

# Rhoscrowther | Wind Farm



## Environmental Statement

### Volume III: Technical Appendices

#### Appendix 5.1 - LVIA Assessment Criteria

October 2021

## Assessment Criteria

A5.1.1. The criteria used to assess the effects of the proposed development on landscape and seascape (landscape fabric, landscape character, seascape character, landscape designations and seascape designations), and on views and visual amenity are described below.

### Landscape and Seascape

#### Effects on Landscape Fabric

A5.1.2. The assessment of effects on landscape fabric considers the existing landscape elements and features on the site and surrounding area and the predicted residual (physical) effects of the proposed development on the site and surrounding landscape taking into account the design mitigation measures (embedded and good practice) and then the landscape and habitat enhancement measures, and makes a judgement as to whether there is likely to be any significant beneficial or adverse effect on landscape fabric based on the following definitions:

- Significant beneficial effects on landscape fabric would occur where the proposed development would result in the addition, reinstatement or improvement of important/mature/diverse/distinctive components, which had previously been lost or degraded as the result of agricultural operations or other development.
- Significant adverse effects on landscape fabric would occur where the proposed development would result in the permanent loss (or long-term temporary loss) of important/mature/diverse/distinctive components and the effects cannot be adequately mitigated.

#### Effects on Landscape Character

A5.1.3. The assessment of effects on landscape character considers the predicted residual effects of the proposed development, the landscape context, the theoretical visibility analyses, the viewpoint analysis and other fieldwork observations, and predicts the degree and extent of the likely significant adverse or beneficial effects on landscape character as a consequence of the addition of the proposed development, either directly (into the host

landscape) or indirectly (into views from the surrounding landscapes).

A5.1.4. The criteria used to judge landscape value, susceptibility, sensitivity, magnitude and significance of effects on landscape character are as follows.

### Landscape Value

A5.1.5. Most landscapes are locally valued by local people. Landscape and recreational designations are an indication of landscape and recreational value over and above local value, as they are areas that have been recognised for their particular scenic beauty and/or recreational potential. They are also usually landscapes within which a higher level of development control is in place for the purpose of protecting those qualities.

A5.1.6. Judgements on landscape value (for landscape units or landscape features) are based on those given in published landscape character assessments (where given), checked in the field and/or from fieldwork observations, based on the criteria provided in Table A5.1.1 below.

**Table A5.1.1: Landscape Value**

Landscape Value	Description
<b>International value</b>	Where the landscape is designated at an international level, eg World Heritage Site and the purposes include landscape and/or recreational aims.
<b>National value</b>	Where the landscape is designated at a national level, eg National Parks (England, Scotland and Wales), Areas of Outstanding Natural Beauty (England, Wales and NI), National Scenic Areas (Scotland) and Heritage Coasts (England and Wales) or where a landscape feature is designated at a national level, eg Scheduled Monument, and forms a highly distinctive landscape feature.
<b>County/Borough/District value</b>	Regional Parks, landscape designations in Structure, Unitary or Local Development Plans or a landscape feature that is designated at a County/Borough/District level and forms a distinctive landscape feature.
<b>Local value</b>	For undesignated landscapes and landscape features which are locally valued, and display evidence of responsible use and value.
<b>Unvalued</b>	Where the landscape and/or landscape features have been despoiled and there is evidence that society does not value the landscape and/or landscape features, eg fly tipping, abandoned cars, litter, vandalism, etc.

## Landscape Susceptibility

A5.1.7. Susceptibility is defined in GLVIA3 (para 5.40, p88-89, LVIA-1) as:

*“the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies” (para 5.40, p88-89, LI/IEMA 2013).*

A5.1.8. The susceptibility of a landscape unit to the change that will be brought about by the type and scale of development proposed depends on:

- The key characteristics of the landscape (including physical/natural and cultural/social elements, and aesthetic and perceptual factors), and the clarity and robustness of these characteristics.
- Nature of views (visual enclosure/openness of views, and extent to which views contribute to landscape character).
- Landscape planning policies and strategies for the landscape unit.
- The nature of the changes to landscape character and views that would be brought about by the proposed development (based on the inherent characteristics of commercial scale wind energy development, and the scale and location of the development proposed) and the compatibility of these with the above factors.

