposed development, but would allow for the current uncertainty of the quality of the rock at these locations. The current preference would be for borrow pit no.7 (**SEI Figure 3.9g**) to be used first, followed by borrow pit no.1 (**SEI Figure 3.9a**), borrow pit no.2 (**SEI Figure 3.9b**), borrow pit no.3 (**SEI Figure 3.9c**), borrow pit no.4 (**SEI Figure 3.9d**), borrow pit no.5 (**SEI Figure 3.9e**), and borrow pit no.6 (**SEI Figure 3.9f**).

SEI DESCRIPTION OF DEVELOPMENT 3

3.27 **Table 3-5** details the changes in terms of number and size of proposed borrow pit search areas and the associated land take, when comparing the previous (EIA Report) proposals and amended (SEI) proposals.

Table 3-5: Proposed Borrow Pits Size Comparison

| Previous Proposed Borrow Pits | | Amended Proposed Borrow Pits | |
|-------------------------------|---------------|------------------------------|---------------|
| BP 1 | 0.93ha | BP 1 | 0.66ha |
| BP 2 | 0.79ha | BP 2 | 0.40ha |
| BP 3 | 2.00ha | BP 3 | 2.00ha |
| BP 4 | 0.85ha | BP 4 | 0.33ha |
| BP 5 | 2.25ha | BP 5 | 1.28ha |
| | | BP 6 | 0.60ha |
| | | BP 7 | 1.78ha |
| Total | 6.82ha | Total | 7.05ha |

Amended Access Track

3.28 Due to the reasons outlined in **SEI Chapter 2** and **Table 3-1** above, there are amendments to the proposed access track shown in the EIA Report. The main updates to the access tracks proposed are as follows:

- An additional approximately 232.22m of track going from the Eishken road to the additional substation compound;
- An additional spur of track, approximately 293m, going from the Eishken road to the relocated Turbine No.2;
- The track from the Eishken road to Turbine No.16 has been amended with the track now shortened from approximately 468m to 347m. The new track alignment avoids the need to float the track;
- The track spur to Turbine No.14 has moved slightly west as a result of Turbine No.14 being relocated. The track length is now approximately 370m compared to 351m previously;
- The turning head for Turbine No.20 has ben flipped to the other side of the track and moved approximately 38m west;
- There are now track spurs going to temporary construction compounds no.1 and no.2. These are approximately 15m and 41m long respectively; and
- There is an additional 0.40km of floated track proposed. Approximately half of this is immediately north of Turbine No.11, and the rest being split across two sections of track between Turbine No.21 and Turbine No.24.

3.29 The amended track layout proposed is shown on **SEI Figure 3.1**.

SEI DESCRIPTION OF DEVELOPMENT 3

3.30 **Table 3-6** details the changes in terms of overall proposed track length and the amount of track to be floated, when comparing the previous (EIA Report) and amended (SEI) track layouts¹.

Table 3-6: Proposed Track Length Comparison

| Previous (EIA Report) Length of Proposed Track | | Amended (SEI) Length of Proposed Track | |
|--|---------------|--|----------------|
| Upgraded Track | 12.1km | Upgraded Track | 12.1km |
| New Track | 16.5km | New Track | 17.36km |
| Floated Track | 2.2km | Floated Track | 2.60km |
| Total New and Upgraded Track | 28.6km | Total New and Upgraded Track | 29.46km |

Summary of Key Components of the Proposed Development

3.31 The key component parts of the proposed development, following the updates to the Site layout as presented in this SEI chapter, are detailed in **Table 3-7**.

Table 3-7: Proposed Development Key Components

| Key Component | Detail |
|---------------------------------|---|
| Wind Turbines | 25 wind turbines including internal transformers, three with blade tip heights of up to 180m and 22 with blade tip heights of up to 200m |
| Wind Turbine Foundations | 25 turbine foundations (approximately 22.8m diameter based on candidate turbine. Final design to be confirmed) |
| Crane Hardstandings | 25 crane hardstandings (approximately 50m x 20m and 1m in depth, with additional temporary crane pad areas – shown on EIA Report Figure 3.5) |
| Access Tracks | Approximately 12.1km of upgraded access tracks (Eishken Road widened to 5m), and approximately 17.36km of new access tracks with a typical running width of 6m (wider at bends and junctions) and associated drainage. 2.60km of the new track is anticipated to be floating track where consistent (50m distance or more) peat depths of over 0.5m or greater are identified along with shallow topography (below 5%) |
| Underground Cabling | Approximately 19.16km of underground cabling along access tracks to connect the turbine locations, and the onsite electrical substation |
| Substation Compounds | Two onsite substation compounds. The Eurowind substation compound would have an area of 75m x 100m and would include a control and metering building (approximately 16m x 30m and 8m high). The SHETL substation compound would have an area of 85m x 145m, and would include High Voltage (HV) equipment, such as transformers and circuit breakers as well as a control building (approximately 16m x 30m and 8m high). |
| Borrow Pits | Up to seven borrow pits (covering approximately 7.05ha) |

¹ Note – The increase in track length proposed is as a result of attempts to reduce impacts on peat and peat habitats.

SEI DESCRIPTION OF DEVELOPMENT 3

| | |
|-----------------------------------|---|
| Construction Compounds | Three temporary construction compounds (0.64ha, 0.28ha and 0.63ha respectively) |
| Meteorological (Met) Masts | Two permanent met masts up to 122.5m in height. The met masts would have a main foundation area of 3m x 3m, as well as four anchor points for supporting guy wires. |

3.32 **SEI Chapters 7 to 16** consider the amended site layout and if there are any changes to the effects as predicted in the EIA Report.

SEI RENEWABLE ENERGY AND PLANNING POLICY 4

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Introduction

- 4.1 **Chapter 4: Renewable Energy and Planning Policy**, of the Environmental Impact Assessment (EIA) Report outlines the main policies of relevance to the determination of the application for Section 36 consent. It sets out a summary of the planning and regulatory context in relation to the key topics covered in the EIA Report, and also looks at the wider policy context in relation to climate change and renewable energy and other material considerations. The Chapter does not form a judgement on the proposed development's compliance with the policy framework at the time of submission, as this was addressed in the Planning Statement accompanying the application.
- 4.2 All the information contained in Chapter 4 of the EIA Report remains valid unless stated otherwise in this Supplementary Environmental Information (SEI) Chapter.
- 4.3 The following Technical Appendices associated with Chapter 4 of the EIA Report remain valid:
- **Technical Appendix 4.1: Legislation, Policy and Guidance.**
- 4.4 Since the submission of the Uisenis Wind Farm application in August 2023, national policy relevant to the proposed determination of the application remains unchanged. However, the Scottish Government onshore wind sector deal has been published, and there have been updates with regards to the progress of Scotland meeting renewable energy targets. This SEI Chapter provides a summary of these updates.

Scotland Context

Onshore Wind Sector Deal 2023

- 4.5 On 21 September 2023, the Scottish Government published 'The Onshore Wind Sector Deal'. The deal sets out the commitments from the Scottish Government and the onshore wind farm industry to deliver 20GW of onshore wind energy by 2030. The Government and the onshore wind farm industry's commitments within the deal include:
- support the enhancement of current skills and training provisions through further higher education and training to focus on delivery of the needs of the wind industry;
 - continue to collaborate with local communities, building on good practices to enhance its existing 'good neighbour' approach through engagement at all stages of the project's lifecycle and offering impactful community benefits and practical routes to shared ownership;
 - new onshore wind projects will enhance biodiversity and optimise land use and environmental benefits;
 - reduction in time taken to determine section 36 applications for onshore wind farm projects by increasing skills and resources by streamlining approaches to scoping EIA Reports;
 - develop evidence to support a more strategic approach to delivering the investment in our electricity network and to inform a coordinated approach to the transportation of wind turbine components across Scotland's road network; and
 - deliver cooperative coexistence between onshore wind deployment and safe aviation operations.

Progress Towards Targets

4.6 **Tables 4-1** and **4-2** and **Graphs 4-1** and **4-2** set out how Scotland has made progress towards the renewable energy and greenhouse gas targets set by the Government.

Table 4-1: Progress Against Renewable Energy Targets

| Year | Target | Achieved/Progress |
|------|---|---|
| 2020 | Equivalent of 100% of all electricity used in Scotland to come from renewable sources. ¹ | No - equivalent of 98.1% of all electricity used in Scotland came from renewable sources. ² |
| 2021 | Equivalent of 100% of all electricity used in Scotland to come from renewable sources. (continuation of 2020 target as target was not met). | No - equivalent of 85.0% of all electricity used in Scotland came from renewable sources. ² |
| 2022 | Equivalent of 100% of all electricity used in Scotland to come from renewable sources. (Although the target year has passed, the Scottish Government are continuing to monitor progress of the metric). | Yes - equivalent of 113% of all electricity used in Scotland came from renewable sources. ² See Graph 4-1 . |
| 2030 | To increase the installed onshore wind capacity in Scotland to 20GW. ³ | Latest figures in September 2023 (most recently available) show that the installed onshore wind capacity in Scotland was 9.5GW. ⁴ |
| 2030 | To generate 50% of Scotland's overall energy consumption from renewable sources. ⁵ | Final figures for 2021 indicate that the equivalent of 23.7% of total Scottish energy consumption came from renewable sources; down from 26.8% in 2020. ⁶ (see Graph 4-2). |
| 2050 | To have decarbonised the energy system almost completely. ⁵ | Future target is difficult to gauge progress against. |

¹ Scottish Government (2011) 2020 Renewable Routemap for Renewable Energy in Scotland Update 2011

² Scottish Government Energy Statistics for Scotland – Q3 2023 part 2 - <https://www.gov.scot/publications/energy-statistics-for-scotland-q3-2023-part-2/>

³ Scottish Government Onshore Wind Policy Statement 2022 <https://www.gov.scot/publications/onshore-wind-policy-statement-2022/documents/>

⁴ Scottish Government Energy Statistics for Scotland – Q4 2023

⁵ Scottish Government (2017). The future of energy in Scotland: Scottish energy strategy 20 December 2017

⁶ Scottish Government. Scottish Energy Statistics Hub. <https://scotland.shinyapps.io/Energy/?Section=WholeSystem&Chart=RenEnTgt>

Table 4-2: Progress Against Greenhouse Gas Emissions Targets

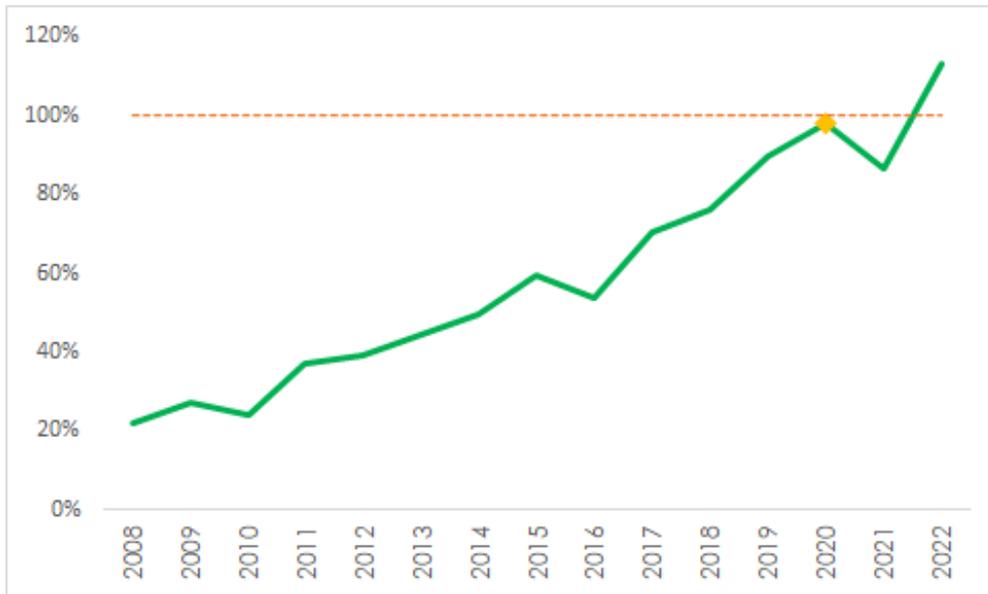
| Year | Current Target ⁷ (% Reduction of Emissions relative to 1990) | Recommended Target ⁸ (% Reduction of Emissions relative to 1990) | Achieved / Progress ⁹ |
|------|--|--|--|
| 2020 | 56% reduction. | N/A | Achieved – GHG account reduced by 58.7% between the baseline period and 2020. As detailed in the Scottish Emissions Targets – First Five-Yearly Review (December 2022): <i>“The fall in emissions in 2020 was largely due to the travel restrictions during the COVID-19 pandemic and it is unlikely the target would have been achieved without the impacts of the pandemic.”</i> |
| 2021 | 57.9% | 51.1% | Not achieved – GHG account reduced by 49.9% between baseline period and 2021. |
| 2022 | 59.8% | 53.8% | Most recent data available is 2021 figure. |
| 2023 | 61.7% | 56.4% | Most recent data available is 2021 figure. |
| 2024 | 63.6% | 59.1% | Most recent data available is 2021 figure. |
| 2025 | 65.5% | 61.7% | Most recent data available is 2021 figure. |
| 2026 | 67.4% | 64.4% | Most recent data available is 2021 figure. |
| 2027 | 69.3% | 67.0% | Most recent data available is 2021 figure. |
| 2028 | 71.2% | 69.7% | Most recent data available is 2021 figure. |
| 2029 | 73.1% | 72.3% | Most recent data available is 2021 figure. |
| 2030 | 75% | 75% | Most recent data available is 2021 figure. |
| 2040 | 90% | 90% | Most recent data available is 2021 figure. |
| 2045 | 100% | 100% | Most recent data available is 2021 figure. |

⁷ Scottish Government (2019). Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

⁸ Independent Climate Change Committee (2022). Scottish Emissions Targets – First Five-Yearly Review

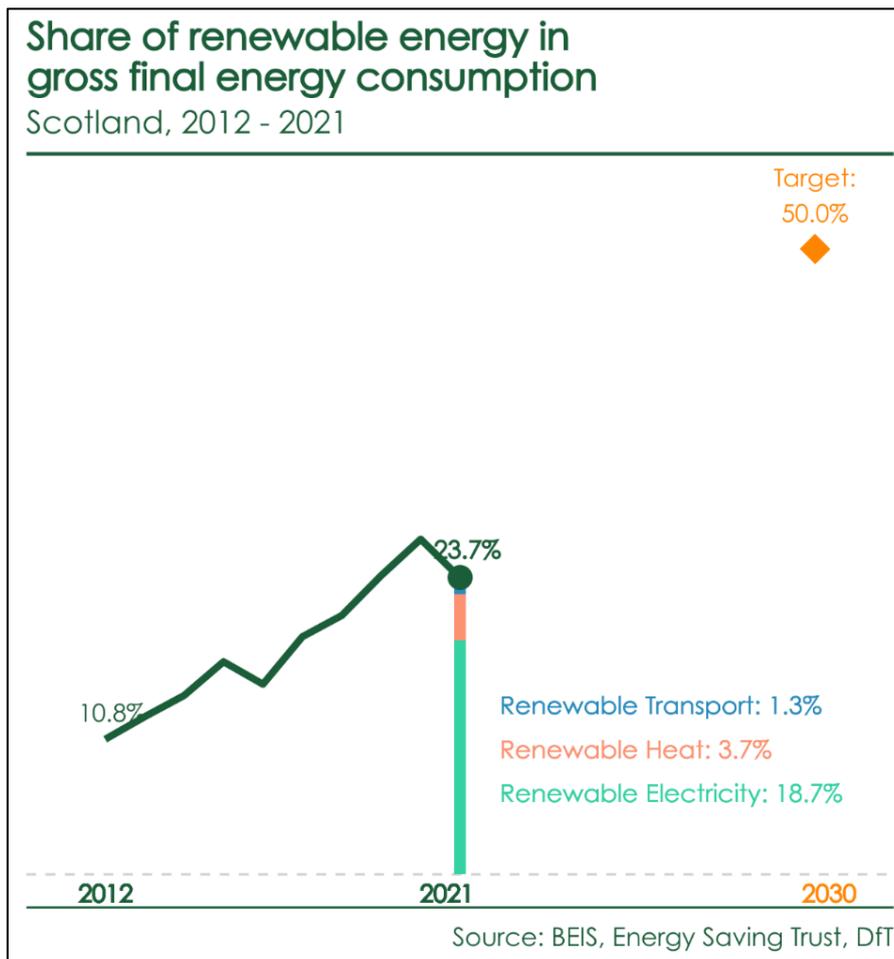
⁹ Scottish Government Scottish Greenhouse Gas Statistics 2021 <https://www.gov.scot/publications/scottish-greenhouse-gas-statistics-2021/>

Graph 4-1: Renewables Electricity Generation in Scotland



(Scottish Government Energy Statistics for Scotland – Q3 2023 part 2)

Graph 4-2 Share of Renewable Energy in Gross Final Energy Consumption



(Scottish Energy Statistics Hub, 2023)

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ASSESSMENT OF CUMULATIVE EFFECTS1

Introduction

- 5.1 **Chapter 5: Environmental Impact Assessment** of the Environmental Impact Assessment Report (EIA Report) discusses the need for EIA and sets out the approach to assessment taken in respect of the proposed development.
- 5.2 The methodologies used for the assessments carried out as part of this Supplementary Environmental Information (SEI) remain consistent with the original EIA Report unless otherwise stated within the SEI technical chapters.

Assessment of Cumulative Effects

- 5.3 Since submission of the Uisenis Wind Farm application in August 2023, there have been relevant changes to the cumulative situation as assessed in the EIA Report. The key relevant changes are as follows:
- The Harris to Stornoway 132kV Overhead Line replacement – Consented granted (February 2024);
 - Grimshader Wind Farm – EIA Scoping Request submitted (December 2023); and
 - Heastabhal Wind Farm – EIA Scoping Request submitted (December 2023).
- 5.4 The Harris to Stornoway 132kV Overhead Line replacement was assessed (its status was 'in planning') in the Landscape and Visual Chapter of the EIA Report. **Chapter 7: Landscape and Visual** of this SEI provides a brief update on this project, with regards cumulative effects, now that it has been consented.
- 5.5 It has been agreed with NatureScot on 23 February 2024, that as the Grimsahder and Heastabhal Wind Farms are currently only at EIA Scoping stage, they do not need to be considered in this SEI (Comhairle nan Eilean Siar were also consulted with regards to this approach, however did not respond).

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Table 6-1: Post Submission Key Consultee Comments 1

Introduction

- 6.1 **Chapter 6: Scoping and Consultation**, of the Environmental Impact Assessment Report (EIA Report) sets out the Scoping process that was undertaken as part of the EIA for the proposed development. It also details additional consultation that has been undertaken in respect of the proposed development with consultees.
- 6.2 The following Technical Appendices associated with Chapter 6 of the EIA Report remain valid:
- **Technical Appendix 6.1: Scoping Response Table.**

Post Submission Consultee Responses

- 6.3 Since submission of the Uisenis Wind Farm application in August 2023, consultation responses have been received from consultees on various elements of the application. Where required, responses have been issued (prior to this Supplementary Environmental Information (SEI)) to the relevant consultees in order to address questions and concerns. Where considered appropriate, consultee responses have been addressed within the relevant chapters of this SEI document (SEI Chapters 7 – 16).
- 6.4 This SEI has been produced in order to address consultee responses from NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland, the Royal Society for the Protection of Birds (RSPB), Ironside Farrar (on behalf of the Energy Consents Unit), and interim feedback from Comhairle nan Eilean Siar (CnES). Their consultee responses that have required the production of this SEI are detailed in **Table 6-1**.

Table 6-1: Post Submission Key Consultee Comments

| Consultee | Summary of Consultee Response | Comment/Where Addressed in SEI |
|--------------------------|---|---|
| NatureScot 04/12/2024 | <p>We recommend reduction or removal of the southern turbine cluster (T19-T25), as this would significantly reduce collision risk for golden eagle and likelihood of abandonment of one range.</p> <p>If these turbines are included in any consent granted, we recommend that the plan to paint one blade black on each turbine should not be progressed.</p> <p>A habitat management plan should have clear identification of the damage (areas to be restored) ie. locations of drains, peat hags, bare peat, with a clear identification of which are to be restored and what techniques are to be used. The plan should follow best practice and ideally reference guidance.</p> <p>We recommend that any works carried out for peatland restoration should be carried out in accordance with the Peatland ACTION Technical Compendium (https://www.nature.scot/doc/peatland-action-technical-compendium).</p> <p>We recommend that peat should be reinstated as soon as possible, and not stored for any longer than one year.</p> | <p>SEI Chapter 2 SEI Chapter 7 SEI Chapter 8 SEI Tech Appendix 8.5 SEI Chapter 9 SEI Chapter 10</p> |

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| | <p>We recommend that the proposal for peatland restoration be revised so that ten hectares are restored for every hectare lost, in accordance with NatureScot guidance.</p> <p>In this response letter we have highlighted the most important impacts of the proposed windfarm, highlighted the inadequacy of proposed peatland mitigation and made recommendations about measures to reduce residual impacts. We will advise later on impacts on white-tailed eagles, as we are still considering these.</p> | |
| <p>NatureScot 07/03/2024</p> | <p>White-Tailed Eagle</p> <p>We advise that the level of predicted white-tailed eagle impacts identified in the environmental statement will add significantly to a growing cumulative collision risk for white-tailed eagles at a national level. This is one of the recent wind farm applications within the white-tailed eagle core range that are predicting collision risks of more than 1 bird per year – the other is Glen Ullinish 2 in Skye. This represents a step change in the levels of predicted mortality that we have encountered to date, and we anticipate more applications with similar levels in future. For example, and without prejudice to our final advice on these cases, ECU has recently consulted us on scoping opinion for two further large wind farms in Lewis, within the core range for this species. These are located 7-15km from Uisenis.</p> <p>At Uisenis specifically, it is clear that the southern cluster of turbines, T19-T25, makes a disproportionate contribution to the total predicted collision mortality. Our advice is that removing these would significantly reduce the impacts on white-tailed eagle arising from this development proposal.</p> <p>Eagle Conservation Programme</p> <p>While this is included in the ‘Mitigation’ section on the Environmental statement, it is really too vague to be able to be classed as true mitigation at present.</p> <p>Golden eagle is at its highest population ever recorded in the Outer Hebrides Natural Heritage Zone (NHZ) and must be close to, if not at, carrying capacity. Similarly the white-tailed eagle population is growing strongly, therefore, the pressures/constraints that do exist are not at levels which affect the populations negatively. The pressures that could have future impacts are increasing numbers of wind farms, and potentially avian flu if it continues longer term. There are certainly wider research possibilities, but supporting these would be planning gain (e.g. relationship between high densities of both eagles; if satellite tagging was proposed on white-tailed eagles it would longer term further inform our understanding of the species and interaction with wind farms potentially. Note, however, that satellite tagging adult/sub adult white-tailed eagles has, to date, proven to be much more difficult than it has for golden eagle.</p> <p>NatureScot has welcomed regional golden eagle plans elsewhere in situations where the NHZ population was unfavourable, and there was a proposal for significant on-the-ground work to recover the population with associated research like satellite tagging. There isn’t such an obvious hook or clear benefit in this case.</p> | <p>SEI Chapter 9</p> |

