7 Ecology

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7 Ecology

7.1 Executive Summary

7.1.1 With the change in layout from the 2019 EIA Report, an updated impact assessment has been carried out for valuable acid grassland and blanket bog habitats. The assessment made in the 2019 EIA Report remains valid for all other non-avian important ecological features.

7.1.2 Similar to the conclusion in the 2019 EIA Report, no significant impacts are predicted for valuable acid grassland habitat.

7.1.3 The changed layout has caused a reduction on the permanent loss of blanket bog from a predicted loss of 30.61 ha to 23.4 ha under the 2020 Layout. Temporary impacts have been reduced from a predicted loss of 23.2 ha under the 2019 Layout to 18 ha under the 2020 Layout. Despite these significant reductions, the loss of blanket bog remains a significant effect.

7.1.4 An updated Draft Habitat Management Plan (HMP) for restoration of blanket bog off-site is therefore included that sets out the proposals for degraded blanket bog habitat to be made available to compensate for these impacts. Overall, a net amount of c70 ha blanket bog will be restored which will outweigh the losses within the Proposed Development site (refer to 2020 SEI Appendix 7.1).

7.2 Introduction

7.2.1 This chapter provides an updated assessment of impacts on ecological features following the proposed change in layout. The 2019 Layout included 29 turbines and impacts from the proposed layout on important ecological features (IEFs) were assessed in Chapter 7 of the 2019 EIA Report.

The change in layout

7.2.2 The 2020 Layout is described in Chapter 3 of the 2020 SEI. The changes from the 2019 Layout can be summarised as follows:

- Removal of turbines 1, 2, 3, 4, 7 and 29 as well as associated track;
- Reduction in height of turbines 5, 16, 19, 20, 24, 25, 26, 27 and 28 from 200 m to 180 m;
- Removal of borrow pits G and I; and
- Removal of construction compound 3.

7.2.3 The numbering/names of turbines, borrow pits and construction compounds have not changed between the 2019 and 2020 Layouts.

The present chapter

7.2.4 This chapter of the Supplementary Environmental Information provides an updated impact assessment based on the changed layout. It should be read in conjunction with Chapter 7 of the 2019 EIA Report, including figures and technical appendices, where notably the baseline conditions, evaluations and identification of important ecological features subject to assessment, which remain valid, are detailed.

7.2.5 As detailed in Chapter 2 of this Supplementary Environmental Information, consultation responses have been received from a range of stakeholders. Responses of relevance to ecology have been addressed in the present chapter.

7.3 Response to Consultation Responses

Scottish Environment Protection Agency

7.3.1 In their response dated 24 June 2019 (see Appendix 2.1b), Scottish Environment Protection Agency (SEPA) does not raise any ecology-related objection to the Proposed Development.

7.3.2 The only ecology-related point made by SEPA in the response relates to the assessment of groundwater-dependent terrestrial ecosystems (GWDTEs), and SEPA confirms that they agree with the approach taken and the conclusion in the 2019 EIA Report that GWDTEs will not be significantly affected by the Proposed Development.

Scottish Natural Heritage

7.3.3 In their response dated 29 July 2019 (see Appendix 2.1d), Scottish Natural Heritage (SNH) state that the Proposed Development would have a significant adverse impact on peat and peatland of National importance, and they therefore object to the proposal. They make the following points:

1) "*SNH staff undertook a walk-over survey of the greater part of the site on 2 and 3 July 2019, measuring peat depth and assessing habitat properties at a sample of turbine locations. This survey confirmed:*

   - *The site supports extensive areas of Class1 carbon rich soils, deep peat and priority peatland habitat;*
   - *That much of that habitat satisfied the minimum quality standards required of a Site of Special Scientific Interest;*
   - *That despite efforts to reduce impacts on areas of deep peat and summit pool systems, significant damage to areas of deep peat and priority peatland habitat could not be avoided;*
   - *That the peatland is of sufficient quality over an extensive area that on-site habitat restoration would not compensate for the loss and damage resulting from wind farm construction and operation.*

   The findings of our survey accorded with the statements in the EIA Report regarding the extent and generally good condition of the peatland habitat across the site."

2) "*Scottish Planning Policy identifies "*carbon rich soils, deep peat and priority peatland habitat" as nationally important interests for which planning authorities should develop spatial frameworks" and states that "further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.*" The Applicant therefore needs to demonstrate through the EIA that a wind farm can be built on this site without significant loss and damage to these nationally important interests.* […] *Although the quality of the habitat at this site is acknowledged in the EIA Report, its importance and the significance of the effects of constructing a wind farm on it do not seem to be fully recognised. Nor is it clear how the off-site compensatory measures can be secured in the long term, nor, even if they could, how these would result in benefits equal to or greater than the losses which will occur on the site.*"

3) "*This development would have adverse impacts on an area of peatland of National importance and consequently we object to the proposal. Given the extent and quality of the peatland on the site we do not consider that a large wind farm could be accommodated in this area without unacceptable impacts. We are committed to supporting good development in the right place in order to meet SG's renewable energy production and we would be happy to talk with the developer about the scale of windfarm that would be more appropriate in this area of Shetland.*"

SNH Point 1

7.3.4 The Applicant is grateful to SNH for visiting the Proposed Development site and declaring their agreement with statements in the 2019 EIA Report regarding the extent and condition of the peatland habitat across the site.

7.3.5 The 2019 EIA Report evaluated the blanket bog within the site as being of national value. However, the site is not designated at the national level as a Site of Special Scientific Interest (SSSI), and we are not aware of any consultation to change this. Nor is the site designated at the international level as a Special Area of Conservation (SAC) or on the local level, e.g. as a Local Nature Reserve (LNR).

7.3.6 Joint Nature Conservation Committee (JNCC) guidance on selection of SSSIs (JNCC, 1994) states that blanket bogs larger than 25 ha should be considered for SSSI status in all parts of Britain if capable of forming peat. These broad minimum criteria are met on the Proposed Development site and they would likely be met in many other undesignated locations on Shetland as well, and a prioritisation of sites for selection would therefore have been carried out in line with Stage 4 of the JNCC (1994) guidance, which identifies the sites of highest quality based on characteristics such as presence of plant species indicating peat formation capability and/or lack of disturbance, natural surface patterning, absence of trees and scrub and low frequency of drains.

