



Local Authority Area – Slough BC

SLOUGH HEAT AND POWER



Background

Slough Heat and Power is a multi megawatt power station based on Slough Trading Estate that utilises biomass fuel in the form of woodchips to generate electricity which is distributed to the National Grid and heat which is utilised on the Trading Estate via a steam and hot water distribution network. The power station has been in existence since the 1920's and operated on coal until 2000.

The Technology / Scope of Project

The power station was using coal and gas as its main sources of fuel in the two fluidised bed boilers that form one part of the three generating stations on site until 2001/02 when the power station began experimenting with the use of biomass. When the Renewables Obligation Order came in to force in April 2002 the power station completed the conversion to biomass fuel.

The fluidised bed boilers enable the power station to burn any solid fuel and requires no further processing of wood except chipping.

Importance to the Thames Valley

TV Bioenergy is one of two aggregators of biomass fuel for Slough Heat and Power. The fuel is sourced from local tree surgeons, foresters, contractors, existing short rotation coppice growers and Local Authorities. The fuel must be supplied in the form of woodchips as space at the power station is not available for processing material and must conform to the power stations fuel specification. A copy of the specification is available at www.tvbioenergy.co.uk.

Key elements of the specification are the size of chip which must not exceed 50mm in any dimension and the moisture content which must not exceed 50% (wet basis). In addition the chip must be stored on concrete or tarmac hard standing and must be free from contamination.

The majority of tree surgery material will meet this specification however it is important to note that good maintenance of chipper blades to ensure long, stringy shards of woodchip are avoided is vital and that all sweepings generated from site work are collected and stored separately to the chip. This basic good housekeeping will ensure that the chip supplied is acceptable to the power station.

TV Bioenergy will purchase the woodchip either on a loaded or delivered rate depending on the producer's capabilities and preference. If necessary TV Bioenergy will arrange haulage at a date and time convenient to the producer and can arrange loading or other services if required. The wood chip is collected in either agricultural bulkers or walking floor lorries depending on loading capabilities and delivered direct to the power station.

If you are interested in supplying woodchip to Slough Heat and Power please contact us on 01635 817420 or email woodfuel@tvenergy.org.