

Planning Committee Report LA01/2017/1124/F	27th June 2018
PLANNING COMMITTEE	

Linkage to Council Strategy (2015-19)	
Strategic Theme	Protecting and Enhancing our Environment and Assets
Outcome	Pro-active decision making which protects the natural features, characteristics and integrity of the Borough
Lead Officer	Development Management & Enforcement Manager
Cost: (If applicable)	N/a

<u>No:</u> LA01/2017/1124/F	<u>Ward:</u> DRUMSURN
<u>App Type:</u> Full Planning	
<u>Address:</u> Craiggore Wind Farm in the townlands of Moneyguiggy and Craiggore Forest, Belraugh Road, Garvagh	
<u>Proposal:</u> Proposed amendment to the overall tip height of the consented Craiggore Wind Farm (B/2012/0268/F) to 140m; with blade lengths up to 46m and hub height up to 95m. No other amendments are proposed to the already consented wind farm	
<u>Con Area:</u> n/a	<u>Valid Date:</u> 03.08.2017
<u>Listed Building Grade:</u> n/a	
<u>Agent:</u> Renewable Energy Systems Limited, Willowbank Business Park, Willowbank Road, Millbrook, Larne, BT40 2SF	
<u>Applicant:</u> Renewable Energy Systems Limited, Willowbank Business Park, Willowbank Road, Millbrook, Larne, BT40 2SF	
<u>Objections:</u> 0	<u>Petitions of Objection:</u> 0
<u>Support:</u> 0	<u>Petitions of Support:</u> 0

Drawings and additional information are available to view on the Planning Portal- www.planningni.gov.uk

1.0 RECOMMENDATION

1.1 That the Committee has taken into consideration and agrees with the reasons for the recommendation set out in section 9 and the policies and guidance in sections 7 and 8 and resolves to **APPROVE** planning permission subject to the conditions set out in section 10.

2.0 SITE LOCATION & DESCRIPTION

2.1 The site is located within the townlands of Moneyguiggy and Craiggore Forest, Belraugh Road, Garvagh. The site lies within the lower central section of the Binevenagh Landscape Character Area (LCA 36). This is an expansive moorland landscape, dominated by a large-scale mosaic of rough pasture, bog and conifer plantations.

2.2 The site itself is located on an area of rough grazing pastures and commercial forest. The site has extant approval for a wind farm consisting of 10 turbines.

3.0 RELEVANT HISTORY

3.1 Craiggore Wind Farm B/2012/0268/F – 10 turbines – Approved 05 March 2015

4.0 THE APPLICATION

4.1 The proposal is for an amendment to the overall tip height of the consented Craiggore Wind Farm from 125m to 140m. No other amendments are proposed and the footprint of the wind farm will remain the same.

4.2 Each turbine will have a hub height not exceeding 95m and blade diameter not exceeding 46m. The associated access

tracks, underground cabling, crane hardstandings, control building, substation and permanent meteorological mast have all been approved under the previous application.

- 4.3 Each turbine will have a generational capacity of up to 3.45MW, giving a combined generation capacity of up to 34.5MW. In accordance with The Planning (Development Management) Regulations (Northern Ireland) 2015, applications which exceed 30MW are considered to be 'Major Developments prescribed for the purpose of section 26(1) of the Planning Act (Northern Ireland) 2011.
- 4.4 Section 26 requires the applicant to consult with the 'Department' regarding the submission of the proposed application. The Department, in this case, considered that the proposal was not of regional significance and would not involve a substantial departure from the local development plan and therefore the application should be submitted to the appropriate Council. A notice to this effect served under section 6 accompanied the application.
- 4.5 Micrositing was approved under the extant application, however, the micrositing capability has been removed.

Design & Access Statement

- 4.6 A Design & Access Statement is required under Article 6 of the Planning (General Development Procedure) Order (NI) 2015 as the application is considered to be a major application.
- 4.7 The design and access statement is to provide details of the design principles and concepts that have been applied to the development and how issues relating to access to the development have been dealt with.
- 4.8 The report demonstrates that the applicant undertook significant consideration of the siting and design of the wind turbines and ancillary development giving regard to the land form, topography, and environmental/locational constraints. This

involved detailed assessment of the site and early discussions with consultees to provide an acceptable scheme prior to submission of an application.

- 4.9 It is accepted that due to the inherent design characteristics of wind farms and for health and safety that there will be no requirement for access for those with disabilities onto the site.

5.0 PUBLICITY & CONSULTATIONS

External

- 5.1 Three neighbours were identified for notification within the terms of the legislation. The application was advertised on 20th September 2017 in the local papers. There are no objections to this proposal from members of the public.

Internal

- 5.2 See appendix 1 for details of consultations carried out and the responses provided. Within this there are no outstanding issues and no objections.

Proposal of Application Notice

- 5.3 As this application is considered a major application it must comply with the Proposal of Application Notice and carry out community consultation at least 12 weeks prior to the submission of the application.
- 5.4 A Proposal of Application Notice was submitted on 1st December 2016 under LA01/2016/1477/PAN. The applicant advised that they intended to undertake the following forms of consultation:
- Press notice of the public event and where further information could be obtained
 - Staffed public exhibition with information boards
- 5.5 The public event was to be held on 31st January in Garvagh Community Building, Garvagh. Prior to this a press notice

advertising the public exhibition was to be published in two local newspapers on 24th January 2017.

Community Consultation Report

- 5.6 The community consultation report was submitted as part of the planning application, received on 3rd August 2017 which is more than 12 weeks after the Proposal of Application Notice was received, as required by the legislation.
- 5.7 It contained the methods of consultation carried out and the comments and feedback from this exercise. The report demonstrates that the consultation was carried out as agreed in the Proposal of Application Notice.
- 5.8 The event was advertised in two local newspapers and local councillors were invited to attend the event. Only one person attended the event. Questionnaire and enquiry forms were available at the event but none were filled in. One comment was entered in the sign in book saying 'very informative'. No issues were raised.

6.0 MATERIAL CONSIDERATIONS

- 6.1 Section 45(1) of the Planning Act (Northern Ireland) 2011 requires that all applications must have regard to the local plan, so far as material to the application, and all other material considerations. Section 6(4) states that in making any determination where regard is to be had to the local development plan, the determination must be made in accordance with the plan unless material considerations indicate otherwise.
- 6.2 The development plan is the Northern Area Plan 2016 (NAP) and the site falls within Landscape Character Area (LCA) 36 – Binevenagh which has been assessed to have a high to medium landscape sensitivity to impact from wind turbine development.
- 6.3 The site is not within any European designations.

- 6.4 The Regional Development Strategy (RDS) is a material consideration.
- 6.5 The Strategic Planning Policy Statement for Northern Ireland (SPPS) is a material consideration. As set out in the SPPS, until such times as both a new local plan strategy is adopted, councils will apply specified retained operational policies.
- 6.6 Due weight should be given to the relevant policies in the development plan.
- 6.7 The extant planning approval B/2012/0268/F is also a material consideration.
- 6.8 All material considerations and any policy conflicts are identified in the “Considerations and Assessment” section of the report.

