

## **Uisenis Wind Farm Volume 1**

## Supplementary Environmental Information Non-Technical Summary

June 2024



**Uisenis Power Limited** 



# ₩SLR

## **SEI Non-Technical Summary**

## **Uisenis Wind Farm**

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#### **Revision Record**

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### 1.0 Introduction

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<sup>1</sup>, 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<sup>2</sup>, as amended.

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 200 metres (m) and three turbines with a proposed blade tip height of 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<sup>3</sup> (the EIA Regulations).

The Supplementary Environmental Information (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 to address certain information requests from consultees during the consultation period. In summary, the SEI 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.

In each chapter of the SEI, details are provided where relevant, on the consultation responses received during the application consultation period and how these have been addressed, if necessary.

This SEI Non-Technical Summary (NTS) summarises the findings and content of the SEI. This SEI NTS is additional to the original submitted NTS (for the 2023 EIA Report) and both documents require to be read together to get the full up to date summary of the environmental impact assessment of the proposed development.

The SEI has been prepared by SLR and also the specialist subconsultants who prepared the EIA Report. All specialists are considered to be 'competent experts' in their field, a requirement of the EIA Regulations. Further details of staff experience and qualifications are set out in **Chapter 1: Introduction** of the SEI. The submission of the SEI will trigger another round of consultation in the planning process, which will provide consultees and the public with the opportunity to make representations on its content to the ECU. These comments, along with the information presented in the EIA Report and SEI, will be used to inform the decision on the application for consent.

<sup>&</sup>lt;sup>3</sup> Scotiish Government (2017). Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017



<sup>&</sup>lt;sup>1</sup> UK Government (1989). The Electricity Act 1989

<sup>&</sup>lt;sup>2</sup> Scottish Government (1997). Town and Country Planning (Scotland) Act 1997

## 2.0 Confirmation of Approach

In the SEI, each topic chapter seeks to:

- provide a revised assessment (where necessary) taking into account the amendments that have been made to the proposed development; and/or
- provide new or additional information to address application consultation responses, or to supplement the original assessment.

A summary of changes to the significance of effects, as presented in the EIA Report, is provided at the end of each chapter. For clarity, each assessment chapter of the SEI also sets out clearly which EIA Report Technical Appendices and Figures have been superseded.

## 3.0 Consultation on S36 Application and Amendments to the Proposed Development

#### 3.1 Key Consultee Comments to S36 Application

**SEI Chapter 2: Site Description and Design Evolution** sets out the key comments, on the Uisenis Wind Farm Section 36 application, received from NatureScot, Scottish Environment Protection Agency (SEPA), and the Royal Society for the Protection of Birds (RSPB). CnES have not yet provided full detailed response to the application.

**Table 3-1** details these key comments. These comments are considered 'key' as they make direct requests/recommendations that would result in a change to the Site layout or application boundary.

Consultee	Date	Consultee Response
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.
		Turbines (T)13, 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.
		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 194,942m <sup>3</sup> .
		The dimensions or exact location of the North construction compound should be amended to avoid the deeper areas of peat.
		Focus on relocating infrastructure proposed on near natural habitat located on peat over 1m in depth.
		Peatland restoration proposals (not accounting for grazing management) should be significantly expanded.
		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. T2 infrastructure should be repositioned to increase the buffer; and drawing provided showing the site specific to protect the water environment
NatureScot Part I	04	The oHMP should include enhancement, which we would
	December 2023	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.
		We recommend reduction or removal of the southern turbine cluster (T19-T25), as this would significantly reduce collision

Table 3-1: Summary of Key Consultee Responses (NatureScot, SEPA and RSPB)

		risk for golden eagle and likelihood of abandonment of one range. 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. This proposed mitigation measure both exacerbates adverse visual impacts, and is unlikely to deliver the mitigation of ornithological impacts that are intended.
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.

The applicant has considered the responses detailed above in **Table 3-1** (as well as all other consultee responses), that request/recommend changes to the Site layout and/or application boundary. Where considered feasible and appropriate<sup>4</sup>, the applicant has sought to address the key consultee responses and amend the proposed development accordingly.

