Planning and Environmental Appeals Division (DPEA)

Telephone: 0131 244 6668
E-mail: Adrian.Phillips@scot.gov.uk

Mr M Fitzpatrick
Highland Council
Sent By E-mail

Our ref: PPA-270-2316
Planning Authority ref:22/03558/FUL

27 July 2026

Dear Mr. Fitzpatrick

PLANNING PERMISSION APPEAL: LAND 1580M SE OF SCHOOLHOUSE FORSS THURSO KW14 7XX

Please find attached a copy of the decision on this appeal.

The reporter's decision is final. However you may wish to know that individuals unhappy with the decision made by the reporter may have the right to appeal to the Court of Session, Parliament House, Parliament Square, Edinburgh, EH1 1RQ. An appeal **must** be made within six weeks of the date of the appeal decision. Please note though, that an appeal to the Court of Session can only be made on a point of law and it may be useful to seek professional advice before taking this course of action. For more information on challenging decisions made by DPEA please see https://beta.gov.scot/publications/challenging-planning-decisions-guidance/.

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I trust this explains the position.

Yours sincerely,

Adrian Phillips

ADRIAN PHILLIPS
Case Officer
Planning And Environmental Appeals Division

Follow @DPEAScotland

Planning and Environmental Appeals Division
Hadrian House, Callendar Business Park, Falkirk, FK1 1XR
E: dpea@gov.scot T: 0300 244 6668

Scottish Government
Riaghaltas na h-Alba
gov.scot

Appeal Decision Notice – EIA Development

Decision by Philip McLean, a Reporter appointed by the Scottish Ministers

- Planning appeal reference: PPA-270-2316
- Site address: land 1580 metres SE of Schoolhouse, Forss, Thurso, KW14 7XX
- Appeal by RES UK & Ireland Ltd against the decision by The Highland Council
- Application for planning permission 22/03558/FUL dated 18 July 2022 refused by notice dated 26 February 2025
- The development proposed: Cairnmore Hill wind farm (re-design) – erection and operation of a wind farm for a period of 35 years, comprising of 5 wind turbines with a maximum blade tip height of 138.5 metres, access tracks, substation, control building, battery energy storage system, and ancillary infrastructure
- Application drawings: as listed in schedule 3 to this notice
- Date of site visit by Reporter: 8, 9 & 10 July 2025

Date of appeal decision: 27 July 2026

Decision

I allow the appeal and grant planning permission subject to the 26 conditions listed at the end of the decision notice. Attention is drawn to the 5 advisory notes at the end of the notice.

Environmental impact assessment

The proposed development is described as above, and in chapter 2 of the Environmental Impact Assessment (EIA) report. The proposed layout of wind farm infrastructure is set out in Figure 2.1 Site Layout. It is EIA development. The determination of this appeal is therefore subject to the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the 2017 EIA regulations").

I am required to examine the environmental information, reach a reasoned conclusion on the significant environmental effects of the proposed development, and integrate that conclusion into this decision notice. In that respect I have taken the following into account:

- the EIA report submitted on 27 September 2022;
- additional information on biodiversity enhancement, submitted on 18 October 2023;
- consultation responses and representations from the public as summarised in schedule 4 to this notice.

I am required by the 2017 EIA regulations to include information in this decision notice in regard to opportunities for the public to participate in the decision-making procedure. I set that information out in schedule 4 below. My conclusions on the significant environmental effects of the proposal are set out below.

Preliminary matters

A. I note that the council has amended the description of the development from the terms of the application, and has asked me to adopt its amended description. The key differences are that the council's version omits reference to likely generating capacity and includes reference to the proposed 35-year lifespan of the development. The appellant accepts the council's amendments. I am satisfied this amended description is accurate and conveys the substance of what is applied for, and I adopt it above with one minor grammatical change.

B. The Court of Session issued its decision in *Raeshaw Farms Limited v Scottish Ministers and Energiekontor* [2026] CSIH 10 in February 2026. I sought comments from the main parties on its implications for this appeal. The key consideration arising is the need for me to consider whether or not the proposed wind farm and its associated grid connection form a single project for the purposes of environmental impact assessment. Relevant factors in considering this question are set out in *R (Wingfield) v Canterbury City Council* [2020] JLP 154, although this list is non-exhaustive. Of particular relevance in this case is the degree of functional interdependence between the wind farm and its grid connection, since the wind farm would have no function without a grid connection, and the grid connection would have no purpose without the wind farm. I also do not consider that either are stand-alone developments in the sense that term is used in *Wingfield*. These factors tend to suggest the wind farm and its grid connection are a single project. Certain other factors point in the other direction in this case, in particular the lack of common ownership or simultaneous determination. The appellant submits that they are a single project, although does not explicitly refer to the *Wingfield* factors. No party has suggested they are not one project. On balance, I accept the appellant's view, particularly given the high degree of functional interdependence, and I therefore treat the wind farm and grid connection as a single project, although the grid connection does not form part of the appeal proposal.

Reasoning

1. I am required to determine this appeal in accordance with the development plan, unless material considerations indicate otherwise. The development plan in this case comprises National Planning Framework 4 (NPF4) (2023), the Highland-wide Local Development Plan (HwLDP) (2012), the Caithness and Sutherland Local Development Plan (CaSPlan) (2018), and the council's statutory supplementary guidance including Onshore Wind Energy (2016) and the associated addendum (2017). Having regard to the provisions of the development plan, the main issues in this appeal are:

- landscape and visual impacts, including residential visual amenity;
- impacts on cultural heritage;
- the benefits of the proposal; and
- other impacts and proposed mitigation.

2. There are no policies or designations in CaSPlan of relevance in this case, except for the fact it defines the boundaries of special landscape areas (impacts on which fall to be considered under policies in other parts of the development plan), so I make no further reference to it.

<u>Landscape impacts</u>

3. Landscape effects of the proposed wind farm are reported in chapter 5 of the EIA report. I am satisfied that the approach taken in gathering evidence to inform the assessment of landscape effects followed current best practice. The council does not

suggest otherwise. The EIA report identifies significant operational effects on landscape receptors within 5km of the proposed turbines. In summary, the appellant's position is that significant effects would be localised and that they are acceptable in policy terms.

4. NatureScot advises that the proposal raises no landscape issues of national interest. The council considers the proposal would have non-localised significantly detrimental effects on landscape qualities. It submits these effects would be unacceptable and contrary to relevant policy. Landscape effects form the basis of the first of its two reasons for refusal. Similar concerns are raised by a large number of objectors.

5. The appeal site lies around 3km to the west of Thurso in a gently undulating lowland area, predominantly agricultural in nature with scattered residential development. The proposed turbines would be positioned on a broad ridge known as the Hill of Forss, also known by other names including Scrabster Hill and Cairnmore Hill. It reaches a maximum height of 144 metres above sea level a short distance outside the site boundary. The turbine bases themselves would each be at an altitude of around 130 to 135 metres. The coastline lies around 2.5km to the north of the proposed turbines.

6. There are a number of existing wind farms within the surrounding landscape, the closest being the Forss Phases 1 and 2 and Hill of Lybster wind farms (which together form a distinct cluster) around 4km to the west-north-west, comprising a total of 7 turbines between 76 and 99.5 metres to blade tip, and the Baillie wind farm around 4.5km to the south-west, which comprises 21 turbines of 110 metres to blade tip. Further to the south-west, the Limekiln wind farm (consisting of two phases, both now operational) is around 9.6km away and comprises a total of 24 turbines of 149.9 metres to blade tip.

7. The EIA report assesses that the proposal would have a significant effect on landscape character within a radius of around 5km. Specifically, it predicts major (significant) localised direct effects on the 'host' landscape character type (LCT) 143: Farmed Lowland Plain, reducing to moderate (significant) effects within 5km (and not significant beyond 5km). To the north, moderate (significant) indirect effects are predicted within landscape character type 141: High Cliffs and Sheltered Bays, affecting the coastal edge between Brims Ness and Holburn Head. Effects on all landscape character types beyond 5km from the nearest proposed turbine are assessed as not significant, including type 134: Sweeping Moorland Flows, which lies just over 5km to the south-west at its nearest. The EIA report also assesses moderate (significant) effects within 5km of the site on the North Caithness and Pentland Firth seascape character unit (number 8), which is to the north beyond the coastal edge.

8. My understanding of the council's position is that it does not dispute the appellant's assessment of significance regarding landscape effects. Rather, the disagreement is focused on the acceptability of effects. The council's position in this respect is largely based on its Onshore Wind Energy supplementary guidance, which sets out ten criteria for landscape and visual considerations. The guidance supports HwLDP policy 67, which expects proposals' design and location to reflect the scale and character of the landscape and seek to minimise landscape and visual impacts. The council also draws on the addendum to the guidance, which contains a landscape sensitivity appraisal for Caithness.

9. The council considers the proposal would not relate well to the existing landscape setting, and would undermine the distinction between the Farmed Lowland Plain and Sweeping Moorland Flows landscape character types, thereby disrupting these areas' distinctiveness, integrity, and variety. It submits the proposal would thus have significantly detrimental effects on landscape character and the sense of place it imbues. It highlights

that these landscape effects would be experienced by road users on the 'North Coast 500' tourist route and other regionally important routes.

10. The proposed turbines would be 138.5 metres to blade tip. Structures of this scale would undoubtedly have a significant effect on the character of the site itself and the surrounding landscape. I consider significant landscape character effects are an inevitable consequence of building a large-scale feature like a wind farm in a rural location. As noted above, there are other wind farms or clusters in the area, including two within 5km of the appeal site (Baillie wind farm and the Forss cluster). These are both within the Farmed Lowland Plain landscape character type, and hence wind farm development is already a feature within this landscape, although the appeal proposal's turbines would be taller.

11. The council considers the Hill of Forss a local landmark. In doing so it draws support from NatureScot's description of the landscape character type's key characteristics. I acknowledge that occasional smooth hills within the Farmed Lowland Plain form local landmarks to a certain extent. However, I consider the council overstates the significance of the Hill of Forss in this respect, whose gentle slopes and flat summit do not represent a particularly distinct focal point in the landscape in my opinion. I accept that the hill does contain views from lower-lying areas to either side, and provides a sense of transition for travellers on the A836 as it crosses the hill's northern slopes (noted as a 'gateway' in the council's sensitivity appraisal). The council argues that the hill provides separation between the two existing nearby wind farms to the west (in what it refers to as the 'coastal triangle'), and the rest of the lowland plain landscape character type to the east. The appellant's cumulative zone of theoretical visibility mapping confirms limited visibility of the Forss cluster from the east, however Baillie wind farm in fact has relatively extensive visibility across the landscape character type, with the Hill of Forss mainly only screening the area immediately around Thurso. To the extent that the proposal would be visible from the Thurso area, and would be more prominent than the Baillie wind farm from the east, I accept it would extend the influence of wind farms further east into the landscape character type. However, I do not consider this effect would be as marked as the council suggests.

12. The nearest designated landscape is the Dunnet Head special landscape area (SLA) around 12km away. The EIA report identifies no significant effects on its special qualities, nor on those of the Flow Country and Berriedale SLA or the Farr Bay, Strathy and Portskerra SLA. The council agrees, and I see no reason to conclude otherwise.

13. Effects on national scenic areas and wild land areas were all scoped out of the appellant's assessment, in agreement with the council, due to the distances involved or lack of visibility. I am content there would be no significant effects on any of these areas.

Visual impacts

14. Visual effects of the proposed wind farm are reported in chapter 5 of the EIA report, which considers effects at 17 locations, between 1.4km and 23.1km from the nearest proposed turbine. I am satisfied that these are representative of all potentially significant visual effects, and that the approach taken in gathering evidence to inform the assessment of visual effects followed current best practice. The council does not suggest otherwise.

15. The appellant's assessment identifies significant operational effects on visual receptors within 8km, specifically the western extent of Thurso, communities around the Hill of Forss including Forss, Janetstown, and Westfield, the A836 and A9, the Wick to Thurso railway line, the Stromness ferry, and sections of the core path network. In summary, the appellant's position is that significant visual effects would be localised and that they are acceptable in policy terms.

16. The council agrees that effects within 8km would be significant. It also considers there would be significant effects at several other viewpoints up to around 16km away. It considers these effects would not be localised and they would be unacceptable and contrary to relevant policy. Visual effects form the basis of the second of its two reasons for refusal. Similar concerns are raised by a large number of objectors.

17. My discussion below first addresses the seven viewpoints where the appellant and council agree there would be a significant visual effect (viewpoints 1, 2, 3, 4, 6, 7, and 18), although in most cases there is disagreement about the level of effect. These locations are all within around 8km of the site. I then turn to the five viewpoints where the council and appellant disagree on effects' significance (viewpoints 8, 9, 11, 12, and 13). These are all around 10km to 16km distant. For the remaining five viewpoints (numbered 10, 14, 15, 16, and 17), the appellant and council agree that visual effects would not be significant. Viewpoint 5 was scoped out at an early stage. I visited all the assessed viewpoints except 7 and 9, and my conclusions are informed by my observations as well as the submissions.

Viewpoints where main parties agree effects would be significant

18. Viewpoint 1: this viewpoint is on the A836 around 5km west of the edge of Thurso, 1.4km from the nearest proposed turbine. It represents views that would be experienced by road users on this main road where it traverses the northern slopes of the Hill of Forss. It is part of the 'North Coast 500' tourist route. This viewpoint also represents views that would be experienced by residents of properties along or near this stretch of road, with roughly 35 homes within around 2km of the proposal to its north and north-west. The appellant and council agree that effects would be major and significant.

19. The hubs and blades of all five turbines would be clearly visible from this viewpoint, and most of the turbine towers. The proposal would be seen on the fairly level horizon of the Hill of Forss, forming a relatively simple and reasonably evenly-spaced composition. In the foreground are agricultural fields with field boundaries comprised mainly of fences and low flagstone walls, and with scattered residential properties and some farm buildings. There are also two existing small-scale turbines to the south of the road, and some low voltage overhead lines and telegraph wires.

20. While views towards the proposed turbines when travelling on this section of road would tend to be at an oblique angle, the lack of roadside screening means they would be prominently visible. The road also affords open coastal views northwards, including towards Hoy in Orkney. To the west, the Baillie wind farm and Forss cluster are visible roughly 3km away and will be seen by westbound travellers. In clear conditions I saw that the view westwards also features distant mountains in Sutherland such as Ben Hope and Ben Loyal.

21. I agree with the assessment that there would be a major and significant visual effect experienced by local residents, visitors, and others using this section of the A836. The turbines would seem noticeably tall, in contrast to the smaller scale features seen in the foreground. This effect would be exacerbated when travelling along the road since the turbines would tend to remain comparatively fixed in the view while foreground features changed, emphasising the relative distance to the turbines and their height. The simplicity of the landform on which the turbines would sit would temper the visual effect somewhat, as would the panoramic nature of the view, with other focal points drawing the eye. The relatively close-range views of the development as represented by this viewpoint would be experienced by road users for only a fairly short time as they passed the site. Conversely, residents of nearby homes would experience them more frequently and for longer.

22. As this is a location where residential receptors are present, less than 2km from the proposed turbines, it is necessary for me to consider whether the visual effect would be so severe it would unacceptably affect residents' enjoyment of their homes. I address that issue later in relation to the appellant's residential visual amenity assessment.

23. Viewpoint 18: this viewpoint is around 2.5km west of Thurso on a minor road in the dispersed settlement of Janetstown. It is 1.4km from the nearest proposed turbine, and represents views from scattered residential properties to the south-east of the site, of which there are about 35 within around 2km. The appellant and council agree that effects would be major and significant.

24. The hubs and blades of all five turbines would be clearly visible from this viewpoint, and most of the turbine towers, seen above the fairly level horizon of the Hill of Forss. As with viewpoint 1, the proposal would form a relatively simple and quite evenly-spaced composition. In the foreground the view contains scattered housing, agricultural fields enclosed mainly by fences, and some low voltage overhead lines. I also noted evidence of small-scale quarrying activity, with some localised variations in landform.

25. The topography in Janetstown gently falls from west to east, with open views eastwards towards Thurso and the coast beyond, including to Dunnet Head and glimpses of Orkney. There are also panoramic views southwards across the low-lying agricultural landscape south of Thurso. A number of existing wind farms are visible on the skyline to the east and south over 15km away, which are not especially conspicuous at these distances.

26. I agree with the assessment that there would be a major and significant visual effect experienced by residents and users of the local road network in the Janetstown area. I consider the proposal would be a very prominent new feature in the view to the north and north-west. It would be an obvious focal point when approaching the area from either of the two roads into it (from the north-east or south-east). As with viewpoint 1, the height of the turbines would be readily apparent compared to the small-scale buildings seen in the foreground, with this effect exacerbated if the receptor was moving. The visual effect would again tend to be lessened to an extent by the simplicity of the landform on which the turbines would be seen and the panoramic nature of views from this location.

27. As with viewpoint 1, since there are residential receptors at this location, less than 2km from the proposal, I must consider whether the visual effect would unacceptably affect residents' enjoyment of their homes. I turn to that issue later.

28. Viewpoint 2: this viewpoint is located on the unclassified road between Thurso and Reay, representing views experienced by road users. This road passes to the south of the Hill of Forss through the hamlet of Westfield, providing an alternative route between Thurso and Reay (instead of the A836). It may tend to be predominantly used by local residents, as tourists may favour the A836 as it is on the 'North Coast 500' tourist route. I observed this road to be relatively well used. Submissions indicate it was previously part of a designated national cycle route but this is no longer the case. I did see a number of cyclists using it. Similar views would also be experienced by residents of a number of homes in the Westfield area, subject to localised screening, and by users of the core path nearby.

29. This viewpoint is 3.1km from the nearest proposed turbine. The intervening landform would provide some screening of the lower part of the proposal such that the hubs of two turbines would be visible, and part of one tower, while only the blade tips of the other three turbines would be seen. The extent of visibility of the turbines would vary depending on the exact location of the receptor, with all the turbine hubs visible from further to the south-west (as demonstrated by the appellant's theoretical visibility mapping). The view towards the

proposal comprises largely open agricultural grazing land on the southern slopes of the Hill of Forss, which forms a relatively level horizon. Field boundaries comprise fences and low flagstone walls. A cluster of farm buildings and trees are located in the middle distance, and a small-scale wind turbine.

30. A transmission line crosses the road from east to west a short distance to the south of the viewpoint location, while the Baillie wind farm is quite noticeable around 3km to the west. The Limekiln wind farm is also visible roughly 8km to the south-west. These features would not be in the same field of view as the proposal at the viewpoint location itself, however from a short distance along the road to the south-west, eastbound travellers would see the transmission line in the foreground with the proposal beyond. The transmission line would also appear in the view towards the proposal from homes in and around Westfield.

31. The appellant assesses the effect as moderate and significant, while the council considers the level of effect would be major-moderate, with road users and local residents having a high susceptibility to wind farm development. I consider the proposal would be highly visible and noticeable in views from this area, and I consider the appellant's assessment underplays this to a degree by focusing on road users and not residents. However, the influence of other tall features in the view, in particular the overhead lines, would serve in my opinion to reduce the proposal's effect somewhat. Overall I agree the effect would be significant.

32. Viewpoint 3: this viewpoint is on the A836 near the western edge of Thurso, 3.9km from the nearest turbine. Like viewpoint 1 discussed above, it represents views that would be experienced by road users, including tourists, from this main road, which forms part of the 'North Coast 500' tourist route. Similar views would also be experienced from some properties on the western edge of Thurso, including homes and some commercial and other uses, and from core paths to the west of the town.

33. From the viewpoint location, the hubs and blades of all five proposed turbines would be clearly visible, and most of the turbine towers, positioned on the fairly level horizon of the Hill of Forss. The proposal would form a fairly evenly-spaced composition, albeit with turbines 4 and 5 noticeably closer than the others and therefore appearing larger, a slight overlap between turbines 3 and 4, and an appreciably bigger gap between turbines 1 and 2. The view contains houses and other buildings in the foreground, and street lighting columns alongside the road. There are some tree belts in the middle distance, with the distant view enclosed by the rising landform of the Hill of Forss, comprising open agricultural grazing land with low field boundaries. One small-scale turbine is visible in the distance to the right of the proposal's location, while two others can be seen above Scrabster harbour. Existing wind farms are largely screened from view from this location. There is an open outlook northwards to the coast, with Dunnet Head and Hoy forming focal points in the distance.

34. The appellant assesses the effect as moderate and significant, while the council considers the level of effect would be major-moderate. I consider the proposal would be prominent in views travelling westbound on the A836, where it would be seen straight ahead. Its large scale would be apparent, in contrast to small-scale foreground features. Numerous homes on the western edge of Thurso would also experience similar views. While road users would only experience such views relatively briefly, residents would experience them daily. In my opinion, the existence of coastal views drawing the eye from the A836 might slightly lessen the proposal's effect on road users, however many residential properties facing towards the site will not have these coastal views, for example those on Wolfburn Road and Bishops Drive. I consider the focus of the appellant's assessment on road users and not residents serves to downplay the importance of this viewpoint to an extent. Overall I agree the effect would be significant.

35. Viewpoint 4: this viewpoint is at St Mary's Chapel, Crosskirk, a scheduled monument located beside the coast to the north-west of the site, accessed by walking around 1km along a core path. It is 4.1km from the nearest turbine, and represents recreational views for visitors to the chapel, as well as users of the core path. I consider effects on the monument's cultural heritage interest later in this notice.

36. Almost the full height of all five turbines would be visible, located on the fairly level horizon of the Hill of Forss. The composition would appear relatively simple and quite evenly-spaced. The view towards the site includes coastal grassland in the immediate foreground, with a low cliff edge to the left. In the middle distance there are scattered houses and farm buildings set in agricultural land, with fences and walls as field boundaries.

37. The main focus of views from this viewpoint is northwards out to sea and towards Hoy to the north-east. Looking inland, the Forss turbine cluster is extremely prominent to the south-west, little more than 300 metres away around the buildings of the Forss business park. A number of blade tips of Baillie wind farm are also visible around 4km to the south but are not especially noticeable.

38. The appellant assesses the effect as moderate and significant, while the council considers it would be major-moderate, regarding the chapel as a key local landmark, its value increased by being scheduled. I agree with the council that the proposal would increase the extent of the panorama influenced by wind farm development, and that the turbines' height would be readily apparent due to the contrast with smaller-scale features closer at hand. On the other hand, the prominence of the Forss cluster from the chapel, coupled with the overall focus of views out to sea, serve to reduce the effect of the proposal in my opinion. I agree with the appellant's assessment of a moderate and significant effect.

