PARTNERSHIPS FOR RENEWABLES
A CARBON TRUST ENTERPRISE

Stroud District Council
Ebley Mill
Westward Road
Stroud
Gloucestershire
GL5 4UB

DARRYL ROGERS,
PRINCIPAL PLANNING OFFICER

PfR (Sharpness Docks) Limited

16th December 2011

Dear Sir,

TOWN AND COUNTRY PLANNING ACT 1990

PLANNING APPLICATION FOR THE CONSTRUCTION AND OPERATION OF A WIND TURBINE AND ASSOCIATED INFRASTRUCTURE ON LAND NORTH OF SHARPNESS ESTATE (REF: S.11/2448/FUL)

Please find enclosed a planning application for the construction and operation of a wind turbine at Sharpness Docks on land owned by British Waterways. The project is being developed by Partnerships for Renewables (PfR), who are working with organisations such as British Waterways to deliver new renewable energy schemes. The proposal forms an integral but independent part of the aspirations of British Waterways for the comprehensive regeneration of the land to the north of Sharpness Docks.

The application PfR (Sharpness Docks) Limited specifically seeks approval for:

> *"The erection, 25 year operation and subsequent decommissioning of a wind energy development comprised of the following elements: one wind turbine with a maximum overall height (to vertical blade tip) of up to 122 metres, together with new access track, modification to existing track, temporary construction compound, hard standing area, control kiosk and cabling, and other works and development ancillary to the main development."*

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The proposed development presents an opportunity for Stroud District Council to enable the generation of between 3.28 to 5.47 GWh of renewable electricity per year, which is equivalent to the amount of electricity used annually by approximately 736 to 1226 average households. As a result, this development could displace approximately 1,412 – 2354 tonnes of carbon dioxide emissions per year*. By displacing electricity generated by fossil fuels, this brings environmental and security of supply benefits to the UK.

The proposed development represents a Schedule 2 development under the *Town and Country (Environmental Impact Assessment) Regulations 2011*. It has been agreed with the Council that the application for this development would be accompanied by an Environmental Statement. This has been prepared in accordance with the Scoping Opinion received from Stroud District Council in August 2011, and in ongoing consultation with the Council and relevant consultees. The planning application and supporting documentation is set out at the end of this letter.

The proposed development is considered to be compliant with the development plan for the site and is supported by national energy policy, which has an aspiration to generate 30% of the UK's electricity from renewable sources by 2020, in order to combat climate change and provide the UK with a more secure energy supply. An extensive EIA process has established that with the implementation of appropriate mitigation measures and an Environmental Management Plan (EMP) these benefits can be achieved with limited significant environmental effects. Specifically, within the scheme both ecological and ornithological mitigation and monitoring is proposed during construction and operation in order to minimise any potential effects on local wildlife.

There are also some off site highways works that would be needed in order for the abnormal loads to be delivered to the proposed site; however these are all within the highways boundary and it considered that the works could be incorporated by the use of a section 278 agreement.

As part of the proposal, a community benefit package is provided. This will consist of a community fund which will receive an annual payment at the rate of £5,000 per year (index linked) for the operational life of the wind turbine. The fund will be administered by representatives of the local community to be spent in any way that the community sees fit. A separate community benefit fund consultation will take place if the development gains consent. It will be conducted by an independent third-party.

The planning fee of £3,685 for the planning application has been sent by cheque to Stroud District Council (Ref: S.11/2448/ful) and therefore not enclosed.

This fee has been determined in accordance with Circular 04/08 *Planning Related Fees* which states that the planning application fee for wind farms should be calculated by adding *"all land over which the blades of each turbine can rotate to the area of the footprint of any ancillary structures and engineering works".* In this instance, this equates to 1.09ha, therefore the fee (under Category 5) equates to £3,685. This includes all elements of the scheme, both temporary and permanent, as shown on Drawing Number: PA003 Block Plan.

I trust the information provided is suitable, but should you require additional information or clarification please do not hesitate to contact me.

Yours sincerely,

p.p.

Jerry Sturman

Regional Manager
PfR (Sharpness Docks) Limited

*Note:

The Digest of UK Energy Statistics (November 2011) gives 2010 domestic electricity consumption as 118,681 gigawatt-hours (GWh) (Shown in table as 118.68TWh) (http://www.decc.gov.uk/assets/decc/statistics/source/electricity/dukes5_1_2.xls) which, when divided by the number of households in the UK – 26,591,600 *(http://www.decc.gov.uk/assets/decc/statistics/publications/ecuk/269-ecuk-domestic-2010.xls* (table 3.3) - gives an average electricity usage of 4,463 kWh per year per household in the UK (118,681,000 ÷ 26,591,600 = 4,463). Taking into account the candidate turbine for the site, it is expected that a single turbine with an installed capacity of 1.5–2.5 MW could generate between 3.285 and 5.475 GWh of renewable electricity per year (based on a capacity factor of 25% - for onshore wind the five year average capacity factor (2006 - 2010 is 26.16% (Table 7.4 - http://www.decc.gov.uk/assets/decc/11/stats/publications/dukes/2309-dukes-2011-chapter-7-renewable-sources.pdf). These figures are derived as follows in the following example (using a 25% capacity factor): 1,500 kW (1 × 1.5 MW turbine) × 8,760 hours/year × 0.25 (capacity factor) = 3,285,000 kWh. Based on the 4,463 kWh household figure, and the predicted electricity generation of between 3.285 and 5.475 GWh, it is estimated that the yearly output from the wind turbine will be equivalent to the approximate domestic electricity needs of between 736 and 1,226 average households in Britain (e.g. 3,285,000 ÷ 4463 = 736). In September 2008, the Advertising Standards Authority endorsed a figure of 430 gCO_2/kWh, based on the assumption that the energy generated by the wind turbines displaces Combined Cycle Gas Turbines and an average mix generation (430 gCO_2/kWh). On this basis, and on the assumption that the wind turbines annual output is between 3.285 and 5.475 GWh, a wind energy development of this scale is expected to displace between 1412 and 2354 tonnes of CO_2 equivalent emissions per year. These figures are derived as follows (using an output of 3.285 GWh as an example): 3,285,000 kW (output) × 430 gCO_2/kWh ÷ 1,000,000 = 1,412 tonnes CO_2.

The following suite of planning application documents is enclosed:

- Planning Application Fee of £3,685 (sent directly to Stroud District Council – ref: (Ref: S.11/2448/ful));
- 5 'Planning Documents' packs containing: the Planning Application Form including Certificate B and the following drawings:
    - PA 001 Layout Plan (1:2,500)
    - PA 002 Existing Site Plan (1:500)
    - PA 003 Block Plan (1:500)
    - PA 004 Indicative Turbine Elevations (1:250)
    - PA 005 Indicative Elevation and Layout of Kiosk (1:50)
    - PA 006 Typical Cable Trench Detail (1:10)
    - PA 007 Typical Turbine Foundation (1:100)
    - PA 008 Typical Crane Hard standing (1:200)
    - PA 009 Typical Access Track Cross Section (1:20)
    - PA 010 Indicative Extent of Works at Site Access (1:1,000)
- 5 hard copies of the Planning Statement;
- 5 hard copies of the Design and Access Statement
- 5 hard copies of Environmental Statement Volume 1 Main Text;
- 5 hard copies of Environmental Statement Volume 2 Figures;
- 5 hard copies of Environmental Statement Volume 3 Appendices;
- 5 hard copies of the Non-Technical Summary of the Environmental Statement;
- 5 hard copies of the Statement of Community Involvement.
- 10 x Electronic Copies (CDs) of all documentation.