OAKLANDS FARM SOLAR PARK

Applicant: Oaklands Farm Solar Ltd

Environmental Statement
Appendix 5.1 – LVIA and CLVIA Methodology
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Oaklands Farm Solar Park - Environmental Statement Volume 3

Appendix 5.1: LVIA and CLVIA Methodology

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Appendix 5.1
Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA Methodology

Introduction

A5.1.1 The following information sets out the methodology for the Landscape and Visual Impact Assessment (LVIA) and Cumulative Landscape and Visual Impact Assessment (CLVIA) for the proposed Oaklands Farm Solar Park.

A5.1.2 Landscape and visual assessments are separate, although linked, processes considering landscape and visual effects separately, followed by an assessment of cumulative landscape and visual effects where relevant.

A5.1.3 LVIA therefore considers the likely effects of a proposed development on:

- Landscape as a resource in its own right (caused by changes to the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape).
- Views and visual amenity as experienced by people (caused by changes in the appearance of the landscape).

Guidance

A5.1.4 This methodology was developed by Chartered Landscape Architects (Chartered Members of the Landscape Institute (CMLI), who have extensive experience in the assessment of landscape and visual effects arising from a wide range of development types and scales.

A5.1.5 The methodology was developed primarily in accordance with the principles contained within the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)[1].

[1] The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.

Scope of the Assessment

A5.1.6 The LVIA considers physical changes to the landscape as well as changes in landscape character. It also considers visual impacts as perceived by people.

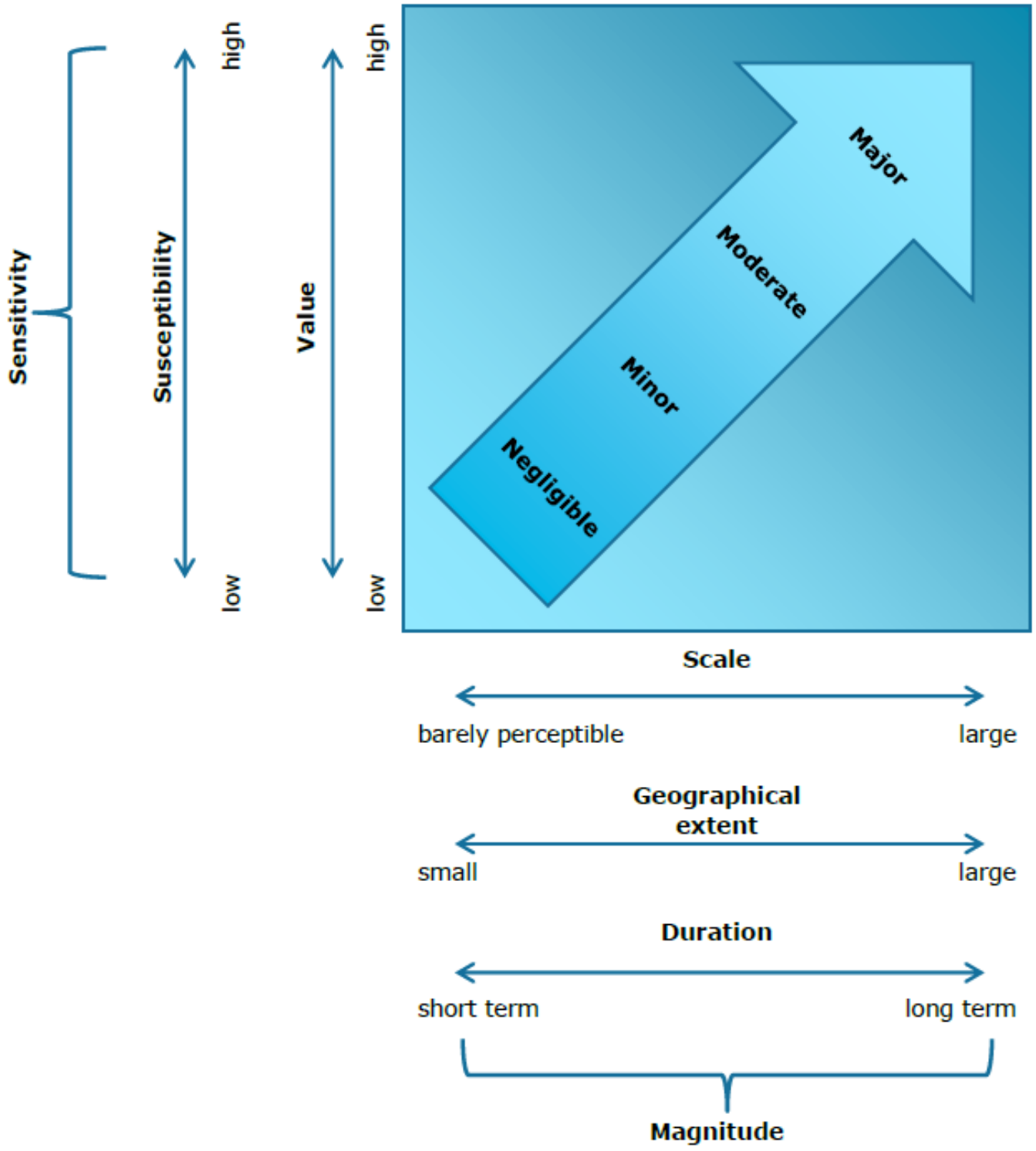
A5.1.7 All likely significant landscape and visual effects (including cumulative effects) are examined, including those relating to construction and operation (at both Year 1 and Year 10 to account for proposed mitigation and enhancement measures). At the end of the operational phase, the solar park will either be decommissioned, or an application made for consent to extend its operational life. Decommissioning would involve the removal of all above ground infrastructure, including the PV panels. Access tracks will either be left in situ providing a continuation of improved access for farmers or removed depending on the requirement of the landowner at the time. The changes to the landscape arising from the decommissioning of the solar park would be very similar to those arising from construction. Decommissioning has not therefore been separately assessed in the LVIA.

