APPENDIX 8.1: SHADOW HABITATS REGULATIONS APPRAISAL

Figures

1. INTRODUCTION

1.1 Terms of Reference

1.1.1 Envirocentre Limited was commissioned by ASH design and assessment Ltd. (ASH), on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission) to undertake a shadow Habitats Regulation Appraisal (HRA) to determine whether the proposed construction of a new 132 kV overhead line (OHL) (and ancillary development) to connect the consented Cloiche Wind Farm[1] and the proposed Dell 2 Wind Farm[2] to the electricity transmission network at Melgarve substation would have any adverse impact on the integrity of any European designated sites.

1.2 Scope of Report

1.2.1 A shadow HRA is required to assess whether the project, alone or in combination with other projects, will have an adverse impact on the integrity of a European designated site. It is the responsibility of the competent authority to conduct the HRA. This document aims to provide the information necessary for them to carry out Stage One of the assessment (Screening) by:

- providing a description of the proposed works;
- identifying those European designated sites which are connected to and/or could potentially be affected by the proposed works;
- identifying how the proposed works may impact on the qualifying features of the designated site(s);
- considering other projects which may have “in combination” effects on the European designated sites;
- recommending the designated sites which need to be taken forward for further assessment if impacts on their qualifying features cannot be ruled out; and
- an appraisal of the proposed works and potential impacts on qualifying features scoped in for assessment.

[1] Received consent from the Scottish Government in November 2023.

[2] It should be noted that in August 2019, an application to build and operate Dell Wind Farm was consented following an appeal to the Scottish Ministers. However, the wind farm has been re-designed at the same location to increase capacity and energy capture with fewer wind turbines. The application for Dell 2 Wind Farm was submitted to the Scottish Government Energy Consents Unit on behalf of the Scottish Ministers on 11th March 2024 and awaits decision. It is this proposed re-designed Dell 2 Wind Farm that this EIA Report refers to throughout, rather than the previously consented design.

2. METHODS

2.1 The Shadow Habitats Regulations Appraisal Process

2.1.1 The shadow HRA is a four-stage process. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. The stages are summarised in Table 2.1. It is stated within the EU guidelines that "where, without any detailed assessment at the screening stage, it can be assumed (because of the size or scale of the project or the characteristics of the national site network) that significant effects are likely, it will be sufficient to move directly to the appropriate assessment (Stage Two) rather than complete the screening assessments explained below."

Table 2.1: Key Stags of the HRA Process

Stage 1	
Screening for Likely Significant Effect (LSE)	- Identify international sites in and around the project area. - Examine conservation objectives of the interest feature(s) (where available). - Review plan policies and proposals and consider potential effects on UK sites (magnitude, duration, location, extent). - Examine other plans and programmes that could contribute to 'in combination' effects.
	- If no effects likely – report no likely significant effect. - If effects are judged likely or uncertainty exists – the precautionary principle applies, proceed to Stage 2. - If following screening the project is reviewed and includes integral mitigation which will ensure no likely significant effects, then no further Appropriate Assessment needed.
Stage 2	
Appropriate Assessment (AA)	- Complete additional scoping work including the collation of further information on sites as necessary to evaluate impact in light of conservation objectives. - Agree scope and method of AA with the competent authority. - Consider how the project 'in combination' with other projects will interact when implemented (the Appropriate Assessment). - Consider how effects on integrity of the site could be avoided by changes to the project and the consideration of alternatives. - Develop mitigation measures (including timescale and mechanisms). - Report outcomes of AA including mitigation measures.
	- If the project will not adversely affect European site integrity proceed with plan. - If effects or uncertainty remain following the consideration of alternatives and development of mitigation proceed to Stage 3.
Stage 3	
Alternative Solutions	- Consider alternative solutions, delete from project or modify. - Consider if priority species/habitats affected - identify 'imperative reasons of overriding public interest' (IROPI), economic, social, environmental, human health, public safety (only applicable in highly exceptional circumstances).
Stage 4	
Imperative Reasons of Overriding Public Interest (IROPI)	- Stage 4 is the main derogation process of Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a UK site to proceed in cases where it has been established that no less damaging alternative solution exists. - The extra protection measures for Annex I priority habitats come into effect when making the IROPI case. Compensatory measures must be proposed and assessed. The Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

2.2 Screening

2.2.1 The Screening stage determines whether or not the project is likely to (or potentially could) have significant effects on the national site network. A list of all SACs, SACs, SPAs and potential SPAs (pSPAs) that are within proximity to the site, or sites designated for mobile species which have the potential to be affected by the

proposed development, was compiled and the qualifying interest features noted. Following this, the key environmental conditions (conservation objectives) needed to support site integrity were detailed for each site.