In order to ensure that the energy potential of the Site has been maximised, and guarantee the economic viability of the proposed development, no wind turbines have been removed from the proposals. Focus has therefore been directed at addressing the following areas, summarised from **Table 3-1**:

- Reducing the amount of near natural peat bog habitat disturbed by proposed Site infrastructure;
- Reducing the amount of peat to be excavated as a result of proposed Site infrastructure;
- Moving Turbine No.2 and its crane pad, further from the nearby watercourse; and
- Providing an increase in the amount of peat bog habitat restoration proposed.

Section 3.2 below, details the amendments that have been made to the proposed development in order to address these areas of concern.

<sup>&</sup>lt;sup>4</sup> Whether a requested change to the proposed development is deemed feasible or appropriate, includes consideration on other environmental and technical constraints, relevant policy and guidance, and also economic viability of the project.



All other consultee comments (i.e. those not shown in **Table 3-1**) have also been considered and responses provided, where required, in the relevant SEI Chapter. This includes the SEI providing further assessment on the impact of the proposed development on Golden and White-Tailed Eagle, and also updates to the Peat Landslide Hazard Risk Assessment.

#### 3.2 Amendments to the Proposed Development

SEI Chapter 2: Site Description and Design Evolution and SEI Chapter 3: Description of Development provide detail on the amendments that have been made to the proposed development since the 2023 Section 36 application was submitted.

The amendments to the Site Infrastructure are detailed in **Table 3-2** and can also be seen on, **SEI Figure 2** and **SEI Figure 3**. The Site location has remained the same as is shown on SEI **Figure 1**.

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 turbine infrastructure away 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 turbine infrastructure away from deeper peat.
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

Table 3-2: Overview of Changes to Site Infrastructure from EIA Report to SEI



Site Infrastructure	Summary of Changes from EIA Report to SEI
	compound out of near natural peat bog habitat and out of deeper areas of peat.
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



Site Infrastructure	Summary of Changes from EIA Report to SEI
	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.
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.

The amendments to the application boundary and the area proposed for peat bog habitat restoration are detailed in **Table 3-3**.

Table 3-3: Other	Changes to	the Proposed	<b>Development</b>	from EIA Report t	o SEI
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Item	Summary of Changes from EIA Report to SEI
Proposed Peat Bog Habitat Restoration	An additional 39ha of peat bog habitat restoration is proposed. This takes the amount of peat bog habitat restoration proposed from 50ha (as presented in the 2023 EIA Report) to 89ha.
Application Boundary	<ul> <li>As a result of the following:</li> <li>additional area for peat bog habitat restoration;</li> <li>additional area for wet heath grazing reduction; and</li> <li>additional (SHETL) substation compound</li> <li>the application boundary has increased from 1,420ha (as presented in the 2023 EIA Report), to 1,647ha.</li> </ul>

**Table 3-4** provides the amended turbine coordinates and specifications for the proposed development.

Table 3-4:	Turbine	Coordinates	and	<b>Specifications</b>
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Turbine No.	Easting	Northing	Tip Height (m)	AOD (m)
T1	131931	914665	180	47
T2	132296	914578	200	40
Т3	131032	914211	200	92
T4	131621	914367	200	60
T5	131931	914002	200	56
Т6	132871	914180	200	42

Turbine No.	Easting	Northing	Tip Height (m)	AOD (m)
T7	133314	913950	200	38
Т8	132374	913751	200	64
Т9	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

## 4.0 Environmental Impact

#### 4.1 Landscape and Visual Amenity (SEI Report Chapter 7)

**SEI Chapter 7: Landscape and Visual** provides an update to the Landscape and Visual Impact Assessment presented in the EIA Report.

None of the amendments to the proposed development have been made as a result of landscape and visual related considerations. However, landscape and visual amenity was an important consideration when amending the site layout.