Judging the Significance of Effects

A5.1.8 An assessment of landscape or visual effects requires consideration of the nature of the receptor (sensitivity of receptor) and the nature of the effect on the receptor (magnitude of change). GLVIA3 states that the nature of receptors, commonly referred to as their sensitivity, should be assessed in terms of the susceptibility of the receptor to the type of change proposed, and the value attached to the receptor. The nature of the effect on each landscape or visual receptor, commonly referred to as its magnitude, should be assessed in terms of size and scale of effect, geographical extent, duration and reversibility.

A5.1.9 Sensitivity and magnitude are then considered together, to form a judgement regarding the overall significance of effects (GLVIA3, Figure 3.5, Page 39). This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Judgements are made on a case by case basis, guided by the principles set out in **Plate 1**.

Plate 1: Judging levels of effect – Landscape or Visual (including cumulative)



Assessing Significance of Landscape Effects

A5.1.10 Judging the significance of landscape effects requires consideration of the nature of the landscape receptors (sensitivity) and the nature of the effect on those landscape receptors (magnitude).

Landscape Sensitivity

A5.1.11 The sensitivity of a landscape receptor to change is based on combining professional judgements on susceptibility and value as illustrated in **Table A5.1.1**.

Table A5.1.1: Sensitivity of landscape receptors

Sensitivity of Landscape Receptors			
	Higher	⟷	**Lower**
Susceptibility	The landscape is less able to accommodate solar PV development without undue negative consequences to the baseline situation. Attributes (as set out below in **Table A5.1.2**) that make up the character of the landscape offer very limited opportunities for the accommodation of change without key characteristics being fundamentally altered by solar PV development, leading to a different landscape character.	⟷	The landscape is more able to accommodate solar PV development without undue negative consequences to the baseline situation. Attributes (as set out below in **Table A5.1.2**) that make up the character of the landscape are more resilient to being changed by solar PV development.
Value	Landscapes with higher scenic quality, conservation interests,	⟷	Landscapes of limited aesthetic qualities, low conservation interest, little recreational value,

Sensitivity of Landscape Receptors			
	recreational value, cultural associations or rarity or uniqueness. Areas designated at a national level e.g. National Parks or AONBs with national policy level protection.		few cultural associations or of character that is frequent/widespread. Areas or features that are not formally designated.

Susceptibility of the Landscape Receptor

A5.1.12 Susceptibility means "*the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular 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*" (GLVIA3 paragraph 5.40).

A5.1.13 For solar PV development, a series of criteria are used to evaluate susceptibility of landscape character types or areas to solar PV development as set out in the table below.

Table A5.1.2: Criteria to determine susceptibility to solar PV development

Characteristic/ Attribute	Aspects Indicating Lower Susceptibility to Solar PV Development	⟷	Aspects Indicating Higher Susceptibility to Solar PV Development
Scale	Large scale.	⟷	Small scale.
Landform	Absence of strong topographical variety, featureless, convex or flat.	⟷	Presence of strong topographical variety or distinctive landform features.

