

The Rotating Ring Wind Energy Transfer Concept.

Brief description of the Project.

The fixed installation.

The rotating vehicle

The Wingsail deck

The Air intake

The Power generators

The Preferred Locations

Finance

History

Purpose

Future developments

The rotating ring wind energy transfer concept.

The concept arises from the need to have a method of wind energy transfer available because the present method of three blade wind turbines on towers is not efficient

The present methods are severely limited by the size of the machines and the fact that they need to be on tall towers.

The new thinking is to base all the heavy running machinery on the ground and bring the air to it.

Because central axles with power take off also restrict development the new thinking is to have the moving parts as a rail vehicle on one or more circular tracks which are in effect very large taper roller bearings and take the power at the rim.

The plan is collect the wind energy with aircraft style wings set between annular plates mounted on the rail undercarriage to transfer the wind energy into vehicular movement.

To collect the power there is choice of driving electricity generators by the rotation of the wheel axles, by attaching a gear ring to the vehicle and by that means drive other kinds of electricity generators or oil pumps which in turn drive static generators or by setting coils with iron cores between the rails then mounting magnets on the train undercarriage make electricity by the vehicle movement like a rotating generator laid out flat around the entire rail circle.

To bring the air to the wings there must be a very large but light weight controllable air intake a measure wider at its base than the overall width of the moving machinery and of such height that the area of the intake exceeds by a factor the area of the wings. There would be four airtakes to one machine with a rotatable valve to chose the windward opening.

The air intake though high relates very well to the height of the present wind turbines. These structures should be very good looking such that they attract attention for the sheer daring of their design and execution.

With present day boat sail knowledge and the ability of engineers to devise big roofs with opening and shutting systems like camera shutters a fixed structure that enables choice of which way to meet the wind are within reach.

The proposed locations for these machines are such places as disused coastal airfields and similar remote places where there is plenty of wind but certainly not in places of outstanding beauty or recreation.

On the subject of where will the money come from it is already well known that cash for windmills is readily available but in this instance the route maybe to offer venture capital shares through the Stock Exchange and aim to sell about One Billion one pound shares.

Not less than £100M should be set aside R&D

The history of this concept is already written as a series of papers that set out to generate an alternative to a proposed wind farm of 125 Vestas 90 turbines in the Clyde and Muirshiel Country Park west of Glasgow. These papers are available on application.

The purpose is to produce more electricity in about one tenth of the space of a present day wind power generation station. Currently Electricity is sold from wind power stations at about £70 a Megawatt. The present concept is to aim for more than the same income per wing in a machine with an indefinite life by way of good maintenance and less stress in the equipment all at less capital cost.

Future developments might well be along the lines making machines in a very wide range of sizes for example to suit a single homestead or a hotel or a hospital up to a small town and then onto a city such as Glasgow which is the present target.

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