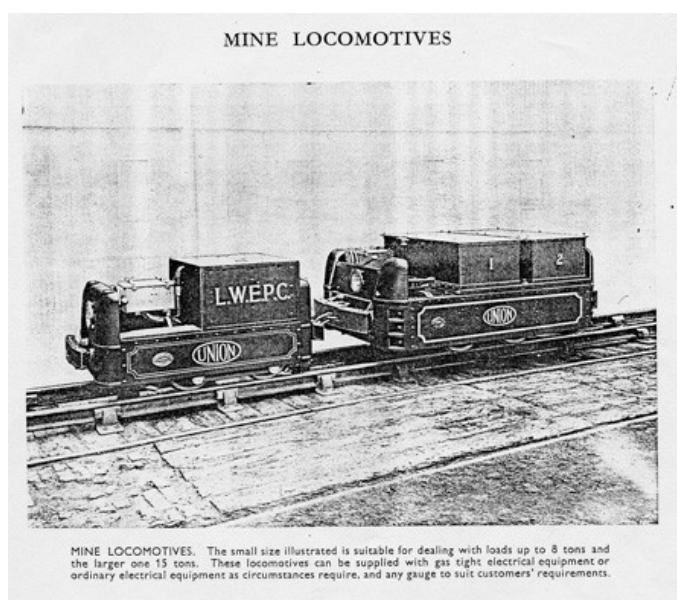
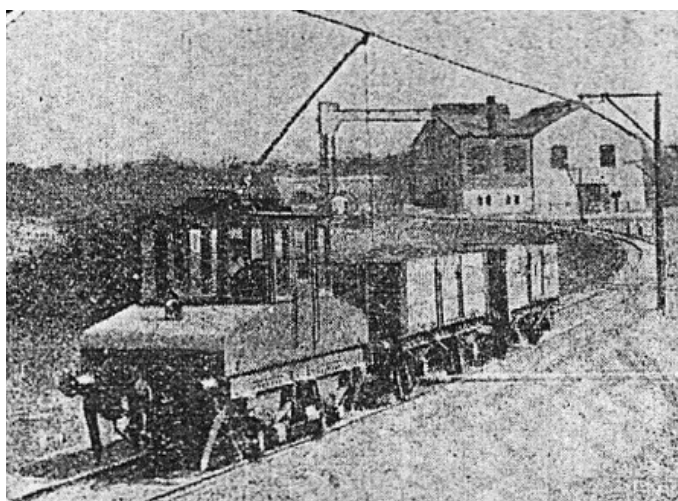


The following article on the long since demolished Avon Power Station has been received from Chris Capewell, Queens Park, London; with particular thanks, for information and photographs, to Gordon Capewell, North Berwick.

The power plant promoters and owners were the Leicestershire & Warwickshire Electric Power Co, later headquartered at Hinckley. The owners of this undertaking was Balfour Beatty, through the Tramways Light and Power Co., later the Midland Counties Electrical Supply Co. Ownership passed to the British Electricity Authority at nationalisation in April 1948 and eventually to the Central Electricity Generating Board. Closure was in 1973.

The original construction in the ca. 1920-1 was two 2.5 MW BTH Turbine-Alternators (T/As) and associated two no. Babcock & Wilcox boilers. Steam pressure is thought to have been at 300psi. The BTH machines were built at Rugby; the B&W boilers at Glasgow.

The station in this early form is seen in the background of the photograph of the first overhead electric locomotive taken from an advertisement for the electrical contractor which supplied the overhead wire equipment, Brecknell, Munro and Rogers, (from the collection of Chris West). The first coal hoist can be seen in this photograph.



Joseph Booth battery loco supplied to Avon Power Station
 (Photo & information supplied by the M. Swift Collection)
 Leicester & Warwickshire Electric Power Co. (per Balfour Beatty)
 Motor 2728 tested – no date 4 hp, 100 amp @ 750 rpm, 40 volt
 [Illustrated on p 83 of 1932 handbook, 0-4-0BE lettered L.W.E.P.C.]
 Date not known - but 1926-28
 Serial Number LD 171

The station was supplied with coal via the Avon Bridge exchange sidings connected to the Great Western Railway, latterly British Railways, Western Region. This supply ceased in the mid 1960s, after which the modest supply needed for the station in its latterly

reserve capacity was supplied by road lorries. Two additional BTH 6.5 MW T/As with associated four no. B&W boilers were installed in the mid 1920's. The original coal hoist for the boilers was incorporated in the extended boiler house. The 1970's photograph taken from under the canal bridge over the River Avon, (c.Hugh Jones), shows six chimney flues from these six boilers.



Two BTH15 MW T/A.s with associated two no. higher pressure B&W boilers of 400 psi 600F were installed during 1942. A pressure reducing valve was also installed to provide in addition steam to the existing low pressure plant. The 1947 view noted below shows the station in its final form. The maximum output of the station was 51 MWs. Just two years before closure its appearance was modified by the erection of a single flue. A photograph of these 1971 works was published by 'The Courier' in its 170th anniversary edition in 1998.