7.3.7 The Proposed Development site is located c.1.9 km north of the East Mires and Lumbister SSSI and Special Area of Conservation (SAC), which is designated for blanket bog. Given the relatively short distance between the two localities, it must be assumed that the nature conservation interest of the Proposed Development site was sufficiently well understood and considered inferior to East Mires and Lumbister, when the latter was designated as an SSSI in 1996, and again in 2015 when the East Mires and Lumbister SAC standard data form was submitted to the European Commission. The SSSI citation states that bog orchid (*Hammarbya paludosa*) is present at East Mires and Lumbister, one of only three recorded sites in Shetland, and this species is also highlighted on the Joint Nature Conservation Committee (JNCC) website for the East Mires and Lumbister SAC[1]. In addition, the SSSI citation mentions that the moss *Sphagnum warnstorfii* also has its only Shetland location at East Mires and Lumbister. Neither species was recorded in the National Vegetation Classification (NVC) survey of the Proposed Development site that was undertaken by Botanæco in 2016 and documented in Appendix 7.2 of the 2019 EIA Report. This confirms that the quality of the blanket bog within the Proposed Development site does not match that of East Mires and Lumbister SAC and SSSI, despite its acknowledged high value.

SNH Point 2

7.3.8 Chapter 7 of the EIA Report fully acknowledged that the permanent loss of 30.61 ha of blanket bog would be significant at the National area level.

7.3.9 As detailed in Table 7.1 the permanent loss of blanket bog is reduced to 23.4 ha under the 2020 Layout.

7.3.10 It is acknowledged that the Outline HMP included as Appendix 7.7 in the 2019 EIA Report does not detail how the off-site compensatory measures will be secured in the long term or how they will result in benefits equal to or greater than the losses which will occur on the Proposed Development site. An updated Draft HMP is therefore included as Appendix 7.1 of this 2020 SEI which provides greater assurance that off-site compensation will be secured and will result in benefits greater than the losses.

SNH Point 3

7.3.11 The Applicant acknowledges SNH's willingness to consider a changed scheme. As described in the sections above, the 2020 Layout represents a significantly different proposal, and as summarised in Table 7.1, this in turn has a much reduced effect on the peatland habitat.

[1] Available at: https://sac.jncc.gov.uk/site/UK0019795 (accessed January 2020)

Royal Society for the Protection of Birds Scotland

7.3.12 In their response dated 31 July 2019 (see Appendix 2.1g), the Royal Society for the Protection of Birds Scotland (RSPB Scotland) objects to the Proposed Development for a number of reasons, with those relevant to ecology being as follows:

1) *Impacts on Class 1 peatland. Virtually the whole site is classified as Class 1 Peatland and Scottish Planning Policy (SPP) states that this is to be regarded as a "*nationally important environmental interest*" that should be protected from development. RSPB Scotland had previously raised concerns (in our letter dated 9th February 2018) that "*will be very challenging, if possible at all, to accommodate the scale of development proposed at this site without unacceptable peat impacts*". These impacts cannot be sufficiently mitigated as acknowledged in section 10.8.7 of the EIA Report where it accepts that even with mitigation there will be major impacts on peat.*

2) *The submitted Habitat Management Plan (HMP) does not have any measures specifically targeted towards merlin, golden plover and curlew, and should be expanded to do so. It is considered that in order to offset the (non-SPA) impacts of the development that there would need to be significantly more off-site peatland restoration.*

3) *Notwithstanding our objections we recommend that if Scottish Ministers are minded to grant the consent and make a Section 57 direction, they should ensure that adequate mitigation and offsetting measures are secured for all species impacted as part of a fully detailed habitat management plan (HMP). We do not consider it will be possible to fully mitigate for the peatland impacts of this development.*

4) *The applicant has acknowledged the good condition of this habitat in their application and we understand that much of the habitat has been found to satisfy the minimum quality standards required of a Site of Special Scientific Interest (SSSI) by SNH. It would also have been extremely useful if an assessment of nearby designated peatland sites (e.g. East Mires and Lumbister SAC & SSSI located to the south of the proposed development site) had been undertaken to provide meaningful comparison to evaluate the value of the site.*

5) *RSPB Scotland recognises that the applicant has put forward measures to reduce the amount of peat impacted by this development however, aspects of the proposed development could damage blanket bog. RSPB Scotland is concerned about the permanent loss of any blanket bog and considers it misleading to suggest that areas to be restored (temporary materials lay down areas, construction compounds and temporary borrow pits) to have a "barely perceptible adverse impact" as we consider that it will not be possible to restore these in the short term, if at all. There is a requirement to protect peatlands as the first priority to keep existing carbon in the ground.*

6) *Should Scottish Ministers be minded to grant consent RSPB Scotland considers that the applicant should submit a much larger scheme of off-site peatland restoration (funded by the applicant) that should be implemented to reduce the carbon payback and compensate, as far as practicable, for the impacts of this proposed development. However, it is considered that it will not be possible to adequately mitigate for the impacts of the currently proposed scheme and that this development would still have unacceptable impacts on peat.*

7) *It is noted that the applicant has submitted an Outline Habitat Management Plan (Appendix 7.7 of the EIA Report) in support of this application but this HMP is very limited in terms of detail and extremely modest in its objectives. RSPB Scotland considers that much more detail is required and significantly more ambition should be offered in terms of habitat restoration to minimise the impacts of the proposed development and reduce the carbon payback period, although for the reasons set out above it is not considered possible to fully off-set the impacts of this development on peat. This plan should also include specific measures for a variety of bird species including merlin, curlew and golden plover.* […] *RSPB Scotland welcomes the suggestion from the applicant that it forms part of the HMP stakeholder group and can*

confirm that we would be willing to sit on this group should consent be granted for the scheme."

RSPB Scotland Point 1

7.3.13 Chapter 7 of the EIA Report acknowledged that the permanent loss of 30.61 ha of blanket bog would be significant at the National area level.