2.2.2 With reference to the NatureScot guidance[3] the screening stage determines whether Appropriate Assessment is required, by:

- Determining whether a project (or plan) is directly connected with or necessary to the conservation management of any European sites;
- Describing the details of the project (or plan) proposals and other projects that may cumulatively affect any European sites;
- Describing the characteristics of relevant European sites; and
- Appraising likely significant effects of the proposed project on relevant European sites.

2.2.3 The guidance gives the following definition of LSE:

2.2.4 "The test of significance is where a plan or project could undermine the site's conservation objectives. The assessment of that risk (of 'significance') must be made in the light, amongst other things, of the characteristics and specific environmental conditions of the site concerned."

*2.2.5 "A likely effect is one that cannot be ruled out on the basis of objective information. The test is a 'likelihood' of effects rather than a 'certainty' of effects. Although some dictionary definitions define 'likely' as 'probable' or 'well might happen', in the Waddenzee case the European Court of Justice ruled that a project should be subject to Appropriate Assessment "**if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site, either individually or in combination with other plans and projects**". Therefore, 'likely', in this context, should not simply be interpreted as 'probable' or 'more likely than not', but rather whether a significant effect can objectively be ruled out."*

2.3 Screening Conclusion

2.3.1 The outcome of screening for appropriate assessment is to reach one of the following determinations:

a) A Stage Two AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.
b) A Stage Two AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

2.3.2 Section 4.3 of this report details the results of the screening process for this project.

2.4 Appropriate Assessment

2.4.1 The Appropriate Assessment establishes whether or not a project's LSE identified during the screening stage will have an adverse effect on the integrity of the affected site with regard to its conservation objectives. Based on the guidance provided by NatureScot the effects of the proposal on the designated sites' qualifying features will determined by:

[3]NatureScot, formerly SNH guidance available at : https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra (Accessed January 2024)

- Gathering information required to assess impacts (from site documents, scientific literature, EU and UK guidance on impact assessment and impact assessments from similar projects);
- Predicting the type and nature of impacts e.g. direct or indirect, short or long term;
- Assessing whether there will be adverse effects on the integrity of the site as defined by the conservation objectives and the status of the site. The precautionary principle must be applied at this stage. If it cannot be demonstrated with supporting evidence that there will be no adverse effects then adverse effects will be assumed; and
- Ascertaining if it is possible to mitigate adverse effects.

2.4.2 Section 5 of this report details the Appropriate Assessment process for this project.

2.5 In-Combination Effects

2.5.1 Under Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 (as amended) it is necessary to consider whether a plan or project is likely to have a significant effect on a national site network site "either alone or in combination with other plans or projects."

2.5.2 These should include:

- Approved but as yet uncompleted plans or projects;
- Plans and projects for which an application has been made and which are currently under consideration but not yet approved by the competent authorities; and
- Permitted ongoing activities such as discharge consents, abstraction licences or consecutive/simultaneous maintenance activities.

3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Site Location

3.1.1 The proposed construction works will take place from the Stronelairg wind farm plateau, located within the Garrogie Estate which is south-east of Fort Augustus, and travel south through the Glenshero Estate to the Melgarve substation, west of Garva Bridge. Further description of the Proposed Development is in **Chapter 3 – The Proposed Development** of the EIA Report.

3.2 Project Description

3.2.1 SSEN Transmission is proposing to submit an application under Section 37 of the Electricity Act 1989 as amended (the 1989 Act) for consent to construct and operate a new 132 kV overhead line (OHL) to connect the consented Cloiche Wind Farm and the proposed Dell 2 Wind Farm to the electricity transmission network at Melgarve substation.

3.2.2 The consented Cloiche Wind Farm is located on Glendoe and Garrogie Estates, adjacent to the operational Stronelairg Wind Farm and Glendoe Hydroelectric Scheme and approximately 11 km to the south-east of Fort Augustus. It consists of up to 29 turbines of a maximum height of 149.9 metres with an installed capacity of approximately 125 MW.[4] Cloiche Wind Farm was approved by Scottish Ministers in November 2023.

