

FAO Mr S. J. Ball
Head of Planning and Transportation
The Vale of Glamorgan Council
Dock Office
Barry Docks
Barry
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19 November 2008

Dear Sirs

ENERGY RECOVERY FACILITY, BARRY – DESIGN AND ACCESS STATEMENT

This letter represents the Design and Access Statement (the Statement) to support the Planning Application for developing a new Energy Recovery Facility in Barry, Vale of Glamorgan. This statement has been written in accordance with the guidelines on changes to the development control system, DCLG 2006 and guidelines from the Commission for Architecture and the Built Environment (CABE) documentation regarding the preparation of Design and Access Statements.

Extracts from the Environmental Statement, also prepared by Parsons Brinckerhoff, have been used throughout this letter.

1.0 The Proposal

Barry Energy Recovery Ltd (BERL), (part of the BioGen Power Ltd group of companies) propose to build and operate an Energy Recovery Facility in Barry Docks in the Vale of Glamorgan. The Facility will process approximately 80,000 tonnes of residual waste per annum and create 7.5 megawatt (MWe) of renewable electricity for export to the National Grid. This is enough renewable electricity to power approximately 11,000 homes.

The proposed Facility will process waste materials and generate electricity on a 24 hour basis. However, Waste will only be accepted during set operating hours. Operating Hours will be from 07:00 to 19:00 Monday to Friday and 07:00 to 17:00 on Saturdays.

Within the Facility waste is heated in a reduced oxygen environment converting the material into a synthetic gas fuel (i.e. gasification). The gas is then burned as an efficient fuel in an oxygen rich environment and the energy from the combustion is used to drive a turbine, generating renewable electricity.

2.0 The Existing Site

The site is situated on a level plot, approximately 1.6 ha in size, at National Grid Reference 312810, 167260 on Atlantic Way, within Barry Docks. The site is approximately 100m south east of eastern dock wharf, approximately 450m east of the main dock gates and approximately 370m to the north of the Severn Estuary.

The Site extends to approximately 1.6ha and is located in an existing industrial environment. Historic and existing land use in the vicinity of the Site includes waste management activities (scrap yards, waste segregation, and landfill) and bulk materials storage and handling (including stockpiles of sand and other aggregates) and other small industrial units. At present the Site is covered by scrub vegetation, all of which will be removed as a consequence of the proposed development.

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landfill. There are also opportunities for local property owners to benefit through the use of steam or heat in their buildings.

3.2 Amount

The proposed development will cover the majority of the 1.6Ha of the site and would be in keeping with its industrial surroundings

3.3 Layout

The main building will be located in the centre of the site and will house the majority of plant, which comprises the Waste Reception Hall (WRH), Waste/Fuel Silo, Energy Recovery Hall, Workshop, Control Room/Office, Auxiliary Buildings and Covered Ash bay. Please see Drawing No. 08-1353-P01 accompanying the Planning Application for further information.

The turbine and air condenser units will be located outside the main building adjacent to the south western boundary.

Dust filters and silos for dust from the filters and for lime and carbon storage are located to the south and south west of the main building. There is associated loading areas by each silo, 18 (2 disabled) car parking spaces and 5 bicycle parking spaces are to be provided for staff.

Means of egress in the event of a fire will be provided in accordance with building regulations. An assembly point will be determined during detailed design.

3.4 Scale

The energy recovery building will be 23.58m in height above ground level. The attached chimney stack is approximately 45 m in height above ground level. The main building is relatively rectangular in shape, approximately 75m by 45.5m. The plan area covers approximately 3312m² as shown on Plan No. 08-1353-P01.

3.5 Landscaping

Much of the site area as shown on drawing 08-1353-P01, will be covered in a concrete hardstanding to facilitate the safe operation of all vehicles. Landscaping as illustrated on Fig. 8.6 accompanying the planning application will be provided around the perimeter of the site. In addition, a wetland area will be created in the northern corner of the site, thus diversifying the habitats found within the site.

3.6 Architectural Design/Appearance.

The Barry Energy Recovery Plant has been designed to respond to the language of its industrial park setting. The mass of the building has been broken to achieve a "layering" effect to lighten its appearance. A materials palette of predominantly natural green rainscreen cladding with grey coloured accent framework seeks to blend the building with adjacent grassed and planted landscaped areas.

On site there will be a fully structured landscape planting scheme with feature trees and shrubs subject to L.A approvals. This planting will screen the services and circulation activities proposed on the site. The introduction of a pond at the Atlantic Way/ Atlantic Crescent corner of the site provides a reference point to the surrounding wetland, whilst giving a quality visual amenity focal point when viewed from both inside the site boundaries and the surrounding area.

4.0 Access

4.1 Vehicular and Transport Links

4.1.1 Background

Access to the site is via Fyordd y Mileniwm, Wimbourne Road and Atlantic Way. Wimbourne Road and Atlantic Way are in private ownership although limited public access is allowed to Wimbourne Road. A


demonstrates a proven environmental track record particularly its performance in relation to the Waste Incineration (England and Wales) Regulations 2002.

The proposal would reduce HGV movements on the road network by providing a Sub Regional disposal Facility and is therefore consistent with the driving principles of Wise about Waste; the Proximity Principle and Regional Self Sufficiency.

The project design has accounted for the results of the environmental baseline information obtained from specialist consultants on a range of topics including hydrology, ecology, traffic, air quality, noise and visual intrusion. This has allowed the design of the appropriate mitigation measures and the identification of environmental enhancement measures that include additional shrub/trees planting and the creation of a wetland habitat to enhance the biodiversity of the site over and above that which exists at present.

The Facility has been designed to be in keeping with its industrial setting whilst providing some betterment to the area in the form of a landscaping plan and visually attractive design. The Facility has been designed to minimise emissions to air, including odours.

Yours faithfully
Parsons Brinckerhoff



TIM HOWARD
Senior Engineer