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Jenny Hazzard Head of Environmental Planning ITPEnergised

By email only to: Jenny.hazzard@itpenergised.com

Our ref: CIN-ORK-002

21 December 2021

Dear Jenny Hazzard,

# **DECISION NOTICE**

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
PLANNING APPLICATION 20/313/TPPMAJ: Erect 6 wind turbines (maximum height 149.9 metres, maximum wind farm capacity 50 MW), erect a meteorological mast (maximum height 90 metres) and a substation, construct access tracks, a water crossing and underground cabling, create a borrow pit, and associated infrastructure, at land near Lyness, Hoy, Orkney ('the proposed development')

- 1. This letter contains Scottish Ministers' decision on the above planning application submitted to Orkney Islands Council by ITPEnergised on behalf of Orkney Islands Council on 25 September 2020.
- 2. The application was called in for Scottish Ministers' determination on 16 October 2020. This was in view of the proposal raising matters which are of national importance in the context of expectations set out in National Planning Framework 3 for the Pentland Firth and Orkney Waters area and the need for an enhanced high voltage energy transmission network, and to avoid any conflict of interest that could have arisen in the event that Orkney Islands Council determined the application.
- 3. The application was considered by means of written submissions and an unaccompanied site inspection (carried out on 2 June 2021) by David Buylla, a Reporter appointed by Scottish Ministers for that purpose.
- 4. A report with the Reporter's recommendation was issued to Scottish Ministers on 3 September 2021. A copy of the Reporter's report ('the Report') is attached.

## Reporter's Recommendation and Scottish Ministers' Decision

5. The Reporter has recommended that planning permission be refused. Scottish Ministers have carefully considered all the evidence presented and the Reporter's conclusions and recommendation. Scottish Ministers disagree with the Reporter's conclusions and recommendation, and grant planning permission subject to conditions for the proposed development, for the reasons given below. All references to paragraph and chapter numbers, unless otherwise stated, are to the Report.

## The Proposed Development and Site

- 6. The proposed development would principally comprise six wind turbines with a maximum blade tip height of 149.9m. The total generating capacity for the site would be approximately 28.8MW, depending on the final model of turbine selected.
- 7. Other components of the proposed development include:
  - a temporary construction compound;
  - crane hard-standings;
  - access tracks;
  - underground cabling;
  - on-site substation and maintenance building; and
  - a permanent meteorological monitoring mast (up to 90 metres in height).
- 8. The proposed development would be located on land approximately 1.3km west of the settlement of Lyness, which is towards the south eastern end of the island of Hoy.

### The Reporter's Report

9. Chapter 1 of the Report provides information on the proposed development and site, the environmental impact assessment, consultation responses and representations. Chapter 2 summarises and discusses the policy context. Main issues are considered in the subsequent topic-based chapters. Chapter 12 contains the Reporter's overall conclusions and recommendations.

# Legal and policy context and determining issues

- 10. Section 25 of the Town and Country Planning (Scotland) Act 1997 requires Ministers to determine planning applications in accordance with the development plan unless material considerations indicate otherwise. In this case, the development plan consists of the Orkney Local Development Plan 2017 ('the LDP') and accompanying supplementary guidance.
- 11. Ministers agree with the Reporter's summaries of the relevant provisions of the development plan, national planning policy, and other relevant national and council guidance and policy, provided in Chapter 2 of the Report.

12. A draft of the fourth National Planning Framework (NPF4) was published for consultation on 10 November 2021. Ministers give it limited weight in the determination of this application given its consultation draft status. National Planning Framework 3 and Scottish Planning Policy will remain in force until NPF4 is adopted.

## **Environmental Impact Assessment**

- 13. The determination of this application is subject to the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations'). The Reporter was satisfied, and Ministers agree, that the submitted EIA Report provides all of the environmental information necessary for Ministers to reach a reasoned conclusion on the significant environmental effects of the proposed development. Scottish Ministers have taken this information into account when considering this application.
- 14. The Report contains a summary of the findings of the EIA Report and the comments received on it from consultees and made in representations. Together, these form summaries of the environmental information and the results of the consultations and information gathered pursuant to Parts 5 and 6 of the EIA Regulations and how those results have been incorporated or addressed. Appendix 2 of the Report provides a summary of the arrangements taken to ensure the public had the opportunity to participate in the decision-making procedures. The Report describes the various mitigation and monitoring measures proposed and required, and these are also described in the EIA Report Chapter 17: Schedule of Environmental Commitments. Ministers agree with, and adopt as their own for the purposes of this decision notice, those summaries and descriptions and the Reporter's reasoned conclusion on the significant effects of the proposed development on the environment, which Ministers are satisfied is still up to date.

# The Conservation (Natural Habitats, &c.) Regulations 1994 ('the Habitats Regulations')

- 15. NatureScot advises, and Ministers agree, that under the terms of the Habitats Regulations, the proposed development is likely to have a significant effect on the qualifying interests of Hoy Special Protection Area (SPA), Switha SPA and the proposed Scapa Flow SPA (pSPA). Consequently, Scottish Ministers have carried out appropriate assessments of the implications for the SPAs in view of the sites' conservation objectives.
- 16. Paragraph 210 of Scottish Planning Policy states that the same level of protection should be afforded to proposed Special Areas of Conservation (SACs) and SPAs (i.e. sites which have been approved by Scottish Ministers for formal consultation but which have not yet been designated) as is afforded to sites which have been designated. An appropriate assessment in relation to Scapa Flow pSPA has therefore also been carried out.
- 17. Following advice from NatureScot, and in view of the conservation objectives of the site, Ministers have concluded that the proposed development will not adversely affect the integrity of the Hoy SPA, subject to compliance with the conditions contained in Appendix 1.

