

Brechfa Forest Connection

Development Consent Order Application - Reference EN020016

DLV13 Appendix 1 ORGEOH

November 2015

Regulation 8(1)(b) of the Infrastructure Planning
(Examination Procedure) Rules 2010

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Modified from Table 9.1 of the ES [APP-064] following the Examiner's first written questions – The Holford Rules and how they apply to the assessment

Holford Rule	Reflection in the assessment criteria used to determine the landscape and visual effects of the Proposed Development with examples on the route of where the rules have been deployed
<p>1. Avoid altogether, if possible, the major areas of highest amenity value, by so planning the general route of the line in the first place, even if the total mileage is somewhat increased in consequence.</p>	<p><i>Reflection in the assessment criteria used to determine the landscape and visual effects:</i></p> <p>An evaluation of all landscape character areas and designations through which the Proposed Development would pass has been undertaken and alternative routes selected to avoid impacts on areas of highest amenity value (see Chapter 3, Alternatives, of the ES (Volume 6.2)).</p> <p><i>Examples on the route of where the rule has been deployed:</i></p> <ul style="list-style-type: none"> ▪ The entire route avoids National Parks and Areas of Outstanding Natural Beauty (the Brecon Beacons National Park fell within the overall routeing options study area).
<p>2. Avoid smaller areas of high amenity value or scientific interests by deviation, provided this can be done without using too many angle towers, i.e. the bigger structures which are used when lines change direction.</p>	<p><i>Reflection in the assessment criteria used to determine the landscape and visual effects:</i></p> <p>The identification and assessment of individual visual receptor locations including footpath and cycle routes has been undertaken.</p> <p><i>Examples on the route of where the rule has been deployed:</i></p> <ul style="list-style-type: none"> ▪ Poles 18 to 48 – alignment options further to the south east were dismissed due to the greater ecological and landscape value present in the valleys to the south of Bancycapel.

Holford Rule

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- Poles 50 to 70 deviate to the east to avoid landscape and ecological value at Beaulieu Plantation.
- Poles 137 to 153 deviate to east to avoid distinct and visually prominent hill at Nant-y-boncath.
- Small areas of Ancient Semi-natural Woodland (ASNW) and/or Plantations on Ancient Woodland Sites (PAWS) were avoided.
- Routes that passed through Sites of Special Scientific Interest (SSSI) were avoided.

3. Other things being equal, choose the most direct line, with no sharp changes of direction and thus with fewer angle towers.

Reflection in the assessment criteria used to determine the landscape and visual effects:

Degree of landscape and visual change criteria used in the assessment takes account of the frequency of angle pole structures in any given area which may result in a higher degree of landscape and visual change.

Examples on the route of where the rule has been deployed:

- Once major and smaller areas of high amenity value had been avoided, sections of the route follow as straight a path as was considered possible. The Proposed Development comprises the minimum number of changes in direction considered possible.
- Examples of straight sections include pole structures 9 to 18, 30 to 40, 40 to 48, 48 to 59, 62 to 79 (to cross the valley as simply and

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efficiently as possible), 99 to 110 and 156 to 169.

- The complex topography, complex landcover and dispersed settlement of this part of Carmarthenshire requires more changes in direction than might be possible within an open, flat arable landscape (for example: less direct route between poles 22 and 30 reflects presence of landcover; angle at pole 79 reflects transition between two valleys; and less direct route between poles 140 and 160 reflects distinct topographical forms and dispersed settlement).

4. Choose tree and hill backgrounds in preference to sky backgrounds wherever possible. When a line has to cross a ridge, secure this opaque background as long as possible, cross obliquely when a dip in the ridge provides an opportunity. Where it does not, cross directly, preferably between belts of trees.

Reflection in the assessment criteria used to determine the landscape and visual effects:

Landscapes with visually prominent steep slopes and skylines have been identified as more highly susceptible. Degree of landscape and visual change criteria used in the assessment take account of the likelihood that a backdrop of sky rather than land is likely to increase the level of landscape and visual change.

Examples on the route of where the rule has been deployed:

- Pole structures 2 to 16 are located in a valley and would generally be seen against tree and hill backgrounds (see viewpoint 3).
- Pole structures 62 to 79 would generally be seen against tree and hill backgrounds.
- Pole structures 77 to 80 cross a ridgeline as directly as possible

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(see viewpoint 9).

- Poles 79 to 84 would be seen against a backdrop of land (see viewpoint 9).
- Poles 130 to 140 would be seen against a backdrop of land (see viewpoints 24 and 26).

5. Prefer moderately open valleys with woods where the apparent height of towers will be reduced, and views of the line will be broken by trees.

Reflection in the assessment criteria used to determine the landscape and visual effects:

Landscapes comprising moderately open valleys have been identified as less susceptible. Degree of landscape and visual change criteria used in the assessment also take account of the likelihood that following the grain of a moderately open valley is likely to reduce the level of landscape and visual change.

Examples on the route of where the rule has been deployed:

- Moderately open valleys are followed at poles structures 1 to 16 (see viewpoint 3), 79 to 86 (see viewpoint 9), 130 to 140 (see viewpoint 24 and 26) and 153 to 159.
- Deployment of this design principle was constrained by the designation of some valleys in the study area as Special Landscape Areas and that many other valleys contained high levels of woodland cover including scheduled ancient and semi-natural

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woodland.

6. Where country is flat and sparsely planted, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration of lines or 'wirescape'.

Reflection in the assessment criteria used to determine the landscape and visual effects:

Landscapes with existing wirescape have generally been identified as more susceptible. Degree of landscape and visual change criteria used in the assessment also take account of the likelihood that avoiding wirescape conflicts is likely to reduce the level of landscape and visual change.

Examples on the route of where the rule has been deployed:

- The landscape in this part of Carmarthenshire is generally neither flat nor sparsely planted. It comprises a hilly landscape with predominantly high levels of woodland and dispersed tree cover.
- Where the Proposed Development needed to cross existing high voltage lines (pole structures 10 to 11 and 22 to 24) it has done so obliquely or directly in locations identified as being of relatively low sensitivity.
- The alignment of pole structures 1 to 16 was chosen over an alternative route to the north that crossed higher ground and would have resulted in increased combined visibility of different overhead lines.

7. Approach urban areas through

Reflection in the assessment criteria used to determine the landscape and

Holford Rule

Reflection in the assessment criteria used to determine the landscape and visual effects of the Proposed Development with examples on the route of where the rules have been deployed

industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach and the substation, carefully assess the comparative costs of undergrounding.

visual effects:

This rule has been of limited relevance to the assessment.

Examples on the route of where the rule has been deployed:

The Proposed Development does not need to enter into or connect an urban area. The presence of large numbers of residential properties precluded routeing a rural to rural connection through such areas.