Characteristic/ Attribute	Aspects Indicating Lower Susceptibility to Solar PV Development	↔	Aspects Indicating Higher Susceptibility to Solar PV Development
Landcover and landscape pattern/ complexity	Simple. Uniform. Regular fields of mainly modern origin. Urban or 'brownfield' landscape.	↔	Complex. Rugged. Irregular fields of ancient origin. Dominated by semi-natural land cover.
Historic landscape/ time depth	Absence of time depth and historic features.	↔	Presence of historic landscapes with great time depth with a high density of historic landscape features.
Settlement and manmade influences	Presence of contemporary structures e.g. utility, infrastructure or industrial elements.	↔	Absence of modern development. Presence of small scale, historic or vernacular settlement.
Skylines	Non-prominent/screened skylines or skylines that are less important in views. Presence of existing modern man-made features.	↔	Distinctive, undeveloped skylines. Skylines that are highly visible over large areas or exert a large influence on landscape character. Skylines with important historic landmarks.

Characteristic/ Attribute	Aspects Indicating Lower Susceptibility to Solar PV Development	↔	Aspects Indicating Higher Susceptibility to Solar PV Development
Inter-visibility with adjacent landscapes	Little inter-visibility with adjacent sensitive landscapes or viewpoints.	↔	Strong inter-visibility with sensitive landscapes. Forms an important part of a view from sensitive viewpoints.
Perceptual aspects	Presence of visible or audible signs of human activity and development. Lacking in naturalness. Threatening; unattractive; noisy. High levels of light pollution/does not experience dark skies.	↔	Remote from visible or audible signs of human activity and development. High levels of naturalness evident. Tranquil; wild; spiritual; attractive; peaceful. Low levels of light pollution/experiences dark skies.

A5.1.14 Landscape susceptibility is defined as **high**, **medium** or **low** according to **Table A5.1.3**.

Table A5.1.3: Definition of landscape susceptibility

Landscape Susceptibility	Description
High	The landscape is not able to accommodate the type of development proposed without undue negative consequences to the baseline situation, e.g. this may include: ■ Landscapes that are smaller in scale, exhibiting some complexity, perhaps with some distinctive topographical features.

Landscape Susceptibility	Description
	■ Absence of any modern development and/or presence of historic landscape with great time depth. ■ Distinctive, undeveloped skylines and/or skylines that are highly visible or exert an influence on landscape character (which may include important historic landmarks). ■ Strong inter-visibility with highly sensitive landscapes or forms an important part of a view from highly sensitive viewpoints. ■ High sense of remoteness/ wildness with no visible or audible signs of human activity and development, and experiences dark skies.
Medium	The landscape is able to accommodate the type of development proposed to some extent without undue negative consequences to the baseline situation, e.g. this may include: ■ Medium scale landscapes which may have some topographical variety or features present. ■ May be some man-made features and/ or contemporary structures present. ■ Skylines may be present but not likely to be the most important skylines in a region – there could be some visibility of the skyline from sensitive landscapes or views. ■ Some visible or audible signs of human activity and development, but may also be some sense of tranquillity and experiences some dark skies. ■ Medium can also be a balance of indicators associated with high and low susceptibility.

Landscape Susceptibility	Description
Low	The landscape is more able to accommodate the type of development proposed without undue negative consequences to the baseline situation, e.g. this may include: ■ Large scale landscapes with absence of strong topographical variety and a simple form. ■ Regular or uniform landcover patterns. ■ Presence of man-made features and/or contemporary structures e.g. utility, infrastructure or industrial elements. ■ Skylines that are not prominent or less important in views. ■ Less visible from sensitive landscapes or views. ■ Presence of visible or audible signs of human activity and development, and does not experience dark skies. ■ Lack of tranquillity.

Value of the Landscape Receptor

A5.1.15 Landscape value, for the purposes of the LVIA, are determined with reference to:

- Review of designations and the level of policy importance that they signify (such as landscapes designated at international, national or local level); and
- Application of criteria that indicate value (such as natural heritage, cultural heritage, landscape condition, associations, distinctiveness, recreational, perceptual and functional) as described in the Landscape Institute's *TGN 02-21: Assessing landscape value outside national designations*[2] and GLVIA3, paragraphs 5.44 - 5.47.

A5.1.16 Internationally and nationally designated landscapes would generally indicate landscape of higher value; however, there are no designated landscapes within the proposed

[2] Landscape Institute (2021) TGN 02-21: Assessing landscape value outside national designations. Available at: https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/

study area. Landscapes without formal designation (such as a widespread or common character type without high scenic quality) are likely to be of lower value.