The proposed wind turbine movements are all under the 75m micrositing allowance applied for as part of the 2023 Section 36 application. In addition to this, the Aviation Lighting Scheme remains unchanged, with Turbines No.1, No.3, No.7, No.12, No.18, No.22, and No.25 proposed for visible aviation lighting.

It is still proposed to have Turbines No.19, No.20, No.21, No.22, No.23, No.24, and No.25 with painted blade mitigation applied (as per the 2023 application).

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.

The changes to the proposed development are not considered to change the findings of the assessment of effects on landscape character, designated landscapes or wild land areas in **Chapter 7: Landscape and Visual** (and associated Technical Appendices), of the EIA Report.

Significant landscape and visual effects predicted during both construction and operational phase.

#### 4.2 Ecology (SEI Report Chapter 8)

**SEI Chapter 8: Ecology** provides an update to the Ecological Impact Assessment presented in the EIA Report.

As detailed in Section 3 of this SEI NTS, many of the amendments to the proposed development have been made in order to address ecological related concerns from consultees. These are primarily in relation to reducing the amount of near natural peat bog habitat disturbed by proposed Site infrastructure, and increasing the amount of peat bog habitat restoration proposed.

The amendments to the proposed development, presented in the SEI, include a reduction in the amount of near natural peat bog habitat disturbed by proposed Site infrastructure, from 39.78ha (as presented in the EIA Report) to 35.07ha. In addition to this, the amount of peat bog habitat restoration proposed has increased by 39ha, from 50ha (as presented in the EIA Report) to 89ha.

The amendments to the proposed development, presented in the SEI, include an increase in the amount of wet heath and blanket bog mosaic habitat that is to be managed for reduced grazing, in order to improve the condition of this habitat. An area of 611ha of this habitat is proposed to be fenced off, compared to 537ha as presented in the EIA Report.

A Fish Population Assessment has been carried out at selected watercourses across the Site in order to get a better understanding of the number and type of fish species present.



The Fish Population Assessment is presented as **SEI Technical Appendix 8.6**. Only one of the four watercourses surveyed were assessed as good for Atlantic Salmon fry.

A Fresh Water Pearl Mussel Survey has been carried out at selected watercourses / waterbodies across the Site in order to get a better understanding of the presence of Fresh Water Pearl Mussel and the condition of the habitat. The Fresh Water Pearl Mussel Survey is presented as **SEI Technical Appendix 8.7**. No Fresh Water Pearl Mussel were identified at any locations during the survey.

The Outline Habitat Management Plan (HMP) presented as part of the 2023 EIA Report, has been updated is included within the SEI as **SEI Technical Appendix 8.5**. The Outline HMP provides updated detail on the peat bog habitat restoration proposals, and other restoration and enhancement measures forming part of the proposed development.

As a result of the changes to the proposed development there are no changes to the significance of effects predicted for habitats, fauna, or designated sites, from those assessed and presented in **Chapter 8: Ecology** of the EIA Report.

No significant effects are predicted during either the construction or operational phases of the proposed development.

#### 4.3 Ornithology (SEI Report Chapter 9)

**SEI Chapter 9** supplements Chapter 9 of the EIA Report, providing additional information on Ornithology.

The modest changes in the locations of six turbines (up to 57m) are not considered to make any material differences to the collision mortality risks predicted in the 2023 EIA Report. The magnitude of predicted collision risk effects on all Important Ornithological Features are therefore considered to be unchanged, and are not considered further in **SEI Chapter 9**: **Ornithology**, with the exception of golden eagle, where further population modelling was requested by consultees (RSPB).

#### 4.3.1 New Technical Appendices

As a result of the design amendments to the proposed development, three Technical Appendices presented as part of Chapter 9 of the EIA Report, have been updated (following requests from consultees) and are included as part of the SEI as follows:

- SEI Technical Appendix 9.5: Outline Eagle Conservation Programme;
- SEI Technical Appendix 9.6: Golden Egle Population Viability Analysis Model; and
- SEI Technical Appendix 9.7: 2017-2019 Surveys.

The Outline Eagle Conservation Programme provides an outline of the possible 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.