A5.1.9. The key characteristics including the nature of views are derived from the baseline landscape character assessments and fieldwork observations, the landscape planning policies and strategies include national and local policies and guidance, and the nature of the changes are drawn from experience of similar development types and scales in similar landscapes. As susceptibility depends not just on the type and scale of the proposed development but also on its location, the influence of the above parameters on the susceptibility of a landscape unit can vary depending on whether it is the host landscape unit or an adjacent or more distant unit.

A5.1.10. The criteria used to judge landscape susceptibility are provided in Table A5.1.2 below.

**Table A5.1.2: Landscape Susceptibility to Large Scale Wind Turbines**

Landscape Susceptibility	Description
<b>Very susceptible</b>	Where the clarity of the key characteristics are very strongly expressed and/or their robustness to change is fragile and/or views are an essential characteristic, and/or policies and strategies aim to achieve “no change” to landscape character, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would be incompatible with these factors.
<b>Susceptible</b>	Where the clarity of the key characteristics are strongly expressed and/or their robustness to change is weak and/or views are an important characteristic and/or policies and strategies aim to conserve the key characteristics, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a poor compatibility with these factors.
<b>Moderate susceptibility</b>	Where the clarity of the key characteristics are clearly expressed and/or their robustness to change is moderately strong and/or views contribute to landscape character and/or policies and strategies promote or accept limited changes to key characteristics, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a limited degree of compatibility with these factors.
<b>Slight susceptibility</b>	Where the clarity of the key characteristics are vaguely expressed and/or their robustness to change is strong and/or views are a minor contribution to landscape character and/or policies and strategies promote or accept that the landscape could evolve, and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would have a degree of compatibility with these factors.
<b>Negligible susceptibility</b>	Where the key characteristics are muddled and/or their robustness to change is very strong and/or views are incidental to landscape character and/or policies and strategies promote or accept major changes to key characteristics and the changes to landscape character that could be brought about by a development of the type, scale and location proposed would be compatible with these factors.

A5.1.11. It is important to note the use of the word “could” rather than “would” in relation to the changes to landscape character that “could” be brought about by the proposed development as the magnitude of change is not taken into account at this stage.

## Landscape Sensitivity

A5.1.12. In accordance with GLVIA3, the sensitivity of each landscape unit is judged on the basis of its *value* and its *susceptibility to change* (GLVIA3, paras 5.39 - 5.47, pp88 - 90, LVIA-3). Accordingly, the judgements on value and susceptibility are combined to give levels of sensitivity as in Table A5.1.3 below.

**Table A5.1.3: Landscape Sensitivity to Large Scale Wind Turbines**

Landscape Sensitivity	Description
<b>Very high sensitivity</b>	A landscape with <b>international or national value</b> and/or with features, elements, areas or special qualities of international or national value, that could be <b>very susceptible</b> to the type, scale and location of development proposed.
<b>High sensitivity</b>	A landscape with <b>national or County/Borough/District value</b> and/or with features, elements, areas or special qualities of national value, that could be <b>susceptible</b> to the type, scale and location of development proposed.
<b>Medium sensitivity</b>	A landscape with <b>County/Borough/District or local value</b> and/or with features, elements, areas or special qualities of County/Borough/District or local value, that could have a <b>moderate susceptibility</b> to the type, scale and location of development proposed.
<b>Low sensitivity</b>	A landscape with <b>local value</b> and/or with features, elements, areas or special qualities of local value, that could have a <b>slight susceptibility</b> to the type, scale and location of development proposed.
<b>Very low sensitivity</b>	A landscape that is <b>unvalued</b> and/or with features, elements, areas or special qualities that are unvalued, and that could have a <b>negligible susceptibility</b> to the type, scale and location of development proposed.