The station has also been referred to as Warwick Power Station, and Avon Generating Station, (see OS map in WIAS Retort no. 8). The sub station at Emscote (on the site of the original ca.1904 tramway power plant and adjacent the tram depot) which operated in the 20s and 30's comprised AC/DC converters for supplying the tramways and local DC requirements. Similar converter plants were at Tavistock St. and Clements St. in Leamington serving a similar purpose. 'The Leamington and Warwick Tramways' (Swingle and Turner, Oakwood Press 112) notes details of the original plant and Tramway Museum, Crich photographic archive have photographs showing the machine room, boiler room and chimney adjacent and to the north of the tram shed.

Photographs taken by Gordon R. Capewell, Engineer at Avon Power Station 1945 – 1952.

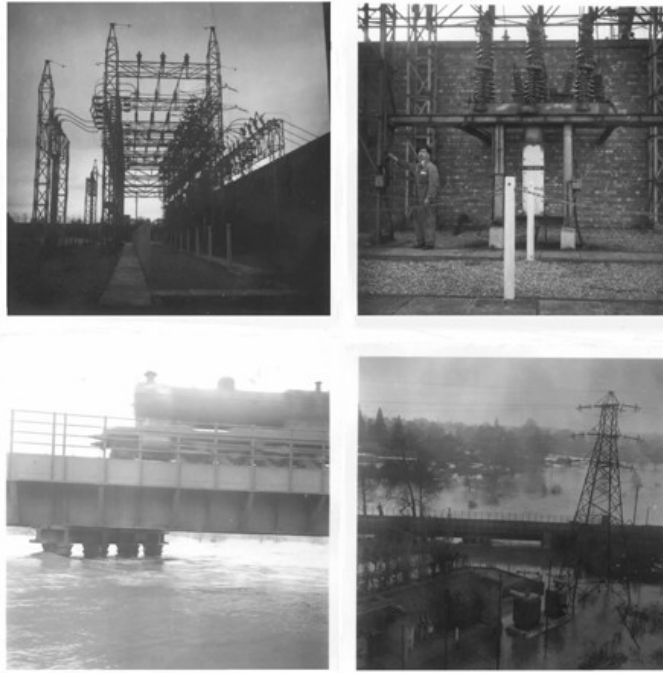


Avon Power Station external photographs:-

Top left – outdoor 33KV substation, isolator switches.
 Top right – outdoor 33KV substation, isolator switches.

Bottom left - view of GWR railway bridge over the River Avon during the 1947 floods with a GWR ex ROD 30xx 2-8-0 running up road. (Incidentally this photograph is quite curious – either the locomotive is running without buffer heads, or the speed of the train has foxed the emulsion into losing them!).

Bottom right – view south over the GWR railway bridge across the River Avon, during the 1947 floods. The grid pylon connects to the 33KV outdoor sub station, to the two 15MW T/As and to the power station local area power supply and was installed during the war.



Avon Power Station internal photographs taken 1946:-

Left –Engine room view – foreground Nos 3 and 4 BTH 6.5MW Turbine/Alternator sets.

Background - Nos 5 and 6 BTH 15MW T/A sets.

Centre - Nos 5 and 6 BTH 15MW Turbine/Alternator sets.

Right – Control gallery. Grid import/export metering on the right; grid 33KV switchgear control panels on the left.



Avon Power Station internal detail photographs:-

Left - Turbine/Alternator no.5: Alternator; showing copper shortening fault in rotor.

Centre - Turbine/Alternator no.5: High pressure cylinder.

Right - Turbine/Alternator no.5: High pressure cylinder and rotor.



Avon Power Station accident photographs:-

Wreckage at the rotary coal tippler due to faulty shunting with locomotive no. 2 in the late 1940s.

Note the narrow gauge track for the ash removal skips.



Update 12th October 2009 from Alain Foote

Further to the mention of the BTH turbines for Avon Power Station, I have looked up the turbines in the list of steam turbines built by BTH and can add the following additional info.

According to the list, turbine numbers R1012 and R1013 were 3000kW 3000rpm type H5C.57 ordered by Balfour Beatty/Leicestershire & Warwickshire Electric Supply on the 15th April 1919 and dispatched in January 1920. I believe that the subsequent units were:-

Turbine no. R1187 a 6000 kW 3000rpm type H10C ordered by Leicester & Warwick Electric on 9th August 1923 - delivery date unknown.

Turbine no. R1259 a 6000 kW 3000rpm type H10C.V. ordered by Balfour Beatty on 19th January 1925 and delivered on 15th October 1925.

Turbine nos. R2246 and R2247 15000kW type H.23.C size S-"H" 3000rpm turbines ordered Leicester and Warwick Avon Power on 7th September 1939 and dispatched on 11th December 1941.