- 18. Following advice from NatureScot, and in view of the conservation objectives of the site, Ministers have concluded that the proposed development will not adversely affect the integrity of the Switha SPA.
- 19. Following advice from NatureScot, and in view of the conservation objectives of the site, Ministers have concluded that the proposed development will not adversely affect the integrity of the Scapa Flow proposed SPA, subject to compliance with the conditions contained in Appendix 1.
- 20. Ministers agree with NatureScot that there would be no likely significant effect on any of the qualifying habitats of the Hoy SAC, due to the distance between all elements of the proposed development and the SAC boundary, and the intervening topography.

# Reporter's findings and conclusions

- 21. As noted in paragraph 1.9 of the Report, the Reporter addresses most of the topics of the EIA report (including landscape and visual effects, ornithology, ecology and nature conservation, and cultural heritage) in turn within the Report. For each potential effect, he sets out the findings of the EIA report, the views of consultees and his own conclusions.
- 22. Ministers agree with the Reporter's findings and conclusions regarding the landscape and visual effects of the proposed development, as set out in Chapter 3 of the Report. These include the conclusion (at paragraph 3.31) that there would be significant adverse landscape character effects, in places out to approximately 10 kilometres, but primarily within a radius of approximately 4.5 kilometres.
- 23. Ministers note that none of the proposed development would be within the Hoy and West Mainland National Scenic Area ('the NSA'). They agree with the Reporter's finding (at paragraph 3.56) that there would be some significant adverse indirect effects on one of the special landscape qualities of the NSA but that this would not compromise the objectives of designation or the overall integrity of the NSA and would not therefore conflict with criterion (iii) of part G (*Landscape*) of Policy 9 *Natural Heritage & Landscape* of the LDP.
- 24. Ministers agree with the Reporter that (paragraph 3.79) the proposed development would have significant adverse effects on four of the six key attributes and qualities of the Hoy Wild Land Area ('the WLA'). Ministers agree with the Reporter that the proposed development is contrary to Policy 9G of the LDP and the expectations of national policy in relation to areas of wild land as expressed in Scottish Planning Policy. However, Ministers note that only one of the proposed turbines would be within the WLA. In addition, Ministers agree with the Reporter that (paragraph 3.79) not all parts of the WLA would experience such adverse effects to the same degree, and that the areas where qualities such as remoteness, tranquillity and the absence of human artefacts are most strongly experienced are likely to experience fewer effects from the proposal than areas towards the east of the WLA, where such qualities are already significantly less clearly expressed. This in Ministers' view, limits the significance of this policy conflict when balancing the adverse impacts against the benefits of the proposed development.

- 25. Ministers agree with the Reporter that (paragraphs 3.103 and 3.105) from a landscape and visual impact perspective, the proposed development is contrary to LDP Policy 7 *Energy* part D (*Onshore Wind Energy Development*) criteria (i) (a) and (b), and would not satisfy the first requirement of LDP Policy 1 (*Criteria for All Development*). However Ministers also agree with the Reporter's statement in paragraph 3.103 that significant adverse landscape and visual effects are to be expected within a close proximity of a commercial wind energy site and what needs to be assessed is how those effects should affect the overall assessment of the proposed development (often referred to as the planning balance).
- 26. In relation to effects on ornithology, ecology and nature conservation, Ministers agree with the Reporter (paragraph 4.71) that on balance, the proposed development would satisfy the requirements of parts A, B and C of LDP Policy 9 Natural Heritage & Landscape (which relate to internationally designated sites, protected species and wider biodiversity and geodiversity respectively) for the reasons the Reporter sets out in chapter 4 and paragraphs 12.21 and 12.22. Ministers however also agree that there would be residual adverse effects (following mitigation, in terms of harm to white-tailed eagle, red-throated diver, great skua, hen harrier and curlew populations) which would represent a disbenefit of the proposed development to be weighed in the planning balance.
- 27. Ministers agree with the Reporter's findings regarding the impacts of the proposed development on cultural heritage, as set out in Chapter 6 of the Report, but disagree with some of the Reporter's conclusions regarding compliance with development plan policy on this matter. Specifically, Ministers agree with the Reporter's conclusions in paragraph 6.28 that significant cultural heritage effects would be limited to two designated heritage assets: the former naval HQ (a Category A listed building) and the Category B listed royal naval cemetery. Ministers agree with the Reporter's conclusion in paragraph 6.29 that the proposed development would have a moderate/major adverse effect on the setting of the former naval HQ due to the observer's ability to appreciate the strategic wartime significance of the building being substantially undermined. Ministers also agree that (paragraph 6.30) there would be a moderate (significant) effect on the royal naval cemetery, with the turbines appearing as an alien intrusion into the otherwise visually subdued setting to the cemetery.
- 28. Ministers have had special regard to the desirability of preserving the listed buildings and their setting and features of special architectural or historic interest that they possess. In so doing, Ministers have given significant weight to the possibility (as highlighted in paragraph 12.19) that the future of the former naval HQ, which is uncertain given its 'Building at Risk' status and deteriorating condition, can be safeguarded by developer-funded works to the building, to be secured by condition. Ministers also acknowledge the applicant's proposal for a formation of a heritage trail to provide improved access to all of the wartime assets together with interpretation boards to improve visitors' understanding and appreciation (paragraph 6.32). Ministers consider this would provide some (but limited) compensation for the adverse effects on the heritage assets, and should be secured by condition.
- 29. Ministers agree with the Reporter that Policy 8 (Historic Environment & Cultural Heritage) of the LDP only permits development that would have an adverse impact on the significance of a cultural heritage asset where it can be demonstrated

