Clashindarroch II WF

AC Noise Objection and Proposed Planning Condition

for Vattenfall

Andy McKenzie, Hayes McKenzie Partnership Ltd 3519_N02_EXT5, 12 August 2021

1. INTRODUCTION

- 1.1 Hayes McKenzie have been engaged to assist with Aberdeenshire Council's Objection 4to the proposed Section 36 application for Clashindarroch II Wind Farm (C2) on the basis of operational noise.
- 1.2 This note considers the current position and proposes noise limits to regulate cumulative operational noise from the combination of the proposed development operating alongside the existing Clashindarroch Wind Farm (C1).

2. CURRENT POSITION

- 2.1 Aberdeenshire Council (AC) have objected to C2 for 4 reasons, listed in a letter of 28th January 2021 to the Energy Consents Unit, the last of which refers to 'the potential for the development to cause noise pollution and nuisance when considered cumulatively with the adjacent Clashindarroch wind farm' and the lack of 'details of proposed mitigation to reduce residual impact'.
- 2.2 The consultation from AC's Environmental Health (EH) Department on 13th November 2020, however, was that they had 'no objection subject to condition'.
- 2.3 The reasons for AC's objection is given at Paragraph 2.11 of the 21st January 2021 Report to the Infrastructure Services Committee which states that 'while there is no outstanding objection from Infrastructure Services (Environmental Health), the information supplied as part of the EIA does not provide adequate information on the proposed mitigation for the noise impacts and therefore does not comply with Policy P4 as it cannot be confirmed there will be no residual adverse impact.
- 2.4 It is also stated in Paragraph 2.11 that 'noise impacts from the development when considered in isolation are not significant and would not cause pollution or nuisance, however there is a recognition by both Infrastructure Services (Environmental Health) and the developer that the development has potential to cause nuisance to noise sensitive receptors when considered alongside the operational Clashindarroch Wind Farm'.

- 2.5 The issue arises from the fact that the assessment carried out for the EIA Report assumes that C1) is at all times operating at the noise limits prescribed in its planning conditions at the four most affected properties. This highly unrealistic assumption effectively prevents any additional noise to be added by C2 acting in addition. This is noted in the EIA Report to be mitigated by the fact that, in practice, noise would be limited by the permitted noise at Boganclough which is the nearest. This is referred to in the UK Institute of Acoustics Good Practice Guide¹ as the 'controlling property' but no further details are supplied of what the resulting noise limits on C2 would be and how they would be met.
- 2.6 Subsequent information provided by SLR on 23rd October 2020, on behalf of the developer, provides a further assessment based on these assumptions. Noise curtailment is shown to be required at the two nearest properties and example data for the candidate turbine operating in a reduced noise mode is provided together with noise predictions based on the proposed turbines operating in this mode, demonstrating compliance with the derived limits.
- 2.7 AC's EH department noted in their Consultation Response of 13th November 2020 that 'given the relationship between power generation and noise output, the Planning Authority should however, be aware that any mitigation is likely to result in a consequent loss of power generation to some extent' and that 'the exact detail and extent of the mitigation and consequent loss of power generation will not be known until the model of wind turbine for this development is finalised'.
- 2.8 The Consultation Response from EH also provides a draft planning condition on noise including noise limits at the properties of Boganclough Lodge, Boganclough, Finglenny and Corrylair (H3, H4, H6 and H7, respectively, in the EIA Report). At H3 and H4 these appear to be set at the predicted noise level (rounded up to the nearest integer dB value) for the candidate turbine, except where this resulted in exceedance of the limit derived by SLR² where this derived limit value (rounded down to the nearest integer dB value) is used instead. At H6 and H7 these appear to be set at the predicted noise level (rounded up to the nearest integer dB value), for the candidate turbine.
- 2.9 The basis for these limits is not provided in the EH Consultation Response but may have been included in correspondence between EH and SLR.
- 2.10 It is not clear why, if these limits were to be met by the Proposed Development as required by the proposed Condition, there would be 'potential for the development to cause noise pollution

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A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Noise from Wind Farms, Institute of Acoustics, 2013.

² This was set by SLR at 10 dB below the noise limit on C1 to ensure that, assuming C1 is operating at its limit, C2 would add less than 0.5 dB to the cumulative noise level at these properties.

and nuisance', as stated in Objection 4, as it has been clearly demonstrated, to the satisfaction of AC EH, that these limits can be met with curtailment applied. However, the approach set out below sets out an alternative approach to that in the EIA Report which will enable a robust and enforceable planning condition to be imposed on any consent granted.

3. PROPOSED ALTERNATIVE LIMITS

- 3.1 Vattenfall has decided that the proposed development should be considered alongside the existing C1 site for the purposes of assessment and conditions on any deemed planning permission for C2. This is because C1 and C2 will both be operated by Vattenfall who will, therefore be responsible for compliance with any limits on C1 and C2 acting together. In these circumstances the imposition of a cumulative noise condition on a C2 permission would be appropriate.
- 3.2 This would mean that the limits currently applied to C1 would also apply to the combination of C1 and C2 acting together, with the C2 operator taking responsibility for this. This arrangement is standard practice for extension wind farms with the same operator, to resolve the situation where only a limited 'noise budget' is available for new development if it is considered completely separately to an existing one. In essence, this means that the actual levels of noise from C1 are considered rather than the highly theoretical assumption that it is operating at its limits (see Paragraph 2.5 (above)).
- 3.3 The limits applicable to cumulative noise at properties H3 and H4 would therefore be derived from the original background noise measurements carried out by Hayes McKenzie prior to C1 being built and used by SLR as the basis for cumulative noise limits as provided at EIA Report Tables 14-18 and 14-19 (referred to as the 'Consented Noise Limit' in these Tables).
- 3.4 The limits at property H7 are also provided at EIA Report Tables 14-18 and 14-19 (referred to as 'Derived Noise Limit' in these Tables and corresponding to those at EIA Report Table 14-8) and should be used as the basis for cumulative noise limits at this property. This approach should address comments in the EHO's consultation response of 13th November 2020 on the possible influence of nearby wind turbine noise sources on background noise measurements, and assuming this agreed, can be formalised in the Statement of Agreed Matters. It may be noted that the nearest C1 turbine is over 4 km distant from this location.
- 3.5 The limits at property H6, provided at ES Tables 14-18 and 14-19 (referred to as 'Consented Noise Limit' in these Tables), are identical to those applied at H3 and H4 rather than being those derived at ES Table 14-7, due to concerns about the impact of C1 on the baseline measurements representative of this property, despite the fact that the nearest C1 turbine is some 2.5 km distant from this location.

3.6 The Council is asked to agree the approach set out above.

4. **CONCLUSIONS**

4.1 Aberdeenshire Council's Objection to C2 on noise grounds has been reviewed. An alternative approach to noise limits, in which cumulative noise from the combination of C2 and C1 operating together, are regulated by the same limits as currently apply to the existing site, is proposed for discussion with Aberdeenshire Council.