39. Viewpoint 6: this viewpoint is on the A9 around 2km south of the edge of Thurso, a distance of 6.3km from the nearest proposed turbine. It represents views that would be experienced by road users, including tourists, from this main route to Thurso from the south.

40. The full height of all five turbines would be visible, seen atop the fairly level horizon of the Hill of Forss. The composition would appear simple and relatively evenly-spaced. The view towards the site includes open agricultural land with occasional buildings, groups of trees, and field boundaries. Thurso can be seen to the north, set against slightly elevated ground beyond. I saw that a large single building breaks the skyline to the south-west of the town (referred to by the council as the JGC Engineering building). A number of turbine hubs and blade tips of Baillie wind farm can be seen around 9km to the west, and there is also visibility towards Limekiln wind farm, 12km away, although vegetation provides some screening. A cluster of other wind farms is visible to the south (referred to in the appellant's assessment as the 'south-east wind farm group'), mainly only turbine blade tips, the closest of these being Achlachan wind farm around 13km away. There are also power lines and telegraph poles in the landscape.

41. The appellant assesses the effect as moderate and significant, while the council considers the level of effect would be major-moderate on the basis the landscape forms the expansive rural setting of southern approaches to Thurso. I consider the proposal would be highly visible and noticeable to northbound travellers on the A9, where it would be seen ahead on the horizon at an oblique angle. I agree with the council that the size and prominence of the JGC Engineering building, which the proposal would be seen behind, may serve to reduce the apparent scale of the turbines. The building may cause a dissonant effect in terms of perception of scale and distance in the landscape, however I do not agree with the council that the proposal would significantly exacerbate this effect. To my

mind, the Hill of Forss is not in itself a particularly noticeable landscape feature whose scale or distance would be obvious to road users. Overall I agree the effect would be significant.

42. Viewpoint 7: this viewpoint is at sea, representing views for tourists and other passengers on the Scrabster to Stromness ferry, and other recreational craft in the Pentland Firth. The photomontages and wireframe images representing this viewpoint are based on a location 8.1km from the nearest turbine.

43. I did not visit this location. The appeal submissions indicate that the hubs and blade tips of all five turbines would be visible, and part of the towers, positioned on the undulating skyline beyond the sea cliffs of Holborn Head. The proposal would form a relatively simple and quite evenly-spaced composition, with a minor overlap between turbines 4 and 5, and a slightly larger gap between turbines 1 and 4 than between others. The Forss cluster would be visible along the coast to the west, around 11km away.

44. The appellant assesses the effect as moderate and significant at around 8km, and submits the effect would cease to be significant beyond that distance, i.e. with the ferry further from the coast. The council considers the level of effect would be major-moderate on the basis it regards ferry passengers as highly susceptible to turbine development.

45. Ferry passengers will be able to experience panoramic views east and west along the Caithness coast, as well as northwards towards Orkney. I consider the proposal would be prominent in the view south-west. However, I do not consider it likely all passengers would experience these views throughout their journey, with some instead likely to be using on-board facilities (such as the restaurant or shop) rather than admiring the view. For this reason I concur with the appellant's assessment of a moderate and significant effect.

Viewpoints where main parties disagree on significance of effects

46. Viewpoint 8: this viewpoint is at a car park overlooking Sandside Bay to the north of Reay. It represents views for tourists and recreational receptors on the coastal edge. There are also a small number of residential receptors, as the council notes.

47. This viewpoint is 10.3km from the nearest turbine. Almost the full height of all five turbines would be seen. The composition would not be entirely balanced, with some overlap between turbines 3 and 5, and an appreciably larger gap between turbines 1 and 2 than between others.

48. The foreground of the view contains Sandside Bay itself, with the coastal edge opposite seen stretching into the distance. The outlook north-east towards Hoy is a key focus of the view. I saw that the Dounreay nuclear complex is prominently visible to the east across the bay, with a number of relatively large buildings and several chimneys breaking the skyline. Electricity transmission lines run southwards from it, also seen on the skyline. Further south there are a number of agricultural buildings and dwellings. The Forss turbine cluster is visible around 7km away on the skyline to the north-east, along the coast beyond the Dounreay complex. Much of Baillie wind farm is also visible around 6km to the east, and the Limekiln wind farm around 5km to the south.

49. The appellant assesses the effect as minor and not significant, while the council considers it would be moderate and significant. The proposal would introduce a further wind farm into the view across Sandside Bay, seen roughly mid-way between Baillie wind farm and the Forss cluster. It would read as distinct and separate from both. While I consider the proposal would be noticeable, in my opinion the presence of multiple large-scale vertical features in the same view, in particular the two existing wind farms, the Dounreay complex,

and the transmission lines, would serve to reduce the overall effect. Taken together with the moderate distance to the proposal, and the main focus of the view being out to sea, this leads me to agree with the appellant that the effect would not be significant.

50. Viewpoint 9: this viewpoint is located on the summit of Beinn Ràtha, a 242-metre hill around 3km south of Reay. It is 12.2km from the nearest proposed turbine, and represents recreational views experienced by hillwalkers. It is within the East Halldale Flows wild land area. The full height of all five turbines would be seen, forming a fairly compact group. The central three turbines would partly overlap, with the outer two set slightly further apart.

51. I did not visit this location. I can see from submissions it affords panoramic views in all directions. The coast lies to the north beyond intervening low-lying agricultural land, with Orkney a focal point to the north-east. To the east is extensive commercial forestry plantation in the middle distance, with gently undulating agricultural land beyond. The Dounreay complex can be seen on the coast, around 6km away to the north-east. To the south and west is the open moorland of the flow country and distant mountains.

52. It is clear to me from the submissions that Limekiln wind farm is extremely prominent in views to the east from this location, with the closest turbines only around 1.5km away. Baillie wind farm is visible around 7.5km to the north of east, and the Forss cluster is roughly 11km to the north-east. Other existing wind farms are also visible to the south-east at distances of over 20km. The proposal would be seen behind part of Baillie wind farm and slightly higher in the view. The Baillie turbines are mainly seen against a background of farmland and moorland, with only blade tips breaking the skyline. Conversely, the appeal proposal would mainly be seen on the skyline. In certain other respects, the two proposals would appear similar, including in terms of the apparent size of the turbines within the view, and their spacing, although the proposal would comprise far fewer turbines than Baillie wind farm and hence would occupy a much smaller proportion of the view.

53. The appellant assesses the effect as minor and not significant, while the council considers it would be moderate and significant. The council has concerns about the proposal's prominence on the skyline in front of Dunnet Head, and its visual contrast with existing wind farms, in particular with Baillie wind farm. It considers the proposal would affect the perception of scale and distance of the Pentland Firth and Orkney.

54. I accept the proposal would be noticeable from this viewpoint, however I consider the council overstates the importance of Dunnet Head in the panoramic view, and underplays the extent to which the view north-eastwards (towards Orkney) is already altered by wind farms. I acknowledge that the visual overlap with Baillie wind farm would appear somewhat awkward, however I do not consider it would be as obvious as the council suggests given the distances involved. Submissions indicate there is no defined path to this summit and there is no evidence before me to suggest it is particularly well-visited or popular. All told, I agree with the appellant's assessment of a minor and not significant effect.

55. Viewpoint 11: this viewpoint is located at the summit of Ben Dorrery, a 244-metre hill around 9km south of Westfield. This viewpoint is 12.6km from the nearest turbine, and represents recreational views experienced by hillwalkers. The full height of all five turbines would be seen. The composition would seem slightly unbalanced, with the three left-most turbines appearing somewhat separate from the other two.

56. Like Beinn Ràtha (viewpoint 9), this hill summit affords expansive panoramic views in all directions. Northwards, towards the site, commercial forestry and Loch Calder are seen in the middle distance. Undulating agricultural land extends beyond, including the gradual rise of the Hill of Forss, on which the proposal would be located. In the distance the

Pentland Firth and Orkney are visible. To the east, the view encompasses the rolling farmland of central Caithness, while to the south and west lies the moorland expanse of the flow country, with distant mountains beyond. The presence on the summit of a telecommunications mast within a fenced compound means views in all directions cannot be obtained from a single location, however moving around the summit enables the full panorama to be experienced. The mast itself forms a focus of short-range views.

57. Baillie wind farm can be seen around 10km to the north. The Forss cluster is also visible, however it is seen immediately behind one end of Baillie wind farm and it is not readily apparent it is a separate group of turbines. Limekiln wind farm can be seen around 8km to the north-west. To the south-east is a group of other wind farms, the closest being Achlachan around 9km away. The proposal would be seen in broadly the same direction as Baillie wind farm but would appear separate from it. While Baillie wind farm is seen largely against a backdrop of sea, the proposal would sit slightly higher on the horizon, seen mainly against the sky. I consider the proposal would be a relatively noticeable feature in the view, more so than Baillie wind farm, at a moderate distance from the viewer.

58. The appellant assesses the effect as minor and not significant, while the council considers it would be moderate and significant. While I acknowledge the proposal would increase the influence of wind energy development in the view, I consider the expansive and panoramic nature of the view would serve to reduce the visual effect, with other focal points drawing the eye. The simplicity of the landform of the Hill of Forss, on which the turbines would be seen, would also lessen the visual effect somewhat. The viewpoint can be accessed via a core path, and it is signed from the road end by Dorrery farm. However, I noted on my site inspection there is very limited opportunity for parking, which suggests it may not be an especially frequently visited viewpoint. Taking all this together, I agree with the appellant's assessment of a minor and not significant effect.

59. Viewpoint 12: this viewpoint is at Dunnet Bay, by the A836 (part of the 'North Coast 500' route) around 12km east of Thurso. There is a caravan and motorhome site adjacent, while the bay itself has a sandy beach around 3km long. This viewpoint is 15km from the nearest proposed turbine, and represents views for tourists and recreational receptors on the coastal edge. It is within the Dunnet Head special landscape area. The full height of all five turbines would be seen. The composition would appear slightly unbalanced, with the three right-most turbines closer together than the other two.

60. Views from this location are focused on the expansive sweep of the beach and out to sea beyond. The view north of west is towards the open sea, while looking westwards the coastline towards Thurso and Holborn Head is seen across the bay, comprising a gently undulating landform. I saw that buildings are discernible in the distant landscape, and two masts atop the Hill of Olrig are visible on the horizon.

61. Baillie wind farm is visible around 19km to the south of west, mainly hubs and blade tips seen against the sky, with turbine towers mainly screened by landform. It is not especially noticeable. Blade tips of Limekiln wind farm are also visible around 24km away but are not readily apparent except perhaps in particularly clear conditions. The proposal would be seen to the right of Baillie wind farm, and would be a more noticeable feature in the landscape, seen on the skyline. Its scale and positioning would clearly differentiate it from Baillie wind farm. I agree with the appellant that it would not appear on a notably higher part of the landform, with the Hill of Forss not an obvious feature in the view.

62. The appellant assesses the effect as minor and not significant, while the council considers it would be moderate and significant. I do not consider the proposal would appear out of scale with the expansive landscape from this viewpoint given the distance and simple

horizontal skyline, which would serve to lessen the visual effect. It would not introduce a new type of development into the view, given the presence of existing wind farm development on the skyline. The view would be seen from the whole beach, however sand dunes screen views from much of the A836 running parallel just inland. All told, I concur with the appellant's assessment of a minor and not significant effect.

63. Viewpoint 13: this viewpoint is at Easter Head, the terminus of the Dunnet Head peninsula. It is located at a view indicator a short walk uphill from a car park at the end of the B855, a popular destination for visitors to the area as the northernmost point of mainland Britain. I observed it to be well visited. This viewpoint is 15.7km from the nearest turbine, and represents views for tourists and recreational receptors on the coastal edge. It is within the Dunnet Head special landscape area. The full height of all five proposed turbines would be seen, forming a compact group with some overlaps or stacking of the central three turbines.

64. The viewpoint is located on a small hill forming the high point of the headland, and it affords panoramic views in all directions. To the north and north-east, the open seas of the Pentland Firth and the islands of Orkney form a key focus. Looking east, the coastline stretching towards John o' Groats is seen, as well as the island of Stroma, while to the south the view looks over the moorland and lochs of Dunnet Head to undulating farmland beyond. Looking west and south-west, in the direction of the appeal site, the view encompasses moorland in the foreground, with the coastline from Thurso stretching westwards seen beyond over Dunnet Bay and Thurso Bay. The town of Thurso and port of Scrabster are visible. In clear conditions, distant mountains in Sutherland including Ben Hope and Ben Loyal can be seen.

65. Baillie wind farm is visible around 20km away to the south-west, mainly set against higher ground beyond, and its lower part screened by intervening landform. Limekiln wind farm is slightly overlapping and to the left of Baillie wind farm in the view, around 26km away, with the two likely to be read as a single development. The Forss cluster is visible adjacent to the coast around 20km away and also set against a backdrop of higher landform. None of those existing wind farms is especially prominent at this distance. Wind energy development is also visible in other directions, including to the south-east, where Lochend wind farm is the closest around 10km away, and to the south where there are a number of wind farms at distances of 25km or more. The proposal would be positioned in front of the right-hand end of Baillie wind farm, seen mostly on the skyline.

66. The appellant assesses the effect as minor and not significant, while the council considers it would be moderate and significant. In the council's view, the proposal would appear out of scale in the landscape, and it considers the composition would be poor. I accept that the proposal would appear larger and more prominent than existing wind farms in the view south-westwards, and would increase the influence of wind energy development. However, given the distance, it would still be a relatively small feature in an expansive view. The panoramic nature of the view, with other focal points drawing the eye in different directions, in particular the Pentland Firth and Orkney, would reduce the effect. For these reasons I accept the appellant's assessment of a minor and not significant effect.

Other viewpoints

67. As noted above, the appellant's assessment considers a further five viewpoints (numbered 10, 14, 15, 16, and 17). Although there are differences between the council and appellant regarding the level of effect in some instances, they agree in each case that visual effects would not be significant. Based on the written submissions and having visited each location, I agree there would not be significant visual effects at any of them.

Communities, transport routes, and recreational routes

68. The EIA report assesses significant visual effects on the western extent of Thurso. Viewpoint 3 represents views from this location, although the extent of visibility would vary considerably within the town depending on localised screening by buildings and other features. I conclude above that the effect from this viewpoint would be significant and I consider the effect on some western parts of Thurso would be similarly significant.

69. Significant visual effects are also identified in the EIA report on communities around the Hill of Forss including Forss, Janetstown, and Westfield. Visual effects that residents in these locations would experience are illustrated by viewpoints 1, 2, and 18. I conclude above that effects from each of these viewpoints would be significant. The extent to which individual properties would experience views comparable to these viewpoints would vary depending on their specific location and orientation, and any localised screening by topography, although in general the landform is very open. Overall, I conclude there would be significant visual effects on large parts of these dispersed communities.

70. The EIA report assesses significant sequential effects on parts of key transport routes within around 8km, specifically the A836 (part of the 'North Coast 500' tourist route) and the A9, the Wick to Thurso railway line, and the Stromness ferry. Views from points on or adjacent to these routes within 8km of the proposed turbines are represented by viewpoints 1, 3, 6, and 7, while viewpoints 10, 12, 14, and 17 represent more distant locations. I discuss these viewpoints above and agree with the appellant there would be significant visual effects from those within 8km of the proposal, however I do not agree with the council that there would be significant effects beyond that distance. All told, I accept the appellant's assessment of effects on these transport routes, and note that views from the A836 and A9 are mostly open, with limited roadside screening from buildings or vegetation. I accept that views from the Wick to Thurso railway line will be broadly comparable to those from the A9 given they both occupy the valley of the River Thurso. There would be little or no screening of views from the route of the Stromness ferry, with any screening from the landform of Holborn Head being short-lived (if it occurred at all).

71. In relation to recreational routes, the EIA report predicts significant visual effects on sections of the core path network within around 5km of the proposed turbines. One core path passes through the site itself, while others are located around Thurso, along the coast past Holburn Head and Spear Head, at other coastal locations such as at Crosskirk, and to the south near Westfield. Due to the openness of the landscape and general lack of screening, these core paths will largely have unrestricted views towards the proposal. I concur with the appellant's assessment of significant effects. The council considers more distant core paths would also be significantly affected, citing in particular paths at Sandside Head and Ben Dorerry, represented by viewpoints 8 and 11, both over 10km from the nearest turbine. I have concluded above that visual effects would not be significant at those viewpoints and it follows that I conclude likewise for core paths in those locations.

72. A number of objectors also refer to the single track road at Hill of Forss being a popular recreational route, used by walkers, cyclists, horse riders, and runners. I consider effects on recreational users of this route would be significant within around 5km of the site.

<u>Cumulative landscape and visual impacts</u>

73. The appellant's landscape and visual impact assessment treats existing wind farms (at the time of the assessment) as part of the 'baseline'. In other words, it considers these in the 'primary' assessment, which I have discussed above. The cumulative assessment considers two potential future scenarios. Cumulative scenario 1 includes consented

proposals in addition, while scenario 2 also considers proposals at application or appeal stage. Hence scenario 1 represents only proposals with a fair likelihood of being constructed, whereas scenario 2 has a lower level of certainty as not all proposals may progress or be approved. The appellant's methodology is sometimes referred to as the 'additional' approach, focusing on the additional effects of the main project, as opposed to the combined effects of all projects. I am content this is a reasonable approach in this case.

74. Since the appellant's assessment was prepared in 2022, there have been several changes to the potential cumulative situation. These changes are addressed in the appellant's appeal submissions but do not alter its assessment of significant effects (either in terms of the 'primary' assessment or the cumulative assessment). Changes of most relevance to this proposal include the fact Limekiln wind farm and Limekiln extension are both now constructed (formerly scenario 2 and scenario 1 projects, respectively). Within the Forss turbine cluster, the single Hill of Lybster turbine has been constructed (formerly in scenario 1), while the two-turbine proposal known as 'Forss III' has been consented (moving it from scenario 2 to scenario 1). Within 10km of the appeal site, Forss III is now the only scenario 1 proposal, and there are no scenario 2 proposals.

Cumulative landscape impacts

75. The appellant's assessment identifies no significant cumulative landscape effects. In terms of the appellant's methodology as summarised above, I understand this to mean that there is not assessed to be any significant change between the 'primary' assessment (which includes consideration of existing wind farms) and either scenario 1 or scenario 2. The council does not dispute this finding. I see no reason to conclude differently.

Cumulative visual impacts

76. The appellant's assessment identifies no significant cumulative visual effects at any of the assessed viewpoints. Again, I understand this to indicate no significant change between the 'primary' assessment and either scenario 1 or scenario 2.

77. Notwithstanding that the council disagrees with the appellant's 'primary' assessment of significance at a number of viewpoints (as discussed above), it almost entirely accepts the findings of the appellant's cumulative assessment in respect of 'static' viewpoints (as opposed to sequential effects, which I turn to below). The one exception is viewpoint 9 (Beinn Ràtha), where the council considers there are 'potentially' significant cumulative effects in combination with other proposals to the west of that viewpoint. These include one consented wind farm (Bettyhill Phase 2), two others at inquiry (Melvich and Kirkton), and one at scoping stage (Achrugan). The council's view about the proposal's interaction with Baillie wind farm from this viewpoint (summarised above) contributes to its concern.

78. I have already outlined my opinion that the proposal itself would not have a significant visual effect from viewpoint 9, although I accept that its visual relationship with Baillie wind farm would be slightly awkward. As regards cumulative effects, the proposals referred to by the council are all around 20km or more from the appeal site, albeit closer to the viewpoint. I am aware that the Kirkton proposal has recently been refused. While it might be the case that the other proposals would have a significant visual effect from the viewpoint, either individually or cumulatively, because the appeal proposal would be seen behind an existing wind farm and in a different direction to those other schemes, I do not consider it would make a significant contribution to any cumulative effect. I therefore agree with the appellant's finding of no significant cumulative effect.

79. In respect of cumulative visual effects from other assessed viewpoints, I am in agreement with the appellant and council that there would be no significant change between the primary assessment and either scenario 1 or scenario 2 for any of them. I therefore accept the assessment finding of no significant cumulative visual effects.

80. Turning to sequential cumulative effects, the council submits that the proposal would have significant cumulative effects on road users travelling towards Thurso, including with existing and consented offshore wind farms. I accept the general point that such sequential visual effects could extend over greater distances than static visual effects, and I acknowledge that travellers on key routes in Caithness (including the A9 and A836) will experience sequential effects from a number of onshore and offshore wind farms. However, I am not persuaded the proposal would make a substantial contribution to such effects.

Residential visual amenity

81. Technical appendix 5.2 of the EIA report is a residential visual amenity assessment, which considers whether the nature or magnitude of the proposal's visual effect at any residential property would be such that it potentially affects 'living conditions' or 'residential amenity', and hence reaches the 'residential visual amenity threshold'. Landscape Institute guidance sets out a four-step process for assessing residential visual amenity, with the final step being a judgement of whether the threshold is reached for those properties with the highest magnitude effects. It indicates that this final step goes beyond the identification of significant effects in environmental impact assessment terms. The threshold is the point at which the visual amenity of a residential property is adversely affected to the extent it may become a matter of residential amenity. Where this is the case, the guidance advises that effects on residential amenity are a matter to be weighed in the planning balance. Such circumstances represent an exception to the normal maxim that there is no 'right to a view', and the fact the planning system does not usually take private interests into account.

82. The appellant's assessment considers all dwellings within 2km of the proposed turbines, which reflects standard practice. It identifies 81 properties within this study area (at the time of the assessment). It groups those sharing a similar outlook, orientation, or elevation such that views towards the proposed wind farm would be expected to be similar. The assessment considers 17 such groups of properties, along with 15 individual properties. The appeal submissions indicate there is one additional property within 2km since the original assessment was undertaken, within the 'group 2' cluster.

83. Four property groups and three individual properties are carried forward to the final stage of assessment:

- Group 3 comprises three properties to the north-west of the proposal, accessed from the A836: Burn of Brims, Atlantic View, and Taldale. They would be around 1km from the closest proposed turbine. Viewpoint 1, discussed above, is relatively nearby.

- Group 4 is a short distance north-east of group 3, comprising four properties: Brims House, Annfield, and 1 & 2 Brims New Houses. These are just to the north of the A836. They would be around 1.2km from the nearest turbine.

- Group 6 is to the north-east of the proposal, comprising three properties located on the south side of the A836: Dunhobby, Thorvik, and Windrift. They would be around 950 metres from the closest proposed turbine.

- Property 31, Brimmisa House, lies a short distance north-west of group 6. It would be around 1.4km from the nearest proposed turbine.