7.3.14 As summarised in Table 7.1, the permanent loss of blanket bog is reduced to 23.4 ha under the 2020 Layout. An updated Draft HMP for restoration of blanket bog off-site is therefore included as Appendix 7.1 of this 2020 SEI.

RSPB Scotland Points 2, 3, 6 and 7

7.3.15 As described in Appendix 7.1 of this 2020 SEI, the Draft HMP has been updated to include bird interests. It also provides comfort that significantly more off-site peatland restoration will be carried out relative to the blanket bog lost for the Proposed Development.

7.3.16 The Applicant is delighted that RSPB Scotland is willing to be part of the HMP stakeholder group.

RSPB Scotland Point 4

7.3.17 As noted in paragraph 7.3.7, the Proposed Development site is located c.1.9 km north of the East Mires and Lumbister SSSI and SAC, which is designated for blanket bog. Given the relatively short distance between the two localities, it must be assumed that the nature conservation interest of the site was sufficiently well understood and considered inferior to East Mires and Lumbister, when the latter was designated as an SSSI in 1996, and again in 2015 when the East Mires and Lumbister SAC standard data form was submitted to the European Commission. The rare species bog orchid and *Sphagnum warnstorfii* occur at East Mires and Lumbister, but neither was recorded on the Proposed Development site. This indicates that the quality of the blanket bog within the site does not match that of East Mires and Lumbister, despite its acknowledged high value.

RSPB Scotland Point 5

7.3.18 The sensitivity of peat and blanket bog is appreciated by the Applicant. With the change in layout, the impact from temporary materials lay down areas, construction compounds and temporary borrow pits is also reduced in scale. As summarised in Table 7.1, temporary impacts have reduced the predicted loss of 23.2 ha under the 2019 Layout to 18 ha under the 2020 Layout. An updated Outline Peat Management and Restoration Plan is provided in Appendix 10.1 of the 2020 SEI.

7.3.19 It should be noted that the updated Draft HMP, provided as Appendix 7.1 of the 2020 SEI, provides habitat management with a net benefit exceeding both the permanent and temporary losses of blanket bog habitat.

Marine Scotland Science

7.3.20 In their response dated 18 June 2019 (see Appendix 2.1s), Marine Scotland Science (MSS) does not raise an objection to the Proposed Development. The following points are made in the response:

1) "*MSS welcomes the proposal to develop a fish species protection plan and site water quality management plan. We advise that the developer consults our generic monitoring programme guidelines to establish a strategically designed, robust integrated water quality, macroinvertebrate and fish population monitoring programme to be carried out at least 12 months before, during and for at least 12 months after construction at sites potentially impacted by the proposed development and at control sites, where an impact is unlikely. We recommend that key hydrochemical parameters (including turbidity and flow/stage data) are measured in a UKAS accredited laboratory as opposed to less accurate field measurements and for fully quantitative electrofishing surveys to be carried out to enable spatial and temporal comparisons of fish densities."*

7.3.21 The Applicant can confirm that the monitoring programme will be developed with cognisance to the advice outlined in Point 1 of the MSS response and can be conditioned as part of the consent of the Proposed Development.

Shetland Amenity Trust

7.3.22 In their response dated 18 July 2019, Shetland Amenity Trust (SAT) object to the Proposed Development based on the location of the Proposed Development, and they make a number of points relevant to the ornithology, ecology, geology, peat, hydrology and hydrogeology, as well as landscape and visual impact assessments. SAT make the following points about the Proposed Development of relevance to ecology (the full response is included in Appendix 2.1l):

1) "*It will have an adverse impact on active blanket bog. Active blanket bog is listed as a priority habitat in the E U Habitats Directive and the EIA for this development acknowledges that the proposed construction site comprises mainly blanket bog, much of it active and of high quality. Active blanket bog is also a key habitat in sequestering carbon from the atmosphere and is an important carbon store. Damage to this habitat will release further carbon into the atmosphere and there is no evidence here in Shetland that once damaged, blanket bog can be restored to an active, carbon sequestering, state within a reasonable timescale (decades).*

2) *Should the ECU be minded to grant consent for this development then we urge the Scottish Government and the Shetland Islands Council to put measures in place that will ensure that the development proceeds in accordance with any conditions placed upon it to minimise environmental damage. To this end it is crucial that there is an independent and properly resourced means of ensuring any such conditions are met* […] *Shetland Amenity Trust suggests that the developer pays for one or more Ecological Clerk of Works (or similar) that reports directly to the Local Authority in addition to the developer and/or its subcontractors.*

3) *Shetland Amenity Trust wishes to acknowledge that the general quality of the sections of Environmental Impact Assessment dealing with the natural heritage is very high, of a much better quality than we have come to expect for such developments […] We are surprised, however, that the developer was not asked to provide a much fuller and more definitive document for the Habitat Management Plan (HMP) and for the Construction Environmental Management Plan (CEMP). Whilst it may be possible to restore blanket bog back to a dwarf-shrub vegetation that will prevent further erosion and carbon losses it is extremely difficult (maybe impossible) to restore it back to active blanket bog in a Shetland context, so it would have been useful to see in the HMP exactly what measures the developer intends to employ to do this, and where this will happen.*

4) *Shetland Amenity Trust feels that there is a huge tension between the Scottish Government's policy on renewable energy and the importance it attaches to the role of peatland in tackling global climate change. As recently as 25th June the Scottish Government announced a further £11 million investment as part of its Peatland Action Programme to restore peatlands* […] *Scotland's Land Use Strategy, also a requirement of the Climate Change (Scotland) Act 2009, describes peatland restoration as a means to lock up carbon and contribute to climate mitigation.* […] *The National Peatland Plan sets out a vision for peatlands to be valued for multiple benefits, with improvements in the protection and condition of peatlands. Its principal aim is to protect, manage and restore peatlands to maintain their natural functions, biodiversity and benefits. One of its supporting aims is to protect those areas of peatland currently in good condition.* […] *Scotland's Economic Strategy states that protecting and enhancing Scotland's natural capital, which includes peatland, is fundamental to a healthy and resilient economy.* […] *Healthy peatlands are essential in supporting Scottish Government objectives under the Water Framework and Habitats Directive* […] *It makes no sense to build large industrial windfarms on active blanket bog and by doing so release more carbon to the atmosphere. It is far more cost-effective to prevent damage to blanket bog, thus avoiding further carbon emissions, than to fund restoration projects which will take many years to, and in some cases never, return peatland to an active state.*