A5.1.17 For the purposes of this assessment, landscape value is recorded as **high**, **medium** or **low**.

Table A5.1.4: Definition of landscape value

Landscape Value	Description
High	This may include: ■ Areas or features valued at a national level e.g. National Parks or AONBs or key features of these that contribute to the designation. ■ Landscapes that are in good condition, have high scenic quality, are rare, have high recreational value, high conservation interest, are remote/ tranquil and/or have high/ nationally recognised associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area.
Medium	This may include: ■ Areas or features valued at a local level which may include local authority designated landscapes or key features of these that contribute to the designation. ■ Landscapes that are in a moderate condition, that have a moderate scenic quality, may have some rarity value at a local level, have some recreational value, some conservation interest, have a degree of rurality (but not a great sense of tranquillity/ remoteness) and/or have locally recognised associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area.
Low	This may include: ■ Landscapes that are in less good condition, have a low scenic quality, are not rare, lacking recreational value or conservation interest, unlikely

Landscape Value	Description
	to exhibit a sense of tranquillity/remoteness and have no notable associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area.

Combining Landscape Susceptibility and Value Judgements

A5.1.18 An overall judgement of landscape sensitivity has been derived by combining the separate judgements on landscape susceptibility and landscape value, as per the 'sequential combination' approach referred to in GLVIA3 (para 5.55). The process of combining the judgements of susceptibility and value is one of professional judgement. The starting point is an even weighting given to susceptibility and value, but each situation is different and there may be instances where susceptibility or value has more influence. In each case the judgement is clearly explained.

A5.1.19 Landscape sensitivity of a landscape receptor to change is expressed as **high**, **medium** or **low**.

Nature of Landscape Effect (Magnitude of Landscape Change)

A5.1.20 The magnitude of landscape change is based on combining professional judgements on size and scale; geographical extent; duration and reversibility as set out below. Further information on each criterion is provided in **Table A5.1.5**.

Table A5.1.5: Nature of landscape effect (landscape magnitude)

Nature of Landscape Effects (Landscape Magnitude)			
	Higher	⟷	**Lower**
Size/scale	Extensive loss of landscape features (and) or elements, and/or change in, or loss of key landscape	⟷	Some loss of landscape features (and) or elements, and/or change in or loss of

Nature of Landscape Effects (Landscape Magnitude)			
	characteristics, and/or creation of new key landscape characteristics.		some secondary landscape characteristics.
Geographical extent	Larger area across which there will be a change in landscape features and/or character.	⟷	Smaller area across which there will be a change in landscape features and/or character.
Duration	Changes over a longer period.	⟷	Changes over a shorter period.
Reversibility	Change to features, elements or character which are not reversible.	⟷	A landscape change which is reversible.

Size and Scale of Effect

A5.1.21 For landscape elements/features, this depends on the extent of existing landscape elements that will be lost or changed, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape.

A5.1.22 In terms of landscape character, this reflects the degree to which the character of the landscape will change by removal or addition of landscape components, and how the changes will affect key characteristics.

A5.1.23 This assessment of size/scale is described as being **large**, **medium**, **small** or **barely perceptible** according to **Table A5.1.6**.

Table A5.1.6: Size/scale of landscape change

Size/scale	Definition
Large	Complete loss or modification of landscape elements and features, or addition of new elements and features, which result in a large change to the key characteristics and character of the landscape (including perceptual character).

Size/scale	Definition
Medium	Loss of landscape elements and features, or addition of new ones, which result in discernible changes to landscape characteristics and character (including perceptual character).
Small	A perceptible but small change to landscape characteristics and character (including perceptual character) as a result of the loss of landscape elements and features or addition of new ones.
Barely perceptible	A barely perceptible change to landscape characteristics and character.

Geographical Extent of Effect

A5.1.24 Geographical extent over which the landscape effect will be felt is described as being **small** (at the level of the site or its immediate surroundings), **medium** (at the scale of the landscape type/character area), or **large** (widespread affecting several landscape types or character areas.

Duration of Effect

A5.1.25 GLVIA3 states that "*Duration can usually be simply judged on a scale such as short term, medium term or long term*". For the purposes of this assessment, duration is determined in relation to the length of phases of the development, as follows:

- **Short-term** or temporary effects are those that occur during construction, and may extend into the early part of the operational phase, e.g. construction activities, lasting < 2 years;
- **Medium-term** effects are those that occur during part of the operational phase, generally lasting 2 - 5 years; and
- **Long-term** effects are those which occur throughout the operational phase, e.g. presence of the development, or effects which continue after the operational phase, generally lasting 5 - 10 years, or beyond.