- Group 12 is to the south-east, comprising two properties: Roan Va and Sula Sgeir. They would be around 1.1km from the closest turbine.

- Property 69, Hopefield, is also to the south-east. It would be around 920 metres from the nearest turbine.

- Property 80, Braigh-Mor, is to the west of the site, accessed from a minor road. It would be around 950 metres from the nearest turbine.

84. The appellant's assessment sets out the fact these properties generally have some outlook towards the site from windows in the house or from the curtilage, to varying degrees in each case. Hopefield (property 69) has outbuildings to the north that provide screening of views towards the site from the dwelling itself, while certain other properties have some limited screening from vegetation (in particular those in groups 4 and 6). The landform would screen limited parts of the proposed development from some locations, illustrated in wirelines included in the assessment.

85. The assessment identifies that properties located to the north of the site (groups 3, 4, and 6, and Brimmisa House (property 31)) also typically have outlooks northwards towards the Pentland Firth. Group 12 properties also have an eastwards outlook towards the coast and Dunnet Head, while Braigh-Mor (property 80) has an open outlook westwards. The outlook from all properties is generally open and expansive, with wide skies.

86. The appellant's assessment concludes that, while the magnitude of change is high at all the properties that have been subject to detailed assessment (meaning the proposal would be a key or defining element of the view), the residential visual amenity threshold is not breached at any property. It comments that the proposed development would generally be seen in the context of expansive and open views, which are typically available in multiple viewing directions, with the coast often drawing the eye.

87. The council considers that from groups 3, 4, and 12, Hopefield (property 69), and Braigh-Mor (property 80) views towards the proposal would be across intervening landscape features such as open fields that would serve to separate the turbines from properties and maintain a sense of openness. Similar considerations would apply at Brimmisa House (property 31) due to the agricultural land to the south and the A836 beyond. In the case of group 6, it considers that the receding nature of the proposal in the view (with turbines further from properties increasingly screened by landform) would limit the effect. Overall, the council accepts the appellant's finding that there would be no breach of the residential amenity threshold, although it considers the proposal would be a dominant feature that residents would experience as a strong visual intrusion.

88. I have carefully reviewed the submissions on this topic, and I saw all the properties discussed above from public vantage points during my site inspection. While I agree with the appellant's assessment of a high magnitude of change at these properties, and hence I acknowledge that the proposal would be a key or defining element of their views, I do not consider it would be overbearing at any property such that it would detract from overall living conditions. I therefore accept the finding that the proposal would not result in a breach of the residential amenity threshold. As such, I conclude that these effects are not so severe that they should add additional weight against the proposal in the planning balance, over and above that arising from the adverse visual effects I have already identified. In reaching this conclusion, I have had regard to the representations made by residents of some of the affected homes. I understand the genuine concerns expressed, and I acknowledge the magnitude of visual effects that local residents would experience.

Landscape and visual conclusions

89. NPF4 policy 11 is intended to encourage, promote, and facilitate all forms of renewable energy development. It provides in-principle support to wind farms in all locations except national parks and national scenic areas. Battery storage is also supported.

90. Part e) of the policy lists a series of potential impacts that, through project design and mitigation, proposals are expected to address. Of relevance to landscape and visual effects are points i. (impacts on communities and individual dwellings), ii. (significant landscape and visual impacts), iii. (impacts on public access routes), and xiii (cumulative impacts). In considering a proposal's impacts, policy 11 confirms that significant weight should be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. I discuss those targets later in this notice.

91. While expecting significant landscape and visual impacts to be addressed, part e) ii of policy 11 recognises they are to be expected for some forms of renewable energy. I consider wind farms' scale and nature will inevitably give rise to some significant landscape and visual impacts. The policy confirms that, where impacts are localised or appropriate design mitigation has been applied, they will generally be considered acceptable.

92. HwLDP policy 67 indicates renewable energy proposals' design and location should reflect the scale and character of the landscape and should seek to minimise landscape and visual impacts. The council's Onshore Wind Energy supplementary guidance provides that proposals should seek to avoid significant adverse landscape and visual effects, and its assessment criteria are focused on this objective. I consider this is out-of-step with NPF4's expectation that significant effects will be accepted in most circumstances.

93. NPF4 policy 4 d) provides that proposals affecting local landscape area designations will normally only be supported where there are no significant adverse effects on the area's integrity or the qualities for which it has been designated. HwLDP policy 61 states that new development should be designed to reflect the landscape characteristics and special qualities identified in the area's landscape character assessment.

94. As set out above, the proposed wind farm would exert a significant effect over landscape character within a radius of around 5km. This would include direct effects on the 'host' Farmed Lowland Plain landscape character type, and indirect effects on the High Cliffs and Sheltered Bays landscape character type on the coastal edge to the north, and on the North Caithness and Pentland Firth seascape character unit. I agree with the appellant's assessment findings in this regard. There is no definition in NPF4 of a 'localised impact' on landscape in terms of policy 11 e) ii.. Having regard to the extent of significant landscape effects, the overall size of the affected landscape character types, and the absence of significant effects on designated landscapes, there is nothing that causes me to consider the identified significant landscape effects should be regarded as more than localised.

95. The council focuses on the degree to which the proposal is (in its view) at odds with the existing pattern of nearby wind energy development, including in terms of turbine heights, and its belief that this would undermine the distinction between landscape character types. I accept that the proposed turbines would be taller than those of nearby wind farms. However, I consider this is symptomatic of modern wind farm development, as both turbines' heights and their efficiency have increased substantially since earlier schemes. While I do not dispute that this variance in height (to the extent it is perceived) may cause the proposal to contravene certain criteria in the council's guidance, I do not consider it renders the effects non-localised. The site's elevation is also slightly higher than that of any existing wind farms within the same landscape character type, however I do not

accept the council's contention that this difference would be 'pronounced' as, in the case of Baillie wind farm, it would be only around 15 to 20 metres.

96. In respect of visual effects, I agree with the appellant that significant effects would be experienced as far away as around 8km. The openness of the landscape is such that visibility of the proposal would be fairly extensive within that radius. Significant visual effects would be experienced in the western part of Thurso and in large parts of dispersed communities around the Hill of Forss including Forss, Janetstown, and Westfield. There would be significant effects on transport routes within around 8km, specifically the A836 (part of the 'North Coast 500' tourist route) and the A9, the Wick to Thurso railway line, and the Stromness ferry, and on several core paths within 5km. For the reasons set out above, I do not agree with the council that significant effects would extend to other locations almost 16km away, although I acknowledge there would still be relatively extensive visibility of the proposal from that distance. Again, there is no definition in NPF4 of a 'localised impact' in visual terms in relation to policy 11 e) ii., however I consider a distance of up to around 8km can reasonably be described as 'localised' in the circumstances of this case.

97. As set out above, the proposed wind farm would have significant adverse visual effects at a number of residential properties nearby but these would not be so overbearing at any property as to detract from its overall living conditions. I therefore do not consider these residential visual amenity effects render the proposal unacceptable. I am satisfied the requirement of policy 11 e) i. to address visual and residential amenity impacts on individual dwellings has been addressed. I discuss potential noise and shadow flicker impacts below.

98. Turning to the question of whether design mitigation has been applied to reduce landscape and visual effects (as referenced in policy 11 e) ii.), the appellant highlights that the appeal proposal is a redesigned scheme following refusal of an earlier eight-turbine application, with a resultant reduction in effects. While full details of that previous proposal are not before me, I note the council accepts that the appeal development would have lesser effects than the earlier design. It considers the composition is notably improved from several viewpoints, and the spread of turbines noticeably reduced from others. Submissions also indicate the council previously considered residential visual amenity effects were unacceptable, and the appeal proposal has reduced effects in that respect. All told, I am satisfied that design mitigation has been applied to reduce landscape and visual effects.

99. Taking this all together, I conclude that the proposed wind farm's significant adverse landscape and visual effects remain within what could reasonably be considered as localised, and that appropriate design mitigation has been applied. Effects on communities and individual dwellings remain within acceptable limits in my view. Accordingly, I conclude that the proposal's landscape and visual effects are consistent with NPF4 policy 11.

100. I consider these significant adverse landscape and visual effects mean the proposal presents some conflict with HwLDP policy 67 and the council's supporting supplementary guidance, and also with policy 61 in respect of landscape.

101. The absence of significant effects on any special landscape area, as noted above, indicates there is no conflict with NPF4 policy 4 d).

102. I return below to my assessment of the acceptability of the proposal's landscape and visual effects in the context of the overall balance of policy considerations in this case.

Cultural heritage impacts

103. NPF4 policy 7 seeks to protect and enhance historic environment assets and places. The most relevant elements of the policy in this instance are parts a), h), and o). NPF4 policy 11 e) vii. requires renewable energy proposals to demonstrate how design and mitigation have addressed impacts on the historic environment. HwLDP policy 57 similarly seeks to protect cultural heritage features, commensurate with their importance.

104. Chapter 6 of the EIA report considers effects on archaeology and cultural heritage, and is based on both desk-based study and fieldwork. It identifies 56 heritage assets within the boundary of the appeal site. Within 10km of the proposed turbines there are 53 scheduled monuments, 67 listed buildings (many of these within Thurso), and one conservation area. It is supported by photomontages and wirelines from a number of viewpoints relating to cultural heritage assets or their settings. I am satisfied that the EIA report fulfils the requirement in part a) of NPF4 policy 7 for proposals with potentially significant impacts on historic assets to be accompanied by an adequate assessment.

105. The EIA report predicts moderately significant effects on the settings of two scheduled monuments outwith the site. Thing's Va broch (reference SM587) is located to the east, around 1.1km from the closest proposed turbine. Scrabster Mains broch (reference SM579) is around 2km north-east of the nearest proposed turbine. Both survive as low grass-covered mounds in rural farmland settings, with open aspects eastwards towards Thurso and the coast. The blade tips and hubs of all five turbines would be visible in the view westwards from Thing's Va broch, while from Scrabster Mains broch five blade tips and four hubs would be seen to the south-west. The assessment identifies this would result in a noticeable change in the surroundings of both of these scheduled monuments.

106. Historic Environment Scotland (HES) agrees that effects on these two scheduled monuments would be significant and considers the appellant underestimates the level of some impacts. In particular, it is concerned about longer views towards both brochs from lower ground to the east. It submits these views are important in understanding their prominent roles as centres of power in the past, since their visibility and monumental architecture would have expressed their occupants' power and status. HES considers the proposal would diminish both monuments' cultural significance to a degree, although it does not object. It advises that deletion or relocation of turbine 5, the closest to the brochs, would reduce effects. However, that turbine remains part of the proposal before me in this appeal.

107. I acknowledge that neither broch is prominent or widely visible in the landscape. However, that in itself does not lessen their importance or cultural significance. I accept HES's explanations of the two sites' history and significance, which I consider more comprehensive than those in the EIA report. The appellant does not contest HES's accounts. Based on them, I accept that views towards both monuments form part of their settings, not only views from them. The photomontages show that in certain long-range views from the east the proposal would be behind the brochs, and I agree with HES this would be distracting and may diminish a sense of the brochs' prominence. I concur that the appellant has underestimated the effects on the settings of these two monuments.

108. NPF4 policy 7 h) refers to significant impacts on the 'integrity' of the setting of a scheduled monument, indicating that proposals will only be supported where such impacts are avoided (unless justified by exceptional circumstances). However, the concept of 'integrity' of a monument's setting is not defined in NPF4. No party has made submissions on how it should be interpreted, or has directed me to any guidance on this particular point. However, the EIA report and HES both refer to the HES 'managing change' guidance note on setting, which is relevant to interpreting the concept of setting more broadly.

109. In my view, the term integrity implies a greater degree of impact, and thus I do not consider that significant adverse impacts on scheduled monuments' settings (as identified in this case) automatically translate to significant adverse impacts on those settings' integrity. Having regard to the HES guidance on setting, I consider the factors most relevant to the integrity of a monument's setting would include those aspects that are integral to its cultural significance and the ability to understand, appreciate, or experience it. In this case, the key elements of the monuments' settings seem to me to be the open character of the surrounding landscape, and important views to and from them over the countryside.

110. It is agreed that there are open views in all directions from both brochs. Those to the east towards lower ground and the coast are the longest, which HES notes would have allowed occupants oversight of important land and sea communication routes. These key views would be unaffected by the proposal, and hence that important element of each monument's setting would remain unaltered. Based on the evidence before me, I consider views from the brochs towards the proposed turbines are of secondary importance and are less central to their understanding, appreciation, and overall cultural significance.

111. I have already accepted above that long-range views towards the brochs also form important parts of their settings, which would be adversely affected by the proposal. The level of impact on views from the east would vary depending on the precise vantage point. The photomontages are based on the turbines being seen directly behind one or other broch, and represent worst case scenarios. From other locations the proposed turbines and brochs would be seen in slightly different directions, even if within the same overall field of view. The turbines would thus be somewhat less distracting and have a reduced effect on the sense of the brochs' prominence in the landscape. I therefore do not consider the ability to understand and appreciate the monuments would be substantially undermined.

112. Taking these matters together, I do not consider the proposed wind farm's adverse effects would meet the threshold of a significant effect on the integrity of the setting of Thing's Va broch or on the integrity of the setting of Scrabster Mains broch. In reaching that conclusion I draw support from the fact that HES does not consider setting effects reach the level of national interest. I also note the council does not oppose the proposal on cultural heritage grounds. Overall, I conclude there is no conflict with NPF4 policy 7 h).

113. HwLDP policy 57 provides that significant adverse effects on features of national importance (including scheduled monuments) must be clearly outweighed by social or economic benefits of national importance. I consider the proposal's climate change benefits, which I discuss below, relate to a matter of national importance and would outweigh the effects on scheduled monuments in this case. There is no policy conflict in this respect.

114. NPF4 policy 7 o) relates to non-designated historic environment assets, providing that these should be protected and preserved in situ wherever feasible. It also seeks archaeological evaluation where there is potential for buried remains below a site.

115. The EIA report identifies two heritage assets within the site that could potentially be affected. The appellant proposes to avoid one of these, a former mill lade, with the resultant effect assessed as negligible and not significant. The other asset is described as a sub-rectangular grassy platform covered by a low pile of large boulders, thought to be either from field clearance or the remains of a demolished former small building or other structure. It is assessed as having little intrinsic heritage value and negligible sensitivity, with the potential effect of high magnitude but overall minor and not significant. No effects are identified on other assets within the site. The potential for direct effects on previously unidentified buried archaeological remains is assessed as low, with an archaeological watching brief proposed during construction. A programme of archaeological works would

be secured as part of the construction and environmental management plan required by condition 9. The council's archaeologist raises no objections, subject to paleoenvironmental survey and limited watching brief. I see no reason to disagree with the appellant's assessment findings regarding non-designated assets, and I am satisfied the proposed approach to mitigation means there is no conflict with policy 7 criterion o). The extent of archaeological survey required would be agreed between the parties at a later date.

116. The proposal includes restoration of an old sheepfold within the site using traditional drystone wall techniques to form a viewpoint and information point. I consider this would represent a minor cultural heritage benefit.

Benefits of the proposal

117. Chapter 14 of the EIA report addresses climate change matters. The proposed turbines would have a combined electricity generation capacity of up to 21.5 megawatts, generating around 91 gigawatt-hours of renewable electricity annually. This is enough to power over 12,000 homes. The appellant indicates this equates to an estimated saving over the lifetime of the development of 21,925 tonnes of carbon dioxide emissions compared to electricity generation from fossil fuels, with an expected emissions payback of 0.8 years. It assesses this as a moderate and significant positive effect on climate change. I note the appellant's generation figures take account of the power reduction that would result from its proposed noise management strategy (discussed further below).

118. NPF4 policy 1 states that, when considering all development proposals, significant weight will be given to the global climate and nature crises. The proposed wind farm would contribute to Scotland's efforts to tackle the climate crisis and would have a positive effect in helping reduce greenhouse gas emissions. It therefore finds support from policy 1.

119. No details of the capacity of the proposed battery storage facility have been provided. The submitted drawing does not suggest its capacity would be substantial. I am therefore unable to give any significant additional weight to this aspect of the proposal.

120. Socio-economic matters are addressed in EIA report chapter 13. It estimates the construction cost of the wind farm would be around £21 million, of which £2.1 million (10%) could be contributed to the Highland economy. It states that the development would make an estimated annual contribution to the UK economy of approximately £1.5 million during its operational phase, although I calculate that based on the proposed generating capacity of 21.5 megawatts and the appellant's figure of £22,347 gross value added per year for each megawatt of installed capacity, the annual contribution to the UK economy would in fact be under £0.5 million.

121. In terms of employment during the 12-month construction period, the appellant estimates the proposed wind farm would create 30 to 35 temporary jobs, which it states equates to approximately three permanent full-time equivalent (FTE) jobs based on a conversion factor of ten years of full-time employment to one permanent FTE. After accounting for potential leakage and displacement factors, the net employment benefit is estimated as 1.5 FTE. A further 2.55 indirect and induced FTE are also anticipated.

122. In the 35-year operational phase, the appellant estimates the wind farm would directly generate two FTE employees (after accounting for likely leakage), with a further three indirect and induced FTE.

123. Part c) of NPF4 policy 11 states that renewable energy proposals will only be supported where they maximise net economic impact, including local and community

socio-economic benefits such as employment, associated business and supply chain opportunities. I am not aware of any guidance on how this should be demonstrated or assessed. While the appellant states it is committed to using local contractors, suppliers and employees during the construction phase wherever reasonably practicable, it does not agree to the council's proposed condition requiring a local employment scheme to be submitted. It is not clear to me that a condition of this nature would be capable of establishing whether the development's net economic impact would be 'maximised' (and hence demonstrating policy compliance), and thus I am not persuaded it is necessary or reasonable. The inherent uncertainty regarding the extent to which local and community socio-economic benefits might be delivered means the weight I attach to them is reduced, although I have no reason to doubt the appellant's stated commitments.

124. I note that there would be a community benefit fund associated with the proposal. However, this is not a material consideration and I do not take it into account as a benefit of the proposed development.

125. The proposal would have other benefits in terms of biodiversity enhancement, as set out in the appellant's biodiversity enhancement management plan. I discuss this below.

126. As noted above, the proposed restoration of an old sheepfold to form a viewpoint and information point would represent a minor cultural heritage benefit.

Other impacts and proposed mitigation

127. The EIA report assesses a wide range of other topics: ecology; ornithology; hydrology and peat; noise; shadow flicker; traffic and transport; and safety. The council has not founded its refusal on any of these matters and I note in this regard that there are no outstanding concerns on the part of consultees, subject to the imposition of appropriate conditions. The EIA report does not identify any residual significant environmental effects of the proposed wind farm other than those relating to landscape and visual impacts and cultural heritage, as discussed above. The EIA report also assesses the potential environmental effects of the likely grid connection, concluding that it would not have any significant effects, subject to embedded mitigation and good practice.

Ecology and ornithology

128. NPF4 policy 11 e) part ix. requires renewable energy proposals to address impacts on biodiversity including birds. Policy 1 requires significant weight to be given to the nature crisis. Policy 3 requires the proposal to conserve and restore biodiversity, and to provide significant enhancements. Policy 4 presumes against proposals that would have an unacceptable impact on the natural environment, including Special Protection Areas. HwLDP policy 67 also requires renewable energy proposals to address effects on natural heritage, species, and habitats, while policies 57, 58, 59, and 60 relate to natural heritage designations, protected species, and other important species and habitats.

129. Ecology matters other than ornithology are addressed in chapter 7 of the EIA report. This predicts loss of just under 6% of the wet dwarf shrub heath habitat within the site, assessing the effect as minor and not significant. The EIA report notes that the habitat is common within the region and across the uplands of Scotland, and that within the site it is degraded and of poor quality. No specific mitigation for this habitat loss is identified, however enhancement measures are proposed to improve the quality of remaining wet heath habitat. I discuss biodiversity enhancement below. No effects on protected species or other biodiversity interests are identified in the EIA report. Potential construction effects

would be minimised through pollution prevention measures and good practice identified in a construction and environmental management plan, which would be secured by condition.

130. Chapter 8 of the EIA report addresses potential effects on ornithology. It concludes that there would be minor and not significant effects on geese, swans, curlew and lapwing, and negligible-minor and not significant effects on golden plover. No specific mitigation is identified as being required, however a breeding birds protection plan and a bird disturbance management plan would be produced as part of a construction and environmental management plan. These would help minimise any effects. An environmental clerk of works would also be appointed. These matters would be secured by conditions.

131. NatureScot advises that an appropriate assessment is required for the Caithness Lochs Special Protection Area (SPA), which is protected for its wintering populations of Greenland white-fronted geese, greylag geese, and whooper swans. NatureScot's advice is based on the appellant's survey work and analysis, including its predictions of collision risk. It considers that the levels of collision risk mortality and the likelihood of disturbance of roosting or foraging birds would not adversely affect the SPA populations of any of the three SPA species. It concludes that the proposal would not undermine their conservation objectives and therefore it would not adversely affect the integrity of the SPA. I agree with NatureScot's conclusions and adopt them for the purposes of my appropriate assessment.

132. The appellant and NatureScot are in agreement that no appropriate assessment is required for either the North Caithness Cliffs SPA or the Caithness and Sutherland Peatlands SPA and I see no reason to disagree.

133. A number of objectors raise concerns about potential impacts on other habitats and species, including a range of other bird species. Many of the species mentioned are specifically considered in the EIA report, while species in certain categories were scoped out of detailed assessment on the basis significant effects at a population level were unlikely. This is explained in the EIA report. Having regard to the views of NatureScot and the council's ecology officer, I am satisfied that the appellant has adequately assessed ecological and ornithological matters (including cumulatively where appropriate).

134. Taking all this together, I am content that the proposal is not likely to have significant adverse effects on ecological or ornithological matters, and that there is no conflict with relevant policies. Conditions would help ensure effects were minimised.

135. There is some disagreement between the appellant and council regarding the detail of relevant conditions. In particular, the appellant does not accept that great crested newts should be addressed in the protected species plan (requiring the on-site pond to be surveyed). It acknowledges that there is one record of the species in the area but submits this is outdated and distant and relates to an introduced specimen, arguing the area is outwith the species' natural range and moreover that the site lacks ecological connectivity to potential great crested newt habitats. On balance I agree with the appellant that it is highly unlikely the species is present on the site, and hence it need not be included in the protected species plan (part of the construction and environmental management plan required under condition 9). I discuss conditions further below.