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| | <p>So, while we cautiously welcome the proposal, we would need more information about exactly what is proposed and why to be able to give more informed feedback.</p> | |
| <p>SEPA 21/11/2023</p> | <p>Peat Depth and Peat Habitat</p> <p>To show that the development complies with the mitigation hierarchy in Policy 5 of NPF4 we are looking for a demonstration that peatland in near natural condition has been avoided (as this has the lowest greenhouse gas emissions and greatest greenhouse gas uptake potential of all peatland condition categories) and the total area and volume of peat disturbance has been minimised.</p> <p>The peatland quality information provided to us by the developer shows that much of the site is near natural condition blanket bog. Of the 25 turbines only five (T13, T16, T18, T19 and T24) do not have an impact on habitat in this condition. We therefore object and seek modifications to the turbine layout to clearly demonstrate how steps have been taken to avoid near natural condition habitat. We also object until the construction compounds and borrow pits are relocated or modified so that they do not directly impact on near natural habitats.</p> <p>In relation to minimisation of the total area and volume of peat disturbed then steps have been taken to avoid impacting on the larger areas of deeper peat. However peat depth on the site is variable and there are also a large number of smaller pockets of deeper peat throughout the site and, while we appreciate that amendments were made in relation to this as part of finalising the layout, much of the turbine infrastructure is located on such areas. We object until either infrastructure is moved to avoid the deepest areas of peat in the vicinity or information is submitted to demonstrate that the current layout minimises the volume of peat to be disturbed, which we note is currently estimated to be 194,942m³.</p> <p>We also object unless the dimensions or exact location of the North construction compound is amended to avoid the deeper areas of peat.</p> <p>Taking into consideration above we suggest that the developer focus on infrastructure that is proposed on near natural habitat located on peat over 1 m in depth. A table showing the extent of peat disturbed by each infrastructure element, demonstrating how it has been located to minimise peat disturbance and impact on near natural habitat may be a useful approach.</p> <p>Peatland Restoration</p> <p>Table 5-2 of the OHMP indicates that approximately 88 ha of peatland habitats – bog, grassland and heath - will be impacted by the development. However at this stage only 50 ha of peatland restoration is proposed. While proposals to manage grazing are also included, in line with NatureScot’s guidance Advising on peatland, carbon-rich soils and priority peatland habitats in development management this is not considered offsetting. We therefore object to the development until the peatland restoration proposals are significantly expanded.</p> | <p>SEI Chapter 2 SEI Chapter 8 SEI Tech Appendix 8.5 SEI Chapter 10</p> |

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| | <p>Watercourses</p> <p>Most turbine infrastructure is located greater than 50 m from a watercourse following recognised industry practice. However we note that T1, T2, T10 and T24 are within this buffer. For infrastructure at T1, T10 and T24 we are content that the potential for pollution could be controlled via suitable mitigation measures. However at T2 we consider that a buffer of 10 m between the proposed clearance area and the watercourse is not large enough to put in place measures to protect the water environment. We therefore object until the infrastructure is repositioned to increase the buffer and a drawing is provided showing the site specific mitigation that can be put in place to protect the water environment.</p> | |
| <p>HES 10/11/2023</p> | <p>Based on the information supplied with the EIA Report we are currently unable to determine whether the proposed development would raise issues of national interest for our remit. We require the submission of visualisations to be able to fully understand and assess the potential effects of the proposed development on the setting of St Columb's Church, Eilean Chaluim Chille (SM5345). We therefore object to the proposed application until sufficient information is provided to allow us to properly assess and understand the potential impacts of the proposals.</p> | <p>SEI Chapter 11</p> |
| <p>HES 22/01/2024</p> | <p>Historic Environment Scotland (HES) issued an objection to this scheme in November 2023 based on lack of information to facilitate an adequate assessment of impacts on the setting of St Columb's Church, Eilean Chaluim Chille (SM5345). In our response we requested visualisations to redress this.</p> <p>The applicant provided a covering letter and wireframes taken from St Columb's Church, Eilean Chaluim Chille (SM5345) from the approaches to the church and from the causeway linking the island with the mainland. These show that there is no visibility of the turbines from these locations, except for a single blade tip visible on the approaches to the church.</p> <p>However, the visualisations do not accord with the assessment set out within the EIAR. Para 11.113 of the EIAR states <i>'The proposed development would introduce 25 wind turbines located c.8.9km to the southwest of the asset. Analysis of the ZTV found that 8 to 14 of these turbines would be visible (Figure 11.1b).</i></p> <p>Given that the evidence provided in the visualisations and the conclusions offered in the EIAR do not align, we request that the applicants should clarify their interpretation of the wireframes with reference to the conclusions presented in the EIAR. This will provide us with the information that we require to assess the impacts on the setting of the scheduled monument (SM5345).</p> | <p>SEI Chapter 11</p> |
| <p>RSPB 08/12/2023</p> | <p>RSPB Scotland objects to the proposed Uisenis Wind Farm due to lack of information regarding the predicted impacts of the development on Golden Eagle populations and details of commitments made in the application.</p> | <p>SEI Chapter 2 SEI Chapter 8 SEI Tech Appendix 8.5 SEI Chapter 9</p> |

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| | <p>We request the submission of the following and will review our position if this further information is provided by the Applicant:</p> <ul style="list-style-type: none"> • A Golden Eagle Population Viability Analysis (PVA) model with counterfactual outputs to allow the population-level impacts to be better understood. • A detailed plan for a robust research project examining the effectiveness of painting a number of turbine blades black. This measure has been proposed as mitigation for Golden and White-tailed Eagle, but no means for testing the effectiveness of the proposal has been suggested. The plan should be agreed prior to determination and made a condition of any consent. The RSPB Conservation Science team would be interested in discussing the design of such research. • An outline Eagle Conservation Programme to be agreed prior to determination. The submission and approval of a detailed plan should be made a condition of any consent. Such a programme should be designed to add to understanding of wind farm impacts in high-density White-tailed Eagle and Golden Eagle populations. <p>For both eagle species, we strongly recommend that:</p> <ul style="list-style-type: none"> • The Outline Habitat Management Plan is revised to include actions to provide foraging habitat away from the proposed turbine array. <p>For White-tailed Eagle:</p> <ul style="list-style-type: none"> • Consideration should be given to painting additional turbine blades black within the northern array. We suggest those closest to roost sites and frequent flight areas, i.e., the outer most turbines. <p>For Golden Eagle, adopting any of the following, would provide significant improvements:</p> <ul style="list-style-type: none"> • Removal of turbines within 1km of Golden Eagle nest sites and further consideration should be given to removing some turbines within the 2km core territory range from nest sites. • The 75m micro-siting allowance should not be used to move turbines closer to nest and roost sites. This should be committed to and secured by a suitably worded condition of any consent. • Loss of good and well-used Golden Eagle habitat would be reduced by removing further turbines from the scheme such as eastern and western outlying turbines T7, 12, 13 and 18, and any possible from the southern array. | |
| <p>Ironside Farrar 23/01/2024</p> | <p>As the detailed infrastructure probing does not meet the guidance in some locations, additional probing is required to complete the assessment/ fill gaps to make it line with ECUBPG/ SEPA guidance. This includes additional probing at borrow pits to cover the entire areas of search, and also</p> | <p>SEI Chapter 10</p> |

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| | <p>the section of tracks where there are gaps in the probing/ 50m centres have not been achieved.</p> <p>Comment is requested on whether the likelihood assessment can be considered suitably robust without considering the areas of artificial drainage across the proposed area as although drainage is noted as a factor potentially influencing peat stability it does not appear to have been included in the likelihood assessment.</p> <p>The windfarm infrastructure should be included in the consequence assessment. Therefore, please update the assessment with this receptor and make any amendments to the overall risk assessment (hazard ranking).</p> <p>It is not clear whether the medium and high likelihood areas shown relating to the borrow pits have been included in the consequence assessment. In addition, some of the track sections shown in medium risk do not appear to have been included either. Please update the consequence assessment and risk assessment accordingly.</p> <p>Please provide an overall risk map (hazard ranking) to show the extent of substantial/ serious hazard (risk).</p> <p>Site specific mitigation, including a site-specific plan, should be provided for all medium (or above) risk areas (substantial/ serious). This should include risk (hazard ranking) over the area relative to the infrastructure layout, details of topography, slope and receptors and also the specific mitigation and proposed micrositing options to demonstrate that these proposals are all achievable/credible.</p> <p>Given there a number of areas of medium and high risk in proximity to infrastructure, please confirm how stability risks associated with temporary peat storage will be reduced during construction phase. A plan should be included showing area suitable for storage.</p> <p>Please provide details of mitigation to reduce/ manage risks for borrow pits.</p> | |
| <p>CnES 08/02/2023</p> | <p>The Archaeology Service</p> <p>The Archaeology Service would suggest that across the site peat depths range for 0.5m to over 3m (TA10.1). Peat is an excellent repository of environmental data and will hold a record of the environment from its formation onwards, preservation of palaeo environmental remains is regarded as high.</p> <p>In the case of Loch Seaforth Head the Archaeology Service would suggest that post medieval features may have reused or incorporated earlier sites or settlements. Therefore, potential for earlier deposits and feature should be considered at least moderate.</p> <p>The Roads Authority</p> <p>The proposed road improvement should be substantial, in light of the construction traffic, allowing the weight restriction to be removed. There is little detail on the proposed road upgrade, further details on the road layout and design should be submitted.</p> | <p>SEI Chapter 3 SEI Chapter 11 SEI Chapter 12</p> |

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Introduction

- 7.1 **Chapter 7: Landscape and Visual** of the Environmental Impact Assessment (EIA) Report considers the potential effects of the proposed Uisenis Wind Farm (the proposed development) on the landscape and visual resources of the proposed development location (the Site) and the surrounding study area, during the construction, operational and decommissioning phases of the project.
- 7.2 This Supplementary Environmental Information (SEI) Chapter considers any changes to the potential landscape and visual effects (identified in **Chapter 7: Landscape and Visual** of the EIA Report) resulting from the changes to the proposed development set out in **SEI Chapter 2: Site Description and Design Evolution** of this SEI Report.
- 7.3 This Chapter supplements and should be read in conjunction with the Landscape and Visual Impact Assessment (LVIA) contained in **Chapter 7: Landscape and Visual** and accompanying appendices (**Technical Appendix 7.1 to 7.6**) of the EIA Report. There have been no substantial changes to the approach, methodology, guidance^{1, 2} and baseline conditions noted in **Chapter 7: Landscape and Visual** of the EIA Report and accompanying appendices. This assessment was undertaken by Chartered Landscape Architects (CMLI) at LUC (Land Use Consultants Limited) on behalf of Uisenis Power Limited (the applicant).
- 7.4 This Chapter of the SEI Report is supported by comparative wireline visualisations produced in accordance with current best practice guidance³ from the 18no. LVIA viewpoints, showing the 2023 Application Layout and the 2024 SEI Layout (**SEI Figure 7.35 to SEI Figure 7.52**).

Consultee Responses to 2023 Application

- 7.5 Consultees NatureScot, Scottish Environment Protection Agency (SEPA), and the Royal Society for the Protection of Birds (RSPB) all responded to the proposed development application consultation, requesting/recommending that some of the proposed infrastructure be moved, in order to address specific concerns.
- 7.6 A summary of requests/recommendations from NatureScot for changes to the proposed development, resulting from landscape and visual considerations, is provided in **Table 7-1**. Refer to **SEI Chapter 2** and **SEI Chapter 6** for further detail on consultee responses related to other topic areas.

¹ Consultation on the draft *Guidance for Assessment of Effects on Special Landscape Qualities (AESLQ)* (prepared by NatureScot, the Cairngorms National Park Authority, and Loch Lomond and Trossachs National Park) is being undertaken from 30th May 2024 until 27th June 2024.

² The NatureScot *Assessing impacts on Wild Land Areas - technical guidance* was updated August 2023 to reflect NPF4.

³ SNH (February 2017) *Visual Representation of Wind Farms Guidance*. Version 2.2

Table 7-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--------------------------------|---|--|
| NatureScot 04 December 2023 | <i>“The black render of the blades of the seven turbines of the southern cluster T19-T25 would further exacerbate the incongruity and detracting effect of the proposal.”</i> | After further discussion with NatureScot on 23 February 2024, the decision was made to retain the painted blade mitigation on Turbines No.19-No.25 (a measure intended to mitigate bird collision risk). No changes are proposed to the painted turbine blades as part of this SEI. Refer to SEI Chapter 9: Ornithology for further information regarding bird collision risk. NatureScot have not raised an objection to the proposed development in relation to landscape and visual considerations. |

Design Amendments

7.7 Key design changes are outlined in **SEI Chapter 2: Site Description and Design Evolution** of the SEI Report. No changes have been made to the proposed development resulting from feedback on landscape and visual considerations.

Revised Figures and Visualisations

7.8 Comparative wireline visualisations from the 18no. LVIA viewpoints, showing the 2023 Application Layout and the 2024 SEI Layout are shown on **SEI Figure 7.35** to **SEI Figure 7.52**. Reference should be made to the original LVIA Figures and Visualisations within **Volumes 3a, 3b** and **3c** of the EIA Report when viewing the comparative wirelines contained within this SEI. The following **Table 7-2** sets out the SEI Figures for this chapter with reference to the corresponding LVIA Figure of relevance.

Table 7-2: SEI and LVIA Figures and Visualisations

| Viewpoint | SEI Figure (Comparative Wirelines illustrating 2023 Application Layout and 2024 SEI Layout) | LVIA Figure (NatureScot Visualisations illustrating 2023 Application Layout) |
|---|---|--|
| Viewpoint 1 - Orasaigh (Orinsay) | SEI Figure 7.35a-b | Figure 7.12-7.12c |
| Viewpoint 2 - B8060, east of the Site | SEI Figure 7.36a-b | Figure 7.13-7.13g |
| Viewpoint 3 - Beinn Mhor | SEI Figure 7.37a-b | Figure 7.14-7.14f |
| Viewpoint 4 - Taobh a' Ghlinne (Glenside) | SEI Figure 7.38a-b | Figure 7.15-7.15c |

| | | |
|--|--------------------|-------------------|
| Viewpoint 5 - B8060 near Tabost (Habost) Church | SEI Figure 7.39a-b | Figure 7.16-7.16g |
| Viewpoint 6 - Leumrabhagh | SEI Figure 7.40a-b | Figure 7.17-7.17c |
| Viewpoint 7 - Uisinis | SEI Figure 7.41a-b | Figure 7.18-7.18b |
| Viewpoint 8 – Baile Ailein | SEI Figure 7.42a-b | Figure 7.19-7.19c |
| Viewpoint 9 - A859 near Lacasaigh (Laxay) Cemetery | SEI Figure 7.43a-b | Figure 7.20-7.20c |
| Viewpoint 10 - Todun | SEI Figure 7.44a-b | Figure 7.21-7.21f |
| Viewpoint 11 - Liurbost | SEI Figure 7.45a-b | Figure 7.22-7.22f |
| Viewpoint 12 - Liuthaid | SEI Figure 7.46a-b | Figure 7.23-7.23f |
| Viewpoint 13 - A859 near Liurbost | SEI Figure 7.47a-b | Figure 7.24-7.24d |
| Viewpoint 14 - Acha Mor (Achamore) | SEI Figure 7.48a-b | Figure 7.25-7.25c |
| Viewpoint 15 - An Cliseam | SEI Figure 7.49a-b | Figure 7.26-7.26j |
| Viewpoint 16 - Calanais Standing Stones | SEI Figure 7.50a-b | Figure 7.27-7.27d |
| Viewpoint 17 - Stornoway War Memorial | SEI Figure 7.51a-b | Figure 7.28-7.28e |
| Viewpoint 18 - An-Cnoc (Knock) | SEI Figure 7.52a-b | Figure 7.29-7.29e |

Cumulative Developments Update

7.9 Since the submission of the S36 application in August 2023, there have been very few changes to the cumulative baseline situation (as set out in **Table 7-8 of Chapter 7: Landscape and Visual**⁴ of the EIA Report). These changes are summarised below:

- The Harris-Stornoway 132kV overhead line (OHL) replacement was consented⁵ in February 2024.
- A scoping request for Heastabhal Wind Farm (14 turbines at 200m tip height)⁶, located 7.0km the north-west of the proposed development, was submitted in December 2023.
- A scoping request for Grimshader Wind Farm (19 turbines at 200m tip height)⁷, located 15.2km to the north-east of the proposed development, was submitted in December 2023.

7.10 The Scenario 2 assessment of **Chapter 7: Landscape and Visual** of the EIA Report included the Harris-Stornoway 132kV overhead line as the only undetermined proposed development. The Harris-Stornoway 132kV OHL development will replace the existing wood pole OHL. **Chapter 7: Landscape and Visual** of the EIA Report concluded (paragraph 7.90): *'given the existing influence of the operational 132kV trident wood pole OHL, the future combined effects of operational and consented wind farm development*

⁴ A cut-off date of 18 April 2023 was applied for the inclusion of developments within the cumulative assessment in **Chapter 7: Landscape and Visual** of the EIA Report.

⁵ ECU reference: ECU00004490

⁶ ECU reference: ECU00005011

⁷ ECU reference: ECU00005010

and the proposed Harris-Stornoway 132kV OHL replacement (assuming a Scenario 2 baseline) are unlikely to change beyond the influences on LCTs and visual receptors identified under Scenario 1.' As such, consideration of the Harris-Stornoway 132kV OHL replacement as a consented scheme within cumulative Scenario 1 of the original LVIA is unlikely to result in alternative effects to those identified in **Chapter 7: Landscape and Visual** of the EIA Report.

- 7.11 As per paragraph 7.73 of **Chapter 7: Landscape and Visual** of the EIA Report, proposals that have not yet progressed beyond Scoping stage are not considered within the cumulative assessment. As the Heastabhal and Grimshader Wind Farms have not yet progressed beyond this stage there is limited certainty as to their final design and progression towards an application for consent for these developments, they are not considered within an updated cumulative assessment. This approach was agreed with NatureScot⁸.
- 7.12 The changes to the cumulative baseline situation outlined above therefore do not change the findings of the cumulative assessment detailed in **Chapter 7: Landscape and Visual** of the EIA Report.

Potential Construction Effects

Landscape Effects during Construction

- 7.13 Construction activities would result in direct effects on the landscape of the Site. The main construction activities with the potential to affect the Site include excavations and track construction; the presence of tall cranes and partially built towers whilst turbines are being erected; and the movement of construction vehicles and plant.
- 7.14 As set out in **SEI Chapter 2: Site Description and Design Evolution** of this SEI Report and illustrated in the (**SEI Figure 2.9**), the proposed changes to the turbine layout and Site infrastructure are relatively minimal. The changes to the proposed development do not change the findings of the assessment of construction effects on the Site in **Chapter 7: Landscape and Visual** of the EIA Report.

Visual Effects during Construction

- 7.15 Visual effects during the construction phase would affect the same receptors as assessed in the operational phase. As noted in **Chapter 7: Landscape and Visual** of the EIA Report, visual effects resulting from construction would change throughout the construction phase as wind turbines are gradually constructed in sections. As such, visual effects during the construction phase are unlikely to exceed the level of effect associated with operational visual effects and are not assessed independently.

Potential Operational Effects

Landscape Effects during Operation

- 7.16 The main likely landscape effects of the proposed development during the operational phase of the project would be associated with the presence of the wind turbines, turbine

⁸ Agreed with NatureScot via Microsoft Teams call on 23rd February 2024.

transformers and ancillary infrastructure including access tracks, onsite substations and Site access track. As set out in **SEI Chapter 2: Site Description and Design Evolution** of this SEI Report and illustrated in the (**SEI Figure 2.9**), the proposed changes to the turbine layout and Site infrastructure are relatively minimal. Those which may be discernible and give rise to potential alternative landscape or visual effects are detailed below.

- 7.17 Changes to the location of turbines Turbines No.2, No.3, No.4, No.8, No.14 and No.25 (as detailed in **SEI Chapter 2: Site Description and Design Evolution** and shown on **SEI Figures 2.9a-j** and **SEI Figures 2.10a-h**) are within the proposed 75m micro-siting allowance (as identified in **Chapter 2: Site Description and Design Evolution** of the EIA Report). Excluding Turbines No.3 and No.25, changes to the location of turbines are largely contained within the interior of the Site. Turbine No.3, located on the north western periphery of the turbine layout, has been moved approximately 22m south (towards Turbine No.9). Turbine No.25, located on the south eastern periphery of the turbine layout, has been moved approximately 20m north east. Given the minimal changes to the locations of the turbines, direct effects on the landscape resource of the Site are considered similar to those identified in **Chapter 7: Landscape and Visual** of the EIA Report.
- 7.18 The additional substation compound will be located within Landscape Character Type (LCT) 326 - Prominent Hills and Mountains, in an area of moorland to the south of Loch Sgiobacleit. Whilst the introduction of the additional substation compound will increase the extent of direct effects on LCT 326 - Prominent Hills and Mountains, direct effects will be relatively localised within the north of the LCT. The additional substation compound will be located at a relatively low elevation (between approximately 30m to 40m AOD). Landform rises to the south-west of the additional substation compound towards Cleit na Ceardaich (168m AOD), and beyond Loch an Eilein Liatha and Logh Sgiobacleit to the north-east of the additional substation compound towards Beinn Bhuidhe (102m AOD). Intervening elevated landform surrounding the additional substation compound will limit indirect landscape effects, resulting from views of the substation, from the wider landscape. The landscape effects identified within **Chapter 7: Landscape and Visual** of the EIA Report will continue to mainly result from the introduction of the turbines of the proposed development.
- 7.19 The changes to the proposed development do not change the findings of the assessment of effects on landscape character, designated landscapes or wild land areas in **Chapter 7: Landscape and Visual, Technical Appendix 7.3: Assessment of Effects on Special Landscape Qualities, Technical Appendix 7.4: Wild Land Impact Assessment** and **Technical Appendix 7.5: Aviation Lighting Impact Assessment** of the EIA Report.

Visual Effects during Operation

- 7.20 As illustrated in the comparative wirelines in **SEI Figure 7.35** to **SEI Figure 7.52**, changes to the turbine layout (as detailed in **SEI Chapter 2** of this SEI Report) will be relatively minimal, limited to movements of turbines up to a maximum distance of 60m (horizontally from the original proposed turbine positions) and within the 75m micro-siting allowance. There will be slight adjustments to the composition of turbines within the northern extents of the turbine layout (formed by Turbines No.1 to No.18), and the location of Turbine No.25 in the south east of the turbine layout of the proposed development. The horizontal extent of the proposed turbines in views of the proposed development will remain the same or very similar to that of the 2023 Application Layout in all views represented by the visualisations which accompany the LVIA. There will be a slight decrease in the horizontal extent of turbines in views where T3 and T25 form the peripheral turbines of the proposed

development (Viewpoint 2 - B8060, east of the Site, Viewpoint 3 - Beinn Mhor, Viewpoint 4 - Taobh a' Ghlinne (Glenside), Viewpoint 10 - Todun, Viewpoint 11 - Liurbost, Viewpoint 17 - Stornoway War Memorial and Viewpoint 18 - An-Cnoc (Knock)), though this change will be barely perceptible.

