

## = Lemington Power Station =

Lemington Power Station is a small , now defunct coal @-@ fired power station , located in North East England . It is situated on the Lemington Gut , a backwater of the River Tyne , at Lemington , 3 @.@ 5 mi ( 5 @.@ 6 km ) west of Newcastle upon Tyne . The station 's main building still stands today and is a rare example of an early power station , dating from before the nationalisation of the United Kingdom 's electrical supply industry .

The station was opened in 1903 with a total generating capacity of 970 kilowatts , the electricity generated being used to power a tram system , and provide local households and streets with electric lighting . The station ceased generating electricity in 1919 , however the structure was retained for use as a sub @-@ station until 1946 when the tram line closed . The station was partially demolished in 1949 , but has since been made a locally listed building and is now owned by construction company Nortland Construction . In March 2012 Norland applied to Newcastle City Council for permission to demolish the building on the grounds of it being at risk of collapse .

## = = Background = =

In the early 1900s , an increasing number of areas were being provided with electricity , and train and tram lines were being electrified . In the area around Newcastle upon Tyne , this required the opening of power stations at Wallsend , Forth Banks and The Close . Two supply companies built the stations , the Newcastle @-@ upon @-@ Tyne Electric Supply Company ( NESCo ) to the east of Newcastle , and the Newcastle and District Electric Lighting Company ( DisCo ) to the west .

DisCo built a station at Lemington , in the western outskirts of the city , to provide electricity for a tram line which ran through their supply area , from the City Centre to Throckley . The station was sited amid the derelict buildings of the Tyne Iron Company 's ironworks . They had opened in 1797 and closed in 1886 . The works were largely demolished , but some of the ironworks ' buildings and chimneys still stood unused , and the power station was built amongst them . DisCo opened Lemington Power Station in 1903 .

## = = Design and specification = =

The station consists of a parallel boiler house and turbine hall , which creates a large double @-@ gabled building . It is of steel frame construction with brick cladding . Other features include round @-@ headed openings and ridge ventilators . This building originally housed the station 's boilers and turbo generators . Constructed alongside the station was a brick built chimney , to remove gasses from the boilers . The station was first brick built power station in North East England , with corrugated iron being the usual material used prior to this .

The station 's boiler house housed three coal @-@ fired Lancashire boilers , each of 200 HP capacity and each with individual economisers . These boilers provided steam for two 410 kilowatt ( kW ) and one 150 kW direct current Parsons turbo generators . This gave the station a total generating capacity of 970 kW . Before being used in the Lemington power station , these generators had been used in Forth Banks Power Station and in Newburn Steelworks . One of the steam turbines from these sets is now on display at the Electric Power and Historical Museum in Yokohama , Japan , after sitting on display in the entrance to Blyth Power Station for many years .

## = = Operations = =

The power station was well situated for coal deliveries as it was only 200 yd ( 180 m ) from Lemington Staithes . The staithes marked the end of the Wylam Waggonway , which brought coal from a number of nearby collieries to the staithes for export . Coal was hauled from the staithes to the power station , before being dumped directly into overhead hoppers in the boiler house . From there it was burned in the boilers to provide steam for the turbo generators . This steam was then cooled after use , using condensers , the water for which was taken from the Lemington Gut . This

was a backwater of the River Tyne , created when a new channel was cut in 1876 .

As well as providing power for the tram system , the station was a source of electricity for local homes . The building of a power station brought major environmental improvements to what was a highly polluted area , because electricity represented a much cleaner source of household energy than coal , which was used at the time . Local households gradually switched to the new power source . A partner in the enterprise of the Lemington power station was Sir Matthew White Ridley , who had considerable interests in coal and banking .

= = Closure and present = =

Production of electricity in the station ceased in 1919 , ushered in by the completion of an extension to generating equipment at Newburn Steelworks . The building was retained and continued to be used to supply power to the tram route by housing a sub @-@ station , which used rotary converters . The station also provided a service for local residents who wanted their wireless accumulators recharged . The station continued to operate in this way until 1946 , when the tram route was closed . The station 's chimney was demolished in 1949 , along with remaining structures of the Tyne Iron Works , which had stood next to the power station throughout its operation .

The main turbine and boiler building is now a locally listed building , standing today as a monument to the important role that Tyne and Wear played in the development of electrical supply . The building had been considered for the more protected Listed Building status , but the decision was taken in May 2004 not to promote it . Other early power stations in the area ( such as those at Dunston and Wallsend ) have all been entirely demolished . The Lemington station is partly still standing due to riverside sites becoming less important to industrial development , leading to the site never being redeveloped .

The large remaining building currently stands in amongst a small industrial estate at the foot of the nearby Lemington Glass Cone . Along with the neighbouring Ironworks site , it is owned by Norland Construction , a crane and plant company formerly known as Reeds Cranes and Plant , the building used as storage for their machinery . The site is thought to be contaminated with coal products , fuels and oils such as PCBs , as well as dioxins and furans . In 2003 , Newcastle City Council released plans that they hoped to redevelop the site for heritage tourism in the future .