136. In terms of the requirement in policy 3 b) for biodiversity enhancement, the appellant seeks to address this through a biodiversity enhancement management plan, proposing wet dwarf shrub heath restoration (as noted above), native broadleaf woodland creation, native mixed shrub enhancement and creation, and native hedgerow creation. It identifies beneficial effects for biodiversity, in particular for upland wading birds such as curlew, lapwing, and golden plover. It proposes a condition to secure these measures. The council

instead seeks imposition of a condition requiring a habitat management plan. I favour the appellant's proposed wording as I consider it better reflects the enhancement requirements of NPF4 policy 3 b), and bearing in mind the lack of any likely significant adverse effects on habitats (for which mitigation or compensation might be necessary).

137. Taking all this together, I consider that, with the imposition of appropriate conditions, the proposal accords with the terms of relevant development plan policies relating to ecology and ornithology, specifically NPF4 policies 1, 3, 4, and 11 e) part ix., and HwLDP policies 57, 58, 59, 60, and 67.

Hydrology and peat

138. NPF4 policy 11 e) part viii. requires renewable energy proposals to address impacts on hydrology and the water environment. Policy 5 c) provides that development proposals on peatland habitats will only be supported in certain circumstances, one of which is renewable energy generation that optimises the contribution of the area to greenhouse gas emissions reduction targets. HwLDP policy 55 also seeks to avoid unnecessary disturbance to peat, while policy 67 requires that renewable energy proposals address effects on ground water and surface water. Policies 63, 64, and 66 also relate to the water environment, flood risk, and surface water drainage.

139. Technical appendix 2.2 of the EIA report provides a draft peat management plan, based on a peat depth and coring survey (reported in technical appendix 2.4). It identifies that the site is mainly covered in shallow peat, and the proposal avoids the one deeper pocket. The identified peat balance is neutral, in terms of quantities to be excavated and reinstated. Technical appendix 2.5 of the EIA report addresses potential effects on hydrology, the water environment, and flood risk. It explains that the proposal largely avoids the drainage network, however three new watercourse crossings would be required, one of which would be temporary during construction. Mitigation measures are set out to minimise the risk of pollution or effects on groundwater, which would be secured under the terms of a construction and environmental management plan to be required by condition. No significant effect on any of these matters is identified in the EIA report.

140. SEPA has no objections to the proposal subject to conditions aimed at minimising impacts on peat and carbon loss, protecting the water environment, and adherence to environmental protection measures during construction and decommissioning as outlined in the EIA report. Conditions 7, 9, 10, 11, and 23, detailed below, would address these matters. The council's flood risk management team has no comments on the proposal. I am satisfied that the proposal does not conflict with relevant development plan policies.

Noise and shadow flicker

141. NPF4 policy 11 e) part i. requires renewable energy proposals to demonstrate how impacts of noise and shadow flicker are addressed, while HwLDP policy 67 contains similar provisions. HwLDP policy 72 addresses pollution including noise.

142. Chapter 10 of the EIA report considers noise, including cumulatively. Effects from operational noise are assessed based on 'The Assessment and Rating of Noise from Wind Farms' (ETSU-R-97) and the associated good practice guide, which have long represented the accepted approach for decision-making in Scotland. I am aware that updated guidance on noise assessment has recently been published, however I understand the accepted approach remains fundamentally the same. Construction noise is assessed based on the relevant British Standard. Technical appendix 10.2 addresses noise from the proposed

energy storage facility, concluding it would be substantially below the sound levels from the turbines, and is thus insignificant and is not considered further.

143. Peak construction noise levels are predicted in the EIA report to potentially exceed the daytime target level at one residential property near the site entrance, and to potentially exceed the target for evenings and weekends at three properties. Mitigation measures are proposed, which would be addressed in the construction noise management plans to be provided under conditions 10 and 11 (detailed below).

144. During the wind farm's operation, the cumulative noise assessment taking into account existing wind farms (in particular Baillie and Forss) predicts the daytime noise limit could be exceeded at 34 residential properties by a maximum of 4.2 dB(A), and the night limit exceeded at six properties by up to 0.8 dB(A). The appellant proposes a noise management strategy to reduce noise levels to within limits, involving operating certain turbines in reduced noise mode by altering their blade pitch (which also reduces energy generation). The appellant notes that meeting noise limits does not mean the wind farm would be inaudible at these properties under all conditions.

145. Some objectors raise concerns about the potential for noise from the proposal to affect human health (including mental health). However, the council's environmental health officer accepts the appellant's findings, and has no objections subject to conditions to specify operational noise limits (and to address construction noise, discussed above). I understand the concerns of objectors but see no compelling evidence that causes me to reach a different conclusion from the specialist advice of the appellant and council. The two main parties are agreed on the terms of a condition regarding operational noise to ensure noise limits are met, and I include this as condition 26 below.

146. An assessment of the proposal's potential shadow flicker effects is set out in EIA technical appendix 2.8. It identifies eight residential properties that could potentially experience shadow flicker exceeding 30 hours per year or 30 minutes per day. The most affected property would be Atlantic View to the north-west, with potential for shadow flicker on 153 days of the year up to a total of over 51 hours. I acknowledge that these figures represent a 'worst case', with actual effects likely to be less due to factors such as cloud cover and turbine alignment. In response to my request for clarification, the appellant confirmed that it considers unmitigated effects at these eight properties would be significant. It also indicated that significant effects could occur at two further properties, which were not reported originally as they are financially involved in the proposal.

147. The appellant now proposes a shadow flicker management system, which would implement turbine shutdowns at times when shadow flicker effects could otherwise arise. This would entirely prevent shadow flicker occurring at any property, and would be secured through condition 24 (detailed below). I am satisfied that, with the inclusion of this condition, the proposal would not give rise to any shadow flicker effects.

Traffic and transport

148. NPF4 policy 11 e) part vi. requires renewable energy proposals to address impacts on road traffic and on adjacent trunk roads, including during construction. Policy 13 also relates to transport, although is mainly focused on the design and layout of developments.

149. Chapter 11 of the EIA report addresses traffic and transport matters. It does not predict any significant effects. Transport Scotland and the council's transport planning service raise no objections to the proposal subject to conditions relating to abnormal loads on the trunk road network, and a construction traffic management plan. These matters

would be addressed by conditions 13 and 14. The scope of these conditions is broadly agreed between the appellant and council, aside from how post-construction remediation of public roads should be secured. I prefer the appellant's original wording in this regard, which refers to an 'appropriate agreement', as it is less prescriptive than the council's. Subject to these conditions, I am satisfied the proposal accords with relevant NPF4 policies.

150. I note that a number of representations in support of the proposal submit that the site's proximity to the A836 and Scrabster harbour would minimise traffic disruption.

Other matters

151. NPF4 policy 23 seeks to mitigate risks from safety hazards. Safety matters are addressed in chapter 11 of the EIA report, including the proposed wind farm's vulnerability to major accidents or disasters, and its potential effects on human health and safety. It concludes that the overall risk to health and safety, including major accidents, is negligible. There is no evidence before me that indicates otherwise.

152. However, the council considers that fire risk and associated health and safety matters relating to the proposed energy storage facility ought to be addressed as part of the planning process. While it accepts that the relevant considerations are those that might impact the final layout and appearance of the development, it also submits that compliance with health and safety guidance should be evidenced via planning condition. I agree with the appellant that this would duplicate the effect of other non-planning controls and is therefore unnecessary. However, I do consider it appropriate that the detailed layout of the energy storage facility should address provision for emergency access and adequate water supply, and these matters are referenced in the appellant's proposed condition wording. I include that wording in condition 4 (with a minor amendment to the structure for clarity). I acknowledge the appellant's submission that it intends the proposal to be self-sufficient in the event of a battery-based fire and thus it would not require fire service intervention. The Scottish Fire and Rescue Service has not made any comments on the proposal. Overall I am satisfied there is no conflict with NPF4 policy 23.

153. NPF4 policy 11 e) part iv. requires renewable energy proposals to address impacts on aviation and defence interests. HwLDP policy 67 contains comparable provisions. There are no objections from National Air Traffic Services (NATS) Safeguarding. Highlands and Islands Airports Limited also has no objections subject to a condition requiring submission of an instrument flight procedures assessment relating to Wick Airport, which is addressed by condition 17. The Ministry of Defence has no objections provided conditions are attached to secure charting and aviation safety information, and aviation lighting (which it has confirmed can be infra-red lighting). These matters are addressed by conditions 16 and 18. I am satisfied the attached conditions adequately address aviation and defence matters.

154. Chapter 11 of the EIA report also considers waste, indicating that a site waste management plan would be agreed and implemented via a planning condition. This is included as a requirement of the construction and environmental management plan, which I secure under condition 9. Condition 19 regarding decommissioning also provides for a site waste management plan for that phase. The assessment predicts the effects of waste would be negligible and not significant. I see no reason to conclude differently.

155. NPF4 policy 11 e) part iii. requires renewable energy proposals to address impacts on public access, including any long distance walking or cycling routes. HwLDP policies 67 and 77 contain similar provisions. Chapter 13 of the EIA report considers effects on public access including core paths, supported by an outline outdoor access management plan (technical appendix 2.7). I have already concluded there would be significant visual effects

on certain recreational routes within around 5km, including core paths. The appellant indicates any effects on access and recreation during construction would be kept to a minimum, including that the core path within the site would remain open, and this would be addressed by an outdoor access management plan (which I require under condition 21). There are no designated long distance walking or cycling routes nearby. The public would have access to the proposed new tracks within the development following the construction phase, and a small car park is proposed adjacent to the site access. I am satisfied the proposal addresses impacts on public access, and I agree effects would not be significant.

156. NPF4 policy 11 e) part v. requires renewable energy proposals to address impacts on telecommunications and broadcasting installations. HwLDP policy 67 contains similar provisions. The appellant submits the proposal would not cause any issues in respect of telecommunications, and there is no evidence before me indicating otherwise.

157. NPF4 policy 11 e) parts xi. and xii. require renewable energy proposals to address decommissioning and site restoration, including measures to safeguard or guarantee availability of finances to effectively implement restoration plans. The appellant and council agree on a condition requiring a bond or other financial guarantee to be put in place, which I impose as condition 20. They are not entirely agreed on the wording of a condition regarding decommissioning. I have imposed the appellant's version as condition 19, which aligns more closely with the Scottish Government's onshore wind standard conditions.

Grid connection

158. The potential grid connection is discussed in chapter 12 of the EIA report. This does not form part of the appeal proposal before me and would be subject to a separate consenting process. However, as noted above, the appellant considers the proposed wind farm and the associated grid connection constitute a single project in EIA terms, which I accept. I therefore need to consider whether the grid connection would be likely to have any significant environment effects, either itself or in combination with the proposed wind farm.

159. The appellant has identified an indicative route for a connection to Thurso South substation, anticipating it would be mainly underground cable, with one overhead section near the substation. The EIA report assesses the environmental effects of this potential grid connection as far as possible, based on desk-based study. The appellant does not identify any significant effects, subject to avoidance and appropriate mitigation. NatureScot considers further assessment would be required as part of the consenting process for the grid connection. The council's transport planning service also seeks further details prior to any grid connection works.

160. While I see no reason to disagree with the findings of the EIA report that significant effects are unlikely based on the identified grid connection route, the appellant's assessment is not based on a reasonable 'worst case' grid connection, and there is a possibility that the grid connection might ultimately be different from what has been assessed. In these circumstances, the likely significant effects of the overall project (including the grid connection) are not fully identifiable at present. Given this uncertainty, I consider that a multi-stage condition is necessary to prevent development of the wind farm until such time as details of the grid connection have been submitted to and approved by the planning authority, and the grid connection has received development consent. The appellant accepts the principle of a multi-stage condition, however its proposed wording would not ensure the grid connection's effects had been assessed and found to be acceptable before work could start on the wind farm, and in my view this would not meet the requirements of the EIA regulations. I therefore impose an alternative form of words as condition 25 below.

161. I acknowledge the views of some objectors that the grid connection should form part of the appeal proposal. While I accept that a single consenting process might have certain advantages, I must consider the proposal as it stands. I have considered the potential environmental effects of the associated grid connection as far as possible at this stage.

Development plan conclusions

162. For the reasons set out above, I consider NPF4 lends significant support to the proposed wind farm. I have set out the climate, energy and other benefits of the proposal above. These benefits are of particular relevance in drawing support from policy 1, which gives significant weight to the global climate crisis.

163. Policy 11 of NPF4 is the key topic-specific policy. It supports the principle of a wind farm in this location. For the reasons set out above, I consider the proposed wind farm's significant adverse landscape and visual effects remain within what can reasonably be considered as localised, and that appropriate design mitigation has been applied. Effects on communities and individual dwellings are an important consideration, and I detail above the significant visual effects that would be experienced by local residents. However, I do not consider these exceed normally accepted limits. There would also be significant effects on the settings of two scheduled monuments but not to the extent their integrity would be significantly affected. My assessment above demonstrates the avoidance of significant effects in relation to the other matters listed in policy 11 e).

164. In the context of policies 1 and 11 of NPF4, I do not consider the extent, scale, and nature of the identified adverse effects, as summarised above, weigh as heavily in the planning balance as the identified benefits. This conclusion reflects the expectation set out in policy 11 that significant weight will be placed on a proposal's contribution to renewable energy generation targets and greenhouse gas emission targets, and also its statement that significant landscape and visual impacts are to be expected.

165. I must also consider the relevant policies of other parts of the development plan. As set out above, HwLDP policy 67 and its supporting supplementary guidance (which seeks to avoid significant landscape and visual effects) indicate a balance of considerations that is at odds with NPF4's expectation that significant effects will be accepted in many circumstances. While I consider the proposal raises some conflict with policy 67 and the supplementary guidance, and also with policy 61 regarding landscape, I attach greater weight to NPF4 policy 11 as the later expression of development plan policy.

166. My assessment above demonstrates that the proposal accords with other relevant policies relating to topics including cultural heritage, ecology, ornithology, hydrology and peat, noise and shadow flicker, traffic and transport, health and safety, aviation and defence, public access, telecommunications, and decommissioning.

167. Drawing together all of the above, I find the principle of the proposed development is consistent with the development plan, and the proposal is supported by NPF4 policies 1 and 11. I do not identify any substantial conflict with other relevant policies. I therefore find that the proposal accords overall with the provisions of the development plan.

Energy policy

168. The Onshore Wind Policy Statement (2022) indicates a clear policy ambition to increase deployment of wind energy in Scotland by 2030 and beyond. It anticipates a rapid expansion of Scotland's onshore wind capacity, both new sites and repowering of existing sites, describing this as 'mission critical' for meeting Scotland's climate targets. The

statement emphasises that this will require taller and more efficient turbines and this will change the landscape.

169. This policy statement does not form part of the development plan but is a material consideration in this case. I consider it generally reflects the terms of NPF4, and supports my conclusions above in terms of the proposal's consistency with the development plan, with its 21.5 megawatts generating capacity weighing strongly in its favour.

170. Some objectors question the need for more renewables or suggest that other forms of power generation would be preferable, such as offshore wind farms. It is beyond the scope of the decision on this appeal for me to consider the merits of energy policy, which clearly supports further onshore wind energy development.

Other matters

171. There are references in the submissions to Scottish Planning Policy (SPP) (2014) but this has now been superseded by NPF4 and I have therefore had no regard to it.

172. The Scottish Government published planning guidance 'Battery Energy Storage Systems' in March 2026. I invited comments from the main parties on its relevance to this proposal. I am satisfied that it does not raise any additional considerations in this case that I have not already addressed above.

173. I have noted the matters raised in representations, both objecting to and supporting the proposal, and I have mostly addressed these under the various headings above.

174. The capacity of the electricity grid to accommodate further energy development is raised. However, NPF4 policy 11 is clear that grid capacity should not constrain renewable energy development. Consequently, although I note the concern about grid capacity, I do not consider such concerns stand in the way of a grant of permission for the proposed development. As noted above, the grid connection itself does not form part of the appeal proposal, however condition 25 would prevent development of the wind farm until details of the grid connection were approved.

175. Objectors raise the site's planning history, in particular the refusal in 2021 of an application for an eight-turbine wind farm (which I have already referred to above in relation to design mitigation). Each proposal must be considered on its own merits against the policy framework in place at the time, and this previous decision was taken before NPF4 was adopted, which I regard as representing a more supportive policy framework for wind energy proposals than before, in particular in relation to landscape and visual matters. This previous proposal is therefore of limited direct relevance to this appeal.

176. A number of objectors raise concerns about public consultation processes and suggest there was a lack of awareness of the proposal. The substantial number of representations received by the council suggests to me a high level of awareness. Public opportunities to participate in the decision-making procedure are set out in schedule 4.

177. A range of other matters are raised in representations that are not material planning considerations and are therefore not factors I can take into account. These include potential impacts on house prices, constraints payments, consumer energy prices in the local area, the turbines' manufacturing location, and the personal circumstances of objectors.

Conditions

178. Exchanges during the course of this appeal have resulted in some agreement between the council and the appellant regarding conditions, however there remain disputes about the need for certain conditions or the detail of their wording. I have already addressed a number of these above in relation to policy matters and mitigation measures.

179. In broad terms, the council considers that conditions should generally contain 'inclusive requirements', detailing the matters to be addressed to satisfy the condition. I acknowledge its argument that this approach might help minimise the demand on its resources at condition discharge stage. However, I agree with the appellant that this approach may be at odds with circular 4/1998, which advises that conditions should only be imposed where necessary to enable permission to be granted. I consider that expectation extends to the detail of conditions, and that they should not be unduly prescriptive. Moreover, the council would ultimately retain control of agreeing relevant details. In any event, I have carefully considered parties' arguments about each individual condition.

180. Where there are relatively minor disagreements regarding wording or the inclusion of certain requirements, I have had regard to the Scottish Government's onshore wind standard conditions, although I am aware they were prepared for applications made under the Electricity Act. Where there is no evidence indicating a different approach is justified, I have tended to favour the wording that most closely aligns with the standard conditions.

181. I have adopted the council's proposed wording in condition 3 regarding the design of wind turbines, which reflects the standard conditions. Given that the turbine tip height is included in the description of development I do not agree with the appellant that it is necessary to specify it in this condition. I have also removed reference to anemometry masts from this condition since none form part of this proposal.

182. The council and appellant reached agreement through the course of the appeal process that an environmental clerk of works should be appointed (rather than an ecological clerk of works, which the appellant originally preferred). However, there remains disagreement on the detailed condition wording. The appellant proposes wording taken from the standard conditions. There is nothing indicating a departure from that approach is necessary in the circumstances of this case, and accordingly I include this as condition 8.

183. The main parties disagree on the detailed condition wording regarding a construction and environmental management plan (condition 9). I have already found above that it is not necessary to address great crested newts as part of the species protection plan. I see no reason not to accept the appellant's request to have a separate condition requiring a construction method statement and a construction noise management plan for the energy storage facility, and a further condition regarding construction method statements for other infrastructure. I have included these as discrete conditions 10 and 11. I am content that the appellant's wording regarding a programme of archaeological works is sufficient, with the scope of this to be agreed with the council. I agree with the appellant that requirements regarding wetland ecosystems and tree felling are not relevant and should not be included. I have also amended parts (2)(f) and 2(p) of the condition regarding soil storage and cable trenches as their meaning was unclear to me, although taken from the standard conditions.

184. The council also seeks a separate condition regarding archaeology, in addition to the relevant provisions of the construction and environmental management plan. I agree with the appellant that this would represent duplication and is unnecessary.

185. The appellant disputes the need for a condition regarding a schedule of mitigation measures, which the council seeks in order to ensure all such measures are detailed in a single document. I acknowledge that the council's proposed wording is taken from the onshore wind standard conditions, and I accept that bringing all mitigation measures together in one document might be good practice. However, I agree with the appellant that this is not strictly necessary to enable permission to be granted as it would represent duplication of the requirements of other conditions.

186. The council disputes the need for a condition on construction hours, indicating it would rather rely on statutory nuisance powers and a local liaison group (to be established as part of the traffic management plan required under condition 13). I am satisfied a planning condition is appropriate and necessary to ensure impacts on amenity are minimised, and I consider this would complement rather than duplicate other controls. I also note the appellant's wording is taken from the onshore wind standard conditions and I see no reason to depart from that approach in this respect.

187. There are minor differences in the suggested wording of a condition regarding aviation safety, in terms of providing details of the height and location of the development to relevant bodies, and in condition 16 I have opted for wording that most closely reflects the provisions sought by the Ministry of Defence.

188. I have clarified in condition 18 that aviation lighting should be infra-red (as opposed to visible lighting), as this is the basis on which the proposal has been assessed, and on which I have reached my conclusions on its landscape and visual effects.

189. In respect of decommissioning, I prefer the appellant's wording regarding an interim plan and adopt this in condition 19. It accords with the onshore wind standard condition and I see no reason to depart from that approach in this case. For the same reason I accept the appellant's proposed timescale of one year prior to the date of final generation for submission of a detailed decommissioning, restoration and aftercare plan.

190. As noted above, the appellant opposes the council's proposed condition requiring a local employment scheme. I find above that this condition is not necessary or reasonable. I have therefore not attached it.

191. The council seeks a condition regarding a site inspection strategy, which would require site inspections after 25 years of operation and every five years thereafter. It argues this is a standard condition for permissions lasting longer than the standard manufactured operational life of wind turbines. However, I note the onshore wind standard conditions indicate it should only be applied to permissions of 40 years or longer, which is not the case here. There is nothing to indicate this condition is necessary in this instance.

192. I have made a number of further minor modifications to suggested conditions (and to their headings and their reasons) to improve clarity and consistency, remove duplication, or correct minor formatting or grammatical issues. In particular, I have separated provisions regarding commencement of development and the duration of the consent into two conditions (numbers 1 and 2). I have removed reference to aviation safety lighting being excluded from condition 5 (signage) since the proposal has been assessed on the basis of no visible lighting so this is not relevant. I have removed reference from condition 7 to the ability for the council to agree micro-siting outwith the specified parameters as this would create the potential for development to take place that had not been assessed through the environmental impact assessment process (nor taken into account in my decision). I have amended references to "the company" to instead refer to the developer or operator, given that (unlike a consent under the Electricity Act) planning permission runs with the land.

193. I have included definitions as proposed by the appellant to explain terms used in certain conditions, however I have excluded one ("the application") as I consider it to be unnecessary, and I have corrected errors and inconsistencies in others.

194. The attached conditions provide for monitoring measures where appropriate. In condition 8 I require the appointment of an environmental clerk of works, who would have responsibility for monitoring compliance with environmental commitments relating to the development, which would include mitigation measures. In condition 9 I require the incorporation of pollution control monitoring measures in the construction and environmental management plan. In condition 13 I require monitoring procedures to ensure agreed traffic management measures are adhered to. In condition 22 I require regular monitoring of biodiversity enhancement measures to ensure objectives are met. There is no evidence before me to suggest that any other monitoring measures are required.