A5.1.26 The LVIA considers effects arising during the construction phase and operational phase (at both year 1 and year 10 to account for proposed mitigation and enhancement measures).

Reversibility of Effect

A5.1.27 In accordance with the principles contained within GLVIA3, reversibility is reported as **reversible**, **partially reversible** or **not reversible**, and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e. at the end of the construction or at the end of the operational lifespan of the development).

Combining Magnitude of Landscape Change Judgements

A5.1.28 An overall judgement for the magnitude of landscape change is derived by combining the separate judgements on size/scale, geographical extent, duration and reversibility, as per the 'sequential combination' approach referred to in GLVIA3 (para 5.55). In most cases, size/scale of change tends to have the largest influence on overall magnitude.

A5.1.29 The magnitude of landscape change is expressed as **high**, **medium**, **low** or **barely perceptible**.

Table A5.1.7: Nature of landscape effect (landscape magnitude)

Magnitude of Landscape Change	Definition
High	This may include: ■ An obvious (large scale) change in landscape features, characteristics and character potentially resulting in the creation of a new landscape character type. ■ Likely to affect a larger geographical extent.
Medium	This may include: ■ Discernible (medium scale) changes to landscape features, characteristics and character.

Magnitude of Landscape Change	Definition
	■ Likely to affect a moderate geographical extent. ■ Likely to apply to discernible changes over a long or medium term, but could include obvious changes for a short term.
Low	This may include: ■ A perceptible but small change to landscape features, characteristics and character. ■ Likely to be a lesser geographical extent. ■ Likely to apply to small changes over the long or medium term, but could apply to discernible (medium scale) changes over a short term.
Barely perceptible	This may include: ■ An imperceptible/barely perceptible change to landscape features, characteristics and character over any extent and for any duration.

Judging Levels of Landscape Effect and Significance

A5.1.30 Judgements on landscape sensitivity and magnitude of landscape change are combined to assess the overall significance of each effect, guided by the principles set out in **Plate 1**.

A5.1.31 Sensitivity and magnitude are typically weighted evenly so that a medium sensitivity and medium magnitude will result in a moderate overall effect, while a high sensitivity combined with a high magnitude will result in a major effect and a low sensitivity combined with a low magnitude will result in a minor effect. However, there are many possible combinations and in some cases a weighting to either sensitivity or magnitude may be required to come to an overall level of effect e.g. a high sensitivity combined with a medium magnitude could result in either a major or a moderate effect. In these finely balanced cases, magnitude tends to influence the overall level of effect slightly more than sensitivity.

A5.1.32 Levels of effect are identified as **negligible**, **minor**, **moderate** or **major** where effects of 'moderate' and above are considered significant in the context of the EIA Regulations.

Direction of Effects

A5.1.33 The direction of landscape effects (**beneficial**, **adverse** or **neutral**) is determined in relation to the degree to which the proposal fits with landscape character and the contribution to the landscape that the development makes, even if it is in contrast to existing character.

Assessing Significance of Visual Effects

A5.1.34 Visual effects are experienced by people at different locations around the study area. Visual receptors are the people who will be affected by changes in views of visual amenity at different places, and they are usually grouped by what they are doing at that place (residents, road users, recreational users etc.).

A5.1.35 Judging the significance of visual effects requires consideration of the nature of the visual receptors (sensitivity) and the nature of the effect on those receptors (magnitude).

Visual Sensitivity

A5.1.36 The sensitivity of a visual receptor to change is based on combining professional judgements on susceptibility and value as set out in **Table A5.1.8** below. Further information on each criterion is also provided below this table.

Table A5.1.8: Sensitivity of visual receptors

Sensitivity of visual receptors			
	Higher	⟷	**Lower**
Susceptibility	Viewers whose attention or interest is focused on their surroundings including communities/individual residential receptors/people engaged in outdoor recreation/visitors to heritage assets	⟷	People whose attention is not on their surroundings (and where setting is not important to the quality of working life) such as commuters/people engaged

Sensitivity of visual receptors			
	or other attractions where views of the surrounding area are an important contributor to experience.		in outdoor sports/people at their place of work.
Value	Views recorded in management plans or guide books. Views associated with nationally designated landscapes; notable views from a National Trail or promoted route; or designed views (vistas) recorded in citations for historic parks, gardens/scheduled monuments etc. Views of high scenic quality.	↔	Views which are not documented or protected. Views which are more incidental, and less likely to be associated with somewhere people travel to or stop. Views of low scenic quality.