The Golden Eagle Population Viability Analysis (PVA) model with counterfactual outputs has been developed to determine the effects of additional mortality to the national (NHZ 3) golden eagle population due to wind turbine collisions. The findings of the model show that while the Outer Hebrides golden eagle 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 wind farm projects. With this 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 remain unchanged.

The 2017-2019 Surveys SEI Technical Appendix has been included following a request made by the RSPB. The SEI Technical Appendix summarises the flight activity surveys carried out within the Site of the proposed Uisenis Wind Farm from 2017-19 by Natural Research (Projects) Ltd. The flight activity survey data were used to conduct collision risk modelling for the proposed development, as presented in the 2023 EIA Report.

#### 4.3.2 Ornithology: Construction Effects

The proposed amendments to the site layout do not change the findings of Chapter 9 of the EIA Report with regards:

- Black-Throated Diver;
- Golen Eagle;
- White Tailed Eagle;
- Merlin;
- Greenshank; and
- Golden Plover and Dunlin.

The potential construction effects (of the proposed development) on the above would remain as presented in the EIA Report; not significant, following appropriate mitigation.

#### 4.3.3 Ornithology: Operational Effects

The proposed amendments to the site layout do not change the findings of Chapter 9 of the EIA Report with regards:

- Black-Throated Diver;
- Golen Eagle;
- White-Tailed Eagle;
- Merlin;
- Greenshank; and
- Golden Plover and Dunlin.

The potential operational effects (of the proposed development) on the above would remain as presented in the EIA Report; not significant, following appropriate mitigation.

#### 4.3.4 Collision Risk (White-Tailed Eagle)

Following a request from NatureScot, an alternative collision risk model was produced (for further information) for White-Tailed Eagle. This updated model takes into account the national cumulative collision risk of White-Tailed Eagles, including the collision rates put forward by the Uisenis Wind Farm EIA Report, and other wind farms currently going through planning such as Glen Ullinish 2.

Based on a worst-case cumulative annual collision estimate of 12 birds, the model predicts continued growth, but a 36% lower national population at year 25 of the model, than without the additional mortality.

Therefore, using NatureScot's values for national cumulative mortality, the alternative collision risk model, suggests a significant effect. However, the predicted effects of collision mortality due to the proposed development alone, and cumulatively at an Outer Hebrides Natural Heritage Zone scale, would remain not significant (unchanged from the EIA Report),



## 4.4 Hydrology, Hydrogeology, and Geology (SEI Report Chapter 10)

**SEI Chapter 10** supplements Chapter 10 of the EIA Report, providing additional information on Hydrology, Hydrogeology and Geology (including peat and soils).

In order to help inform the amendments to the site layout from the 2023 application, an additional peat depth survey was undertaken in February 2024.

#### 4.4.1 Updated Technical Appendices

As a result of the design amendments to the proposed development, three Technical Appendices presented as part of Chapter 10 of the EIA Report, have been updated and are included as part of the SEI as follows:

- SEI Technical Appendix 10.1: Peat Landslide Hazard Risk Assessment;
- SEI Technical Appendix 10.2: Peat Management Plan; and
- SEI Technical Appendix 12.3: Borrow Pit Appraisal.

The updated Peat Landslide Hazard Risk Assessment concludes that, following the design amendments, there are no significant changes to peat instability risk across the proposed development, from what was presented in the EIA Report. Subject to micrositing and mitigation, all of the locations initially identified as medium or high risk locations for peat slide, can be considered as insignificant.

The updated Peat Management Plan provides an update on the volume of peat that would need to be excavated during the construction of the proposed development, following the design amendments. In addition to this the Peat Management Plan provides further detail on the temporary storage of excavated peat, as well as the long terms re-use of this peat. The volume of peat predicted to be excavated is 189,358m<sup>3</sup>, which is less than the 194,942m<sup>3</sup> as assessed and presented in the 2023 application.