that mitigation measures will be taken to mitigate any loss of significance and where any loss that cannot be mitigated is outweighed by the social, economic, environmental or safety benefits of the proposal. Ministers also agree with the Reporter (paragraph 12.18) that the first expectation of this policy is not met. However, Ministers consider (contrary to the Reporter's view expressed in paragraph 12.20) that the loss of significance of both listed buildings is outweighed by the benefits of the proposed development which are outlined in paragraphs 32 - 34 below. Ministers therefore consider that the proposed development would accord with Policy 8 of the LDP.

- 30. For the reasons given in Chapter 7 of the Report, Ministers agree with the Reporter that (paragraph 7.20) overall, subject to appropriate planning conditions, the proposed development would have no significant adverse effects on geology, hydrology or hydrogeology. In addition, that the climate change implications of the proposed level of peat removal would be compensated for by the proposed peat management plan and the carbon reduction consequences of the proposed wind turbines.
- 31. Ministers agree with the Reporter's findings and conclusions regarding traffic and transport, aviation and radar, and shadow flicker contained in Chapters 8, 10 and 11 respectively. These are in summary that, subject to compliance with conditions, there would be no significant residual effects on traffic or transport; there is no evidence to suggest there would be any significant adverse individual or cumulative aviation or radar impact; nor significant shadow flicker effects. The proposed development would comply with the relevant policy requirements related to these matters.
- 32. Ministers agree with the Reporter's findings and conclusions in paragraphs 9.1 to 9.13 of Chapter 9 regarding socio-economic, recreation and tourism issues. Ministers agree that (paragraph 9.13) whilst the direct and indirect positive socio-economic benefits would not be significant, they should be given a small amount of positive weight in the planning balance. Ministers do not attribute any positive weight (as suggested by the Reporter in paragraph 12.7) to the fact that the promoter of the scheme is the local authority.
- 33. In paragraph 9.2 the Reporter notes that the applicant considers that a further (indirect) benefit of the proposed development is the contribution the proposed development would make to the establishment of sufficient generating capacity to justify an interconnector linking Orkney to the Scottish mainland. The regulator Ofgem has confirmed that, in order to justify investment in upgraded infrastructure, it expects it to be demonstrated by December 2022 that 135 megawatts (MW) of additional wind power are capable of proceeding. In paragraph 9.5, the Reporter states that the applicant argues (and no party has disputed) that, without the proposed development, there is no likelihood of this 135 Megawatt target being achieved within the identified timescale. Ministers give considerable weight to this benefit of the proposed development.
- 34. Ministers consider that the importance of an interconnector, and the benefits which could be derived from it, are recognised across national policy, including National Planning Framework 3 (NPF3) and the National Islands Plan, and securing an interconnector is a priority of NPF3. Ministers agree with the Reporter that

(paragraph 9.14) the benefits of securing the delivery of the interconnector are material to the assessment of the application. Ministers also agree that (paragraph 9.14) approval of this application would not, in itself, secure the delivery of an interconnector. However, Ministers consider the contribution of the proposed development would make (if permitted) to the interconnector needs case would be a significant benefit, especially in view of the Global Climate Emergency. Ministers give this significant benefit substantial weight as a material consideration.

- 35. As discussed in paragraph 29 above, Ministers do not agree with the Reporter that the proposed development would be contrary to LDP Policy 8 (Historic Environment & Cultural Heritage). However, Ministers agree with the Reporter (paragraph 12.26) that the proposed development does not, overall, comply with the development plan. They also agree (paragraph 12.27) that planning permission should not therefore be granted unless material considerations indicate otherwise. These include the contribution the proposed development would make to climate change mitigation and to the transition to a low carbon energy economy, and the net economic benefit and associated social benefits this would bring.
- 36. Scottish Planning Policy sets out a presumption in favour of development that contributes to sustainable development. In paragraph 29 it sets out a series of principles that should guide decisions. In paragraph 32 it states that for proposals that do not accord with up-to-date development plans, the primacy of the plan is maintained and SPP and the presumption will be material considerations. Ministers disagree with the Reporter's conclusions in paragraph 12.6, and consider that the proposed development would contribute to sustainable development in some respects (and therefore benefits from the SPP presumption) given its net economic benefit, support for the delivery of energy infrastructure, and support for climate change mitigation. Ministers note that the development plan is not out of date, so the presumption is not elevated by paragraph 33 of SPP to become a significant material consideration in this case.
- 37. Ministers consider that the contribution of the proposed development to the interconnector needs case would be a significant benefit, as discussed in paragraph 34 above. Ministers give this substantial weight as a material consideration. Adding this to the other benefits of the proposed development, Ministers consider that the material considerations warrant granting permission for the proposed development as a departure from the development plan. Ministers consider that whilst the proposed development would have significant adverse impacts on the landscape (including on attributes and qualities of the Hoy WLA), cultural heritage, and visual amenity, and adverse effects on some bird populations as discussed above, its benefits outweigh those impacts.
- 38. Ministers consider it important to prevent a situation whereby the Final Needs Case fails to receive Ofgem's final approval but the proposed development is still constructed. Such a situation would mean the contribution to the needs case (which as discussed above is being given substantial weight as a benefit) ultimately proved ineffectual whereas the adverse impacts of the proposed development would still arise. Permission is therefore subject to a condition which prohibits the commencement of development unless and until Ofgem have approved the Final Needs Case for the interconnector project.