3.2.3 The proposed Dell 2 Wind Farm is located on Dell Estate and lies approximately 5 km to the north of the consented Cloiche Wind Farm. In August 2019, an application to build and operate Dell 2 Wind Farm with associated infrastructure was consented under the Town and Country Planning Act 1997 (as amended)(the 1997 Act), following an appeal to the Scottish Ministers. Since that time, a revised design and layout is being developed by the wind farm developer that seeks to increase the installed capacity of the proposed wind farm to approximately 50 MW. Consent for the revised layout would be required from Scottish Ministers under the 1989 Act given the revisions increase the installed capacity to 50MW, meeting the threshold for which section 36 consent under the 1989 Act is required. A scoping opinion was received from Scottish Ministers 6 May 2022, and the application for Dell 2 Wind Farm was submitted to the Scottish Government Energy Consents Unit (ECU) on behalf of the Scottish Ministers on 11th March 2024 and awaits decision.

3.2.4 Between the two proposed / consented wind farms and Melgarve substation, the Proposed Development would comprise a combination of approximately 7 km of new double circuit steel structure 132 kV overhead line (OHL) and approximately 9.9 km of new 132 kV underground cable (UGC). Cable Sealing End (CSE) compounds would be required to facilitate the transition between OHL and UGC. New permanent access tracks (including bridges) and temporary access tracks would also be required to facilitate the construction and operation of the Proposed Development.

Section 37 Consent

3.2.5 Section 37 Consent under the 1989 Act, including deemed planning permission under section 57(2) of the 1997 Act, is sought for the following works:

- Approximately 7.0 km of 132 kV OHL double circuit L7 lattice towers carrying both connections. It is currently anticipated that the steel lattice structures would be of the L7 suite of towers. Typically, the span lengths for the Proposed Development would be between approximately 124 m and 308 m. Tower heights would also vary, depending on local topography, but would typically be in the region of 25 m to 37 m in height. The average OHL structure height would be approximately 30 m.

[4] Details as per the Cloiche Wind Farm Determination letter dated 30 November 2023.

Ancillary Development

3.2.6 Deemed planning permission under section 57(2) of the 1997 Act is also sought for the following elements, or ancillary development required to facilitate the Proposed Development's construction and operation:

- **Two Cable Sealing End (CSE) compounds** to facilitate the transition between OHL and UGC. One CSE compound would be situated at approximate Ordnance Survey (OS) grid reference NH 48474 01491 which lies approximately 1.3 km southeast of the consented Cloiche Wind Farm substation, and the other CSE compound would be situated at approximate OS grid reference NN 50665 95775 which lies approximately 0.5 km northeast of Melgarve substation;
- **Approximately 7.3 km of 132 kV UGC** between the proposed Dell 2 Wind Farm on-site substation at approximate OS grid reference NH 49722 06710 and the new CSE approximately 1.3 km to the southeast of the consented Cloiche Wind Farm substation;
- **Approximately 1.8 km of 132 kV UGC** between the consented Cloiche Wind Farm on-site substation at approximate OS grid reference NH 47429 02486 and the new CSE approximately 1.3 km to the southeast of the consented Cloiche Wind Farm substation; and
- **Approximately 0.8 km of two 132 kV UGCs** running parallel to each other from the new CSE located approximately 0.5 km northeast of Melgarve substation, splitting apart again before they enter into Melgarve substation itself. The existing Melgarve substation is situated at OS grid reference NN 50119 95611.

3.2.7 UGC elements are classed as permitted development under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992. However, in this case, given that there is no technical alternative to the UGC at either end of the OHL and following review of the Screening Opinion, the UGC is to be considered as part of the Proposed Development for which deemed planning permission under section 57(2) of the 1997 Act is sought.

3.2.8 The following ancillary works would also be required as part of the Proposed Development, or to facilitate its construction and operation, for which deemed planning permission under section 57(2) of the 1997 Act is sought:

- Upgrades to existing access tracks;
- New permanent and new temporary access tracks;
- Permanent stone hardstanding areas related to the CSE compounds and associated working areas around infrastructure to facilitate construction;
- Vegetation clearance to facilitate construction and operation of the Proposed Development, to comply with the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002[5];
- Temporary measures to protect water crossings (e.g. scaffolding and temporary bridges); and
- Working areas around infrastructure to facilitate construction.