5) *The EIA describes the condition of the blanket bog as variable but that good quality bog, with numerous pool complexes, occurs in several areas. Unfortunately, no attempt has been made to assess how the quality of blanket bog on the site compares with the rest of Shetland, notably Special Areas of Conservation that have been classified due to their blanket bog vegetation.*

6) *The EIA suggests that of the pure M17 blanket bog, just 30.6 hectares would be permanently lost, 23.3 hectares will be taken temporarily and a further 10 hectares being disturbed or degraded. It suggests that the latter 33.2 hectares will be returned to its former states. Experience in Shetland has shown that although this may be returned to some form of dwarf-shrub vegetation it is highly unlikely to be returned to its former state i.e. active blanket bog. […] Shetland Amenity Trust feels that the EIA presents a best-case scenario and that in practice it is likely that the area of blanket bog degraded by this development will be greater than this. We feel that the construction of an industrial scale wind farm on area of active blanket bog is inappropriate. As well as being an European priority habitat, active blanket bog is also important in mitigating climate change.*

7) *We are somewhat surprised and concerned that no effort has been made to survey the invertebrates present at the proposed site, or that full survey of the lower plants was not undertaken. These surveys would seem to be a pre-requisite for a development of this scale and would have contributed positively to the EIA. Both were requested by Shetland Amenity Trust as part of the scoping exercise.*"

SAT Point 1

7.3.23 Chapter 7 of the EIA Report acknowledged that the permanent loss of 30.61 ha of blanket bog would be significant at the National area level.

7.3.24 As detailed in Table 7.1, the permanent loss of blanket bog is reduced to 23.4 ha under the 2020 Layout. An updated Draft HMP for restoration of blanket bog off-site is therefore included as Appendix 7.1 of this 2020 SEI.

SAT Point 2

7.3.25 The 2019 EIA Report confirmed that an ECoW would be on site to oversee implementation of ecological mitigation. The Applicant can confirm that the cost of the ECoW would be met by the Applicant and that the ECoW will report directly to the Local Authority, in accordance with standard practise, in addition to the Applicant and its subcontractors.

SAT Point 3

7.3.26 The Applicant is grateful to SAT for the positive feedback on the quality of the 2019 EIA Report.

7.3.27 It is acknowledged that the Outline HMP included as Appendix 7.7 in the 2019 EIA Report does not detail how the off-site compensatory measures will be secured in the long term or how they will result in benefits equal to or greater than the losses which will occur on the site. An updated Draft HMP is therefore included as Appendix 7.1 of this 2020 SEI that provides greater assurance that off-site compensation will be secured and that measures therein will ensure long term benefits greater than the losses.

SAT Point 4

7.3.28 The sensitivity of peat and blanket bog is appreciated by the Applicant, and as described in Chapter 2 of the EIA Report, substantial efforts were undertaken to design around ecological constraints, including areas of deep peat and summit pool complexes. An initial layout with 63 turbines was reduced to 29 turbines during this process. This has been further reduced to 23 turbines in the 2020 Layout, which now avoids areas to the north and north-west.

SAT Point 5

7.3.29 As noted in paragraphs 7.3.7 and 7.3.17, the site is located c.1.9 km north of the East Mires and Lumbister SSSI and SAC, which is designated for blanket bog. Given the relatively short distance between the two localities, it must be assumed that the nature conservation interest of the site was sufficiently well understood and considered inferior to East Mires and Lumbister, when the latter was designated as an SSSI in 1996, and again in 2015 when the East Mires and Lumbister SAC standard data form was submitted to the European Commission. The rare species bog orchid and *Sphagnum warnstorfii* occur at East Mires and Lumbister, but neither was recorded on the site. This indicates that the quality of the blanket bog within the site does not match that of East Mires and Lumbister, despite its acknowledged high value.

SAT Point 6

7.3.30 Chapter 7 of the EIA Report fully acknowledged that the permanent loss of 30.61 ha of blanket bog would be significant at the National area level. As detailed in Table 7.1, the permanent loss of blanket bog is reduced to 23.4 ha under the 2020 Layout, and temporary impacts have been reduced from 23.2 ha under the 2019 Layout to 18 ha under the 2020 Layout. An updated Outline Peat Management Plan provided as Appendix 10.1 of this SEI has further detail on restoration methods of temporarily disturbed peat.

7.3.31 It should be noted that the updated Draft HMP, provided as Appendix 7.1 of this SEI, provides habitat management with a net benefit exceeding both the permanent and temporary losses of blanket bog habitat.

SAT Point 7

7.3.32 The Applicant acknowledges that a separate survey of lower plants, notably bryophytes, was not carried out in addition to the National Vegetation Classification (NVC) survey, but the NVC survey did record lower plants. It was undertaken by Principal Botanist Dr Andy McMullen, who has worked full time in consultancy since 2006, initially as a Principal Botanist with EnviroCentre, then as an Associate Botanist with Land Use Consultants (LUC) from 2012 to 2015, then as Principal Botanist with MacArthur Green in 2015, and finally as a Principal Botanist with Botanæco from 2015 until the present time. Botanæco is a specialised ecological and botanical consultancy based in Scotland. In addition, Dr McMullen's doctoral research from 1996 to 2000 focused on palaeoecology and the conservation management of lowland raised bogs, although Dr McMullen also worked with upland mosses and liverworts during this time. The Applicant is confident that Dr McMullen did a thorough botanical survey of the site in 2016.

7.3.33 It is further acknowledged that a survey for invertebrates was not carried out. It is possible that the site could hold species of conservation interest; however, given the small footprint of the development relative to the size of the site, this is unlikely to change the assessed impact of the Proposed Development, and invertebrate surveys were not requested by statutory consultees, such as SNH.