39. Ministers note that the application sought in-perpetuity consent for the wind farm. However, Ministers consider that the starting point in the development plan, set by LDP Policy 7 (Energy), is that planning permission for all wind energy developments should be time-limited. The policy aligns with paragraph 170 of Scottish Planning Policy, which recognises that whilst areas identified for wind farms should be suitable for use in perpetuity, consents may be time-limited. Ministers note that some of the assessment detailed in the EIA report (specifically, the predicted effects on ornithology) only considers effects over a 25-year period of operation of the wind farm. Ministers conclude that there is no clear justification to depart from LDP Policy 7(D)(v), and consider that a 25-year time limit is appropriate in this case.

## **Formal Decision**

- 40. Accordingly Scottish Ministers hereby grant planning permission for the proposed development subject to the conditions listed in the schedule attached as Appendix 1.
- 41. The Scottish Ministers direct that section 58(1) of the Town and Country Planning (Scotland) Act 1997 is not to apply with regard to this planning permission and that planning permission is to lapse on the expiry of a period of ten years from the date of this permission if there has been no development within that period. This direction is made to reflect the fact that a grid connection is anticipated to not be available until at least 2025.
- 42. This decision of Scottish Ministers is final, subject to the right conferred by Sections 237 and 239 of the Town and Country Planning (Scotland) Act 1997 of any person aggrieved by the decision to apply to the Court of Session within 6 weeks of the date of this letter. If such an appeal is made, the Court may quash the decision if satisfied that it is not within the powers of the Act, or that the appellant's interests have been substantially prejudiced by a failure to comply with any requirements of the Act, or of the Tribunals and Inquiries Act 1992, or any orders, regulations or rules made under these Acts.
- 43. A copy of this letter and the Reporter's report have been sent to the planning authority. Those parties who lodged representations will also be informed of the decision.

Yours sincerely

Fiona Simpson Chief Planner

## Appendix 1: Schedule of conditions

## 1. Site Decommissioning, Restoration and Aftercare

- (1) The wind turbines shall be decommissioned and cease to generate electricity by no later than the date falling twenty-five years from the First Export Date, and the restoration of the site shall be completed within three years thereafter and shall be in accordance with the details submitted and approved under the terms of this condition.
- (2) Written confirmation of the First Export Date shall be provided to the Planning Authority no later than one calendar month after that date.
- (3) No development shall commence unless and until a decommissioning, restoration and aftercare strategy has been submitted to, and approved in writing by, the Planning Authority (in consultation with NatureScot and SEPA). The strategy shall outline measures for the decommissioning of the Development and restoration and aftercare of the site, and shall include proposals for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environmental management provisions.
- (4) No later than three years prior to decommissioning of the Development, a detailed decommissioning, restoration and aftercare plan, based upon the principles of the approved decommissioning, restoration and aftercare strategy, shall be submitted for the written approval of the Planning Authority in consultation with NatureScot and SEPA. The detailed decommissioning, restoration and aftercare plan shall provide updated and detailed proposals, in accordance with relevant guidance at that time, 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 (but is not limited to):
  - (a) a site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases):
  - (b) 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;
  - (c) a dust management plan;
  - (d) a traffic management plan;
  - (e) the appointment of an Ecological Clerk of Works;
  - (f) 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;

- (g) a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site:
- (h) details of measures for soil storage and management;
- (i) 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;
- (j) details of measures for sewage disposal and treatment;
- (k) temporary site illumination;
- (I) the construction of any temporary access into the site and the creation and maintenance of associated visibility splays;
- (m)details of watercourse crossings; and
- (n) a species protection plan based on surveys for protected species (including birds) carried out no longer than eighteen months prior to submission of the plan.
- (5) The Development shall be decommissioned, the site restored and aftercare undertaken in accordance with the approved plan, unless and until otherwise agreed in writing in advance with the Planning Authority (in consultation with NatureScot 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.

### 2. Final Needs Case for electricity transmission link (interconnector)

No development is to be commenced unless and until Ofgem have approved the Final Needs Case for Scottish Hydro Electric Transmission's (SHE-T) proposed project to build an electricity transmission link between Orkney and mainland Scotland. For the avoidance of doubt, a conditional decision of Ofgem to approve the Final Needs Case does not constitute Ofgem's approval under the terms of this condition.

Reason: To prevent a situation whereby the Final Needs Case fails to receive Ofgem's final approval but the proposed development is still constructed, leading to the adverse impacts of the proposed development without realisation of the broader benefits given weight in Ministers' decision.

#### 3. Health and Safety or Environmental Obligations

In the event of a serious breach of health and safety or environmental obligations relating to the development during the period of this permission, written notification of the nature and timing of the incident to Scottish Ministers and the Planning Authority, including confirmation of remedial measures taken and/ or to be taken to rectify the breach, shall be submitted within 24 hours of the incident occurring.

Reason: in the interests of health and safety and environmental protection.

# 4. EIA Report

The development shall be implemented in full and strict accordance with the plans and mitigation measures described in Chapter 17 'Schedule of Environmental Commitments' of the EIA Report, and supplementary documents, unless otherwise agreed in writing with the planning authority or unless otherwise required or approved in relation to conditions attached to this permission, noting that the height of the hub and length of the blades may alter, but the tip height will not exceed 149.9 metres.