Associated Works

3.2.9 Other associated works are required to facilitate construction of the Proposed Development or would occur as a consequence of its construction and operation. These works, listed below, do not form part of the description of the Proposed Development and are therefore not included in the application for statutory consents. On that basis they are therefore not assessed in detail in this EIA Report. The associated works are:

- Borrow pits and quarries which would be required to source stone for the construction of access tracks. Separate planning applications for these works would be sought by the Principal Contractor; and

[5] The Electricity Safety, Quality and Continuity Regulations (2002), available at https://www.legislation.gov.uk/uksi/2002/2665/contents/made

- Temporary construction compounds which would be required to facilitate construction of the Proposed Development. The final location and design of temporary site compounds would be confirmed by the Principal Contractor and separate planning permissions would be sought as required.

4. SCREENING FOR LIKELY SIGNIFICANT EFFECT

4.1.1 For significant effects to arise, there must be a risk enabled by having a 'source' (e.g. construction works at a proposed development site), a 'receptor' (e.g. a European site or its qualifying interests), and a pathway (connectivity) between the source and the receptor (e.g. mobile marine species travelling between the proposed development site and the designated site). The identification of a pathway does not automatically mean that significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (e.g. duration of construction works), the characteristics of the pathway (e.g. what species and the number of individuals travelling between the two sites) and the characteristics of the receptor (e.g. the sensitivities of the European site and its qualifying interests).

4.1.2 NatureScot guidance[3] states that sites with mobile species should be considered within the screening process where there is a significant ecological link between the designated site and the proposed development site. It also states that for developments which could increase recreational pressures on designated sites, all sites within reasonable travel distance of the development should be considered for screening. It is also necessary to consider sites which are part of the same coastal ecosystem, where the proposed development may affect coastal processes.

4.2 Relevant European Sites

4.2.1 The following sites have been scoped in for assessment due to them being within proximity to the site and/ or considered connected to the site via dispersal of designated mobile species:

- River Spey SAC;
- Creag Meagaidh SAC;
- Creag Meagaidh SPA;
- Monadhliath SAC; and
- Loch Knockie and nearby lochans SPA.

4.2.2 The sites are listed in Table 4.1, along with their screening assessment.

Table 4.1: List of European Designated Sites within proximity to the site along with their Qualifying Features and Screening Assessment for Likely Significant Effects

Site Name (distance and orientation from works)	Conservation Objectives	Qualifying Features	Likely Significant Effect (LSE)	Screening Assessment
River Spey SAC (adjacent to southern boundary of corridor)	To avoid deterioration of the qualifying habitats thus ensuring that the integrity of the site is maintained, and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and To ensure for the qualifying habitats are maintained in the long term:	Atlantic Salmon (*Salmo salar*)	Pathway for LSE identified. According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. Therefore, Atlantic Salmon are not present where the construction works will take place. However, there is potential for pollution (via silt, concrete washout or hydrocarbons) into tributaries that lead into the River Spey. This could result in mortality and deterioration of suitable habitat supporting this species	Scoped in
		Freshwater Pearl Mussel (*Margaritifera margaritifera*)	Pathway for LSE identified. According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. Therefore, it's host species (Atlantic Salmon) are not present where the construction works will take place. However, there is potential for pollution (via silt, concrete washout or hydrocarbons) into tributaries that lead into the River Spey. This could result in mortality and deterioration of suitable habitat supporting this species	Scoped in
		Otter (*Lutra lutra*),	Pathway for LSE identified. There is potential for pollution (via silt, concrete washout or hydrocarbons) into tributaries that lead into the River Spey. This could result in mortality and deterioration of suitable habitat supporting this species. In addition, this species could utilise the tributaries for lay-ups or natal holts. Therefore there could be disturbance to resting or breeding otter during ground investigation works.	Scoped in
		Sea Lamprey (*Petromyzon marinus*)	Pathway for LSE identified.	Scoped in

