Planning and Environmental Appeals Division

Appeal Decision Notice

T: 0300 244 6668
F: 0131 244 8988
E: dpea@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

Decision by Malcolm Mahony, a Reporter appointed by the Scottish Ministers

- Planning appeal reference: PPA-330-2023
- Site address: Hesta Head (land near), South Ronaldsay, Orkney KW17 2R
- Appeal by Hesta Head Wind Farm Ltd against the decision by Orkney Islands Council
- Application for planning permission 17/083/TPPMAJ dated 6 March refused by notice dated 21 Sep 2018
- The development proposed: erect 5 wind turbines (maximum capacity 20.4MW; maximum height 125 metres to blade tip), erect a meteorological mast (maximum height 81 metres), substation and associated infrastructure including access track
- Application drawings listed in schedule at the end of the notice
- Date of site visit by Reporter: 16-17 January 2019

Date of appeal decision: 18 April 2019

Decision

I allow the appeal and grant planning permission subject to the 23 conditions listed at the end of the decision notice. Attention is drawn to the five advisory notes and the habitats regulations appraisal at the end of the notice.

Preliminary

1. On 16 May 2017, the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 came into force. The 2017 regulations revoked the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 with certain exceptions. The 2011 Regulations continue to have effect for an application (and any subsequent appeal) for planning permission where the applicant submitted an environmental statement in connection with the application before 16 May 2017. That was done in this case. I have therefore determined this appeal in accordance with the 2011 regulations as they applied before 16 May 2017.

2. In carrying out my environmental impact assessment of this proposal, I have had regard to all of the environmental information and to the responses to it from consultees and other parties. As part of that process, I have considered direct and indirect effects of the proposed development on human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and cultural heritage. However, in this decision notice I have focussed on those that are critical to the acceptability of the proposal and over which the main parties disagree.

3. I deal with effects on human beings and landscape in the sections of this notice covering: seascape, landscape and visual impact; impact on residential properties; tourism and recreation and socio-economics. Effects on flora and fauna are covered in my ornithology and ecology sections. Soil, water, air and material assets were not raised in the reasons for refusal and I agree that any effects could be successfully addressed by conditions. The issue of climate is dealt with under carbon considerations, National Planning Framework 3 and Scottish Planning Policy. Effects on cultural heritage are considered in my historic environment section.

Reasoning

4. I am required to determine this appeal in accordance with the development plan, unless material considerations indicate otherwise. As the proposal would be visible from listed buildings, I must have special regard to the desirability of preserving the listed buildings or their settings and any special features of historic or architectural interest which they possess.

5. Having regard to the provisions of the development plan, the main issues in this appeal are: seascape, landscape and visual; the Linklater Memorial; the historic environment; nearby residential property; ornithology; contribution towards to the needs case for a subsea electricity transmission cable; socio-economics; potential to support objectives in National Planning Framework 3; energy output; and carbon displacement.

6. The appeal site lies on the east coast of South Ronaldsay generally to the south of the existing communications mast at Ward Hill. It comprises sloping agricultural land between the A961 road and coastal cliffs. Five turbines with a maximum height of 125 metres to blade tip are proposed with a combined maximum installed capacity of 20.4MW (megawatts) and a 25 year operational phase. There would be a meteorological mast, a sub-station, access tracks and other associated development typical of a wind farm.

7. The Executive Director of Development and Infrastructure (the Executive Director), in his committee report, acknowledged that his recommendation was finely balanced between the benefits and residual adverse effects and, should the decision-maker place additional weight on any of the issues supporting development, that could legitimately tip the balance in favour of the development. However, his report recommended refusal, stating that landscape impact concerns were considered to outweigh employment creation, socio-economic benefits of shared ownership, carbon displacement and contribution towards the needs case for the subsea transmission cable.

8. This recommendation was accepted and the application was refused on the following grounds:

1) The proposed site is located within the landscape type 'Plateau Heaths and Pasture', as defined in the SNH Orkney Landscape Character Assessment (1998). The application site is open and slightly elevated with a feeling of exposure, and a landscape sensitivity of plateau heaths and pasture is that the open plateau makes built structures highly visible from within the landscape. The 'Landscape Capacity Assessment for Wind Energy in Orkney' (2015) notes that turbines of a scale 50 to 80 metres "would tend to dominate the low hills of this landscape type" and that "turbines typically up to 30 metres

and occasionally between 30 and 50 metres would be acceptable in small groups located on the fringes of the character area, away from plateau tops". The site selection process and design iterations are all acknowledged, and absence of landscape designation, but the scale of turbines proposed exceeds the capacity of the landscape. The inevitability of significant impacts resulting from commercial scale wind energy development is also acknowledged, but at the scale proposed the landscape would be diminished, and the turbines would be a prominent feature in a skyline location, across a wide area of theoretical visibility. Impact from the Linklater Memorial is of concern, as a memorial to two ships lost off the coast, and as a popular location for wildlife watching and informal recreation, where the tall rugged cliffs and lack of large scale man-made structures are key to its character.

2) The development is considered contrary to Policy 1 (criteria i, ii and iv) and Policy 7D (i.a. and i.b.) of the Orkney Local Development Plan 2017 and Supplementary Guidance 'Energy', as listed below, on the basis that the wind energy development is likely to have a significant adverse impact on landscape character which cannot be mitigated to the satisfaction of the planning authority to avoid unacceptable impacts, and that enjoyment of the Linklater Memorial would be significantly compromised by new wind energy developments.

Site selection, design and access

9. The appellant states that development opportunities for commercial wind farms are extremely restricted in Orkney. The application was submitted following a site selection process across the islands over a period of more than seven years. Potential offshore wind farm sites are restricted to specific Crown Estate development zones, of which there are none in the vicinity of the Orkney Isles. Consequently, the appellants assessed only onshore sites. Hesta Head was selected for reasons of: wind resource (with a load factor around double that of the Scottish average onshore wind farm); direct access from the A961 road; grid connection; absence of national or international cultural heritage designations within the site; location of national and international natural heritage designations; and lack of peat disturbance.

10. Between scoping stage and submission of the application, the proposal was reduced from 6 turbines to 5, each with increased rotor diameter but the same maximum overall height. During processing of the application, turbine locations were amended by being moved generally to the west and north-west to increase distance from the sea cliffs. This followed consultation responses objecting in relation to a peregrine falcon nesting location at the eastern boundary of the site. The layout and infrastructure proposed has been subject to 14 iterations. The various iterations have resulted in a number of mitigation measures, including in relation to noise, shadow flicker, archaeological assets, clustering of turbines, landscape and visual effects, minimising water crossings and avoiding more sensitive habitats. To reflect the changes to the application, an Environmental Statement Addendum was submitted in March 2018.

11. I concur with the Executive Director's conclusion that the design iteration process has minimised landscape impacts, thereby satisfying Policy 9G(i) of the local development plan.

12. The appellant proposes to upgrade the core path within the development boundary. It is expected that the proposed access road and tracks within the site would facilitate access by people with disabilities.

Seascape, landscape and visual impact

13. The appeal site is located within the landscape type Plateau Heaths and Pasture and borders Cliff Landscapes to the east, as defined in the Scottish Natural Heritage (SNH) Orkney Landscape Character Assessment (1998). The assessment has been adopted as non-statutory planning advice. The Plateau Heaths and Pasture type has a generally open and exposed character despite being relatively low altitude. In general, built structures are highly visible from within the landscape.

14. In terms of seascape, the South Ronaldsay character area is influenced by its isolation and exposure in the Pentland Firth. "The area is relatively well settled with dispersed linear development following the road network and a concentration of settlement at St Margaret's Hope. Improved pasture, arable land, rough grassland and patches of moorland flank simple, stepped coastlines and sheltered bays, including Widewall Bay which is particularly sheltered. Relatively high, rugged cliffscapes, on which World War defence structures mark focal viewpoints, shelter the coastline from the south-west."

15. At Hesta Head, the slightly elevated and generally open landscape results in theoretical visibility in most directions, although because of intervening water many of the land areas lie more than 10 kilometres from the site, where visibility is more fragmented because of intervening landforms, and there is open sea to the east.

16. The proposal is not located within any designated landscape. The Hoy and West Mainland National Scenic Area lies approximately 20 kilometres to the north-west. Hoy Wild Land Area is located over 17 kilometres to the north-west. There are three Gardens and Designed Landscapes within the 35 kilometre study area. There are two Special Landscape Areas in Caithness. The Environmental Statement Addendum predicts that no significant effects for any of the above, principally due to their distance from the site.

17. The Environmental Study concludes that significant cumulative effects would result for three seascape receptors and five landscape receptors. These are concentrated in the vicinity of the site.

18. Whilst not objecting to the application, SNH considers that the proposal would be contrary to the findings of the Landscape Capacity Assessment for Wind Energy in Orkney, 2014, and far exceed the capacity of the site to accommodate wind farm development,. It would lead to significant landscape change and significant visual effects on the local and wider population. Accepting significant landscape change has the potential to limit capacity for further development of any scale in the wider area.

19. With regard to these comments, I have some reservation about the council's two landscape assessment studies, as explained below. Moreover, the 2015 study looks for a strategy based on an acceptance of landscape change. Whilst it is possible that the capacity for further development in the wider area would be affected, that is hypothetical and can attract limited weight in my consideration.

20. The Landscape Capacity Assessment for Wind Energy in Orkney (published 2014) was commissioned by the council and has been adopted as non-statutory planning policy. The generally undulating character of South Ronaldsay is said to be most suited to more small-scale development of up to 50 metres in height, with capacity for occasional development of a greater size. In relation to Plateau Heaths and Pastures, large turbines of 50-80 metres are said to dominate the low hills of this landscape type. Opportunities would be limited to turbines "typically up to 30 metres and occasionally between 30 and 50 metres [which] would be acceptable in small groups located on the fringes of the character area, away from plateau tops." The assessment concludes that sensitive coastal and upland locations should remain turbine-free.

21. In a follow up document entitled Landscape Assessment for Potential Strategic Wind Energy Development in Orkney published in 2015, the consultants were requested to identify a strategy for siting turbines up to 125 metres in height under a presumption of a degree of landscape change rather than of landscape accommodation; a presumption which "would introduce a non-fundamental or acceptable level of change to key landscape characteristics and visual resources." The main areas identified for larger turbines were Sanday, Stronsay, south-west Scapa Flow and the northern moorland hills of Mainland. The study also looked for areas where landscape could be allowed to change more fundamentally in order to meet local and national policy objectives for wind energy development; one location was identified, encompassing Flotta, Fara and part of Hoy around Lyness.