Reason: to ensure the environmental effects of the development are effectively managed and mitigated.

#### 5. Redundant Turbines

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 with the Planning Authority, 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 a decommissioning, restoration and aftercare strategy which must be approved in advance in writing by the Planning Authority.

Reason: to ensure appropriate provision is made for any turbine(s) requiring repair or decommissioning.

#### 6. Design of Wind Turbines

Prior to the erection of the first turbine, full details of the proposed wind turbines (including, but not limited to, the power rating, size, type, external finish and colour), any anemometry masts and all associated apparatus shall be submitted to and approved in writing by the planning authority. The blade tip height of the turbines shall not exceed 149.5 metres above ground level. The development shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust, staining or discolouration, until such time as the wind farm is decommissioned. All wind turbine blades shall rotate in the same direction.

Reason: in the interests of visual amenity.

## 7. Signage

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: in the interests of visual amenity.

# 8. Design of Substation and Ancillary Development

Prior to the construction of the sub-station building, full details of the external appearance, dimensions, surface materials, associated compounds, any construction compound boundary fencing, external lighting, landscaping and parking areas shall be submitted to and approved in writing by the Planning Authority. The substation building, associated compounds, fencing, external lighting and parking areas shall be constructed in accordance with the approved details.

Reason: in the interests of visual amenity.

#### 9. Construction Hours

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 bank 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 residential amenity.

### 10. Construction Traffic Management Plan

Prior to the commencement of construction activities at the development, a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the planning authority. The CTMP shall include:

- a) agreed routes for the delivery of construction materials associated with the development on the local road network;
- b) measures to ensure that the specified routes are adhered to, including monitoring procedures;
- c) details of all road signage and associated traffic management measures to be installed at the site access junction;
- d) a detailed construction programme;
- e) details of the loads (number of loads and type of vehicle) associated with each month of construction and their routes to site;

- f) details of the measures to be provided to ensure that the public road is kept free of mud and debris;
- g) details of the safety induction to be provided for all staff working at the site;
- h) a protocol for working with local businesses to ensure the construction traffic does not adversely interfere with deliveries or normal business traffic;
- i) a description of a construction liaison committee to provide a conduit between the community and the developer to address any transport matters that may arise; and
- j) details of a staff transport and travel arrangement plan to reduce vehicle trips associated with the construction phase of the development.

Once approved, the CTMP shall be operated as approved.

Reason: in the interests of road safety.

#### 11. Abnormal Loads

No less than three months prior to the delivery of turbine components, a Route Access Report for all abnormal load movements (vehicles over 44 tonnes GVW or width greater than 2.9 metres or length greater than 18.3 metres) shall be submitted for the written agreement of the Planning Authority. The following details shall be submitted within the report:

- a) details of the proposed vehicles delivering the loads, including weights and general dimensions:
- b) details of any road widening, temporary traffic measures and signage or removal of street furniture or vegetation required to enable delivery. Where necessary, these should be informed by swept path assessments;
- c) proposals for trial runs to be undertaken prior to deliveries being made;
- d) proposed traffic safety measures to be adopted for all abnormal load movements including confirmation of police escorting at all times on the public road;
- e) details of how local stakeholders and residents will be advised of deliveries;
- f) a liaison plan with emergency services; and
- g) a timetable for proposed deliveries.

Once agreed the developer shall undertake abnormal road movements and associated works in accordance with the agreed details and shall provide one month advance notice of the exact movement dates to the Planning Authority.

Reason: in the interests of road safety.

#### 12. Road Condition

A photographic road condition survey shall be carried out jointly with the developer's representative and the planning authority, both prior to works commencing and again upon completion of work on the hereby approved development on the existing road infrastructure that will be used by to access and egress the development site. The applicant shall be responsible for funding the cost of any repairs following damage to

the public road which is solely attributed to this development which may have been caused by any vehicles or plant accessing or egressing the development site. Any works identified in the post construction survey that are attributable to construction activities shall be undertaken to the satisfaction of the Planning Authority within three months of completion of the development.

The developer shall also be responsible for mitigating any damage caused to the public road by vehicles and plant accessing and egressing the development site, in such a manner that the road always remains safe for other road users and until permanent repair works are agreed and carried out.

Any over-run or over-sail areas on the route to the site that required physical works to be carried out within the road boundary to facilitate access by abnormal loads shall be reinstated to the satisfaction of the Planning Authority within three months of completion of the development.

Reason: in the interests of road safety.

## 13. Port Management Plan

No less than six months prior to the delivery of turbine components to Orkney, a Port Management Plan (PMP) shall be submitted to and approved in writing by the planning authority. The PMP shall include:

- a) the proposed timescales for turbine component deliveries to be made;
- b) outline and agree quay space and temporary storage areas with Marine Services;
- c) outline and agree crane and stevedore access arrangements;
- d) confirm and book quay space;
- e) detail the vessels that will undertake the deliveries; and
- f) agree access rights along the access road from the pier and the convoy management with Orkney Islands Council, Marine Services and Police

Once approved, the PMP shall be operated as approved.

Reason: to minimise port disruption and in the interests of public safety.

### 14. Construction and Operational Environmental Management Plan

No development shall commence unless a Construction and Operational Environmental Management Plan (COEMP) outlining site specific details of all onsite 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 NatureScot and SEPA. 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.

