Appendix LV2 – Viewpoint Analysis

Table LV2_1: Viewpoint Locations

Vp No	Location	Easting	Northing	Elevation (approx)	Distance to turbine (km)	Bearing (approx) to site	Landmap Character Area	Landscape Designations	Recreational and Transport Routes	Visual receptors
A	Footpath south of site near Pen Rhos substation	329115	353250	246m AOD	0.2	S	LCA7D – West Wrexham Ridges and Valleys	None	Public Right of Way	Walkers
B	Brymbo Road	328805	353150	259m AOD	0.4	SW	LCA7D – West Wrexham Ridges and Valleys	None	Local road	Motorists, A few residents
C	Near junction of Ffordd Owain and Argoed, Brymbo	329240	353725	241m AOD	0.3	NE	LCA7D – West Wrexham Ridges and Valleys	None	Local road	Nearby residents, Motorists
D	Long Lane near local footpath	330330	352955	190m AOD	1.3	SE	LCA7D – West Wrexham Ridges and Valleys	None	Local road	Nearby residents, Motorists, Walkers
E	Plas Pentwyn, Coedpoeth	328570	351250	227m AOD	2.2	S	LCA7D – West Wrexham Ridges and Valleys	None	Local road	Nearby residents, Motorists

Prediction Methodology

1. The following viewpoint analysis has identified the visual receptor sensitivity and landscape sensitivity at each viewpoint location and combined these with the predicted magnitude of change in the view in order to determine the overall impact for each visual receptor type and landscape character unit at each location.
2. In accordance with GLVIA3, the sensitivity of each visual receptor group at each location is a function of the susceptibility of visual receptors to change at that location and the value attached to these views.
3. All visual receptors are people and are 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.
4. Receptor susceptibility levels of very susceptible, susceptible, moderate susceptibility, slight susceptibility and negligible susceptibility are used taking into account the following factors:
    - Receptor location, occupation or activity,
    - Movement of receptor and duration and frequency of view experienced,
    - Focus of attention and interest.
5. The judgement of value is based on a five point scale – National value, County/Borough/District value, Community value, private value, unvalued. 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, such as the popularity of a location.
6. Accordingly, visual receptor sensitivity is determined in terms of the sensitivity of each location for each receptor type (rather than the sensitivity of the receptors *per se*), using a five point relative scale – high, high/medium, medium, medium/low and low.
7. In accordance with GLVIA3, the sensitivity of each landscape unit is judged on the basis of its value and its susceptibility to change arising from the specific type, scale and location of development proposed.
8. The susceptibility to change of a landscape unit is based on a five point scale (very susceptible, susceptible, moderate susceptibility, slight susceptibility and negligible susceptibility)and depends on:
    - The key characteristics of the landscape, 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 could be brought about by the type, scale and location of the proposed development and the compatibility of these with the above factors.
9. The same five point value scale is used for landscape units as for visual receptors. Judgements on landscape value are based on those given in published landscape character assessments (where given) and/or checked in the field from fieldwork observations.

10. Accordingly, the assessment of landscape sensitivity for each landscape unit is derived from the judgement of value and combined with the judgement of susceptibility to give a level of landscape sensitivity as part of a five point scale – high, high/medium, medium, medium/low or low sensitivity.

11. The magnitude of the change in the views and in landscape character from the viewpoints has been assessed using a four point scale – substantial, moderate, slight and negligible. This magnitude of change scale is a relative scale and is not an absolute scale. It is based on the assessor's interpretation of largely quantifiable parameters, including:

    - Distance and direction of the viewpoint from the development.
    - Extent of the development visible from the viewpoint.
    - Field of view occupied by the development (horizontal and vertical angles of view) and proportion of view (as a percentage of the panorama).
    - Context of the view and degree of contrast with the existing landscape and built elements (background, form, composition, pattern, 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 built form, this includes the relative scale of the development and whether the development would be overwhelming, overbearing, dominant, prominent, visible, noticeable, discernible or barely discernible.
    - Duration and nature of the effect, eg direct/ indirect, secondary, cumulative, temporary/ permanent, short term/ long term, intermittent/ continuous, reversible/ irreversible, etc (as related to the nature of the development).