22. The study advised that, as a strategic level study, it provides a context for the consideration of capacity for, and the cumulative effects of, potential future wind turbine developments on Orkney, and that no site specific conclusions should be drawn from it in relation to proposed wind farms.

23. Landscape consultants for the appellant have reviewed both studies. They criticise them variously for, among other things: not distinguishing the relative sensitivity of receptors; according high sensitivity to areas with very limited visibility; an overly broad-brush approach to diverse landscapes; identifying areas close to the National Scenic Area and Wild Land Area as preferred areas; and identifying preferred areas which are constrained for non-landscape reasons. They also point out that the 2015 study focussed on areas identified in the 2014 study rather than re-examining other areas, including the locality of the appeal site, in more detail. Using the same criteria as the 2015 study, the consultants found that Hesta Head could accommodate up to six turbines at 125 metres height.

24. I share those reservations expressed by the appellants' consultants which I have summarised above. I also note that some of the areas identified in the 2015 study as having highest underlying capacity fall within the category of Areas of Significant Protection in the Spatial Strategy Framework for wind farm development in the 2017 Orkney Local

Development Plan. The latter, which is based on landscape and other criteria, has statutory status and is more up to date. Moreover, whilst strategic studies provide useful guidance, especially for developers' areas of search, all schemes require to be assessed by detailed landscape and visual impact assessments as the Environmental Statement Addendum has done.

25. The Spatial Strategy Framework for wind farm development identifies the appeal site as lying within an Area with Potential for Wind Farm Development, the most favourable of three categories.

26. In the Environmental Assessment Addendum, visual impacts are assessed using a methodology in line with best practice advice. Of the 21 representative viewpoints selected for the Environmental Statement, six are predicted to experience significant impacts when the development is operational. These are: the car park at the Linklater Memorial at Windwick Bay; the public viewpoint on the A961 at Olad Summit; Burwick Harbour; Wheems Farm and campsite above Newark Bay; Point of Ayre in Deerness; and Duncansby Head public viewpoint in Caithness.

27. Whilst the council accepts that the main views of interest from Olad Summit are towards the Pentland Firth and Scapa Flow and Flotta, rather than towards the site, it considers the views from Linklater Memorial car park to be more damaging. The latter is also of concern in that the memorial is dedicated to two warships lost off the coast in 1918 with heavy loss of life. They went down after running onto rocks during violent gales. This is also a popular location for wildlife watching and informal recreation. The tall rugged cliffs and lack of large scale man-made structures are regarded as key to the character of this view.

28. The most important view from the memorial is along the coast towards the location where the vessels foundered. Although the amended turbines positions are further from the cliff edge, all of one and part of three of them would be included and prominent in that view. However, they would not obscure the cliffs and rocks or detract from an understanding of the significance of the memorial. The presence of tall turbines would, nevertheless, reduce the perceived height of the cliffs.

29. Significant visual effects are also predicted for public roads (the A961, Kirkwall to Burwick; and the B9041, B9042, B9043 and B9044 on South Ronaldsay), for part of National Cycle Network 1 (Stromness to Burwick), and for several core paths in the vicinity of the site.

30. The Executive Director's report to committee accepts that the turbine locations have been carefully considered in relation to landform. However, he is concerned about the prominence of the turbines (in the operational phase) for road users travelling from Mainland south through South Ronaldsay, north from Burwick, and for passengers on the ferry crossings from Gill's Bay to St Margaret's Hope and from John O'Groats to Burwick.

31. The Environmental Statement Addendum assesses the likely effects at static viewpoints along or near the main road corridor as varying between minor at St Mary's/Holm to major at Olad summit (adjacent to the site) and moderate/major at Burwick harbour. Based on my site visits, I find that, whilst the turbines would be visible and

sometimes prominent on much of the road journey when approaching the site from the north or south, they have been sited to present a visually acceptable composition in most views from the island's main transport corridors and there are often other vistas to attract attention.

32. Visual effects on the ferry crossings to St Margaret's Hope and to Burwick are assessed as minor/moderate and negligible/minor, respectively, in the Environmental Statement Addendum, and therefore not significant (in the technical sense used in environmental impact assessments). The Executive Director emphasises the context in which those views are obtained, especially from the Pentland Ferries' route through Scapa Flow. I agree that this increases the impact on those views.

33. The council considers that the proposal is not sited and designed to minimise negative impacts on landscape and seascape characteristics, and therefore fails to accord with Policy 9G(i) of the local development plan.

34. In my site visits, I took particular account of the visual effects of the proposal from the various viewpoints highlighted in the Environmental Statement Addendum as well as from the nearby roads and paths. I looked, in particular, at the sequential effects on users of the A961 between Burwick and Kirkwall. I accept that there would be significant seascape and landscape change and significant visual effects, especially in the locality of the site and on parts of the A961 route. But by its nature, commercial wind energy development will necessarily result in some significant adverse impacts on landscape and visual receptors. In this case, the proposal would not have a significant effect on the Hoy and West Mainland National Scenic Area, the Hoy Wild Land Area or other designated landscapes. Moreover, I am satisfied that the appellant has taken reasonable steps to minimise negative impacts and to make the development sympathetic to natural and historic features within the landscape as described in the design section above. I am not persuaded that cumulative effects with other developments would be unacceptable. Consequently, I find that the proposal accords with the terms of local development plan Policy 9G: Landscape.

Historic Environment

35. Historic Environment Scotland does not object to the proposal as impacts are not likely to reach a level where significant issues for its interests would be raised. However, it considers some impacts have been underestimated in the Environmental Statement Addendum. It expresses concern about the impact on the setting of Isbister cairn (a scheduled monument) but, given the intervening distance (some 3.5 kilometres), does not consider that this is sufficient to merit an objection.

36. The proposal has been designed to avoid direct impacts on the cultural historic assets within the site boundary. None of those assets is designated.

37. The Cairns o' the Bu is an undesignated broch site overlooking the bay at Wind Wick, some 1.3 kilometres south-west of the nearest proposed turbine. The County Archaeologist claims that it has the potential to become a highly-visited site. The proposed turbines would be a dominating feature in the view north-north-east from the Cairns, but views through the valley to the west and eastwards to the sea would not be affected. Mitigation measures have been agreed with the developers, comprising the publication of

information literature/ site interpretation boards and a contribution to post-excavation work, all to advance understanding of the site.

38. The proposed turbines would be prominent in views from the category A listed St Peter's Kirk at Kirkhouse Point, their modernity and scale contrasting with the historic, human-scale structures. The nearest turbine would stand at a distance of some 2.7 kilometres and all five turbines would be visible in whole or in part. The kirk is viewed in combination with other historic structures on the shore such as boat nousts and winches.

39. The committee report concludes that, subject to planning conditions, the impact on the historic environment is not a reason for refusal. I consider that the turbines would not significantly detract from the ability to understand historic environment assets in the context of their landscape setting. I consider that the design iterations carried out and contributions proposed for the Cairns o' the Bu excavation and research would assist in mitigation of the effects of the proposal. Having visited the key sites and localities, and bearing in mind the statutory test for effects on listed buildings, I see no grounds to take a different view from the council or to find that the proposal would be contrary to the relevant sections of Policy 8 of the local development plan.

Impact on residential properties

40. In terms of visual impact, whilst planning law is not intended to protect the view from individual private properties, it is generally accepted that it would not be in the public interest for a development to create unacceptable living conditions at a dwelling. In wind farm cases which have come before the Scottish Ministers, the Ministers have considered whether the development would result in "overbearing visual effects on residential amenity to a degree that any property might be considered an unattractive place in which to live." With this test in mind, I have considered those dwellings within two kilometres of the appeal site, other than those which would have limited or no visibility of the turbines.

41. There are no residential properties within the appeal site, but 46 (excluding derelict or ruinous) lie within two kilometres of the nearest turbine, 13 of those lying within one kilometre. Six properties are assessed in the Environmental Statement Addendum as being potentially subject to large impacts on their views (on a scale of very large to very small). "Large" is defined as where the proposed development would form a prominent element from the property, generally seen at close range in views from several key locations within the property, resulting in considerable change to the quality and character of views from the property but not to the extent that the impact of the development would be likely to be considered oppressive or overbearing. The six properties are: Braeland, the new house west of Braeland, Melhaven, Stella Maris, The Head, and Trocaire. The last three are financially involved in the project. A further 27 properties were judged to be potentially subject to medium impacts, objections having been received from two of those.

42. The closest properties are 665 metres to the south, 919 metres to the west and 704 metres to the north of the nearest turbine. The effect on each of the properties is analysed in the Environmental Statement, including the extent to which principal views are affected.

43. In all cases, the houses would have the impression of looking towards the array rather than of being within it. I note that, particularly in the closer properties, the view of turbines would occupy a limited sector of an extensive panoramic view. Other key factors relate to the orientation of each property, position of windows, location of garden ground, screening by landform or buildings, backclothing of the turbines, and composition of the array. The committee report advises that impact on any residential property would not be so great or overwhelming as to constitute a reason for refusal. Based on my site visits, the analysis in the Environmental Statement Addendum and representations, I am satisfied that, although the turbines would be prominent in some views, the visual effects would not be overbearing to the degree that any of the properties might be considered an unattractive place to live.

44. Some local residents are concerned that they would experience shadow flicker. Shadow flicker occurs within buildings when the sun casts the shadow of rotors blades through a narrow window. The locations and frequency of this happening can be calculated for any property, incorporating information on average sunshine hours and the pattern of wind direction, to arrive at probable frequency in local conditions. Whilst there is no UK statutory guidance on acceptable levels of shadow flicker, best practice used across Europe and generally accepted guidance adopts maximum limits of 30 hours per year or 30 minutes on the worst affected day. Government advice states that generally shadow flicker should not be a problem where the separation between turbines and dwellings is greater than 10 rotor blade diameters. Potential shadow flicker has been calculated for nearby residential properties as occurring well below the above thresholds. However, it is normal to require developers to provide a protocol setting out a procedure for addressing and mitigating any complaints received. Mitigation could involve shutting down turbines for critical periods. There is therefore no evidence that shadow flicker would be a significant issue.