- A 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 soil storage and management.
- A drainage management strategy, which accords with SuDS principles, demonstrating how all surface and waste water arising during and after development will be managed and prevented from polluting any watercourses or sources.
- A detailed peat management plan, to include details of all peat stripping, excavation, storage and reuse of material in accordance with best practice advice published by NatureScot and SEPA.
- Details of sewage disposal and treatment.
- Details of temporary site illumination.
- Details of the construction of the access into the site and the creation and maintenance of associated visibility splays.
- Details of 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 mast.
- Details of watercourse crossings.
- A Breeding Bird Protection Plan, incorporating the measures set out in Condition 20.
- A Habitat Protection Plan to ensure that, during the construction phase, habitat not required to be directly affected by the approved development is protected from indirect effects.
- Details of post-construction restoration/reinstatement of the working areas not required during the operation of the development.
- The method of restoration of the borrow pit.
- Details of ornithological monitoring to be undertaken during the operational phase, and how the data from this monitoring will be made available to inform future development in Orkney.

Reason: to ensure a satisfactory level of environmental protection during construction and operation.

#### 15. Protection of the Water Environment

The developer will ensure that the 50 metre buffers around all water bodies are maintained and that all new infrastructure (with the exception of any proposed watercourse crossings and directly related tracks) occurs outwith the 50 metre buffer area from water features on site unless adequate justification is provided and it is agreed in writing with the Planning Authority.

Reason: to protect the water environment.

## 16. Ecological Clerk of Works

No development shall commence until an Ecological Clerk of Works (ECoW) has been appointed and the identity and terms of appointment of the ECoW has been submitted to and agreed in writing by the Planning Authority. The ECoW shall be employed for the period of wind farm construction, including site preparation, micrositing and post-construction restoration.

Reason: to protect ecological interests.

#### 17. Micro-siting

That the wind turbines, crane pads, tracks, substation compound, and meteorological mast locations shall not be erected in any position other than the positions shown in the EIA Report, unless approved by the Ecological Clerk of Works. Any such variation (micro-siting) shall not exceed 50 metres in any direction from the locations of those elements shown in the EIA Report. Should micro-siting be required, the turbine locations will not be moved within the accepted telecommunications buffer (75 metres clearance from the blade tip) unless otherwise agreed with BT. In addition, the separation distance to the closest residential property (Thurvoe) will not be reduced.

Reason: to enable necessary minor adjustments to the position of the wind turbines and other infrastructure to allow for site-specific conditions whilst safeguarding existing telecommunications infrastructure and residential property.

# 18. Habitat Management Plan

Prior to the commencement of development a detailed Habitat Management Plan shall be submitted to and approved in writing by the Planning Authority. The plan shall thereafter be implemented in full.

Reason: in the interests of nature conservation.

### 19. Species Protection Plan

No development shall commence until a construction Species Protection Plan for otter is submitted to, and approved in writing by, the Planning Authority. The development shall thereafter be delivered in accordance with the approved plan.

Reason: in the interests of nature conservation.

## 20. Protection of Breeding Birds

No ground works (site clearance and stripping of vegetation) or construction works will be undertaken during the bird breeding season (April to August inclusive) unless previously agreed in writing by the Planning Authority. If a request is made to the Planning Authority to undertake such works during the bird breeding season, then the ECoW or another suitably qualified surveyor will carry out pre-construction breeding bird surveys prior to commencement of works, to locate active nests and to inform how works can best be progressed to avoid disturbance. Any active nests will be cordoned off to a suitable distance (agreed in consultation with NatureScot) and construction operations delayed within the cordon until the young have successfully

fledged or breeding had failed. The ECoW will carry out a watching brief during works

During the breeding season (April to August inclusive), construction will not take place along the section of access track between T4, T5 and T6, nor installation of the turbine at T5, before 15th May. Construction may only commence within the aforementioned areas from 15th May onwards if pre-construction surveys by the ECoW or another suitably qualified surveyor indicate that the closest red-throated diver lochan is not occupied. If the lochan is occupied, construction of the aforementioned infrastructure will commence only after the breeding attempt is completed (young fledged) or has failed, or if no eggs are laid by 15th July.

During the breeding season (April to August inclusive) construction will not take place along the section of access track between T2 and T4 nor installation of the turbines at T3 and T4 before 15th May. Construction may only commence within the aforementioned areas from  $15^{th}$  May onwards if pre-construction surveys by the ECoW or another suitably qualified surveyor indicate that there is no occupied hen harrier nest site within 500 m. If nests are found within 500 m, construction of the aforementioned infrastructure will commence only after the breeding attempt is completed (young fledged) or has failed. Works may commence from  $15^{th}$  May if there are nests at 500 m - 750 m, but these nests will be monitored by the ECoW and the works would cease if disturbance was observed.

During the breeding season (April to August inclusive) construction will not take place along the section of access track between T2 and T4 nor installation of the turbines at T3 and T4 before 15th May. Construction may only commence within the aforementioned areas from  $15^{th}$  May onwards and only if pre-construction surveys by the ECoW or another suitably qualified surveyor indicate that there is no occupied short-eared owl site within 300 m. If an occupied site is found within 300 m, construction of the aforementioned infrastructure will commence only after the breeding attempt is completed (young fledged) or has failed. Works may commence from 15th May if there are occupied sites at 300 m - 500 m, but these sites will be monitored, and the works would cease if disturbance was observed.

Reason: in the interests of nature conservation.

### 21. Written Scheme of Archaeological Investigation

No development shall commence until a Written Scheme of Investigation (WSI) is submitted to, and approved in writing by, the Planning Authority. The WSI will set out watching brief mitigation works and will make provision for sampling of peat deposits that may contain paleoenvironmental remains. The development shall thereafter be delivered in accordance with the approved plan.