7.0 RELEVANT POLICIES & GUIDANCE

The Northern Area Plan 2016

Strategic Planning Policy Statement (SPPS)

Planning Policy Statement 2: Natural Heritage

Planning Policy Statement 3: Access, Movement and Parking

Planning Policy Statement 6: Planning, Archaeology and The Built Heritage

Planning Policy Statement 18: Renewable Energy

Planning Policy Statement 18: Renewable Energy – Best Practice Guidance

Planning Policy Statement 18: Renewable Energy – Supplementary Planning Guidance – Wind Energy Developments in Northern Ireland’s Landscapes

Supplementary Guidance

8.0 CONSIDERATIONS & ASSESSMENT

8.1 The main considerations in the determination of this application relate to: the principle of development; impact on public safety, human health, residential amenity, visual amenity, landscape character, biodiversity, nature conservation, and local natural resources.

Principle of development

- 8.2 The aim of the SPPS in relation to renewable energy is to facilitate the siting of renewable energy generating facilities in appropriate locations in order to achieve Northern Ireland's renewable energy targets. It advises that the Council should take account of the proposal's contribution to the wider environmental benefits along with consideration of impact on health, safety and amenity, visual impact and landscape character, impact on biodiversity, habitat and built heritage, natural resources, public access to the countryside and future decommissioning. These considerations are discussed in detail below.
- 8.3 The principle for a windfarm on this site has been established through the granting of planning permission B/2012/0268/F. This application is seeking to increase the maximum tip height of the approved turbines from 125m to 140m.
- 8.4 The Northern Area Plan 2016 is silent on the matter of wind farm development in this area.

HRA

- 8.5 The potential impact of this proposal on Special Protection Areas, Special Areas of Conservation and Ramsar sites has been assessed in accordance with the requirements of Regulation 43 (1) of the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended). The proposal does not fall within, site adjacent to, or is hydrologically linked to, any European sites, therefore it would not be likely to have a significant effect on the features of any European site.

EIA consideration

- 8.6 The proposal is a subsequent application in relation to a Schedule 2 development. The proposal has not been subject to EIA determination and is not accompanied by an Environmental Statement, however, the original application (B/2012/0268/F) was accompanied by an Environmental Statement.
- 8.7 The Council considers that the environmental information previously submitted in relation to the original application is adequate to assess the significant effects of the development on the environment and shall take that information into consideration in its decision for current consent. This is in accordance with Regulation 13 of The Planning (Environmental Impact Assessment) Regulation (NI) 2017.
- 8.8 Although the applicant did not submit a new Environmental Statement, they submitted new visuals to show the impact of the proposed turbines on the landscape. Since the submission of the visuals, the rotor diameter has been further reduced and no new visuals have been submitted to reflect the final changes. However, it is considered that the submitted visuals are adequate to assess the proposal as the tip height will remain the same and the rotor diameter will be smaller.

Consideration of Planning Policy Statement 18 – Renewable Energy and the Strategic Planning Policy Statement for Northern Ireland

- 8.8 Both the SPPS and policy RE1 of PPS 18 require that all renewable energy development, associated buildings and infrastructure will not result in an unacceptable adverse impact on:

(a) public safety, human health, or residential amenity;

Public safety

- 8.9 The policy states that supplementary planning guidance '*Wind Energy Development in Northern Ireland's Landscapes*' (Best

Practice Guidance) will be taken into account in assessing all wind turbine proposals.

- 8.10 Section 1.3.54 of the Best Practice Guidance to PPS18 requires that the turbines should be set back at least fall over distance plus 10% from the “edge of any public road”, right of way or railway line. The maximum base to tip height in this proposal is 140m which constitutes the fall over distance, therefore the fall over distance plus 10% is 154m. All turbines should be least 154m back from the public road. The closest turbine to Belraugh Road is 154m from the road edge which is acceptable.
- 8.11 In relation to safety, paragraph 1.3.52 of the Best Practice Guidance states that *‘for wind farm development the best practice separation distance of 10 times rotor diameter to occupied property should comfortably satisfy requirements’*. No minimum distance is specified. Whilst the guidance acknowledges that wind turbines are a safe technology, it still stipulates a separation distance as there is still the potential for failure and injury. In this instance the maximum rotor diameter is 92m which equates to a separation distance of at least 920m.
- 8.12 There are 4 properties within 920m of a proposed turbine. One dwelling, identified by the applicant as H10, is under the applicant’s control and will remain vacant throughout the lifetime of the project therefore it will not be taken into consideration in the assessment of this application. This leaves 3 dwellings within the 920m separation distance for safety. The shortfall varies from 19m to 51m.
- 8.13 The original approval (B/2012/0268/F), which is a material consideration, had a maximum rotor diameter of 90m and therefore a separation distance of 900m. Two dwellings fell within the 900m, however, this was deemed to be acceptable. The increase in rotor diameter of 2m brings one more dwelling within the separation distance, which is considered to be acceptable as the shortfall in this instance is only 19m whereas

the previous shortfalls which were deemed acceptable under B/2012/0268/F were 17m and 31m.

Human Health

- 8.14 There is no indication from any consultees or allegations from objectors that the proposed development will result in any detriment to human health.

Residential Amenity

- 8.15 Policy RE1 stipulates that a separation distance of 10 times rotor diameter, with a minimum distance not less than 500m, will generally apply.” In this case the turbines proposed have a maximum rotor diameter 92m therefore a separation distance of 920m from any occupied property.
- 8.16 With regard to amenity, the policy uses the term ‘generally apply’ to allow an element of discretion for properties, like H10, which are under the control of the developer or have a financial interest, for properties that may have a shortfall of only a few metres, and where noise or shadow flicker has been assessed as being acceptable.
- 8.17 As highlighted above, 3 properties have been identified as being within 920m of a proposed turbine. With regard to noise, Environmental Health (EHO) had no objections to the noise assessment submitted. They have indicated that they are content with the proposed noise levels predicted at sensitive receptors and as such have no objection subject to conditions being applied in the event of an approval.
- 8.18 Even though 3 dwellings all fall within the 920m separation distance, the evidence submitted in the noise assessment shows that noise will not have an unacceptable detrimental impact on residential amenity and is therefore acceptable.
- 8.19 With regard to shadow flicker, the Best Practice Guidance states that at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low. The applicant has

indicated that there are 3 dwellings within this distance and therefore have the potential to be affected by shadow flicker.

8.20 The guidance also states that for dwellings within 500m, shadow flicker should not exceed 30 hours per year or 30 minutes per day. There are no dwellings within 500m. The guidance does not give figures for what is deemed an acceptable amount of time for shadow flicker for dwellings outside 500m.

8.21 Figures have been provided for the worst case scenario for potential shadow figure, 10 of the properties listed fall have the potential to exceed the limits set out in the best practice guide. However, they are all outside the guidance distance of 500m. Taking this into consideration, along with the proposed mitigation measures, the topography and vegetation cover in the area (which may screen houses from potential shadow flicker) and the fact that actual shadow flicker instances will be lower than the worst case scenario figures presented, it is considered that shadow flicker will not present an unacceptable impact on residential amenity.

8.22 In terms of visual amenity on the residents in proximity to the site, it is not considered that the increase in tip height would have an over bearing impact due to the siting of the turbines and the topography of the area.

(b) visual amenity and landscape character;

8.23 The principal of a windfarm on this site has been established under B/2012/0268/F. The visual impact of the windfarm on the landscape was deemed acceptable. The consideration now falls to the impact of the increased tip height on visual amenity.