Scottish Forestry

7.3.34 In their response dated 21 May 2019 (see Appendix 2.1v), Scottish Forestry (SF) does not object to the Proposed Development, but they do note the following:

1) "*There are small areas on broadleaf woodland within the proposed development area, that are noted by the Applicant in Environmental Impact Assessment Report (EIA Report) Chap*[t]*er 7 - Ecology & Nature Conservation in Table 7.5 - Area and percentage cover of Site Phase 1 Habitat and Table 7.6 – Evaluation of Ecological Features, and recognised as of local importance. There is also area of woodland created under Scottish Forestry Grant Scheme (SFGS), approved for planting in 2005, located near archaeological features of Heatherdale, grid reference HP 5127 0184, along Burn of Glipapund. The afforested area is relatively small in comparison with the scale of proposed development, and SF notes that woodland habitat is not mentioned in Table 7.7 – Summary of Habitat Lost to Proposed Development Footprint.* […] *SF seeks reassurance that the woodland present within proposed development area will not be removed.*"

7.3.35 The Applicant can confirm that woodland removal will not be carried out as part of the Proposed Development. The location of the small woodland area near Heatherdale is shown on Figure 7.1; it has been planted in acid grassland north of the Burn of Glipapund, and this area will not be affected by the Proposed Development: The nearest section of Proposed Development is Potential Borrow Pit Search Area E, which is located c50 m south of the Burn of Glipapund.

Other stakeholders

7.3.36 John Muir Trust: In an email dated 29 July 2019 (see Appendix 2.1h), the John Muir Trust stated they did not intend to comment on the application at that time. No further response has been received.

7.3.37 Yell Community Council: In an email dated 24 June 2019 (see Appendix 2.1o), Yell Community Council stated they objected to the application on four grounds, one of which was 'environmental impact'. No clarifying detail was provided.

7.4 Updated Ecological Impact Assessment

Standard mitigation

7.4.1 In line with the guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM, 2018), which forms the basis of the Ecological Impact Assessment (EcIA), the assessment process assumes the application of standard mitigation measures.

7.4.2 Standard mitigation measures, which will automatically be implemented as part of the Proposed Development, were outlined in section 7.8 of the 2019 EIA Report and remain valid, but the following measures are developed further in this 2020 SEI (see cross references below):

- Development of a Site Construction Environmental Management Plan (CEMP), in consultation with stakeholders (i.e. SEPA, SNH and Shetland Islands Council) to include:
    - Appointment of a suitably qualified and experienced Ecological Clerk of Works (ECoW) to oversee application of the CEMP;
    - Site Water Management Plan (SWMP);
    - Peat Management Plan (PMP); see Appendix 10.1 of this SEI;
    - Materials Management Plan (MMP; to include a Waste Policy/Management Plan); and
    - HMP; see Appendix 7.1 of this SEI for an updated Draft HMP.
- Development of an Operational Site Management Plan (OSMP) which will also include the HMP and maintenance task Method Statements.

Mitigation through Design Iteration

7.4.3 As described in the 2019 EIA Report Chapter 2 (Design Iteration), the 2019 Layout was the result of ten major iterative design changes (A to J), from November 2017 to the design adopted for the EIA submission.

7.4.4 As described in Chapter 3, and summarised in Paragraph 7.2.2, the 2020 Layout represents a further reduction in the number of turbines, borrow pits and construction compounds, notably in blanket bog in the vicinity of summit pool complexes in the north and north-west of the site.

7.5 Potential Effects

Overview

7.5.1 The range of Important Ecological Features (IEFs) scoped into the assessment remains as identified in Section 7.7 of the 2019 EIA Report.

7.5.2 The main elements of the Proposed Development that have the potential to impact on IEFs during construction and operation remain the same as described in Section 7.9 of the 2019 EIA Report. However, as shown in Table 3.1 in Chapter 3 of this 2020 SEI, track construction now involves 990 m of new cut track (down from 1.75 km in the 2019 Layout) and 12.5 km of permanent floating track (down from 18.35 km in the 2019 Layout).

7.5.3 Because the change between the 2019 Layout and the 2020 Layout has not resulted in changes to locations of remaining turbines, borrow pits and infrastructure, impacts on individual IEFs cannot be higher than identified in the 2019 EIA Report. As such, IEFs on which the assessment in the 2019 EIA Report concluded no significant effect, and which have not been raised as concerns by consultees subsequently, have been scoped out the assessment below. This chapter therefore updates the assessment for the following IEFs only:

- unimproved acid grassland of the U5 *Nardus stricta-Galium saxatile* and U6 *Juncus squarrosus-Festuca ovina* community types – valued at the Local level; and
- blanket bog, present as M17 *Trichophorum caespitosum-Eriophorum vaginatum* blanket mire and as a variety of mosaic components, including the M1, M2 and M3 bog pool communities – valued at the National level.

7.5.4 Figure 7.1 of the 2020 SEI shows the National Vegetation Classification map updated with the 2020 Layout.

Habitat Loss

7.5.5 Habitat losses to the Proposed Development have been calculated using the assumptions stated in Sections 7.9.5-6 of the 2019 EIA Report. Table 7.1 summarises the permanent and temporary habitat losses, construction phase disturbance to habitats, as well as degradation (drying) of peatland habitats and disruption of water flows during the operational phase. These values are provided for both the 2019 and 2020 Layouts. For transparency, values are provided for all affected habitats, regardless of whether or not they are IEFs.

Table 7.1 - Summary of Habitat Lost to Proposed Development Footprint in 2019 Layout and 2020 Layout

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
IEFs												
Unimproved acid grassland and unimproved acid grassland-dominated mosaics												
Unimproved acid grassland	U5	50,352	2,867	2,867	0	0	435	435	n/a	n/a	n/a	n/a
	U5b/U5a	300,400	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	U5b	8,612	370	0	0	0	149	0	n/a	n/a	n/a	n/a
	U6a	19,358	0	0	1,334	0	48	0	n/a	n/a	n/a	n/a
	U6a/U6d	56,594	776	0	0	0	385	0	n/a	n/a	n/a	n/a
	U6d/U4a	8,644	0	0	0	0	1	0	n/a	n/a	n/a	n/a
Unimproved acid grassland and acid	U6d/D1.1	5,517	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	U6d/H12c/U6a	5,030	0	0	0	0	0	0	n/a	n/a	n/a	n/a

[2] National Vegetation Classification codes are shown, where available, whereas Phase 1 habitat code are provided for habitats not included in the NVC or where the vegetation within a given polygon could not be ascribed to an NVC community. They include instances of D1.1 dry heath, E4 bare peat, G1.3 oligotrophic open water, G1.4 dystrophic open water, and J5 hardstanding. Mosaics are listed with codes in order of abundance.