45. A number of representations express concern about noise effects at residential properties. The appellant's noise study looked at three locations representative of premises closest to the proposed development. It was carried out in accordance with government-recommended ETSU-R-97 guidance and with the Institute of Acoustics Good Practice Guide. The study found that the predicted turbine noise levels for the proposal meet the ETSU-R-97 specified derived daytime and night-time noise limits at all except one residential receptor neighbouring the site without the need for mitigation. The exception is Gammons Park, where the relevant daytime noise limit could be slightly exceeded in certain wind conditions. To account for this, two of the turbines would be operated in restricted modes during certain wind speed conditions and wind directions. The residual effects are therefore not significant.

46. A planning condition has been proposed to monitor and control noise from the wind farm. Where a breach of this condition occurs, the developer is required to put in place a scheme designed to mitigate the breach and to prevent its future recurrence.

47. Any turbine chosen would meet, or enable curtailment options to meet, the guideline limits for all of the nearby residential properties. The council's Environmental Health service has no objection, subject to an appropriate planning condition.

48. Noise from construction and traffic would be audible at times, but would be controlled by planning conditions and mitigation measures such as use of quiet plant, work within defined hours and timing of construction traffic and deliveries. Consequently, the residual effects of this noise would not be significant.

Ornithology

49. Subsequent to submission of the Environmental Statement Addendum on ornithology, consultation exchanges with SNH and the Royal Society for the Protection of Birds (RSPB) have addressed issues over a number of bird species. The remaining concerns of those bodies have focussed on peregrine falcons, which have a breeding range on cliffs adjacent to the development site. In response to feedback from those two bodies, the appellant amended the scheme layout by moving turbines back from the cliff to reduce potential collision risks and potential disturbance to peregrines. The nearest turbine was moved from 260 metres to 490 metres from the range centre. In addition, further surveys were undertaken. Nevertheless, a revised assessment identified that there remained a potentially significant collision risk to peregrines from the scheme alone and in combination with other developments and proposals in the region.

50. The Environmental Statement Addendum found: that, subject to mitigation measures, there would be no significant residual effects on breeding peregrine as a result of construction and decommissioning works; that operation displacement would be non-significant for breeding peregrine at the regional level; but that the cumulative collision risk for the NHZ2 peregrine population was significant. It was added that the latter was represented a precautionary, conservative approach and the actual risk was likely to lie below this estimate.

51. The Statement found that there were no further layout changes which would avoid impacts; that there were no feasible measures for mitigation of the operation of the wind farm, for example, by temporary turbine shutdown, as periods of increased risk were too difficult to predict; and that there was no scope to enhance habitat for peregrines further from the wind farm. As this leaves a significant residual effect on the regional peregrine population, the appellant proposes a compensatory measure in the form of the design and implementation of a Peregrine Research and Management Plan across NHZ2 region (comprising Orkney and North Caithness). This would have the potential to identify management measures to benefit the regional population of peregrines.

52. The RSPB objects to the proposal on the basis that there is insufficient information to conclude that there would not be an adverse impact on the Special Protection Areas (SPAs) within NHZ2, which are designated for peregrine, and consequently it objects to the conclusions of the Habitats Regulations Appraisal. It states that population modelling shows that the peregrine population would reduce by 23% over the life of the wind farm, without considering cumulative effects. Cumulatively with other operational, consented and planned wind farms, the reduction would be 44%, which would be potentially catastrophic. Third party representations, including from the Orkney Field Club, raise detailed concerns, including regarding peregrine, hen harrier and great skua. The RSPB has not objected in relation to the latter two species. The Environmental Statement Addendum predicted no significant effect on hen harrier or great skua.

53. SNH initially objected on the same basis as the RSPB, but in a letter to the council dated 7 May 2018, it removed its objection in response to revisions to the proposal and additional information. It considers that the modelled population decline for Hesta Head and Hesta Head in combination with other wind farms is likely to be an over-estimate for reasons which it sets out (see the Habitats Regulations Appraisal). In terms of the Town and Country Planning Environmental Impact Assessment (Scotland) Regulations 2011, it advised: "that the proposal is likely to have an adverse impact on peregrine falcons nesting on the cliffs adjacent to the development site, and possibly on the wider Orkney or NHZ breeding populations. It is difficult to be sure about the significance of the impact, but it is unlikely to be of national significance on its own or in combination with other wind farms, and unlikely to result in an adverse effect on the integrity of Hoy, North Caithness Cliffs and East Caithness Cliffs SPAs for which peregrine falcon is a qualifying feature."

54. Writing subsequently, in response to my request for advice in relation to the Habitats Regulations, SNH stated, in summary, that in its view "the Costa Head Wind Farm, on its own or in combination with other proposals, will not adversely affect the integrity of the SPAs Hoy, North Caithness Cliffs and East Caithness Cliffs." Further details of its appraisal are summarised in my Habitat's Regulations Appraisal section below.

55. The committee report, accepting that the proposed Peregrine Research and Management Plan would be designed to offset an impact on the Natural Heritage Zone 2 population, concludes that ornithological impacts do not merit refusal of the application. The council has not refused the application on this basis.

56. The appellant proposes that ground works and construction works would be timed to avoid the bird breeding season, and that a qualified Ecological Clerk of Works would be employed to supervise the protection of birds.

57. SNH is the government's advisor on a range of matters including ornithology. It has been in dialogue with parties regarding the issues and has provided detailed and cogent reasons for its position. Whilst understanding the concerns of the RSPB and Orkney Field Club, I consider that I must accept the SNH advice. I do not consider that the proposal would be in breach of Policy 9B(i) of the local development plan or that its impacts would constitute grounds for refusal of the application.

58. Policy 9B(i) of the local development plan states that "development likely to have an adverse effect on any protected species will not be permitted unless it can be justified in accordance with the relevant protected species legislation." In view of all the above evidence, I do not consider that the proposal would be in breach of that policy or that its impacts would constitute grounds for refusal of the application.

59. In relation to the above matters, I have carried out a Habitats Regulations Appraisal, which may be found in a schedule at the end of the decision notice.

Ecology

60. With regard to non-avian ecology, the site is not located within any international or national statutory designation for wildlife or natural heritage, with the exception of a small area at the eastern boundary (outwith the development footprint) which falls within the Ward

Hill Site of Special Scientific Interest. The proposed access to the site from the A961 and the first 400 metres of the access track would run through part of the Olad Summit Local Nature Conservation Site. This would result in the loss of 0.324 hectares of dry heath and 0.003 hectares of mire. Policy 9: Natural Heritage and Landscape of the local development plan states that developments likely to affect a Local Nature Conservation Site will only be permitted where there is no feasible alternative location and satisfactory mitigation measures are taken, or any effects are clearly outweighed by social, environmental or economic benefits.

61. The appellant has explained that following detailed study and design iteration, it was concluded that safe access for abnormal load delivery vehicles from the A961 could not be achieved using the existing Ward Hill track and that the only area within the landholding available for development with sufficient space for safe turning off the public road was that indicated in the application. That explanation has been accepted by council officers. The appellant has committed to enhancing a currently unmanaged parcel of dry heath (0.85 hectares in extent) close to the summit of Ward Hill, partly in mitigation of the smaller area of dry heath lost in construction of the track. There is also scope in the Habitat and Species Management Plan to include habitat creation, land management and/or habitat restoration works elsewhere on the site in order to offset the development impacts. I therefore conclude that Policy 9 is satisfied.

62. Assessments show that other ecological impacts can be adequately managed by mitigation measures and by the imposition of planning conditions.

Tourism and Recreation

63. The committee report states that, whilst visitors would note the presence of the turbines, there is no substantiated evidence that visitor numbers, repeat visitors and visitor spend within the local area or wider region would be affected negatively. Some representations express fears about reduction in visitor numbers, but I have received no substantive evidence to support those views, and studies cited by the appellants find otherwise.

64. Policy 10A: Core Paths and Access of the local development plan says development should have no unacceptable adverse impact on, among other things, core paths. Enhancement and expansion of multi-functional green networks is encouraged. In this case, one core path passes over Ward Hill then through the proposed array to the coast connecting with another path along the coastline past the site. The setting for users would change. For the Ward Hill path, summit views are panoramic and those over the south-eastern quadrant would be interrupted, but not those in other directions. For the coastal path, the main focus is seaward views, which would be away from the turbines. Sections of these paths would have to be diverted during construction and decommissioning of the proposal but not otherwise. Routes would be improved as part of the scheme, giving easier access to Hesta Head. The council does not find the overall effect to be unacceptable and I have no reason to take a different opinion.

Subsea cable transmission link

65. The Orkney electricity grid is currently connected to Caithness by two 33kV (kilovolt) cables with a combined capacity of 38MW. Orkney is one of Britain's leading centres for innovation in renewable energy, and has significant renewable resources from onshore wind, wave and tidal. Following considerable growth in small-scale renewable electricity generation, the existing Orkney electricity network reaches full capacity at times, preventing new electricity generators connecting and curtailing the output of some existing generators. Further commercial renewable energy generation in Orkney is therefore dependent on an interconnector. The construction of a new interconnector has been a stated strategic priority for the Orkney Islands Council over many years.

66. As a result of pressure from the Scottish Government, Island Councils and the renewables industry, the opportunity for eligible onshore Remote Island Wind projects to participate in the next Contracts for Difference auction in May 2019 has been agreed by the UK government. To be eligible, a project requires to hold a valid planning consent, a grid offer and a land agreement. Since they would be competing against offshore wind projects, island projects need to be commercially viable, so turbines with a tip height of 125 metres or greater are required.

67. There is a proposal to install a 220kV High Voltage Alternating Current subsea cable between Orkney and the Scottish mainland at Caithness to relieve the pressure on the current system and allow new generators to connect, followed by a second cable of similar specification once further generation has committed and the economic case has been made for the further investment. To receive approval for a cable, the government regulator for gas and electricity markets in the United Kingdom, Ofgem, must agree that a 'needs case' demonstrates sufficient demand and value to Orkney and Scottish mainland customers.

