IS/MT/105.06

22 November 2009

Planning Department
Barnsley MBC
Town Hall
Barnsley
South Yorkshire
S70 2TA

Dear Sirs

FULL PLANNING APPLICATION FOR NEW INDUSTRIAL UNIT TO HOUSE BIOMASS ELECTRICITY GENERATING EQUIPMENT, ON AN EXISTING SUB STATION SITE AT WHALEY ROAD, BARAUGH GREEN.

I enclose four copies of the following documentation, together with the appropriate planning application fee in the sum of £3,685.00 in order to lodge the above planning application.

- Completed Planning application form and certificates;
- 1:1250 OS Plan
- 1:200 SITE PLAN AS EXISTING
- 1:200 SITE PLAN AS PROPOSED
- 1:100 GENERAL ARRANGEMENT PLAN INC. SECTIONS
- 1:100 ELEVATIONS AS PROPOSED.
- Design and access statement;
- Existing noise survey;
- Environmental assessment.
- Covering Letter and Supporting Planning Statement.

I also enclose a validation check list to ensure that the relevant documents have been enclosed as per my initial planning discussions with Matthew Woodhead.

Background to Renewable Energy

Renewable Energy is seen by the UK Government as vital to helping cut harmful CO^2 emissions, as set out by the UK Government's climate change program and subsequent White Paper.

The Energy White Paper states that by 2010 renewable energy should be contributing to 10% of the UK's electricity supply, and the aim is to double this by 2020, thus helping the country to reach its ambitious target of UK carbon emission reduction.

In April 2002 the Government introduced the Renewables Obligation which calls on all licensed electricity suppliers in England and Wales to supply a specified and growing proportion of their electricity sales from a choice of eligible renewable sources and provides financial incentives for them to do so.

At the moment 5.86% of the total amount of electricity generated in the UK comes from renewable sources from the following sectors, Biomass, wind, solar, hydro electricity, wave and so on.

To meet the Government's 10% renewables target by 2010 approximately 10,000 megawatts of additional renewable generated electricity will be required.

This requirement stems from the Kyoto Agreement where the UK undertook to cut carbon emissions by 12.5% to the years 2008 to 2012.

In December 2007 the supplemental to PPS1 was published referring to Planning & Climate Change. The document refers to the Climate Change Bill, which puts into statute the UK's targets to reduce carbon dioxide emissions.

The key objective is to "*make full contribution to delivering the climate change program and energy policies and in doing so contribute to global sustainability*"

The supplement goes on to state " *an application for planning permission to develop a proposal that will contribute to the delivery of the key planning objectives set out, should receive expeditious and sympathetic handling of the planning application*" (para 40)

Central Government has trusted the Regional Development Agencies with powers to assist in meeting the carbon reduction targets with Yorkshire Forward working to create a lower carbon economy in Yorkshire and Humberside, with the region having agreed targets to reduce greenhouse emissions by 25% by 2016.

The region produces 13% of the UK's greenhouse gases pumping some 90M tonnes of CO^2 into the atmosphere every year. With an annual greenhouse emission currently costing the economy £22.5 billion per year.

Yorkshire Forward's main initiatives are the Regional Energy Infrastructure strategy and Future Energy Yorkshire; to assist businesses with the development of renewable energy and generation.

Renewables Obligation

The Renewables Obligation Order (ROO) is the Government's main mechanism supporting generation of renewable energy electricity. Since its introduction in 2002 the ROO has been successful in stimulating growth in renewable electricity generation, it has more than doubled since 2002 with a project pipeline of more than 11GW is in place across the UK.

However there are constraints on the availability and deployment of the cheaper forms. This means to move beyond 10% of electricity generated from renewable sources and towards the Government's aspirations of renewable energy other technologies such as offshore wind farms and biomass need to come forward.

The Yorkshire and Humberside plan also recognises the need for a reduction in greenhouse gas emissions by 20 to 25% in its Policy YH2 Climate Change and Resource use, and sets energy efficiency targets at Policy ENV5 Energy.

It also indicates the amount of renewable grid connected energy that should be targeted for in each of the regions under its jurisdiction including North Yorkshire 209 megawatts in 2010 and 428 megawatts by 2021. With the Wakefield area delivering some 11 megawatts in 2010 and 41 megawatts by 2021.

