

Appendix 16.1 Cumulative LVIA Methodology

APPENDIX 16.1: LVIA CUMULATIVE METHODOLOGY

Methods

16.1.1 The cumulative effects assessment follows the guidelines as set by the Institute of Environmental Management and Assessment (IEMA) and advice from the Planning Inspectorate (PINS). IEMA's guidelines recognise two major sources of cumulative effects:

- **Type 1 or Intra-project effects** – These effects occur where a single receptor is affected by more than one source of impact arising from different aspects of the proposed development. An example of an intra-project effect would be where a local resident is affected by dust, noise and traffic disruption during the construction of a scheme, with the result being a greater nuisance than each individual effect alone; and
- **Type 2 or Inter-project effects** – These effects occur as a result a number of developments, which individually might not be significant, but when considered together could create a significant cumulative effect on a shared receptor, and will include developments separate from and related to the proposed development.

16.1.2 In terms of the Cumulative Landscape and Visual Impact Assessment (CLVIA) the methodology used in this assessment draws on the following guidance in addition to those listed in Chapter 7:

- 'Guidance. Cumulative effect of wind farms', Version 2 Revised 13.04.05, Scottish Natural Heritage; and
- 'Guidance. Assessing the cumulative impact of onshore wind energy developments'. March 2012; Scottish Natural Heritage.

16.1.3 Cumulative Landscape and Visual Impact Assessment (CLVIA) guidance has largely evolved from the assessment of onshore wind farms, however, the principle of cumulative effects remains the same regardless of the type

of development. The guidance outlined in the EN-1 and EN-3 advocates a similar approach in terms of cumulative impacts upon the landscape and visual resource. The assessor is unaware of any site specific guidance published by the Council in relation to CLVIA that could be of relevance.

16.1.4 The CLVIA covers the potential cumulative effects on landscape receptors and views. Cumulative effects on landscape elements found within the application site are excluded from the cumulative assessment as these result from the proposed development in isolation and are covered in Chapter 7. Based on the detailed knowledge of the identified cumulative developments it is unlikely that there would be any cumulative effects upon landscape elements found within the application site or along the delivery route such as trees or hedgerows which would occur as a result of other cumulative sites.

16.1.5 As with the assessment of effects of the proposed development itself, the significance of cumulative effects is determined through a combination of the sensitivity of the landscape receptor or view and the magnitude of change upon it. The sensitivity of landscape receptors and views is the same in the cumulative assessment as for the proposed development in isolation. However, the cumulative magnitude of change is assessed differently.

Cumulative magnitude of change

16.1.6 The cumulative magnitude of change is an expression of the degree to which landscape receptors and views will be changed by the addition of the proposed development to other developments that are operational, consented or proposed within the study area. This is dependent on a number of variables as follows:

- The location of the proposed development in relation to other developments within the study area. If the proposed development is seen in a part of the view that is not affected by another development, this will generally increase the cumulative magnitude of change as it will extend its influence into an area that is currently unaffected. Conversely, if the proposed development is seen in the context of other

developments, the cumulative magnitude of change may be lower as it is not extending development to hitherto undeveloped parts of the outlook. This is particularly true where the scale and layout of the proposed development is similar to that of the other sites, as where there is a high level of integration and cohesion with an existing site, the various development may appear as a single co-ordinated site;

- The extent of the developed skyline. If the proposed development will add notably to the developed skyline in a view, the cumulative magnitude of change will tend to be higher, as the nature of the skyline has a particular influence on both views and landscape receptors;
- The number and scale of the developments seen simultaneously, successively, or sequentially. Generally, the greater the number of visible developments, the higher the cumulative magnitude of change will be. Furthermore, the addition of the proposed development to a view where a greater number of smaller developments are apparent will usually generate a higher cumulative magnitude of change than a view of one or two large developments as this can lead to the impression of a less co-ordinated or strategic approach;
- The size and scale comparison between all of the proposed development. If the proposed development is of a similar scale to other visible and relevant developments, particularly those seen in closest proximity to it, the cumulative magnitude of change will generally be lower as it will have more integration with the other sites and will be less apparent as an addition to the cumulative situation;
- The distance of the proposed development from the viewpoint or receptor. As in the assessment of the site itself, the greater the distance, the lower the cumulative magnitude of change will tend to be; and
- The magnitude of change of the proposed development in isolation as assessed in Chapter 7. The lower this is assessed to be, the lower the cumulative magnitude of change is likely to be. Where the proposed development itself is assessed to have a negligible magnitude of change on a landscape and visual receptor there will not be a cumulative effect

as the contribution of the proposed development will equate to the 'no change' situation.

16.1.7 Definitions of cumulative magnitude of change are provided within Table 16.1 to ensure that the assessment process is transparent.

Table 16.1 – Cumulative magnitude of change	
Cumulative magnitude	Definition
High	The addition of the proposed development will make an immediately apparent contribution to the cumulative situation in a landscape receptor or view.
Medium	The addition of the proposed development makes a notable contribution to the cumulative situation, and its cumulative addition is readily apparent.
Low	The addition of the proposed development will make a minor contribution to the overall cumulative situation, and its cumulative addition is only slightly apparent.
Negligible	The addition of the proposed development will make a negligible contribution to the cumulative situation and its addition equates to a 'no change' situation.

Significance of cumulative effects

- 16.1.8 The objective of the cumulative assessment is to determine whether any effects that the proposed development would have on views and landscape receptors when seen or perceived in conjunction with other existing and proposed sites will be significant or not significant.
- 16.1.9 A significant cumulative effect will occur where the addition of the proposed development to other existing and proposed relevant developments would result in a landscape or view that is defined by the presence of more than one major development and is characterised primarily by large scale development so that other patterns and components are no longer definitive.
- 16.1.10 If the proposed development itself is assessed to have a significant effect on a landscape or visual receptor, it does not necessarily follow that the cumulative effect will also be significant. If the joint effect of the two or more development does not result in the perception of a landscape defined by large scale development, the cumulative effect will be not significant, even if the effect of the proposed development itself in isolation is considered to be significant.