12. The sensitivity and magnitude of change have then been combined as per the matrix in **Table LV2_2** below.

Table LV2_2 – Assessment of Overall Impact

Location sensitivity	Magnitude of change			
	Substantial	Moderate	Slight	Negligible
High	Major	Major/ moderate	Moderate	Moderate/ minor
High/ medium	Major/ moderate	Moderate	Moderate/ minor	Minor
Medium	Moderate	Moderate/ minor	Minor	Minor/ negligible
Medium/ low	Moderate/ minor	Minor	Minor/ negligible	Negligible
Low	Minor	Minor/ negligible	Negligible	Imperceptible

13. Effects on landscape character may be beneficial or adverse:

    - Beneficial effects on landscape character - are likely to occur where the proposed development would materially enhance the quality (condition) of the landscape, would complement the existing character and/or where particularly valued characteristics, previously lost or degraded, would be reinstated.
    - Adverse effects on landscape character - are likely to occur where the proposed development would become a key characteristics of the landscape, would contrast with the existing character,

and/or where existing key characteristics would be permanently (or long-term temporarily) lost or changed and cannot be adequately mitigated.

14. The polarisation of public opinion on renewable energy developments is such that effects on views can be considered beneficial by some observers and adverse by others. Accordingly, in order to consider a worst case scenario, it is recommended that the predicted effects on views are considered to be adverse.

Viewpoint Analysis

15. The findings of the viewpoint analysis are provided in **Table LV2_3** below. This analysis was undertaken in the field in October 2024 using computer-generated wireline views of the proposal. It is illustrated by the images in **Viewpoints A** to **E** which were photographed in October 2024, showing the existing and predicted views in the direction of the proposal. In these figures, photographs illustrate the existing views from each viewpoint (as at October 2024). Computer-generated wirelines illustrate the predicted views of the proposed solar array along with photomontages and photo-wireframe overlays to indicate where the proposal would be entirely screened from view. These viewpoint illustrations are printed at A3 and guidance is contained on each sheet as to the appropriate viewing distances or principal distance in order for the scale of the elements in the images to match those in the field when viewed from these viewpoint locations. However, as a rule of thumb, these images can be held at a comfortable arm's length to be viewed. These are Type 3 illustrations.

Table LV2_3: Viewpoint Analysis

Vp A: Footpath south of site near Pen Rhos substation					
Distance to Brymbo Solar Array	**NGR**	**Elevation (approx)**	**Landscape designation**	**Recreational area or route**	**Existing View**
0.2km	329115 353250	246mAOD	None	Public Right of Way	Located on Footpath BRY/0, looking north along the route of the footpath towards a bank of mature trees. The wider view from this location extends across a large pasture field with Pen Rhos substation nearby. This is a simple view with the footpath popular with local dog walkers.
Assessment of Effects on Landscape Character					
LCA	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
7D: West Wrexham Ridges and Valleys	Local Slight susceptibility	Medium/ low	None	No effect	An undesignated landscape of local value that could have slight susceptibility with a medium/ low sensitivity to the type, scale and location of development proposed. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on landscape character at this location.
Assessment of Effects on Views					
Receptor	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
Walkers	Community Susceptible	High/ medium	None	No effect	A public footpath with community value, along which receptors would be moving slowly, could use the route frequently, with predominantly open views and so would be susceptible and with a high/medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of walkers at this location.

Vp B: Brymbo Road					
Distance to Brymbo Solar Array	**NGR**	**Elevation (approx)**	**Landscape designation**	**Recreational area or route**	**Existing View**
0.4km	328805 353150	259mAOD	None	Local road	Located on Brymbo Road by a local road junction, looking northeast across neighbouring pasture fields towards a bank of mature trees. A pylon line is visible as part of the woodland forming the skyline of the view, with several electricity lines also crossing the foreground and middle distance of the view.
Assessment of Effects on Landscape Character					
LCA	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
7D: West Wrexham Ridges and Valleys	Local Slight susceptibility	Medium/ low	None	No effect	An undesignated landscape of local value that could have slight susceptibility with a medium/ low sensitivity to the type, scale and location of development proposed. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on landscape character at this location.
Assessment of Effects on Views					
Receptor	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
Motorists	Community Moderately susceptible	Medium	None	None	A local road with community value, along which receptors would be moving slowly to steadily, could use the route frequently, with views in several different directions and so would be moderately susceptible and with a medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of motorists or their passengers at this location.

A few nearby residents	Private view Very susceptible	High	None	None	A private residential view, which nearby receptors may gain from parts of their property, depending on orientation, including views from windows. Views in other directions would also be available. High sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of residents at this location.