" the region will maximise improvements to energy efficiency and increase its renewable energy capacity"

(Yorkshire and Humberside Spatial Strategy Policy EN5; Energy)

Proposed Development

The proposed development is sited on an existing YEDL sub station site in place of generating equipment that has been removed in the past 2 years.

There will be a new building constructed of a steel portal frame covered with profile sheeting with a pitched roof to house 7 (5 running a back up and potential expansion) biomass generators and a bunded / covered fuel holding cell with a 15m chimney. It is envisaged that the generators will run in tandem creating approximately 7KVA of electricity which will be fed into the National Grid.

Due to the location alongside the existing YEDL sub network there is direct connection for the electricity into the National Grid Network, thus conforming to Government guidelines.

The sites are classed as Carbon Neutral, as defined by the UK Renewable Obligation scheme, because the plants used to produce the biofuels absorbed an equivalent level of CO2 to that which will be released from the sites during combustion. All the fuels to be used meet the UK government Sustainability criteria as laid out by OFGEM

The plant will only run on OFGEM accredited fuels and for the avoidance of doubt will **NOT BURN VIRGIN PALM OIL OR VIRGIN SOYA BEAN OIL**, in line with Rocpower's Sustainability policy

The sites are self sufficient in that the small power load required to operate the site, is generated by the site and is therefore renewable.
The waste heat generated from the engines is utilised to heat the fuel to the required temperature.

Fuel is delivered to site in bulk tankers and stored in storage tanks. The fuel is heated in these tanks to the required temperature by utilising the waste heat from the generators.

The fuel is then combusted in compression ignition engines which drive an alternator, generating electricity.

The electricity is then fed directly into the local distribution network for use in that area; therefore the amount of electricity lost in transmission is kept to a minimum. This will also assist in reducing the number of power lines required to bolster the network in future years.

Supporting information

The application is accompanied by plans and documents to meet the National Validation requirements, including a design and access statement, which sets out the broad principles which will guide the application for approval.

In relation to local requirements we have addressed the relevant issues in turn below as indicated on the validation checklist.

Economics Statement

The development of a biomass power generation site will provide improvements to the energy efficiency of the area and increase the renewable energy capacity of the region. It will reduce greenhouse gas emissions by using a CO^2 neutral fuel, provide new efficient energy generation for the transmission into the national grid and support local amenity and areas of demand. The proposal therefore, will help to reduce harmful emissions into the environment.

Environmental Statement

The purpose of this development is to reduce greenhouse gas emissions and approve energy efficiency. The use of bio fuels to run the proposed generators, will, in itself provide a large environmental benefit which will be ongoing in the reduction of fossil fuel electricity generation. This is inline with government policy and guidelines.

The proposed development does not require an EPR certificate as the thermal input required to generate power is less than 20MW (see attached report from ENVIRON).

A contamination survey of the site as existing has been carried out by YEDL which notes some localised diesel spillage which will be removed as part of the development.

Flood Risk Assessment for Environment Agency Flood Zone

The Environment Agency plans show the site is not at risk from flooding so no further risk assessment is necessary. With regard to the sitting of the building it is to be built on existing hard standing and the run off rain water will be taken directly to the existing soak away system.

Land Contamination Assessment

1. An Envirocheck Land Contamination Assessment Report has been attached to the application. This indicates that there are no contamination issues

2. Noise Impact Assessment –

   there will be no additional noise created due to the sound attenuation measures provided by the new structure which will include an acoustic lining to the building and an acoustic fence externally to shield the cooler units. Details of both measures can be seen at Appendix III of the Design & Access Statement.

   A noise survey showing the current ambient noise levels carried out by White Young Green is included in the application.

Transport Assessment

The site will be run by remote linkage so will be unmanned. There will be one delivery a day to site consisting of a tanker topping up the Bio fuel. There may be two tankers on a Friday to keep the plant running over the weekend. In addition there will be planned maintenance visits and a weekly site inspection.

Site Waste Management

The only waste that will be produced from the site will be used lubricants and items used to service the engines. These items will be removed from site by the service contractor and disposed of inline with their waste management policy.
As the site is unmanned it is unlikely that any other forms of waste will need to be collected.

Conclusion

The proposed development is in line with current Governmental guidance for the generation of renewable energy. It provides point of use generation and will reduce the amount of CO2 released into the atmosphere.

I trust the application is in order but if you require any further information please do not hesitate to contact me.

Yours faithfully

Iain Slater MRICS
Development Manager