195. For the reasons set out above, I consider a condition preventing development of the wind farm until details of the grid connection have been approved is necessary to ensure compliance with the EIA regulations. This is addressed by additional condition 25.

Overall conclusion

196. I am satisfied that my reasoned conclusions on the significant effects of the proposed development are up to date. I find that significant effects of the wind farm would be limited to landscape and visual effects (including on communities and individual dwellings), and effects on the settings of two scheduled monuments, as described above. Following my consideration of the environmental information, I have identified no additional significant effects. I conclude that, subject to mitigation controlled by means of the conditions attached to this notice, there would be no unacceptable residual impacts in regard to those matters.

197. Taking all relevant matters into account, I conclude, for the reasons set out above, that the proposed development accords overall with the relevant provisions of the development plan and that there are no material considerations that would still justify refusing to grant planning permission.

198. I have considered all the other matters raised, but there are none that would lead me to alter my conclusions.

Philip McLean
Reporter

Schedule 1: Conditions

Definitions

“Bank Holiday” means:

- New Year's Day, if it is not a Sunday or, if it is a Sunday, 3rd January;
- 2nd January, if it is not a Sunday or, if it is a Sunday, 3rd January;
- Good Friday;
- the first Monday in May;
- the first Monday in August;
- 30th November, if it is not a Saturday or Sunday or, if it is a Saturday or Sunday, the first Monday following that day;
- Christmas Day, if it is not a Sunday or, if it is a Sunday, 27th December; and
- Boxing Day, if it is not a Sunday or, if it is a Sunday, 27th December.

"Commencement of Development" means initiation of development in accordance with section 27 of the Town and Country Planning (Scotland) Act 1997.

“EIAR” means the Environmental Impact Assessment Report submitted in September 2022.

“Final Commissioning” means the earlier of:

(a) the date on which electricity is exported to the grid on a commercial basis from the last of the wind turbines forming part of the development erected in accordance with this permission; or

(b) the date 18 months after the date of First Commissioning, unless a longer period is agreed in writing in advance by the Planning Authority.

"First Commissioning" means the date on which electricity is first exported to the grid on a commercial basis from any of the wind turbines forming part of the development.

"IFP Assessment" means a safeguarding assessment against current and any possible future IFPs. This assessment must be undertaken by a UK CAA Approved Procedure Design Organisation (APDO).

"IFP Scheme" means a scheme to address the potential impact of the turbines on the instrument flight procedures or Aeronautical Information Regulation and Control (ATCSMAC) of Wick Airport.

"Public Holiday" means Easter Monday and the third Monday in September.

“Supplementary Environmental Information” means the Supplementary Information submitted in October 2023.

1. Commencement of Development

The development to which this permission relates shall be begun not later than the expiration of five years beginning with the date of grant of this permission.

Reason: Section 58 of the Town and Country Planning (Scotland) Act 1997 requires a condition to be attached to permissions limiting their duration. While three years is the default period set by law, a period of five years is appropriate for a wind farm development.

2. Duration of Consent

The planning permission hereby granted shall endure for a period of 35 years from the date of Final Commissioning. Written confirmation of the date of the Final Commissioning shall be provided to the Planning Authority no later than one calendar month after that date.

Reason: To define the duration of the consent.

3. Design of Wind Turbines

(1) No turbines shall be erected until details and specification of the proposed wind turbines, (including the size, make and model, power rating and sound power levels, nameplate generating capacity, type, external finish and colour) and all turbine associated apparatus have been submitted to and approved in writing by the Planning Authority.

(2) For the avoidance of doubt the scale of the turbines shall not exceed the parameters assessed in the EIAR and set out in the description of the Development.

(3) The submission shall demonstrate that all wind turbine blades shall rotate in the same direction.

(4) Thereafter the wind turbines and all associated apparatus shall be constructed and operated in accordance with the details approved under part (1) and shall be maintained in the free from external rust, staining or discolouration, until such time as the Development is decommissioned unless otherwise agreed in writing by the Planning Authority.

Reason: To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts assessed in the EIAR and in the interests of the visual amenity of the area.

4. Design of Energy Storage Facility

(1) There shall be no Commencement of Development on the energy storage facility until details of the location, layout, external finishes and appearance, dimensions and surface materials of the energy storage facility, inclusive of battery containers, substation(s), control buildings, external above ground electrical equipment, associated compounds, construction compound, boundary fencing and other enclosures, external lighting, security cameras and parking areas, and details of arrangements for access and water supply for emergency services have been submitted to, and approved in writing by, the Planning Authority.

(2) For the avoidance of doubt the details of the energy storage facility shall not exceed the parameters assessed in the EIAR.

(3) Thereafter, the battery energy storage facility shall be constructed in accordance with the details approved under part (1) and the infrastructure shall be maintained in the

approved colour, free from rust, staining or discolouration until such time as the Development is decommissioned.

Reason: To ensure that the environmental impacts of the energy storage facility forming part of the Development conform to the impacts assessed in the EIAR and in the interests of the visual amenity of the area.

5. Signage

No part of the Development shall display any text, logo, sign or advertisement (other than health and safety signage as required by law) or be illuminated unless otherwise approved in writing by the Planning Authority.

Reason: In the interests of health and safety on site and the visual amenity of the area.

6. Design of substation and ancillary development

Prior to construction of the substation compound, full details of the external appearance, dimensions, and surface materials of the substation building(s), associated compounds, any construction compound boundary fencing, external lighting and parking areas shall have been submitted to and approved in writing by the Planning Authority. The approved details shall be implemented.

Reason: To ensure that the environmental impacts of the substation, associated compounds and associated development forming part of the Development conform to the impacts assessment in the EIAR and in the interests of the visual amenity of the area.

7. Micro-siting

(1) All wind turbines, buildings, areas of hardstanding and tracks shall be constructed in the location shown in Figure 2.1 Site Layout (EIAR Volume 3A Figures and Drawings Chapter 2). The locations of all wind turbines, buildings, areas of hardstanding and tracks may be adjusted by micro-siting within the site subject to the following restrictions:

(a) Subject to sub-paragraphs (b) and (c), the wind turbines and other infrastructure hereby permitted may be micro-sited within 50 metres;

(b) No wind turbine or other infrastructure, may be micro-sited:

(i) to less than 50 metres from surface water features identified in the EIAR or from a major watercourse, all as identified in Figure 2.1 Site Layout (EIAR Volume 3A Figures and Drawings Chapter 2); or

(ii) to less than 25 metres from minor watercourses as identified in Figure 2.1 Site Layout (EIAR Volume 3A Figures and Drawings Chapter 2 and from watercourse crossings as identified in Figure 2.1 Site Layout (EIAR Volume 3A Figures and Drawings Chapter 2);

(c) No turbine shall be micro-sited onto peat deeper than currently shown on Figure 2.4.2 Phase 1 and 2 Sampling Peat Depths and Figure 2.4.3 Interpolated Peat Depths (EIAR Volume 4, Technical Appendix 2.4 Phase 1 and 2 Peat Depth & Coring Survey Report);

(d) Any micro-siting of access tracks onto peat over 1 metre in depth shall require the tracks to be floated;

(e) All micro-siting permissible under this condition must be approved in advance in writing by the Environmental Clerk of Works ("EnvCoW").

(2) No later than one month after the date of Final Commissioning, an updated site plan shall be submitted to the Planning Authority showing the final position of all wind turbines, areas of hardstanding, tracks and associated infrastructure forming part of the Development. The plan should also specify areas where micro-siting has taken place and, for each instance, be accompanied by copies of the ECoW or Planning Authority's approval, as applicable.

Reason: To enable necessary minor adjustments to the position of the wind turbines and other infrastructure to allow for site-specific conditions while maintaining control of environmental impacts and taking account of local ground conditions, including existing infrastructure.

8. Environmental Clerk of Works

There shall be no Commencement of Development until the terms of appointment by the developer of an independent Environmental Clerk of Works ("EnvCoW") have been submitted to, and approved in writing by, the Planning Authority. The terms of appointment shall:

a) impose a duty to monitor compliance with the environmental commitments provided in the EIAR, any micro-siting under condition 7, the Construction and Environmental Management Plan approved under condition 9, the Biodiversity Enhancement Management Plan approved under condition 22, Breeding Birds Protection Plan, Species Protection Plan and Bird Disturbance Management Plan all as approved under condition 9 ("the EnvCoW works");

b) require the EnvCoW to report to the nominated construction project manager, developer and Planning Authority any incidences of non-compliance with the EnvCoW works at the earliest practical opportunity;

c) require the EnvCoW to submit a monthly report to the construction project manager, developer and Planning Authority summarising works undertaken on site.

(2) Prior to the decommissioning, restoration and aftercare phases of the Development or the expiration of the operational period of the consent (whichever is the earlier), details of the terms of appointment of a suitably qualified, experienced, and independent EnvCoW by the developer / operator throughout the decommissioning, restoration and aftercare phases of the Development shall be submitted to, and approved in writing by the Planning Authority.

(3) the EnvCoW shall be appointed on the terms approved under part (2) throughout the decommissioning, restoration and aftercare phases of the Development.

Reason: To secure effective and transparent monitoring of and compliance with the environmental mitigation and management measures associated with the Development during the construction, decommissioning, restoration and aftercare phases.

9. Construction and Environmental Management Plan

(1) There shall be no Commencement of Development until a Construction and Environmental Management Plan (CEMP) containing site-specific details of all on-site construction works, post-construction reinstatement, drainage and mitigation, together with

details of their timetabling, has been submitted to, and approved in writing by, the Planning Authority. The CEMP shall be informed by the site and ground investigation works and best practice guidance.

(2) The CEMP shall provide:

(a) a site waste management plan (dealing with all aspects of waste produced during the construction period other than peat and other carbon rich soils), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment, evidencing all proposals comply with SEPA's guidance and the requirements of the waste management licensing regime as appropriate;

(b) details of the location, layout, formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil, fuel and chemical storage, lighting columns, and any construction compound boundary fencing required for the construction period;

(c) a dust management plan detailing all mitigation/dust suppression measures intended to reduce the impacts of dust on site, including measures to reduce dust on roads;

(d) 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;

(e) a Pollution Prevention and Incident Plan incorporating a Pollution Prevention Plan, Pollution Incident Plan and a Pollution Control Monitoring Plan, which shall provide measures to protect watercourses, groundwater, management of natural surface hydrological flows (flushes, springs, etc.) and protection of peatland/soils, arrangements for the storage and management of oil and fuel and other chemicals on the site and sewage disposal and treatment;

(f) details of soil storage and management including outline quantities, locations (other than peat and other carbon rich soils), and details of management arrangements for long-term storage of construction-generated materials that are to be used to facilitate future site restoration;

(g) a drainage management strategy, demonstrating how all surface and waste water arising during and after construction is to be managed and prevented from impacting on the water environment and to mitigate flood risk;

(h) 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;

(i) details of temporary site illumination, including measures to ensure light spill/pollution is minimised and avoids habitats within the site and does not extend beyond the immediate working area, and not beyond the site boundary;

(j) a Protected Species Plan. The Plan shall be informed by, but not limited to, surveys carried out by a suitably qualified person for bat, reptiles, and ground nesting birds. The surveys shall inform the mitigation measures required to protect bat,

reptiles, and ground nesting birds during construction of the Development. The Plan shall provide mitigation measures, as required, and a timetable for implementation;

(k) a Breeding Birds Protection Plan (BBPP);

(l) a Bird Disturbance Management Plan (BDMP);

(m) details of the construction of the access into the site, including associated drainage and the creation and maintenance of associated visibility splays;

(n) details of post-construction restoration/reinstatement of the working areas not required during the operation of the Development;

(o) a programme of archaeological works including details of an archaeological 'watching brief' as detailed in the EIAR and a written scheme of investigation;

(p) details of the cable trenches;

(q) a phasing plan for the construction works; and

(r) a written scheme which details the methodology for dealing with any revisions to any of the documents required under this part (2). Any revised documents will require to be submitted to and approved in writing by the Planning Authority prior to the revisions being implemented on site.

(3) The Development shall be implemented in accordance with the CEMP approved under part (1) unless otherwise approved in advance in writing by the Planning Authority.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the EIAR, or as otherwise agreed, are fully implemented.

10. Battery Energy Storage System Construction

(1) Prior to installation of the battery energy storage facility a:

(i) site-specific Construction Method Statement; and

(ii) a Construction Noise Management Plan including details of the management of noise and vibration during construction and post-construction restoration, including that caused by construction traffic;

Both in respect of the battery energy storage facility, shall be submitted to and approved in writing by the Planning Authority.

(2) The measures under part (1) shall be implemented as approved unless otherwise agreed in advance in writing by the Planning Authority.

Reason: To ensure that construction operations on the Battery Energy Storage System are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the EIAR, or as otherwise agreed, are fully implemented.

11. Infrastructure Construction

(1) Prior to erection of the first wind turbine:

(a) Site-specific Construction Method Statements for:

(i) crane pads;

(ii) turbine foundations;

(iii) working cable trenches;

(iv) erection of the wind turbines and meteorological masts;

(v) Substation compound formation, erection of associated buildings and ancillary infrastructure; and

(vi) watercourse crossings including full details and plans of the design and specification of all new and upgraded watercourse crossings to be constructed, ensuring continuous flow and fish passage with no hanging culverts, noting all crossings shall be oversized bottomless arched culverts or traditional style bridges;

(vii) all roads/tracks to be altered/formed within the development site; and

(b) a Construction Noise Management Plan including details of the management of noise and vibration during construction and post-construction restoration, including that caused by construction traffic;

All in respect of the infrastructure identified under part (a) (i)- (vii) shall be submitted to and approved in writing by the Planning Authority.

(2) The measures under part (1) shall be implemented as approved unless otherwise agreed in advance in writing by the Planning Authority.

Reason: To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the EIAR, or as otherwise agreed, are fully implemented.

12. Redundant Turbines

If one or more turbines fails to generate electricity for a continuous period of 12 months excluding any periods of constraint imposed by the National Grid as a result of which turbines are not operating, then within 3 months of the end of the 12 month period, unless otherwise approved in writing by the Planning Authority, a scheme setting out how the relevant turbine(s) and any specifically associated infrastructure will be removed from the site and the ground restored shall be submitted to the Planning Authority for approval. The scheme shall be implemented in full within 12 months of the date of its approval.

Reason: To ensure that any redundant wind turbine is removed from the site, in the interests of safety, amenity and environmental protection.

13. Traffic Management Plan

(1) There shall be no Commencement of Development until a Traffic Management Plan has been submitted to, and approved in writing by, the Planning Authority in consultation with the Roads Authorities. The Traffic Management Plan shall provide:

(a) a detailed construction programme;

(b) details of all off-site sources of bulk materials to be used for construction purposes;

(c) details of the number and type of vehicle movements generated by construction activities;

(d) the routeing of all traffic associated with the Development on public roads;

(e) measures to ensure that the specified routes are adhered to, including monitoring procedures;

(f) details of all signage and lining arrangements to be put in place;

(g) provisions for emergency vehicle access;

(h) measures to keep all public roads free from mud and debris caused by construction traffic;

(i) provision for the submission and agreement of a roads condition survey pre-and post-construction accompanied by an appropriate agreement between the Planning Authority and the developer to ensure the delivery of any post-construction public road restoration that may be required; and

(j) the identification of and delivery of all upgrades to the public road network to ensure that it is to a standard capable of accommodating construction-related traffic (including the formation or improvement of any junctions leading from the site to the public road) to the satisfaction of the Roads Authority, including but not limited to:

a. pre-commencement carriageway, bridges and culvert strengthening;

b. carriageway widening and/or edge strengthening;

c. provision of passing places;

d. road safety measures;

e. traffic management measures;

(k) a transport risk assessment during daylight hours and hours of darkness to inform a contingency plan which shall include measures to address any haulage incidents that may result in public roads becoming temporarily closed or restricted;

(l) identification of a nominated person to whom any road safety issues can be referred;

(m) the establishment of a Community Liaison Group to inform communities affected by construction.

(2) The approved Traffic Management Plan shall be implemented in full, unless otherwise approved in advance in writing by the Planning Authority.

Reason: To minimise interference with the safety and integrity of, and the free flow of traffic on, the public road network.

14. Abnormal Loads

(1) There shall be no abnormal load deliveries to the site until an Abnormal Load Route Assessment Report, including any necessary trial runs, has been submitted to and approved in writing by the Planning Authority in consultation with Transport Scotland. The Abnormal Load Route Assessment Report shall provide:

(a) a transport risk assessment during daylight hours and hours of darkness;

(b) details of a communications strategy to inform the relevant communities of the programme of abnormal load deliveries;

(c) details of any accommodation measures required for the local road network including the removal of street furniture, junction widening and traffic management;

(d) any additional signing or temporary traffic control measures deemed necessary on the trunk road network due to the size or length of any loads being transported must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland;

(e) details of the route for abnormal loads on the local and trunk road networks and any recommendations for delivery of abnormal loads;

(f) an assessment of the capacity of the road network including carriageways, culverts, bridges, passing places, and crossings on the route to cater for abnormal loads, and details of proposed upgrades and mitigation measures required to the public road network; and,

(g) a plan for access by vehicles carrying abnormal loads, including but not limited to the number and timing of deliveries and the length, width and axle configuration of all such traffic associated with the Development.

(2) Prior to the first delivery of an abnormal load, a programme for abnormal load deliveries shall be submitted to, and be approved in writing by the Planning Authority in consultation with Transport Scotland.

(3) Prior to any movement of abnormal loads (including trial runs) the developer must complete any mitigation works set out in in the scheme approved under part (1) of this condition, and maintain such measures during the period of abnormal load deliveries.

(4) Any trial run shall be undertaken in accordance with the details approved under part (1) prior to the movement of any abnormal loads.

(5) The details in the approved report shall thereafter be implemented in full prior to the first delivery of an abnormal load.

Reason: In the interests of road safety and to ensure that abnormal loads will not have any detrimental effect on the public road network.

15. Construction Hours

(1) Construction work shall only take place on the site between the hours of 07.00 to 19.00 on Monday to Saturday inclusive, with no construction work taking place on a Sunday or on national public holidays or bank holidays (see definitions). Outwith these hours the following is permitted:

(1) development at the site limited to turbine delivery and erection, commissioning, maintenance and pouring of concrete foundations; and

(2) access for security reasons, emergency responses or to undertake any necessary environmental controls provided that the developer notifies the Planning Authority in writing of any such works within 24 hours if prior notification is not possible.

Reason: In the interests of amenity to restrict noise impact.

16. Aviation Safety

(1) Prior to the erection of the first turbine, the developer shall provide the Planning Authority, Ministry of Defence, and NATS with the following information:

(a) the date of the commencement of wind turbine generators;

(b) the height above ground level of the tallest structure forming part of the Development;

(c) the maximum height of any construction equipment to be used in the erection of the wind turbines;

(d) the date any wind turbines are brought into use; and

(e) the position of the turbines and masts in latitude and longitude.

(2) The developer shall, as soon as is practicable and in any event with 7 days prior to the event, provide to the Planning Authority, the Ministry of Defence, and NATS written notice of any proposed changes to the information provided under part (1).

(3) Within 1 month of the erection of the final turbine, the developer shall provide written confirmation to the Planning Authority, the Ministry of Defence, and NATS of the actual date on which construction was completed and the confirmed latitude and longitude of all turbines (in degrees, minutes and seconds) and the height above ground level of each turbine (in metres to blade tip).

Reason: In the interests of aviation safety.

17. Aviation Safety – Instrument Flight Procedures Scheme

No part of any turbine forming a part of the development shall be erected unless and until such time as the Planning Authority receives confirmation from the operator of Wick Airport in writing that:

a) an IFP Assessment has demonstrated that an IFP Scheme is not required; or

b) an IFP Scheme has been approved by the Airport Operator;

c) the Civil Aviation Authority (CAA) has confirmed its approval to the Airport Operator of the IFP Scheme (if such approval is required); and

d) the IFP Scheme has been submitted to National Aeronautical Information Services (NATS) for promulgation, via the Aeronautical Information Regulation and Control (AIRAC) Cycle (or any successor publication) (where applicable). The effective date

for the AIRAC Cycle, containing the introduction of the IFP Scheme, has passed and the IFP Scheme is available for use by aircraft.

Reason: In the interests of aviation safety; to secure mitigation of impacts and ensure the development does not alter traffic patterns or impact the safety of aircraft at Wick Airport.

18. Infra-Red Aviation Lighting – Ministry of Defence

Prior to commencing construction of any wind turbine generators, or deploying any construction equipment or temporal structure(s) 50 metres or more in height (above ground level) the undertaker must submit an aviation lighting scheme for the approval of the Planning Authority in conjunction with the Ministry of Defence defining how the development will be lit with infra-red lighting throughout its life to maintain civil and military aviation safety requirements as determined necessary for aviation safety by the Ministry of Defence. This should set out:

a) details of any construction equipment and temporal structures with a total height of 50 metres or greater (above ground level) that will be deployed during the construction of wind turbine generators and details of any infra-red aviation warning lighting that they will be fitted with; and

b) the locations and heights of all wind turbine generators featured in the development identifying those that will be fitted with infra-red aviation warning lighting identifying the position of the lights on the wind turbine generators; the type(s) of lights that will be fitted and the performance specification(s) of the lighting type(s) to be used. Thereafter, the undertaker must exhibit such lights as detailed in the approved aviation lighting scheme. The lighting installed will remain operational for the lifetime of the development.

Reason: To maintain aviation safety.

19. Site Decommissioning, Restoration and Aftercare

(1) The Development shall cease to generate electricity by no later than the date falling 35 years from the date of Final Commissioning.

(2) There shall be no Commencement of Development until an Interim Decommissioning, Restoration and Aftercare Plan has been submitted to and approved in writing by the Planning Authority (“the Interim Plan”). The Interim Plan shall outline measures for the decommissioning of the Development and restoration and aftercare of the site, and shall provide proposals for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environmental management provisions in any instance that the site as a whole, or in part, ceases to operate prior to the approval of the Decommissioning, Restoration and Aftercare Plan.

(3) No later than one year prior to the Date of Final Generation, a detailed Decommissioning, Restoration and Aftercare Plan, based on the principles of the Interim Plan, shall be submitted to the Planning Authority for its written approval.