The updated Borrow Pit Appraisal reflects that four of the five proposed borrow pits presented in the EIA Report, have been resized and/or relocated, as well as another two borrow pits having been added to the proposed development. The Borrow Pit Appraisal provides updated figures for how much (approximately) aggregate is required to construct the proposed development, and how much is expected to be won from the onsite borrow pits. Approximately 283,095m<sup>3</sup> of aggregate is required to construct the proposed development, with the seven borrow pits anticipated to yield considerably more than this.

#### 4.4.2 Turbine No.2 Relocation

In SEPA's response to the 2023 application, dated 21 November 2023, they advised that they considered the distance (approximately 10m) between Turbine No.2 and a nearby watercourse, was not enough to put in place measures to protect the water environment.

As a result, Turbine No.2 has been moved from its original location presented in the 2023 application. Turbine No.2 has been moved approximately 57m north west of its original location, taking it outwith 50m of any nearby watercourse or waterbody. This is considered to address SEPA's concern with regards this turbine.

#### 4.4.3 Hydrology, Hydrogeology, and Geology: Construction Effects

The proposed amendments to the site layout do not change the findings of Chapter 10 of the EIA Report with regards:

- construction effects and peat/soils;
- construction effects and pollution risk;

- construction effects and erosion / sedimentation;
- construction effects and fluvial flood risk; and
- construction effects and infrastructure/man made drainage.

The potential construction effects (of the proposed development) on the above would remain as presented in the EIA Report; not significant.

#### 4.4.4 Hydrology, Hydrogeology, and Geology: Operational Effects

The proposed amendments to the site layout do not change the findings of Chapter 10 of the EIA Report with regards:

- operational effects and peat/soils;
- operational effects and pollution risk;
- operational effects and erosion / sedimentation;
- operational effects and fluvial flood risk; and
- operational effects and infrastructure/man made drainage

The potential operational effects (of the proposed development) on the above would remain as presented in the EIA Report; not significant.

#### 4.5 Cultural Heritage and Archaeology (SEI Report Chapter 11)

**SEI Chapter 11** supplements Chapter 11 of the EIA Report, providing additional information on Cultural Heritage and Archaeology.

None of the design amendments to the proposed development, as presented in the 2023 application, have been as a result of any Cultural Heritage and Archaeology related responses from consultees. However, Cultural Heritage and Archaeology was an important consideration (such as trying to avoid any onsite heritage assets, and limiting views of the proposed development from offsite heritage assets where possible) when amending the site layout.

#### 4.5.1 Cultural Heritage and Archaeology: Construction Effects

The proposed amendments to the site layout are considered quite minimal (in terms of the distance that turbines and other infrastructure has moved). As a result, there are no additional heritage assets directly affected by the proposed development and there is no change to the findings of Chapter 11 of the EIA Report with regards potential impacts upon any heritage assets within the Site.

#### 4.5.2 Cultural Heritage and Archaeology: Operational Effects

There are no additional designated heritage assets that have visibility of the proposed development following the design amendments to the site layout.

SEI Chapter 11 has assessed the operational effects of the proposed development on the same cultural heritage assets considered in the EIA Report (Sideval (SM5351), St. Columb's Church (SM5345), Dun Cromore (SM1670), and Calanais Complex (SM90054)). No changes have been identified to potential effects (or their significance) from what was set out in the EIA Report – No significant effects.

#### 4.6 Site Access, Traffic and Transport (SEI Report Chapter 12)

**SEI Chapter 12** provides an update to the Traffic and Transport Assessment presented in Chapter 12 of the EIA Report.



None of the design amendments to the proposed development, as presented in the 2023 application, have been as a result of any Site Access, Traffic and Transport related responses from consultees. However, Further detail on the proposed upgrades to the Eishken road have been provided, following a request from the Comhairle Nan Eilean Siar roads department.

The scale of the design amendments with respect to traffic and transport matters is minimal. There is a small increase (0.86km) in the length of new track proposed, as a result of the turbine, borrow pit and temporary construction compound amendments, as well as due to the addition of a second substation compound. There is also an increase in the amount of track that is proposed to be floated (from 2.2km to 2.60km), which has been done in order to reduce the volume of peat to be excavated.