Reason: to protect and/or record features of archaeological importance.

#### 22. Heritage Trail

No development shall commence until a plan is submitted to, and approved in writing by, the Planning Authority for the establishment of a way marked Heritage Trail within the site which will improve physical access to the Second World War heritage remains and will direct visitors from the Command Bunker to the selected heritage

assets on Wea Fea. The Heritage Trail shall thereafter be delivered in accordance with the approved plan.

Reason: to contribute towards compensating for the harm to the setting of these heritage assets.

#### 23. Recreation and Access Plan

No development shall commence until 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 temporary diversion of Core Path H7, new infrastructure and upgrades to Core Path H7 within the site, and how that would be maintained in perpetuity. Thereafter the plan shall be implemented in full.

Reason: to ensure that satisfactory public access is maintained.

#### 24. Aviation

No development in respect of this planning permission shall take place unless and until the developer has provided written confirmation to the Ministry of Defence the anticipated date of commencement and completion of construction; the maximum height above ground level of the construction equipment and the position of each wind turbine in latitude and longitude. At the same time, the developer shall confirm to the Planning Authority that this has been undertaken.

Reason: in the interests of aviation safety.

## 25. Shadow Flicker

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 15 of the EIA Report, 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 approved through the protocol shall be implemented.

Reason: in the interests of residential amenity.

### 26. Noise (relating to Operation Phase)

The rating level of noise immissions from the combined effects of any wind turbine or turbines lawfully developed as described below (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 its 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 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 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 Planning Authority.
- c) Within 21 days from receipt of a written request from the 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 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 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 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 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 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 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 Planning Authority for the complainant's dwelling.
- f) The wind farm operator shall provide to the 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 Planning Authority for compliance measurements to be made under

paragraph (c), unless the time limit is extended in writing by the 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 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 Planning Authority.
- h) In the event that the developer claims that one or more noise sensitive receptors are subject to a direct financial involvement in the development approved under this application, and therefore the noise sensitive receptor should be subject to the higher noise limits for such financially involved noise sensitive receptors as described in ETSU-R-97 The Assessment and Rating of Noise from Wind Farms, the developer shall provide evidence of such financial involvement for the approval of the Planning Authority and thereafter shall provide evidence of the ongoing nature of the financial involvement within 21 days of a written request from the Planning Authority.

Reason: to avoid unacceptable noise effects in the interests of residential amenity.

# Noise limits from any lawfully developed turbines under application 20/313/TPPMAJ

Table 1 – Between 07:00 and 23:00 – Noise limits expressed in dB LA90,10-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.

DAYTIME - DERIVED RESIDUAL NOISE LIMITS		Wind Speed m/s							Notes		
Derived limit, assuming "cautious prediction" (+2 dB added to existing levels) / 10 dB below		4	5	6	7	8	9	10	11	12	
overall limit where no headroom available	NSR ID	Level, dBL <sub>A90</sub>									
Rysa Mill	NSR1	39.9	39.9	39.9	39.9	39.9	39.9	39.9	41.2	42.4	
The Noddle		39.9	39.9	39.9	39.9	39.9	39.9	39.9	41.2	42.4	1
Scews	NSR3	39.9	39.9	39.9	39.9	39.8	39.8	39.8	41.1	42.3	
Little Scews	NSR4	39.8	39.8	39.8	39.8	39.8	39.7	39.7	41.1	42.3	
Summer Cleary	NSR5	39.8	39.8	39.8	39.8	39.8	39.7	39.7	41.1	42.3	
Moorlands	NSR6	39.6	39.6	39.6	39.6	39.5	39.3	39.3	40.8	42.1	
Thurvoe	NSR7	39.5	39.5	39.5	39.5	39.4	39.2	39.2	40.7	42.0	
Haybrake Farm	NSR8	39.7	39.7	39.7	39.7	39.6	39.5	39.5	40.9	42.1	
Treetops bungalow	NSR9	39.7	39.7	39.7	39.7	39.6	39.5	39.4	40.9	42.1	Limit derived using
Lyness Hotel	NSR10	39.6	39.6	39.6	39.6	39.5	39.4	39.4	40.8	42.1	available headroom across full range of
Unknown property	NSR11	39.6	39.6	39.6	39.6	39.5	39.4	39.4	40.8	42.1	
2 Chalet	NSR12	39.5	39.5	39.5	39.5	39.3	39.1	39.1	40.7	42.0	wind speeds
1 Chalet	NSR13	39.4	39.4	39.4	39.4	39.3	39.1	39.1	40.6	41.9	
Ore Farm	NSR14	37.0	37.0	37.0	37.0	37.0	37.0	40.0	44.4	47.7	
Halla	NSR15	39.1	39.1	39.0	38.9	38.3	37.6	40.0	44.4	47.7	
Old Kirk	NSR16	39.2	39.2	39.1	39.0	38.4	37.8	40.1	44.4	47.7	
Old School House	NSR17	39.3	39.3	39.2	39.1	38.6	38.1	40.3	44.5	47.8	
North Walls Schoolhouse	NSR18	39.4	39.3	39.2	39.1	38.6	38.0	40.2	44.4	47.8	
Dunfarmin	NSR19	39.8	39.8	39.8	39.8	39.7	39.6	40.5	43.6	46.5	
Upper Seatter	NSR20	39.8	39.8	39.8	39.8	39.7	39.7	40.5	43.6	46.5	

Table 2 – Between 23:00 and 07:00 – Noise limits expressed in dB LA90,10-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.