(4) The plan as submitted and approved under (3) shall provide updated and detailed proposals, in accordance with relevant guidance at that time, for the removal of the Development (except for turbine foundations more than 1 metre below ground level), the treatment of ground surfaces, the management and timing of the works and environment management provisions, and shall provide:

(a) a site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases and, including details of measures to be taken to minimise waste associated with the Development and promote the recycling of materials and infrastructure components);

(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) 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;

(e) a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;

(f) details of measures for soil storage and management;

(g) 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;

(h) details of measures for sewage disposal and treatment;

(i) details of temporary site illumination; and

(j) details of the construction of any temporary access into the site and the creation and maintenance of associated visibility splays.

(5) The Development shall be decommissioned, the site restored and aftercare undertaken in accordance with the approved plan.

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.

20. Financial Guarantee

(1) There shall be no Commencement of Development until a bond or other form of financial guarantee in terms which secure the cost of performance of all decommissioning, restoration and aftercare obligations referred to in condition 19 has been submitted to and approved in writing by the Planning Authority.

(2) The value of the financial guarantee shall be agreed between the developer / operator and the Planning Authority or, failing agreement, determined (on application by either party) by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning, restoration and aftercare obligations referred to in condition 19.

(3) The financial guarantee shall be maintained in favour of the Planning Authority until the completion of all decommissioning, restoration and aftercare obligations referred to in condition 19.

(4) The value of the financial guarantee shall be reviewed by agreement between the developer / operator and the Planning Authority or, failing agreement, determined (on application by either party) by a suitably qualified independent professional not less than every five years, and at the time of the approval of the detailed decommissioning, restoration and aftercare plan approved under condition 19. The value of the financial guarantee shall be increased or decreased to take account of any variation in costs of compliance with decommissioning, restoration and aftercare obligations referred to in condition 19 and best practice prevailing at the time of each review.

Reason: To ensure that there are sufficient funds to secure performance of the decommissioning, restoration and aftercare conditions attached to this planning permission in the event of default by the developer / operator.

21. Outdoor Access Management Plan (including Car Park Provision)

(1) No development shall commence until an Outdoor Access Management Plan ("OAMP") has been submitted to and agreed in writing by the Planning Authority in consultation with the Council's Access Officer and Roads Authority. The OAMP shall include:

(a) details of public access arrangements during construction and operation; and

(b) the design, layout and maintenance arrangements for a small car park adjacent to the A836 site access, consistent with the approved Construction Traffic Management Plan. The small car park shall be constructed post construction and thereafter maintained for the operational life of the development.

(2) The OAMP shall ensure that public access is retained in the vicinity of Cairnmore Hill Wind Farm during construction, and thereafter that suitable public access is provided during the operational phase of the wind farm. The plan as agreed shall be implemented in full.

Reason: In the interests of safeguarding and facilitating public access both during and after the construction phase of the Development.

22. Biodiversity Enhancement Management Plan

(1) No development shall commence until a Biodiversity Enhancement Management Plan ("BEMP") taking account of the Outline BEMP submitted as Supplementary Environmental Information dated October 2023 has been submitted to and approved in writing by the Planning Authority.

(2) The BEMP shall set out proposals for habitat restoration and enhancement within the Site.

(3) The BEMP shall follow the approach and principles as set out in the draft BEMP submitted as Supplementary Environmental Information dated October 2023 and shall detail measures to restore and enhance habitats within the site during the period of construction, operation and decommissioning of the development.

(4) The BEMP shall provide details for regular monitoring, review and updating to be undertaken against the BEMP objectives and reasonable measures for securing amendments or additions to the BEMP in the event that the BEMP objectives are not being met.

(5) Unless otherwise approved in advance in writing by the Planning Authority, the BEMP shall be implemented as approved (as may be varied under part (3)).

Reason: In the interests of good land management and the protection and enhancement of habitats and species identified in the EIAR and Supplementary Environmental Information.

23. Peat and Carbon Rich Soils Management Plan

(1) There shall be no Commencement of Development until a detailed Peat and Carbon Rich Soils Management Plan (PMP) has been submitted to and approved in writing by the Planning Authority in consultation with SEPA.

(2) The PMP shall:

(a) take account of site and ground investigations to minimise the loss of peat and other carbon rich soil and minimise carbon loss including making use of predisturbed ground;

(b) include actions, including micro-siting, to minimise excavated peat and other carbon rich soils volumes;

(c) encourage use of excavated peat and other carbon rich soils in an appropriate manner; and

(d) follow good practice for handling, storing, and reinstating peat and other carbon rich soils including showing the breakdown of volumes of acrotelmic, catotelmic and amorphous peat and demonstrating that all excavated catotelmic peat is locked underground and covered with vegetated turves. For the avoidance of doubt, catotelmic peat shall not be used for verge reinstatement, re-profiling/ landscaping, spreading, mixing with mineral soils, or in bunds).

(3) The Peat and Carbon Rich Soils Management Plan shall thereafter be implemented as approved upon the Commencement of Development.

Reason: To ensure that disruption to peat is minimised and there is appropriate re-use of peat in restoration and aftercare following construction activities.

24. Shadow Flicker

(1) No turbine shall be erected until a scheme for the avoidance of shadow flicker at residential properties which lawfully exist or for which planning permission has been granted as at the date of this permission, has been submitted to, and approved in writing by, the Planning Authority.

(2) The approved shadow flicker avoidance scheme shall thereafter be implemented in full.

Reason: To prevent any impacts of shadow flicker on residential property amenity.

25. Grid Connection

No Development shall commence until:

(a) details of the grid connection have been submitted to and approved in writing by the Planning Authority; and

(b) the grid connection has received development consent (either planning permission or consent under section 37 of the Electricity Act 1989).

Reason: To ensure that likely significant effects of the grid connection cumulatively and in combination with the wind farm are assessed and taken into account before final consent is given for any part of the project to proceed, since the wind farm and its grid connection have been found to comprise a single project in EIA terms.

26. Noise

(1) 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 attached Guidance Notes, shall not exceed the values set out in the attached Tables A to X (as appropriate). Noise limits for dwellings which lawfully exist or have planning permission for construction at the date of this consent but are not listed in the attached Tables shall be those of the physically closest location listed in the Tables unless otherwise agreed with the Planning Authority. The coordinate locations to be used in determining the location of each of the dwellings listed in Tables A to X shall be those listed in Table Y.

(2) Within 21 days from the receipt of a written request from the Planning Authority and following a complaint to the Planning Authority 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 the wind farm operator's expense, employ an independent consultant approved by the Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property following the procedures described in the attached Guidance Notes.

(3) The wind farm operator shall provide to the Planning Authority the independent consultant's assessment and conclusions regarding the said noise complaint, including all calculations, audio recordings and the raw data upon which those assessments and conclusions are based. Such information shall be provided within 2 months of the date of the written request of the Planning Authority, with an additional 3 weeks allowed should further investigation pursuant to Guidance Note 4 be required, unless otherwise extended in writing by the Planning Authority.

(4) Wind speed, wind direction and power generation data shall be continuously logged and provided to the Planning Authority at its request and in accordance with the attached Guidance Notes within 14 days of such request. Such data shall be retained for a period of not less than 24 months.

(5) No development shall commence until there has been submitted to the Planning Authority details of a nominated representative for the development to act as a point of contact for local residents (in connection with conditions parts 1 – 4) together with the arrangements for notifying and approving any subsequent change in the nominated representative. The nominated representative shall have responsibility for liaison with the Planning Authority in connection with any noise complaints made during the construction, operation and decommissioning of the wind farm.

Reason: To protect nearby residents from undue noise and disturbance and to ensure that noise limits are not exceeded and to enable prompt investigation of complaints.

Tables A to X and table Y, as referred to in noise condition 26

Table A: The LA90,10min dB Wind Farm Noise Level at Night – 0 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	28.0	28.0	28.0	28.0	28.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	28.0	28.0	28.0	28.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	28.0	28.0	28.0	28.0	29.0	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H13	28.0	28.0	28.0	28.0	28.0	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	28.0	28.0	28.0	28.0	31.5	35.2	37.3	37.3	37.1	37.1	37.6	37.6
H25	28.0	28.0	28.0	28.1	32.2	35.9	37.8	37.8	37.8	37.7	38.3	38.3
H30	28.0	28.0	28.0	28.0	30.2	34.0	36.1	36.4	36.4	36.4	36.4	36.4
H34	28.0	28.0	28.0	30.5	34.6	38.3	40.4	40.7	40.7	40.7	40.7	40.7
H39	28.0	28.0	28.0	28.5	32.5	36.3	37.3	37.2	37.0	37.0	38.7	38.7
H48	28.0	28.0	28.0	28.0	29.2	33.0	35.0	35.4	35.4	35.4	35.4	35.4
H49	28.0	28.0	28.0	28.0	28.0	28.6	30.6	31.0	31.0	31.0	31.0	31.0
H52	28.0	28.0	28.0	28.0	28.0	28.6	30.7	31.0	31.0	31.0	31.0	31.0
H57	28.0	28.0	28.0	28.0	28.0	28.0	29.1	29.4	29.4	29.4	29.4	29.4
H68	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H69	28.0	28.0	28.0	28.0	28.0	30.7	32.7	33.1	33.1	33.1	33.1	33.1
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H74	28.0	28.0	28.0	28.0	28.0	28.0	29.6	29.9	29.9	29.9	29.9	29.9
H75	28.0	28.0	28.0	28.0	28.0	30.9	32.9	33.3	33.3	33.3	33.3	33.3
H78	28.0	28.0	28.0	28.0	28.0	30.4	32.4	32.7	32.8	32.8	32.8	32.8
H79	28.0	28.0	28.0	28.0	28.0	29.4	31.5	31.8	31.8	31.8	31.8	31.8
H89	28.0	28.0	28.0	28.0	31.6	35.3	37.4	37.7	37.7	37.7	37.7	37.7

Table B: The LA90,10min dB Wind Farm Noise Level at Night – 30 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	28.0	28.0	28.0	28.0	28.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	28.0	28.0	28.0	28.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	28.0	28.0	28.0	28.0	29.0	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H13	28.0	28.0	28.0	28.0	28.0	29.8	31.9	32.2	32.2	32.2	32.2	32.2
H24	28.0	28.0	28.0	28.0	31.5	35.2	37.3	37.4	37.2	37.2	37.6	37.6
H25	28.0	28.0	28.0	28.0	31.4	35.1	37.2	37.5	37.5	37.5	37.5	37.5
H30	28.0	28.0	28.0	28.0	29.2	33.0	35.0	35.4	35.4	35.4	35.4	35.4
H34	28.0	28.0	28.0	29.8	33.9	37.6	39.7	40.0	40.0	40.0	40.0	40.0
H39	28.0	28.0	28.0	28.8	32.9	36.6	37.5	37.5	37.3	37.4	39.1	39.1
H48	28.0	28.0	28.0	28.0	30.8	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H49	28.0	28.0	28.0	28.0	28.0	31.7	33.8	34.1	34.2	34.2	34.2	34.2
H52	28.0	28.0	28.0	28.0	28.0	31.7	33.8	34.1	34.1	34.1	34.1	34.1
H57	28.0	28.0	28.0	28.0	28.0	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H68	28.0	28.0	28.0	28.0	29.6	33.4	35.5	35.8	35.8	35.8	35.8	35.8
H69	28.0	28.0	28.0	28.0	29.4	33.2	35.3	35.6	35.6	35.6	35.6	35.6
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H74	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H75	28.0	28.0	28.0	28.0	28.0	30.6	32.7	33.0	33.0	33.0	33.0	33.0
H78	28.0	28.0	28.0	28.0	28.0	30.5	32.5	32.9	32.9	32.9	32.9	32.9
H79	28.0	28.0	28.0	28.0	28.0	30.0	32.1	32.4	32.4	32.4	32.4	32.4
H89	28.0	28.0	28.0	28.0	29.1	32.8	34.9	35.2	35.2	35.2	35.2	35.2

Table C: The LA90,10min dB Wind Farm Noise Level at Night – 60 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.7	29.0	29.0	29.0	29.0	29.0
H7	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	28.0	28.0	28.0	28.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	28.0	28.0	28.0	28.0	29.0	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H13	28.0	28.0	28.0	28.0	28.0	28.0	29.3	29.7	29.7	29.7	29.7	29.7
H24	28.0	28.0	28.0	28.0	31.5	35.2	37.3	37.6	37.6	37.6	37.6	37.6
H25	28.0	28.0	28.0	28.0	29.5	33.3	35.3	35.7	35.7	35.7	35.7	35.7
H30	28.0	28.0	28.0	28.0	28.0	29.7	31.8	32.1	32.1	32.1	32.1	32.1
H34	28.0	28.0	28.0	28.7	32.8	36.5	38.6	38.9	39.0	39.0	39.0	39.0
H39	28.0	28.0	28.0	28.8	32.9	36.6	37.8	37.7	37.7	37.8	39.1	39.1
H48	28.0	28.0	28.0	28.0	30.8	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H49	28.0	28.0	28.0	28.0	28.5	32.3	34.3	34.7	34.7	34.7	34.7	34.7
H52	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H57	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	28.0	28.0	28.0	28.0	31.9	35.7	36.8	36.7	38.1	38.1	38.1	38.1
H69	28.0	28.0	28.0	28.3	32.3	36.1	38.2	38.5	38.5	38.5	38.5	38.5
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H74	28.0	28.0	28.0	28.0	30.0	33.8	35.0	35.0	36.2	36.2	36.2	36.2
H75	28.0	28.0	28.0	28.0	28.0	31.2	33.3	33.6	33.6	33.6	33.6	33.6
H78	28.0	28.0	28.0	28.0	28.0	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H79	28.0	28.0	28.0	28.0	28.1	31.9	34.0	34.3	34.3	34.3	34.3	34.3
H89	28.0	28.0	28.0	28.0	28.0	30.0	32.1	32.4	32.4	32.4	32.4	32.4

Table D: The LA90,10min dB Wind Farm Noise Level at Night – 90 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.1	28.4	28.4	28.4	28.4	28.4
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H7	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	28.0	28.0	28.0	28.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	28.0	28.0	28.0	28.0	29.0	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H13	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H24	28.0	28.0	28.0	28.0	31.5	35.2	37.3	37.6	37.6	37.6	37.6	37.6
H25	28.0	28.0	28.0	28.0	28.0	29.6	31.6	32.0	32.0	32.0	32.0	32.0
H30	28.0	28.0	28.0	28.0	28.0	28.0	28.1	28.4	28.4	28.4	28.4	28.4
H34	28.0	28.0	28.0	28.0	30.9	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H39	28.0	28.0	28.0	28.8	32.9	36.6	37.7	37.7	37.7	37.8	39.1	39.1
H48	28.0	28.0	28.0	28.0	30.8	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H49	28.0	28.0	28.0	28.0	28.5	32.3	34.3	34.7	34.7	34.7	34.7	34.7
H52	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H57	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	28.0	28.0	28.0	28.7	32.7	36.5	36.8	36.7	38.8	38.9	38.9	38.9
H69	28.0	28.0	28.0	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H74	28.0	28.0	28.0	28.0	31.5	35.0	35.0	35.0	36.7	37.6	37.6	37.6
H75	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H78	28.0	28.0	28.0	28.0	30.0	33.7	35.8	36.1	36.1	36.1	36.1	36.1
H79	28.0	28.0	28.0	28.0	31.1	34.8	36.9	37.2	37.2	37.2	37.2	37.2
H89	28.0	28.0	28.0	28.0	28.0	28.7	30.7	31.1	31.1	31.1	31.1	31.1

Table E: The LA90,10min dB Wind Farm Noise Level at Night – 120 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.6	28.9	28.9	28.9	28.9	28.9
H11	28.0	28.0	28.0	28.0	28.0	28.0	29.9	30.2	30.3	30.3	30.3	30.3
H12	28.0	28.0	28.0	28.0	28.0	30.9	33.0	33.3	33.3	33.3	33.3	33.3
H13	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H24	28.0	28.0	28.0	28.0	31.5	35.2	37.3	37.5	37.4	37.5	37.6	37.6
H25	28.0	28.0	28.0	28.0	28.0	28.0	29.5	29.8	29.9	29.9	29.9	29.9
H30	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H34	28.0	28.0	28.0	28.0	29.8	33.6	35.6	35.9	36.0	36.0	36.0	36.0
H39	28.0	28.0	28.0	28.8	32.9	36.6	37.5	37.4	37.4	37.5	39.1	39.1
H48	28.0	28.0	28.0	28.0	30.8	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H49	28.0	28.0	28.0	28.0	28.5	32.3	34.3	34.7	34.7	34.7	34.7	34.7
H52	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H57	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	28.0	28.0	28.0	28.7	32.7	36.5	36.7	36.5	38.7	38.9	38.9	38.9
H69	28.0	28.0	28.0	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H74	28.0	28.0	28.0	28.0	31.6	35.0	35.0	35.0	36.7	37.8	37.8	37.8
H75	28.0	28.0	28.0	28.0	31.3	35.1	37.2	37.5	37.5	37.5	37.5	37.5
H78	28.0	28.0	28.0	28.1	32.1	35.9	37.8	37.7	38.3	38.3	38.3	38.3
H79	28.0	28.0	28.0	28.7	32.8	36.5	37.4	37.1	38.9	38.9	38.9	38.9
H89	28.0	28.0	28.0	28.0	28.0	28.6	30.6	31.0	31.0	31.0	31.0	31.0

Table F: The LA90,10min dB Wind Farm Noise Level at Night – 150 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H11	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H12	28.0	28.0	28.0	28.0	28.0	28.0	28.4	28.7	28.7	28.7	28.7	28.7
H13	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H24	28.0	28.0	28.0	28.0	30.0	33.7	35.8	36.1	36.1	36.1	36.1	36.1
H25	28.0	28.0	28.0	28.0	28.0	28.0	29.3	29.6	29.6	29.6	29.6	29.6
H30	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H34	28.0	28.0	28.0	28.0	29.8	33.5	35.6	35.9	35.9	35.9	35.9	35.9
H39	28.0	28.0	28.0	28.5	32.5	36.3	36.9	36.6	36.6	36.4	38.7	38.7
H48	28.0	28.0	28.0	28.0	30.8	34.6	36.7	36.6	36.6	36.4	37.0	37.0
H49	28.0	28.0	28.0	28.0	28.5	32.3	34.3	34.7	34.7	34.7	34.7	34.7
H52	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H57	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	28.0	28.0	28.0	28.7	32.7	36.5	36.4	36.2	38.4	38.9	38.9	38.9
H69	28.0	28.0	28.0	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.1	28.1	28.1	28.1	28.1
H74	28.0	28.0	28.0	28.0	31.6	35.0	35.0	35.0	36.7	37.8	37.8	37.8
H75	28.0	28.0	28.0	28.5	32.5	36.3	37.8	37.7	38.7	38.7	38.7	38.7
H78	28.0	28.0	28.0	28.6	32.6	36.4	37.7	37.7	38.8	38.8	38.8	38.8
H79	28.0	28.0	28.0	28.7	32.8	36.5	37.5	37.4	38.9	38.9	38.9	38.9
H89	28.0	28.0	28.0	28.0	28.0	29.7	31.8	32.1	32.1	32.1	32.1	32.1

Table G: The LA90,10min dB Wind Farm Noise Level at Night – 180 Degree Sector												
House	**Reference Wind Speed, Standardised v10 (ms-1)**											
ID	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H11	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H12	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H13	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H24	28.0	28.0	28.0	28.0	28.0	30.9	32.9	33.3	33.3	33.3	33.3	33.3
H25	28.0	28.0	28.0	28.0	28.0	28.9	30.9	31.3	31.3	31.3	31.3	31.3
H30	28.0	28.0	28.0	28.0	28.0	28.0	30.0	30.4	30.4	30.4	30.4	30.4
H34	28.0	28.0	28.0	28.0	31.0	34.8	36.8	37.2	37.2	37.2	37.2	37.2
H39	28.0	28.0	28.0	28.0	30.5	34.3	36.3	36.4	36.3	36.1	36.7	36.7
H48	28.0	28.0	28.0	28.0	29.0	32.8	34.8	35.2	35.2	35.2	35.2	35.2
H49	28.0	28.0	28.0	28.0	28.0	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H52	28.0	28.0	28.0	28.0	28.0	31.4	33.5	33.8	33.8	33.8	33.8	33.8
H57	28.0	28.0	28.0	28.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	28.0	28.0	28.0	28.7	32.7	36.5	37.0	36.8	38.8	38.9	38.9	38.9
H69	28.0	28.0	28.0	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	28.0	28.0	28.0	28.0	28.0	28.9	31.0	31.3	31.3	31.3	31.3	31.3

Table H: The LA90,10min dB Wind Farm Noise Level at Night – 210 Degree Sector												
House	**Reference Wind Speed, Standardised v10 (ms-1)**											
ID	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H11	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H12	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H13	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H24	28.0	28.0	28.0	28.0	28.0	29.4	31.5	31.8	31.8	31.8	31.8	31.8
H25	28.0	28.0	28.0	28.0	28.7	32.4	34.5	34.8	34.8	34.8	34.8	34.8
H30	28.0	28.0	28.0	28.0	28.0	31.4	33.5	33.8	33.8	33.8	33.8	33.8
H34	28.0	28.0	28.0	28.8	32.8	36.6	38.6	38.9	39.0	39.0	39.0	39.0
H39	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H48	28.0	28.0	28.0	28.0	28.0	28.7	30.8	31.1	31.1	31.1	31.1	31.1
H49	28.0	28.0	28.0	28.0	28.0	28.0	30.1	30.4	30.4	30.4	30.4	30.4
H52	28.0	28.0	28.0	28.0	28.0	28.0	29.9	30.2	30.3	30.3	30.3	30.3
H57	28.0	28.0	28.0	28.0	28.0	30.3	32.3	32.7	32.7	32.7	32.7	32.7
H68	28.0	28.0	28.0	28.0	32.1	35.8	36.9	36.8	38.3	38.3	38.3	38.3
H69	28.0	28.0	28.0	28.8	32.9	36.6	38.7	39.0	39.0	39.0	39.0	39.0
H72	28.0	28.0	28.0	28.0	28.0	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	28.0	28.0	28.0	28.0	31.4	35.0	35.0	35.0	36.7	37.5	37.5	37.5
H75	28.0	28.0	28.0	28.5	32.5	36.3	37.6	37.5	38.7	38.7	38.7	38.7
H78	28.0	28.0	28.0	28.6	32.6	36.4	37.5	37.4	38.8	38.8	38.8	38.8
H79	28.0	28.0	28.0	28.7	32.8	36.5	37.3	37.1	38.9	38.9	38.9	38.9
H89	28.0	28.0	28.0	28.0	31.6	35.3	37.4	37.7	37.7	37.7	37.7	37.7