Susceptibility of the Receptor

A5.1.37 The susceptibility of visual receptors to changes in views/visual amenity is a function of the occupation or activity of people experiencing the view and the extent to which their attention is focused on views (GLVIA3, paragraph 6.32).

Table A5.1.9: Susceptibility of visual receptors

Susceptibility	Receptor Group
High	Viewers whose attention or interest is focused on their surroundings, including: ■ Communities where views contribute to the landscape setting enjoyed by residents. ■ People engaged in outdoor recreation (for example users of rights of way including national trails and promoted routes, whose interest is

Susceptibility	Receptor Group
	likely to be focused on the landscape, or views from nationally designated landscapes). ■ Visitors to heritage assets or other attractions where views of surrounding are an important contributor to experience. ■ People travelling on scenic routes and tourist routes, where attention is focused on the surrounding landscape.
Medium	Viewers whose attention or interest is focused on their surroundings to some extent, including: ■ People travelling on local road routes, where attention may be focused on the surrounding landscape, but is transitory. ■ People at their place of work whose attention is focused on the surroundings and where setting is important to the quality of working life.
Low	Viewers whose attention or interest is less focused on their surroundings, including: ■ People travelling more rapidly on major road, rail or transport routes (not recognised as scenic routes). ■ People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape. ■ People at their place of work whose attention is not on their surroundings (and where setting is not important to the quality of working life).

Value of the Views Experienced from the Visual Receptor

A5.1.38 Recognition of the value of views experienced from the visual receptor is determined with reference to:

- Planning designations specific to views;

- Whether it is recorded as important in relation to designated landscapes (such as views specifically mentioned in the special qualities of a National Park or an AONB);
- Whether it is a notable view from a National Trail;
- Whether it is recorded as important in citations (such as designed views recorded for Registered Parks and Gardens, or views recorded as of importance in Conservation Area Appraisals);
- The value attached to views by visitors, for example a designated viewpoint advertised on OS maps and in tourist information, or which is a significant destination, such as a popular hill summit, or a viewpoint which has facilities for enjoyment of the view, or and a view familiar from photographs or paintings;
- The scenic quality of the view, in terms of its sense of rurality and the condition of the landscape elements in the view, as judged on site.

A5.1.39 The value of views experienced from the visual receptor is recorded as high, medium or low in accordance with **Table A5.1.10** below.

Table A5.1.10: Definitions of value attached to views

Value of the View	Description
High	This may include: ■ High quality views associated with nationally designated landscapes (perhaps identified in management plans), or high-quality views from National Trails. ■ Designed views recorded in citations for historic parks and gardens. ■ Valued views from conservation areas, as recorded in a Conservation Area Appraisal. ■ High quality views that are regularly used in guide books for that part of the country.

Value of the View	Description
	■ Views are of high scenic quality with strong sense of rurality and features landscape elements in good condition.
Medium	This may include: ■ Non-designated views, which may be noted in landscape character assessments. ■ Views are of moderate scenic quality with some sense of rurality and features landscape elements in moderate condition.
Low	This may include: ■ Other non-designated views (these may not be documented views but may nevertheless be valued by the local community who experience them). ■ Views are of low scenic quality, lacking sense of rurality and features landscape elements that are in less good condition.

Combining Visual Sensitivity Judgements

A5.1.40 An overall judgement of visual sensitivity is derived by combining the separate judgements on visual susceptibility and the value of views experienced from the visual receptor, as per the 'sequential combination' approach referred to in GLVIA3 (para 6.43). The process of combining the judgements of susceptibility and value is one of professional judgement. The starting point is an even weighting given to susceptibility and value, but each situation is different and there may be instances where susceptibility or value has more influence. If an even weighting is not applied, the reason for this is explained.

A5.1.41 Visual sensitivity of a visual receptor to change is expressed as **high**, **medium** or **low**.

Nature of Visual Effect (Magnitude of Visual Change)

A5.1.42 The magnitude of visual change is based on combining professional judgements on size and scale; geographical extent; duration and reversibility, the principle of which is set out in **Table A5.1.11** below. Further information on each criterion is also provided below this table.