- 7.21 As noted above, the additional substation compound will be located at a relatively low elevation (between approximately 30m to 40m AOD). Whilst the introduction of the additional substation compound will form a perceptible change in close-distance views from locations within approximately 1km of the substation, intervening elevated landform surrounding the substation will limit visibility from the wider study area. The visual effects identified within **Chapter 7: Landscape and Visual** of the EIA Report will continue to mainly result from the introduction of the turbines of the proposed development.
- 7.22 An Aviation Lighting Report was prepared (refer to **Technical Appendix 15.1: Aviation Lighting Report** of the EIA Report) which sets out the details of the lighting scheme. The lighting design is described in more detail in the Aviation Lighting Report and summarised below:
- Two medium intensity 'steady' red (2000 candela) lights on the nacelles of seven turbines of the proposed development (Turbines No.1, No.3, No.7, No.12, No.18, No.22, No.25) (the secondary light on each turbine is fitted for use in the event of failure of the primary light, and would not be lit concurrently);
 - Infrared lights to MoD specification installed on the nacelles of each turbine of the proposed development (25 in total); and
 - No low intensity red lights (32 candela) located on the intermediate level on the turbine are proposed as part of this lighting scheme.
- 7.23 Though two of the proposed lit turbines (Turbines No.3, and No.25) have been moved within the 75m micro-siting allowance, no changes to the aviation lighting scheme are proposed.
- 7.24 An assessment of landscape and visual effects arising from visible aviation lighting for representative receptors within the Study Area is presented in **Technical Appendix 7.5: Aviation Lighting Impact Assessment** of the EIA Report.
- 7.25 The changes to the proposed development do not change the findings of the assessment of effects on visual receptors in **Chapter 7: Landscape and Visual** and **Technical Appendix 7.5: Aviation Lighting Impact Assessment** of the EIA Report.

Summary of Changes to the Significance of Effects

- 7.26 The changes to the proposed development, as set out in **SEI Chapter 2: Site Description and Design Evolution** of the SEI Report, do not change the findings of the assessment of landscape and visual effects, either individually or cumulatively, as set out in **Chapter 7: Landscape and Visual**, **Technical Appendix 7.3: Assessment of Effects on Special Landscape Qualities**, **Technical Appendix 7.4: Wild Land Impact Assessment** and **Technical Appendix 7.5: Aviation Lighting Impact Assessment** of the EIA Report.

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APPENDICES

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Introduction

- 8.1 SLR Consulting has been commissioned by the applicant to undertake a review of the Ecological Implications that could arise from the design changes to the proposed Uisenis Wind Farm (see **SEI Chapter 2: Site Description and Design** for full details).
- 8.2 This Supplementary Environmental Information (SEI) Chapter supplements **Chapter 8: Ecology** of the 2023 Uisenis Wind Farm Environmental Impact Assessment (EIA) Report. The methodology employed in this SEI is as set out in EIA Report **Chapter 8: Ecology**.
- 8.3 The following key documents should be read in conjunction with this SEI chapter:
- SEI Report Volume 3 – **SEI Technical Appendix 8.5: Outline Habitat Management Plan (HMP)**;
 - SEI Report Volume 3 – **SEI Technical Appendix 8.6: Fish Population Assessment**;
 - SEI Report Volume 3 – **SEI Technical Appendix 8.7: Fresh Water Pearl Mussel Survey**;
 - EIA Report Volume 2 – **Chapter 8: Ecology** (2023);
 - EIA Report Volume 3d – Chapter 8: Figures; and
 - EIA Report Volume 4a – Chapter 8: Technical Appendices (2023).

Consultee Responses to 2023 Application

- 8.4 **Table 8-1** below provides a summary of the ecology related responses to the 2023 Uisenis Wind Farm application, received from key consultees. A reply to the consultee responses is also provided.

Table 8-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--------------------------|---|--|
| NatureScot 04/12/2023 | NatureScot stated that the outline Habitat Management Plan (oHMP) is significantly inadequate to offset the predicted impacts on peatland arising from the proposed development. | The peatland restoration area has been increased from 50ha to 89ha as per paragraph 8.29. Further detail and justification is presented in SEI Technical Appendix 8.5 OHMP . |
| | NatureScot state that their guidance advises a 1:10 multiplier for peatland restoration, therefore based on 47.97ha loss, there should be 479.7ha of restoration. In addition, they highlight a further requirement for restoration of 10% of the baseline assessment of peatland within the site. Therefore a further 75.82ha would be required for enhancement. | Since the EIA Report was submitted, further habitat surveys were undertaken within the Eishken Estate and the neighbouring Pairc estate which identified additional areas for restoration. However, despite this it was not possible to reach the 1:10 multiplier. Full details of peatland restoration are found in SEI Technical Appendix 8.5 . |
| | NatureScot recommend that the HMP should have clear identification of the areas to be restored with clear identification of the restoration | SEI Figure 8.5.1 within SEI Technical Appendix 8.5 has been updated to include additional areas of peatland restoration. Further details of peatland |

| | | |
|-------------------|--|--|
| | techniques to be used. The plan should follow best practice and ideally reference guidance. | restoration have also been provided within SEI Technical Appendix 8.5 . |
| | NatureScot recommend that any works carried out for peatland restoration should be carried out in accordance with the Peatland ACTION Technical Compendium. | SEI Technical Appendix 8.5 has been updated to reflect that all peatland restoration works will be carried out in accordance with the Peatland ACTION Technical Compendium. |
| | NatureScot recommend that peat should be reinstated as soon as possible, and not stored for any longer than one year. | See SEI Chapter 10 . |
| | NatureScot recommend that the proposal for peatland restoration be revised so that ten hectares are restored for every hectare lost, in line with NatureScot guidance. | The proposed peatland restoration areas have been updated, see SEI Technical Appendix 8.5 for full details. |
| RSPB 8/12/2023 | RSPB recommend that the outline Habitat Management Plan is revised to include actions to provide foraging habitat away from the proposed turbine array. | The grazing management area has been extended away from the proposed turbine array, as detailed in paragraph 8.32. Full details are provided in SEI Technical Appendix 8.5 . |
| | RSPB state that it is necessary to maximise peatland restoration opportunities and revise the HMP, and in the HMP, it should be clear what restoration is proposed as mitigation, what is proposed as compensation and what is proposed as enhancement. | The peatland restoration area has been increased from 50ha to 89ha as per paragraph 8.29. Further details and justification are presented in SEI Technical Appendix 8.5 . |
| | The RSPB state that the area of blanket bog restoration should be substantially increased and areas outwith the site boundary should be considered. | The peatland restoration area has been increased from 50ha to 89ha as per paragraph 8.29. Further details and justification is presented in SEI Technical Appendix 8.5 . |
| | The RSPB note the aim within the HMP to improve breeding conditions for waders, however state that the restorations areas within the HMP are located close to infrastructure, contain proposed riparian planting or are on steep, sloping ground which is unsuitable and would negate any benefits. RSPB state there is a need to look for further, more suitable areas where real gains can be made, away from turbine locations. | The grazing management area has been extended away from the proposed turbine array, as detailed in paragraph 8.32, which will provide opportunities for waders further from infrastructure. Full details are provided in SEI Technical Appendix 8.5 . |
| | RSPB note the intention within the HMP to reduce grazing to prevent further erosion on wet heath habitats and benefit foraging raptors. They | SEI Technical Appendix 8.5 has been updated to reflect that all fencing, planting and subsequent maintenance operations will take place outwith the |

| | | |
|----------------------------|--|--|
| | <p>recommend that any fencing/ planting and subsequent maintenance operations take place outwith the eagle breeding season (Feb to August inclusive).</p> | <p>eagle breeding season (February to August inclusive). See SEI Technical Appendix 8.5 for full details.</p> |
| | <p>RSPB note that no firm commitments are made with regards to grazing management at this stage, and that a detailed grazing plan would be agreed as part of the final HMP. However, they request that this should be agreed prior to consent to ensure reliable and realistic commitments are made prior to consent in order to fully assess the plans.</p> | <p>Further details regarding grazing management have been provided in Section 5.4.2.1 of SEI Technical Appendix 8.5. The landowner has agreed to the principal of grazing management at the areas identified in SEI Technical Appendix 8.5.</p> |
| | <p>RSPB note that another aim in reducing grazing pressure is to improve foraging conditions for the raptors, however state that the fenced areas include turbines, which would negate any benefit. They recommend further areas are ought, away from turbine locations.</p> | <p>The grazing management area has been extended away from the proposed turbine array, as detailed in paragraph 8.32, which will provide opportunities for waders further from infrastructure. Full details are provided in SEI Technical Appendix 8.5.</p> |
| | <p>RSPB state that Section 8.174 of the EIA report suggests Rhododendron will be removed and monitored as part of the HMP, however this does not seem to appear in the oHMP. They request that this is included.</p> | <p>Rhododendron removal was included within the EIA Report Chapter 8 in error, and is therefore no longer proposed. This is due to access restrictions in the vicinity of Eishken Lodge, as per paragraph 8.36.</p> |
| <p>SEPA 21/11/2023</p> | <p>SEPA request that a demonstration that peatland in near natural condition has been avoided and the total area and volume of peat disturbance has been minimised.</p> | <p>SEI Technical Appendix 8.5 contains details of peatland restoration areas and justification associated with these.</p> |
| | <p>SEPA note that only five turbines avoid blanket bog in near natural condition. They therefore object on this basis and seek modifications to the turbine layout to clearly demonstrate how steps have been taken to avoid near natural condition habitat. SEPA also object until the construction compounds and borrow pits are relocated or modified so that they do not directly impact on near natural habitats.</p> | <p>Paragraph 8.5 and SEI Chapter 2: Site Description and Design Evolution contains details of design amendments for the proposed development. Where possible, infrastructure has been moved in order avoid near natural condition blanket bog. The amount of near natural blanket bog disturbed has reduced from 39.78ha (at the time of the 2023 EIA Report) to 35.07ha.</p> |
| | <p>SEPA state that they object until infrastructure is moved to avoid areas of deepest peat in the vicinity, or information is submitted to demonstrate that the current layout minimises the volume of peat disturbed. SEPA also object unless</p> | <p>Paragraph 8.5 and SEI Chapter 2: Site Description and Design Evolution contains details of design amendments for the proposed development. Where possible, infrastructure has been moved (including the northern construction</p> |

| | | |
|--|--|--|
| | <p>the dimensions or exact location of the North construction compound is amended to avoid the deeper areas of peat.</p> | <p>compound, which is now called TCC1) in order reduce the volume of peat disturbed. The amount of peat that would require excavation has reduced from 194,942m³ (at the time of the 2023 EIA Report) to 189,358m³.</p> |
| | <p>SEPA object until peatland restoration proposals are significantly expanded.</p> | <p>Since the EIA Report was submitted, further habitat surveys were undertaken within the Eishken Estate and the neighbouring Pairc estate which identified additional areas for restoration. However, despite this it was not possible to reach the 1:10 multiplier. The peatland restoration area has been increased from 50ha to 89ha as per paragraph 8.29. Further details and justification is presented in SEI Technical Appendix 8.5: OHMP.</p> |

Design Amendments

8.5 The design amendments from the site layout of the 2023 Uisenis Wind Farm application (as detailed in the 2023 EIA Report) are detailed in **SEI Chapter 2: Site Description and Design Evolution**, and include:

- Relocation of wind turbines (Turbine No’s. 2, 3, 4, 8, 14 and 25);
- Relocation of crane pads (associated with Turbine No’s. 2, 3, 4, 8, 14, 16 and 25);
- Reduction in size of both temporary construction compounds that were included in the EIA Report;
- Addition of a new temporary construction compound;
- Reduction in size and relocation of some borrow pits (Borrow Pit No’s. 1, 2, 4 and 5);
- Addition of two new borrow pits (Borrow Pit No’s. 6 and 7);
- Realigning of some existing access tracks, addition of access track spurs, and an increase in the length of floating track;
- Addition of a second substation compound; and
- Expansion of application boundary (in order to accommodate increases to the areas proposed for peat bog restoration and grazing management, as well as the second substation compound).

Revised Figures

8.6 In order to update the graphic information previously issued with the 2023 EIA Report, a series of revised Figures have been produced for the SEI, as follows:

- Figures which support **Technical Appendix 8.1** of the EIA Report:
 - **SEI Figure 8.1.2: UK Habitat Classification**

- Figures which support **SEI Technical Appendix 8.5**:
 - **SEI Figure 8.5.1: Peat Restoration Areas**
 - **SEI Figure 8.5.2: Peatland Quality**
 - **SEI Figure 8.5.3: Proposed Peat Bog Restoration Areas**

Baseline Conditions

Habitats

8.7 As a result of the design amendments, specifically the changes to the Site application boundary (for full details see **SEI Chapter 2**), the total areas of habitats referenced in **Table 8-4** of the EIA Report Chapter 8 are no longer accurate. **SEI Figure 8.1.2** shows the extent of the UKHab survey in relation to the updated application boundary. It should be noted that despite the design changes, all wetland habitats within 250m of all proposed turbines and borrow pits and 100m of all other proposed infrastructure have been surveyed for potential GWDTE in line with SEPA guidelines (SEPA, 2017).

Fauna

Fish

8.8 Following submission of the **EIA Report Chapter 8**, electrofishing surveys were conducted in September 2023 within the Site (see **SEI Technical Appendix 8.6: Fish Population Assessment** for full details).

8.9 The results of the fish population assessment are summarised below:

- Allt Sgrihascro was classified as very poor for Atlantic salmon fry, absent for Atlantic salmon parr, very poor for brown trout fry and moderate for brown trout fry;
- The Abhainn Cheothadail was classified as very low for Atlantic Salmon parr, absent for Atlantic Salmon fry, moderate for brown trout fry (no brown trout parr recorded);
- Abhainn Cheothadail was classified as good for Atlantic salmon fry, very poor for Atlantic salmon parr, very poor for trout and moderate for brown trout fry; and
- No fish were recorded within the Airighean Dhomnaill.

8.10 The results summarised in paragraph 8.9 confirm the presence of fish on Site, however do not change the assessment of effects on fish within the **EIA Report Chapter 8**, which concluded **no significant effects on salmonids or other fish species of conservation concern likely**.

8.11 The results of the fish population assessment will be utilised as a baseline against which proposed construction and post-construction phase monitoring can be compared, so that impacts on salmonid populations can be monitored during and after construction.

FWPM

8.12 Following submission of the **EIA Report Chapter 8**, fresh water pearl mussel (FWPM) survey was undertaken in September 2023 (see **SEI Technical Appendix 8.7: Freshwater Pearl Mussel Survey Report** for full details).

- 8.13 No FWPM were identified at any locations during the survey, and no evidence of any shells or existence of FWPM was found. Some 'optimal' habitats were recognised in the Abhainn Cheothadail and Seaforth river catchments, confirming that suitable habitat for FWPM colonisation is present on site, however there is no evidence of FWPM on site currently.
- 8.14 As detailed in **EIA Report Chapter 8**, a minimum 50m buffer has been ensured between all proposed infrastructure and the watercourses other than those listed below:
- 54 watercourse crossings;
 - Small areas of proposed clearance area and temporary hardstanding at Turbines No.1, No.3 and No.10; and
 - Small area of proposed clearance area and temporary and temporary hardstanding at Turbine No.24.
- 8.15 With the implementation of good practice pollution measures (see EIA Report **Chapter 10: Hydrology, Hydrogeology, and Geology**) the likelihood of a pollution event affecting suitable FWPM habitat within downstream watercourses is considered to be low. Therefore, no significant effects on habitat with FWPM suitability is likely.

Identification and Evaluation of Key Impacts

- 8.16 The methodology of the ecological impact assessment is described in full in **Chapter 8: Ecology** of the 2023 EIA Report and has been replicated to fully assess the ecological impacts of the design amendments.

Assessment of Construction Phase Impacts

Habitats

- 8.17 EIA Report **Chapter 2: Site Description and Design Evolution** includes proposed dimensions of all permanent and temporary features of the proposed development. Permanent features of the proposed development consist of turbines, crane pads, access tracks and substation compound. Temporary features of the proposed development consist of the construction compound and borrow pit(s).
- 8.18 The impacts are categorised as follows:
- direct habitat loss: this includes habitats present under the footprint of the proposed development, including access tracks, turbine bases, crane pads, substation compounds and borrow pits.
 - indirect habitat loss: indirect loss has been calculated for peatland habitats which lie within 10m of the direct habitat loss areas; the allowance of 10m is to allow for drying effects and vegetation changes due to construction works. For other habitats an allowance of temporary loss of 5m is included to allow for possible temporary loss due to damage during construction.
- 8.19 The habitat under the new substation footprint was covered by the surveys undertaken to support EIA Report Chapter 8, however some of the surrounding habitat sits outwith the original survey buffer. Due to this, a precautionary approach has been taken and this habitat is assumed to be blanket bog, and as such, a 10m buffer has been applied.
- 8.20 The proposed development would result in the potential maximum loss of habitat as follows:

- Annex 1 blanket bog communities (M17 mire community) direct loss of 10.87ha and the indirect loss of 24.20ha;
- degraded blanket bog: direct loss of 2.40ha and indirect loss of 6.48ha;
- Annex 1 upland wet heath (M15): direct loss of 25.11ha and indirect loss of 15.39ha; and
- Annex 1 upland dry heath (H14): direct loss of 0.02ha and indirect loss of 0.12ha.

- 8.21 The direct and indirect loss of up to 35.07ha of regionally important Annex 1 blanket bog habitat and 40.50ha of regionally important wet heath habitat is likely to constitute a **significant negative effect** at a regional level.
- 8.22 The loss of 8.88ha of degraded blanket bog is likely to constitute a **significant negative effect** at the local level.
- 8.23 The loss of 0.14ha of Annex 1 upland dry heath is not large enough to be significant.
- 8.24 For full details of habitat loss see **Table 5-2** within **SEI Technical Appendix 8.5**
- 8.25 EIA Report Chapter 8 and **SEI Technical Appendix 8.5** detail the mitigation and habitat restoration measures proposed to offset the significant negative effects described in paragraphs 8.21 and 8.22.

Fauna

- 8.26 Effects during the construction phase on protected fauna (considered to be fish, FWPM, reptiles, otter *Lutra lutra*, bats and deer) will not change as a result of the amendments to the design. Both direct and indirect impacts on these species are considered to be **non-significant**.

Assessment of Operational Phase Impacts

Habitats

- 8.27 Effects during the operational phase on habitats will not change as a result of the amendments to the design. **No significant effects** are predicted.

Fauna

- 8.28 Effects during the operational phase on protected fauna (considered to be fish, FWPM, reptiles, otter, bats and deer) will not change as a result of the amendments to the design. **No significant effects** are predicted.

Amendments to Outline Habitat Management Plan

- 8.29 In their response, NatureScot stated that the outline Habitat Management Plan (OHMP) is significantly inadequate to offset the predicted impacts on peatland arising from the proposed development. The area of peatland restoration has been increased from 50ha to 89ha.
- 8.30 NatureScot also recommended that the OHMP should have clear identification of areas to be restored with clear identification of the restoration techniques to be used. These details have been updated within **SEI Technical Appendix 8.5**.

- 8.31 In their response, SEPA stated that they object to the proposed development until peatland restoration proposals are significantly expanded. The area of peatland restoration has been increased from 50ha to 89ha.
- 8.32 In their response, the RSPB recommended that the OHMP is revised to include actions to provide foraging habitat away from the proposed turbine array. The Site boundary has been expanded to allow for the extension of the grazing management area, providing foraging habitat away from the proposed turbine array.
- 8.33 The RSPB also requested that more suitable areas for breeding habitat for waders be looked into further, away from turbine locations. As stated in paragraph 8.29, the grazing management area has been extended which should provide opportunities for waders further away from infrastructure.
- 8.34 The RSPB recommended any fencing/planting and subsequent maintenance within the grazing management area takes place outwith the eagle breeding season (February to August inclusive); **SEI Technical Appendix 8.5** has been updated to reflect this.
- 8.35 The RSPB requested firm commitments regarding the grazing management regime be included within the OHMP at this time, further details regarding grazing management have been included within Section 5.4.2.1 of **SEI Technical Appendix 8.5**.
- 8.36 The RSPB noted that Section 8.174 of the EIA Report Chapter 8 suggests Rhododendron will be removed and monitored, however this isn't included in the OHMP. The removal of rhododendron is no longer proposed due to access restrictions in the vicinity of Eishken Lodge.
- 8.37 Full details of the changes referenced in paragraph 8.29 to 8.36 can be found within **SEI Technical Appendix 8.5**.

Summary of Changes to the Significance of Effects

- 8.38 As a result of the changes to the proposed development there would be no changes to the effects as assessed and presented in **Chapter 8: Ecology** of the EIA Report. Therefore, with the implementation of good practice measures and the implementation of the proposed HMP (including peatland habitat restoration), no significant negative effects are predicted.

Conclusions

- 8.39 This chapter has reviewed the responses from consultees, providing additional information as requested where necessary, and clarifying a number of concerns.
- 8.40 It has reviewed the changes to the layout of the proposed development and described how these would have no change on the assessment of the effects of the proposed development on ecological receptors.

References

SEPA (2017). Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems. Land Use Planning System SEPA Guidance Note 31 (LUPS- GN31). Version 3 Issued 11 September 2017.

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Introduction

- 9.1 This Supplementary Environmental Information (SEI) Chapter assesses the potential for the proposed development's design amendments to change the predicted levels of significance of effects on ornithological features presented in the 2023 EIA Report, **Chapter 9: Ornithology**.
- 9.2 It also takes into consideration relevant consultee responses to the 2023 EIA application and provides further supporting information on proposed mitigation and enhancement options.
- 9.3 All data sources, baseline conditions and assessment methods presented in EIA Report, **Chapter 9: Ornithology** and **Technical Appendices 9.1 to 9.4** remain applicable to this SEI Chapter.
- 9.4 Based on the extent and nature of the design amendments (see below), it can be reasonably determined that the scope of the assessment in terms of potential impacts, and bird species which are considered to be Important Ornithological Features (IOFs, as per CIEEM, 2018 guidance), remain unchanged from those in EIA Report, **Chapter 9: Ornithology**.
- 9.5 It should be assumed that, unless specifically mentioned below, all predicted effects in the 2023 EIA Report, **Chapter 9: Ornithology**, also remain unchanged. Furthermore, all embedded and additional mitigation and enhancement measures for ornithological features outlined in the 2023 EIA Report, **Chapter 9: Ornithology**, remain committed to.

Design Amendments

- 9.6 The design amendments to the proposed development are detailed in **SEI Chapter 2: Site Description and Design Evolution** and are shown on **SEI Figure 2.9** and **SEI Figure 2.10**. Of relevance to ornithology and this Chapter of the SEI, these can be summarised as follows:
- Relocation of six turbines (Turbines No.2, No.3, No.4, No.8, No.14 and No.25) up to 57m from original locations and rotation of the crane pad associated with Turbine No.16 approximately 35m east;
 - Reduction in size of northern temporary construction compound, and reorientation and reduction in the size of southern temporary construction compound;
 - Addition of a new temporary construction compound TCC3;
 - Reduction in size of borrow pits 1, 2, 4 and 5, and relocation of borrow pit 4, approximately 117m north;
 - Addition of two new borrow pits 6 and 7;
 - An additional substation compound to the north of the turbine array;
 - Additional access tracks and amendments to previously proposed access tracks associated with other design amendments; and
 - Additional areas for peat bog restoration and an additional area required for the additional substation compound.
- 9.7 A comparison of the previous Site layout (as set out in the 2023 EIA Report) and amended Site layout is shown on **SEI Figure 2.9a-j** and **SEI Figure 2.10a-h**.

Consultee Responses to 2023 Application

- 9.8 In relation to potential effects on ornithology, relevant responses to the 2023 application were received from NatureScot and Royal Society for the Protection of Birds (RSPB) Scotland. These are summarised in **Table 9-1** below.
- 9.9 It should be noted that in November 2023, further ornithological information was provided by the applicant in response to a request by NatureScot (email dated 12 October 2023), in order to clarify certain matters in the 2023 EIA Report, **Chapter 9: Ornithology**. This response was used to inform NatureScot's consultee responses summarised in **Table 9-1** and which can be found on the Energy Consents Unit's webpage for the proposed development's application¹ (see *applicant's clarification to NatureScot, dated 07 November 2023*).