Vp C: Near junction of Ffordd Owain and Argoed, Brymbo					
Distance to Brymbo Solar Array	**NGR**	**Elevation (approx)**	**Landscape designation**	**Recreational area or route**	**Existing View**
0.3km	329240 353725	241mAOD	None	Local road	Located on Fford Owain near its junction with Argoed, looking in a southwesterly direction across houses on Argoed. A bank of mature trees forms the skyline of the view behind these properties, with a pylon line crossing through the view.
Assessment of Effects on Landscape Character					
LCA	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
7D: West Wrexham Ridges and Valleys	Local Slight susceptibility	Medium/ low	None	No effect	An undesignated landscape of local value that could have slight susceptibility with a medium/ low sensitivity to the type, scale and location of development proposed. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on landscape character at this location.
Assessment of Effects on Views					
Receptor	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**

Nearby residents	Private view Very susceptible	High	None	None	A private residential view, which nearby receptors may gain from parts of their property, depending on orientation, including views from windows and garden areas. Views in other directions would also be available. High sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of residents at this location.
Motorists	Community Moderately susceptible	Medium	None	None	A local road with community value, along which receptors would be moving slowly to steadily, could use the route frequently, with views in several different directions and so would be moderately susceptible and with a medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of motorists or their passengers at this location.

Vp D: Long Lane near local footpath					
Distance to Brymbo Solar Array	**NGR**	**Elevation (approx)**	**Landscape designation**	**Recreational area or route**	**Existing View**
1.3km	330330 352955	190mAOD	None	Local road	Located on Long Lane near its junction with Footpath BRO/14, looking in a northwesterly direction across the valley. A pylon line can be seen across part of the middle distance landform forming the skyline of the view although foreground roadside vegetation partially interrupts this view.
Assessment of Effects on Landscape Character					
LCA	**Value** **Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
7D: West Wrexham Ridges and Valleys	Local Slight susceptibility	Medium/ low	None	No effect	An undesignated landscape of local value that could have slight susceptibility with a medium/ low sensitivity to the type, scale and location of development proposed. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on landscape character at this location.

Assessment of Effects on Views					
Receptor	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
Nearby residents	Private view Very susceptible	High	None	None	A private residential view, which nearby receptors may gain from parts of their property, depending on orientation, including views from windows and garden areas. Views in other directions would also be available. High sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of residents at this location.
Motorists	Community Moderately susceptible	Medium	None	None	A local road with community value, along which receptors would be moving slowly to steadily, could use the route frequently, with views in several different directions and so would be moderately susceptible and with a medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of motorists or their passengers at this location.
Walkers	Community Susceptible	High/ medium	None	No effect	A public footpath with community value, along which receptors would be moving slowly, could use the route frequently, with some open views and so would be susceptible and with a high/medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of walkers at this location.

Vp E: Plas Pentwyn, Coedpoeth					
Distance to Brymbo Solar Array	**NGR**	**Elevation (approx)**	**Landscape designation**	**Recreational area or route**	**Existing View**
2.2km	328570 351250	227mAOD	None	Local road	Located on Heol yr Efail near to its junction with Heol y Castell, looking north across parts of Coedpoeth to the surrounding countryside. A pylon line can be seen crossing the skyline of the view interspersed with woodland and agricultural fields.

Assessment of Effects on Landscape Character					
LCA	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
7D: West Wrexham Ridges and Valleys	Local Slight susceptibility	Medium/ low	None	No effect	An undesignated landscape of local value that could have slight susceptibility with a medium/ low sensitivity to the type, scale and location of development proposed. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on landscape character at this location.
Assessment of Effects on Views					
Receptor	**Value Susceptibility**	**Sensitivity**	**Magnitude**	**Predicted effects**	**Assessment**
Nearby residents	Private view Very susceptible	High	None	None	A private residential view, which nearby receptors may gain from parts of their property, depending on orientation, including views from windows and garden areas. Views in other directions would also be available. High sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of residents at this location.
Motorists	Community Moderately susceptible	Medium	None	None	A local road with community value, along which receptors would be moving slowly, could use the route frequently, with views in several different directions and so would be moderately susceptible and with a medium sensitivity to changes in the view. The proposed solar array would be entirely screened from view by intervening vegetation, even in winter months. Therefore, there would be no effect on the visual amenity of motorists or their passengers at this location.