

Portishead B Power Station

Oil Fuel Installation

Oil is delivered by sea to Portishead Dock in tankers which are equipped with off-loading pumps whose delivery is connected to the station permanent 16 inch. dia. off-loading pipeline through flexible hoses on the wharf. The plant is designed for an off-loading rate of 600 tons per hour of heavy fuel oil having a viscosity of 6,000 Redwood No. 1 seconds at 100 degrees Fahrenheit. This off-loading pipeline delivers to either of two welded steel storage tanks located on the A station site, and erected within concrete bunds.

Oil is drawn from the tanks by means of transfer pumps which deliver to an oil supply ring-main in the boiler house at a controlled pressure. The whole of the oil pipework system and storage tanks, pumps, etc., are steam trace heated and lagged to maintain this oil at a pumpable viscosity (at a temperature of 140 degrees Fahrenheit approx.). The steam for oil heating is generated by three auxiliary oil-fired boilers. From the boiler house ring-main, oil passes through pumping and heating units which raise the oil temperature and pressure to the conditions necessary for efficient atomisation at the main oil burners.

Extracted from CEGB booklet published 1960.