Table I: The LA90,10min dB Wind Farm Noise Level at Night – 240 Degree Sector												
House	**Reference Wind Speed, Standardised v10 (ms-1)**											
ID	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H6	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.3	28.3	28.3	28.3	28.3
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H11	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H12	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H13	28.0	28.0	28.0	28.0	28.0	29.1	31.1	31.5	31.5	31.5	31.5	31.5
H24	28.0	28.0	28.0	28.0	28.0	29.0	31.1	31.4	31.5	31.5	31.5	31.5
H25	28.0	28.0	28.0	28.0	31.0	34.8	36.9	37.2	37.2	37.2	37.2	37.2
H30	28.0	28.0	28.0	28.0	29.9	33.7	35.8	36.1	36.1	36.1	36.1	36.1
H34	28.0	28.0	28.0	30.0	34.1	37.8	39.9	40.2	40.2	40.2	40.2	40.2
H39	28.0	28.0	28.0	28.0	28.0	31.2	33.3	33.6	33.6	33.6	33.6	33.6
H48	28.0	28.0	28.0	28.0	28.0	28.0	28.2	28.5	28.5	28.5	28.5	28.5
H49	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H52	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H57	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.3	28.3	28.3	28.3	28.3
H68	28.0	28.0	28.0	28.0	30.1	33.9	35.9	36.3	36.3	36.3	36.3	36.3
H69	28.0	28.0	28.0	28.0	30.7	34.4	36.5	36.8	36.8	36.8	36.8	36.8
H72	28.0	28.0	28.0	28.0	28.0	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	28.0	28.0	28.0	28.0	29.7	33.5	35.0	35.0	35.9	35.9	35.9	35.9
H75	28.0	28.0	28.0	28.5	32.5	36.3	37.5	37.4	38.7	38.7	38.7	38.7
H78	28.0	28.0	28.0	28.6	32.6	36.4	37.5	37.4	38.8	38.8	38.8	38.8
H79	28.0	28.0	28.0	28.7	32.8	36.5	37.2	37.0	38.9	38.9	38.9	38.9
H89	28.0	28.0	28.0	28.0	32.0	35.8	37.8	37.8	37.7	37.6	38.2	38.2

Table J: The LA90,10min dB Wind Farm Noise Level at Night – 270 Degree Sector												
House	**Reference Wind Speed, Standardised v10 (ms-1)**											
ID	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.0	29.0	29.3	29.3	29.3	29.3	29.3
H6	28.0	28.0	28.0	28.0	28.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H11	28.0	28.0	28.0	28.0	28.0	28.0	29.0	29.3	29.3	29.3	29.3	29.3
H12	28.0	28.0	28.0	28.0	28.0	28.0	28.1	28.5	28.5	28.5	28.5	28.5
H13	28.0	28.0	28.0	28.0	28.0	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	28.0	28.0	28.0	28.0	28.0	29.5	31.6	31.9	31.9	31.9	31.9	31.9
H25	28.0	28.0	28.0	28.1	32.2	35.9	37.7	37.7	37.6	37.5	38.3	38.3
H30	28.0	28.0	28.0	28.0	30.4	34.2	36.3	36.6	36.6	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	28.0	28.0	28.0	28.0	28.0	31.1	33.1	33.5	33.5	33.5	33.5	33.5
H48	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H49	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H52	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H57	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H68	28.0	28.0	28.0	28.0	28.0	30.7	32.8	33.1	33.1	33.1	33.1	33.1
H69	28.0	28.0	28.0	28.0	28.0	31.4	33.5	33.8	33.8	33.8	33.8	33.8
H72	28.0	28.0	28.0	28.0	28.0	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	28.0	28.0	28.0	28.0	28.0	30.1	32.1	32.5	32.5	32.5	32.5	32.5
H75	28.0	28.0	28.0	28.5	32.5	36.3	37.4	37.2	38.7	38.7	38.7	38.7
H78	28.0	28.0	28.0	28.2	32.3	36.0	37.3	37.0	38.4	38.4	38.4	38.4
H79	28.0	28.0	28.0	28.0	31.6	35.4	37.1	36.8	37.8	37.8	37.8	37.8
H89	28.0	28.0	28.0	28.0	32.0	35.8	37.8	37.7	37.7	37.6	38.2	38.2

Table K: The LA90,10min dB Wind Farm Noise Level at Night – 300 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	28.0	28.0	28.0	28.0	28.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	28.0	28.0	28.0	28.0	28.0	30.0	32.1	32.4	32.4	32.4	32.4	32.4
H11	28.0	28.0	28.0	28.0	28.0	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H12	28.0	28.0	28.0	28.0	28.0	30.6	32.7	33.0	33.0	33.0	33.0	33.0
H13	28.0	28.0	28.0	28.0	28.0	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	28.0	28.0	28.0	28.0	28.0	31.1	33.2	33.5	33.5	33.5	33.5	33.5
H25	28.0	28.0	28.0	28.1	32.2	35.9	37.7	37.7	37.6	37.5	38.3	38.3
H30	28.0	28.0	28.0	28.0	30.4	34.2	36.3	36.6	36.6	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	28.0	28.0	28.0	28.0	28.0	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H48	28.0	28.0	28.0	28.0	28.0	28.0	28.1	28.4	28.4	28.4	28.4	28.4
H49	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H52	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H57	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H68	28.0	28.0	28.0	28.0	28.0	29.2	31.2	31.5	31.6	31.6	31.6	31.6
H69	28.0	28.0	28.0	28.0	28.0	29.9	32.0	32.3	32.3	32.3	32.3	32.3
H72	28.0	28.0	28.0	28.0	28.0	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	28.0	28.0	28.0	28.0	28.0	28.0	29.4	29.7	29.7	29.7	29.7	29.7
H75	28.0	28.0	28.0	28.0	31.2	35.0	37.0	37.2	37.4	37.4	37.4	37.4
H78	28.0	28.0	28.0	28.0	29.9	33.7	35.7	36.1	36.1	36.1	36.1	36.1
H79	28.0	28.0	28.0	28.0	28.2	32.0	34.1	34.4	34.4	34.4	34.4	34.4
H89	28.0	28.0	28.0	28.0	32.0	35.8	37.8	37.7	37.7	37.6	38.2	38.2

Table L: The LA90,10min dB Wind Farm Noise Level at Night – 330 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	28.0	28.0	28.0	28.0	28.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	28.0	28.0	28.0	28.0	28.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	28.0	28.0	28.0	28.0	28.0	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	28.0	28.0	28.0	28.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	28.0	28.0	28.0	28.0	29.0	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H13	28.0	28.0	28.0	28.0	28.0	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	28.0	28.0	28.0	28.0	30.3	34.1	36.2	36.5	36.5	36.5	36.5	36.5
H25	28.0	28.0	28.0	28.1	32.2	35.9	37.7	37.7	37.7	37.6	38.3	38.3
H30	28.0	28.0	28.0	28.0	30.4	34.2	36.3	36.6	36.6	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	28.0	28.0	28.0	28.0	30.1	33.9	36.0	36.3	36.3	36.3	36.3	36.3
H48	28.0	28.0	28.0	28.0	28.0	28.7	30.8	31.1	31.1	31.1	31.1	31.1
H49	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H52	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H57	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
H68	28.0	28.0	28.0	28.0	28.0	29.1	31.1	31.5	31.5	31.5	31.5	31.5
H69	28.0	28.0	28.0	28.0	28.0	29.7	31.8	32.1	32.1	32.1	32.1	32.1
H72	28.0	28.0	28.0	28.0	28.0	28.1	30.2	30.5	30.5	30.5	30.5	30.5
H74	28.0	28.0	28.0	28.0	28.0	28.0	28.6	29.0	29.0	29.0	29.0	29.0
H75	28.0	28.0	28.0	28.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H78	28.0	28.0	28.0	28.0	28.0	31.2	33.3	33.6	33.6	33.6	33.6	33.6
H79	28.0	28.0	28.0	28.0	28.0	29.9	32.0	32.3	32.4	32.4	32.4	32.4
H89	28.0	28.0	28.0	28.0	32.0	35.8	37.8	37.8	37.7	37.7	38.2	38.2

Table M: The LA90,10min dB Wind Farm Noise Level during the Day – 0 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	25.0	25.0	25.0	25.0	25.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	25.0	25.0	25.0	25.0	28.1	31.8	33.9	33.4	34.2	34.2	34.2	34.2
H12	25.0	25.0	25.0	25.0	29.0	32.7	33.9	33.4	35.1	35.1	35.1	35.1
H13	25.0	25.0	25.0	25.0	26.4	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	25.0	25.0	25.0	27.4	31.5	34.1	33.8	33.4	36.8	37.6	37.6	37.6
H25	25.4	25.4	25.4	28.1	32.2	34.8	34.7	34.6	36.3	38.3	38.3	38.3
H30	25.0	25.0	25.0	26.2	30.2	34.0	34.8	34.7	36.3	36.4	36.4	36.4
H34	27.8	27.8	27.8	30.5	34.6	38.3	40.4	40.7	40.7	40.7	40.7	40.7
H39	25.8	25.8	25.8	28.5	32.5	34.0	33.7	33.3	36.7	38.7	38.7	38.7
H48	25.0	25.0	25.0	25.2	29.2	33.0	33.5	33.0	35.4	35.4	35.4	35.4
H49	25.0	25.0	25.0	25.0	25.0	28.6	30.6	31.0	31.0	31.0	31.0	31.0
H52	25.0	25.0	25.0	25.0	25.0	28.6	30.7	31.0	31.0	31.0	31.0	31.0
H57	25.0	25.0	25.0	25.0	25.0	27.0	29.1	29.4	29.4	29.4	29.4	29.4
H68	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H69	25.0	25.0	25.0	25.0	26.9	30.7	32.7	33.1	33.1	33.1	33.1	33.1
H72	25.0	25.0	25.0	25.0	25.0	25.0	25.6	25.9	25.9	25.9	25.9	25.9
H74	25.0	25.0	25.0	25.0	25.0	27.5	29.6	29.9	29.9	29.9	29.9	29.9
H75	25.0	25.0	25.0	25.0	27.1	30.9	32.9	33.3	33.3	33.3	33.3	33.3
H78	25.0	25.0	25.0	25.0	26.6	30.4	32.4	32.7	32.8	32.8	32.8	32.8
H79	25.0	25.0	25.0	25.0	25.7	29.4	31.5	31.8	31.8	31.8	31.8	31.8
H89	25.0	25.0	25.0	27.5	31.6	34.8	34.7	34.7	36.3	37.7	37.7	37.7

Table N: The LA90,10min dB Wind Farm Noise Level during the Day – 30 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	25.0	25.0	25.0	25.0	25.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	25.0	25.0	25.0	25.0	28.1	31.8	33.9	34.1	34.2	34.2	34.2	34.2
H12	25.0	25.0	25.0	25.0	29.0	32.7	34.3	34.0	35.1	35.1	35.1	35.1
H13	25.0	25.0	25.0	25.0	26.0	29.8	31.9	32.2	32.2	32.2	32.2	32.2
H24	25.0	25.0	25.0	27.4	31.5	34.2	34.0	33.7	36.9	37.6	37.6	37.6
H25	25.0	25.0	25.0	27.3	31.4	34.9	34.8	34.8	36.4	37.5	37.5	37.5
H30	25.0	25.0	25.0	25.2	29.2	33.0	34.9	34.8	35.4	35.4	35.4	35.4
H34	27.1	27.1	27.1	29.8	33.9	37.6	39.7	40.0	40.0	40.0	40.0	40.0
H39	26.2	26.2	26.2	28.8	32.9	34.3	34.2	33.9	37.1	39.1	39.1	39.1
H48	25.0	25.0	25.0	26.8	30.8	34.2	34.0	33.7	36.9	37.0	37.0	37.0
H49	25.0	25.0	25.0	25.0	28.0	31.7	33.8	33.4	34.2	34.2	34.2	34.2
H52	25.0	25.0	25.0	25.0	28.0	31.7	33.8	33.4	34.1	34.1	34.1	34.1
H57	25.0	25.0	25.0	25.0	27.7	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H68	25.0	25.0	25.0	25.6	29.6	32.3	33.3	35.8	35.8	35.8	35.8	35.8
H69	25.0	25.0	25.0	25.4	29.4	33.2	35.3	35.6	35.6	35.6	35.6	35.6
H72	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H74	25.0	25.0	25.0	25.0	26.7	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H75	25.0	25.0	25.0	25.0	26.9	30.6	32.7	33.0	33.0	33.0	33.0	33.0
H78	25.0	25.0	25.0	25.0	26.7	30.5	32.5	32.9	32.9	32.9	32.9	32.9
H79	25.0	25.0	25.0	25.0	26.2	30.0	32.1	32.4	32.4	32.4	32.4	32.4
H89	25.0	25.0	25.0	25.0	29.1	32.8	34.9	34.8	35.2	35.2	35.2	35.2

Table O: The LA90,10min dB Wind Farm Noise Level during the Day – 60 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	25.0	25.0	25.0	25.0	25.0	26.6	28.7	29.0	29.0	29.0	29.0	29.0
H7	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	25.0	25.0	25.0	25.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	25.0	25.0	25.0	25.0	29.0	32.7	34.7	34.5	35.1	35.1	35.1	35.1
H13	25.0	25.0	25.0	25.0	25.0	27.3	29.3	29.7	29.7	29.7	29.7	29.7
H24	25.0	25.0	25.0	27.4	31.5	34.7	34.6	34.4	37.4	37.6	37.6	37.6
H25	25.0	25.0	25.0	25.5	29.5	33.3	34.9	34.9	35.7	35.7	35.7	35.7
H30	25.0	25.0	25.0	25.0	25.9	29.7	31.8	32.1	32.1	32.1	32.1	32.1
H34	26.1	26.1	26.1	28.7	32.8	36.5	38.6	38.9	39.0	39.0	39.0	39.0
H39	26.2	26.2	26.2	28.8	32.9	34.7	34.6	34.5	37.4	39.1	39.1	39.1
H48	25.0	25.0	25.0	26.8	30.8	34.6	34.5	34.4	37.0	37.0	37.0	37.0
H49	25.0	25.0	25.0	25.0	28.5	32.3	34.3	34.2	34.7	34.7	34.7	34.7
H52	25.0	25.0	25.0	25.0	28.4	32.2	34.3	34.2	34.6	34.6	34.6	34.6
H57	25.0	25.0	25.0	25.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	25.2	25.2	25.2	27.9	31.9	32.6	33.5	37.1	38.1	38.1	38.1	38.1
H69	25.6	25.6	25.6	28.3	32.3	36.1	38.2	38.5	38.5	38.5	38.5	38.5
H72	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H74	25.0	25.0	25.0	26.0	30.0	32.0	32.7	35.3	36.2	36.2	36.2	36.2
H75	25.0	25.0	25.0	25.0	27.4	31.2	33.3	33.6	33.6	33.6	33.6	33.6
H78	25.0	25.0	25.0	25.0	27.8	31.5	33.6	33.9	33.9	33.9	33.9	33.9
H79	25.0	25.0	25.0	25.0	28.1	31.9	34.0	34.3	34.3	34.3	34.3	34.3
H89	25.0	25.0	25.0	25.0	26.3	30.0	32.1	32.4	32.4	32.4	32.4	32.4

Table P: The LA90,10min dB Wind Farm Noise Level during the Day – 90 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	26.0	28.1	28.4	28.4	28.4	28.4	28.4
H6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H7	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.8	32.8	32.8	32.8	32.8
H11	25.0	25.0	25.0	25.0	28.1	31.8	33.9	34.2	34.2	34.2	34.2	34.2
H12	25.0	25.0	25.0	25.0	29.0	32.7	34.7	34.6	35.1	35.1	35.1	35.1
H13	25.0	25.0	25.0	25.0	25.0	25.0	25.2	25.5	25.5	25.5	25.5	25.5
H24	25.0	25.0	25.0	27.4	31.5	34.7	34.6	34.5	37.5	37.6	37.6	37.6
H25	25.0	25.0	25.0	25.0	25.8	29.6	31.6	32.0	32.0	32.0	32.0	32.0
H30	25.0	25.0	25.0	25.0	25.0	26.0	28.1	28.4	28.4	28.4	28.4	28.4
H34	25.0	25.0	25.0	26.8	30.9	34.6	36.7	37.0	37.0	37.0	37.0	37.0
H39	26.2	26.2	26.2	28.8	32.9	34.7	34.6	34.5	37.5	39.1	39.1	39.1
H48	25.0	25.0	25.0	26.8	30.8	34.6	34.6	34.4	37.0	37.0	37.0	37.0
H49	25.0	25.0	25.0	25.0	28.5	32.3	34.3	34.2	34.7	34.7	34.7	34.7
H52	25.0	25.0	25.0	25.0	28.4	32.2	34.3	34.2	34.6	34.6	34.6	34.6
H57	25.0	25.0	25.0	25.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	26.0	26.0	26.0	28.7	32.7	32.6	33.5	37.1	38.9	38.9	38.9	38.9
H69	26.3	26.3	26.3	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H74	25.0	25.0	25.0	27.4	31.5	32.0	32.7	35.3	37.6	37.6	37.6	37.6
H75	25.0	25.0	25.0	25.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H78	25.0	25.0	25.0	25.9	30.0	33.7	35.1	36.1	36.1	36.1	36.1	36.1
H79	25.0	25.0	25.0	27.0	31.1	34.2	34.7	37.2	37.2	37.2	37.2	37.2
H89	25.0	25.0	25.0	25.0	25.0	28.7	30.7	31.1	31.1	31.1	31.1	31.1

Table Q: The LA90,10min dB Wind Farm Noise Level during the Day – 120 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H7	25.0	25.0	25.0	25.0	25.0	26.5	28.6	28.9	28.9	28.9	28.9	28.9
H11	25.0	25.0	25.0	25.0	25.0	27.9	29.9	30.2	30.3	30.3	30.3	30.3
H12	25.0	25.0	25.0	25.0	27.2	30.9	33.0	33.3	33.3	33.3	33.3	33.3
H13	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H24	25.0	25.0	25.0	27.4	31.5	34.6	34.4	34.1	37.2	37.6	37.6	37.6
H25	25.0	25.0	25.0	25.0	25.0	27.5	29.5	29.8	29.9	29.9	29.9	29.9
H30	25.0	25.0	25.0	25.0	25.0	25.0	26.6	27.0	27.0	27.0	27.0	27.0
H34	25.0	25.0	25.0	25.8	29.8	33.6	35.6	35.9	36.0	36.0	36.0	36.0
H39	26.2	26.2	26.2	28.8	32.9	34.6	34.4	34.1	37.2	39.1	39.1	39.1
H48	25.0	25.0	25.0	26.8	30.8	34.5	34.3	33.8	37.0	37.0	37.0	37.0
H49	25.0	25.0	25.0	25.0	28.5	32.3	34.1	33.5	34.7	34.7	34.7	34.7
H52	25.0	25.0	25.0	25.0	28.4	32.2	34.0	33.4	34.6	34.6	34.6	34.6
H57	25.0	25.0	25.0	25.0	28.9	32.7	34.8	35.1	35.1	35.1	35.1	35.1
H68	26.0	26.0	26.0	28.7	32.6	32.4	33.4	37.0	38.9	38.9	38.9	38.9
H69	26.3	26.3	26.3	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H74	25.0	25.0	25.0	27.6	31.6	32.0	32.7	35.3	37.8	37.8	37.8	37.8
H75	25.0	25.0	25.0	27.3	31.3	34.8	35.5	37.5	37.5	37.5	37.5	37.5
H78	25.4	25.4	25.4	28.1	32.1	34.7	35.4	38.1	38.3	38.3	38.3	38.3
H79	26.0	26.0	26.0	28.7	32.8	34.1	34.7	37.5	38.9	38.9	38.9	38.9
H89	25.0	25.0	25.0	25.0	25.0	28.6	30.6	31.0	31.0	31.0	31.0	31.0

Table R: The LA90,10min dB Wind Farm Noise Level during the Day – 150 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H11	25.0	25.0	25.0	25.0	25.0	25.0	26.0	26.3	26.3	26.3	26.3	26.3
H12	25.0	25.0	25.0	25.0	25.0	26.3	28.4	28.7	28.7	28.7	28.7	28.7
H13	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H24	25.0	25.0	25.0	25.9	30.0	33.7	33.5	32.3	36.1	36.1	36.1	36.1
H25	25.0	25.0	25.0	25.0	25.0	27.2	29.3	29.6	29.6	29.6	29.6	29.6
H30	25.0	25.0	25.0	25.0	25.0	25.2	27.2	27.6	27.6	27.6	27.6	27.6
H34	25.0	25.0	25.0	25.7	29.8	33.5	35.6	35.9	35.9	35.9	35.9	35.9
H39	25.8	25.8	25.8	28.5	32.5	34.1	33.6	32.5	36.3	38.7	38.7	38.7
H48	25.0	25.0	25.0	26.8	30.8	34.1	33.6	32.5	36.3	37.0	37.0	37.0
H49	25.0	25.0	25.0	25.0	28.5	32.3	33.6	32.7	34.7	34.7	34.7	34.7
H52	25.0	25.0	25.0	25.0	28.4	32.2	33.6	32.7	34.6	34.6	34.6	34.6
H57	25.0	25.0	25.0	25.0	28.9	32.7	34.6	35.1	35.1	35.1	35.1	35.1
H68	26.0	26.0	26.0	28.7	32.4	32.1	33.0	36.7	38.9	38.9	38.9	38.9
H69	26.3	26.3	26.3	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	25.0	25.0	25.0	25.0	25.0	25.7	27.7	28.1	28.1	28.1	28.1	28.1
H74	25.0	25.0	25.0	27.6	31.6	32.0	32.7	35.3	37.8	37.8	37.8	37.8
H75	25.8	25.8	25.8	28.5	32.5	34.7	35.4	38.0	38.7	38.7	38.7	38.7
H78	25.9	25.9	25.9	28.6	32.6	34.7	35.3	38.0	38.8	38.8	38.8	38.8
H79	26.0	26.0	26.0	28.7	32.8	34.3	35.0	37.8	38.9	38.9	38.9	38.9
H89	25.0	25.0	25.0	25.0	25.9	29.7	31.8	32.1	32.1	32.1	32.1	32.1