8.24 The tip height of the proposed turbine will result in a 15m increase from what was approved under B/2012/0268/F. It is not considered that the increase in tip height would have any more of an impact than what was originally approved in terms of this landscape and the particular context of the turbines.

- 8.25 Consideration was taken of the views from the dwellings in proximity to the site, particularly those on the 4 roads encircling the site, Belraugh Road, Kilhoyle Road, Gortnarney Road and Temain Road. Due to the topography of the land and existing vegetation, views of the site from these dwellings are restricted. With particular regard to Kilhoyle Road, where the main bulk of the dwellings are located, the land rises steeply to the rear of the dwellings therefore screening the site from view. It is not considered that there would be an unacceptable detrimental impact on the visual amenity of these dwellings.
- 8.26 With regard to views from public roads, again, given the topography of the land, critical views of the site are restricted mainly to Belraugh Road. The topography of the land limits views from the west and south to long range views. There will also be long range views to the east. The increase in height over these long range views are not so detrimental as to warrant a refusal in this particular case.

(c) biodiversity, nature conservation or built heritage interests;

- 8.27 No issues have been raised by any of the consultees. It is not considered that the proposal will have any detrimental impacts on biodiversity, nature conservation or built heritage.

(d) local natural resources, such as air quality or water quality; and

- 8.28 Due to the nature of the development there will be limited impact on air quality except for dust suppression upon construction.
- 8.29 No issues regarding ground or surface water have been identified. The site is hydrologically linked to the River Roe ASSI and SAC however, proposed mitigation measures contained within the ES will reduce the risk of pollution, caused by runoff from the development, having a detrimental impact to the aquatic environment or the features of the designated sites.

(e) public access to the countryside.

8.30 The site in question is not publicly owned land and as such public access to the site upon the construction of the proposed development will be no different than before, that is, access to the land will depend on the landowners consent.

PPS 18 Requirements for Wind Development

8.31 In RE1 of PPS 18 applications for wind energy development will also be required to demonstrate all of the following:

(i) that the development will not have an unacceptable impact on visual amenity or landscape character through: the number, scale, size and siting of turbines;

8.32 As discussed above, it is considered that there will be no unacceptable impact on visual amenity or landscape character.

(ii) that the development has taken into consideration the cumulative impact of existing wind turbines, those which have permissions and those that are currently the subject of valid but undetermined applications;

8.33 Due to the proximity of the proposed windfarm to the existing windfarm at Rigged Hill, the proposal and the cumulative impact on the landscape is evident but not so significant as to warrant a refusal for the proposal.

(iii) that the development will not create a significant risk of landslide or bog burst;

8.34 The Environmental Statement (submitted under B/2012/0268/F) proposes general guidance methods and practices which should help reduce peatslide risk. These methods were accepted by Geological Survey NI (GSNI).

(iv) that no part of the development will give rise to unacceptable electromagnetic interference to communications installations; radar or air traffic control systems; emergency services communications; or other telecommunication systems;

8.35 There consultees have advised that the development will not give rise to unacceptable interference to communication installations, emergency services communications or other telecommunications systems.

(v) that no part of the development will have an unacceptable impact on roads, rail or aviation safety;

8.36 City of Derry Airport (CDA) was consulted as the site lies within 30km of it. CDA have no concerns over aviation safety and have no objection to the proposal.

8.37 DfI Roads have no objection to the proposal and no issues have been raised regarding road safety.

8.38 The Civil Aviation Authority have no objection to the proposal. They have advised that the applicant will need to report the structures to the Defence Geographic Centre (DGC) so that they can be charted on aviation maps as the turbines will be higher than 91.4m above ground level.

(vi) that the development will not cause significant harm to the safety or amenity of any sensitive receptors (including future occupants of committed developments) arising from noise; shadow flicker; ice throw; and reflected light; and

8.39 As discussed above, EHO have no objections to the noise levels predicted within the submission and would be content for noise to be managed by condition in the event of any approval.

8.40 Shadow flicker has also been assessed above and was deemed to be within acceptable limits. The applicant advises that due to the semi-matte finish of the turbine, the convex surfaces and the differing orientations of rotor directions, it is highly unlikely that reflected light will arise.

8.41 Paragraph 1.3.79 of the Best Practice Guidance advises that ice throw is unlikely in Northern Ireland and as such limited consideration has been given to this.

(vii) that above-ground redundant plant (including turbines), buildings and associated infrastructure shall be removed and the site restored to an agreed standard appropriate to its location.

8.42 The removal of the turbines and any of the associated infrastructure will be dealt with by condition if approved. Ongoing restoration of the site will be dealt with in the Final Habitat Management Plan which will be submitted if the application is approved.

Development on Active Peatland

8.43 There is no development proposed on active peatland.

Habitat Management Plan

8.44 Policy RE1 of PPS 18 also requires that the application includes mitigation measures to avoid damage during construction, operation and decommissioning. Policy NH5 of PPS 2 also states that appropriate mitigation and/or compensatory measure will be required. Details of mitigation measures were included in the ES submitted under B/2012/0268/F which are considered to be acceptable and any approval will be conditioned with the requirement for the submission of a full CEMP and its agreement prior to the commencement of the development.

9.0 CONCLUSION

9.1 This proposal is considered acceptable in this location having regard to the Area Plan and other material considerations. The application is for an increase in tip height, from 125m to 140m to an already approved windfarm which must be given significant weight. It is considered that the proposal will not have a detrimental impact on the residential amenity of the dwellings in proximity to the site or on the visual amenity of the surrounding landscape significantly beyond that of the original approval. Therefore, the proposed nature and scale of the proposal is

considered acceptable having regard to the policy guidance set out in policy RE1 of PPS18 and the SPPS.

10.0 CONDITIONS AND INFORMATIVES

Conditions

1. As required by Article 34 of the Planning (Northern Ireland) Order 1991, the development hereby permitted shall be begun before the expiration of 5 years from the date of this permission.

Reason: Time limit.

2. No site works of any nature or development shall take place until a programme of archaeological work has been implemented, in accordance with a written scheme and programme prepared by a qualified archaeologist, submitted by the applicant and approved by the Council. The programme should provide for the identification and evaluation of the archaeological remains within the site, for mitigation of the impacts of the development through excavation recording or by preservation of remains and for the preparation of an archaeological report.

Reason: To ensure that archaeological remains within the application site are properly identified and protected or appropriately recorded.

3. Access shall be afforded to the site at all reasonable times to any archaeologist nominated by the Council to observe the operations and to monitor the implementation of archaeological requirements.

Reason: To monitor programmed works in order to ensure that identification, evaluation and appropriate recording of any archaeological remains, or any other specific work required by condition or agreement, is completed in accordance with the approved programme.

4. All above ground structures shall be dismantled and removed from the site 25 years from the date when the wind farm is commissioned to the electricity grid or shall be removed if electricity generation has ceased on site for a period of 12 months (unless further consent has been granted). The land shall be restored in accordance with an agreed scheme to be submitted to the Council at least one year prior to the commencement of any decommissioning works. This scheme shall include details of all works and measures to restore the site, the timeframe within which the works shall be carried out along with proposals for aftercare for a period of 3 years after completion of the restoration works.

Reason: To ensure the development is decommissioned in a manner that protects the ecology and hydrology of the site beyond the life span of the windfarm.