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
dry dwarf shrub heath mosaic	U6d/U6a/U4a/ D1.1	16,363	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	U6d/U6a/U5a/ D1.1	15,970	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	U6a/U6d/H12c/ D1.1	14,754	510	510	0	0	215	215	n/a	n/a	n/a	n/a
	U6d/H12c/D1.1	22,495	1,213	1,213	0	0	497	497	n/a	n/a	n/a	n/a
Unimproved acid grassland and marshy grassland (rush pasture) mosaic	U6d/U6a/M23b	36,716	285	285	0	0	120	120	n/a	n/a	n/a	n/a
	U6d/U6a/M23b/ U5a/U5b	27,534	131	131	0	0	60	60	n/a	n/a	n/a	n/a
Unimproved acid grassland and blanket bog mosaic	U6d/M17c	2,779	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	U6d/M2	2,388	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Unimproved acid grassland and acid flush mosaic	U6d/U6a/M6c	4,912	0	0	0	0	0	0	n/a	n/a	n/a	n/a

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Total for grassland IEFs		*598,418*	*6,152*	*5,006*	*1,334*	*0*	*1,910*	*1,327*	*n/a*	*n/a*	*n/a*	*n/a*
Reduction in impact 2019-2020 (m^2)			*1,146*		*1,334*		*583*		*n/a*		*n/a*	
Reduction in impact 2019-2020 (%)			*18.6*		*100*		*30.6*		*n/a*		*n/a*	
Blanket bog and blanket bog-dominated mosaics												
Blanket bog	M17b	12,258,852	274,936	213,201	214,806	169,817	91,113	69,361	91,113	69,361	133,333	101,544
Bog pool	M1	1,064	0	0	0	0	0	0	n/a	n/a	0	0
	M2	3,163	206	206	0	0	63	63	n/a	n/a	88	88
Blanket bog and bog pool mosaic	M17b/M3/M2/ M1	103,435	2,698	0	518	0	437	0	437	0	695	0
	M17b/M3/M2	422,706	17,144	17,144	1,164	1,164	4,776	4,776	4,776	4,776	7,132	7,132
	M17b/M2	22,566	0	0	0	0	0	0	0	0	0	0
	M17b/M3	7,515	0	0	972	972	165	165	165	165	257	257
	M17b/M2/M3/ E4	84,515	0	0	532	532	145	145	145	145	233	233

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Blanket bog, bog pool and bare peat mosaic	M17b/M3/M2/ E4	8,474	0	0	0	0	0	0	0	0	0	0
	M17b/E4/M3	69,557	0	0	0	0	0	0	0	0	0	0
Blanket bog, bog pool and open water mosaic	M17b/M2/M3/ G1.4	449,635	1,186	0	0	0	429	0	429	0	804	0
	M17b/M3/M2/ G1.4	389,669	0	0	0	0	0	0	0	0	0	0
	M17b/M2/G1.4	129,955	0	0	0	0	0	0	0	0	0	0
	M17b/M3/G1.4	178,992	671	0	0	0	235	0	235	0	367	0
Blanket bog, bog pool, bare peat and open water mosaic	M17b/M2/M3/ E4/G1.3	549,364	3,598	3,598	7,826	7,826	1,985	1,985	1,985	1,985	2,918	2,918
	M17b/M3/G1.3	151,597	0	0	0	0	0	0	0	0	0	0
	M17b/M3/E4/ G1.4	76,021	0	0	0	0	0	0	0	0	0	0
Blanket bog and open water mosaic	M17b/G1.4	13,420	0	0	0	0	0	0	0	0	0	0

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Blanket bog and acid grassland mosaic	M17b/U5a	17,055	3,310	0	941	0	360	0	360	0	518	0
	M17b/U5b	18,171	2,375	0	5,798	0	1,135	0	1,135	0	1600	0
	M17a/U6d	10,247	0	0	0	0	0	0	0	0	0	0
Blanket bog and dwarf shrub heath mosaic	M17b/D1.1	15,421	0	0	0	0	7	7	7	7	70	70
Total for blanket bog IEFs		*14,981,394*	*306,125*	*234,149*	*232,557*	*180,311*	*100,850*	*76,502*	*100,787*	*76,439*	*148,015*	*112,242*
Reduction in impact 2019-2020 (m^2)			*71,976*		*52,246*		*24,348*		*24,348*		*35,773*	
Reduction in impact 2019-2020 (%)			*23.5*		*22.5*		*24.1*		*24.2*		*24.2*	
Non-IEFs												
Grassland and grassland-dominated mosaics												
Unimproved acid grassland	U4a	2,616	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Improved acid grassland	U4b	1,957	0	0	0	0	0	0	n/a	n/a	n/a	n/a

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Marshy grassland (rush pasture) and acid grassland mosaic	M23b/U6a/U6d	8,761	183	183	0	0	89	89	n/a	n/a	n/a	n/a
Heath and heath-dominated mosaics												
Acid dry dwarf shrub heath	D1.1	204,893	2,209	2,209	154	154	889	889	n/a	n/a	n/a	n/a
	H12c	68,940	125	0	0	0	57	0	n/a	n/a	n/a	n/a
Acid dry dwarf shrub heath and acid grassland mosaic	D1.1/U6d	47,492	1,694	1,694	10,961	10,961	1,267	1,267	n/a	n/a	n/a	n/a
	D1.1/U6d/U6a	22,660	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	D1.1/U6d/U6c	108,325	344	344	17,527	17,527	844	844	n/a	n/a	n/a	n/a
	H12c/U5b/U6a/U6d	65,983	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	H12c/U6a/U6d	34,565	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	H12c/U6d	1,481	0	0	0	0	0	0	n/a	n/a	n/a	n/a