## Magnitude of Change in Landscape Character

A5.1.13. The magnitude of change to landscape character depends on the scale or degree of change to the landscape resource and the nature, geographical extent, duration and reversibility of the effects that would be brought about by the proposed development (see GLVIA3, paras 5.48 - 5.52, p90 - 91, LVIA-3). It also assumes that any changes that do not conserve or enhance existing landscape character would be adverse. Accordingly, the judgements of magnitude are based on the criteria in Table A5.1.4 below.

**Table A5.1.4: Magnitude of Change to Landscape Character**

Magnitude of Change	Description
<b>Very substantial adverse</b> [or beneficial]	Where the proposed development would become a defining characteristic of the landscape, would override and be in stark contrast with [or would substantially enhance] the existing landscape context, would be in the context of no similar structures [or would reinstate particularly valued features that had been previously lost or degraded] and would be a dominant additional feature(s) which would be present for a long, albeit temporary and reversible, time frame.
<b>Substantial adverse</b> [or beneficial]	Where the proposed development would become a key characteristic of the landscape, would compete with and detract from [or enhance] the existing landscape context, would be in the context of few similar structures [or would reinstate particularly valued features that had been previously lost or degraded] and would be a prominent additional feature(s) which would be present for a long, albeit temporary and reversible, time frame.
<b>Moderate adverse</b> [or beneficial]	Where the proposed development would become a characteristic of the landscape and would contrast with [or complement] the existing landscape context, may be in the context of a few similar structures [and/or would reinstate valued features that had been previously lost or degraded] and would be a visible additional feature(s) which would be present for a long, albeit temporary and reversible, time frame.
<b>Slight adverse</b> [or beneficial]	Where the proposed development would become a characteristic of the views from this landscape and would contrast with [or complement] the existing landscape context, may be in the context of some similar structures [and/or would reinstate features that had been previously lost or degraded] and would be a noticeable additional feature(s) which would be present for a long, albeit temporary and reversible, time frame.
<b>Negligible adverse</b> [or beneficial]	Where the proposed development may contrast with [or would complement] the existing landscape context, may be in the context of several similar structures [and/or would reinstate minor features that had been previously lost or degraded] and would be a barely discernible additional feature(s) which would be present for a long, albeit temporary and reversible, time frame.
<b>No change</b>	Where the proposed development would not be visible or would not result in any discernible change in landscape character.

### Significance of Effects on Landscape Character

A5.1.14. The effects on landscape character are then derived by combining the sensitivity and magnitude in accordance with the matrix in Table A5.1.5 below.

A5.1.15. In the following table, where overall effects are predicted to be

major/moderate or higher, there are likely to be significant changes in landscape character. Overall effects of moderate+ may be significant if these apply to an extended area or location, and overall effects of moderate may contribute to significance if combined with greater changes in the same general location, whereas moderate/minor+ or lower changes are unlikely to result in significant changes to landscape character.

**Table A5.1.5: Assessment of Effects on Landscape Character**

LANDSCAPE SENSITIVITY	MAGNITUDE OF CHANGE								
	V sub	V sub/ sub	Sub	Sub/ mod	Mod	Mod/ slight	Slight	Slight/ neg	Neg
<b>Very high</b>	Major++	Major+	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min
<b>High</b>	Major+	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+
<b>Medium</b>	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor
<b>Low</b>	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Min/ neg+
<b>Very low</b>	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Minor/ neg+	Min/ neg

A5.1.16. The nature of the predicted significant effects on landscape character can be: direct/indirect, secondary, individual/ cumulative (additional or combined), short/medium/long-term, temporary/permanent, intermittent/continuous, reversible/irreversible and/or adverse/beneficial effects (based on Schedule 4 of the EIA Regulations).