5. The vehicular access, including visibility splays and any forward sight distance, shall be provided in accordance with Drawing No. 04(Rev A), 07 (Rev A) and the Department's DC(1) received on 15 May 2013 and stamped approved 15th March 2015 under reference B/2012/0268/F, prior to the commencement of any other development hereby permitted. The area within the visibility splays and any forward sight line shall be cleared to provide a level surface no higher than 250mm above the level of the adjoining carriageway and such splays shall be retained and kept clear thereafter.

Reason: To ensure there is a satisfactory means of access in the interests of road safety and the convenience of road users.

6. The gradient of the access road shall not exceed 4% (1 in 25) over the first 10 m outside the road boundary.

Reason: To ensure there is a satisfactory means of access in the interests of road safety and the convenience of road users.

7. Effective vehicle wheel washing facilities shall be installed and operated for the duration of the construction period and any repair or remedial work periods thereafter.

Reason: To prevent the carry-over of mud or debris onto the public road in the interests of road safety and convenience.

8. A detailed programme of works and any required/associated traffic management proposals shall be submitted to and agreed in writing with the Council prior to the commencement of any element of road works.

Reason: To facilitate the convenient movement of all road users and the orderly progress of work in the interests of road safety.

9. No development activity (including ground preparation or vegetation clearance) shall take place until a Construction and Environmental Management Plan (CEMP) has been submitted to and agreed in writing with the Council. All works on site shall conform to the CEMP. The CEMP shall include the following:

- a) Spoil Management Plan, including identification of spoil storage areas.
- b) Details of site drainage, foul water disposal and silt management measures, including SuDS.
- c) Details of watercourse crossings.
- d) Details of the establishment of buffer zones to watercourses and medium or high peat slide risk areas.
- e) Details of the storage of equipment, materials and chemicals.
- f) Details of the refuelling of vehicles.
- g) Pollution Prevention Plan including details of cement and concrete batching and measures to prevent discharge of alkaline wastewaters. When concrete/cement is used concrete batching

shall not be permitted on site. Wet concrete operations shall not be carried out within watercourse buffers. Wastewater spillage to be minimised by using settling tanks and recycling water.

h) Appointment of a geotechnical engineer to approve access track construction and excavation and storage of peat prior to works commencing, and to supervise works on a regular basis.

Reason: To ensure implementation of mitigation measures identified within the Environmental Statement and to prevent likely significant effects on the River Roe and Tributaries Area of Special Scientific Interest (ASSI) and Special Area of Conservation (SAC).

10. No development activity (including ground preparation or vegetation clearance) shall take place until a Protected Species Management Plan (PSMP) has been submitted to and agreed in writing with the Council. All works on site shall conform to the PSMP. The PSMP shall include the following:

a) Details of further surveys for badgers and red squirrels prior to any works commencing, including each phase of tree felling or associated mechanical operations.

b) Halting of any works or tree felling should any squirrel dreys be found, until a mitigation strategy has been approved by NIEA.

c) Establishment and maintenance of badger protection zones with hi-viz badger protection fencing for the duration of any works at a distance of at least 25 metres from any sett entrances.

d) Any felling of trees within 25m badger protection zones to take place under the terms of an NIEA wildlife licence.

e) No trees to be allowed to fall within 25m badger protection zones.

- f) No construction works or storage of materials within 25m badger protection zones.
- g) No re-planting of forestry within 25m badger protection zones.
- h) No stump removal, mechanical piling or burning within 25m badger protection zones.
- i) Extraction and re-planting of forestry within 100m of badger setts to be supervised by an Ecological Clerk of Works (ECoW).
- j) Details of the management of bat buffer zones between turbines and forestry.

Reason: To mitigate for impacts on protected species using the site.

11. The areas for the temporary construction compound, temporary enabling works compound/wheel wash area and temporary crane hard standing areas as indicated on Drawing No. 04(Rev A) received by the Council on 15th May 2013 and stamped approved 5th March 2015 under B/2012/0268/F, shall be reinstated to their former condition within 12 months of the commencement of wind energy to the national grid. A report detailing the completion of these works shall be submitted to the Council within 12 months of the date supplied in compliance with Condition 22.

Reason: To ensure habitats are appropriately restored.

12. No development activity (including ground preparation or vegetation clearance) shall take place until a Forestry and Habitat Management Plan (FHMP) has been submitted to and agreed in writing with the Council. All works on site shall conform to the FHMP. The FHMP shall include:

- a) Revision of the Forestry Management Plan previously submitted under B/2012/0268/F to include;

- b) Details of mitigation for badgers in compliance with the Protected Species Management Plan;
- c) The inclusion of buffers to badger setts in Figure 2 and Table 5.1;
- d) Removal of oak from the broad leaf tree planting list in table 5.1;
- e) Felling operations to take place outside of the bird breeding season (March to August);
- f) Removal of tree planting from areas marked as homogenous blanket bog in Figure 7.4 of ES: Phase 1 Habitat Map;
- g) Full planting list of broadleaf trees to be provided with percentage cover;
- h) Details for retention and planting of broadleaf trees, including timescales;
- i) Details of the management of broadleaf planting and open space areas for biodiversity for the lifetime of the wind farm;
- j) Monitoring of the success of habitat management measures with monitoring reports produced for each phase of the development and submitted to the Council.

Reason: To prevent any likely significant effects on the River Roe and Tributaries Area of Special Scientific Interest (ASSI) and Special Area of Conservation (SAC) and to mitigate impacts of forestry operations and wind farm construction on the biodiversity of the site, including protected species and Northern Ireland priority habitats.

13. No development activity shall take place until a Bat Monitoring Method Statement has been submitted to and agreed in writing with the Council. This shall include details of the monitoring of

bat activity across the site post construction and bat carcass searches at selected turbines for the lifetime of the wind farm.

Reason: To monitor the impact of the proposal on bats.

14. No development activity shall take place until a person recognised by the Council as a suitably qualified and experienced person has been appointed as an Ecological Clerk of Works (ECoW) and the role and responsibilities of the ECoW agreed in writing with the Council. The ECoW shall supervise all works at regular intervals (details of which to be included in the appropriate plans to be submitted to the Council prior to the commencement of works).

Reason: To supervise implementation of mitigation measures to minimise impacts on habitats and species.

15. There shall be no tree felling operations or vegetation clearance during the bird breeding season (1 March to 31 August) in any year.

Reason: To protect breeding birds.

16. Prior to any works commencing between 1 March and 31 August in any year, a bird survey shall be carried out by a suitably experienced and competent ornithologist. The location of any active nests or breeding activity shall be recorded and appropriate mitigation measures, including buffer zones, shall be implemented to prevent disturbance to breeding birds. A report of the findings of the bird survey and a Mitigation Method Statement, showing buffers to active nests, shall be submitted to and agreed in writing with the Council. All works must conform to the agreed Mitigation Method Statement.

Reason: To protect breeding birds.

17. All works on site, between 1 March and 31 August in any year, shall be monitored on a weekly basis by a suitably experienced and competent ornithologist with the power to halt works. The

location of any active nests or breeding activity shall be recorded and appropriate mitigation measures, including buffer zones (to be agreed with the Council), shall be implemented to prevent disturbance to breeding birds. All monitoring, findings and mitigation measures shall be detailed in reports which shall be submitted in writing to the Council no later than mid June and mid September in any year.

Reason: To protect breeding birds.