As a result of the design amendments to the proposed development, the amount of aggregate required to construct the wind farm has increased to 283,095m<sup>3</sup>. As detailed in **SEI Technical Appendix 12.3: Borrow Pit Appraisal**, the seven onsite borrow pits included within the proposed development are expected to yield enough aggregate (potentially up to 404,537m<sup>3</sup>) for the construction of the wind farm. As such, there would be no requirement to bring additional aggregate from offsite, and therefore the design amendments would not lead to a discernible increase in traffic flows from what was presented in Chapter 12 of the EIA Report.

#### 4.6.1 Site Access, Traffic and Transport: Construction Effects

The design amendments to the proposed development are of a minor scale and as such do not require further assessment from that previously provided in the EIA Report. The significance of effects are therefore unchanged from those reported in Chapter 12 of the EIA Report; not significant (following implementation of appropriate mitigation).

#### 4.6.2 Site Access, Traffic and Transport: Cumulative Effects

Following an assessment of the design amendments, there are no residual cumulative effects predicted as a result of the construction of the proposed development nor are there any residual cumulative operational effects predicted as part of the proposed development.

There are no changes to the significance of effects as reported previously in Chapter 12 of the EIA Report, consequently the results of the assessment presented in Chapter 12 of the EIA Report remain valid.

#### 4.7 Noise (SEI Report Chapter 13)

**SEI Chapter 13** supplements Chapter 13 of the EIA Report. **SEI Chapter 13** considers the noise effects on the nearby residential receptors of the relocation of Turbines No.2, No.3, No.4, No.8, No.14 and No.25.

None of the design amendments to the proposed development, as presented in the 2023 application, have been as a result of any Noise related responses from consultees.

The amended Site layout does not affect the calculated construction and operational noise impacts reported in the 2023 EIA Report. Therefore, the significance of effects reported in Chapter 13 of the EIA Report have not changed as a result of the amended Site layout.

There remains no significant noise effect, on nearby residential receptors, during either construction or operation of the proposed development.

## 4.8 Socio-Economics, Tourism, Recreation and Land Use (SEI Report Chapter 14)

**SEI Chapter 14** supplements Chapter 14 of the EIA Report. **SEI Chapter 14** considers the design amendments to the proposed development and the potential effects on the Socio-Economics, Tourism, Recreation and Land use of the area.

None of the design amendments to the proposed development, as presented in the 2023 application, have been as a result of any Socio-Economic, Tourism, Recreation or Land use related responses from consultees.

The design amendments to the proposed development do not result in changes to the significance of effects presented within Chapter 14 of the EIA Report. There therefore remains no significant effects predicted with regards Socio-Economic, Tourism, Recreation or Land use.

### 4.9 Aviation (SEI Report Chapter 15)

**SEI Chapter 15** supplements Chapter 15 of the EIA Report. **SEI Chapter 15** considers the design amendments to the proposed development and the potential effects on aviation receptors / infrastructure.

None of the design amendments to the proposed development, as presented in the 2023 application, have been as a result of any Aviation related responses from consultees.

None of the proposed turbines that have been relocated, have seen an increase in their overall elevation (ground level + 200m tip height) of more than 20m.

None of the proposed turbines that have been relocated, have moved by as much as the 75m micrositing allowance considered in the Instrument Flight Procedure assessment that was carried out on the originally proposed turbine locations and presented in the EIA Report.

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. This is considered acceptable, even with Turbines No.3 and No.25 having been relocated, as these turbines have moved no more than 25m and the reasons for their originally being chosen for visible aviation lighting remain. The aviation lighting scheme remains valid and is considered to comply with statutory requirements under The ANO (2016) to assist with air safety.

The design amendments to 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 design amendments to the proposed development do not result in any changes to the significance of effects presented within Chapter 15 of the EIA Report. For Aviation, significance is established by the relevant aviation stakeholders in terms of any impacts being deemed either acceptable or unacceptable. No stakeholders had any objection to the 2023 application, and it is considered that the design amendments to the proposed development will not result in any changes to impacts for aviation receptors / infrastructure.