A5.1.17. With regards to landscape character, the effects of wind energy developments are generally direct (within the host landscape), indirect (on neighbouring landscapes), individual (when in isolation), cumulative (when there are other wind schemes in the landscape), temporary, continuous and reversible after the 25 year operational life of the development. Although 25 years is a short timescale relative to the natural evolution of a landscape, it is equivalent to a generation and so the effects on landscape character are, therefore, considered to be long-term.

A5.1.18. Finally, the degree and extent of change on landscape character is typically described in terms of three levels (where “landscape unit” is the existing name of the landscape character area or type under assessment) as follows:

- “Wind farm landscape” - where the wind turbines would override many of the other key characteristics such that the wind turbines would become one of the defining characteristics of the landscape and a new landscape area or type would be defined.
- “Landscape unit with wind turbines” - where the wind turbines would become one of the key characteristics of the landscape and some of the other key characteristics would change, such that a new landscape sub-area or sub-type could be defined and so the name of the landscape unit would be followed by “with wind turbines”.
- “Landscape unit” - where the wind turbines would become one of the key characteristics of the landscape (or views out of the landscape unit) but the majority of the other key characteristics would remain largely unchanged, such that there would be a material change to landscape character but not sufficient to justify the creation of a new landscape sub-area or sub-type, and so the name of the landscape unit would not change.

### **Effects on Seascape Character**

A5.1.19. The assessment of effects on seascape character considers the predicted residual effects of the proposed development, the seascape context, the theoretical visibility analyses, the viewpoint analysis and other fieldwork observations, and predicts the degree and extent of the likely significant adverse or beneficial effects on seascape character as a consequence of the addition of the proposed development, either directly (into the host seascape unit) or indirectly (into views from the surrounding seascape units).

A5.1.20. The criteria used to judge seascape value, susceptibility, sensitivity, magnitude and significance of effects on seascape character are the same as those described above for assessing the effects on landscape character.

## Effects on Landscape Designations

A5.1.21. The assessment of effects on landscape designations, such as National Parks and Areas of Outstanding Natural Beauty (AONBS), considers the special characteristics and purposes of these designations plus the predicted residual effects of the development, the theoretical visibility analyses, the viewpoint analysis and other fieldwork observations, and makes a judgement as to whether there are likely to be any significant beneficial or adverse effects on the special characteristics and purposes of the designations based on the following definitions:

- Significant beneficial effects are likely to occur where the proposed development would bring about a significant change in the special characteristics that underpin the purpose/objectives of the designation, and that change would significantly enhance the ability of the designation to fulfil those purposes/objectives.
- Significant adverse effects are likely to occur where the proposed development would bring about a significant change in the special characteristics that underpin the purpose/objectives of the designation, and that change would significantly compromise the ability of the designation to fulfil those purposes/objectives.

## Effects on Seascape Designations

A5.1.22. The assessment of effects on seascape designations, such as Heritage Coasts and the seascape components of coastal National Parks and Areas of Outstanding Natural Beauty (AONBS), considers the special characteristics and purposes of these designations plus the predicted residual effects of the development, the theoretical visibility analyses, the viewpoint analysis and other fieldwork observations, and makes a judgement as to whether there are likely to be any significant beneficial or adverse effects on the special characteristics and purposes of the designations based on the definitions for landscape designations above.

## Views and Visual Amenity

### Effects on Views

A5.1.23. The criteria used to judge value, susceptibility, sensitivity, magnitude and significance of effects on views are as follows.

#### Location Value

A5.1.24. The value attached to a location or to a particular view at a location can influence the purpose and expectation of receptors at the location, and the judgement of value takes into account:

- Recognised value - for example, by the presence of planning designations or designated heritage assets.
- Indicators of value - to individuals, communities and society generally, for example, the popularity of the location and views as indicated by visitor numbers, the inclusion in guidebooks or on tourist maps, the provision of visitor facilities and references in literature and art.

A5.1.25. The value of a location and/or view is described as in Table A5.1.6 below.