NIGHT-TIME - DERIVED RESIDUAL											Notes
NOISE LIMITS		Wind Speed								Notes	
Derived limit, assuming "cautious prediction" (+2 dB added to existing levels)	NSR ID	4	5	6	7	8 evel, dBL	9	10	11	12	
Rysa Mill	NSR1	43.0	43.0	43.0	43.0	43.0	42.9	42.9	42.9	42.9	1
The Noddle	NSR2	43.0	43.0	43.0	43.0	42.9	42.9	42.9	42.9	42.9	1
Scews	NSR3	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	1
Little Scews	NSR4	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	1
Summer Cleary	NSR5	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	
Moorlands	NSR6	42.8	42.8	42.8	42.8	42.7	42.7	42.7	42.7	42.7	
Thurvoe	NSR7	42.8	42.8	42.8	42.8	42.7	42.6	42.6	42.6	42.6	
Haybrake Farm	NSR8	42.8	42.8	42.8	42.8	42.8	42.7	42.7	42.7	42.7	Limit derived
Treetops bungalow	NSR9	42.8	42.8	42.8	42.8	42.8	42.7	42.7	42.7	42.7	using
Lyness Hotel	NSR10	42.8	42.8	42.8	42.8	42.8	42.7	42.7	42.7	42.7	available
Unknown property	NSR11	42.8	42.8	42.8	42.8	42.8	42.7	42.7	42.7	42.7	headroom
2 Chalet	NSR12	42.7	42.7	42.7	42.7	42.7	42.6	42.6	42.6	42.6	across full
1 Chalet	NSR13	42.7	42.7	42.7	42.7	42.6	42.6	42.6	42.6	42.6	range of wind
Ore Farm	NSR14	41.7	41.7	41.7	41.7	41.7	41.7	41.8	45.8	48.9	Specias
Halla	NSR15	42.6	42.6	42.5	42.5	42.3	42.0	41.8	45.8	48.9	
Old Kirk	NSR16	42.6	42.6	42.6	42.5	42.3	42.0	41.8	45.8	48.9	
Old School House	NSR17	42.7	42.6	42.6	42.6	42.4	42.1	42.0	45.9	48.9	
North Walls Schoolhouse	NSR18	42.7	42.7	42.6	42.6	42.4	42.1	41.9	45.8	48.9	
Dunfarmin	NSR19	42.9	42.9	42.9	42.9	42.9	42.8	42.8	44.7	47.2	]
Upper Seatter	NSR20	42.9	42.9	42.9	42.9	42.9	42.8	42.8	44.7	47.2	

In the event that the developer provides evidence to the satisfaction of the Planning Authority under condition h) above that the Occupier(s) of any other addresses subject to the above noise limits has an ongoing direct financial involvement in the development approved under this planning application then the overall noise limit applicable at such properties may be 45.0 dBLA90,10minutes, or the background + 5 dB, whichever is the higher, accounting for contribution of cumulative turbines existing or consented prior to the consent of the development.

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

Property	Easting	Northing			
Rysa Mill	329970	995448			
The Noddle	330004	995375			
Scews .	330022	995111			
Little Scews	330045	994879			
Summery Cleary	330333	994894			
Moorlands	330076	994491			
Thurvoe	330039	994439			
Haybrake Fm	330482	994495			
Treetops bungalow	330408	994509			
Lyness Hotel	330407	994458			
Unknown property	330511	994410			
2 Chalet	330423	994320			
1 Chalet	330416	994290			
Ore Farm	330452	993546			
Halla	330664	992954			
Old kirk	330662	992893			
Old School House	330660	992847			
North Walls Schoolhouse	330698	992818			
Dunfarmin	330746	992273			
Upper Seatter	329810	992062			

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 EN60651/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: 1997 (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 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 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 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 Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format. Other data formats may be agreed with the Planning Authority, as appropriate.

#### 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 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 ETSUR- 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) A least squares "best fit" linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.
- (f) The tonal penalty is derived from the margin above audibility of the tone according to the figure 17 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 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 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:

$$L_1 = 10 \log \left[ 10^{\frac{L_2}{10}} - 10^{\frac{L_3}{10}} \right]$$

- (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 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 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.

# 27. Maintenance, enhancement and interpretation of the Formal Naval Headquarters Building

Prior to the first turbine being erected on site, a plan for the maintenance, enhancement and interpretation of the former naval headquarters building on Wee Fea shall be submitted to and approved in writing by the planning authority. The plan shall detail measures to be carried out by the developer to ensure the long-term future of this listed building and to provide better public access to and/or interpretation of it. Once approved, the plan shall be implemented in full.

Reason: to secure the future prospects of this nationally important building improve and its contribution to an observer's understanding, appreciation and experience in mitigation for the effects of the approved development.

## 28. Dragonfly pools creation

Prior to the first turbine being erected on site a plan shall be submitted to and approved in writing by the planning authority providing details of dragonfly pools, to be created by the developer in order to provide new dragonfly habitat and replacement habitat for any pools that are destroyed as part of the approved development. Larvae from any destroyed pools shall be relocated to the new pools in order to maintain the population. In order to promote better public access to any understanding of the dragonfly and damselfly species that inhabit the application site, this pool creation project should incorporate boardwalk access. Once the details of the project have been approved by the planning authority they shall be completed in accordance with the approved details prior to erection of the sixth turbine on the site.

Reason: to recognise the site's importance to dragonfly and damselfly