¹ <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004568>

Table 9-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|---|
| <p>NatureScot 04 December 2023</p> | <p><i>“Impacts predicted for golden eagle include likely abandonment of one range, and collision mortality. These are not expected to affect the status of the regional population of golden eagle in the Outer Hebrides.”</i></p> <p>For displacement of golden eagles, NatureScot considers that <i>“the worst case, as previously, is that two territories will be abandoned (though it could be one abandoned and the other rendered unproductive).”</i></p> <p>As the site and surrounding area contain a high density of territories, the displacement risks to non-breeding birds are low.</p> | <p>Noted. These predicted impacts and resultant effects are considered to be unchanged with the design amendments, although the likelihood of abandonment of one or both territories may be reduced due to the expansion of planned habitat enhancement under the revised Outline HMP (SEI Technical Appendix 8.5).</p> |
| <p>NatureScot 04 December 2023</p> | <p>The proposal is not likely to have a significant effect on the Lewis Peatlands Special Protection Area (SPA) or the North Harris Mountains SPA, so that an appropriate assessment is not required.</p> | <p>Noted. The design amendments will not alter the predicted effects on designated sites, which are therefore scoped out of this SEI.</p> |
| <p>NatureScot 04 December 2023</p> | <p>We recommend reduction or removal of the southern turbine cluster (T19-T25), as this would significantly reduce collision risk for golden eagle and likelihood of abandonment of one range.</p> | <p>The design process for the proposed development took into consideration the location of eagle nest sites and preferred topography and habitats. Additional mitigation has been committed to, to avoid significant effects.</p> <p>This request for the removal of turbines has been considered, however in order for the proposed development to remain financially viable, and to</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|--|
| | | <p>ensure that the energy potential of the Site is maximised, the applicant has advised that these turbines cannot be removed (see SEI Chapter 2: Site Description and Design Evolution for further information).</p> |
| <p>NatureScot 04 December 2023</p> | <p>If [turbines T19-T25] are included in any consent granted, we recommend that the plan to paint one blade black on each turbine should not be progressed.</p> | <p>A follow-up meeting with NatureScot in February 2024 helped clarify that this request was made in relation to the potential for adverse landscape and visual impacts due to blade painting, rather than the potential for adverse impacts on birds. It was highlighted by NatureScot at this meeting that if implemented, they would see the painting of blades as a trial with uncertain outcomes, rather than mitigation for predicted collision mortality risks for the proposed development (see Table 7-1 of SEI Chapter 7: Landscape and Visual for detail on the post submission discussions with NatureScot around the landscape and visual effects of painting turbine blades – with the decision made to retain the painted blade mitigation.</p> <p>As outlined in the 2023 EIA Report, Chapter 9: Ornithology, the monitoring results from the Smola Wind Farm in Norway are considered applicable for the proposed development due to the similarities in site topography and habitats, as well as the key species to show benefit (white-tailed eagle). It was therefore concluded that there could be a sufficient likelihood of a reduction in collision rates to be seen as suitable mitigation.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|--|
| | | <p>Painting of blades is therefore proposed to remain as mitigatory good practice in relation to the reduction of collision risk to white-tailed eagles (and other species), and upon consent, a robust monitoring programme would be devised and agreed with key consultees as part of the Eagle Conservation Programme (ECP) for the proposed development (see SEI Technical Appendix 9.5). The purpose of the monitoring programme would be to determine the efficacy of this mitigation measure, and whether amendments/expansion is required.</p> |
| <p>NatureScot 04 December 2023</p> | <p>The vantage point (VP) survey height bands don't match the rotor swept area, so it is unclear how data has been handled in terms of what has and hasn't been excluded.</p> <p>Chapter 9, 9.39 CRM used a height figure of 122.5m to the nacelle with rotor swept area of 45-200m – this doesn't match 9.1 TA ornithology – where the developer states the varying turbine sized and rotor swept areas, also CRM only on 22-23 data not 2017-19 data.</p> | <p>It can be confirmed that all collision modelling used for the EIA was based on a turbine type with a rotor swept area of 45-200m above ground level.</p> <p>As outlined in EIA Report Technical Appendix 9.1, the difference between survey height bands and actual rotor swept area is accounted for within the collision risk model on the assumption of even flight distribution within each height band – for example, the appropriate proportion of flight activity within the 40-100m survey height band (occurring at 40-45m, or 5/60th of total flight duration) would be excluded if the lower rotor tip is 45m above ground level.</p> <p>Collision risk modelling results using the 2017-19 data are presented in SEI Technical Appendix 9.7.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--------------------------------|--|---|
| NatureScot 04 December 2023 | As construction-phase mitigation, para. 9.85 of EIA Chapter 9: Ornithology proposes a 1km buffer Feb-Aug and potentially a 500m buffer for roosts, but it's unclear whether this refers to year-round or just the Feb-Aug period mentioned. | Restrictions within 500m of identified golden eagle and white-tailed eagle roosts will be in place all year round between the hours of dusk and dawn. |
| NatureScot 04 December 2023 | The Outline Habitat Management Plan (OHMP) Wet Heath Restoration area indicative fenceline is proposed to run within c200m of golden eagle territory EA1 nest sites. This is well within disturbance distance and may be difficult to implement without risk of a Wildlife and Countryside Act offence if this territory is not abandoned. | The revised OHMP in SEI Technical Appendix 8.5 includes a commitment to carrying out all fence construction in the non-breeding season, to avoid disturbance impacts on eagles. In addition, fencing would be suitably micro-sited based on topography to minimise collision risks. Where such a risk is identified, fence markers would be added. |
| NatureScot 04 December 2023 | <p>We agree that collision is less of an issue for golden eagle than displacement.</p> <p>Whilst the CRM predictions in terms of collisions may not be realised, the levels of activity suggests some collisions will occur during the wind farm lifetime.</p> <p>For cumulative collision risk at the Outer Hebrides Natural Heritage Zone (NHZ) level, even if the higher prediction of the NRP data from 2017-19 is used, the cumulative risk is still not going to significantly impact the population. That said the suggestion is made that the NHZ population still has capacity to grow, when in fact it is currently just above the previously maximum estimated population level and must be close to 'carrying capacity'.</p> | Noted. The risk of collisions for golden eagles is considered to be small and at a level that would not affect the favourable conservation status of the NHZ population. It is anticipated that the proposed painting of turbine blades may reduce predicted collision risks to golden eagles. |

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|--|
| <p>NatureScot 04 December 2023</p> | <p>Merlin: Whilst we broadly agree with the assessment in terms of displacement etc., the proximity of the nest site to a turbine location does suggest that buffering the nest would not be possible given it can be closer to the turbine than the disturbance distances quoted. Also, if this site is not displaced, then it may prove difficult or impossible to undertake maintenance during the breeding season, as it would be impossible to have the required buffer in place.</p> | <p>As a Schedule 1 species, effort may be required during the construction phase to avoid disturbing a merlin breeding attempt, if located within a potential disturbance zone of construction activities. The extent and duration of restrictions would be determined by the Ecological Clerk of Works (ECoW). Post-construction monitoring of breeding merlin would also inform the requirement for restrictions to operational maintenance. Information on measures would be included in a Bird Disturbance Management Plan (BDMP) which would be agreed prior to construction.</p> |
| <p>NatureScot 04 December 2023</p> | <p>Greenshank: Given the widespread distribution of breeding greenshank within the turbine array and buffer, and the likely places they may move broods to feed it may prove difficult or impossible to undertake maintenance during the breeding season, as it would be impossible to have the required buffer in place.</p> | <p>Post-construction monitoring of breeding greenshank would inform the requirement for restrictions to operational maintenance. These would likely be dependent upon location, duration and nature of any maintenance work. Information on measures would be included in a BDMP which would be agreed prior to construction.</p> |
| <p>NatureScot 04 December 2023</p> | <p>The OHMP includes a number of habitat measures which may be beneficial in the longer term to breeding waders including greenshank. However, reduction in grazing pressure here seems to be based on fencing out deer and sheep. Such fencing may be counter-productive to breeding waders in that it can form a barrier to movement of broods, and the scale of fencing potentially required here is large.</p> | <p>Refer to the revised OHMP in SEI Technical Appendix 8.5 for the proposed location and extent of fencing. Fencing within areas suitable for breeding waders would be of a design that would allow movement of wader chicks. In addition, fencing would be suitably micro-sited based on topography to minimise collision risks. Where such a risk is identified, fence markers would be added.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|---|
| <p>NatureScot 04 December 2023</p> | <p>Black-throated diver: The pair has bred on more than one loch so they may have alternatives if displaced, but these are still close to the wind farm and its access. T2 and T7 are both in close proximity to a breeding loch and again, should the pair not be displaced, any maintenance for these turbines will require mitigation to minimise risk of a WCA offence.</p> | <p>Post-construction monitoring of breeding black-throated diver would inform the requirement for restrictions to operational maintenance. These would likely be dependent upon location, duration and nature of any maintenance work. Information on measures would be included in a BDMP which would be agreed prior to construction.</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>We advise that the predicted collision risk for white-tailed eagles is particularly high compared to most other wind energy proposals, which will add significantly to a growing cumulative collision risk at a national level. This is likely to result in significant impacts on the growth rate of the national population of this re-introduced protected species, which will slow the rate of range expansion, and hinder progress towards restoring its former range across Scotland.</p> <p>The national cumulative collision risk of white-tailed eagles, including the most recent applications, is currently approximately 11-12 birds/year (approximately half of this from the current Uisenis and Glen Ullinish 2 applications). This means that the growth rate and subsequent range recovery may be significantly negatively impacted.</p> <p>We are currently undertaking work to understand the risks in more detail, to inform advice on future proposals. Given this situation, we will in future advise that a national level cumulative collision risk assessment is required for wind farm proposals/applications where white-tailed eagle has been identified as a significant ornithological receptor.</p> | <p>Predicted effects of the proposed development due to collision mortality on the national population were presented in EIA Report Chapter 9: Ornithology. The assessment conclusions are considered to remain unchanged due to the relatively minor amendments in turbine layout described in the SEI. It should however be noted, that as outlined by NatureScot below, the assessment of effects on the national population is precautionary because breeding numbers are now thought to have risen from 150 to 170 pairs.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|--|---|
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>At Uisenis specifically, it is clear that the southern cluster of turbines, T19-T25, makes a disproportionate contribution to the total predicted collision mortality. Our advice is that removing these would significantly reduce the impacts on white-tailed eagle arising from this development proposal.</p> | <p>The design process for the proposed development took into consideration the location of eagle nest sites and preferred topography and habitats. Additional mitigation has been committed to, to avoid significant effects.</p> <p>This request for the removal of turbines has been considered, however in order for the proposed development to remain financially viable, and to ensure that the energy potential of the Site is maximised, the applicant has advised that these turbines cannot be removed (see SEI Chapter 2: Site Description and Design Evolution for further information).</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>Eagle Conservation Programme: While this is included in the ‘Mitigation’ section on the Environmental statement, it is really too vague to be able to be classed as true mitigation at present.</p> <p>While we cautiously welcome the proposal, we would need more information about exactly what is proposed and why to be able to give more informed feedback.</p> | <p>Additional information on the proposed ECP is presented in SEI Technical Appendix 9.5 and summarised in the <i>Outline Eagle Conservation Programme</i>. This has been developed with assistance from Robin Reid (Scottish Raptor Study Group), and input from NatureScot and RSPB Scotland.</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>The EIA Report suggests that the Golden Eagle Territories (GET) model can be applied to white-tailed eagle (9.143). However, the wording in the GET model paper (Fielding 2020) is “could apply to other soaring species” not that it does. We have no idea of white-tailed eagle ‘territory’ size and therefore can’t quantitatively assess loss as we can for golden eagle.</p> | <p>The GET model determines the suitability of land features within a given area for golden eagles, based on known topographical characteristics favoured by the species. It does not consider territories.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|--|--|
| | | <p>in the current absence of any model for specifically predicting habitat use by white-tailed eagle in Scotland, the GET model can reasonably be applied to white-tailed eagles or other large raptor species which favour similar topography for soaring efficiently. Outputs were used to minimise potentially significant effects on white-tailed eagle in line with good EIA practice.</p> <p>The ECP would provide data on behaviour and habitat preferences of white-tailed eagles, and it is possible that this information could be used to support research into modelling white-tailed eagle in Scotland.</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>We disagree with the suggestion that avoidance rate of 95% is too precautionary.</p> | <p>Noted. A range of avoidance rates considered to be realistic for white-tailed eagle was used in the EIA Report assessment, with justification given. Current evidence on collision fatalities from wind farms in Scotland would suggest that 95% avoidance rate may be too precautionary. The carcass monitoring programme proposed as part of the ECP would add to the understanding of actual collision rates and the future revision of avoidance rates.</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>The modelling presented for impacts on the national population is based on 150 breeding pairs. As the current population is thought to be 170 pairs, the predictions here are likely to be precautionary.</p> | <p>Whilst this is noted, the modelling presented does not predict an overall impact upon the future conservation in Scotland over the lifetime of the proposed development. Whilst the growth may be slowed, the population's recovery towards favourable conservation status would still be achieved.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|---|
| | <p>Based on our 2016 research report modelling the future population growth and expansion of the white-tailed eagle population, additional mortality at this level is likely to reduce the predicted population by c.40% This is clearly a significant impact on the growth rate of the population, likely to negatively impact the pace of former range recovery.</p> | <p>The assessment conclusions presented in the EIA Report for the project alone are considered to remain unchanged due to the relatively minor amendments in turbine layout described in the SEI. A revised national population model based on amended input parameters is presented in the <i>Assessment of Effects</i> section.</p> |
| <p>NatureScot 07 February 2024 (white-tailed eagle response)</p> | <p>As noted in our earlier advice, we don't consider blade painting a proven method of mitigation, and given the high impacts here this would not be the best place to conduct a trial of a measure of unproven efficacy.</p> | <p>See above for response on blade painting.</p> |
| <p>RSPB 08 December 2023</p> | <p>We request the submission of the following and will review our position [objection to the proposed development] if this further information is provided by the Applicant:</p> <ul style="list-style-type: none"> • A Golden Eagle Population Viability Analysis (PVA) model with counterfactual outputs. • A detailed plan for a robust research project examining the effectiveness of painting a number of turbine blades black. • An outline Eagle Conservation Programme to be agreed prior to determination. | <p>The golden eagle PVA model is presented in SEI Technical Appendix 9.6 and considered in the <i>Assessment of Effects</i> section below.</p> <p>It is envisaged that a detailed research plan for monitoring the efficacy of turbine painting would be devised as part of the ECP. Such a plan would be discussed with key consultees including RSPB Scotland.</p> <p>Further detail on the scope of the ECP is provided in SEI Technical Appendix 9.5 and summarised in the <i>Outline Eagle Conservation Programme</i> section below. It is envisaged that this forms the basis of a planning condition, and similar to the Habitat</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--------------------------|---|--|
| | | Management Plan, would be finalised after consent is granted, in cooperation with key consultees, including RSPB Scotland. |
| RSPB 08 December 2023 | For both eagle species, we strongly recommend that the OHMP is revised to include actions to provide foraging habitat away from the proposed turbine array. | <p>The revised OHMP is presented in SEI Technical Appendix 8.5. This includes additional wet heath and peatland restoration areas which are located within foraging areas of breeding golden eagles and white-tailed eagles, and away from proposed turbine locations.</p> <p>Peatland restoration would be undertaken in line with NatureScot (2022; updated 2023²) <i>Peatland Restoration and Breeding Birds</i> guidance to avoid disturbance to Schedule 1 listed species and other sensitive breeding species highlighted in the guidance.</p> |
| RSPB 08 December 2023 | <p>For White-tailed Eagle:</p> <ul style="list-style-type: none"> We welcome the proposed painting of turbine blades black within the southern array, which is likely to help reduce collision risk to white-tailed eagle, as this was not proposed for the consented schemes. Consideration should be given to painting additional turbine blades black within the | The efficacy of the mitigation would be determined by a robust monitoring programme across the site as part of the ECP, which would determine whether consideration would need to be given to painting additional turbines to reduce collision risks. |

² <https://www.nature.scot/doc/peatland-restoration-and-breeding-birds>

| Consultee | Summary of Key Issues | Response to Comments |
|----------------------------------|---|--|
| | northern array. We suggest those closest to roost sites and frequent flight areas, i.e., the outer most turbines. | |
| <p>RSPB 08 December 2023</p> | <p>For golden eagle, adopting any of the following, would provide significant improvements:</p> <ul style="list-style-type: none"> • Removal of turbines within 1km of Golden Eagle nest sites and further consideration should be given to removing some turbines within the 2km core territory range from nest sites. • The 75m micro-siting allowance should not be used to move turbines closer to nest and roost sites. This should be committed to and secured by a suitably worded condition of any consent. • Loss of good and well-used golden eagle habitat would be reduced by removing further turbines from the scheme such as eastern and western outlying turbines T7, 12, 13 and 18, and any possible from the southern array. | <p>The design process for the proposed development took into consideration the location of eagle nest sites and preferred topography and habitats, as gathered through various site-specific data sources, rather than the assumption of a 2km core range radius around a nest.</p> <p>This request for the removal of turbines has been considered, however in order for the proposed development to remain financially viable, the applicant has advised that these turbines cannot be removed (see SEI Chapter 2: Site Description and Design Evolution for further information).</p> <p>It can be confirmed that no turbines would be microsited closer to eagle nest or roost sites.</p> |
| <p>RSPB 08 December 2023</p> | <p>Surveys and assessment:</p> <p>It was highlighted by RSPB Scotland that the EIA Report did not include detailed results and analysis of 2017-19 data provided to the applicant by Natural Research.</p> <p>It was also highlighted that the breeding bird study area covers the northern access road, but no results or data were</p> | <p>Additional information on the 2017-19 surveys is presented in SEI Technical Appendix 9.7.</p> <p>It is clarified that scarce breeding bird surveys carried out in 2017-19 and 2022-23 covered the closest part of the northern access route to the Site, which is shown on SEI Figure 3.1. Existing data from the Raptor Study Group were sought and provided on</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|----------------------------------|---|---|
| | <p>presented on any EIA Report Figure from this area. It is therefore unknown whether this area was actually covered by surveys.</p> <p>RSPB Scotland requested that the justifications and the missing documents that are referred to above are provided.</p> | <p>eagle nest and roost sites in a wider study area, which covers the remaining part of the access route.</p> <p>It is the case that the access route in its entirety follows an existing metalled road and so it is anticipated that construction work required along the route will be minimal and restricted to specific pinchpoints.</p> <p>It is clarified that upgrading works where required along the access route would form part of the area covered by the ECoW and pre-construction bird surveys would be undertaken to ensure that no Schedule 1 breeding species would be disturbed by construction activities. Suitable restrictions to construction activities would be employed if required. This would form part of a BDMP.</p> |
| <p>RSPB 08 December 2023</p> | <p>Black-throated diver:</p> <p>Infrastructure should be moved further away from the breeding loch either through re-design or through the proposed 75m micro-siting allowance to reduce the risk of displacement of the black-throated diver pair.</p> <p>The substation lighting mitigation outlined in section 9.226 of the EIA Report should be made a condition of any consent and the restriction period increased from April to July to March to August.</p> | <p>Effort would be made to microsite closest infrastructure away from the black-throated diver loch so that the risk of disturbance is reduced, e.g. through natural screening. No micrositing of closest infrastructure nearer to the loch would occur.</p> <p>The <i>Assessment of Effects</i> section considers the design amendments in relation to breeding black-throated divers, and updates to required mitigation.</p> <p>It can be confirmed that the substation lighting restriction period would be amended so that it covers the period of March to August.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
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| <p>RSPB 08 December 2023</p> | <p>Greenshank, golden plover and dunlin: Peatland restoration opportunities should be carried out at a much larger scale across the estate and beyond to provide benefits to these species.</p> | <p>The revised OHMP is provided in SEI Technical Appendix 8.5. This includes an additional peatland restoration area and additional wet heath restoration area which would benefit these species.</p> |
| <p>RSPB 08 December 2023</p> | <p>It is our view that cumulative impacts are underestimated (due to (i) scoping out of non-eagle species due to low/no collision risks associated with the proposed development alone, and (ii) only including other wind farm projects and not overhead lines and berthing facility) and the assessment should be updated and revised to give a more accurate prediction of cumulative impacts, particularly on white-tailed eagle and golden eagle. Results of this should then feed into updated population models for the species.</p> | <p>It is considered reasonable to scope out species from a cumulative collision risk assessment when the predicted collision rate for the proposed development is less than one bird over the operational lifetime of the proposed development (i.e. a collision mortality event is highly unlikely). This was the case for all IOFs apart from golden eagle and white-tailed eagle.</p> <p>It is recognised that non-wind farm projects, in particular overhead lines, may pose a collision or electrocution risk to eagles, but because the energy distribution network has been in place for a long period of time, mortality associated with collisions/electrocutions is factored into the baseline population size, productivity and growth rate used in the modelling (i.e. the reference populations are already suppressed by any impacts).</p> <p>Proposed wind farms on Lewis would provide a new, additional risk to eagles and so warrant inclusion in a cumulative assessment and has been the case for the assessment presented for the proposed development.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
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| | | <p>Should an application be made for the berthing facility, the cumulative impacts would be evaluated in that application.</p> <p>It is added that the ECP proposed as part of the proposed development and presented in SEI Technical Appendix 9.5 includes scope to address current impacts on eagles on Lewis that are unrelated to wind farms, including the energy distribution network.</p> |
| <p>RSPB 08 December 2023</p> | <p>Mitigation:</p> <p>We strongly recommend that the guy lines of the two permanent met masts be marked in line with NatureScot guidance.</p> <p>It should be noted that EIA Report section 8.155 (operational impacts on habitats) does not include oil leaks from turbines, and this should be included in any mitigation plan.</p> | <p>It can be confirmed that markers will be added to the existing met mast guy lines to reduce collision risks (see SEI Figure 3.11b). This enhancement measure is not subject to planning permission being granted to the proposed development.</p> <p>The prevention and minimisation of risks of oil leaks from turbines will be included as embedded mitigation – further details are provided in SEI Technical Appendix 3.1 Outline CEMP.</p> |
| <p>RSPB 08 December 2023</p> | <p><u>Outline Habitat Management Plan</u> [for response to comments relating to ecological features, see SEI Chapter 8: Ecology]:</p> <p>RSPB recommends that:</p> <ul style="list-style-type: none"> Any fencing or planting operations shall be undertaken outwith the breeding season for eagles (February to August inclusive), this includes use of helicopters, but ideally these should not be used due in close proximity to nest sites. We | <p>The revised OHMP in SEI Technical Appendix 8.5 includes a commitment to erect all fencing outside of the eagle breeding season. Micrositing would be employed to minimise the collision risks by taking into account topographical conditions. Where appropriate, markers may be added to further reduce risks.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
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| | <p>would also recommend any maintenance is also undertaken outwith these times.</p> <ul style="list-style-type: none"> • Micro-siting of the fence line is important to reduce the risk of potential collision with a new structure in the open landscape. | |
| | <p>The fenced areas of the OHMP as shown on EIA Figure 8.5.1 include the turbines in the southern array and two turbines in the northern array, which would negate any benefits to raptors and wader. For waders, the areas also include sloping ground which is unsuitable and would also negate any benefits. Again, we recommend further areas are sought, away from turbine locations.</p> | <p>The revised OHMP is provided in SEI Technical Appendix 8.5. This includes an additional peatland restoration area and additional wet heath restoration area away from turbines, which would benefit these species.</p> |
| | <p>Although we are supportive of the proposed native riparian tree planting, the importance of this site for waders should be acknowledged and locations are designs chosen so as to avoid 'edge effects'.</p> | <p>Identified riparian planting areas (see SEI Figure 8.5.1) take into account the distribution of waders on site and are on discrete sloped areas which are suboptimal for wader species.</p> |
| | <p>We support the carrion removal action. We also support the Low Intervention Areas 1km around eagle nest sites, although this cannot be termed 'Habitat Management'.</p> | <p>Although not habitat restoration, the low intervention area would involve estate management that would improve conditions for golden eagle, e.g. by avoiding muirburn close to nests during the breeding season. It is therefore appropriate to include in the OHMP as part of the range of habitat management measures.</p> |
| | <p>As discussed above, installing diver rafts in suitable lochs could count towards biodiversity enhancement, rather than mitigation. Any sites that already have breeding Black- or Red-throated Divers on them, would not mitigate against</p> | <p>The installation of carefully located rafts would have the potential to have a twofold benefit – (i) to allow existing black-throated diver pairs to continue to use a breeding loch, by locating the raft beyond disturbance</p> |

| Consultee | Summary of Key Issues | Response to Comments |
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| | <p>displacement since these birds are territorial, so rafts would only be likely to benefit existing pairs rather than displaced pairs.</p> <p>Locations should be chosen outside the turbine array, with good prey resources.</p> | <p>range; or (ii) allowing new pairs of either diver species to breed in the local area, that may otherwise in the future have inhabited currently unused lochs within the site. In both cases these would help mitigate adverse effects on the regional populations otherwise caused by the Project.</p> |
| | <p>In Table 9-1 of the EIAR the Applicant agreed to produce a collision reporting protocol in pre-application discussions with RSPB, however, this has not been included in the HMP.</p> <p>The proposed monitoring programme within the HMP should be developed alongside the requested Eagle Conservation Programme and research into efficacy of painting turbines black as mitigation against eagle collisions.</p> | <p>The collision reporting protocol would form part of the Eagle Conservation Programme - see SEI Technical Appendix 9.5. This includes monitoring for carcasses around turbines as part of the research into determining the efficacy of turbine blade painting.</p> |

Assessment of Effects

- 9.10 This section evaluates whether the significance of any of the effects predicted in the EIA Report **Chapter 9: Ornithology** would be changed due to the proposed design amendments summarised above.
- 9.11 The section considers in turn each of the IOFs identified in the EIA Report, in relation to the following impacts:
- Construction impacts:
 - Temporary and permanent habitat loss; and
 - Construction disturbance.
 - Operational impacts:
 - Operational disturbance and displacement; and
 - Operational lighting.
- 9.12 The modest changes in the locations of six turbines (up to 57m) will not make any material differences to the collision mortality risks predicted in the EIA Report. The magnitude of predicted collision risk effects on all IOFs are therefore considered to be unchanged, and have been scoped out of this assessment, with the exception of golden eagle, where further population modelling was requested by consultees (see **Table 9-1**).