18. No development activity shall take place until a Bird Monitoring Programme (BMP) has been submitted to and agreed in writing with the Council. The BMP shall include details of a programme of bird monitoring carried out by a suitably experienced and competent ornithologist, using appropriate survey methodology, in the year of construction (year 1) and in years 2, 3, 5 and 10. This shall include hen harrier breeding attempts within a 2km radius of the site and regular carcass searches to be carried out post construction. The ornithologist shall liaise with the Northern Ireland Raptor Study Group to obtain up to date breeding records of hen harriers in the area. A report of the findings of the monitoring shall be submitted to the Council within 6 months of the end of each monitoring year.

Reason: To monitor the impact of the proposal on sensitive bird species.

19. Taping streamers, markers or similar devices shall be attached along all guy wires at appropriate intervals on all met masts erected on site and these shall be maintained for the lifetime of the structures.

Reason: To reduce the risk of collision for bird species.

20. No development shall take place until details of the model of the turbine to be installed, its noise specification, colour and finish, have been submitted to and agreed in writing with the Council.

Reason: To ensure that wind turbines with excessive sound power levels are not installed.

21. The developer shall notify the Council in writing of the date of commencement of works on site and of the date when the turbines have become fully operational (supplying energy to the National Grid).

Reason: To ensure compliance with appropriate conditions.

22. The level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty when calculated in accordance with the procedures described on pages 104 - 109 of ETSU-R-97) shall not exceed values set out in tables 1 and 2 on page 28 of Supporting Information document received 3rd August 2017 and tables 3 and 4 below. Noise limits for any dwellings which lawfully exist or have planning permission for construction at the date of this consent but are not listed in the tables shall be represented by the physically closest location listed in the tables unless otherwise agreed by the Council.

Reason: To control the noise levels from the development at noise sensitive locations.

23. Within 6 months of the development first becoming fully operational the wind farm operator shall at his/her expense employ a suitably qualified and competent person to undertake a noise survey to assess the level of noise immissions from the wind farm. The duration of such monitoring shall be sufficient to provide comprehensive information on noise levels with all turbines operating across the range of wind speeds referred to in Condition 22 and covering a range of wind directions. Details of the noise monitoring survey shall be submitted to and agreed in writing with the Council prior to any monitoring commencing. The Council shall be notified not less than 2 weeks in advance of the date of commencement of the noise survey.

Reason: To assess compliance with noise immission limits as required by Condition No. 22.

24. Within 4 weeks of a written request by the Council, following a noise complaint from the occupant of a dwelling which lawfully exists or has planning permission at the date of this consent, the wind farm operator shall, at his/her expense employ a suitably qualified and competent person, to assess the level of noise immissions from the wind farm at the complainant's property following the procedures described in Pages 102-109 of ETSU-R-97. Details of the noise monitoring survey shall be submitted to and agreed in writing with the Council prior to any monitoring commencing. The Council shall be notified not less than 2 weeks in advance of the date of commencement of the noise monitoring.

Reason: To control the noise levels from the development at noise sensitive locations.

25. The wind farm operator shall provide to the Council the results, assessment and conclusions regarding the noise monitoring required by Conditions 24 or 25, including all calculations, audio recordings and the raw data upon which that assessment and conclusions are based. Such information shall be provided within 9 months of the wind farm becoming fully operational in respect of condition 23, or within 3 months of the date of the written request of the Council under condition 24 unless, in either case, otherwise extended in writing by the Council.

Reason: To control the noise levels from the development at noise sensitive locations.

26. Wind speed, wind direction and power generation data shall be continuously logged throughout the period of operation of the wind farm. This data shall be retained for a period of not less than 12 months. At the request of the Council, the recorded wind data, standardised to 10m height above ground level and relating to any periods during which noise monitoring took place

or any periods when there was a specific noise complaint, shall be made available to it.

Reason: To facilitate assessment of monitoring exercises and complaint investigation.

27. Within 4 weeks from receipt of a written request from the Council, following an amplitude modulation (AM) complaint to it from the occupant of a dwelling which lawfully exists or has planning permission at the date of this consent, the wind farm operator shall submit a scheme for the assessment and regulation of AM to the Council for its written approval. The scheme shall be in general accordance with:

- Any guidance endorsed in National or Northern Ireland Planning Policy or Guidance at that time, or in the absence of endorsed guidance,
- Suitable published methodology endorsed as good practice by the Institute of Acoustics; or in the absence of such published methodology,
- The methodology published by Renewable UK on the 16th December 2013;

and implemented within 3 months of the written request of the Council unless otherwise extended in writing by the Council.

Reason: To control the levels of AM from the development at noise sensitive locations.

28. Construction work, which is audible at any noise sensitive property outside the site, shall only take place between the hours of 07.00 - 19.00 hours on Monday to Friday, 07.00 - 13.00 hours on Saturday with no such working on Sunday. Outwith these hours, work at the site shall be limited to turbine erection, testing/commissioning works, emergency works, or construction work that is not audible at any noise sensitive property.

Reason: To control noise levels from construction noise at noise sensitive locations.

Informatives

1. For guidance on the preparation of the Written Scheme and Programme of Archaeological Work, which should be submitted for approval at least 4 weeks before work is due to begin, contact:
NIEA Historic Environment Division
Causeway Exchange
1-7 Bedford Street
Town Parks
Belfast
BT2 7EG
Tel: 028 9082 3100
Quote Ref: SM11/1 LDY 17:02

2. Application for the excavation licence, required under the Historic Monuments and Archaeological Objects (NT) Order 1995 should be submitted at least 3 weeks before work is due to begin, by a qualified archaeologist responsible for the project to:-
NIEA Historic Environment Division Excavation Licensing
Causeway Exchange
1-7 Bedford Street
Town Parks
Belfast
BT2 7EG

3. Discharge Consent, issued under the Water (Northern Ireland) Order 1999, is required for any discharges to the aquatic environment. Any proposed discharges not directly related to the construction of the proposal, such as from septic tanks or wash facilities, will also require separate Discharge Consent applications.

4. If your proposed scheme will involve abstractions (e.g. dewatering of an excavation) or an impoundment (a pool of water formed by a dam or pit) an appropriate

abstraction/impoundment licence issued under the Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 may be required.

5. The definition of a 'waterway' used in the contract(s) for the scheme, the Construction Environmental Management Plan (CEMP) and any relevant method statements should be as defined under the Water (Northern Ireland) Order 1999.
6. Developers should acquaint themselves of their statutory obligations in respect of watercourses as prescribed in the Drainage (Northern Ireland) Order 1973, and consult the Rivers Agency of the Council of Agriculture accordingly on any related matters.
7. Any proposals in connection with the development, either temporary or permanent which involve interference with any watercourse at the site:- such as diversion, culverting, bridging; or placing any form of structure in any watercourse, require the written consent of the Rivers Agency. Failure to obtain such consent prior to carrying out such proposals is an offence under the Drainage Order which may lead to prosecution or statutory action as provided for.
8. Any proposals in connection with the development, either temporary or permanent which involve additional discharge of storm water to any watercourse require the written consent of the Rivers Agency. Failure to obtain such consent prior to permitting such discharge is an offence under the Drainage Order which may lead to prosecution or statutory action as provided for.
9. If, during the course of developing the site, the developer uncovers a watercourse not previously evident, he should advise the local Rivers Agency office immediately in order that arrangements may be made for investigation and direction in respect of any necessary measures required to deal with the watercourse.