**Table A5.1.6: Value of Location or Particular View**

Value of Location or View	Description
<b>National value</b>	A recognised scenic view in a landscape that has been designated at a national level, eg National Parks (England, Scotland and Wales), Areas of Outstanding Natural Beauty (England, Wales and NI), National Scenic Areas (Scotland) and Heritage Coasts (England and Wales), or a view of or from a distinctive landscape feature designated at the national level, eg Scheduled Monument, Grade I Listed Building, Grade I Listed Garden.
<b>County/Borough/District value</b>	A popular view promoted in visitor guides and/or in a landscape designated in Structure, Unitary or Local Development Plans.
<b>Community value</b>	A popular view in an undesignated landscape which is locally valued, and displays evidence of responsible use and value.
<b>Private value</b>	A private view, eg from a residential property, that is likely to be valued by the occupants.
<b>Unvalued</b>	Where the landscape has been despoiled and there is evidence that society does not value the view or landscape, eg fly tipping, abandoned cars, litter, etc.

## Receptor Susceptibility

A5.1.26. Susceptibility to changes in a view will vary between receptor groups and the judgement of susceptibility takes into account:

- Receptor location, occupation or activity - for example, relaxing at home, undertaking leisure, recreational or sporting activities, or at work, etc.
- Movement of receptor and duration and frequency of view experience - whether receptors would be stationary or moving (which influences how long they would be exposed to the change at any one time) and whether receptors are exposed to the view daily, frequently, occasionally or rarely.
- Focus of attention or interest - where their attention would be focused at the location, which depends on their orientation and/or direction of travel, the nature of the landscape and existing views and visual amenity.

A5.1.27. The susceptibility of each receptor group at each location is judged in terms of five levels of susceptibility, as provided in Table A5.1.7 below.

**Table A5.1.7: Visual Receptor Susceptibility to Large Scale Wind Turbines**

Receptor Susceptibility	Description
<b>Very susceptible</b>	Where the receptor would be stationary or moving slowly, would be exposed to the change daily and for much of each day and the focus of their attention or interest would be towards the view of the proposed development.
<b>Susceptible</b>	Where the receptor would be stationary or moving slowly, would be exposed to the change frequently and for sustained periods and the focus of their attention or interest would be towards the view of the proposed development.
<b>Moderate susceptibility</b>	Where the receptor would be moving steadily, would be exposed to the change infrequently and for short periods, and the focus of their attention or interest may be towards the view of the proposed development.
<b>Slight susceptibility</b>	Where the receptor would be moving swiftly, would be exposed to the change occasionally and for very short periods, and the focus of their attention or interest may be oblique to the view of the proposed development.
<b>Negligible susceptibility</b>	Where the receptor would be moving swiftly, would be exposed to the change rarely and for very short periods, and the focus of their attention or interest would be oblique to or away from the view of the proposed development.

## Receptor Sensitivity

- A5.1.28. All visual receptors are people and assumed to be equally sensitive to change. However, the location and activities of visual receptors influence the way in which they currently experience the landscape and views, the extent to which views of the surrounding landscape may contribute to their existing visual amenity, the value they place on these views and their susceptibility to changes in these views. Accordingly, at any one location there may be different levels of sensitivity for the different receptor groups, the sensitivity may vary depending on the direction of the view, and any one receptor group may be accorded different levels of sensitivity at different locations.
- A5.1.29. Some of the above factors for value and susceptibility will vary even within the same receptor group (eg some walkers on access land may visit only once, others may walk there every day). Therefore, the judgement on sensitivity for each receptor group at each viewpoint location assumes a worst-case scenario in terms of both the value attached to the views at that location and the susceptibility of each receptor group to changes in those views.
- A5.1.30. Equally, a receptor's experience and appreciation of the landscape, views and visual amenity is influenced by their cultural background, awareness of historical and contemporary influences, and personal and professional interests. These influences vary from person to person but, in order to assess the worst-case scenario, it is assumed that receptors are fully aware of the cultural, historical and contemporary context of each view.
- A5.1.31. Some typical receptor location sensitivities are provided in Table A5.1.8 below. However, these are only examples which take into account some of the combinations of factors that may influence the judgement of location sensitivity for any one receptor group at any one location. Wherever location sensitivity is judged to be different to those shown in Table A5.1.8, the specific combination of factors that have influenced that judgement are described in the assessment.