68. In March 2018, Scottish and Southern Electricity Networks submitted a Strategic Wider Works Final Needs Case to Ofgem, for a subsea cable transmission link from Orkney to the Scottish mainland. Its analysis concludes that the 'tipping point' to justify the investment for the first cable is no more than 70MW, the point at which the cost of the investment is exceeded by the benefits of the renewable energy supplied to energy consumers. Scottish and Southern Electricity Networks has therefore requested a conditional approval of the Needs Case from Ofgem subject to demonstration that 70MW of generation have been committed to by developers.

69. In National Planning Framework 3, the 'Orkney Waters' are identified as an 'Energy Hub' and an area of co-ordinated action; relieving current electricity grid constraints is stated as an objective. The Framework states that: "Strengthening the electricity grid will be essential in unlocking renewable resources, both onshore and offshore. Interconnectors to the Western Isles, Orkney and Shetland and onshore connections for offshore renewables on other parts of the coast are all required to fully realise the potential for diverse and widely distributed renewable energy development."

70. The Framework also refers to Kirkwall and Orkney, noting "Ambitious plans for wave and tidal energy, together with the wider area's importance as a strategic location for shipping and energy infrastructure, provide significant new opportunities for the

town…Improved grid connection will be a vital component in the future success of Orkney's marine energy sector. As part of this, there will be opportunities to develop new technologies and approaches to harness renewable power generation on and around the islands."

71. Subject to the capacity of turbines of appropriate size by the commissioning date, the proposal would contribute between 18MW and 20.4MW to the 70MW of energy generation required for the needs case. The appellant points out that its application at Costa Head on Orkney, which I am also considering at appeal, would similarly contribute to the needs case. That proposal has a capacity of between 14.4MW and 16.32MW.

72. The appellant states that, whilst other technologies, including wave and tidal, are in development, currently, only commercial scale wind farms (with a tip height of 125 metres or greater) are economically viable and therefore capable of underpinning the needs case.

73. A new interconnector would result in new jobs and protection of existing jobs in Orkney. Over 300 residents on Orkney are employed in the renewable energy industry. An interconnector would enable Orkney to export more energy, improve its security of electricity supply and remove a significant barrier to marine energy development and innovation.

74. Scottish Planning Policy confirms that, "Grid capacity should not be used as a reason to constrain the areas identified for wind farm development or decisions on individual applications for wind farms. It is for wind farm developers to discussion connections to the grid with the relevant transmission network operator."

75. In response to a claim that the proposed developments at Hesta Head and Costa Head were irrelevant to the interconnector as the new cables would be laid regardless, Scottish and Southern Electricity Networks have written to deny that this was the case.

76. In view of the potential for economic benefits to Orkney and the potential to support objectives in National Planning Framework 3, I place particular weight on this issue.

Socio-economics

77. The council, referring to the Environmental Statement Addendum, states that, during the 12 month construction period, the development would sustain up to 10.2 full-time-equivalent jobs (with a similar figure for decommissioning), and during the 25 year operational phase, up to 3.7 full-time-equivalent jobs per annum. These figures are based on direct and supply chain economic impacts. The council considers that the number of jobs which would be created is insignificant, especially in the operational phase.

78. The appellant states that the Environmental Statement Addendum presents the most conservative case as it is based on national average employment statistics. A more detailed assessment by BiGGAR Economics, including analysis of the Orkney labour market arrives at figures for Orkney of 37 and 5 full-time-equivalent jobs, respectively, for Orkney, and 116 and 8 for further employment in Scotland.

79. The appellant also draws attention to the additional potential job creation related to a new Orkney interconnector, if built. Some representations argue that these would be long-term, high value jobs. National Planning Framework 3 states: “It has been estimated that the renewables sector could, by reaching its full potential, bring … over 4,500 full-time-equivalent jobs on Orkney by 2030.”

80. The appellant’s consultant calculates the economic benefit for Orkney to be £19.2 million (gross value added), and for Scotland is £37.7 million (gross value added), using wider economic multipliers. A new interconnector would create additional economic benefit.

81. Calculations such as these are inevitably subject to uncertainty, and in this case the differences between the estimates are considerable. But I place weight on the fact that the appellant’s consultant has taken account of local circumstances including that Orkney’s island situation is likely to result in more of the benefits staying local. I would therefore expect the figures to be higher than those cited in the Environmental Statement Addendum. I also consider that, were the interconnector to be built, the additional employment opportunities and economic benefits could be considerable.

82. Scottish Planning Policy states that “Communities can also gain new opportunities from increased local ownership and associated benefits.” The appellant has committed to a Shared Ownership scheme in association with South Ronaldsay and Burray Community Council and local residents. An initial offer of 10% of project value has been made, and the appellant has proposed a low minimum “buy-in” as far as possible to maximise local participation. Because the site is eligible for Contracts for Difference there would be certainty of income for 15 years, thereby reducing investment risk. The scheme would therefore have the potential for a net economic benefit to the local community. To the extent that the offer is taken up, it would contribute to the Scottish Government target for two gigawatts of shared ownership developments by 2030. Local ownership is noted as a positive impact in Supplementary Guidance: Energy.

83. I therefore find that the scheme is likely to have a positive net socio-economic effect at both local and national levels.

Energy output and carbon considerations

84. The appellant states that the Scottish Energy Strategy, Climate Change Plan and Onshore Wind Policy Statement present ever stronger positive advice and new targets in relation to renewable energy generation, and that the October 2018 IPCC report on climate change provides further support for the need for the proposed development.

85. The Sustainable Orkney Energy Strategy 2017-2025 is the result of collaboration between the council, Orkney Renewable Energy Forum, Community Energy Scotland and Highland and Islands Enterprise. It aims to promote innovation, energy research and technology development and thereby provide growth, quality jobs and exports. Its vision is for “A secure and sustainable, low carbon island economy driven uniquely by innovation and collaboration, enabling the community to achieve ambitious carbon reduction targets, address fuel poverty and provide energy solutions to the world”. However, in view of the inadequate existing electrical grid infrastructure, significant investment in connectivity is

required to allow export to the Scottish mainland. The proposed development would support the aims of this strategy.

86. The anticipated total power output of the proposed development is between 18 and 20.4MW, with an annual indicative total energy output of around 43,000 to 69,000 megawatt hours. Over the 25 year lifetime of the project, for the 18MW option, it is predicted to displace more than 449,500 tonnes of carbon dioxide. This would be a useful contribution to the government's renewable energy and carbon targets.

87. Based on the collection of two years' wind resource data collected by the appellant, the proposed development is expected to have a capacity factor of at least 50%, which is almost double the Scottish average.

National Planning Framework 3

88. The government's vision for Scotland is as: a successful, sustainable place; a low carbon place; a natural, resilient place; and a connected place. It aims to achieve at least an 80% reduction of greenhouse gas emissions by 2050; to reduce total final energy demand by 12% and to meet at least 30% of overall energy demand from renewables by 2020; and for the equivalent of 30% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable sources by 2030.

89. It is maintained that rural communities will benefit from well-planned renewable energy development and that such development presents "an opportunity to improve the long-term resilience of rural communities". However, there must be a balance between allowing appropriate development and protecting the most sensitive landscapes.

90. New offshore electricity transmission cabling of or exceeding 132kV is designated as a national development, and I discuss relevant parts of the Framework above. Overall, I consider that the proposal accords with and is strongly supported by the Framework.

Scottish Planning Policy

91. Scottish Planning Policy sets out national outcomes, including: a successful, sustainable place; a low carbon place; and a natural, resilient place. Having examined these matters in this notice, I am satisfied that the proposal is consistent with the desired outcomes.

92. The policy references the Climate Change (Scotland) Act 2009, which has the target of reducing greenhouse gas emissions by at least 80% by 2050, with an interim target of reducing emissions by at least 42% by 2020. It requires public bodies to act so as to contribute to delivery of the emissions target and to deliver the government's climate change programme.

93. The policy requires planning authorities to set out a spatial framework to identify the most appropriate areas for onshore wind developments. This facilitates a balanced assessment between energy generation and economic benefits on the one hand, and protection of environmental, cultural and other assets on the other.

94. The policy has introduced a presumption in favour of development that contributes to sustainable development. Its aim is to achieve the right development in the right place, not to allow development at any cost. My analysis in this notice of the benefits and disbenefits of the proposal over the long term lead me to find that overall the proposal would be economically, environmentally and socially sustainable and therefore to find policy support from the presumption.

Orkney Local Development Plan 2017

95. The development plan for the Orkney Isles comprises the Orkney Local Development Plan 2017. The council's reasons for refusal indicate that the proposal fails to accord with a number of policies, including three criteria within Policy 1: Criteria for All Development of the plan. These state that development will be supported where: (i) it is sited taking into consideration the location and wider townscape, landscape and coastal character, (ii) the proposed density of the development is appropriate to the location, and (iv) the amenity of the surrounding area is preserved and there are no unacceptable adverse impacts on the amenity of adjacent and nearby properties/users. As this policy covers all types of development, the criteria require to be applied appropriately to an onshore wind project. With that in mind, and my assessments above, notably those on landscape and visual, and on residential amenity, I am satisfied that the criteria are met.

96. The council also considers that under Policy 7D: Onshore Wind Energy Development (i.a) and (i.b) of the plan there would be significant adverse individual or cumulative impacts on communities, amenity, landscape and visual impact. Policy 7D (iii) indicates that where a wind farm development proposal is located within an Area with Potential for Wind Farm Development, as identified in the Spatial Strategy Framework, it is likely to be supported in principle subject to compliance with the development criteria contained in Supplementary Guidance: Energy and any other material planning considerations. The proposal lies within such an area.

97. The Supplementary Guidance: Energy, which has statutory status, requires decisions on wind farms to weigh potential benefits against anticipated adverse impacts on known constraints. The guidance lists the following factors: communities and amenity; landscape and visual impact; natural heritage; historic environment; tourism and recreation; peat and carbon rich soils; water environment; aviation, defence and communications; and construction and decommissioning. The key and contentious factors are covered in the topic sections above. On balance, I am satisfied that the anticipated adverse impacts are outweighed by the potential benefits.

Other issues

98. The appellant has committed to providing a community benefit fund and an additional contribution towards a fuel poverty fund. However, these are not material planning considerations.