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Acid dry dwarf shrub heath, acid grassland and marshy grassland (rush pasture) mosaic	D1.1/U6d/U6a/ U5a/M23b	56,351	452	452	0	0	192	192	n/a	n/a	n/a	n/a
Acid dry dwarf shrub heath and blanket bog mosaic	D1.1/M17b	21,224	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Acid dry dwarf shrub heath, acid grassland and blanket bog mosaic	D1.1/U6d/M17b	9,968	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Flush and spring												
Acid flush	M6	4,464	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Acid flush, bog pool and spring mosaic	M6/M1/M2/M3/ M29	3,712	0	0	0	0	0	0	n/a	n/a	n/a	n/a
	M6b/M29/M1	6,236	0	0	0	0	0	0	n/a	n/a	n/a	n/a

Broad habitat	Habitat/ vegetation code[2]	Extent of within Site boundary (m^2)	Permanent loss (m^2)		Temporary loss during construction (m^2)		Construction disturbance (m^2)		Operational degradation of peat (m^2)		Disruption of water flows (m^2)	
			2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Spring	M29	8,499	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Open water												
Dystrophic open water	G1.4	598,248	0	0	0	0	0	0	n/a	n/a	n/a	n/a
Other												
Hardstanding	J5	39,729	4,805	4,469	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grand total for all habitats		**16,895,914**	**322,088**	**248,507**	**262,534**	**209,156**	**106,098**	**78,952**	**100,787**	**76,439**	**148,015**	**112,242**
Reduction in impact 2019-2020 (m^2) (all habitats)			**73,581**		**53,378**		**27,146**		**24,348**		**35,773**	
Reduction in impact 2019-2020 (%) (all habitats)			**22.8**		**20.3**		**25.6**		**24.2**		**24.2**	

Construction

7.5.6 During the construction phase habitat IEFs will be impacted through permanent loss, temporary loss and temporary disturbance of habitats.

Unimproved acid grassland

7.5.7 As detailed in Table 7.1, the cover of U5 and U6 acid grasslands (including mosaics dominated by either type) amounts to 598,418 m^2 (c59.8 ha). This represents 3.5 % of the area within the site boundary.

7.5.8 Following the assumptions listed in paragraph 7.9.5 of the 2019 EIA Report, as shown in Table 7.1 a total of 5,006 m^2 of the IEF will be permanently lost. This represents 0.8 % of the IEF within the site boundary and is an 18.6 % reduction from the predicted loss of 6,152 m^2 under the 2019 Layout. This permanent loss is a **low** impact and **not significant**.

7.5.9 Whereas a temporary loss of 1,334 m^2 was predicted under the 2019 Layout, no temporary loss of the IEF is predicted under the 2020 Layout. Construction disturbance is predicted to temporarily affect 1,327 m^2. This is a 30.6 % reduction from the predicted disturbance of 1,910 m^2 under the 2019 Layout and represents 0.2 % of the grassland IEF within the site boundary. This temporary disturbance is a **barely perceptible** impact on this feature of Local value and the effect is **not significant** under the EIA Regulations.

Blanket bog

7.5.10 As shown in Table 7.1, the blanket bog IEF, including pure stands of M17 blanket mire, bog pools as well as blanket bog-dominated mosaics with other vegetation types, covers a total area of 14,981,394 m^2 (c1,498 ha) within the site boundary. This represents 88.7 % of the area within the site boundary.

7.5.11 Following the assumptions listed in paragraph 7.9.5 of the 2019 EIA Report, as shown in Table 7.1 a total of 234,149 m^2 of the IEF will be permanently lost. This represents 1.6 % of the IEF within the site boundary and is a 23.5% reduction from the predicted loss of 306,125 m^2 (2 % of the total extent of the IEF) under the 2019 Layout.

7.5.12 In addition to the permanent loss, there will be a temporary loss of 180,311 m^2 (18 ha) of blanket bog due to temporary borrow pit search areas, temporary floated hardstanding, temporary floated roads, and temporary floated construction compounds. This represents 1.2 % of the IEF within the site boundary and is a 22.5 % reduction from the predicted loss of 232,557 m^2 (1.6 % of the total extent of the IEF) under the 2019 Layout. In addition, 76,502 m^2 (7.7 ha) surrounding the footprint may be subject to construction disturbance. This represents 0.5 % of the IEF within the site boundary and is a 24.1 % reduction from the predicted disturbance of 100,850 m^2 (0.7 % of the total extent of the IEF) under the 2019 Layout. Overall, 1.7 % of the IEF will be temporarily lost or disturbed, but affected areas are expected to recover through implementation of the Peat Management and Restoration Plan (refer to Appendix 10.1 of 2020 SEI).

7.5.13 While a limited extent of the IEF will be permanently or temporarily lost to the Proposed Development, the blanket bog habitat type is considered of particularly high value. The permanent loss will be a **low-medium** impact and the effect remains **significant**, whereas the temporary changes are considered to be short-duration, low-level adverse impacts and **not significant** under the EIA Regulations.

Operation

7.5.14 The primary effect during the operational phase relates to potential drying of peatland habitats as a result of the Proposed Development infrastructure, notably drains, changing the hydrological status of the adjacent peat substrate. Because the blanket mire system is characterised by being fed by precipitation and by occurring on a peat substrate of low permeability, drying impacts from drainage may only be measurable in the immediate vicinity of infrastructure. We are not aware of

relevant studies from Shetland, but in a study at Moor House - Upper Teesdale National Nature Reserve, County Durham, Coulson *et al.* (1991) concluded that the greatest effect of drainage and therefore desiccation would occur immediately downslope of drains, but there was no measurable change beyond 5 m in the composition of the flora relative to the position of the ditch. The wetter climate of Shetland is likely to mean that drying effects will operate on similar, small scales.

Blanket bog

7.5.15 Excavated bases and sections of cut track will interrupt or deflect the water flow through adjacent peat, which will cause relatively minor changes and generally result in localised drying-out of the peat and the development of more heath-like communities along track batters and around the turbine bases with changes likely be within to c.2-3 m (see habitat loss assumptions in paragraph 7.9.5 of the 2019 EIA Report).