10. Where an undesignated watercourse flows through or adjacent to a development site, it is strongly advised that a working strip of appropriate width is retained to, in future, enable riparian landowners to fulfil their statutory obligations/responsibilities.
11. Any proposals, temporary or permanent, in connection with any works involving interference with any watercourse at the site (e.g. culverting, bridging, discharge of stormwater etc.) requires written consent from Rivers Agency prior to the carrying out of such proposals (under the terms of Schedule 6 of the Drainage (NI) Order 1973). Watercourse crossings should not impede the passage of fish upstream or downstream during all flow conditions. DAERA can provide guidance if required.
12. It is an offence under the Water (Northern Ireland) Order 1999 to discharge or deposit, whether knowingly or otherwise, any poisonous, noxious or polluting matter so that it enters a waterway or water in any underground strata. Conviction of such an offence may incur a fine of up to £20,000 and/or three months imprisonment.

WMU would like to highlight the requirements of the Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010 which are effective from 20th March 2011. These relate to the storage of ANY oils, as defined by the regulations, in containers over 200 litres. These **MUST BE** stored within suitable secondary containment on site as defined by the Regulations.

For further guidance the following Pollution Prevention Guidelines (PPG) should be consulted by the contractor(s) and site owners prior to the works phase commencing:

- PPG01 General Guide
- PPG02 Above ground oil storage tanks
- PPG03 The design and use of oil separators
- PPG04 The treatment and disposal of sewage where no mains is available
- PPG05 Works or maintenance in or near water
- PPG06 Working at construction or demolition sites
- PPG13 Vehicle washing and cleansing

PPG21 Pollution incident response planning

13. It is an offence under Section 46 of the Fisheries Act (NI) 1966 to cause pollution which is subsequently shown to have a deleterious effect on fish stocks.
14. Loughs Agency has advised as follows:
The applicant should demonstrate best environmental practice when working close to watercourses. The potential for deleterious matter to enter a watercourse is of primary concern. Impacts on the aquatic environment such as a decrease in water quality can cause a significant impact upon various life history stages of fish species.

Consideration should be given to the inclusion of Sustainable Urban Drainage Systems (SuDS) in the proposed development. Construction of SuDS should comply with the standards in the design manual for Scotland and Northern Ireland (CIRIA C521). Should for any reason, oil or fuel be stored in the area, it must be kept in a bunded area (providing 110% capacity of the largest stored unit), 100m from any watercourse that appears on a 1:10 000 O.S. map of the site.

It is essential that silt traps and settlement ponds are utilised and are capable of settling out materials prior to discharge off site. The traps and ponds must be regularly inspected and maintained accordingly.

Existing drainage channels should remain untouched. During the construction period, cement and wet concrete must be kept out of all watercourses and drains.

Track ruttings by machinery movement must be kept to a minimum and no discharge or runoff containing high sediment loads must occur from the site.

A contingency plan must be established and strictly adhered to in the event of any contamination of watercourses.

Any stockpiling of peat or other site materials will require careful management to ensure that slippage or collapse to any adjacent watercourses will not occur.

Runoff due to precipitation will require adequate and monitored treatment.

The applicant should also be aware that it is an offence under section 41 of the Foyle Fisheries Act (1952) to cause pollution which is detrimental to fisheries interests.

15. Any water discharge from works should be consented by NIEA - Water Management Unit under the Water (NI) Order 1999. All works near watercourses shall be carried out in line with PPG05 - Works In, Near or Liable to affect Watercourses.
16. Precautions shall be taken to prevent the deposit of mud and other debris on the adjacent road by vehicles travelling to and from the construction site. Any mud, refuse, etc. deposited on the road as a result of the development, must be removed immediately by the operator/contractor.

Notwithstanding the terms and conditions of the Council's approval set out above, you are required under Articles 71-83 inclusive of the Roads (NI) Order 1993 to be in possession of the Department for Infrastructure's consent before any work is commenced which involves making or altering any opening to any boundary adjacent to the public road, verge, or footway or any part of said road, verge, or footway bounding the site. The consent is available on personal application to the Roads Section Engineer whose address is Northern Division, County Hall, Castlerock Road, Coleraine, BT51 3HS. A monetary deposit will be required to cover works on the public road.

All construction plant and materials shall be stored within the curtilage of the site.

It is the responsibility of the Developer to ensure that water does not flow from the site onto the public road (including verge or

footway) and that existing road side drainage is preserved and does not allow water from the road to enter the site.

The applicant is advised that under Article 11 of the Roads Order (Northern Ireland) Order 1993, the Department for Infrastructure is empowered to take measures to recover any reasonably incurred expenses in consequence of any damage caused to the public road as a result of extraordinary traffic generated by the proposed development.

The applicant should contact the Department for Infrastructure Roads Maintenance Section at County Hall, Castlerock Road, Coleraine, BT51 3HS in order that an agreement may be reached regarding maintenance costs and incurred expenses in consequence of any damage caused to the public road.

Notwithstanding the terms and conditions of the Council approval set out above, you are required under Article 60 of The Road Traffic (NI) Order 1995 to be in possession of the Department for Infrastructure's consent before moving any equipment which would be defined as an abnormal load. The consent is available on personal application to the Roads Abnormal loads Section, DfI Roads Headquarters, Clarence Court, 10-18 Adelaide Street, Belfast, BT2 8GB.

The applicant must apply to the DfI Roads for a licence indemnifying the Council against any claims arising from the implementation of the proposal.

17. WMU note that it proposed that turbine drainage and all dewatering is to discharge via settlement ponds or over open, well vegetated ground.

WMU would recommend that settlement ponds are used and over land flow should be minimised at all times, particularly within watercourse buffer zones, to control surface water discharges from the site.

WMU recommend that the applicant contacts their Industrial Consent team NIEA.DICAPAdmin@daera-ni.gov.uk to discuss all discharges from the site under the terms of the Water (Northern Ireland) Order 1999.

An application form for consent to discharge can be obtained by contacting NIEA WMU at Northern Ireland Environment Agency, 17 Antrim Road, Tonagh, Lisburn, County Antrim, BT28 3AL

WMU would request that the applicant contacts WMU's Abstraction Licensing team ail@daera-ni.gov.uk to discuss this and all other potential water abstractions onsite, as an appropriate abstraction/impoundment licence issued under the Water Abstraction and Impoundment (Licensing) Regulations (Northern Ireland) 2006 may be required.

18. The applicant's attention is drawn to The Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 (as amended), which states that it is an offence to deliberately capture, injure or kill a wild animal of a European protected species included in Schedule II of these Regulations, which includes all species of bat. It is also an offence;
- (a) Deliberately to disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;
 - (b) Deliberately to disturb such an animal in such a way as to be likely to;
 - (i) Affect the local distribution or abundance of the species to which it belongs;
 - (ii) Impair its ability to survive, breed or reproduce, or rear or care for its young; or
 - (iii) Impair its ability to hibernate or migrate;
 - (c) Deliberately to obstruct access to a breeding site or resting place of such an animal; or

(d) To damage or destroy a breeding site or resting place of such an animal.

