Lewis Wind Power
Cumhachd Gaoithe

# Muaitheabhal Wind Farm Repower

Figure 1.3: Proposed Layout

Turbine

Site Boundary

Map Scale @A3: 1:40,000

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Figure 5.1: Comparative Blade Tip Height Zone of Theoretical Visibility (ZTV) for Consented Muaitheabhal Turbines and Proposed Muaitheabhal Wind Farm Repower Turbines

- Turbine

Consented

- Muaitheabhal
- Muaitheabhal East Extension
- Muaitheabhal South Extension
- Site Boundary
- 45km Study Area
- 5km Intervals from Outer Turbines

Comparative ZTV

- Muaitheabhal (and extensions) Only
- Muaitheabhal Wind Farm Repower Only
- Both Layouts visible

Notes:

Zones of Theoretical Visibility (ZTVs) are created using a computer generated model of the windfarm and underlying landform, using Ordnance Survey terrain data.

The ZTV illustrates the theoretical visibility of the proposed windfarm assuming 'bare ground' topography, and does not take account of the screening provided by features such as vegetation (woodland and trees) and buildings, which can significantly reduce the extent of actual visibility. The ZTV therefore provides an overestimation of the actual extent of visibility.

The Comparative ZTV illustrates the extent of additional visibility of the proposed 200m (shown in orange) beyond that of the original consented scheme (shown in green). Visibility is shown to a distance of 45km from the outermost turbines in all directions.

The ZTV is calculated to turbine tip height from a viewing height of 2m above ground level.

The terrain model assumes bare ground and is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2017).

Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.4.1.

Map Scale @A3: 1:355,000

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