7.5.16 Flows of water along the cable route may result in both localised drying and localised pooling of water. Such ongoing processes would result in a long-term low-level change, with affected plant communities potentially transitioning into different community types. However, the effect this for a very small component of the overall area, is considered a **not significant** effect under the EIA Regulations.

7.5.17 As shown in Table 7.1, an estimated 76,439 m^2 of peatland surrounding the infrastructure will be likely subject to degradation. This is a 24.2 % reduction from the predicted degradation estimate of 100,787 m^2 under the 2019 Layout and represents 0.5% of the blanket bog IEF within the site boundary. An additional 112,242 m^2 of peatland will be subject to disruption to flows. This figure is a 24.2 % reduction from the 148,015 m^2 predicted under the 2019 Layout and represents 0.7 % of the blanket bog IEF within the site boundary. Affected plant communities may potentially transition into different community types, including both drier and wetter communities. This is a long-term **low-level** effect on this feature of National value and the effect is considered **not significant** under the EIA Regulations.

Decommissioning

7.5.18 Decommissioning impacts are generally regarded as similar to those experienced during the construction phase, albeit less intrusive.

7.6 Additional Mitigation

7.6.1 Embedded mitigation measures for the construction and operational phases of this Proposed Development were outlined in Chapter 17 of the 2019 EIA Report. Mitigation measures specifically for habitats were summarised in Chapter 7 of the 2019 EIA Report that included:

- Identification of appropriate exclusion zones around sensitive features, to prevent construction vehicle tracking through these areas.
- Careful strip and retention of turves (with particular reference to both peatland and grassland vegetation), for re-use in the restoration of track and turbine batters.
- Operative awareness education, in the form of toolbox talks, to ensure the value of the habitat is understood.
- Careful wash-down of plant and other equipment will be mandatory prior to access to or egress from the Proposed Development site, to prevent potential biosecurity risks associated with plant movements; potentially contaminated materials will be identified and the handling of such strictly controlled.
- Exclusion of livestock from the restored temporary borrow pit areas, to permit habitat recovery free from grazing pressure (which otherwise has the potential to degrade the surface).

7.6.2 More detail is provided in Appendix 7.1 of the 2020 SEI on the proposed blanket bog restoration measures that will be undertaken as part of the proposed HMP.

7.7 Assessment of Residual Effects

7.7.1 Following the change in design of the Proposed Development a re-assessment has been undertaken of the residual effects of the Proposed Development upon Unimproved U5a and U6a acid grassland and blanket bog.

Construction

Unimproved U5a and U6a acid grassland

7.7.2 Assuming full implementation of the mitigation measures identified in Chapter 7 of the 2019 EIA Report, **no significant** residual effects are expected for this IEF.

Blanket bog

7.7.3 Assuming full implementation of the mitigation measures identified in Chapters 7 and 10 of the 2019 EIA Report, **no significant** residual temporary effects are expected for this IEF.

7.7.4 The permanent losses of blanket bog cannot be mitigated; the residual impact is therefore assessed to remain at least a **low level**, long-term **significant** effect at a National scale.

Operation

Blanket bog

7.7.5 The permanent losses of blanket bog cannot be mitigated, but significant off-site peatland restoration will be undertaken to compensate for losses within the site. As described in Appendix 7.1 of the 2020 SEI, these measures will result in a net benefit of c.70 ha, thus out-weighing the losses within the site. As such, **no significant** residual temporary effects are expected during this phase.

7.8 Assessment of Cumulative Effects

7.8.1 At time of writing, there are a number of wind farms projects on the Shetland Isles to take into consideration. However, similar to the assessment in Chapter 7 of the 2019 EIA Report, this assessment considers wind farms within 10 km radius to be appropriate, as follows:

- Garth: five turbines operational since 2017; closest at c.1.5 km east of the Proposed Development site boundary; and
- Hill of Lusetter: approximately 8.5 km to the south, east of Mid Yell, on the southern shore of Mid Yell Voe. No details are available at time of writing, beyond a recording of "scoping" against the status (SNH, 2019).

7.8.2 Garth Wind Farm was constructed within an area of peatland and required excavation of up to 15,000 m^3 of peat. We have not been able to ascertain the loss of peatland within the Garth Wind Farm site, but we are aware that an area off site, Gutcher Quarry, was used as a peat receptor area. Because the peatland restoration proposals described in Appendix 7.1 of the 2020 SEI outweigh the losses from the Proposed Development, the potential for significant cumulative impacts with Garth Wind Farm on blanket bog is unlikely to be significant.

7.8.3 No details are available for the potential wind farm at Hill of Lusetter. However, because the peatland restoration proposals described in Appendix 7.1 of the 2020 SEI outweigh the losses from the Proposed Development, the potential for significant cumulative impacts is unlikely to be significant.

7.8.4 Overall therefore, no significant cumulative effects are anticipated.

7.9 Comparison of Effects

7.9.1 Table 7.2 below compares the effects identified in the 2019 EIA Report for the 2019 Layout with those identified within this chapter for the 2020 Layout.

Table 7.2 – Summary of Effects

Description of Effect	2019 Effects		2020 Effects	
	Significance	**Beneficial/ Adverse**	**Significance**	**Beneficial/ Adverse**
Construction				
Permanent loss of habitat: Acid grassland	Barely perceptible, not significant on Local scale	Adverse	Barely perceptible, not significant on Local scale	Adverse
Permanent loss of habitat: Blanket bog	Long-term low impact, significant on National area scale	Adverse	Long-term low impact, significant on National area scale	Adverse
Temporary disturbance of habitat: Acid grassland	Barely perceptible, not significant on Local scale	Adverse	Barely perceptible, not significant on Local scale	Adverse
Temporary disturbance of habitat: Blanket bog	Barely perceptible, not significant on National area scale	Adverse	Long-term low impact, not significant on National area scale	Adverse
Operation				
Hydrological change – cable routes in blanket bog	Barely perceptible, not significant on National area scale	Adverse	Barely perceptible, not significant on National area scale	Adverse
Degradation and disturbance of habitat: blanket bog	Low level impact, significant on National area scale	Adverse	Low level impact, not significant on National area scale	Adverse

7.10 References

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