Site Name (distance and orientation from works)	Conservation Objectives	Qualifying Features	Likely Significant Effect (LSE)	Screening Assessment
			According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. Therefore, Sea Lamprey are not present where the construction works will take place. There is potential for pollution (via silt, concrete washout or hydrocarbons) into tributaries that lead into the River Spey. This could result in mortality and deterioration of suitable habitat supporting this species	
Creag Meagaidh SAC (1.3km south)	To avoid deterioration of the qualifying habitats thus ensuring that the integrity of the site is maintained, and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and To ensure for the qualifying habitats are maintained in the long term:	designated for its natural biological features including a diverse mosaic of upland habitats of European importance. This includes priority blanket bog habitat and other upland habitats including rocky slopes (including inland cliff, rocky outcrops, acidic scree and chasmophytic vegetation), upland birch woodland, alpine and subalpine heaths, upland assemblage and vascular plant assemblage.	No pathway for LSE identified. The proposed extent of the construction works for the proposed 132 kV OHL is localised and 1.3km from the SAC. Therefore, there is no likely significant effect on the blanket bog habitat designated.	Scoped out
Creag Meagaidh SPA (1.3km south)	To ensure that the qualifying feature of the Creag Meagaidh SPA is in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.	Dotterel (*Charadrius morinellus*)	No pathway for LSE identified. No Dotterel were recorded within the works area during the ornithology surveys in summer 2022, nor were Dotterel recorded during surveys for Cloiche and Stronelairg Wind Farms. Given the distance from the proposed works to the breeding areas within Creag Meagaidh SPA (1.3km at least), there is no likely significant effect predicted.	Scoped out
Monadhliath SAC (2km east)	To avoid deterioration of the qualifying habitats thus ensuring that the integrity of the site is maintained, and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and To ensure for the qualifying habitats are maintained in the long term:	The area is designated for priority upland habitat blanket bog and its mire communities and a range of upland habitats supporting rare vascular plants.	No pathway for LSE identified. Given the scale of the proposed works and the distance between the site and the Monadhlaith SAC, which is located 2km from the proposed works at its shortest distance, no likely significant effects are predicted to the qualifying features.	Scoped out

Site Name (distance and orientation from works)	Conservation Objectives	Qualifying Features	Likely Significant Effect (LSE)	Screening Assessment
Loch Knockie and nearby lochans SPA (4 km west)	To ensure that the qualifying feature of the Loch Knockie and nearby lochans SPA is in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.	Slavonian Grebe (*Podiceps auritus*), breeding	No pathway for LSE identified. No Slavonian Grebes were recorded within the survey area during ornithology surveys in 2022. Similarly, no Slavonian Grebes were recorded in the survey areas for the Cloiche and Stronelairg Wind Farm applications, with the nearest nest sites 4km away. Assessments for Stronelairg Wind Farm concluded that flights to and from current and historical breeding sites would not place this species at collision risk. The same conclusion is considered for the proposed 132 kV OHL. Given the distance from the proposed works to the breeding lochans within Loch Knockie and nearby lochans SPA (4km), and that no collision risk is considered, there is no likely significant effect predicted.	Scoped out

4.3 Screening Conclusion

4.3.1 Following an examination, analysis and evaluation of the relevant information including, in particular, the nature of the proposed works and the likelihood of significant effects on designated sites, the River Spey SAC has been scoped in for Appropriate Assessment.

5. APPROPRIATE ASSESSMENT: RIVER SPEY SAC

5.1 Site Description

5.1.1 The River Spey catchment rises in the Monadhliath Mountains and enters the Moray Firth at Spey Bay. It is the second longest river in Scotland, with a catchment area of over 3,000km^2. The River Spey is designated as a Special Area of Conservation (SAC) for Atlantic salmon, freshwater pearl mussel, lamprey and otter, and the lower Spey is a Special Area of Conservation for coastal shingle and floodplain woodland features. Over 60% of the catchment falls within the Cairngorms National Park.

5.1.2 **Figure 8.1.1** shows the tributaries of the River Spey SAC potentially affected by the Proposed Development.

5.2 Conservation Objectives

- To ensure that the qualifying features of the River Spey SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status; and
- To ensure that the integrity of the River Spey is restored by meeting objectives 2a, 2b, 2c for each qualifying feature (and 2d for freshwater pearl mussel)

5.3 Atlantic Salmon

5.3.1 The specific conservation objectives for Atlantic salmon are as follows:

- Restore the population of Atlantic salmon, including range of genetic types, as a viable component of the site;
- Restore the distribution of Atlantic salmon throughout the site; and
- Restore the habitats supporting Atlantic salmon within the site and availability of food.

5.3.2 In order to achieve these objectives, activities that could lead to a permanent reduction in Atlantic salmon populations or prevent populations recovering, a loss of access to spawning grounds and deterioration in water quality should be avoided.

5.3.3 It is noted that Atlantic salmon do not reach the areas of the Allt Coire Iain Oig and Allt Gilbe where the construction works will be undertaken. According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. However, pollution of these watercourses could lead to a reduction in water quality in the River Spey itself.

