Northern Ireland Assembly

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WIND TURBINES

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This Paper Gives Details of the 'Wind Energy for Rural Businesses' Programme. It Covers the Issues of Funding, Installation Guidance, Requirements for Inclusion, and Accountability for Ex Gratia Payments

Background Detail:

Under the EU's *Rural Development Programme*[1] *2001-2006,* the *Building Sustainable Prosperity*[2] (BSP) programme addresses development priorities, which are commonplace in less prosperous regions of the European Community.

The '*Wind Energy for Rural Businesses*[3]*'* is a sectoral project aimed at enhancing the viability of rural businesses while promoting a sustainable and renewable energy source. It demonstrates that locally produced renewable energy offers the potential to increase business competitiveness and stimulate diversification in rural communities.

Based in Enniskillen, WREAN[4] (The Western Regional Energy Agency & Network), received £450,000 funding from the BSP programme to deliver the project. Applications were received from a wide range of businesses including shops, factories, farms and offices.

The project provides for the installation of some 30 (20kW) wind turbines at rural businesses across Northern Ireland. The maximum funding is some £15,000 per turbine. The cost of the turbine is £45,000 approx. This varied slightly between different sites depending on where the site is located.

There were two main types of wind turbines installed under the programme:

- American-made turbines produced by *Jacobs* and installed by *J.A. Graham*[5]. Since installation these turbines have received routine testing and servicing. According to the *Department of Agriculture and Rural Development,* only minor faults have been recognised upon inspection.

- Chinese Turbines installed by UK Company *Adman*[6] have had a number of more serious faults and these turbines are currently not operating.

[1] http://www.dardni.gov.uk/index/rural-development/nirdp2001-2006.htm

[2] http://www.dfpni.gov.uk/index/finance/european-funding/eu-building-sustainable-prosperity.htm

[3] http://www.dardni.gov.uk/index/rural-development/nirdp2001-2006/building_sustainable_prosperity/sectoral_programmes_and_projects/wind-energy-for-rural-business.htm

[4] http://www.wrean.co.uk/

5http://www.windturbine.net/

[5] http://www.westwind.com.au/

[6] http://www.adman-ltd.com/page2.html

Requirements for Inclusion:

To qualify, each rural business must have an annual consumption of electricity greater than 30,000 kWh/Units per annum and the average wind speed identified be greater that 6 m/sec.

Of the 64 completed applications which were received, 50 projects passed the initial eligibility assessment stage and went forward to project evaluation stage, economic appraisal, site visits etc. The remaining 14 of those rejected were deemed ineligible to proceed due to the following reasons: insufficient electricity usage in respect of 10 applicants whose past year's quarterly electricity bills amounted to less than the minimum usage requirement of 30,000 kWh/Units; 3 applicants failed to provide evidence of their electricity usage at all; and 1 applicant had submitted two applications for the same premises so one was rejected.

The 50 successful applications from the initial sift were subsequently assessed by the WREAN Assessment and Technical panel against preset scoring criteria. 14 scored below the threshold for funding, and therefore were rejected, due to reasons such as: the need for the project not being identified; concerns over viability; concerns over economic sustainability and concerns over a project's ability to maximize usage of electricity generated from the Wind Turbine.

From the remaining 36 applications, 30 letters of Offer were issued by the *Department of Agriculture and Rural Development*[7], on WREAN's recommendation to the successful applicants in mid-2005, and 6 were held on a reserve list. 10 applicants withdrew and the 6 reserve applications then also received letters of offer. 26 applicants therefore proceeded with their projects. Reasons for the 10 withdrawals at this stage were: 2 due to planning refusal; 5 due to promoters deciding that they required a larger turbine; 2 due to the project being too costly and 1 due to investment in another business venture.

Sample Tender Package included in Annex 1:

Guidelines for Installers:

Action Renewables[8] have published guidance details for the installation and running of small wind-powered electricity generating systems. Based on their expertise in the area of renewable energy, they recommend the following:

- The wind turbine should ideally be placed well clear of any buildings, obstructions and places where the public may gather.

- Anchors and guy cables for towers should be well away from roads, tracks and footpaths etc. If there is livestock on the site, the guyed towers, their cables and anchors should be protected by fencing.

- The installer should provide training to the customer on the correct operation of the system to enable the customer to avoid the dangers presented by the

[7] http://www.dardni.gov.uk/

[8] http://www.actionrenewables.org/uploads_documents/SmallWindGenerators.PDF

installation of a generator. The customer should be taken through the system. The individual components such as the turbine blades, hub, tower, inverter and all connection points should be identified and their function explained.

- All components should be labeled if the customer so desires.

- The customer should be trained in, and understand all start-up and shut down procedures, and especially in how to disconnect a grid-connected wind turbine from the electricity system. All disconnect switches should be clearly identified to the customer and labeled.

Accountably:

Government Accounting rules in Northern Ireland do permit Departments to make what are termed “Special Payments” under certain circumstances.

These include *Ex-Gratia*[9] payments which go beyond administrative rules or for which there is no statutory cover or legal liability; and compensation payments which may be made for, among other things, damage to property.

[9] Ex Gratia is defined as a favour where no legal obligation exists.