99. A number of representations express concern about the impacts of the potential electricity transmission infrastructure, including what route might be taken and what type of poles used. Whilst I am aware of this issue, which is common to many wind power

projects, it does not fall within my remit as it would be subject to a separate consenting regime.

Conditions

100. No objections were raised by statutory consultees. Some raised concerns but I consider that those concerns can be addressed by mitigation, monitoring and planning conditions.

101. The council has suggested planning conditions to control aspects of the development, including in respect of a financial guarantee. Subject to some additions and amendments, including in response to letters from the Scottish Environment Protection Agency (SEPA) of 8 May and 25 October 2018, I agree with these.

Summary findings and conclusion

102. In summary, I find that the proposal would have significant but acceptable impacts on seascape, landscape and visual amenity and on archaeological assets. Cumulative visual impacts would not be sufficient to reject the proposal. There would be impacts on the amenity of nearby residential properties, but not to an extent which would fail the test which has been applied by Scottish Ministers in similar cases. Effects on tourism and recreation are acceptable. Ornithological impacts would not merit refusal of the application. Some effects on the Olad Hill Local Nature Conservation Site cannot be avoided, but satisfactory mitigation is proposed. The proposal is likely to have positive net socio-economic effects at both local and national levels. It would support the aims of local and national strategies for renewable energy output and carbon reduction. It would represent an important element of the case for a new grid interconnector to mainland Scotland with consequent economic benefits for Orkney and nationally. Other potential impacts could be appropriately managed through planning conditions and other control regimes. The proposal accords with and is strongly supported by National Planning Framework 3. It is generally consistent with Scottish Planning Policy. The proposal accords with the provisions of the local development plan, in particular Policies 1, 7 (together with Supplementary Guidance: Energy), 8, 9 and 10.

103. I therefore conclude, for the reasons set out above, that the proposed development accords overall with the relevant provisions of the development plan and that there are other material considerations which strongly support the grant of planning permission.

104. In arriving at my findings and conclusion, I have assessed all the relevant environmental information, including that contained in the appellant's Environmental Statement Addendum.

Malcolm Mahony
Reporter

(Four schedules follow: Plans and Drawings; Planning Conditions; Advisory Notes; Habitats Regulations Appraisal.)

Plans and Drawings

Site location plan	Figure PA-1	March 2018
Site layout plan	Figure PA-2	March 2018
Turbine elevation	Figure PA-3	March 2018
Meteorological monitoring mast elevation	Figure PA-4	March 2018
Substation detail	Figure PA-5	March 2018

Planning Conditions

Duration of the Consent
01. This planning permission shall expire and cease to have effect after a period of 25 years from the date 12 months from the date of commencement of works, or when electricity is first exported from any of the approved wind turbines to the electricity grid network (the "First Export Date"), whichever is earlier. Upon the expiration of that 25 year period, the wind turbines shall be decommissioned and removed from the site. Written confirmation of the First Export Date, within the period 12 months from the date of commencement, shall be submitted in writing to the Planning Authority, within one month of the First Export Date.

(Reason: To allow the Planning Authority to calculate the date of expiry of the consent.)

Redundant turbines
02. The wind farm operator shall, at all times after the First Export Date, record information regarding the monthly supply of electricity from the site and electricity generated by each individual turbine within the development and retain the information for a period of at least 12 months. The information shall be made available to the Planning Authority within one month of any request by them. In the event that any wind turbine installed and commissioned fails to supply electricity on a commercial basis for a continuous period of 12 months, then unless otherwise agreed, the wind turbine, along with any ancillary equipment, fixtures and fittings not required in connection with retained turbines, shall, within 3 months of the end of the said continuous 12 month period, be dismantled and removed from the site and the surrounding land fully reinstated in accordance with this condition. For the avoidance of doubt, in making a direction under this condition, the Planning Authority shall have due regard to the circumstances surrounding the failure to generate and shall only do so following discussion with the wind farm operator and such other parties as they consider appropriate.

All decommissioning and reinstatement work required by this condition shall be carried out in accordance with the approved decommissioning, restoration and aftercare strategy, or, should the decommissioning, restoration and aftercare strategy not have been approved at that stage, other decommissioning and reinstatement measures approved in writing by the Planning Authority.

(Reason: To ensure that any redundant wind turbine is removed from site, in the

interests of safety, amenity and environmental protection.)

Duration of works
03. No development shall commence unless and until a timetable for the construction period has been agreed in writing with the Planning Authority. The timetable shall include the start and finish date, noting that the construction work shall not exceed a period of three years from the date of commencement unless otherwise approved in writing by the Planning Authority.

(Reason: To ensure proper planning and other environmental control of the development.)

Design and operation of wind turbines
04. No turbines shall be erected until full details of the proposed wind turbines have been submitted to, and approved in writing by, the Planning Authority. These details shall include:

- The make, model, design, power rating and sound power levels of the turbines to be used.
- The external colour and/or finish of the turbines to be used (including towers, nacelles and blades) which should be non-reflective pale grey semi-matt.
- Overall height of the turbines shall not exceed 125 metres to the tip of the blades in a vertical position.
- Each wind turbine shall have three blades and all wind turbines shall rotate in the same direction.

Thereafter, development shall progress in accordance with these approved details and, with reference to part 2 above, the turbines shall be maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned.

(Reason: To ensure that the environmental impacts of the turbines forming part of the development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.)

Signage
05. Notwithstanding the provisions of the Town and Country Planning (Control of Advertisements) (Scotland) Regulations 1984 (as amended), and unless there is a demonstrable health and safety or operational reason, none of the wind turbines substation buildings/enclosures or above ground fixed plant shall display any name, logo, sign or other advertisement without express advertisement consent having been granted on application to the Planning Authority.

(Reason: To ensure that the turbines are not used for advertising, in the interests of visual amenity.)

Design of sub-station and ancillary development
06. No development shall commence until full details of the location, layout, external appearance, dimensions and surface materials of all control and/or substation buildings, welfare facilities, compounds and parking areas, as well as any fencing, walls, paths and any other ancillary elements of the development, have been

submitted to, and approved in writing by, the Planning Authority. Thereafter, development shall progress in accordance with these approved details. For the avoidance of doubt, details relating to the control and substation buildings shall include additional architectural design, carried out by suitably qualified and experienced people, to ensure that they are sensitively scaled, sited and designed.

(Reason: To ensure that all ancillary elements of the development are acceptable in terms of visual, landscape noise and environmental impact considerations.)

Micro-siting

07. Wind turbines, buildings, masts, areas of hardstanding and tracks may be adjusted by micro-siting within the site as shown on Figure 1.2 of the Environmental Statement Addendum (site layout plan), subject to the following restrictions:

- No wind turbine, building, access track directly associated with a turbine, mast or hard standing shall be moved more than 50 metres from the position shown on Figure 1.2 of the Environmental Statement Addendum.
- No general access track shall be moved more than 20 metres from the position shown on Figure 1.2 of the Environmental Statement Addendum.
- All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works (ECoW).
- No wind turbine proposed within 800 metres of a non-financially involved residential property shall be micro-sited closer to that residential property.

Prior to commencement of works, the Planning Authority shall be notified in writing with a plan of the development, showing the final position of all wind turbines, masts, areas of hardstanding, tracks and associated infrastructure forming part of the development. The plan should specify areas where micro-siting has taken place and, for each instance, be accompanied by copies of approval of the micro-siting by the Ecological Clerk of Works (ECoW).

(Reason: To control environmental impacts while taking account of local ground conditions.)

Construction and Operational Environmental Management Plan

08. No development shall commence unless a Construction and Operational Environmental Management Plan (COEMP) outlining site specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, operational environmental monitoring, together with details of their timetabling, has been submitted to, and approved in writing by, the Planning Authority in consultation with SNH and SEPA. All works on site must be undertaken in accordance with the approved COEMP unless otherwise agreed in writing with the Planning Authority.

The COEMP shall include (but shall not be limited to):

- A site waste management plan (dealing with all aspects of waste produced during the construction period other than peat), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment.
- Details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material

stockpiles, oil storage, lighting columns, and any construction compound boundary fencing.
- A construction dust management plan.
- Construction noise management plan.
- Details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network.
- A pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site.
- Soil storage and management.
- A drainage management strategy, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources.
- A surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water.
- A peat management plan, to include details of all peat stripping, excavation, storage and reuse of material in accordance with best practice advice published by SNH and SEPA.
- Sewage disposal and treatment.
- Temporary site illumination.
- The construction of the access into the site and the creation and maintenance of associated visibility splays.
- Provision of wheel washing facilities.
- The method of construction of the crane pads.
- The method of construction of the turbine foundations.
- The method of working cable trenches.
- The method of construction and erection of the wind turbines and meteorological masts.
- Details of watercourse crossings (including size), timing of engineering works in the water environment, and any change to ground levels in the flood plain.
- Details of buffer zones around water features on the site, including throughout micro-siting.

Post-construction restoration/reinstatement of the working areas not required during the operation of the development, including construction access tracks, construction compound, storage areas, laydown areas, access tracks, passing places and other construction areas. Wherever possible, reinstatement is to be achieved by the careful use of turfs removed prior to construction works. Details should include all seed mixes to be used for the reinstatement of vegetation.

All construction work associated with the Development must be carried out in accordance with the current BS 5228, ‘Code of practice for noise and vibration control on construction and open sites’.

(Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on amenity and the environment, and that the mitigation

measures contained in the Environmental Statement are fully implemented.)

Construction Hours

09. Hours of construction work on site involving the use of machinery and powered tools, or any other operation that would audible from any noise-sensitive receptor, and all HGV movements to and from the site, shall only take place between the hours of 08:00 and 18:00 Mondays to Fridays, 08:00 to 12:30 on Saturdays and not at all on Sundays or the Christmas or New Year Public Holidays, unless otherwise agreed, in writing, with the Planning Authority. Outwith these specified hours, development on the site shall be limited to maintenance, emergency works, dust suppression, and the testing of plant and equipment, unless otherwise approved in advance in writing by the Planning Authority.

(Reason: In the interests of local amenity.)