Black-throated Diver

Construction Impacts

- 9.13 The assessment in 2023 EIA **Chapter 9: Ornithology** identified that the main potential impacts to black-throated divers during construction would be disturbance to a breeding pair that have regularly occupied a loch within a potential disturbance zone of 750m from proposed infrastructure (see EIA Report Confidential **Figure C9.8**), and temporary disturbance to birds that may forage on lochs adjacent to the northern access route.
- 9.14 Embedded mitigation related to these risks includes seasonal restrictions to construction works within the determined disturbance zone of a breeding attempt and exclusion of extraction from borrow pit 1 during the breeding season. Restrictions to construction work along the Site access route to the north would be in place from February to August for golden eagle (see below), and this would also minimise disturbance risks to divers.
- 9.15 The design amendments relevant to black-throated divers would be:
- the relocation of Turbine No.2 approximately 57m north west;
 - the addition of new temporary construction compound TCC3;
 - reduction in size of borrow pit 1; and
 - creation of a new borrow pit 7 to the north of the turbine array and subsequent construction of an additional substation compound in situ.
- 9.16 The location of Turbine No.2 would remain approximately the same distance from the loch as its previous location, and the reduction in size of borrow pit 1 would not affect black-throated divers if extraction takes place outside of the full black-throated diver breeding

season (March to August). No additional impacts are therefore predicted, and therefore the magnitude of impact remains unchanged.

- 9.17 Temporary construction compound TCC3 would be located within 250m of the loch, and therefore within potential disturbance distance of breeding pairs (based on information for this species in Goodship & Furness, 2022). The following additional mitigation is therefore planned in order to avoid additional impacts:
- Construction of TCC3 would take place outside of the black-throated diver breeding season;
 - Suitable screening would be erected around TCC3 outside of the black-throated diver breeding season to obstruct the view from the loch;
 - Where possible, usage of TCC3 would be avoided during the breeding season on the advice of the appointed ECoW, unless it can be confirmed that no breeding of black-throated diver or other Schedule 1 species is taking place or will take place that year within disturbance range of a nest site, following the principles of the BDMP to be agreed with NatureScot.
 - If this is not possible, activity at TCC3 would be restricted only to that which would be considered non-disturbing to divers or any other Schedule 1 breeding species by the ECoW or ornithologist, as set out within the BDMP in consultation with NatureScot. All potentially disturbing activities would be prohibited.
- 9.18 The extraction of borrow pit 7 and subsequent construction of the substation compound to the north would take place outside of the golden eagle breeding seasons (February to August) to avoid disturbance to breeding birds, and so this would also avoid disturbance to foraging black-throated divers on the nearby loch.
- 9.19 When considering the existing and additional mitigation, it is concluded that there would be no additional construction impacts to black-throated divers and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.20 The following design amendments would be relevant to black-throated divers during the operational period:
- The relocation of Turbine No.2 approximately 57m to the northwest; and,
 - Operation of an additional substation compound to the north of the turbine array.
- 9.21 As outlined above, no additional disturbance-displacement impacts would be predicted due to the relocation of Turbine No.2 to a similar distance from the loch.
- 9.22 Although the northern substation is within 500m of the edge of a loch used by foraging black-throated divers, it is unlikely that its presence would result in displacement which would significantly impact on birds' abilities to forage successfully. As is proposed for the substation to the south, restrictions on lighting during the extended (golden eagle) breeding season (February to August) would also be enforced for this substation, which would reduce the risk of displacement.
- 9.23 It is therefore concluded that there would be no additional operational impacts to black-throated divers and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Golden Eagle

Construction Impacts

- 9.24 The EIA assessment identified that the main risks to golden eagles during construction would be disturbance to breeding birds from two active territories that overlap with the Site. As a result, a range of embedded mitigation within 1km of nest sites and 500m from roost sites was committed to, which would be implemented as part of a Bird Disturbance Management Plan (BDMP).
- 9.25 Based on the locations of known nest and roost sites (see EIA Report Confidential **Figure C9.1**) the design amendments relevant to golden eagles during construction would be:
- Creation of a new borrow pit 7 to the north of the turbine array and subsequent construction of an additional substation compound in situ; and,
 - creation of a new borrow pit 6 and reduction in size of nearby borrow pit 5.
- 9.26 As noted above for black-throated diver, no extraction of borrow pit 7 and no subsequent construction of the substation compound would take place during the golden eagle breeding season (February to August) to avoid disturbance to nesting birds.
- 9.27 The locations of borrow pits 6 and 7 are outside of the 1km restriction buffer from known nest sites but extraction activity would be monitored by the ECoW at commencement to enable legislative protection that such activities do not affect nesting golden eagles.
- 9.28 When considering the existing mitigation, it is concluded that there would be no additional construction impacts to golden eagles during construction and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.29 The main impact on golden eagles due to the operation of the proposed development was determined within the 2023 EIA to be the possible abandonment of one active territory, or a reduction in productivity of the territorial pair, and potential adverse impacts on breeding birds within a second territory, although the outcome of the impacts on the second territory is less clear. These impacts would be due to the displacement of golden eagles from suitable nesting and foraging habitat due to the presence of wind turbines.
- 9.30 The following design amendments would be relevant to golden eagles during the operational period:
- Operation of an additional substation compound to the north of the turbine array; and,
 - Creation of additional areas for wet heath and peatland restoration as part of the Habitat Management Plan (HMP).
- 9.31 Because of the modest changes in location of six turbines (up to 57m), these will not make any material differences to the displacement impacts on golden eagles predicted in the EIA Report, with no changes in closest infrastructure to nest sites.
- 9.32 Although it is likely that due to the location of the additional substation compound within, what will be, a former borrow pit, there will be some screening from golden eagle nest sites, restrictions on lighting during the breeding season (February to August) would be implemented for this substation, which would reduce the risk of displacement of breeding and foraging birds.

- 9.33 Overall, there are no additional adverse impacts predicted.
- 9.34 The expansion of the HMP to provide additional areas of suitable golden eagle habitat enhancement within core foraging range of at least one golden eagle pair would reduce the likelihood of territory abandonment for this pair, meaning that the risk of abandonment of one pair (rather than two) would represent the realistic worst-case scenario.
- 9.35 It is therefore concluded that when considering the additional planned habitat enhancement, there would be no additional operational impacts to golden eagles (and potentially there would be a reduction in impacts) and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Collision Risk

- 9.36 In their EIA Report consultation letter, RSPB Scotland requested that a golden eagle PVA model with counterfactual outputs should be presented in order to determine the effects of additional mortality to the NHZ 3 population due to collisions (see **Table 9-1**). The PVA model is presented in detail in **SEI Technical Appendix 9.6** and summarised here.
- 9.1 In the 2023 EIA Report the predicted mean annual collision rate for golden eagles in 2022-23 was 0.301 birds, or one collision every 3.3 years. For the 2017-19 survey period, the predicted mean annual collision rate was 1.365 individuals. As it was unclear whether 2017-2019 or 2022-23 data are more reflective of the current/future reasonable worst-case situation for golden eagles, it was considered appropriate to take a mean value for annual collision rate using all the data. Based on this assumption, the overall annual mean collision rate is 0.995, or one collision per year. Although there are some small changes to proposed turbine locations, these design amendments will not make any material difference to predicted collision rates.
- 9.37 The golden eagle PVA model predicts that under the baseline situation, an average annual growth rate of 1.011 (1.1%) for the Outer Hebrides population will occur, assuming that there is a population cap at 101 pairs, equivalent to the amount of territory ranges thought to exist in the Outer Hebrides (currently around 95 ranges are believed to be occupied).
- 9.38 Considering a range of additional mortality year due to collisions, the model predicted that at one collision per year, this would result in a reduction in population size of 0.26% (counterfactual population size, CPS = 0.9973771) and at 1.4 collisions, the reduction would be 0.33% (CPS = 0.9966813).
- 9.39 Cumulatively an annual collision rate of 0.532 was predicted from other projects within the Outer Hebrides NHZ. When adding the worst-case annual collision rate of 1.365 birds, the resultant cumulative collision rate of c.1.9 birds per year would result in a reduction in population size by 0.53% (CPS = 0.9946729).
- 9.40 Overall, therefore, the Outer Hebrides population would still continue to grow, albeit at the end of the 25-year period to which the model can predict with sufficient accuracy, the population would be up to around 0.53% smaller than without the proposed development and other projects. With this small level of impact, it is considered that favourable conservation status can still be maintained over the operational period of the proposed development, and the predicted effects in the EIA Report (minor adverse and not significant) remain unchanged.

White-tailed Eagle

Construction Impacts

- 9.41 The 2023 EIA assessment identified that the most likely risks to white-tailed eagles during construction would be disturbance to foraging birds across the Site. Two previously used nest sites are within possible disturbance distances from the existing road and proposed access route to the north of the Site (see EIA Report Confidential **Figure C9.4**). Monitoring and restrictions to construction activities would be required during February to August to avoid disturbance to any identified breeding attempts. Any occupied roost sites would also require restrictions within 500m around dawn and dusk, as outlined in a BDMP.
- 9.42 Based on the locations of known nest and roost sites (see EIA Report Confidential **Figure C9.4**) it is considered that no design amendments would be at a location, or of a sufficient scale to make a material difference to white-tailed eagles during construction, when comparing with the impacts predicted in the EIA Report.
- 9.43 It is therefore concluded that there would be no additional construction impacts to white-tailed eagles during construction (and no additional mitigation required), and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.44 The main impact on white-tailed eagles due to the operation of the proposed development was determined to be the risk of collisions with turbines. As noted above, due to the small-scale changes in proposed turbine locations, the collision rates predicted in the EIA Report will not be materially different when taking into account the design amendments.
- 9.45 The following design amendments may therefore be relevant to white-tailed eagles during the operational period:
- Operation of an additional substation compound to the north of the turbine array; and,
 - Creation of additional areas for wet heath and peatland restoration as part of the Habitat Management Plan (HMP).
- 9.46 As current evidence suggests that white-tailed eagles are likely to display much lower behavioural avoidance of wind turbines than species such as golden eagles, displacement was not considered to have a large impact on foraging birds, and based on distance from recorded nest sites, no breeding birds would be directly displaced. Although there may be some displacement around the additional substation compound, this would be very localised in extent and unlikely to affect the productivity or survival of any individual.
- 9.47 The additional habitat management areas would be suitable for improving foraging conditions for white-tailed eagles, and it is considered that on balance, the design amendments (when including the revised Outline HMP) represent an improved situation for white-tailed eagles than that presented in the EIA Report. Overall, there would be no additional operational impacts to white-tailed eagles, and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Collision Risk

- 9.48 In their EIA Report consultation letter, NatureScot advised that they consider that the current national white-tailed eagle cumulative collision risk, including the proposed development, to be approximately 11-12 birds per year (see **Table 9-1**). They also advised that the breeding population has increased from approximately 150 pairs (as modelled in the 2023 EIA Report) to approximately 170 pairs i.e. a total of 340 breeding adult birds.
- 9.49 NatureScot advised that based on their modelling the future population growth and expansion of the white-tailed eagle population, this additional mortality is considered to result in a significant effect.
- 9.50 The white-tailed eagle population model, as presented in 2023 EIA Report **Technical Appendix 9.3** was amended to take into account updated information on Scottish white-tailed eagle, and therefore the following updated input parameters were used:
- National population = 170 pairs;
 - Productivity (Number of chicks fledged per territorial pair) = 0.84. Taken from most recent five-year mean (2018-22) using data presented in Scottish Raptor Monitoring Scheme annual reports³; and,
 - Total annual mortality (as advised by NatureScot, **Table 9-1**) = up to 12 birds (modelled at increments of 1).
- 9.51 All other parameters used were the same as those presented in 2023 EIA Report **Technical Appendix 9.3**.
- 9.52 Based on a worst-case cumulative annual collision estimate of 12 birds, the model predicts continued growth (and a national population of c.3,500 individuals at year 25, up from c.700 individuals now), but a 36% (CPS = 0.6391233) lower national population at year 25 than without the additional mortality. This modelling is based on a similar assumption to that used by Sansom *et al.* (2016) in their modelling of Scottish white-tailed eagles, that there would be no density-dependent population growth or carrying capacity.
- 9.53 When attempting to determine carrying capacity, Sansom *et al.* (2016) estimated that across Scotland, the maximum number of pairs ranged from 783 to 1,041. As noted by Sansom *et al.* (2016), once a carrying capacity has been reached, it is likely that the population will stabilise around that density. Assuming that the national carrying capacity would be met at some stage prior to year 25 of the proposed development's model, and therefore below approximately 5,500 individuals predicted under the baseline scenario, this would mean that at year 25, the counterfactual population size would be lower than 36% (i.e., the impacted population size would be closer to that of the unimpacted population).
- 9.54 These impacts also do not take into consideration the proposed mitigation for the proposed development (painting of turbine blades, carrion/gralloch removal around turbines and habitat enhancement) as well as that proposed for other projects, which have been selected to help reduce these effects on the population either directly (by avoiding collisions) or indirectly (by increasing productivity or survival rates). For the proposed development, based on current evidence demonstrating the efficacy of this measure for

³ <https://raptormonitoring.org/annual-report>

white-tailed eagles, whilst acknowledging some uncertainties still exist, the painted blade mitigation alone was estimated in the EIA Report to have the potential to reduce the predicted annual collision rate from approximately 2.5 individuals to approximately 1.25 individuals.

- 9.55 Therefore, whilst the predicted effects of collision mortality due to the proposed development alone, and cumulatively at an Outer Hebrides NHZ scale would remain minor adverse and not significant (unchanged from the EIA Report), using NatureScot's values for national cumulative mortality, the change in magnitude of population growth due to unmitigated collision mortality would be seen as moderate adverse and therefore a significant effect, albeit it should be emphasised that a continued strong increase of the national population is predicted.
- 9.56 In response to the identified collision risk impacts for white-tailed eagles, the Outline Eagle Conservation Programme presented in **SEI Technical Appendix 9.5** has been designed to protect, increase and better understand the Outer Hebrides population.

Merlin

Construction Impacts

- 9.57 The EIA assessment identified that with merlin breeding within the Site, measures to enable legislative protection during the breeding season would be included within the BDMP. A range of restrictions to construction activities within up to 500m may be required.
- 9.58 There would be no design amendments in the areas of the Site where merlin have been previously recorded breeding (see 2023 EIA Report Confidential **Figures C9.6** and **C9.9**) and it is therefore concluded that there would be no additional construction impacts to merlin during construction (and no additional mitigation measures) and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.59 The main impact on merlin due to the operation of the proposed development in the 2023 EIA Report was determined to be the possibility of displacement of a single breeding pair from nesting within an area around turbines. It was concluded that this was most likely to result in movement elsewhere within the local area rather than the loss of the pair to the population.
- 9.60 The area where nesting has previously taken place is not in proximity to any design amendments and so predicted impacts would be unchanged from those presented in the EIA Report. The additional wet heath habitat management area is not a location where merlin have previously been recorded, although it is possible that birds may be attracted to improved nesting and foraging habitat due to changes in grazing levels.
- 9.61 Overall, it is concluded that there would be no additional operational impacts to merlin (and no additional mitigation measures) and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Greenshank

Construction Impacts

- 9.62 The EIA assessment identified that construction activities could affect breeding greenshank, including in feeding territories that can be separate to nesting territories. The main concentrations of greenshanks were recorded in boggy areas in the centre of the Site (see EIA Report Confidential **Figures C9.7** and **C9.10**).
- 9.63 The relocation of the six turbines is designed to move turbine infrastructure away from deep peat and near natural peat bog habitat, and so these are beneficial design amendments for breeding greenshank. The reduction in sizes of borrow pits 1-3 and temporary construction compounds TCC 1 and 2 in the centre of the Site may also be a slight improvement.
- 9.64 The construction of TCC 3 may be within an area used by breeding greenshanks, but as noted above for black-throated diver, construction of the compound would not take place during the breeding season and restrictions to compound usage would be implemented during the breeding season to avoid the potential for disturbance to breeding Schedule 1 species (i.e., including greenshank).
- 9.65 When considering the additional mitigation, it is concluded that there would be no additional construction impacts to greenshanks during construction and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.66 The main impact on greenshank due to the operation of the proposed development was determined within the 2023 EIA Report to be the possibility of displacement of breeding pairs within an area around turbines. It was concluded that although it was unlikely that there would be a 100% loss of birds, numbers within the Site may decrease compared to baseline conditions.
- 9.67 The relocation of six turbines and reduction in borrow pit sizes will result in a slight improvement in breeding and foraging conditions for greenshank, but overall predicted impacts would be unchanged from those presented in the EIA Report. The additional wet heath and peatland habitat management areas are not in locations which have previously been surveyed for greenshank, although it is possible that birds may be attracted to improved nesting and foraging habitat due to changes in grazing levels.
- 9.68 Overall, it is concluded that there would be no additional operational impacts to greenshank (and no additional mitigation measures) and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Golden Plover and Dunlin

Construction Impacts

- 9.69 The EIA assessment identified that unmitigated construction activities could cause disturbance to breeding golden plover and dunlin. Golden plovers were recorded in relatively large numbers widely across the Site (EIA Report **Figures 9.10** and **9.17**) and whilst the design amendments may affect particular locations and territories, overall the impacts will be similar to those predicted in the EIA Report. The additional wet heath

restoration area will be beneficial for golden plovers which may result in an overall reduction in the magnitude of impacts compared to those predicted in the EIA Report.

- 9.70 Dunlin were more sparsely recorded (EIA **Figures 9.11** and **9.18**) but most commonly recorded within the boggy areas in the centre of the Site. Similar to greenshank described above, the movement of six turbines to avoid deep peat and near natural peat bog habitat, plus the reduction of borrow pit sizes in this area will be overall slightly better for dunlin. Although additional temporary construction compound TCC3 may be within an area used by breeding dunlin, existing restrictions during the breeding season as described above would avoid or otherwise minimise the potential for disturbance impacts. These would be set out in the BDMP.
- 9.71 When considering the existing mitigation, it is concluded that there would be no additional construction impacts to golden plover or dunlin during construction and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Operational Impacts

- 9.72 The main impacts on golden plover and dunlin due to the operation of the proposed development were determined to be the possibility of displacement of breeding pairs within an area around turbines. It was concluded that although it was unlikely that there would be a 100% loss of birds within the Site, numbers may decrease compared to baseline conditions.
- 9.73 The relocation of six turbines and reduction in borrow pit sizes in the centre of the Site will result in a slight improvement in breeding conditions for golden plover and dunlin, but overall predicted impacts would be unchanged from those presented in the EIA Report. The additional wet heath and peatland habitat management areas are not in locations which have previously been surveyed for waders, although it is possible that birds may be attracted to improved nesting and foraging habitat due to changes in grazing levels.
- 9.74 Overall, it is concluded that there would be no additional operational impacts to golden plover or dunlin (and no additional mitigation measures) and therefore **no change in residual effects** (i.e., minor adverse and not significant in EIA terms).

Outline Eagle Conservation Programme

Scope and Aims of ECP

- 9.75 For this SEI, in response to consultee comments (**Table 9-1**) an Outline ECP has been developed in conjunction with Robin Reid (Redwing Ecological Surveys, Scottish Raptor Study Group) with input from NatureScot and RSPB Scotland and is presented as **SEI Technical Appendix 9.5**.
- 9.76 Whilst on Site mitigation for predicted operational effects on golden eagle and white-tailed eagle has already been committed to (in the form of painted blades, carrion removal, HMP habitat restoration), the ECP would be designed to protect, increase and better understand the Outer Hebrides populations of golden eagle and white-tailed eagle.
- 9.77 It is proposed that a detailed ECP would be finalised by an independent organisation in consultation with an appointed advisory group, which NatureScot and RSPB Scotland would be invited to provide representation for. The two main actions of the ECP are however proposed as:

1. To undertake research and monitoring to increase understanding of wind farm impacts on golden eagles and white-tailed eagles in a high-density situation, in order to inform future policy, decision making, and conservation management.
2. To undertake conservation management measures to address constraints on golden eagle and white-tailed eagle populations in the Outer Hebrides with the aim of:
 - a. Improving breeding success in golden eagles.
 - b. Maintaining the size of the current golden eagle population.
 - c. Allowing the white-tailed eagle population to continue to increase to reach carrying capacity on the island.