5.3.4 Towers 10-13, 18-26 all fall within 100m of either the Allt Coire Iain Oig and Allt Gilbe (plus tributaries of these two watercourses) which feed into the River Spey (see **Figure 8.1.1** for locations). Construction works to be undertaken at the north of these are not within the River Spey catchment and therefore pose no risk to the River Spey.

5.3.5 Prior to construction works a Construction Environmental Management Plan (CEMP) will be produced which will detail pollution prevention measures. The contractor will undertake their activity in line with the best practice measures and pollution prevention guidelines (eg. SEPA PPG1, GPP5, GPP21 and PPG22) to minimise the risk of pollution from sources such as runoff, fuels and oils. Within this, specific mitigation required and to be included within the CEMP are outlined below:

- Specific Pollution Prevention and Surface Water Management Plans to be produced for each of the Tower location that has the potential to impact on a watercourse. These will detail the mitigation required for each location. This will include the methods to be used for soil/peat storage;
- Pollution Prevention and Surface Water Management Plans to be produced for new and temporary access tracks to be constructed;

- Specific procedures for the use of concrete pouring, which will take cognisance of forecasted weather conditions. This will include concrete washout areas which must be located a distance from watercourses and within a lined and bunded storage area;
- All plant and vehicles will be fitted with spill kits. Should a spill occur, all works must be stopped, the source of pollution identified, and the spill contained immediately.
- Plant nappies will be deployed underneath all plants when static.
- Re-fuelling operations are not permitted within 10m from the bank of any watercourse.
- Provision of an Ecological/Environmental Clerk of Works (ECoW/EnvCoW) to monitor works at positions adjacent to Allt coire lain Oig and Allt Gilbe respectively. The ECoW.EnvCoW will have the authority to halt works should an incident or potential incident occur.

5.4 Freshwater Pearl Mussel

5.4.1 The specific conservation objectives for freshwater pearl mussel are as follows:

- Restore the population of freshwater pearl mussel as a viable component of the site;
- Restore the distribution of freshwater pearl mussel throughout the site;
- Restore the habitats supporting freshwater pearl mussel within the site and availability of food; and
- Restore the distribution and viability of freshwater pearl mussel host species and their supporting habitats.

5.4.2 In order to achieve these objectives, activities that could lead to an inability of the population to successfully reproduce and recruit sufficient juveniles into the population and deterioration in water quality should be avoided.

5.4.3 It is noted that Atlantic salmon (the main host species for Freshwater Pearl Mussel) do not reach the areas of the Allt Coire Iain Oig and Allt Gilbe where the construction works will be undertaken. According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. However, pollution of these watercourses could lead to a reduction in water quality in the River Spey itself.

5.4.4 Towers 10-13, 18-26 all fall within 100m of either the Allt Coire Iain Oig and Allt Gilbe (plus tributaries of these two watercourses) which feed into the River Spey (see **Figure 8.1.1** for locations). Construction works to be undertaken at the north of these are not within the River Spey catchment and therefore pose no risk to the River Spey.

5.4.5 Prior to construction works a Construction Environmental Management Plan (CEMP) will be produced which will detail pollution prevention measures. The contractor will undertake their activity in line with the best practice measures and pollution prevention guidelines (eg. SEPA PPG1, GPP5, GPP21 and PPG22) to minimise the risk of pollution from sources such as runoff, fuels and oils. Within this, specific mitigation required and to be included within the CEMP are outlined below:

- Specific Pollution Prevention and Surface Water Management Plans to be produced for each of the Tower location that has the potential to impact on a watercourse. These will detail the mitigation required for each location. This will include the methods to be used for soil/peat storage;
- Pollution Prevention and Surface Water Management Plans to be produced for new and temporary access tracks to be constructed;
- Specific procedures for the use of concrete pouring, which will take cognisance of forecasted weather conditions. This will include concrete washout areas which must be located a distance from watercourses and within a lined and bunded storage area;

- All plant and vehicles will be fitted with spill kits. Should a spill occur, all works must be stopped, the source of pollution identified, and the spill contained immediately.
- Plant nappies will be deployed underneath all plants when static.
- Re-fuelling operations are not permitted within 10m from the bank of any watercourse.
- Provision of an Ecological/Environmental Clerk of Works (ECoW/EnvCoW) to monitor works at positions adjacent to Allt coire lain Oig and Allt Gilbe respectively. The ECoW.EnvCoW will have the authority to halt works should an incident or potential incident occur.