Traffic Management Plan

10. No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and approved in writing by, the Planning Authority in consultation with Roads Services. The CTMP, which shall be implemented as approved, shall include the measures as follows:

- A description of all measures to be implemented by the developer to manage traffic during the construction phase (including routing strategies), with any additional or temporary signage and traffic control undertaken by a recognised suitably qualified traffic management consultant.
- The identification and delivery of all upgrades to the public road network to ensure that it is to a standard capable of accommodating construction-related traffic (including the formation or improvement of any junctions leading from the site to the public road) to the satisfaction of Roads Services, including:
    - A route assessment report for abnormal loads and construction traffic, including swept path analysis and details of the movement of any street furniture, any traffic management measures and any upgrades and mitigations measures as necessary.
    - An assessment of the capacity of existing bridges and other structures along the construction access routes to cater for all construction traffic, with upgrades and mitigation measures proposed and implemented as necessary.
    - A videoed trial run to confirm the ability of the local road network to cater for turbine delivery. Three weeks' notice of this trial run must be made to the Roads Services who must be in attendance.
- Drainage and wheel washing measures to ensure water and debris are prevented from discharging from the site onto the public road.
- A risk assessment for the transportation of abnormal loads to site during daylight hours and hours of darkness.
- A contingency plan prepared by the abnormal load haulier. The plan shall be adopted only after consultation and agreement with the Police and Roads Services. It shall include measures to deal with any haulage incidents that may result in public roads becoming temporarily closed or restricted.
- A procedure for the regular monitoring of road conditions and the implementation of any remedial works required during the construction period.

- A detailed protocol for the delivery of abnormal loads/vehicles, prepared in consultation and agreement with interested parties. The protocol shall identify any requirement for convoy working and/or escorting of vehicles and include arrangements to provide advance notice of abnormal load movements in the local media. Temporary signage, in the form of demountable signs or similar approved, shall be established, when required, to alert road users and local residents of expected abnormal load movements. All such movements on public roads shall take place outwith peak times on the network, including school travel times, and shall avoid local community events.
- A detailed delivery programme for abnormal load movements, which shall be made available to Roads Services and community representatives.
- Details of any upgrading works required at the junction of the site access and the public road. Such works may include suitable drainage measures, improved geometry and construction, measures to protect the public road and the provision and maintenance of appropriate visibility splays.
- Details of appropriate traffic management which shall be established and maintained at the site access for the duration of the construction period. Full details shall be submitted for the prior approval of Roads Services.
- A concluded agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 under which the developer is responsible for the repair of any damage to the local road network that can reasonably be attributed to construction related traffic. As part of this agreement, pre-start and post-construction road condition surveys must be carried out by the developer, to the satisfaction of Roads Services.
- Measures to ensure that construction traffic adheres to agreed routes.
- Appropriate reinstatement works shall be carried out, as required by Roads Services, at the end of the turbine delivery and erection period.

(Reason: To maintain safety for road traffic and the traffic moving to and from the development, and to ensure that the transportation of abnormal loads will not have any detrimental effect on the road network.)

Habitat and Species Management Plan

11. No development shall commence unless a habitat and species management plan has been submitted to, and approved in writing by, the Planning Authority in consultation with SNH, SEPA and RSPB as necessary. The habitat and species management plan shall set out proposed habitat and species management of the wind farm site during the period of construction, operation, decommissioning, restoration and aftercare of the site, and shall provide for the improvement, maintenance, monitoring and reporting of high focus habitats.

The approved habitat and species management plan shall include provision for regular monitoring and review to be undertaken to consider whether amendments are needed to better meet the habitat and species plan objectives. In particular, the approved habitat and species management plan will be updated to reflect ground condition surveys undertaken following construction and prior to the date of Final Commissioning and submitted to the Planning Authority for written approval in consultation with SNH and SEPA.

The approved habitat and species management plan shall also include identification of the additional, currently unmanaged parcel of dry heath close to the summit of Ward Hill, which is 0.85 hectares in size, and enhancement measures for that area, as identified in the ES Addendum.

Unless otherwise agreed in advance in writing with the Planning Authority, the approved habitat and species management plan shall be implemented in full.

(Reason: In the interests of good land management, the protection of habitats and species, and the mitigation of habitat loss on the site.)

Ecological Clerk of Works

12. No development shall commence unless the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitable qualified Ecological Clerk of Works (ECoW) in consultation with SNH and SEPA as necessary. The terms of appointment shall:

- Impose a duty to monitor compliance with the ecological and hydrological requirements set out in the Environmental Statement and any other information lodged in support of the application, the Construction and Environmental Management Plan, and the Habitat Management Plan.
- Undertake or oversee a series of repeat ecological surveys within 12 months prior to construction and/or decommissioning.
- Require the ECoW to report to the Company's nominated construction project manager any incidences of non-compliance with the ECoW works at the earliest practical opportunity.
- Require the ECoW to submit monthly reports to the Planning Authority summarising works undertaken on site.
- Require the ECoW to report to the Planning Authority any incidences of non-compliance with the ECoW works at the earliest practical opportunity.
- The ECoW shall be appointed on the approved terms throughout the period from Commencement of Development, to completion of post-construction restoration works.

An ECoW shall also be appointed under the terms of this condition throughout the decommissioning and restoration phases of the development.

No later than 18 months prior to decommissioning of the development or the expiry of this consent (whichever is the earlier), details of the terms of appointment by the wind farm operator of an independent ECoW throughout the decommissioning, restoration and aftercare phases of the development shall be submitted to the Planning Authority for written approval in consultation with SNH and SEPA.

(Reason: To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the development.)

Protection of Breeding Birds

13. No ground works (site clearance and stripping of vegetation) or construction works will be undertaken during the bird breeding season (March to August inclusive) unless previously agreed in writing by the Planning Authority. If an

application is made to the Planning Authority to undertake such works during the bird breeding season, then the ECoW or another suitably qualified surveyor will undertake a pre-construction survey prior to commencement of works to check if the peregrine breeding site adjacent to the development site is in use and if so to inform how works can best be programmed to avoid disturbance.

If an active peregrine breeding site is found, appropriate measures will be implemented in consultation with SNH to avoid disturbance. The ECoW will also carry out a pre-construction breeding bird survey prior to commencement of works to locate any active nests used by other bird species. Any active nests will be cordoned off to a suitable distance (agreed in consultation with SNH) and construction/decommissioning operations delayed within the cordon until the young have fledged and the nest becomes vacant, to be confirmed by the ECoW. The ECoW will carry out a watching brief during works.

(Reason: To ensure legal compliance with respect to breeding birds.)

Peregrine

14. Prior to the First Export Date, a Peregrine Research and Management Plan for peregrines across the NHZ2 (Orkney and North Caithness) region will be designed and submitted to, and approved in writing by the Planning Authority in consultation with SNH. The Peregrine Research and Management Plan will be implemented in accordance with the approved terms and timing.

(Reason: To offset potential adverse effects on peregrine through furthering understanding of the NHZ2 peregrine population and implementing appropriate management.)

Recreation and Access Plan

15. No development shall commence unless a Recreation and Access Plan for the construction and operation phases of the wind farm has been submitted to, and approved in writing by, the Planning Authority, including the new pedestrian route from the main road to meet the existing track, and how that would be maintained in perpetuity. Thereafter the plan shall be implemented in full.

(Reason: In the interest of maintaining public access.)

Archaeological Clerk of Works

16. No development shall commence unless the Planning Authority has approved in writing the terms of appointment of an independent Archaeological Clerk of Works (ACoW). The scope of the ACoW's appointment shall include:

- Monitoring compliance with the archaeological mitigation works that have been approved in this consent.
- Advising the Company on adequate protection and recording of archaeological interests on the site.
- Checking for new records of archaeological interests for which additional mitigation may be required.
- Directing the micro-siting and placement of turbines and tracks.
- Monitoring the compliance with mitigation, reinstatement and restoration measures approved in this consent.

- Reporting any breaches of the mitigation, reinstatement and restoration measures approved in this consent to the Planning Authority in writing.

The ACoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity and during any period of post-construction restoration works.

No later than 18 months prior to decommissioning of the Development or the expiration of this consent (whichever is the earlier), details of the terms of appointment of an independent ACoW shall be submitted to and approved in writing by the Planning Authority. The ACoW shall be appointed on the approved terms throughout the decommissioning, restoration and aftercare phases of the Development.

(Reason: To ensure the protection or recording of archaeological features on the site.)

Noise

17. The rating level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes, shall not exceed the values for the relevant integer wind speed set out in, or derived from, the tables attached to these conditions at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

a) The wind farm operator shall, for turbines which are under their control, continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.

b) No electricity shall be exported until the wind farm operator has submitted to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.

c) Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

d) The assessment of the rating level of noise immissions shall be undertaken in

accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.

e) Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.

f) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions.

g) Where a further assessment of the rating level of noise immissions from the wind farm is required pursuant to Guidance Note 4(c), the wind farm operator shall submit a copy of the further assessment within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

h) Once the Local Planning Authority has received the independent consultant's noise assessment required by this condition, including all noise measurements and any audio recordings, where the Local Planning Authority is satisfied of an established breach of the noise limits set out in the attached tables 1 & 2, upon notification by the Local Planning Authority in writing to the wind farm operator of the

said breach, the wind farm operator shall within 21 days propose a scheme for the approval of the Local Planning Authority. The scheme shall be designed to mitigate the breach and to prevent its future recurrence. This scheme shall specify the timescales for implementation. The scheme shall be implemented as reasonably approved by the Local Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed with the Local Planning Authority.

i) Unless otherwise agreed in writing by the Planning Authority the scheme of mitigation as described in section 5.7 (Mitigation) of the Environmental Statement Addendum Volume 1 to control predicted breaches of the noise limits is to be implemented throughout the life of the development.

j) Where it is shown to the satisfaction of the planning authority that the occupier of any dwelling to which the above noise limits apply has a Financial Involvement in the development, any number in Table 1 or Table 2 below (Noise limits expressed in dB LA90,10-minute periods) which is less than 45.0 shall be taken to be 45.0.