9.78 The main actions of the ECP would be supported by a number of measures as follows:

Monitoring and research

- Annual monitoring of occupancy and breeding success of eagle territories on the Pairc peninsula and periodic monitoring (every 5 years) at an Outer Hebrides scale;
- Continuation of the existing Lewis territorial golden eagle satellite telemetry study which overlaps with the Eishken estate and is currently supported by charitable funds through Natural Research Ltd;
- Satellite tagging of territorial white-tailed eagles adjacent to the Site;
- Satellite tagging of a sample of nestling golden eagles and white-tailed eagles from nests across the Outer Hebrides;
- A rigorous programme of carcass searches in order to quantify collision mortality associated with the proposed development, and determine the efficacy of painting turbine blades to mitigate collision risks;
- A programme of Avian Influenza (HPAI) testing of nestling eagles (and adults where possible); and
- Habitat condition monitoring and monitoring of eagle prey availability within the Eishken estate.

Conservation Management:

Measures to improve golden eagle foraging habitat and live prey availability

- Reduction in the size of the red deer herd on Eishken Estate;
- Construction of fenced enclosures to exclude red deer from certain areas on Eishken Estate and elsewhere where this would benefit eagle foraging habitat condition and prey populations (see revised Outline HMP (**SEI Technical Appendix 8.5**)); and
- Support for deer management in other areas of Lewis & Harris through the provision of training, equipment, deer processing facilities and stalking resource.

Measures to improve the availability of suitable sheltered and undisturbed white-tailed eagle nest sites

- Protection, restoration and creation of native woodland habitat on coastal crags and at other suitable nesting locations; and
- Re-enforcement of existing nest structures and provision of artificial nesting structures in conifer plantations where existing nests are unstable.

Reduction or elimination of electrocution risk to eagles on the overhead line (OHL) electricity distribution network through:

- Influencing and supporting SSEN with the development of a design for an OHL with increased line separation distance that eliminates the risk of electrocution to eagles;
- Analysis to identify sections of the current OHL distribution line network in the Outer Hebrides that carry the greatest risk of electrocution to eagles; and
- Support for increased costs likely to be associated with roll out of the amended design for OHL replacements.

9.79 It is envisaged that the appointment of an independent organisation, advisory group and finalisation of the ECP post consent would be secured by way of a suitably worded planning condition.

Summary of Changes to the Significance of Effects

9.80 The design amendments to the proposed development are considered to be relatively small in their scope and extent, and in the majority of cases, there would be no material changes to the construction or operational impacts on IOFs, and resultant significance of effects would be unchanged from the EIA Report (not significant).

9.81 Where the potential for an additional impact has been identified, for example, the construction of the additional substation compound, additional mitigation measures have been proposed to ensure that no additional impacts would occur, and therefore the predicted significance of effects are again unchanged from the EIA Report (not significant). The mitigation measures that are additional to the ones presented in the EIA Report are:

- Restrictions during construction associated with TCC 3, to minimise disturbance risks to black-throated diver and greenshank in particular; and
- Increase in the extent of habitat management as part of the HMP via an extension to the application boundary, so that there is greater benefit for raptors and waders.

9.82 In addition, further information has been provided on the scope of the ECP.

9.83 The cumulative impact of white-tailed eagles at a national level was not assessed in the EIA Report (this was undertaken at an Outer Hebrides NHZ level only), but using NatureScot's worst-case cumulative collision rates, there would be a significant resultant reduction in population growth rate, albeit the population would continue to grow. The mitigation committed to by the proposed development (painted blades, carrion removal and habitat enhancement) is expected to reduce the contribution of the proposed development towards this cumulative effect, whereas the ECP is also designed help the wider Outer Hebrides and therefore national populations.

References

CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

Goodship, N.M. and Furness, R.W. (2022). Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. A report from MacArthur Green to NatureScot.

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Introduction

- 10.1 **Chapter 10: Hydrology, Hydrogeology and Geology** of the Environmental Impact Assessment (EIA) Report assesses the potential impacts of the proposed development on geology (including peat and soils), hydrology and hydrogeology (forming the water environment).
- 10.2 This Supplementary Environmental Information (SEI) Chapter supplements **Chapter 10** of the EIA Report. The methodology employed in this SEI Chapter is set out in **Chapter 10** of the EIA Report.
- 10.3 The following key documents should be read in conjunction with this SEI:
- EIA Report Volume 2 – **Chapter 10: Hydrology, Hydrogeology and Geology**;
 - EIA Report Volume 3d – Chapter 10 Figures; and
 - EIA Report Volume 4b – Chapter 10 Technical Appendices.

Consultee Responses to 2023 Application

- 10.4 **Table 10-1** provides a summary of the consultation with regards to geology (including peat) and the water environment related to the 2023 Uisenis Wind Farm application. A reply to the consultee response is also provided in **Table 10-1**.

Table 10-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|---------------------------------|---|--|
| Nature Scot 04 December 2023 | Mitigation and offsetting could be sufficient to overcome predicted impacts on peatland arising from the proposal. However, the outline Habitat Management Plan (oHMP) is not currently sufficient to achieve this. | The Outline Habitat Management Plan has been updated (SEI Technical Appendix 8.5). |
| Nature Scot 04 December 2023 | The main concern with this plan, in terms of peatland, is that the proposed compensation measures are in no way sufficient to offset the impacts on the peatland habitat. Our guidance advises that there should be 1:10 (loss : restoration) multiplier applied for peatland. Therefore, based on 47.97ha loss, there should be 479.7ha of restoration. In addition, the above plan is also meant to include enhancement, which we would recommend is in the region of 10% of the baseline assessment of peatland within the site, which is quoted as being 758.2ha, therefore 75.82ha required for enhancement. This plan, proposes 50ha of peatland restoration compared to the 479.7ha (with an additional 75.82ha for enhancement) we would advise, as such this plan is | The Outline Habitat Management Plan has been updated (see SEI Technical Appendix 8.5). |

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| | significantly inadequate to offset the impacts from this proposal. | |
| Nature Scot 04 December 2023 | We recommend that any works carried out for peatland restoration should be carried out in accordance with the Peatland ACTION Technical Compendium. | The Outline Habitat Management Plan has been updated to include this (see SEI Technical Appendix 8.5 . |
| Nature Scot 04 December 2023 | We recommend that peat should be reinstated as soon as possible, and not stored for any longer than one year. | Noted. The Peat Management Plan has been updated, and addresses reinstatement of peat (see SEI Technical Appendix 10.2) |
| Nature Scot 04 December 2023 | We recommend that the proposal for peatland restoration be revised so that ten hectares are restored for every hectare lost in accordance with NatureScot guidance. | The Outline Habitat Management Plan has been updated to include this (see SEI Technical Appendix 8.5 |
| Ironside Farrar 23 January 2023 | As the detailed infrastructure probing does not meet the guidance in some locations, additional probing is required to complete the assessment / fill gaps to make it in line with ECUBPG / SEPA guidance. This included additional probing at borrow pits to cover the entire areas of search, and also the section of tracks where there are gaps in the probing / 50m centres have not been achieved. | Additional peat depth survey has been completed as part of this SEI (see SEI Technical Appendix 10.1 and SEI Technical Appendix 10.2). |
| Ironside Farrar 23 January 2023 | Comment is requested on whether the likelihood assessment can be considered suitably robust without considering the areas of artificial drainage across the proposed area as although drainage is noted as a factor potentially influencing peat stability it does not appear to have been included in the likelihood assessment. | Comment included in Section 6 of SEI Technical Appendix 10.1 . |
| Ironside Farrar 23 January 2023 | The windfarm infrastructure should be included in the consequence assessment. Therefore please update the assessment with this receptor and make any amendments to the overall risk assessment (hazard ranking). | Included in the Peat Landslide Hazard Risk Assessment (PLHRA) and is presented as Technical Appendix 10.1 . |
| Ironside Farrar 23 January 2023 | It is not clear whether the medium and high likelihood areas shown relating to the borrow pits have been included in the consequence assessment. In addition, some of the track sections shown in medium risk do not appear to be included either. Please update the consequence assessment and risk assessment accordingly. | Included in the Peat Landslide Hazard Risk Assessment (PLHRA) and is presented as SEI Technical Appendix 10.1 . |
| Ironside Farrar 23 January 2023 | Please provide an overall risk map (hazard ranking) to show the extent of substantial / serious hazard (risk). | See SEI Figure 10.1.9a-p presented in SEI Technical Appendix 10.1 . |
| Ironside Farrar | Site specific mitigation, including a site specific plan, should be provided for all | Hazard risk assessment and site specific mitigation for all |

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| 23 January 2023 | medium (or above) risk areas (substantial / serious). This should include risk (hazard ranking) over the area relative to the infrastructure layout, details of topography, slope and receptors and also the specific mitigation and proposed micrositing options to demonstrate that these proposals are all achievable/credible. | medium (or above) risk areas for the PLHRA has been amended as is presented as SEI Technical Appendix 10.1 . See SEI Figure 10.1.9a-p presented in SEI Technical Appendix 10.1 . |
| Ironsides Farrar 23 January 2023 | Given there are number of areas of medium and high risk in proximity to infrastructure, please confirm how stability risks associated with temporary peat storage will be reduced during construction phase. A plan should be included showing area suitable for storage. | Details on the proposed mitigation and temporary storage areas are provided in Section 7.1 of the PLHRA (presented in SEI Technical Appendix 10.1) which details suitable areas for temporary peat storage. Recommended locations included in the Peat Management Plan (SEI Technical Appendix 10.2). |
| Ironsides Farrar 23 January 2023 | Please provide details of mitigation to reduce / manage risks for borrow pits. | The borrow pit assessment presented as part of the EIA Report has been updated and is included in this SEI as SEI Technical Appendix 10.3 . This includes best practice mitigation measures with regard to borrow pits. As part of the detailed design (post any consent) further assessment and required mitigation measures will be set out as part of the detailed CEMP. It is accepted that a planning condition can be used to secure this. |
| Scottish Water 08 September 2023 | 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. | Noted. |
| Scottish Water 08 September 2023 | 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. | Noted. |
| Scottish Water 08 September 2023 | 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. | Noted. |

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| SEPA 21 November 2023 | To show that the development complies with the mitigation hierarchy in Policy 5 of NPF4 we are looking for a demonstration that peatland in near natural condition has been avoided (as this has the lowest greenhouse gas emissions and greatest greenhouse gas uptake potential of all peatland condition categories) and the total area and volume of peat disturbance has been minimised. | Noted. The design has been amended to avoid areas of peatland in near natural condition as much as possible. The amended design in relation to peat depth and peatland condition is shown on SEI Figures 10.1.6a-k and SEI Figure 8.4a (also in SEI Figure 2.10a-h). This is addressed below and discussed in full in SEI Chapter 2, SEI Technical Appendix 10.1 and SEI Technical Appendix 10.2 . |
| SEPA 21 November 2023 | The peatland quality information provided to us by the developer shows that much of the site is near natural condition blanket bog. Of the 25 turbines only five (T13, T16, T18, T19 and T24) do not have an impact on habitat in this condition. We therefore object and seek modifications to the turbine layout to clearly demonstrate how steps have been taken to avoid near natural condition habitat. We also object until the construction compounds and borrow pits are relocated or modified so that they do not directly impact on near natural habitats. | |
| SEPA 21 November 2023 | In relation to minimisation of the total area and volume of peat disturbed then steps have been taken to avoid impacting on the larger areas of deeper peat. However peat depth on the site is variable and there are also a large number of smaller pockets of deeper peat throughout the site and, while we appreciate that amendments were made in relation to this as part of finalising the layout, much of the turbine infrastructure is located on such areas. We object until either infrastructure is moved to avoid the deepest areas of peat in the vicinity or information is submitted to demonstrate that the current layout minimises the volume of peat to be disturbed, which we note is currently estimated to be 194,942m ³ . We also object unless the dimensions or exact location of the North construction compound is amended to avoid the deeper areas of peat. | |
| SEPA 21 November 2023 | Taking into consideration above we suggest that the developer focus on infrastructure that is proposed on near natural habitat located on peat over 1 m in depth. A table showing the extent of peat disturbed by each infrastructure element, demonstrating how it has been located to minimise peat disturbance and impact on near natural habitat may be a useful approach. | This is presented within SEI Chapter 2 and peat volumes are provided in SEI Technical Appendix 10.2 . |
| SEPA 21 November 2023 | Once layout details are finalised we will ask for a condition requiring a finalised Peat | Noted. |

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| | Management Plan. Proposals for reinstatement of disturbed areas should follow recognised best practice, for example use of peat to form landscape bunds is not acceptable. Any proposals for use of disturbed peat in peatland restoration should be clearly outlined and justified. | |
| SEPA 21 November 2023 | Table 5-2 of the OHMP indicates that approximately 88 ha of peatland habitats – bog, grassland and heath - will be impacted by the development. However at this stage only 50 ha of peatland restoration is proposed. While proposals to manage grazing are also included, in line with NatureScot’s guidance Advising on peatland, carbon-rich soils and priority peatland habitats in development management this is not considered offsetting. We therefore object to the development until the peatland restoration proposals are significantly expanded. | The OHMP has been updated and is presented as SEI Technical Appendix 8.5 . |
| SEPA 21 November 2023 | Most turbine infrastructure is located greater than 50 m from a watercourse following recognised industry practice. However we note that T1, T2, T10 and T24 are within this buffer. For infrastructure at T1, T10 and T24 we are content that the potential for pollution could be controlled via suitable mitigation measures. However, at T2 we consider that a buffer of 10 m between the proposed clearance area and the watercourse is not large enough to put in place measures to protect the water environment. We therefore object until the infrastructure is repositioned to increase the buffer and a drawing is provided showing the site specific mitigation that can be put in place to protect the water environment. | Noted. Turbine T2 has been relocated to move it outside of the 50m watercourse buffer, as requested. |

Design Amendments

10.5 The design amendments from the site layout of the 2023 Uisenis Wind Farm application (as detailed in the 2023 EIA Report) are detailed in **SEI Chapter 2: Site Description and Design Evolution** (and illustrated on **SEI Figures 2.9 and 2.10**), and include:

- Relocation of wind turbines (Turbine No’s. 2, 3, 4, 8, 14 and 25);
- Relocation of crane pads (associated with Turbine No’s. 2, 3, 4, 8, 14, 16 and 25);
- Reduction in size of both temporary construction compounds that were included in the EIA Report;
- Addition of a new temporary construction compound;

- Reduction in size and relocation of some borrow pits (Borrow Pit No's. 1, 2, 4 and 5);
- Addition of two new borrow pits (Borrow Pit No's. 6 and 7);
- Realigning of some existing access tracks, addition of access track spurs, and an increase in the length of floating track;
- Addition of a second substation compound; and
- Expansion of application boundary (in order to accommodate increases to the areas proposed for peat bog restoration and grazing management, as well as the second substation compound).

Revised Figures

10.6 In order to update the graphic information previously issued with the 2023 EIA Report, a series of revised figures have been produced for the SEI, as follows:

SEI Chapter 10 Figures

- **SEI Figure 10.1: Local Hydrology;**
- **SEI Figure 10.2: Soil Map of Scotland;**
- **SEI Figure 10.3: Carbon and Peatland;**
- **SEI Figure 10.4: Superficial Geology;**
- **SEI Figure 10.5: Bedrock Geology;**
- **SEI Figure 10.6: Groundwater Vulnerability;**
- **SEI Figure 10.7: Regional Hydrology;** and
- **SEI Figure 10.8: GWDTE.**

SEI Technical Appendix 10.1: PLHRA Figures

- **SEI Figure 10.1.1: Site Location;**
- **SEI Figure 10.1.2: Site Layout;**
- **SEI Figure 10.1.3: Superficial Geology;**
- **SEI Figure 10.1.4: Bedrock Geology;**
- **SEI Figure 10.1.5: Peat Depth;**
- **SEI Figure 10.1.6: Peat Depth Over 0.5m;**
- **SEI Figure 10.1.7: Slope;** and
- **SEI Figure 10.1.8: Peat Slide Risk;**

SEI Technical Appendix 10.2: PMP Figures

- **SEI Figure 10.2.1 – Site Location;**
- **SEI Figure 10.2.2 – Site Layout;**

- **SEI Figure 10.2.3 – Peat Depth;**
- **SEI Figure 10.2.4 – Peat Depth Plan Over 0.5m; and**
- **SEI Figure 10.2.5 – Detailed Peat Depth Analysis.**

SEI Technical Appendix 10.3: BPA Figures

- **SEI Figure 10.3.1a – Site Layout;**
- **SEI Figure 10.3.4 – Borrow Pit 1;**
- **SEI Figure 10.3.5 – Borrow Pit 2;**
- **SEI Figure 10.3.6 – Borrow Pit 3;**
- **SEI Figure 10.3.7 – Borrow Pit 4; and**
- **SEI Figure 10.3.8 – Borrow Pit 5.**

10.7 The following are new Figures as a result of an additional two borrow pits being proposed as part of the design amendments to the proposed development:

- **SEI Figure 10.3.9 – Borrow Pit 6; and**
- **SEI Figure 10.3.10 – Borrow Pit 7.**

Assessment of Design Amendment Effects

Peat Landslide Hazard Risk Assessment

- 10.8 The PLHRA has been updated as part of this SEI in accordance with comments provided by NatureScot, Ironside Farrar and SEPA. This is included as **SEI Technical Appendix 10.1**.
- 10.9 As advised by Ironside Farrar, an additional detailed peat depth survey has been undertaken on areas of infrastructure to satisfy the ECUBPG and SEPA guidance. Results from this additional survey indicate that there are no significant changes to peat instability risk across the proposed development, than was presented in the EIA Report.
- 10.10 The consequence assessment includes appropriate recommendations and mitigation measures for medium and high risk locations. Subject to micrositing (as required) and the employment of appropriate mitigation measures, all of the medium and high risk locations can be considered as insignificant.

Peat Management Plan

- 10.11 The PMP has been updated as part of this SEI in accordance with comments provided by NatureScot, Ironside Farrar and SEPA. This is provided as **SEI Technical Appendix 10.2**.

Borrow Pit Appraisal

- 10.12 The Borrow Pit Appraisal has been updated as part of this SEI in accordance with comments provided by Ironside Farrar. This is included as **SEI Technical Appendix 10.3**.

- 10.13 As a result of the design amendments to the proposed development, the volume of aggregate required as part of the construction of the proposed development is 283,095m³ (see **Annex A of SEI Technical Appendix 10.3**). This is an additional 61,694m³ when compared to the 221,401m³ of aggregate that was presented in the EIA Report as being required. The addition of a second substation is the single biggest change resulting in an increase to the volume of aggregate required, however there are also increases to the volume of aggregate required for access tracks, crane pads, and temporary construction compounds. **SEI Technical Appendix 10.3** breaks down the requirements for aggregate and also provides detail on the volume of aggregate anticipated to be won from the proposed onsite borrow pits. The seven proposed onsite borrow pits are expected to provide more than the 283,095m³ estimated as required for construction of the proposed development.
- 10.14 **SEI Technical Appendix 10.3** provides best practice guidance regarding mitigation measures in regards to borrow pits. Prior to the construction of the proposed development, design and best practices, and any required mitigation measures, would be set out in full within a Construction Environmental Management Plan (CEMP) and would be secured by an appropriately worded planning condition.

Potential Construction Effects

Peat and Soils

- 10.15 As per the EIA Report, it is shown (see **SEI Technical Appendix 10.1** (PLHRA), **SEI Technical Appendix 10.2** (PMP) and Embedded Mitigation Section) that the disturbance of peat and soils as a result of the construction of the proposed development can be minimised and the peat deposits safeguarded.
- 10.16 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to construction effects and peat/soils. The potential effects would remain as negligible and therefore **not significant**.

Pollution Risk

- 10.17 As advised by SEPA, Turbine T2 (and its crane pad) has been amended so that is now positioned outside of the 50m watercourse buffer.
- 10.18 Best practice and mitigation measures detailed within Chapter 10 of the EIA Report remain applicable and can be used to mitigate potential adverse effects on the local hydrology and hydrogeology near Turbine T2. These will be included as part of the final CEMP which will be secured by a planning condition (post any consent) and would be prepared and agreed with statutory consultees prior to construction commencing. In addition, as discussed in Chapter 10 of the EIA Report, a programme of water monitoring is proposed prior to and during construction.
- 10.19 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to construction effects and pollution risk. The potential effects would remain as negligible and therefore **not significant**.

Erosion and Sedimentation

- 10.20 As detailed in the Chapter 10 of the EIA Report, adherence to good practice measures would ensure that any material generated from construction works such as the excavation

of borrow pits, hardstanding construction, and watercourse crossing construction, would not be transported into nearby watercourses, to groundwater, or onto areas of peat.

- 10.21 The hardstanding of Turbine T2, which was raised as a concern by SEPA, has been relocated and is no longer within close proximity to a watercourse (not within 50m).
- 10.22 Four of the Five borrow pits proposed in the EIA Report have been resized and relocated, with a further two borrow pits added to the proposed development. No borrow pit is located within 50m of a watercourse or waterbody.
- 10.23 Location specific good practice measures will form part of the final CEMP and would be used to minimise the potential for erosion and sedimentation.
- 10.24 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to construction effects and erosion / sedimentation. The potential effects would remain as negligible and therefore **not significant**.

Fluvial Flood Risk

- 10.25 As detailed in the Chapter 10 of the EIA Report, adherence with good practice measures including appropriate drainage design and compliance with the final CEMP would limit potential fluvial flood risk impacts to being local and short duration and so of negligible magnitude.
- 10.26 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to construction effects and fluvial flood risk. The potential level of effect on flood risk, would therefore remain as negligible and **not significant**.

Infrastructure and Man-made Drainage

- 10.27 As detailed in the Chapter 10 of the EIA Report, the design of the proposed development (including the amendments to the Site layout) has avoided areas of high ecological or habitat interest, including Groundwater Dependent Terrestrial Ecosystems (GWDTE), wherever possible. Furthermore, the superficial and bedrock deposits have little groundwater and therefore limited or little dewatering is likely to be required. There remains potential however, for local dewatering of soils near cable trenches, turbine bases and borrow pits, without incorporation of mitigation measures.
- 10.28 Location specific good practice measures will form part of the final CEMP and would be used to minimise the potential for drainage and dewatering effects.
- 10.29 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to construction effects and infrastructure/man made drainage leading to dewatering. The potential significance of effect of changing groundwater levels and flow due to dewatering remains as negligible and therefore **not significant**.

Potential Operational Effects

Peat and Soils

- 10.30 No excavation, movement or storage of peat or soils is anticipated during the operational site life.

- 10.31 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to operational effects and peat/soils. The potential effects would remain as negligible and therefore **not significant**.

Pollution Risk

- 10.32 The possibility of a pollution event occurring during operation is very unlikely. There would be a limited number of vehicles required onsite for routine maintenance and for the operation of the proposed development. Storage of fuels/oils onsite would be limited to the hydraulic oil required in turbine gearboxes and this would be bunded (satisfying storage guidance) to prevent fluid escaping.
- 10.33 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to operational effects and pollution risk. The potential effects would remain as negligible and therefore **not significant**.

Erosion and Sedimentation

- 10.34 During the operation of the proposed development, it is not anticipated that there would be any significant excavation or stockpiled material beyond the clearing of SuDS features to maintain their efficiency, reducing the potential for erosion and sedimentation effects.
- 10.35 Immediately post-construction, newly excavated drains and track dressings may be prone to erosion as any vegetation would not have matured. Appropriate design of the drainage system, incorporating sediment traps, would reduce the potential for the increased delivery of sediment to natural watercourses. Immediately post-construction, flow attenuation measures would remain and be maintained to slow runoff velocities and prevent erosion until vegetation becomes established.
- 10.36 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to operational effects and erosion/sedimentation. The potential effects would remain as negligible and therefore **not significant**.

