

**Conjoined Public Inquiry into Wind Turbines Session 4 Cumulative**

**Statement of Case**

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**General**

The environmental information presented by the developers to support their case exaggerates the benefits from the turbines, and grossly understates the environmental costs and disbenefits of the schemes.

**Landscape and visual amenity**

The area around the Strategic Search Area designated in TAN8 as SSA C contains the P&L battery of turbines which were installed in 1992, comprising 102 turbines of 300kW rated capacity approximately 45m tall to blade tip. Hence the rated capacity of the battery is approximately 30MW. This installation has had manifest environmental disbenefits to landscape and visual amenity, disruption of access to the area via rights of way and open access land, and noise in the surrounding area. However, the installation has been moderately well contained on the site, with the exception of viewpoints from Llidiartywaun, Llaithddu and Dolfor.

All five turbine proposals before the inquiry seek to install turbines of height in excess of 100m and approximately 3MW in capacity. Hence the replacement turbines proposed amount to a threefold increase in height compared to those now present at Llandinam.

In assessing the visual impact of much larger turbines, there are 10 obvious factors to consider. Of these 10 factors, seven are adversely affected by increasing turbine size. Three might be regarded as beneficially affected: the number of turbines required to achieve a desired output capacity would be reduced; the rotational speed of the turbines would be reduced; and the propensity for visual overlap or "stacking" of turbines would be reduced. Landscape evidence presented by developers has concentrated on these three effects of increasing size, with little or no attempt to assess the other seven adverse effects. The indiscriminate pursuit of these three characteristics in isolation would justify an argument for ever larger and larger turbines.

The proposals to construct swathes of scores of these turbines in vast and open landscapes amounts to the creation of industrial landscapes more akin to 19<sup>th</sup> century Manchester. Because these proposed structures are so huge, and are located on high ground, they would dominate the landscape for miles around.

## **Rights of way**

The proximity of the proposed turbines to footpaths and rights of way will cause users to feel intimidated from going there. Apart from the human reaction, horses vary in their sensitivity to turbines, and many riders would find the proximity of turbines make the bridleways unsafe or unpleasant to use. Turbines of the size proposed are capable of projecting fragments well beyond the offset distances proposed. Turbines placed on open access land have effectively zero separation distance and are hence intrinsically unsafe when operating. Hence users are forced to incur risks, or else to refrain from exercising their right to access. There are instances of turbine operators attempting to exclude the public from open access land during operation and after mechanical and structural failures.

## **Output in relation to Capacity**

Emphasis is placed on the output capacity of the proposals. Targets are set in terms of capacity. But it is the particular nature of wind energy that it is both inefficient and sporadic. Average energy output will be approximately 20% of the rated capacity, and will be produced sporadically over time in a distribution totally unrelated to the fluctuating energy demand. The same applies to all infrastructure. To cope with the occasions (about 10% of the time on average) when the wind is optimal for generation, the capacity of the connecting network has to match the capacity of the proposed installations, and for the rest of the time be only partially used to a greater or lesser degree (about 70% of the time), or not used at all (about 20% of the time).

## **Cost benefit analysis**

The evidence presented by developers exaggerates the benefits of the proposed schemes, and dismisses or diminishes many of the costs. A true assessment of the costs, and a recognition of how meagre the real benefits will be, would make these proposed schemes appear as follies.

20<sup>th</sup> January 2014