If there is evidence of bat roosts on the site, all works should cease immediately and further advice sought from the NIEA Wildlife Team, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, BT7 2JA, Telephone: 028 9056 9558

19. The applicant's attention is drawn to The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended), which states that it is an offence to deliberately capture, injure or kill a wild animal of a European protected species included in Schedule II of these Regulations, which includes the otter (*Lutra lutra*). It is also an offence;

(a) Deliberately to disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;

(b) Deliberately to disturb such an animal in such a way as to be likely to;

(i) affect the local distribution or abundance of the species to which it belongs;

(ii) Impair its ability to survive, breed or reproduce, or rear or care for its young; or

(iii) Impair its ability to hibernate or migrate;

(c) Deliberately to obstruct access to a breeding site or resting place of such an animal; or

(d) To damage or destroy a breeding site or resting place of such an animal.

If there is evidence of otter activity on the site, all works should cease immediately and further advice sought from the NIEA

Wildlife Team, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, BT7 2JA, Telephone: 028 9056 9558

20. The applicant's attention is drawn to Article 10 of the Wildlife (Northern Ireland) Order 1985 (as amended) under which it is an offence to intentionally or recklessly kill, injure or take any wild animal included in Schedule 5 of this Order, which includes the badger (*Meles meles*). It is also an offence to intentionally or recklessly: damage or destroy, or obstruct access to, any structure or place which badgers use for shelter or protection; damage or destroy anything which conceals or protects any such structure; disturb a badger while it is occupying a structure or place which it uses for shelter or protection.

Any person who knowingly causes or permits to be done an act which is made unlawful by any of these provisions shall also be guilty of an offence.

Any works within 25 metres of a badger sett will require a wildlife licence to be obtained from NIEA. Licence applications should be made to the Wildlife Inspector, NIEA, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, BT7 2JA, Telephone: 028 9056 9558

21. The applicant's attention is drawn to Article 10 of the Wildlife (Northern Ireland) Order 1985 (as amended) under which it is an offence to intentionally or recklessly kill, injure or take any wild animal included in Schedule 5 of this Order, which includes the red squirrel (*Sciurus vulgaris*). It is also an offence to intentionally or recklessly: damage or destroy, or obstruct access to, any structure or place which red squirrels use for shelter or protection; damage or destroy anything which conceals or protects any such structure; disturb a red squirrel while it is occupying a structure or place which it uses for shelter or protection.

Any person who knowingly causes or permits to be done an act which is made unlawful by any of these provisions shall also be guilty of an offence.

If there is evidence of red squirrel on the site, all works should cease immediately and further advice sought from the NIEA Wildlife Team, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, BT7 2JA, Telephone: 028 9056 9558

22. The applicant's attention is drawn to Article 4 of the Wildlife (Northern Ireland) Order 1985 (as amended) under which it is an offence to intentionally or recklessly kill, injure or take any wild bird. It is also an offence to intentionally or recklessly: take, damage or destroy the nest of any wild bird while that nest is in use or being built; or take or destroy an egg of any wild bird. If any person intentionally or recklessly disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or disturbs dependent young of such a bird they shall be guilty of an offence.

Any person who knowingly causes or permits to be done an act which is made unlawful by any of these provisions shall also be guilty of an offence.

23. The applicant is informed that they have a legal obligation under the Water (Northern Ireland) Order (1999) (as amended) to obtain the consent of the Council prior to discharging effluent into a waterway or underground stratum for commercial, industrial or domestic premises. This includes any discharge intended to be made from the proposed drainage system as detailed in the application for planning permission.

For further information please contact Northern Ireland Environment Agency, Water Management Unit (Telephone: 0300 200 7850).

24. The applicant is informed that it is an offence under Article 7 of the Water (Northern Ireland) Order 1999 (as amended) to

knowingly or otherwise discharge or deposit any poisonous, noxious or polluting matter so that it enters a waterway or water contained in any underground strata. The penalty if found guilty of an offence under this Article can be imprisonment for a term not exceeding 2 years or a fine or both.

For further information on pollution prevention please contact Northern Ireland Environment Agency, Water Management Unit (Telephone: 0300 200 7850).

25. The development should take into account the position of any NIE equipment to ensure safety. Statutory clearance should be maintained from NIE equipment during construction and maintenance (See HSE Guidance Note GS6 and HSE Booklet HS(G)47. Please contact NIE should you require any further information regarding the location of equipment.
26. This permission does not alter or extinguish or otherwise affect any existing or valid right of way crossing, impinging or otherwise pertaining to these lands.
27. This permission does not confer title. It is the responsibility of the developer to ensure that he controls all the lands necessary to carry out the proposed development.
28. There is a requirement in the UK for all structures over 300 feet (91.4m) high to be charted on aviation maps. You should contact Defence Geographic Centre at least 10 weeks prior to the commencement of development. The point of contact is Nigel Whittle, dvof@mod.uk or AIS Information Centre, Jervis Building, Elmwood Avenue, Feltham, Middlesex, TW13 7AH with details as appropriate.

Please also advise Defence Estates Organisation of the following information:

- (a) Date of commencement of construction;
- (b) Date of completion of the construction;
- (c) The height above ground of the tallest structure;

- (d) The maximum extension height of any construction equipment;
- (e) The position of the masts in latitude and longitude;
- (f) If the site will be lit;
- (g) Any changes to the scheme as re-evaluation may be required.

This information will be promulgated to military aircrew who will endeavour to avoid direct overflight of the site. Construction workers, particularly those working at height, should be aware that essential military low flying training may be conducted in the vicinity.

Please contact a member of the Safeguarding Windfarms team on 0121 311 3847/2025 if you wish to discuss this further.

In order to ensure that aviation stakeholders are aware of the turbines and/ or meteorological masts while aviation charts are in the process of being updated, developments should be notified through the means of a Notice to Airmen (NOTAM). To arrange an associated NOTAM the developer should contact CAA Airspace Regulation (AROps@caa.co.uk / 02074536599) at least 14 days prior to the commencement of development.

- 29. Any incidences of peat slides or spoil slumps should be reported as soon as possible to the Council.
- 30. This approval does not apply to any signs or advertising material which the developer or occupier may wish to erect at the premises. Signs may require separate approval under The Planning (Control of Advertisements) Regulations (Northern Ireland) 2015. Their size, construction, content and siting should be approved by the Council BEFORE any such signs are erected.
- 31. Where temporary approvals for met masts have expired, or where these meteorological masts are no longer required, they should be removed from the site as soon as practicable.

32. A GOOD PRACTICE GUIDE TO THE APPLICATION OF ETSU-R-97 FOR THE ASSESSMENT AND RATING OF WIND TURBINE NOISE

Guidance Notes for Noise Conditions

These notes are to be read with and form part of the noise conditions. They further explain the conditions 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 ETSU-R-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 Council 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: 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 Council, 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.

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

(d) To enable compliance with the conditions to be evaluated, the wind farm operator shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for the turbine and arithmetic mean power generated by the turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Council, this hub height wind speed shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height 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 10metre height wind speed data, 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.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10-minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

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)

(b) Valid data points are those measured in the conditions agreed with the Council and 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 measurement periods set out in Guidance Note 1. In specifying such conditions the Council 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 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 noise immissions at the location 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 used.

(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 below.

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 Guidance 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 Council.

(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 Table contained within the noise conditions or the noise limits for a complainant's dwelling approved in accordance with Conditions, 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 turbine operator shall ensure that the wind turbine is 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 Council in its written request under Conditions.