5.4.6 By undertaking these mitigation measures, potential pollution incidents will be avoided. Therefore, the extent and quality of watercourse habitat suitable for Freshwater Pearl Mussel will be maintained, subject to natural processes.

5.5 Sea Lamprey

5.5.1 The specific conservation objectives for sea lamprey are as follows:

- Maintain the population of sea lamprey as a viable component of the site;
- Maintain the distribution of sea lamprey throughout the site; and
- Maintain the habitats supporting sea lamprey within the site and availability of food.

5.5.2 In order to achieve these objectives, activities that could lead to a permanent reduction in sea lamprey populations or prevent populations recovering, a loss of access to spawning grounds and deterioration in water quality should be avoided.

5.5.3 It is noted that Sea Lamprey do not reach the areas of the Allt Coire Iain Oig and Allt Gilbe where the construction works will be undertaken. According to the Scottish Environmental Protection Agency (SEPA) Obstacles to Fish Passage Map, there is an impassable natural waterfall at the lower end of Allt coire lain Oig. However, pollution of these watercourses could lead to a reduction in water quality in the River Spey itself.

5.5.4 Towers 10-13, 18-26 all fall within 100m of either the Allt Coire Iain Oig and Allt Gilbe (plus tributaries of these two watercourses) which feed into the River Spey (see **Figure 8.1.1** for locations). Construction works to be undertaken at the north of these are not within the River Spey catchment and therefore pose no risk to the River Spey.

5.5.5 Prior to construction works a Construction Environmental Management Plan (CEMP) will be produced which will detail pollution prevention measures. The contractor will undertake their activity in line with the best practice measures and pollution prevention guidelines (eg. SEPA PPG1, GPP5, GPP21 and PPG22) to minimise the risk of pollution from sources such as runoff, fuels and oils. Within this, specific mitigation required and to be included within the CEMP are outlined below:

- Specific Pollution Prevention and Surface Water Management Plans to be produced for each of the Tower location that has the potential to impact on a watercourse. These will detail the mitigation required for each location. This will include the methods to be used for soil/peat storage.
- Pollution Prevention and Surface Water Management Plans to be produced for new and temporary access tracks to be constructed.
- Specific procedures for the use of concrete pouring, which will take cognisance of forecasted weather conditions. This will include concrete washout areas which must be located a distance from watercourses and within a lined and bunded storage area.
- All plant and vehicles will be fitted with spill kits. Should a spill occur, all works must be stopped, the source of pollution identified, and the spill contained immediately.

- Plant nappies will be deployed underneath all plants when static.
- Re-fuelling operations are not permitted within 10m from the bank of any watercourse.
- Provision of an Ecological/Environmental Clerk of Works (ECoW/EnvCoW) to monitor works at positions adjacent to Allt coire lain Oig and Allt Gilbe respectively. The ECoW.EnvCoW will have the authority to halt works should an incident or potential incident occur.

5.5.6 By undertaking these mitigation measures, potential pollution incidents will be avoided. Therefore, the extent and quality of watercourse habitat suitable for Sea Lamprey will be maintained, subject to natural processes.

5.6 Otter

5.6.1 The specific conservation objectives for otter are as follows:

- Maintain the population of otter as a viable component of the site;
- Maintain the distribution of otter throughout the site; and
- Maintain the habitats supporting otter within the site and availability of food.

5.6.2 Activities that could lead to disturbance and displacement of otter and deterioration of water quality should be avoided.

5.6.3 Otter are wide ranging and utilise tributaries away from main river systems. For the construction works, an Ecological Clerk of Works will be employed to undertake pre- works for the presence of otter within the immediate working area plus suitable buffers up and down stream of watercourses. If resting sites or natal holts are found, those affected positions will be microsited using standard buffer distances (30m for resting sites and 250m for natal holts) or disturbance licences applied for. In addition, the ECoW will monitor construction works if an otter constraint is identified.