Table A5.1.8: Receptor Location Sensitivity to Large Wind Turbines

Receptor group		Location sensitivity
Zone receptors	Residents	<p><b>High</b> - would view the proposed development in the primary views from their property (eg main windows and gardens), would be stationary or moving slowly about their property, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p> <p><b>High/medium</b> - would view the proposed development in the secondary views from their property (eg driveway), would be stationary or moving slowly at these locations, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p> <p><b>Medium</b> - would view the proposed development from very limited locations on their property (eg single attic window), would be stationary or moving slowly at these locations, would see the development on a daily basis, could be orientated towards the development, and would value these views.</p>
	Recreational receptors	<p><b>High</b> - are stationery or moving slowly (eg walking, cycling or horse riding), can be orientated towards the development, are at that location primarily in order to enjoy the view, on a nationally designated route, regional long distance route and/or in a landscape nationally designated for its scenic value.</p> <p><b>High/medium</b> - are stationery or moving slowly (eg walking, cycling or horse riding), can be orientated towards the development, are at that location primarily in order to enjoy the view but also for other purposes, at scenic vantage points, on access land, locally promoted route or local right of way.</p> <p><b>Medium</b> - are stationery or moving slowly, can be orientated towards the development, may be at that location in order to enjoy the view but may have other purposes (eg playing sport), or where the main view is not in the direction of the development, on a local right of way, beach, sports field or other leisure/ recreational facility.</p>
Zone receptors	Outdoor workers and school children	<p><b>Medium</b> - outdoor workers and school children in locations where they may be moving slowly, can be orientated towards the development, may experience the view on a daily basis, may be at that location in order to enjoy the view but will have other purposes.</p> <p><b>Medium/low</b> - outdoor workers in locations where they may be moving slowly, can be orientated towards the development, may experience the view on a daily basis, but are at that location primarily to undertake activities unconnected with the view.</p>
	Indoor workers	<p><b>Low</b> - indoor receptors with limited views in this direction, who are in that location primarily to undertake activities unconnected with the view.</p>
Linear receptors	Road and rail users (motorists, passengers, bus and train travellers)	<p><b>High/medium</b> - in locations where they are moving steadily/swiftly, can be orientated towards the development, are likely to be at that location in order to enjoy the view, in a landscape that is nationally designated and/or on a nationally recognised scenic route.</p> <p><b>Medium</b> - in locations where they are moving steadily/swiftly, can be orientated towards the development, may be at that location in order to enjoy the view but may also have other purposes (eg journey to work), in a landscape that is not nationally designated for its scenic value and/or not on a nationally recognised scenic route.</p> <p><b>Medium/low</b> - in locations where they are moving swiftly, with a direction of travel that is oblique or side on to the development, are likely to be travelling for a purpose other than in order to enjoy the view (eg journey to work), in a landscape that is not designated.</p>

### **Magnitude of Change in a View**

A5.1.32. The magnitude of the change in a view is a judgement based on a series of measured parameters which, in order to assess the worst case, assumes that the visual receptors are being exposed to the change for the first time, in excellent visibility (30km+) and that the rotors are turning and are face on to the receptor.