Table A5.1.11: Nature of visual effects (visual magnitude)

Nature of Visual Effects (Visual Magnitude)			
	Higher	⟷	**Lower**
Size/scale	A large visual change resulting from the development is the most notable aspect of the view perhaps as a result of the development being in close proximity, or because a substantial part of the view is affected, or because the development introduces a new focal point and/or provides contrast with the existing view and/or changes the scenic qualities of the view.	⟷	A small or some visual change resulting from the development as a minor or generally unnoticed aspect of the view perhaps as a result of the development being in the distance, or because only a small part of the view is affected, and/or because the development does not introduce a new focal point or is in contrast with the existing view and/ does not change the scenic qualities of the view.
Geographical extent	The changes would be visible over a large area/affect a large part of the receptor/a large number of people	⟷	The changes would be visible over a small area/affect a small part of the receptor/affect a few people.
Duration	Visual change experienced over 10 years or more.	⟷	Visual change experienced over a short period of up to 2 years.

Nature of Visual Effects (Visual Magnitude)			
Reversibility	A permanent visual change which is not reversible or only partially reversible following decommissioning of the development.	↔	A temporary visual change which is reversible following the completion of construction or decommissioning of the development.

Size and Scale of Visual Effect

A5.1.43 The size/scale of visual effect depends on:

- The scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the development;
- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
- The nature of the view of the development, in terms of whether views will be fully open, partially open, glimpsed or oblique.

A5.1.44 The assessment of size/scale is described as being **large, medium, small** or **barely perceptible** according to **Table A5.1.12**.

Table A5.1.12: Size/scale of visual change

Size/scale	Description
Large	Large change in the available view, perhaps where the development is in relatively close proximity in a direct line of vision, or affecting a substantial part of the view, or providing contrast with the existing view.
Medium	Clearly perceptible change in the available view, perhaps where the development is relatively close but at an oblique angle or further away in the direct line of vision, creating a distinct new element in the view.

Size/scale	Description
Small	Small change in the available view, perhaps where the development is at a distance or oblique angle, or where the scale of the landscape absorbs the development well.
Barely perceptible	Change in the available view which is barely perceptible or the change may go unnoticed.

Geographical Extent of Effect

A5.1.45 This records the extent of the area over which the changes would be visible e.g. whether there is only one point from where the development can be glimpsed, or whether it represents a large area from which similar views are gained, i.e. the number of people who will see the change (in general rather than specific numbers).

A5.1.46 The geographical extent is described as being **small** (only small part of the receptor from where the development can be glimpsed / seen by few people), **medium** (part of the receptor has views/ a medium number of people are affected), or **large** (a large part of the receptor is affected by views / seen by many people).

Duration of Effect

A5.1.47 Duration is reported as **short term**, **medium term** or **long term**, as defined for landscape.

Reversibility of Effect

A5.1.48 Reversibility is reported as **reversible**, **partially reversible** or **not reversible** (i.e. permanent) and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e. at the end of the construction or at the end of the operational lifespan of the development).

Combining Magnitude of Visual Change Judgements

A5.1.49 An overall judgement for the magnitude of visual change is derived by combining the separate judgements on size/scale, geographical extent, duration and reversibility, as per the 'sequential combination' approach referred to in GLVIA3 (para 6.43).

A5.1.50 The magnitude of visual change is expressed as **high**, **medium**, **low** or **barely perceptible**.

Table A5.1.13: Definitions of magnitude of visual change

Magnitude of Change	Definition
High	This may include: ■ A large change in available views, perhaps where the development is in close proximity in a direct line of vision, or affecting a substantial part of the view, or providing contrast with the existing view. ■ Likely to affect a long length of a linear receptor or many people. ■ Likely to apply to large changes over the long or medium term.
Medium	This may include: ■ A clearly perceptible change in view, perhaps where the development is relatively close but at an oblique angle or further away in the direct line of vision, creating a distinct new element in the view. ■ Likely to affect a moderate number of people, or a large change affecting fewer people. ■ Likely to apply to clearly perceptible changes over a long or medium term, but could include large changes for a short term.
Low	This may include: ■ A small change in view, perhaps where the development is at a distance or oblique angle, or where the scale of the landscape absorbs the development well – affecting any number of people, or a medium change affecting few people. ■ Likely to apply to small changes over the long or medium term, but could apply to clearly perceptible changes over a short term.

Magnitude of Change	Definition
Barely perceptible	A change in view which is barely perceptible or may go unnoticed, affecting any number of people over any timescale.

Judging the Level of Visual Effect and Significance

A5.1.51 Judgements on visual sensitivity and magnitude of visual change are combined to assess the significance of each effect, guided by the same principles as set out in **Diagram 1**.

A5.1.52 Sensitivity and magnitude are typically weighted evenly so that a medium sensitivity and medium magnitude will result in a moderate overall effect, while a high sensitivity combined with a high magnitude will result in a major effect and a low sensitivity combined with a low magnitude will result in a minor effect. However, there are many possible combinations and in some cases a weighting to either sensitivity or magnitude may be required to come to an overall level of effect e.g. a high sensitivity combined with a medium magnitude could result in either a major or a moderate effect. In these finely balanced cases, magnitude tends to influence the overall level of effect slightly more than sensitivity.