#### 4.10 Other Issues (SEI Report Chapter 16)

**SEI Chapter 16** supplements Chapter 16 of the EIA Report. **SEI Chapter 16** considers the design amendments to the proposed development and the potential effects on Other Issues, including 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.



#### 4.10.1 Shadow Flicker

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.

The updated shadow flicker model show that as a result of the amended turbine locations there is a slight reduction in likely hours of shadow flicker expected to be experienced at Loch Shell House. However, there is a slight increase in likely hours of shadow flicker expected to be experienced at the other six residential properties within the study area. The differences in likely hours of shadow flicker expected to be experienced at these residential properties, between the SEI and EIA shadow flicker models is, however, very minor. The differences at all properties between the SEI and EIA shadow flicker models are less than one hour per year (when average hours of sunshine per year is applied to the model).

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.

#### 4.10.2 Climate and Carbon Balance

As a result of the design amendments to the proposed development, the carbon payback period of the proposed development has been revised.

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  $CO_2$  emissions savings are also similar for the amended proposed development, compared to what was presented in the EIA Report.

The amended proposed development is assessed to have, 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.

#### 4.10.3 Risk of Accidents and Disasters

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.

#### 4.10.4 Population and Human Health

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.

#### 4.10.5 Air Quality

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

#### 4.10.6 Waste and Environmental Management

The updated 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. 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 the SEI.

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

## 5.0 Summary of Significant Effects

#### Table 5-1: Summary of Significant Effects

Торіс	Mitigation	Residual Significant Effects
Landscape and Visual Amenity	Design	Significant effects predicted during both construction and operational phase.
		operational phase, on:
		• Five Landscape Character Types (and one Coastal Character Type);
		<ul> <li>12 assessed viewpoints;</li> </ul>
		Five settlements;
		Four roads / routes; and
		One designated landscape.
Ecology	Design, Pre-Construction Surveys, Construction Environmental Management Plan, Habitat Management Plan	None
Ornithology	Design, Pre-Construction Surveys, Construction Environmental Management Plan, Habitat Management Plan	None
Hydrology, Hydrogeolgoy, and Geology	Design. Other than good practice measures that the developer would implement as standard, no specific mitigation is required.	None
Cultural Heritage and Archaeology	Design and preservation of the assets within the digital record through a pre- commencement condition and/or a watching brief.	None
Site Access, Traffic and Transport	Traffic Management Plan for the movement of abnormal loads. Framework Construction Traffic Management Plan (CTMP) provided.	None
	Trial run for abnormal loads prior to commencement of construction.	
	Provision of information to local residents and users of amenities, to involve the community in the safe operation of the Traffic	

Торіс	Mitigation	Residual Significant Effects
	Management Plan and to alleviate stress and anxiety.	
	Good construction practices including wheel wash and careful loading.	
Noise	Design, Construction Environmental Management Plan.	None
Socio-economics, Tourism, Recreation and Land Use	Design	None
Aviation	Design and aviation lighting (visible)	None
Other Issues	Design	Positive significant effect on climate change and carbon balance over the operational lifetime of the proposed development are predicted.

### 6.0 Next Steps and Further Information

The ECU will consider the SEI, alongside the findings of the EIA, as part of the Section 36 application. Before making a decision on the application, the ECU will re-consult a number of consultees including CnES, NatureScot, SEPA, HES and RSPB, and will consider all representations received from other parties including members of the public.

A copy of the SEI NTS will be made available for download from the applicant website at:

https://eurowindenergy.com/uk/our-projects/uisenis-wind-farm.

Hard copies of this SEI NTS are available free of charge from:

SLR Consulting Limited

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77 Renfrew St,

Glasgow,

G2 3BZ

Tel: 07718 482283

Hard copies of this SEI may be purchased by arrangement from the above address for £500 per copy including visualisations, or £15 per CD rom/USB stick (which will include the original EIA Report). As such, a CD/USB version is recommended.

Hard copies of the SEI and EIA Report can be viewed 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.

## FIGURES



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Making Sustainability Happen