Table 1 – Between 07:00 and 23:00 – Noise limits expressed in dB L_{A90},10-minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

Location	**Standardised wind speed at 10 metre height (m/s) within the site averaged over 10 minute periods**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Rosehaven	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	43.9	43.9	43.9
Braeland	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	43.9	43.9	43.9
East of Wardhill	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	43.9	43.9	43.9
Eastside Wardhill	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	43.9	43.9	43.9
Gammons Park	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	46.3	46.3	46.3
Lower Olad	35.0	35.0	35.0	35.0	35.3	37.7	40.4	40.4	40.4	40.4	40.4	40.4
Stella Maris	35.0	35.0	35.0	35.0	35.0	36.0	38.7	41.6	44.7	47.9	47.9	47.9
The Head	35.0	35.0	35.0	35.9	39.7	43.9	46.1	46.5	46.5	46.5	46.5	46.5
Trocaire	35.0	35.0	35.0	35.0	38.8	43.0	45.2	45.6	45.6	45.6	45.6	45.6
Egypt	35.0	35.0	35.3	36.3	37.4	38.7	40.1	41.9	43.9	46.3	46.3	46.3

Table 2 – Between 23:00 and 07:00 – Noise limits expressed in dB L_{A90},10-minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

Location	**Standardised wind speed at 10 metre height (m/s) within the site averaged over 10 minute periods**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Rosehaven	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	43.7	43.7	43.7
Braeland	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	43.7	43.7	43.7

East of Wardhill	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.8	45.8	45.8
Eastside Wardhill	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.8	45.8	45.8
Gammons Park	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.8	45.8	45.8
Lower Olad	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
Stella Maris	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.1	46.8	46.8	46.8
The Head	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.1	46.8	46.8	46.8
Trocaire	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	44.1	46.8	46.8	46.8
Egypt	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.7	45.8	45.8	45.8

Table 3: Coordinate locations of the properties listed in Tables 1 and 2.

Property	**Easting**	**Northing**
Rosehaven	346272	989241
Braeland	346200	989302
East of Wardhill	346122	989205
Eastside Wardhill	346000	989199
Gammons Park	346057	989035
Lower Olad	344683	988456
Stella Maris	345449	987468
The Head	345577	987498
Trocaire	345599	987385
Egypt	346362	989154

Note to Table 3: The geographical coordinate references are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

Guidance Notes For Noise Conditions

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSUR-97 refers to the publication entitled “The Assessment and Rating of Noise from Wind Farms” (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

(a) Values of the LA90,10-minute noise statistic should be measured at the complainant’s property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 2014 (or the

equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.

(b) The microphone should be mounted at 1.2 – 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the wind farm operator shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.

(c) The LA90,10-minute measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed and wind direction at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods, unless otherwise agreed in writing with the Local Planning Authority. The mean wind speed data for the operating turbines shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data, averaged across all operating wind turbines, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter.

(e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.
Guidance Note 2
(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2.

(b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (d) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurements periods set out in Guidance Note 1. In specifying such conditions the Local Planning Authority shall have regard to those conditions which prevailed during times when the complainant alleges there was disturbance due to noise or which are considered likely to result in a breach of

the limits.

(c) For those data points considered valid in accordance with Guidance Note 2(b), values of the LA90,10-minute noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

Guidance Note 3
(a) Where, in accordance with the approved assessment protocol under paragraph (d) of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.

(b) For each 10-minute interval for which LA90,10-minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2-minute periods should be spaced at 10-minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2-minute period out of the affected overall 10-minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

(c) For each of the 2-minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104 -109 of ETSU-R-97.

(d) The tone level above audibility shall be plotted against wind speed for each of the 2-minute samples. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(e) The average tone level above audibility shall be calculated for each wind speed bin, each bin being 1 metre per second wide and centred on integer wind speeds. Samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

(f) The tonal penalty for each wind speed bin is derived from the margin above audibility of the tone according to the figure on page 104 of ETSU-R-97 (The Assessment and Rating of noise from Wind Farms)

Guidance Note 4
(a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured

noise level as determined from the best fit curve described in Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the Local Planning Authority in its written protocol under paragraph (d) of the noise condition.

(b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.

(c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (e) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

(d) The wind farm operator shall ensure that all the wind turbines in the development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:

(e). Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.

(f) The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:
L1 = 10log[10 L2/10 – 10 L3/10]

(g) The rating level shall be re-calculated by adding the tonal penalty (if any is applied in accordance with Note (3) to the derived wind farm noise L1 at that integer wind speed.

(h) If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with guidance note (3) above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then the development fails to comply with the conditions.

(Reason: in the interest of local residential amenity.)

Shadow Flicker

18. No development shall commence unless and until a Shadow Flicker Protocol has been submitted to, and approved in writing by, the Planning Authority. The Shadow Flicker Protocol shall set out a protocol for addressing any complaint received from a residential receptor within the study area defined in Chapter 14 of the Environmental Statement Addendum, and will set out mitigation and management options. Operation of the turbines shall take place in accordance with the approved Shadow Flicker Protocol and any mitigation measures that have been agreed through the protocol shall be implemented.

(Reason: In the interest of local residential amenity.)

Aviation Safety

19. No development shall commence until the Planning Authority, Ministry of Defence, Defence Infrastructure Organisation Safeguarding (DIOS), Defence Geographic Centre (DGC) and Civil Aviation Authority (CAA) have been provided with the following information, and evidence has been provided to the Planning Authority that this has been done:

- The date of the expected commencement of each stage of construction.
- The height above ground level of the tallest structure forming part of the development.
- The maximum extension height of any construction equipment.
- The position of the turbines and masts in latitude and longitude.

(Reason: In the interests of aviation safety.)

Post-Construction Restoration

20. No development shall commence until a scheme of restoration of areas disturbed as a result of the construction process has been submitted to, and approved in writing by, the Planning Authority. The scheme will include (but not limited to):

- Offsite bridge structures and retaining walls.
- Offsite carriageway and road widening.
- Area of temporary construction compound.
- Anemometer mast(s).
- Areas around turbines.
- Track edges and trenching.

Thereafter the scheme of restoration will be implemented in accordance with the approved timescales to the satisfaction of the Planning Authority.

(Reason: To ensure restoration of areas disturbed by the construction process.)

Site Decommissioning, Restoration and Aftercare

21. The development shall cease to generate electricity and shall be decommissioned by no later than the date 25 years from the date 12 months from commencement of works, or First Export Date. The total period for restoration of the Site in accordance with this condition shall not exceed three years from the date of Final Decommissioning without prior written approval of the Planning Authority.

No development shall commence unless a decommissioning, restoration and

aftercare strategy has been submitted to, and approved in writing by, the Planning Authority in consultation with SNH and SEPA. This strategy will be reviewed every 5 years. The strategy shall outline measures for the decommissioning of the development, restoration and aftercare of the site and will include, without limitation, proposals for the removal of the development, the treatment of ground surfaces, the management and timing of the works, and environmental management provisions.

No later than three years prior to decommissioning of the development or the expiration of this consent (whichever is the earlier) a detailed decommissioning, restoration and aftercare plan, based upon the principles of the approved decommissioning, restoration and aftercare strategy and on the best practice current at the time of submission, shall be submitted to the Planning Authority for written approval in consultation with SNH and SEPA. The detailed decommissioning, restoration and aftercare plan will provide updated and detailed proposals for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environment management provisions which shall include:

- A site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases).
- Details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing.
- A dust management plan.
- Construction noise management plan.
- Details of measures to be taken to prevent loose or deleterious material being deposited on the local road network including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network.
- A pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site.
- Details of measures for soil storage and management.
- A surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt-laden water.
- Details of measures for sewage disposal and treatment.
- Temporary site illumination.
- The construction of any temporary access into the site and the creation and maintenance of associated visibility splays.
- Details of watercourse crossings.
- A species protection plan based on surveys for protected species (including birds) carried out no longer than 18 months prior to submission of the plan.
- Traffic management plan.
- Community liaison plan.
- ECoW/site environment management appointment.

The Development shall be decommissioned, the site restored and aftercare undertaken in accordance with the approved plan, unless otherwise agreed in writing in advance with the Head of Development and Regulatory Services in consultation

with SNH and SEPA.

(Reason: To ensure the decommissioning and removal of the development in an appropriate and environmentally acceptable manner and the restoration and aftercare of the site, in the interests of safety, amenity and environmental protection.)

Financial Guarantee

22. No development shall commence until:

i. Full details of a bond or other financial provision to be put in place to cover all of the decommissioning and site restoration measures outlined in the approved decommissioning, restoration and aftercare strategy have been submitted to, and approved in writing by, the Planning Authority.

ii. Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under part (i) above is sufficient to meet the full estimated costs of all decommissioning, dismantling, removal, disposal, site restoration, remediation and incidental work, as well as associated professional costs, has been submitted to, and approved in writing by, the Planning Authority.

iii. Documentary evidence that the bond or other financial provision approved under parts (i) and (ii) above is in place has been submitted to, and confirmation in writing that the bond or other financial provision is satisfactory has been issued by, the Planning Authority.

Thereafter, the developer shall:

iv. Ensure that the bond or other financial provision is maintained throughout the duration of this permission.

v. Pay for the bond or other financial provision to be subject to review five years after the commencement of development and every five years thereafter until the wind farm is decommissioned and the site restored.

Each review shall be:

vi. Conducted by a suitably qualified independent professional.

vii. Published within three months of each five-year period ending, with a copy submitted upon its publication to both the landowner(s) and the Planning Authority.

viii. Approved in writing by the Planning Authority without amendment or approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part (viii) above recommends that the amount of the bond or other financial provision should be altered (be that an increase or decrease) or the framework governing the bond or other financial provision requires to be amended, the Wind Farm Operator shall do so within one month of receiving that written approval, or another timescale as may be agreed in writing by the Planning Authority, and in accordance with the recommendations contained therein.

(Reason: To ensure financial security for the cost of the restoration of the site to the satisfaction of the Planning Authority.)

CAA Notification

23. Prior to commencement of any works on the hereby approved development, the developer shall notify the Civil Aviation Authority (CAA) of the proposed development and works, at the following address:

Off Route Airspace 5, Directorate of Airspace Policy, Civil Aviation Authority, CAA House, 45-59 Kingsway, London WC2B 6TE (Email: airspace@caa/co.uk).

(Reason: In the interest of aviation safety.)

Advisory notes

1. **The length of the permission:** This planning permission will lapse on the expiration of a period of three years from the date of this decision notice, unless the development has been started within that period (See section 58(1) of the Town and Country Planning (Scotland) Act 1997 (as amended)).