5.6.4 To further avoid disturbance to otter, there will be no night-time lighting directed at any watercourse.

5.6.5 To avoid deterioration in water quality, prior to construction works a Construction Environmental Management Plan (CEMP) will be produced which will detail pollution prevention measures. The contractor will undertake their activity in line with the best practice measures and pollution prevention guidelines (eg. SEPA PPG1, GPP5, GPP21 and PPG22) to minimise the risk of pollution from sources such as runoff, fuels and oils. Within this, specific mitigation required and to be included within the CEMP are outlined below:

- Specific Pollution Prevention and Surface Water Management Plans to be produced for each of the Tower location that has the potential to impact on a watercourse. These will detail the mitigation required for each location. This will include the methods to be used for soil/peat storage.
- Pollution Prevention and Surface Water Management Plans to be produced for new and temporary access tracks to be constructed.
- Specific procedures for the use of concrete pouring, which will take cognisance of forecasted weather conditions. This will include concrete washout areas which must be located a distance from watercourses and within a lined and bunded storage area.
- All plant and vehicles will be fitted with spill kits. Should a spill occur, all works must be stopped, the source of pollution identified, and the spill contained immediately.
- Plant nappies will be deployed underneath all plants when static.
- Re-fuelling operations are not permitted within 10m from the bank of any watercourse.
- Provision of an Ecological/Environmental Clerk of Works (ECoW/EnvCoW) to monitor works at positions adjacent to Allt coire lain Oig and Allt Gilbe respectively. The ECoW.EnvCoW will have the authority to halt works should an incident or potential incident occur.

5.6.6 By undertaking these mitigation measures, potential pollution incidents will be avoided. Therefore, the extent and quality of watercourse habitat suitable for otter will be maintained, subject to natural processes.

5.7 Appropriate Assessment Conclusion

5.7.1 Following an appraisal of the potential impacts of the ground investigation works on the River Spey SAC, by adopting the mitigation described, the works will not have an adverse effect on the integrity of the River Spey SAC.

5.7.2 There are no known other Projects or Plans ongoing within or adjacent to the River Spey SAC in proximity to the Proposed Development. However, given that the Proposed Development, with mitigation, would not have an adverse effect on the integrity of the River Spey SAC, it would also not give rise to cumulative effects.

6. MITIGATION

6.1.1 The following mitigation will be employed to avoid and minimise the risk impacting on the integrity of the River Spay SAC

- Specific Pollution Prevention and Surface Water Management Plans to be produced for each of the Tower location that has the potential to impact on a watercourse. These will detail the mitigation required for each location. This will include the methods to be used for soil/peat storage.
- Pollution Prevention and Surface Water Management Plans to be produced for new and temporary access tracks to be constructed.
- Specific procedures for the use of concrete pouring, which will take cognisance of forecasted weather conditions. This will include concrete washout areas which must be located a distance from watercourses and within a lined and bunded storage area.
- All plant and vehicles will be fitted with spill kits. Should a spill occur, all works must be stopped, the source of pollution identified, and the spill contained immediately.
- Plant nappies will be deployed underneath all plants when static.
- Re-fuelling operations are not permitted within 10m from the bank of any watercourse.
- Provision of an Ecological/Environmental Clerk of Works (ECoW/EnvCoW) to monitor works at positions adjacent to Allt coire lain Oig and Allt Gilbe respectively. The ECoW.EnvCoW will have the authority to halt works should an incident or potential incident occur.
- Ecological Clerk of Works will be employed to undertake pre- works for the presence of otter within the immediate working area plus suitable buffers up and down stream of watercourses. If resting sites or natal holts are found, those affected positions will be microsited using standard buffer distances (30m for resting sites and 250m for natal holts), or disturbance licences applied for. In addition, the ECoW will monitor construction works if an otter constraint is identified.
- No nighttime working.

Scottish & Southern Electricity Networks
TRANSMISSION

Legend

Overhead Line (OHL) Works

- Proposed Tower Location
- Proposed Overhead Line (OHL)
- Limit of Deviation (LoD) for Proposed OHL (50m either side of OHL alignment)

Ancillary Development

- Indicative Cable Sealiong End Compound Outline
- Indicative Underground Cable (UGC) Alignment
- LoD for Proposed UGC (50m either side of UGC alignment)
- New - Temporary Access Tracks
- New - Permanent Access Tracks

Existing Infrastructure

- Existing Access Tracks
- Melgarve Substation

River Spey SAC Tributaries

- Allt Gilbe
- Allt coire Iain Oig and tributaries

N
0 0.25 0.5 km
Scale - 1:20,000 @ A3

Project:	Melgarve Cluster Project: Environmental Impact Assessment
Title:	Figure 8.1.1 - River Spey SAC Tributaries
Drawn by:	MS
Date:	22/03/2024
Drawing:	121010-D-EIA-8.1.1