Table S: The LA90,10min dB Wind Farm Noise Level during the Day – 180 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H11	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H12	25.0	25.0	25.0	25.0	25.0	25.0	25.8	26.1	26.1	26.1	26.1	26.1
H13	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H24	25.0	25.0	25.0	25.0	27.1	30.9	32.7	32.0	33.3	33.3	33.3	33.3
H25	25.0	25.0	25.0	25.0	25.1	28.9	30.9	31.3	31.3	31.3	31.3	31.3
H30	25.0	25.0	25.0	25.0	25.0	28.0	30.0	30.4	30.4	30.4	30.4	30.4
H34	25.0	25.0	25.0	27.0	31.0	34.8	36.8	37.2	37.2	37.2	37.2	37.2
H39	25.0	25.0	25.0	26.5	30.5	33.8	33.1	32.0	36.0	36.7	36.7	36.7
H48	25.0	25.0	25.0	25.0	29.0	32.8	33.2	32.0	35.2	35.2	35.2	35.2
H49	25.0	25.0	25.0	25.0	27.7	31.5	33.4	32.3	33.9	33.9	33.9	33.9
H52	25.0	25.0	25.0	25.0	27.6	31.4	33.3	32.2	33.8	33.8	33.8	33.8
H57	25.0	25.0	25.0	25.0	28.9	32.7	34.5	35.1	35.1	35.1	35.1	35.1
H68	26.0	26.0	26.0	28.7	32.7	33.5	34.1	37.3	38.9	38.9	38.9	38.9
H69	26.3	26.3	26.3	29.0	33.1	36.8	38.9	39.2	39.2	39.2	39.2	39.2
H72	25.0	25.0	25.0	25.0	25.1	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	25.0	25.0	25.0	27.6	31.6	32.0	32.7	35.3	37.8	37.8	37.8	37.8
H75	25.8	25.8	25.8	28.5	32.5	34.5	35.2	37.9	38.7	38.7	38.7	38.7
H78	25.9	25.9	25.9	28.6	32.6	34.4	35.1	37.8	38.8	38.8	38.8	38.8
H79	26.0	26.0	26.0	28.7	32.8	34.0	34.6	37.6	38.9	38.9	38.9	38.9
H89	25.0	25.0	25.0	25.0	28.8	32.6	34.6	34.7	35.0	35.0	35.0	35.0

Table T: The LA90,10min dB Wind Farm Noise Level during the Day – 210 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H11	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H12	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.3	25.3	25.3	25.3	25.3
H13	25.0	25.0	25.0	25.0	25.0	25.4	27.5	27.8	27.8	27.8	27.8	27.8
H24	25.0	25.0	25.0	25.0	25.6	29.4	31.5	31.8	31.8	31.8	31.8	31.8
H25	25.0	25.0	25.0	25.0	28.7	32.4	34.5	34.4	34.8	34.8	34.8	34.8
H30	25.0	25.0	25.0	25.0	27.6	31.4	33.5	33.8	33.8	33.8	33.8	33.8
H34	26.1	26.1	26.1	28.8	32.8	36.6	38.6	38.9	39.0	39.0	39.0	39.0
H39	25.0	25.0	25.0	25.0	28.4	32.2	32.2	32.0	34.6	34.6	34.6	34.6
H48	25.0	25.0	25.0	25.0	25.0	28.7	30.8	31.1	31.1	31.1	31.1	31.1
H49	25.0	25.0	25.0	25.0	25.0	28.0	30.1	30.4	30.4	30.4	30.4	30.4
H52	25.0	25.0	25.0	25.0	25.0	27.8	29.9	30.2	30.3	30.3	30.3	30.3
H57	25.0	25.0	25.0	25.0	26.5	30.3	32.3	32.7	32.7	32.7	32.7	32.7
H68	25.4	25.4	25.4	28.0	32.1	33.3	33.9	37.2	38.3	38.3	38.3	38.3
H69	26.1	26.1	26.1	28.8	32.9	36.6	38.7	39.0	39.0	39.0	39.0	39.0
H72	25.0	25.0	25.0	25.0	25.1	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	25.0	25.0	25.0	27.3	31.4	32.0	32.7	35.3	37.5	37.5	37.5	37.5
H75	25.8	25.8	25.8	28.5	32.5	34.4	35.0	37.8	38.7	38.7	38.7	38.7
H78	25.9	25.9	25.9	28.6	32.6	34.3	34.9	37.8	38.8	38.8	38.8	38.8
H79	26.0	26.0	26.0	28.7	32.8	33.8	34.4	37.5	38.9	38.9	38.9	38.9
H89	25.0	25.0	25.0	27.5	31.6	34.8	34.7	34.5	36.2	37.7	37.7	37.7

Table U: The LA90,10min dB Wind Farm Noise Level during the Day – 240 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H6	25.0	25.0	25.0	25.0	25.0	25.9	28.0	28.3	28.3	28.3	28.3	28.3
H7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H11	25.0	25.0	25.0	25.0	25.0	25.0	25.4	25.8	25.8	25.8	25.8	25.8
H12	25.0	25.0	25.0	25.0	25.0	25.0	25.7	26.0	26.0	26.0	26.0	26.0
H13	25.0	25.0	25.0	25.0	25.3	29.1	31.1	31.5	31.5	31.5	31.5	31.5
H24	25.0	25.0	25.0	25.0	25.3	29.0	31.1	31.4	31.5	31.5	31.5	31.5
H25	25.0	25.0	25.0	27.0	31.0	34.6	34.5	34.3	36.1	37.2	37.2	37.2
H30	25.0	25.0	25.0	25.9	29.9	33.7	34.7	34.6	36.1	36.1	36.1	36.1
H34	27.3	27.3	27.3	30.0	34.1	37.8	39.9	40.2	40.2	40.2	40.2	40.2
H39	25.0	25.0	25.0	25.0	27.4	31.2	32.0	32.0	33.6	33.6	33.6	33.6
H48	25.0	25.0	25.0	25.0	25.0	26.1	28.2	28.5	28.5	28.5	28.5	28.5
H49	25.0	25.0	25.0	25.0	25.0	25.0	26.2	26.6	26.6	26.6	26.6	26.6
H52	25.0	25.0	25.0	25.0	25.0	25.0	26.1	26.4	26.5	26.5	26.5	26.5
H57	25.0	25.0	25.0	25.0	25.0	25.9	28.0	28.3	28.3	28.3	28.3	28.3
H68	25.0	25.0	25.0	26.1	30.1	33.3	33.8	36.3	36.3	36.3	36.3	36.3
H69	25.0	25.0	25.0	26.6	30.7	34.4	36.5	36.8	36.8	36.8	36.8	36.8
H72	25.0	25.0	25.0	25.0	25.1	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	25.0	25.0	25.0	25.7	29.7	32.0	32.7	35.3	35.9	35.9	35.9	35.9
H75	25.8	25.8	25.8	28.5	32.5	34.2	34.8	37.7	38.7	38.7	38.7	38.7
H78	25.9	25.9	25.9	28.6	32.6	34.2	34.8	37.7	38.8	38.8	38.8	38.8
H79	26.0	26.0	26.0	28.7	32.8	33.7	34.3	37.4	38.9	38.9	38.9	38.9
H89	25.3	25.3	25.3	28.0	32.0	34.7	34.6	34.5	36.2	38.2	38.2	38.2

Table V: The LA90,10min dB Wind Farm Noise Level during the Day – 270 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	26.9	29.0	29.3	29.3	29.3	29.3	29.3
H6	25.0	25.0	25.0	25.0	25.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	25.0	25.0	25.0	25.0	25.0	25.4	27.5	27.8	27.8	27.8	27.8	27.8
H11	25.0	25.0	25.0	25.0	25.0	26.9	29.0	29.3	29.3	29.3	29.3	29.3
H12	25.0	25.0	25.0	25.0	25.0	26.1	28.1	28.5	28.5	28.5	28.5	28.5
H13	25.0	25.0	25.0	25.0	26.4	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	25.0	25.0	25.0	25.0	25.7	29.5	31.6	31.9	31.9	31.9	31.9	31.9
H25	25.4	25.4	25.4	28.1	32.2	34.6	34.5	34.3	36.1	38.3	38.3	38.3
H30	25.0	25.0	25.0	26.4	30.4	34.2	34.6	34.5	36.2	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	25.0	25.0	25.0	25.0	27.3	31.1	32.0	32.0	33.5	33.5	33.5	33.5
H48	25.0	25.0	25.0	25.0	25.0	25.3	27.4	27.7	27.7	27.7	27.7	27.7
H49	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H52	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H57	25.0	25.0	25.0	25.0	25.0	25.0	25.5	25.8	25.8	25.8	25.8	25.8
H68	25.0	25.0	25.0	25.0	26.9	30.7	32.8	33.1	33.1	33.1	33.1	33.1
H69	25.0	25.0	25.0	25.0	27.6	31.4	33.5	33.8	33.8	33.8	33.8	33.8
H72	25.0	25.0	25.0	25.0	25.1	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	25.0	25.0	25.0	25.0	26.3	30.1	32.1	32.5	32.5	32.5	32.5	32.5
H75	25.8	25.8	25.8	28.5	32.5	34.1	34.6	37.6	38.7	38.7	38.7	38.7
H78	25.5	25.5	25.5	28.2	32.3	33.9	34.4	37.4	38.4	38.4	38.4	38.4
H79	25.0	25.0	25.0	27.6	31.6	33.6	34.1	37.2	37.8	37.8	37.8	37.8
H89	25.3	25.3	25.3	28.0	32.0	34.7	34.6	34.5	36.2	38.2	38.2	38.2

Table W: The LA90,10min dB Wind Farm Noise Level during the Day – 300 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	25.0	25.0	25.0	25.0	25.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	25.0	25.0	25.0	25.0	26.3	30.0	32.1	32.0	32.4	32.4	32.4	32.4
H11	25.0	25.0	25.0	25.0	27.8	31.5	32.0	32.0	33.9	33.9	33.9	33.9
H12	25.0	25.0	25.0	25.0	26.9	30.6	32.0	32.0	33.0	33.0	33.0	33.0
H13	25.0	25.0	25.0	25.0	26.4	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	25.0	25.0	25.0	25.0	27.3	31.1	32.0	32.0	33.5	33.5	33.5	33.5
H25	25.4	25.4	25.4	28.1	32.2	34.6	34.5	34.3	36.1	38.3	38.3	38.3
H30	25.0	25.0	25.0	26.4	30.4	34.2	34.6	34.5	36.2	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	25.0	25.0	25.0	25.0	28.0	31.8	32.0	32.0	34.2	34.2	34.2	34.2
H48	25.0	25.0	25.0	25.0	25.0	26.0	28.1	28.4	28.4	28.4	28.4	28.4
H49	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H52	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
H57	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.2	25.2	25.2	25.2	25.2
H68	25.0	25.0	25.0	25.0	25.4	29.2	31.2	31.5	31.6	31.6	31.6	31.6
H69	25.0	25.0	25.0	25.0	26.1	29.9	32.0	32.3	32.3	32.3	32.3	32.3
H72	25.0	25.0	25.0	25.0	25.1	28.9	31.0	31.3	31.3	31.3	31.3	31.3
H74	25.0	25.0	25.0	25.0	25.0	27.3	29.4	29.7	29.7	29.7	29.7	29.7
H75	25.0	25.0	25.0	27.2	31.2	34.1	34.7	37.4	37.4	37.4	37.4	37.4
H78	25.0	25.0	25.0	25.9	29.9	33.6	34.0	36.1	36.1	36.1	36.1	36.1
H79	25.0	25.0	25.0	25.0	28.2	32.0	33.9	34.4	34.4	34.4	34.4	34.4
H89	25.3	25.3	25.3	28.0	32.0	34.7	34.6	34.5	36.1	38.2	38.2	38.2

Table X: The LA90,10min dB Wind Farm Noise Level during the Day – 330 Degree Sector												
House ID	**Reference Wind Speed, Standardised v10 (ms-1)**											
	1	2	3	4	5	6	7	8	9	10	11	12
H5	25.0	25.0	25.0	25.0	25.0	28.3	30.4	30.7	30.7	30.7	30.7	30.7
H6	25.0	25.0	25.0	25.0	25.0	28.1	30.1	30.5	30.5	30.5	30.5	30.5
H7	25.0	25.0	25.0	25.0	26.6	30.4	32.5	32.0	32.8	32.8	32.8	32.8
H11	25.0	25.0	25.0	25.0	28.1	31.8	32.5	32.0	34.2	34.2	34.2	34.2
H12	25.0	25.0	25.0	25.0	29.0	32.7	32.5	32.0	35.1	35.1	35.1	35.1
H13	25.0	25.0	25.0	25.0	26.4	30.1	32.2	32.5	32.5	32.5	32.5	32.5
H24	25.0	25.0	25.0	26.3	30.3	33.7	33.1	32.3	36.3	36.5	36.5	36.5
H25	25.4	25.4	25.4	28.1	32.2	34.7	34.6	34.4	36.1	38.3	38.3	38.3
H30	25.0	25.0	25.0	26.4	30.4	34.2	34.7	34.6	36.3	36.6	36.6	36.6
H34	28.0	28.0	28.0	30.7	34.8	38.5	40.6	40.9	40.9	40.9	40.9	40.9
H39	25.0	25.0	25.0	26.1	30.1	33.7	33.2	32.6	36.3	36.3	36.3	36.3
H48	25.0	25.0	25.0	25.0	25.0	28.7	30.8	31.1	31.1	31.1	31.1	31.1
H49	25.0	25.0	25.0	25.0	25.0	25.0	26.5	26.9	26.9	26.9	26.9	26.9
H52	25.0	25.0	25.0	25.0	25.0	25.0	26.5	26.9	26.9	26.9	26.9	26.9
H57	25.0	25.0	25.0	25.0	25.0	25.0	25.9	26.2	26.3	26.3	26.3	26.3
H68	25.0	25.0	25.0	25.0	25.3	29.1	31.1	31.5	31.5	31.5	31.5	31.5
H69	25.0	25.0	25.0	25.0	26.0	29.7	31.8	32.1	32.1	32.1	32.1	32.1
H72	25.0	25.0	25.0	25.0	25.0	28.1	30.2	30.5	30.5	30.5	30.5	30.5
H74	25.0	25.0	25.0	25.0	25.0	26.6	28.6	29.0	29.0	29.0	29.0	29.0
H75	25.0	25.0	25.0	25.0	28.4	32.2	34.3	34.6	34.6	34.6	34.6	34.6
H78	25.0	25.0	25.0	25.0	27.4	31.2	33.3	33.6	33.6	33.6	33.6	33.6
H79	25.0	25.0	25.0	25.0	26.2	29.9	32.0	32.3	32.4	32.4	32.4	32.4
H89	25.3	25.3	25.3	28.0	32.0	34.8	34.7	34.5	36.2	38.2	38.2	38.2

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

Table Y: Coordinate locations of the properties listed in Tables A to X		
House ID	**Co-ordinates**	
	X (m)	**Y (m)**
H5	306258	965628
H6	307682	965855
H7	305580	965936
H11	305387	966245
H12	305315	966421
H13	307770	966440
H24	304958	967245
H25	307371	967293
H30	307802	967424
H34	307200	967551
H39	304931	967630
H48	304671	968045
H49	304371	968318
H52	304403	968499
H57	304674	968949
H68	305422	969089
H69	305576	969163
H72	308827	969313
H74	305696	969446
H75	307282	969480
H78	307012	969550
H79	306607	969561
H89	307865	967917

Guidance Notes for Noise Condition 25

These notes form part of condition 25. They further explain the condition and specify the methods to be deployed in the assessment of complaints about noise immissions from the wind farm.

Reference to ETSU-R-97 refers to the publication entitled “The Assessment and Rating of Noise from Wind Farm” (1997) published by the Energy Technology Support unit (ETSU) for the Department of Trade and Industry (DTI).

Guidance Note 1

a) Values of the LA90,10min noise statistic shall be measured at the complainant’s property using a sound level meter of EN 60651/BS EN 60804 Type 1, or EN 61672 Class 1 quality (or the replacement thereof) set to measure using a 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 shall be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the replacement thereof). These measurements shall be made in such a way that the requirements of Note 3 shall also be satisfied.

b) The microphone should be mounted at 1.2 - 1.5 m above ground level, fitted with a two layer windshield (or suitable alternative approved in writing from 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 3.5m away from

the building facade or any reflecting surface except the ground at a location agreed with the Planning Authority.

c) The LA90,10min measurements shall be synchronised with measurements of the 10-minute arithmetic mean wind speed and with operational data, including power generation information for each wind turbine, from the turbine control systems of the wind farm. d) The wind farm operator shall continuously log arithmetic mean wind speed and arithmetic mean wind direction data in 10 minute periods on the wind farm site to enable compliance with the conditions to be evaluated. The mean wind speed 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 10m height wind speed data which is correlated with the noise measurements of Note 2(a) in the manner described in Note 2(c).

Guidance Note 2

a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b). Such measurements shall provide valid data points for the range of wind speeds, wind directions, times of day and power generation requested by the Planning Authority. In specifying such conditions the Planning Authority shall have regard to those conditions which were most likely to have prevailed during times when the complainant alleges there was disturbance due to noise.

b) Valid data points are those that remain after all periods during rainfall have been excluded. 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 Note 1(c) and is situated in the vicinity of the sound level meter.

c) A least squares, “best fit” curve of a maximum 2nd order polynomial or otherwise as may be agreed with the Planning Authority shall be fitted between the standardised mean wind speed (as defined in Note 1 paragraph (d)) plotted against the measured LA90,10min noise levels. The noise level at each integer speed shall be derived from this best-fit curve.

Guidance Note 3

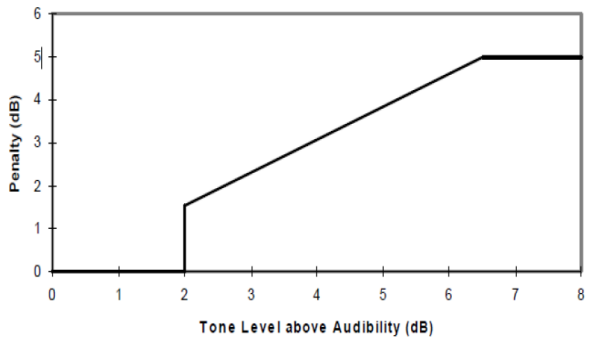
Where, in the opinion of the Planning Authority, noise immissions at the location or locations where assessment measurements are being undertaken contain a tonal component, the following rating procedure shall be used.

a) For each 10-minute interval for which LA90,10min data have been obtained as provided for in Notes 1 and 2, a tonal assessment shall be performed on noise immissions during 2-minutes of each 10-minute period. The 2-minute periods shall be regularly spaced at 10-minute intervals provided that uninterrupted clean data are available. Where clean 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 standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.

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

c) The arithmetic average margin above audibility shall be calculated for each wind speed bin where data is available, each bin being 1 metre per second wide and centred on integer wind speeds. For samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.

d) The tonal penalty shall be derived from the margin above audibility of the tone according to the figure below. The rating level at each wind speed shall be calculated as the arithmetic sum of the wind farm noise level, as determined from the best-fit curve described in Note 2, and the penalty for tonal noise.



Guidance Note 4

If the wind farm noise level (including the application of any tonal penalty as per Note 3) is above the limit set out in the conditions, measurements of the influence of background noise shall be made to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Notes 1 & 2 with the wind farm switched off in order to determine the background noise, L3, at the assessed wind speed. The wind farm noise at this wind speed, L1, is then calculated as follows, where L2 is the measured wind farm noise level at the assessed wind speed with turbines running but without the addition of any tonal penalty:

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

The wind farm noise level is re-calculated by adding the tonal penalty (if any) to the wind farm noise.

Schedule 2: Advisory notes

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

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

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

4. **Right to challenge this decision:** This decision is final, subject to the right of any person aggrieved by this decision to question its validity by making an application to the Court of Session. An application to the Court of Session must be made within 6 weeks of the date of the decision. Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

5. **Notification of this decision by the planning authority:** The planning authority is required (a) to inform the public and bodies consulted in respect of the EIA report of this decision by publishing a notice on the application website or newspaper circulating the in locality of the proposed development or by other reasonable means and (b) to make a copy of the decision available for public inspection in an office of the planning authority where its planning register may be inspected and on the application website.

Schedule 3: Application drawings

Figure 1.1: Location Plan 03022-RES-LAY-DR-LE-001
Figure 2.1: Site Layout 03022-RES-LAY-DR-PE-001
Figure 2.2: Wind Turbine Elevation 03022D2304
Figure 2.3: Typical Gravity Base Foundation 03022D2303
Figure 2.4: Typical Crane Hardstand 03022D2302
Figure 2.5: Typical Access Track Details 03022D2402
Figure 2.6: Typical Water Crossing Detail 03022D2305
Figure 2.7: Substation, Control Building & Energy Storage Unit Layout 03022D2219
Figure 2.8: Substation, Control Building & Energy Storage Unit Elevation 03022D2301
Figure 2.9: Typical Construction Compound Layout 03022D2217
Figure 2.10: Typical Temporary Enabling Works Compound Layout 03022D2216
Figure 2.11: Typical Cable Trench Details 03022D2307
Figure 2.12: Typical Energy Storage Unit Layout 03022D2215
Figure 2.14: Typical Rock Anchor Foundation 03022-RES-FOU-DR-CE-001
Figure 2.15: Site Entrance (Sheets 1 & 2) 03022-RES-ACC-DR-LO-003
Figure 2.16: General Storage Design 03022-RES-BAT-DR-EE-001

Schedule 4: Opportunities for public participation in decision-making

Consultation responses were received from: Caithness West Community Council, Thurso Community Council, Highlands and Islands Airport Authority, Historic Environment Scotland, Ministry of Defence, National Air Traffic Services, NatureScot, Scottish Environment Protection Agency, Scottish Water, and Transport Scotland.

There is the following evidence before me of opportunities the public had to take part in decision-making procedures on the application before I was appointed to this appeal:

- the appellant has provided a report on pre-application consultation. This indicates that three public events were held. One of these was virtual, held online on 2 February 2022, while the other two were public exhibitions at Forss and Thurso on 25 May 2022, and the public had an opportunity to comment to the appellant on the proposed development;

- an advertisement of the application in the Edinburgh Gazette and John O'Groat Journal on 7 October 2022 has been provided. There was a further advert in the Edinburgh Gazette on 13 December 2024 in relation to additional information. These advertised the opportunity for the public to make representations upon the proposal for the development and the accompanying EIA report; and

- the planning authority received 867 public representations in respect of the application (one of which was subsequently withdrawn). The main points raised in those representations are summarised in this decision notice.

Those who made representations upon the application have been treated as interested parties in the appeal. They have had the opportunity to make representations on matters that they raised, by written response to the appeal.