Fluvial Flood Risk

- 10.37 The risk of an effect from fluvial flood risk arises as a result of a potential restriction of flow at the existing watercourse crossings following intense rainfall. In accordance with good practice, routine inspection of the culverts or bridges at the Site would be undertaken, reducing the likelihood of a blockage occurring. In the unlikely event of a blockage any flooding would be localised.
- 10.38 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to operational effects and fluvial flood risk. The potential effects would remain as negligible and therefore **not significant**.

Infrastructure and Man-made Drainage

- 10.39 Operation of the proposed development would require limited activities relative to the construction phase.
- 10.40 The proposed amendments to the Site layout do not change the findings of Chapter 10 the EIA Report with regards to operational effects and infrastructure/man made drainage

leading to dewatering. The potential effects would remain as negligible and therefore **not significant**.

Summary of Changes to the Significance of Effects

- 10.41 As detailed above, the proposed amendments to the site layout do not change the findings of Chapter 10 the EIA Report and that the best practice measures detailed in the EIA Report remain wholly applicable and relevant to the proposed revision.
- 10.42 The significance of likely effects therefore remains as assessed in the EIA Report and **no significant effects** would result as a result of the proposed revision to the assessed development. Further, no additional site investigation or monitoring is required.

Conclusions

- 10.43 The design amendments will not result in any change to the significance of effects as presented in Chapter 10 of the EIA Report.

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Introduction

- 11.1 **Chapter 11: Cultural Heritage and Archaeology** of the Environmental Impact Assessment (EIA) Report presents the findings of the assessment of the potential effects on cultural heritage assets resulting from the proposed development.
- 11.2 This Supplementary Environmental Information (SEI) Chapter supplements Chapter 11 of the EIA Report and sets out clarification of any potential changes to the impacts set out in the EIA Report due to the changes in the proposals. The methodology employed in this SEI is as set out in the EIA Report, Chapter 11.
- 11.3 The following key documents should be read in conjunction with this SEI:
- EIA Report Volume 2 – **Chapter 11: Cultural Heritage and Archaeology**;
 - EIA Report Volume 3d – **Figures 11.1a – d and Figure 11.2a – h**.
 - EIA Report Volume 4b – **Technical Appendices 11.1 and 11.2**.

Consultee Responses to 2023 Application

- 11.4 All consultation in regard to Cultural Heritage with statutory consultees prior to the application submission is outlined in the submitted EIA report, Chapter 11.

Table 11-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|---|--|---|
| Historic Environment Scotland 10 November 2023 | Based on the information supplied in the EIA Report, HES were unable to determine whether the proposed development would raise issues of national interest, particularly regarding the setting of St Columb’s Church Eilean Chaluim Chille (SM5345). Therefore an objection was raised until information in the form of visualisations were provided. | SLR Consulting provided HES with a response on 29 November 2023. The consultation process was reviewed in a cover letter, where the initial exclusion of visualisations for St Columb’s Church (SM5345) was due to lack of predicted impact as indicated by the ZTV analysis. Three visualisations from St Columb’s Church were then presented along the approach and from the asset, to provide HES with the information to fully assess the potential effects. |
| Historic Environment Scotland 22 January 2024 | The visualisations provided in the November 2023 SLR Consulting response were considered not to correlate with the assessment set out in the EIAR. Clarification for the interpretation of the wireframes and the conclusion set out in the EIAR was requested. | Due to the change of the scheme, the clarification requested for the visualisations and impact assessment for St Columb’s Church (SM5345) and any other changes to potential effects have been set out in this SEI report along with updated wireframes. |

| | | |
|-------------------------------------|---|--|
| <p>CnES</p> <p>08 February 2023</p> | <p>The Archaeology Service</p> <p>The Archaeology Service would suggest that across the site peat depths range for 0.5m to over 3m (TA10.1). Peat is an excellent repository of environmental data and will hold a record of the environment from its formation onwards, preservation of palaeo environmental remains is regarded as high.</p> <p>In the case of Loch Seaforth Head the Archaeology Service would suggest that post medieval features may have reused or incorporated earlier sites or settlements. Therefore, potential for earlier deposits and feature should be considered at least moderate.</p> | <p>Where groundworks have been proposed on or proximate to known assets, mitigation has been proposed in the form of a watching brief upon all groundworks.</p> <p>Where ground breaking construction activities are to take place on areas of peat, peat coring will be taken to recover and record any paleoenvironmental data as requested in the initial scoping response from Comhairle Archaeology Service Comments.</p> |
|-------------------------------------|---|--|

Design Amendments

- 11.5 As outlined in **SEI Chapter 2** of this report, the design amendments from the Site layout of the 2023 Uisenis Wind Farm application (as detailed in the 2023 EIA Report) include the repositioning of Turbines No.2, No.3, No.4, T8, No.14 and No.25 as well as their associated infrastructure. The positioning of these turbines has moved up to approximately 50m from their previous locations, making the amendments overall minimal. The repositioning of these turbines has not been as a result of any Cultural Heritage and Archaeology related responses from consultees. Any potential changes to the direct, indirect or setting impacts of cultural heritage receptors within the Site have been assessed.

Revised Figures

- 11.6 Figures have been updated with the design amendments, and new wirelines for the Calanais Standing Stones and St Columb's Church have been produced to facilitate the assessment of any changes to any potential setting impacts. These figures are as follows:
- **SEI Figure 11.1a-d: Designated Cultural Heritage Assets ZTV;**
 - **SEI Figure 11.2a-h: Non-Designated Heritage Assets within the Site;**
 - **SEI Figures 7.50a and 7.50b: Calanais Standing Stone Wirelines (SM90054); and**
 - **SEI Figures 11.3 to 11.5: St Columb's Church, Eilean Chaluim Chille (SM5345) Wirelines.**

Assessment of Design Amendment Effects

Changes to Construction Effects

- 11.7 The design amendments have moved Turbines No.2, No.3, No.4, T8, No.14 and No.25 (**SEI Figure 11.1**). In the 2023 Application Layout for Uisenis Wind Farm, the proposed construction of turbines 2, 3, 4, 8, 14 and 25 had no potential direct effects upon non-designated heritage assets. The new location of these turbines has changed minimally, and still have no potential direct effects upon any non-designated heritage assets within the Site.
- 11.8 As for turbine 8 in the 2023 submission design for Uisenis Wind Farm, the associated borrow pit proposed to the north of the turbine was concluded to cause the total removal of SLR22. The asset is an undated potential shieling recorded on the HER, considered to be of low cultural heritage significance. The total removal of the asset was concluded to cause a high magnitude of impact, resulting in a negligible significance of effect. The turbine, its associated infrastructure and borrow pit has also had a minimal change in location, moving approximately 40m to the north. With this change, SLR22 will be directly impacted and removed by the proposed clearance and bespoke hardstanding envelope, rather than the borrow pit. The conclusion of a negligible significance of effect from the direct impact upon SLR22 will therefore remain unchanged.
- 11.9 All other conclusions of direct effects outlined in the 2023 submission remain the same.

Changes to Operational Effects

Calanais, or Callanish, Standing Stones (SM90054)

- 11.10 Chapter 11 of the EIA report assessed the setting impacts upon the Calanais Standing Stones as an asset of the highest significance. The magnitude of impact resulted in a minor significance of effect upon the asset. This was due to the turbines being present within views to the southeast of the asset, proximate to the views which contribute toward the asset's significance, the 'Sleeping Beauty' mountain range, comprising Mor-Mhonadh, Guaineamol and Sidhean an Airgid, located approximately 4km to the west of the proposed wind farm. This mountain range comprises the skyline which form part of the lunar standstill event with the stone, an archeoastronomical event which is thought to have played a large role in the prehistoric community during the use of the contemporary use of the monument.
- 11.11 The presence of the turbines within the backdrop of views approximately 4km to the east of the mountain range were concluded to cause a slight erosion of the ability to appreciate the views. Whilst the turbines would be visible within this viewshed they would have a slight presence due to the distance and would likely only be visible on clear days. The ability to experience and understand the asset's relationship with the mountain range which comprises the 'Sleeping Beauty' and interacts with the monument during the lunar standstill would remain unaffected.
- 11.12 In regard to the wirelines produced for the 2023 Application Layout and the 2024 SEI Layout (**SEI Figure 7.50a – b**), it is clear that the movements of the six turbines cause no change to the potential effects concluded in Chapter 11 of the submitted EIA Report. The changes to the turbine layout are not discernible within these views, and the impacts outlined within the submitted 2023 Chapter remain the same with the 2024 SEI layout.

Sideval, stone circle 400. S of (SM5351)

- 11.13 The proposed turbines for 2023 Application Layout had no potential visibility from the asset nor its approach but was visible from a single aspect of the asset's setting. The assessment identified that views toward the asset from the mountain ridge comprising Mor-Mhonadh, Guaineamol and Sidhean an Airgid, which comprise part of the wider prehistoric setting in relation to the Calanais Stones. This aspect of the asset's setting would be unaffected by the visible turbines to the southeast, as views toward the turbines and the asset and the prehistoric ritualistic landscape would not share the same viewshed.
- 11.14 As the proposed changes to the turbine layout are minimal, the impacts concluded in the assessment outlined in Chapter 11 of the 2023 EIA report remain applicable and unchanged; the proposed turbines would still be visible from the third viewpoint but would still not cause any impacts. Overall, the magnitude of effect would be neutral and the significance of effect nil.

St Columb's Church, Eilean Chalium Chille (SM5345)

- 11.15 The assessment of St Columb's Church in the 2023 submission identified a neutral magnitude of impact due to the lack of the turbines encroaching on any contributing aspects of the asset's setting. The turbines visibility from the asset was assessed using a ZTV previously, which indicated that up to 14 turbines would have been visible from the asset. This was further clarified in the response provided to HES on 29 November 2023, with bare earth visualisations provided. HES have since requested further clarification on the updated wirelines provided and how they relate to the conclusions reached within the EIA, which this SEI aims to achieve in the context of the 2024 SEI layout.
- 11.16 With the 2024 SEI layout, updated wirelines have been produced to clearly ascertain the visibility of the turbines from the assets contributing aspects of the asset's setting as set out in Chapter 11. The wirelines show no visible turbines from the asset nor from the causeway comprising part of the asset's approach across the water during low tides to the island on which the asset is located, Eilean Chalium Chille (**SEI Figures 11.3 and 11.5**).
- 11.17 From the approach approximately 400m to the north of the church, the wireline shows that two turbine blades would be visible from a rise in the backdrop of the view facing south toward the asset for both the 2023 Application layout and the 2024 SEI layout (**SEI Figure 11.4a – b**). These blades are marginally visible, and considering the turbines are located approximately 8.9km from the asset, comprise an almost indiscernible presence within this view. Considering this view is only one viewpoint along the approach to the asset, and the turbines do not encroach to such a degree that they would detract from the appreciation, experience and understanding of the approach to the asset. All views toward the asset along the causeway, which is accessible during the low tide, other views south along the approach to the asset with the exception of the viewpoint in the wireline, and from the asset, would all remain unaffected.
- 11.18 Overall, the magnitude of effect would remain to be considered neutral to the setting of the asset. With the 2024 SEI layout, the resulting significance of effect would remain nil, as outlined in the EIA and applicant's response to Historic Environment Scotland regarding St Columb's Church dated 29 November 2023.

Dun Cromore, broch, Loch Cromore (SM1670)

- 11.19 As the adjustments to the turbine locations is minimal, and as the 2023 Application layout was not visible from the asset within the 2023 Application layout, the turbines in the 2024

SEI layout would not be considered to cause any new or variations to the previously identified magnitude of impact upon the asset, which would remain a significance of effect of nil. The turbines would remain not to be within views or approaches which contribute to the setting of the asset. Overall, the magnitude of effect remains neutral, resulting in a nil significance of effect.

Summary of Changes to the Significance of Effects

- 11.20 As set out above, this SEI chapter has assessed potential changes to the effects previously identified in Chapter 11 of the EIA Report with the changes to the proposed design.
- 11.21 No changes have been identified to potential effects set out in the submitted EIA Report.

Conclusions

- 11.22 The design amendments will not result in any change to the significance of effects as outlined in Chapter 11 of the EIA Report submitted in November of 2023. This includes direct, indirect and setting effects upon Cultural Heritage assets. Therefore, there remains, no significant effects predicted.
- 11.23 This SEI Chapter has included clarification and further visualisations in regard to St Columb's Church in regard to the issues raised by HES. Overall, the impacts upon the Scheduled Monument remain as assessed in the EIA Report.

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Introduction

- 12.1 **Chapter 12: Site Access, Traffic and Transport**, of the Environmental Impact Assessment (EIA) Report sets out the transport and access issues associated with the proposed development and considers the likely significant effects on transport and access associated with the construction, operation, and decommissioning phases.
- 12.2 This SEI Chapter considers the changes relating to access and transport matters following the revision to the proposed development following consultee responses to the Uisenis Wind Farm application.

Consultee Responses to 2023 Application

- 12.1 Comhairle nan Eilean Siar (CnES) responded to the application and details of their comments are provided below in **Table 12-1**.

Table 12-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--|--|---|
| Comhairle nan Eilean Siar (CnES) 08 February 2024 | <p>The section on Offsite Mitigation notes the upgrade of the Eishken road as part of the project. A previous consented application proposed a new road and bridge as part of the project. The Eishken road currently has a weight restriction of 8t due to the fragile nature of the road.</p> <p>The proposed road improvement should be substantial, in light of the construction traffic, allowing the weight restriction to be removed.</p> | <p>Agreed. The proposed road improvement scheme and new road bridge will remove the need for a weight limit and would be built to CnES standards.</p> <p>The proposed road design and bridge would be secured by planning condition. A full detailed design package of works would be provided following determination and agreed via the Road Construction Consent (RCC) process.</p> |
| | <p>There is little detail on the proposed road upgrade, further details on the road layout and design should be submitted. Following the design of the road and new bridge the developer should apply for Road Construction Consent (RCC) with the works carried out to CnES specification allowing adoption following completion. This application may involve a bond agreement. The original scheme had RCC consent in 2013.</p> | <p>The proposed road design and bridge would be secured by planning condition. A full detailed design package of works would be provided following determination and agreed via the RCC process.</p> <p>The road works were previously described in the submission documents, including drawings in the Route Survey Report. A set of drawings illustrating the works is attached in SEI Technical Appendix 12.1, to provide greater clarity on the proposed works along the length of Eishken road.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|-----------|-----------------------|--|
| | | <p>The proposed widening would provide a 4.5m minimum wide road constructed to adoptable standards. A widening of the road would be provided, with the load bearing elements provided in crushed stone, sitting on geotextile. A full width wearing course surfacing would be provided across the widened road. Enhanced or relocated road drainage features would be provided where necessary and revised and additional passing places would be provided to allow a 6m wide passing area with entry and exit tapers of a minimum of 7m. Passing place length will be sufficient to accommodate an HGV and will be placed at intervisible locations and at both approaches to the new bridge.</p> <p>An indicative cross section of the widening proposals is provided in SEI Technical Appendix 12.2.</p> <p>The new bridge structure would be subject to detailed design and would encompass a single span structure constructed from precast concrete beams or steel. The bridge would be designed to adoptable standards and would replace the existing structure which would remain in situ.</p> <p>The new bridge will be designed to accommodate the proposed turbine and transformer load axle and gross vehicle weights.</p> <p>The road upgrade and bridge design would be secured by an appropriately worded planning condition(s).</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|--|--|---|
| | At present the Abnormal Loads route is from Arnish Point. Any bridges on this route should be independently assessed beforehand. | Agreed. All structures advised by CnES will be assessed prior to Abnormal Indivisible Load (AIL) deliveries commencing. It is proposed that a suitably worded condition will secure this. |
| | A new access connecting to the local authority road network should be constructed in accordance with Drawing 23/00380. | Agreed. It is proposed that a suitably worded planning condition will secure this. |
| | Figure 3.7 shows a typical substation layout with parking adjacent to the Eishken road. "Off Road" parking and turning should be provided within the site of the substation. | Agreed. The substation final design will be issued to CnES for approval prior to construction. |
| Comhairle nan Eilean Siar (CnES) 23 February 2024 | <p>Bridges and Structures</p> <p>In terms of the Bridges structures we believe that the road improvement to the Eishken Road will require at least 1 bridge structure (Seaforth Head) to be replaced and 2 culvert structures (Abhainn Sgeireabhat and Abhainn Ghlas) to be replaced. Structures being classed as anything with a span width of over 0.9m in accordance with GC 300 or a road support having a retained height greater than 1.5m.</p> <p>For these structures and any other additional structures which form part of the Eishken Road improvement the determination of the application stage should be able to consider an outline of the proposed structure which shows its structural form and primary material. Seaforth head bridge should be in the form of a conventional bridge deck in either reinforced or prestressed concrete. Other notable minor</p> | <p>Noted.</p> <p>The new bridge structure would be subject to detailed design and would encompass a single span structure constructed from precast concrete beams or steel. The bridge would be designed to adoptable standards and would replace the existing structure which would remain in situ.</p> <p>The new bridge will be designed to accommodate the proposed turbine</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|-----------|---|--|
| | <p>structures (span > 1.5m) should be closed precast or reinforced concrete box culverts. Consultation with SEPA, Nature Scotland and Fisheries may affect the design and profile of these structures.</p> <p>Prior to RCC the detailed design of notable structures should be submitted to CNES for acceptance in accordance with technical approval procedures CG300, the Design Manual for Roads and Bridges, Approval in Principal.</p> <p>Any culverts and structures outside the above criteria shall be classified as being part of the road infrastructure – existing road crosses numerous small pipe culverts with a diameter less than 0.9m.</p> | <p>and transformer load axle and gross vehicle weights.</p> <p>Noted and agreed</p> <p>Noted. Larger culverts have been identified and are noted in SEI Technical Appendix 12.2.</p> |
| | <p>The previous consented scheme included an upgraded 4.5m wide road 9.7km long with passing places, lining, culverts, bridge and cattle grid.</p> <p>Sect 12.113 in Ch12 of Site Access, Traffic & Transport mentions improvements on the Eishken Rd, it's not clear from this the full extent of the improvement.</p> <p>A standard cross section could be submitted with relevant text confirming that the extent and length of the road upgrade would be similar to the 9.7km in the previous application.</p> <p>As the design of the project progresses an application should be made for Road Construction Consent (RCC) allowing adoption of the road by the local authority on completion.</p> | <p>Noted</p> <p>Drawings illustrating the works were provided in the Route Survey Report. A further set are attached in SEI Technical Appendix 12.2.</p> <p>An indicative section is provided in SEI Technical Appendix 12.2.</p> <p>Noted. This would be undertaken post determination.</p> |

| Consultee | Summary of Key Issues | Response to Comments |
|-----------|--|----------------------|
| | Approval in Principle (AIP) would be sought for the larger structures. | Agreed. |

Design Amendments

- 12.2 Various minor design changes have been undertaken within the development area to cater for comments from NatureScot, Scottish Environment Protection Agency (SEPA), and the Royal Society for the Protection of Birds.
- 12.3 The scale of these changes results in a minor increase in access track construction by 0.86km, a new substation compound and the reduction in temporary compound areas. Overall there is a net increase in aggregate requirement, however this is offset by an increase in borrow pit provision on the Site which can produce up to 404,500m³, of material, more than sufficient for the construction of the whole Site.
- 12.4 The increase in traffic generation over the track and compound construction elements is minimal and estimated at approximately 2 additional movements per day, should the material be imported to Site. All of the proposed works are however scheduled for later stages of the construction programme and are in areas where onsite borrow pit material would be used exclusively. As such, it is unlikely that any further vehicle movements would use the public road network.

Revised Figures

- 12.5 Proposed widening works of Eishken road are provided in **SEI Technical Appendix 12.2**.

Assessment of Design Amendment Effects

Construction Effects

- 12.6 An evaluation of the potential effects of the temporary increase in traffic on the study area roads used for the construction traffic was undertaken in **Chapter 12** of the Environmental Impact Assessment (EIA) Report. None of the parameters that informed that assessment have changed as a result of the SEI assessment.
- 12.7 The construction effects will be minor in nature and they would be not significant, following the implementation of a comprehensive Construction Traffic Management Plan (CTMP), together with onsite route signage and an access management plan, which would incorporate any required re-routing of Public Rights of Way or temporary barriers to protect users from construction activities. The traffic effects are transitory in nature and appropriate mitigation measures are proposed to reduce the potential impacts. No long-term detrimental transport or access issues are associated with the construction phase of the proposed development.

Cumulative Effects

- 12.8 No residual cumulative effects are predicted as part of the proposed development.

Summary of Changes to the Significance of Effects

12.9 There are no changes to the Significance of Effects as reported previously in **Chapter 12** of the EIA Report.

Conclusions

12.10 The results of the assessment presented in **Chapter 12** of the EIA Report remain valid, with no significant effects being predicted, following implementation of appropriate mitigation.

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Introduction

- 13.1 SLR has been commissioned by the applicant to undertake a review of the noise implications that could arise from the relocation of four wind turbines (Turbines No.2, No.3, No.4, No.8, No.14 and No.25), resulting in a need for a reassessment of the noise effects of the proposed development.
- 13.2 This Supplementary Environmental Information (SEI) Chapter supplements **Chapter 13: Noise** of the 2023 Uisenis Wind Farm Environmental Impact Assessment (EIA) Report. The methodology employed in this SEI is as set out in EIA Report **Chapter 13: Noise**.
- 13.3 The following key documents should be read in conjunction with this SI:
- EIA Report Volume 2 – **Chapter 13: Noise (2023)**;
 - EIA Report Volume 3d – Chapter 13 Plan Figures (2023); and
 - EIA Report Volume 4b – Chapter 13 Technical Appendices (2023).

Consultee Responses to 2023 Application

- 13.4 The only consultee response to the 2023 application was by the Environmental Health Service of Comhairle Nan Eilean Siar (CnES). No comment or objection was raised regarding the noise assessment carried out for the construction and operational impacts.

Design Amendments

- 13.5 As outlined in **SEI Chapter 3: Description of Development**, the only design amendment from the 2023 Application Layout (as detailed in the 2023 EIA Report), is the repositioning of Turbines No.2, No.3, No.4, No.8, No.14 and No.25 (and associated crane pads). The distances by which these turbines have moved range from 22m to 57m. These relatively minor adjustments of the turbine locations have been undertaken to accommodate a request from SEPA regarding concern over peat.

Revised Figures

- 13.6 To update the graphic information previously issued with the 2023 EIA Report, a series of revised Figures have been produced for the SEI, as follows:
- **SEI Figure 13.1: Noise Sensitive Receptor and Turbines Locations.**

Assessment of Design Amendment Effects

- 13.7 The same assessment methodology as set out in the in EIA Report **Chapter 13: Noise** has been followed, including derived noise limits.
- 13.8 The revised layout did not affect the calculated construction and operational noise impacts reported in the 2023 EIA Report **Tables 13-6** and **13-7** respectively. Therefore, the significant effects reported in the EIA Report **Chapter 13: Noise** have not changed as a result of the revised layout.

Summary of Changes to the Significance of Effects

- 13.9 The relocation of Turbines No.2, No.3, No.4, No.8, No.14 and No.25 result in no change to the significance of effects assessed in the EIA Report **Chapter 13: Noise**.