(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:

(g) The rating level shall be re-calculated by adding arithmetically 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 note 3 above) at any integer wind speed lies at or below the values set out in the Table contained within the conditions or at or below the noise limits approved by the Council for a complainant's dwelling in accordance with Conditions then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Table contained within the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with Conditions then the development fails to comply with the conditions.

33. When making this decision the Council has taken into consideration environmental information within the terms of the Planning (Assessment of Environmental Effects) Regulations (Northern Ireland) 1989 (as amended).
34. Reference to the "Environmental Statement" relates to the Environmental Statement which was submitted with the application B/2012/0268/F received by the Department on 05.10.2012 and to the additional information received by the Department on 15.05.2013 and received by the Council on 03.08.2017.
35. The Council wishes to bring to the applicant's attention that a number of conditions must be discharged before any works commence on site. The developer should, therefore, ensure that all information required to comply with these conditions is submitted in a timely manner to ensure there are no undue delays in allowing commencement of development. You should discharge the conditions through the Council.

Table 3: Noise Limits dB LA90 for Night-time Periods (23:00 - 07:00)

Property	Standardised wind speed at 10m height (m/s) within the site averaged over 10-minute periods								
	4	5	6	7	8	9	10	11	12
H1	27.4	31.6	34.6	35.4	35.4	34.7	35.1	35.1	35.1
H2	25.8	30.0	33.0	33.9	33.9	33.1	33.5	33.5	33.5
H3	27.7	31.9	34.9	35.7	35.7	35.0	35.4	35.4	35.4
H4	25.0	29.2	32.2	33.0	33.0	32.3	32.7	32.7	32.7
H5	24.7	28.9	31.9	32.8	32.8	32.0	32.4	32.4	32.4
H6	23.3	27.5	30.5	31.3	31.3	30.5	31.0	31.0	31.0
H7	22.6	26.8	29.8	30.7	30.6	29.9	30.3	30.3	30.3
H8	21.8	26.0	29.0	29.8	29.8	29.0	29.5	29.5	29.5
H9	20.6	24.8	27.8	28.7	28.7	27.9	28.3	28.3	28.3
H11	27.0	31.2	34.2	35.0	35.0	34.3	34.7	34.7	34.7

H12	27.3	31.5	34.5	35.4	35.4	34.6	35.1	35.1	35.1
H13	26.9	31.1	34.1	34.9	34.9	34.2	34.6	34.6	34.6
H14	28.8	33.0	36.0	36.8	36.8	36.1	36.5	36.5	36.5
H15	22.1	26.3	29.3	30.2	30.1	29.4	29.8	29.8	29.8
H16	21.1	25.3	28.3	29.3	29.2	28.5	28.9	28.9	28.9
H17	20.2	24.4	27.4	28.3	28.3	27.5	27.9	27.9	27.9
H18	27.6	31.8	34.8	35.7	35.7	34.9	33.0	35.4	35.4
H19	28.7	32.9	35.9	36.7	36.8	36.0	36.4	36.4	36.4
H20	27.7	31.9	34.9	35.8	35.8	35.0	35.4	35.4	35.4
H21	28.8	33.0	36.0	36.8	36.8	36.1	36.5	36.5	36.5
H22	23.8	28.0	31.0	31.9	31.9	31.1	31.5	31.5	31.5
H23	21.9	26.1	29.1	30.1	30.0	29.3	29.7	29.7	29.7
H24	27.1	31.1	34.3	35.2	35.2	34.4	33.0	34.9	34.9
H25	27.7	31.9	34.9	35.7	35.7	34.7	33.0	35.4	35.4
H26	26.3	30.5	33.5	34.4	34.4	33.0	33.0	34.1	34.1

Table 4: Noise Limits dB LA90 at all other times
(Day-time limits)

Property	Standardised wind speed at 10m height (m/s) within the site averaged over 10-minute periods									
	4	5	6	7	8	9	10	11	12	
H1	27.4	31.6	34.6	35.4	35.4	34.7	35.1	35.1	35.1	
H2	25.8	30.0	33.0	33.9	33.9	33.1	33.5	33.5	33.5	
H3	27.7	31.9	34.9	35.7	35.7	35.0	35.4	35.4	35.4	
H4	25.0	29.2	32.2	33.0	33.0	32.3	32.7	32.7	32.7	
H5	24.7	28.9	31.9	32.8	32.8	32.0	32.4	32.4	32.4	
H6	23.3	27.5	30.5	31.3	31.3	30.5	31.0	31.0	31.0	
H7	22.6	26.8	29.8	30.7	30.6	29.9	30.3	30.3	30.3	
H8	21.8	26.0	29.0	29.8	29.8	29.0	29.5	29.5	29.5	
H9	20.6	24.8	27.8	28.7	28.7	27.9	28.3	28.3	28.3	
H11	27.0	31.2	34.2	35.0	35.0	34.3	34.7	34.7	34.7	
H12	27.3	31.5	34.5	35.4	35.4	34.6	35.1	35.1	35.1	
H13	26.9	31.1	34.1	34.9	34.9	34.2	34.6	34.6	34.6	
H14	28.8	33.0	36.0	36.8	36.8	36.1	36.5	36.5	36.5	
H15	22.1	26.3	29.3	30.2	30.1	29.4	29.8	29.8	29.8	
H16	21.1	25.3	28.3	29.3	29.2	28.5	28.9	28.9	28.9	

H17 20.2 24.4 27.4 28.3 28.3 27.5 27.9 27.9 27.9
 H18 27.6 31.8 34.8 34.1 31.0 34.9 35.4 35.4 35.4
 H19 28.7 32.9 35.9 36.7 36.8 36.0 36.4 36.4 36.4
 H20 27.7 31.9 34.9 35.8 35.8 35.0 35.4 35.4 35.4
 H21 28.8 33.0 36.0 35.2 35.5 36.1 36.5 36.5 36.5
 H22 23.8 28.0 31.0 31.9 31.9 31.1 31.5 31.5 31.5
 H23 21.9 26.1 29.1 30.1 30.0 29.3 29.7 29.7 29.7
 H24 27.1 31.3 34.3 33.8 29.3 34.4 34.9 34.9 34.9
 H25 27.7 31.9 34.9 33.4 27.4 35.0 35.4 35.4 35.4
 H26 26.3 30.5 33.5 32.3 31.0 33.6 34.1 34.1 34.1

Footnote 1: As the predicted noise levels from the windfarm will generally be used as the noise limits a single table specifying the noise limits at all times may suffice unless it is proposed to operate the turbines to different limits during the day and night using noise restriction modes.

Appendix 1: Consultation Responses

Consultee	Response Date	Responses
CAA - Directorate of Airspace Policy	29/05/18	No objection
City of Derry Airport	10/10/17	No objection
DETI – Energy Branch	09/10/17	No objection
Environmental Health	05/10/17	No objection subject to previous conditions
MOD – Defence Infrastructure Organisation	26/10/17	No objection
MOD – Safeguarding	26/10/17	No objection
NIE – Windfarm Developments	02/01/17	No objection

NIEA	11/10/17	No objection subject to previous conditions
Ofcom	08/11/17	Fixed link - NIE
Shared Environmental Services	27/10/17	No objection
Dfl Roads	09/05/18	No objection subject to previous conditions