2. **Notice of the start of development:** The person carrying out the development must give advance notice in writing to the planning authority of the date when it is intended to start. Failure to do so is a breach of planning control. It could result in the planning authority taking enforcement action (See sections 27A and 123(1) of the Town and Country Planning (Scotland) Act 1997 (as amended)).

3. **Notice of the completion of the development:** As soon as possible after it is finished, the person who completed the development must write to the planning authority to confirm the position (See section 27B of the Town and Country Planning (Scotland) Act 1997 (as amended)).

4. **Display of notice:** A notice must be displayed on or near the site while work is being carried out. The planning authority can provide more information about the form of that notice and where to display it (See section 27C of the Town and Country Planning (Scotland) Act 1997 Act (as amended) and Schedule 7 to the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013).

5. Construction Site Licence: SEPA indicate that their local regulatory team should be consulted about the possible need for a Construction Site Licence.

Habitats Regulations Appraisal

1. This appraisal should be read together with the ornithology section in my decision notice above.

2. In view of concerns raised by parties in connection with peregrine falcon in relation to European sites, I consider that I require to carry out a Habitats Regulations Appraisal in accordance with regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. As this is a delegated appeal, I am the Competent

Authority in terms of the regulations. The first stage of the Appraisal is to screen out cases which do not require Appropriate Assessment and involves two tests.

3. Regarding the first of these tests, Appropriate Assessment is required in this case if the proposal, either alone or in combination with other projects, is likely to have a significant effect on a European site: in this case an SPA. The phrase "likely significant effect" is used in the sense that it would be capable of having an effect (based on the opinion of the Advocate General in the Sweetman case - European Court of Justice C-258/11). The threshold is therefore relatively low.

4. The Hesta Head proposal would occupy a clifftop site near to a peregrine nesting area, where impacts on peregrine are predicted. Although the site does not lie within a Natura 2000 site, three such sites are potentially affected, namely the SPAs at Hoy (17 kilometres west), North Caithness Cliffs (13 kilometres south – to Stroma) and East Caithness Cliffs (39 kilometres south).

5. The Environmental Assessment Addendum concluded that the proposal left a significant residual effect on the regional peregrine population and proposed a compensatory measure in the form of a research and management plan covering NHZ2 (which includes part or all of each of the three SPAs). In a letter to the council dated 7 May 2018, SNH stated, "the proposal is likely to have an adverse impact on peregrine falcons nesting on the cliffs adjacent to the development site, and possibly on the wider Orkney or Natural Heritage Zone breeding populations." In a letter to my office dated 2 November 2018, RSPB Scotland considered that "there is insufficient information to conclude that there will not be an adverse impact on the SPAs which are designated for peregrine."

6. The Orkney Islands Council has carried out a Habitats Regulations Appraisal, having regard to SNH advice, which concludes that "it is considered unlikely that the proposed wind farm either on its own or in combination with other wind farms, would adversely affect the SPA peregrine populations." From this advice, the council concludes that Appropriate Assessment is not required. However, I cannot agree with this conclusion as it uses the wrong test. The advice given by SNH incorporates terms related to the Appropriate Assessment rather than to the screening exercise.

7. In relation to the second test, all parties agree that the proposal is not connected with, or necessary to, site management for conservation of the SPAs. It is not therefore exempt on that ground.

8. These comments lead me to find that the proposal, individually or in combination with other plans or projects, is likely to have a significant effect on the three above-mentioned SPAs in relation to peregrine. Consequently, I require to make an Appropriate Assessment of the implications of the proposal for the SPAs in view of their conservation objectives.

9. Turning to that Appropriate Assessment, the Competent Authority may only grant permission for the proposal "after having ascertained that it will not adversely affect the integrity of the European site".

10. Each of the three SPAs is classified, among other things, for peregrine as a European non-priority interest. For each site, the relevant conservation objectives are: to avoid deterioration of the habitats or significant disturbance to the species, thus ensuring that the integrity of the sites are maintained; also, to ensure that the following are maintained in the long term: population of the species as a viable component of the site; distribution of the species within the site; distribution and extent of habitats supporting the species; structure, function and supporting processes of habitats supporting the species; and no significant disturbance of the species.

11. The peregrine population at Hoy SPA is currently in favourable condition; that at North Caithness Cliffs SPA is in unfavourable, declining condition; and that at East Caithness Cliffs SPA is currently in favourable condition.

12. The applicant investigated potential effects on the SPAs in the Environmental Statement Addendum and these are summarised in my ornithology section above. The Statement found that the proposal when considered together with other development and proposals in the region presented a significant collision risk to peregrine, leaving a significant residual effect on the regional peregrine population. It commented that this finding was arrived at on a precautionary basis. It then found that there were no feasible measures to mitigate the residual effect, and put forward a compensatory measure comprising a Peregrine Research and Management Plan, described in my ornithology section.

13. As to the admissibility of such a compensatory measure, judgements in the European courts have made or adopted the finding that compensatory measures cannot be taken into account in an Appropriate Assessment. However, a Court of Session judgement (Bagmoor Wind Ltd vs. Scottish Ministers, 2010) has taken a different line on the basis of the UK regulations, stating that compensatory measures which are proposed to be the subject of a planning condition can be taken into account in accordance with regulation 48(6) of the Conservation (Natural Habitats &c.) Regulations 1994, as amended. In the present case, the conditions suggested by the council include one requiring a Peregrine Research and Management Plan. I have not received legal representations on this matter. However, were I to take account of the proposed Plan, I consider that its outcome and benefits are too uncertain to be afforded more than minimal weight. This is because details of the Plan are scant and I see no clear evidence of how the Plan might achieve the potential benefits claimed. Moreover, SNH considers that the Plan would be "unlikely to mitigate or compensate impacts resulting from the Hesta Head proposal."

14. In its letters to my office of 2 May and 2 November 2018, RSPB Scotland maintained that there is insufficient information to conclude that there will not be an adverse impact on the three SPAs. Among other things, it criticises the appellant's document Information to Inform Habitats Regulations Appraisal (an appendix to the Environmental Statement Addendum) on two grounds. Firstly, that the reduced population figures it cites are unreliable as the calculation uses an collision risk avoidance rate of 99% rather than the 98% advised by SNH, and secondly that the modelling requires to look at individual SPA populations rather than the NHZ2 population as a whole. If the modelled dramatic decrease in NHZ2 population takes

place, it is unlikely that there would not be some consequence for the SPAs. Also, as Hesta Head has been shown to be attractive as a nesting site, it could act as a "sink" drawing other birds into the collision risk area.

15. When consulted on the planning application, SNH initially objected to the proposal until sufficient information had been supplied to allow adequate assessment of the potential impacts on the peregrine population of NHZ2 and the peregrine features of the SPAs within NHZ2. However, in its letter to the council of 7 May 2018, SNH explained that revisions to the proposal (described in the Environmental Statement Addendum) together with the additional information supplied allowed SNH to remove its objection. It also gave advice on the impact of the proposal on SPAs in terms of the Town and Country Planning Environmental Impact Assessment (Scotland) Regulations 2011.

16. In the course of the appeal, I sought further information from SNH regarding the effect of the proposal on the three SPAs in terms of the Habitats Regulations and specifically the Appropriate Assessment test. The SNH response, dated 1 April 2019, stated in summary that in its view "the Hesta Head Wind Farm on its own or in combination with other proposals, will not adversely affect the integrity of the SPAs Hoy, North Caithness Cliffs and East Caithness Cliffs."

17. SNH explained that its appraisal considered three factors:
    (1) The distance between the proposed site and the SPAs means that, in accordance with SNH guidance, the peregrines nesting at Hesta Head are not considered part of the SPA breeding populations. However, the Hesta Head and SPA peregrines are all part of the wider NHZ2 peregrine population. In 2014, there were an estimated 22 pairs of peregrine in NHZ2, 10 of these pairs being in the SPAs.
    (2) Although displacement is possible, it is considered more likely that peregrines would continue to breed at Hesta Head. If the pair at Hesta Head are not displaced, they would be at significant risk of collision, with an estimated collision rate of 0.4 birds per annum at 98% avoidance rate. In combination with other wind farms (including the Costa Head proposal) the cumulative collision rate is estimated to be 0.89 birds per annum at 98% avoidance rate.
    (3) Population modelling carried out by the applicants predicts that a collision rate of 0.89 birds per annum could lead to a decline to about 56% of the current NHZ population. However, SNH considers that the modelled population decline for Costa Head on its own and in combination with the Hesta Head and other NHZ2 wind farms is likely to over-estimate impacts to the NHZ population for three reasons.
        i. The model assumes that breeding birds adjacent to the appeal sites are replaced almost immediately after being lost. In reality, the territory might be abandoned or single birds might not pair up for some time. The consequent decrease in flight activity would result in a reduction in collision risk.
        ii. The model assumes that the appeal sites would act as "sinks" for the whole NHZ population, whereas any replacement bird at the site is likely to be an unpaired adult or a sub-adult, and breeding pairs, being

site-faithful, would continue to use their established territories, including at the SPAs.

iii. The appellant has modelled impacts to the SPAs, but only through depressed recruitment. This does not take into account the effects of adult mortality on the breeding population, as predicted by its modelling of impacts to the NHZ population. However, for the reasons given above, that modelling over-estimates the rates of population decline.

On the basis of that appraisal, SNH acknowledges that there are some uncertainties around the appellant's modelling, but does not rely entirely on that modelling and is satisfied that, with the additional information now supplied, and supplemented by the reasoning outlined above, it has sufficient grounds on which to reach the conclusion set out in the previous paragraph.

18. In response to the SNH letter, RSPB Scotland maintains the position it set out in its letters of 2 May and 2 November 2018, the appellant is content to rest on existing submissions, and Orkney Islands Council has not commented.

19. SNH is the government's statutory advisor with respect to natural heritage issues. It has engaged in detailed discussions of the above issues with the council, the appellant's agents and RSPB Scotland. It has given detailed and cogent reasoning to support its advice, and in particular to address the RSPB's concerns.

20. In conclusion, having carried out an Appropriate Assessment based on all of the above ornithological information and advice, I am satisfied that the proposal, either on its own or in combination with other wind farms, would not have an adverse effect on the integrity of Hoy, North Caithness Cliffs and East Caithness Cliffs SPAs.

21. This means that there is no impediment to my granting planning permission for the proposed development.