A5.1.53 Levels of effect are identified as **negligible**, **minor**, **moderate** or **major** where effects of 'moderate' and above are considered significant in the context of the EIA Regulations.

Direction of Effects

A5.1.54 The direction of visual effects (**beneficial**, **adverse** or **neutral**) is determined in relation to the degree to which the development fits with the view and the contribution to the view that the development makes, even if it is in contrast to the existing character of the view.

Cumulative Landscape & Visual Impact Assessment

A5.1.55 GLVIA3 states "*The most significant cumulative landscape effects are likely to be those that would give rise to changes in the landscape character of the study area of such an extent as to have major effects on its key characteristics and even, in some cases, to transform it into a different landscape type. This may be the case where the project being considered itself tips the balance through its additional effects. The emphasis must always remain on the main project*

being assessed and how or whether it adds to or combines with the others being considered to create a significant cumulative effect" (para 7.28 GLVIA3).

A5.1.56 The CLVIA focuses on the assessment of additional cumulative effects, i.e. the effect of adding the proposed development to a baseline of other built or unbuilt developments. The CLVIA also considers the potential interactions between different types of development (e.g. other energy generation stations or other built development).

A5.1.57 As with a LVIA, a CLVIA deals with cumulative landscape and visual effects separately.

Types of Cumulative Visual Effects

A5.1.58 Three types of cumulative effects on visual amenity are referred to in the assessment:

- **Combined effects** occur where a static viewer is able to view two or more developments from a viewpoint within the viewers' same arc of vision (assumed to be about 90 degrees for the purpose of the assessment);
- **Successive effects** occur where a static viewer is able to view two or more developments from a viewpoint, but needs to turn to see them; and
- **Sequential effects** occur when a viewer is moving through the landscape from one area to another, for instance when a person is travelling along a road or footpath, and is able to see two or more developments at the same, or at different times as they pass along the route. Frequently sequential effects occur where developments appear regularly, with short time lapses between points of visibility. Occasionally sequential effects occur where long periods of time lapse between views of developments, depending on speed of travel and distance between viewpoints.

Approach to Assessment of Additional Cumulative Effects

A5.1.59 Although both LVIA and CLVIA look at the effects of a proposed development on the landscape and on views, there are differences in the baseline against which the assessments are carried out.

A5.1.60 For the LVIA, the baseline includes existing developments which are present in the landscape at the time of undertaking the assessment, which may be either operational or under construction, as they form a part of the baseline situation. Their presence has the potential to

influence the assessment of effects on landscape character and the assessment of effects on views. For the CLVIA the baseline is partially speculative and includes (in addition to existing schemes):

- Projects which have been granted planning consent but are not yet constructed (consented); and
- Submitted valid applications which are currently awaiting determination by the relevant consenting authority, including those at appeal (proposed).

A5.1.61 The susceptibility and value of the landscape and visual receptors remain the same as for the LVIA. The magnitude of change is judged using the same criteria as for the LVIA (taking into account the size/scale of additional effect, the geographical extent of the additional effect and the duration).

A5.1.62 The cumulative landscape assessment considers:

- The position of the projects within the landscape, e.g. in similar landscape or topographical context;
- The relationship between the scale and layout of the projects;
- The distances between the projects, and their distance and direction from the receptor; and
- The cumulative effect of ancillary development, e.g. access tracks.

A5.1.63 The cumulative visual assessment considers:

- The arrangement of projects in the landscape or view e.g. developments seen in one direction or part of the view (combined views), or seen in different directions (successive views in which the viewer must turn) or developments seen sequentially along a route;
- The relationship between the scale and layout of the projects;
- The position of the projects within the landscape, e.g. in similar landscape or topographical context; or within the view, e.g. on the skyline, against the backdrop of land;
- The distances between the projects, and their distance and direction from the viewer; and
- In the case of routes, the relative duration of views of the projects from routes.

A5.1.64 As for the LVIA, judging the significance of cumulative landscape and visual effects requires consideration of the sensitivity (nature of the receptor) and the magnitude of effect on those receptors (nature of the effect), guided by the same principles as set out in **Plate 1**.

A5.1.65 Cumulative landscape or visual effect are described as **negligible, minor, moderate** or **major** where cumulative landscape or visual effects of 'moderate' and above are considered **significant** in the context of the EIA Regulations.