A5.1.33. Computer-generated visualisations, fieldwork observations and professional judgement are used to identify a largely quantifiable set of parameters, which include:

- Distance and direction of the viewpoint from the development.
- Extent/proportion of the development visible from the viewpoint.
- Field of view occupied by the development (horizontal/vertical angles).
- Context of the view, existing visual amenity and the degree of contrast with the existing landscape and built elements (background, form, pattern, composition, scale and mass, line, movement, colour, texture, etc).
- Scale of change with respect to the loss or addition of features in the view. For the addition of wind turbines, this includes the scale of the development relative to the scale of the landscape, field pattern, etc and whether the development would be dominant, prominent, visible, noticeable, discernible or barely discernible.
- Nature of change, particularly in relation to existing visual amenity and the composition of the view, such as changes to skyline, creation of a new visual focus, introduction of new man-made elements, changes to visual simplicity or complexity, alteration of visual scale or changes to the degree of visual enclosure.
- Duration and nature of the effect, eg direct/indirect, secondary, individual/cumulative, short/medium/long-term, temporary/permanent, intermittent/continuous, reversible/irreversible, etc (as related to the nature of the development, not the receptor activity).

A5.1.34. For each viewpoint location, the parameters in para A5.1.33 above are examined, the findings combined and the assessment of magnitude judged using a scale of: very substantial, substantial, moderate, slight and negligible.

A5.1.35. For large wind turbines (typically 90m - 125m to tip), each magnitude band approximates to the combinations of parameters in Table A5.1.9 below.

**Table A5.1.9: Magnitude of Change in a View**

<b>Magnitude of Change</b>	<b>Description</b>
<b>Very substantial</b>	Where the proposed wind turbines would be close to the viewpoint, visible in their entirety, would occupy the majority of one sector of the view (90°), the rotors would be turning and facing the receptor, the turbines would be in stark contrast to the landscape context (particularly in terms of scale and an absence of similar structures), such that they would be a dominant new feature which would be present for a long, albeit temporary and reversible, time frame.
<b>Substantial</b>	Where the proposed wind turbines would be in the near distance, visible in their entirety or partly screened, would occupy up to one half of one sector of the view (~ 48°), the rotors would be turning and facing the receptor, the turbines would contrast with the landscape context (particularly in terms of scale and few similar structures), such that they would be a prominent new feature which would be present for a long, albeit temporary and reversible, time frame.
<b>Moderate</b>	Where the proposed wind turbines would be in the middle distance, visible in their entirety or partly screened, would occupy up to one quarter of one sector of the view (~ 24°), the rotors would be turning and facing the receptor, the turbines may contrast with the landscape context (particularly in terms of scale and few similar structures) or may be in the context of similar structures but a visible additional feature which would be present for a long, albeit temporary and reversible, time frame.
<b>Slight</b>	Where the proposed wind turbines would be in the distance, noticeable in their entirety or partly screened, would occupy a small part of one sector of the view (~ 12°), the rotors would be turning and facing the receptor, the turbines may contrast with the landscape context (particularly in terms of scale and few similar structures) or may be in the context of similar structures but a noticeable additional feature which would be present for a long, albeit temporary and reversible, time frame.
<b>Negligible</b>	Where the proposed wind turbines would be in the far distance, partly or largely screened, would occupy a very small part of one sector of the view (~ 6°), the rotors would be turning, the turbines may contrast with the landscape context (particularly in terms of scale and few similar structures) or may be in the context of similar structures but a barely discernible additional feature which would be present for a long, albeit temporary and reversible, time frame.

A5.1.36. These levels of magnitude are used to assess individual and cumulative (additional and/or combined) effects and have been derived from assessing thousands of viewpoints at hundreds of proposed wind farm sites in the UK and examining views of operational wind farms in the field.

A5.1.37. However, magnitude of change is a continuum. These levels are used to describe bands along that continuum and, in order to identify more subtle differences, where appropriate, the intermediate levels of very substantial/substantial, substantial/moderate, moderate/slight and slight/negligible are also used.

