

Wind energy 2006

A discussion document second edition

Given the following: That the Scottish Government has committed itself to 6000 wind turbines and we are aware that wind turbines with wings of about 45 metres have reached the limit of their development at 30% efficiency: that they are generally put on hill tops, take up a lot of room and are strongly opposed by the rural community.

That the wind inland is unreliable but coastal air is rarely still.

That some cruise liners carry seven or more very large fabric sails.

That metal aerofoil sails have been successfully employed to drive ships

That ship sails of both kinds are usually computer controlled.

That structures such as the Forth Railway Bridge, the various road traffic suspension bridges, the London Eye, the Wembley Stadium roof support arch and the Falkirk wheel are all working well as do all manner of rail trains.

Then:

I suggest that we have the know-how to build a new class of wind power generators based around a very large horizontal moving ring train. For example a machine with a diameter of about 600 metres and 100 masts 200 sails. The electricity generators are likely to move with the ring train but there are other solutions.

Such compact machines might be spread around windy sites in the UK so that the chances of a no wind condition will be greatly reduced. But the addition of a diametric pair of engines or more at the rim would enable the machines to function irrespective of the wind and therefore be independent of other traditional power stations.

As to how the machine is actually constructed or whether the sails are triangular or rectangular are not issues. What is important is to think of a much larger scale of wind energy capturing machine fitted into comparatively small space well away from hill tops, places of leisure and concentrations of people.

Alan Lovegreen,
Lochwinnoch 17th April 2006.

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