Conclusions

- 13.10 SLR has been commissioned by the applicant to undertake a review of the noise implications that could arise from the relocation of Turbines No.2, No.3, No.4, No.8, No.14 and No.25.
- 13.11 Using the same methodology as set out in EIA Report **Chapter 13: Noise** this SEI Chapter reassesses the noise effects of the proposed development. On the subject of noise, there remains no significant effect of the proposed development during construction and operation.

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- 14.1 **Chapter 14: Socio-economics, Tourism, Recreation and Land Use**, of the Environmental Impact Assessment Report (EIA Report) provides an assessment of the proposed development on the socio-economics and land use of the area/region it would be located, including the effects on recreation and tourism.
- 14.2 The amendments to the proposed development, as set out in **Chapter 2: Site Description and Design Evolution**, and **Chapter 3: Description of Development** of this Supplementary Environmental Information (SEI), would not result in changes to the significance of effects presented within **Chapter 14** of the EIA Report. All of the information contained in **Chapter 14** of the EIA Report, including the associated Figures and Technical Appendices, therefore remain valid in terms of existing conditions, assessment methodology and significance of effects.

Consultee Responses to 2023 Application

- 14.3 There were no consultee responses to the 2023 Uisenis Wind Farm application, that were in relation to Socio-economics, Tourism, Recreation and Land Use matters.

Conclusions

- 14.4 There are no changes to the significance of effects presented in **Chapter 14** of the EIA Report as a result of the amendments that have been made to the proposed development. Therefore, **Chapter 14** of the EIA Report and its associated Figure and Technical Appendices remain valid.

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- 15.1 **Chapter 15: Aviation**, of the Environmental Impact Assessment Report (EIA Report) provides an assessment of the proposed development on existing and planned military and civil aviation activities, including those resulting from impacts to radar. In addition to this **Chapter 15** of the EIA Report considers other potential effects resulting from the physical presence of the turbines as obstacles, and effects on navigational aids ('Nav aids') and radio communication stations.
- 15.2 The amendments to the proposed development, as set out in **Chapter 2: Site Description and Design Evolution**, and **Chapter 3: Description of Development** of this Supplementary Environmental Information (SEI), would not result in changes to the significance of effects presented within **Chapter 15** of the EIA Report. All of the information contained in **Chapter 15** of the EIA Report, including the associated Figures and Technical Appendices, therefore remain valid in terms of existing conditions, assessment methodology and significance of effects.

Consultee Responses to 2023 Application

- 15.3 **Table 15-1** below provides a summary of the Aviation related responses to the 2023 Uisenis Wind Farm application, received from key consultees. Replies to the consultee responses are also provided in **Table 15-1**.

Table 15-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--|---|--|
| <p>NATS Safeguarding</p> <p>08 September 2023</p> | <p>The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.</p> <p>However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted.</p> <p>If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission or any consent being granted.</p> | <p>Noted that NATS has no safeguarding objection to the proposed development as submitted in 2023.</p> <p>The amended proposals that are put forward in this SEI, do not include any changes to turbine blade tip heights or turbine specifications (e.g. hub height / rotor diameter).</p> <p>The six turbines that are being relocated have moved within the 75m micro-siting allowance applied for as part of the 2023 application.</p> |

| | | |
|--|--|---|
| <p>Defence Infrastructure Organisation</p> <p>10 October 2023</p> | <p>I am writing to tell you that, subject to the conditions detailed in Appendix A, the MOD has no objection to the proposed development.</p> <p>Appendix A Conditions: <u>Condition - Aviation Lighting</u></p> <p>Prior to commencing construction of any wind turbine generators, or deploying any construction equipment or temporal structure(s) 50 metres or more in height (above ground level) the undertaker must submit an aviation lighting scheme for the approval of the local planning authority in conjunction with the Ministry of Defence defining how the development will be lit throughout its life to maintain civil and military aviation safety requirements as determined necessary for aviation safety by the Ministry of Defence.</p> <p>This should set out:</p> <p>a) details of any construction equipment and temporal structures with a total height of 50 metres or greater (above ground level) that will be deployed during the construction of wind turbine generators and details of any aviation warning lighting that they will be fitted with; and</p> <p>b) the locations and heights of all wind turbine generators and any anemometry mast featured in the development identifying those that will be fitted with aviation warning lighting identifying the position of the lights on the wind turbine generators; the type(s) of lights that will be fitted and the performance specification(s) of the lighting type(s) to be used.</p> <p>Thereafter, the undertaker must exhibit such lights as detailed in the approved aviation lighting scheme. The lighting installed will remain operational for the lifetime of the development.</p> <p><u>Condition - Aviation Charting and Safety Management</u></p> <p>The undertaker must notify the Ministry of Defence, at least 14 days prior to the commencement of the works, in writing of the following information:</p> <p>a) the date of the commencement of the erection of wind turbine generators;</p> | <p>Noted that subject to two planning conditions being applied to any consent, Defence Infrastructure Organisation has no safeguarding objection to the proposed development as submitted in 2023.</p> <p>The amended proposals that are put forward in this SEI, do not include any changes to turbine blade tip heights or turbine specifications (e.g. hub height / rotor diameter).</p> <p>The six turbines that are being relocated have moved within the 75m micro-siting allowance applied for as part of the 2023 application.</p> <p>The applicant has no concerns with the two planning conditions requested, and agrees that these should be applied to any consent granted.</p> |
|--|--|---|

| | | |
|--|---|--|
| | <p>b) the maximum height of any construction equipment to be used in the erection of the wind turbines;</p> <p>c) the date any wind turbine generators are brought into use;</p> <p>d) the latitude and longitude and maximum heights of each wind turbine generator, and any anemometer mast(s).</p> <p>The Ministry of Defence must be notified of any changes to the information supplied in accordance with these requirements and of the completion of the construction of the development.</p> <p>The MOD must emphasise that the advice provided within this letter is in response to the information detailed in the developer’s document titled “Description of Development 3”, “Design and Access Statement” and “Site description and Design” dated August 2023. Any variation of the parameters (which include the location, dimensions, form, and finishing materials) detailed may significantly alter how the development relates to MOD safeguarding requirements and cause adverse impacts to safeguarded defence assets or capabilities. In the event that any amendment, whether considered material or not by the determining authority, is submitted for approval, the MOD should be consulted and provided with adequate time to carry out assessments and provide a formal response.</p> | |
| <p>Highlands and Islands Airport Limited</p> <p>27 October 2023</p> | <p>As this application has no amendments (from our previous response to Scoping Opinion - 2022/270/SYY) to the turbine heights or location, Highlands and Islands Airport Limited response remains the same, we have no objections to this proposal.</p> <p>Any variation of the parameters (which include the location, dimensions, form, and finishing materials) then as a statutory consultee HIAL requires that it be further consulted on any such changes prior to any planning permission, or any consent being granted.</p> | <p>Noted that Highlands and Islands Airport Limited has no objection to the proposed development as submitted in 2023.</p> <p>The amended proposals that are put forward in this SEI, do not include any changes to turbine blade tip heights or turbine specifications (e.g. hub height / rotor diameter).</p> <p>The six turbines that are being relocated have moved within the 75m micro-siting allowance applied for as part of the 2023 application.</p> |

Design Amendments

- 15.4 Key design changes are outlined in **SEI Chapter 2: Site Description and Design Evolution** of the SEI Report. The main amendments relevant to aviation are that Turbines No.2, No.3, No.4, No.8, No.14 and No.25 have been relocated from their locations put forward in the 2023 EIA Report. The distance these six turbines are moving is between 23m and 57m.
- 15.5 The Aviation Lighting Scheme presented in **Technical Appendix 15.1: Aviation Lighting Report** of the EIA Report, remains unchanged. Therefore, it is still proposed to have visible aviation lighting applied to Turbines No.1, No.3, No.7, No.12, No.18, No.22 and No.25.
- 15.6 No changes have been made to the proposed development resulting from feedback on aviation considerations.

Assessment of Design Amendment Effects

- 15.7 None of the proposed turbines that have been relocated, have increased their AOD elevation by more than 20m. The most elevated turbines (Turbines No.12, No.13, No.19, No.20, No.21, No.22 and No.23 – all over 100m AOD) have not been moved from what was presented in the 2023 EIA Report, and remain the most elevated turbines in the proposed development.
- 15.8 The IFP Assessment that was carried out on the proposed development as presented in the EIA Report, specified a 75m micro-siting allowance with a 20m horizontal buffer (as part of the assessment parameters). All turbine moves have been less than 75m, and no turbine has had its elevation alter by 20m or more.
- 15.9 The turbines selected to be lit, as part of the Aviation Lighting Scheme presented in **Technical Appendix 15.1: Aviation Lighting Report** of the EIA Report, will remain the same. The turbines selected to be lit will remain effective in defining the geographical extent of the proposed development and include the most elevated turbines.

Summary of Changes to the Significance of Effects

- 15.10 The changes to the proposed development, as set out in **SEI Chapter 2: Site Description and Design Evolution** of the SEI Report, are not considered to change the findings of the assessment of aviation effects, as presented in **Chapter 15** of the EIA Report.

Conclusions

- 15.11 The proposed development will not impact any military radar facilities, or impact on the infrastructure and operation of Stornoway Airport. No mitigation is required for these elements.
- The visible spectrum aviation lighting scheme, presented as **Technical Appendix 15.1: Aviation Lighting Report** of the EIA Report, remains valid and is considered to comply with statutory requirements under The ANO (2016) to assist with air safety.
- 15.12 There are no changes to the significance of effects presented in **Chapter 15** of the EIA Report as a result of the amendments that have been made to the proposed development.

Therefore, **Chapter 15** of the EIA Report and its associated Figure and Technical Appendices remain valid.

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Introduction

- 16.1. **Chapter 16: Other Issues**, of the Environmental Impact Assessment (EIA) Report assess the potential impacts of the proposed development in relation to:
- Shadow Flicker;
 - Climate and Carbon Balance;
 - Risk of Accidents and Other Disasters;
 - Population and Human Health;
 - Air Quality;
 - Telecommunications and Other Infrastructure; and
 - Waste and Environmental Management.
- 16.2. This Supplementary Environmental Information (SEI) Chapter supplements Chapter 16 of the EIA Report. The methodology employed in this SEI Chapter is as set out in EIA Report Chapter 16 of the EIA Report
- 16.3. The following key documents should be read in conjunction with SEI:
- EIA Report Volume 2 – **Chapter 16: Other Issues**.
- 16.4. **Figure 16.1: Shadow Flicker Study Area**, and **Figure 16.2: Shadow Flicker Results** of the EIA Report are superseded by **SEI Figure 16.1** and **SEI Figure 16.2**.

Consultee Responses to 2023 Application

- 16.5. **Table 16-1** below provides a summary of the Other Issues related responses to the 2023 Uisenis Wind Farm application, received from key consultees. A reply to the consultee responses is also provided in **Table 16-1**.

Table 16-1: Consultee Responses

| Consultee | Summary of Key Issues | Response to Comments |
|--|--|---|
| BT 19 September 2023 | We have studied this Wind Farm proposal with respect to EMC and related problems to BT point-to-point microwave radio links. The conclusion is that the turbine locations provided should not cause interference to BT's current and presently planned radio network. BT requires 100m minimum clearance from any structure to the radio link path. If the proposed locations change, please let us know and we can reassess this for you. | Noted. The amended turbine locations are provided in SEI Chapter 3 . |
| Joint Radio Company 26 September 2023 | This proposal is cleared with respect to radio link infrastructure operated by the local energy networks. | Noted. The amended turbine locations are provided in SEI Chapter 3 . |
| CnES 08 February 2024 | The EIA highlights that several properties will likely be affected by | The shadow Flicker assessment has been updated (see below). The |

| | | |
|--------------------------|---|--|
| | shadow flicker (all have a financial interest in the development), however the applicant is committed to installing shadow flicker control modules on the turbines with the potential to cause shadow flicker on nearby receptors. In line with the EIA mitigation, it is recommended that a condition be included where any complaints are investigated in a timeous manner, to the satisfaction of the planning authority and that the rectification of any substantiated shadow flicker issue would be implemented promptly and effectively. | applicant is in agreement that a standard planning condition relating to shadow flicker and addressing any potential shadow flicker complaints is required. |
| CnES 08 February 2024 | There is the potential for dust from the construction of this development to cause a nuisance to neighbouring properties. The following condition is recommended: A method statement should be submitted to the Planning Authority outlining what dust mitigation measures will be put in place for the duration of the construction phase. Should any complaints be received in respect of dust, the developer shall fully investigate these complaints to establish dust levels at any affected property. | The applicant is in agreement that a standard planning condition relating to dust mitigation and addressing any potential dust related complaints is required. |

Revised Figures

- 16.6. **Figure 16.1: Shadow Flicker Study Area**, and **Figure 16.2: Shadow Flicker Results** of the EIA Report are superseded by **SEI Figure 16.1** and **SEI Figure 16.2**.

Assessment of Design Amendment Effects

Shadow Flicker

- 16.7. The amended turbine locations (Turbines No.2, No.3, No.4, No.8, No.14, and No.25) have been assessed through production of an updated shadow flicker model.
- 16.8. **Figure 16.1: Shadow Flicker Study Area**, and **Figure 16.2: Shadow Flicker Results** of the EIA Report have been updated and are presented as **SEI Figure 16.1** and **SEI Figure 16.2**.
- 16.9. The potential and expected hours of shadow flicker are provided in **Table 16-2** below.

Table 16-2: Shadow Flicker Assessment Outputs

| Property ID. | Property Name | Days per Year Where Shadow Flicker Potentially Experienced | Turbine(s) Causing Effect | Max Minutes per Day Where Shadow Flicker Potentially Experienced | Total Hours per Year When Shadow Flicker Potentially Experienced | Likely Hours per Year When Shadow Flicker Potentially Experienced* |
|--------------|------------------|--|---------------------------|--|--|--|
| 1 | Loch Shell House | 86 | 14 | 29.4 | 30.0 | 8.6 |
| 2 | The Cottage | 82 | 14 | 29.4 | 34.5 | 9.9 |
| 3 | - | 83 | 14 | 29.4 | 34.3 | 9.8 |
| 4 | Burnside Cottage | 113 | 14, 19 | 31.2 | 48.0 | 13.8 |
| 5 | - | 114 | 14, 19 | 30 | 47.6 | 13.7 |
| 6 | Eishken Lodge | 83 | 14, 19 | 28.2 | 32.0 | 9.2 |
| 7 | Glenburn Cottage | 101 | 14, 19 | 28.8 | 40.5 | 11.6 |

* based on average sunshine hours being applied to the model.

- 16.10. The results confirm that all the properties assessed could potentially experience over 30 hours of shadow flicker effect per annum. Based on the assessment criteria laid out above the effects on these properties would be significant without mitigation. However, the expected hours of shadow flicker are provided in the final column of **Table 16-2** and, adjusted for likely sunshine hours, (under this assumption) the annual hours of shadow flicker anticipated at all properties is significantly under 30 hours.
- 16.11. The mitigation measure of a shadow flicker control module, set out in **Chapter 16** of the EIA Report, is still proposed. It is assumed that an appropriately worded planning condition, to ensure that any shadow flicker related complaints would be investigated within a reasonable timescale and that the rectification of any substantiated shadow flicker issues implemented promptly, could be applied to any consent.
- 16.12. There are therefore no changes to the conclusions of the shadow flicker assessment carried out in **Chapter 16** of the EIA Report, and following implementation of mitigation, it is considered that there will be no significant effects in relation to shadow flicker as a result of the proposed development.

Climate and Carbon Balance

- 16.13. As a result of the amendments to the Site layout (as described in SEI Chapter 2), the carbon payback period of the proposed development has been revised. The detail for the proposed development that was input to the Scottish Government Windfarm Carbon Assessment Tool, and presented as **Technical Appendix 16.1: Carbon Calculator** of the EIA Report, has been updated. The calculation spreadsheet is now version 4OVO-24G1-R94Z v5.
- 16.14. A summary of the revised anticipated carbon emissions and carbon payback of the proposed development are provided in **Table 16-2**.

Table 16-2: Carbon Calculator

| Result | Exp. | Min. | Max. |
|---|---------|---------|---------|
| Net emissions of carbon dioxide (t CO ₂ eq.) | 306,841 | 225,386 | 491,712 |
| Carbon Payback Time | | | |
| Coal-fired electricity generation (years) | 0.6 | 0.4 | 0.9 |
| Grid-mix of electricity generation (years) | 2.6 | 1.8 | 4.2 |
| Fossil fuel - mix of electricity generation (years) | 1.3 | 0.9 | 2.1 |
| Ratio of CO ₂ eq. emissions to power generation (g / kWh) (TARGET ratio by 2030 (electricity generation) < 50 g /kWh) | 17.69 | 12.27 | 30.08 |

- 16.15. The calculations of total carbon dioxide emission savings and payback time for the proposed development indicates the overall payback period would be approximately 1.3 years, when compared to the fossil fuel mix of electricity generation.
- 16.16. The potential savings in CO₂ emissions due to the proposed development replacing other electricity sources over the lifetime of the wind turbines (assumed to be 30 years for the purpose of the carbon calculator) are approximately:
- 546,361 tonnes of CO₂ per year over coal-fired electricity (approximately 16.39 million tonnes assuming a 30 year lifetime for the purposes of the carbon calculator);
 - 119,679 tonnes of CO₂ per year over grid-mix of electricity (approximately 3.59 million tonnes assuming a 30 year lifetime for the purposes of the carbon calculator); and
 - 245,140 tonnes of CO₂ per year over a fossil fuel mix of electricity (approximately 7.35 million tonnes assuming a 30 year lifetime for the purposes of the carbon calculator).
- 16.17. The overall anticipated carbon payback time for the amended proposed development (compared to a fossil fuel mix of electricity generation) is 1.3 years. This is a slightly shorter payback period than the 1.5 year anticipated carbon payback time as assessed and presented in the EIA Report. The potential CO₂ emissions savings are also similar for the amended proposed development, compared to what was presented in the EIA Report.
- 16.18. The slightly shorter carbon payback period of 1.3 years compared to 1.5 years does not materially alter the proposed development's expected carbon saving potential. The Scottish Government Windfarm Carbon Assessment Tool is continually being updated and the assessment presented in this SEI was carried out on version 1.8.1, compared to the assessment presented in the EIA Report which was carried out on version 1.7.0.
- 16.19. The amended proposed development is expected to have a carbon intensity (**Table 16-2**) of 17.69g CO₂/kWh compared to 21.2g CO₂/kWh presented in the EIA Report. This remains below the carbon intensity target of 50g CO₂/kWh.
- 16.20. The amended proposed development is assessed to have Moderate, positive environmental effects, that are significant under the EIA Regulations. Therefore, the findings of the carbon calculator assessment remain unchanged from that presented in the EIA Report, and are significant (positive) under the EIA regulations.

Risk of Accidents and Other Disasters

- 16.21. The vulnerability of the amended proposed development to major accidents and natural disasters (including Public Safety and Access, Traffic, Construction, Extreme Weather, and Seismic Activity), remains the same as presented in the EIA Report. The risk of accidents and disasters does therefore not result in a significant effect.

Population and Human Health

- 16.22. As per the findings of the EIA Report, it is not expected that there will be any other effects from the amended proposed development which would have significant effects on population and human health.

Air Quality

- 16.23. As per the findings of the EIA Report, effects associated with dust or vehicle emissions are considered to be unlikely.

Telecommunications and Other Infrastructure

- 16.24. The amendments to the proposed development, do not move any wind turbine locations within the 120m buffer applied around the BT operated fixed link. Therefore, as per the findings of the EIA Report, no significant effects are predicted on telecommunications and tv reception.

Waste and Environmental Management

- 16.25. The outline CEMP (**SEI Technical Appendix 3.1**) provides a general overview on how waste and other environmental issues would be managed during the construction phase. **SEI Technical Appendix 10.2: Peat Management Plan** also details how excavated peat is controlled, stored, re-used and disposed of during the construction phase of the proposed development.
- 16.26. It is expected that a Site specific waste management plan for the control and disposal of waste generated onsite would be required by condition, should the proposed development receive consent. Therefore, it is not considered necessary for waste to be assessed further within this SEI.

Summary of Changes to the Significance of Effects

- 16.27. Taking into account the design amendments to the proposed development, effects relating to Shadow Flicker, Climate and Carbon Balance, Accidents and Other Disasters, Population and Human Health, Air Quality, Telecommunications and Other Infrastructure, and Waste and Environmental Management, are assessed as being unchanged from those presented in the EIA Report.

Conclusions

- 16.28. The design amendments will not result in any change to the significance of effects as presented in Chapter 16 of the EIA Report.

- 16.29. The design amendments do not materially alter the proposed development's expected carbon saving potential.

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Introduction

- 17.1 **Chapter 17: Schedule of Commitments**, of the Environmental Impact Assessment (EIA) Report presents a summary of the mitigation, compensation and enhancement measures committed to throughout the EIA Report. All the information contained in Chapter 17 of the EIA Report remains valid unless stated otherwise in this Supplementary Environmental Information (SEI) Chapter.
- 17.2 The purpose of this Chapter of the SEI is to:
- provide a summary of the additional mitigation, compensation and enhancement measures committed to throughout the SEI document. These additional measures may be the result of consultation since the application or measures deemed appropriate as a result of the amendments to the proposed development.
- 17.3 **Table 17-1** provides a summary of additional mitigation, compensation and enhancement measures committed to throughout the SEI document.

Table 17-1: Schedule of Commitments

| SEI Chapter | Type of Mitigation, Compensation or Enhancement | Mitigation, Compensation or Enhancement Measures |
|--|--|---|
| SEI Chapter 3: Description of Development | Construction (Access Track - Peat) | <p>Floating Road Construction</p> <p>It is anticipated that approximately 2.60km of floating tracks will be required where peat has been consistently identified on Site in depths (typically over 1m). Floating road construction is described in the Peat management Plan (SEI Technical Appendix 10.2). The construction comprises the laying of a geosynthetic (geotextile mat or geogrid reinforcement) across soils prior to constructing the road. Where required, risk from run-off would be mitigated by directing drainage to settlement ponds. Erosion processes on the roadside embankments and cuttings would be mitigated by ensuring that gradients are below stability thresholds, which would also enable effective regeneration of vegetation. Sediment traps would also be required in the early years following construction until natural regeneration is established. The tracks would be left in place following construction to provide access for maintenance, repairs, and eventual decommissioning of the proposed development. At the end of the construction period the edges of all new tracks would be restored using materials stripped from excavations.</p> |
| SEI Chapter 3: Description of Development | Construction (Borrow Pits) | <p>Borrow Pits</p> <p>Seven borrow pit search areas will be utilised. These are detailed within SEI Technical Appendix 10.3 Borrow Pit Appraisal.</p> |
| SEI Chapter 8: Ecology | During / Post Construction (Habitat Management Plan) | <p>Habitat Management Plan (HMP)</p> <p>As part of the proposed development, an area of approximately 89ha would be targeted for blanket bog</p> |

SEI SCHEDULE OF COMMITMENTS 17

| | | |
|-----------------------------------|--|---|
| | | restoration, and an area of 611ha targeted for wet heath restoration in order to compensate for habitat loss. An Outline HMP is provided as SEI Technical Appendix 8.5 . A detailed HMP would be agreed with the CnES in consultation with relevant statutory consultees, prior to construction work commencing. |
| SEI Chapter 9: Ornithology | During / Post Construction (Eagle Conservation Plan) | Eagle Conservation Plan (ECP) SEI Technical Appendix 9.5 outlines management measures available to protect, enhance and better understand the Outer Hebrides populations of golden eagle and white-tailed eagle as part of an Eagle Conservation Programme (ECP). |