A5.1.38. Where the parameters at a viewpoint do not fit neatly into one of the above magnitude levels, further judgement is required. For example, there may be mitigating factors in a view, such as a degree of screening by intervening topography, buildings or vegetation, which means that the magnitude may be less than suggested by the combination of other parameters. Also, where an extension to an existing operational wind farm is proposed, the addition of wind turbines to a view that already contains wind turbines may not result in the magnitude of change suggested by the combination of other parameters at the viewpoint as the proposed wind turbines would be seen in the context of similar structures.

### **Significance of Effects on Views**

A5.1.39. For each receptor group, the sensitivity of the location is combined with the predicted magnitude of change to determine the overall change in the view and whether there is likely to be a significant change in the view at that location. In most cases, the overall change in the view can be derived by combining the sensitivity and magnitude in accordance with the matrix in Table A1.10 below.

**A5.1.40.** In the following table, where overall effects are predicted to be major/moderate or higher, there are likely to be significant changes in the view. Overall effects of moderate+ may be significant if experienced over a sustained length of a route or over most of a zone, area or location, and overall effects of moderate may contribute to significance if combined with greater changes at the same location, whereas moderate/minor+ or lower changes are unlikely to result in significant changes to views.

**Table A5.1.10: Assessment of Effects on Views**

RECEPTOR SENSITIVITY	MAGNITUDE OF CHANGE								
	V sub	V sub/ sub	Sub	Sub/ mod	Mod	Mod/ slight	Slight	Slight/ neg	Neg
<b>High</b>	Major++	Major+	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min
<b>High/ medium</b>	Major+	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+
<b>Medium</b>	Major	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor
<b>Medium/ low</b>	Maj/ mod+	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Min/ neg+
<b>Low</b>	Maj/ mod	Mod+	Mod	Mod/ min+	Mod/ min	Minor+	Minor	Minor/ neg+	Min/ neg

A5.1.41. The nature of the predicted significant effects on views can be: direct/indirect, secondary, individual/cumulative (additional or combined), short/medium/long-term, temporary/permanent, intermittent/continuous, reversible/irreversible and/or adverse/beneficial effects (based on Schedule 4 of the EIA Regulations).

A5.1.42. With regards to views, the effects of wind turbines are generally direct, individual (when seen in isolation), cumulative (when there are other wind turbines in the view), temporary, intermittent (when seen in various views along a route), continuous (when seen at a viewpoint) and reversible after the 25 year operational life of the development. 25 years is equivalent to a generation and so the effects on views are, therefore, considered to be long-term for visual receptors.

### Effects on Visual Amenity

A5.1.43. The assessment of effects on visual amenity draws on the predicted residual effects of the proposed development, the landscape and visual baseline, the theoretical visibility analyses, the viewpoint analysis and other fieldwork observations, and makes a judgement as to whether there are likely to be any significant effects on the visual amenity of the main visual receptor groups and locations in the study area, based on the following definition:

- Significant effects on visual amenity can occur where a development would result in significant effects on the primary view(s) at a location or

along a route and the view(s) is one that is valued and can be appreciated by receptors that are at that location for purposes that include the appreciation of the view(s).

A5.1.44. Significant effects on visual amenity can be perceived as beneficial, adverse or neutral and this depends largely on the perceptions and opinions of the individual receptors/observers. The variability of public opinion on renewable energy installations is such that it is difficult to define significant effects on visual amenity as a result of a wind farm as definitely beneficial or definitely adverse for all members of the public who may experience that view.

A5.1.45. However, in order to assess the worst case, it is recommended that all predicted significant effects on visual amenity are placed on the negative side of the planning balance, but that the variability in public perception and the likely numbers of receptors who would be affected are taken into account in the planning balance.

### **Effects on Residential Visual Amenity**

A5.1.46. The assessment of effects on residential visual amenity assesses the effects on the most open view from each residential property local to the site, using the same process and criteria used for the assessment of effects on views and visual amenity (as described above), plus a further stage which makes a Residential Visual Amenity Threshold judgement for each property, taking into account views “in the round” from each property.

A5.1.47. This is described in more detail in the Residential Visual Amenity Assessment (Appendix 5.6).