

SUPPLEMENT TO THE HISTELEC NEWS

AUGUST 2003

ELECTRIC LYME

by Martin Roundell Greene

A new exhibition about the story of electricity in Lyme Regis is due to open in its historic Town Mill this summer. "Electric Lyme" will trace the history from when, in June 1909, the Mayor turned a golden switch to light up the streets for the first time to when the Council gave a dinner for the department staff in March 1948 on the eve of nationalisation.

The research for the exhibition has taken writer Martin Roundell Greene and designer Ian Dicks as far afield as the electricity museums at Amberley and Christchurch, the Public Records Office in Kew and the SWEHS archives in Bristol. Their problem has been that many of the local electricity records were burned.

Dick Hitchcock, who started as a boy apprentice in 1939 at the council's generating station in Mill Lane, remembers, 'We had a new manager after the war and he told me to take all the old records outside and burn them. A few of them, like the deeds to the old Malthouse, looked important so I put them out of sight on a shelf behind the switchboard. But a few months later, in October 1947, there was a big fire. The whole of the Malthouse roof went up so they got burned anyway.'

The idea for the new exhibition came to Martin when he and Ian were preparing the Town Mill's main exhibition at the end of its £800,000 restoration to working order in 2001. 'We had the history of Town Mill right back to 1340, but in the 1920s it suddenly stopped. All we knew was that the council, who in those days ran their own electricity company, had bought the mill. In the 1930s they replaced the waterwheel with a turbine to supplement the generators in the Malthouse next door.'



Fig.1 Dick Hitchcock (left) with Martin and Ian outside the former generating station at the Malthouse in Mill Lane

‘Then someone suggested, “You ought to talk to Dick Hitchcock. He worked in the Malthouse from before the war.” So we went to see him. He’s got an amazingly clear memory, and opened up a completely new world.

‘I hadn’t realized that in the 1930s there were hundreds of electricity companies all over the country, with their own prices and voltages. Today we take electricity for granted but in those days they used to work hard to sell the idea. In Lyme Regis there was an Assisted Wiring Scheme. For five shillings, Dick told us, you could get your house connected and you got four lights. His mother paid seven and sixpence and got an extra light on the stairs with a two-way switch.’

The other problem for Martin was that his knowledge of electricity was minimal. ‘Some hazy memories lingered from O-level physics but my most up-to-date knowledge had come from the other contractors working on the Town Mill restoration project. I noticed they all treated the electricians with quiet respect. When I asked them why they said, “There are only two things you need to know about electricity, mate: you can’t see it and it can kill you”.’

Western Power Distribution, who agreed to sponsor the design of the *Electric Lyme* exhibition, put Martin in touch with Peter Lamb, the Secretary of SWEHS. ‘Peter was my central contact’, says Martin. ‘He realized that I did not know anything about the subject and patiently guided me to relevant sources of information and answered some stunningly basic questions. What are volts? What is the difference between AC and DC?’

He also put me in touch with another SWEHS member, David Hood from Exeter, and David accompanied me on a return visit to Dick Hitchcock where he acted as a sort of technical translator. When Dick spoke of a mercury arc rectifier, at least there was someone else in the room who knew what on earth he was talking about.

Martin’s other sources of research were newspaper archives in Taunton and Yeovil and the old Borough records stored in Dorchester. ‘The records are not always where you expect to find them. There was a missing bundle of documents dealing with the council’s purchase of the original Electric Light & Power Co back in 1923. The papers eventually turned up in a box marked Water.’

Newspaper records and a firm in Cumbria answered a question that had baffled local experts. It was known that waterpower had played an important part in the original plant in 1909, but where had the turbine been sited? There was mention of a mill, but surely at that time the Town Mill was still using its waterpower to grind corn. Then the original manufacturers, Gilkes Ltd of Kendal, discovered in their archives that the turbine had been ordered for a 5.79 metre head of water: far too high for the Town Mill where the head is nearly two metres less. Finally an old newspaper report revealed the answer: the company had leased the water rights and sited the turbine at another watermill, Higher Mill, nearly a mile upstream.

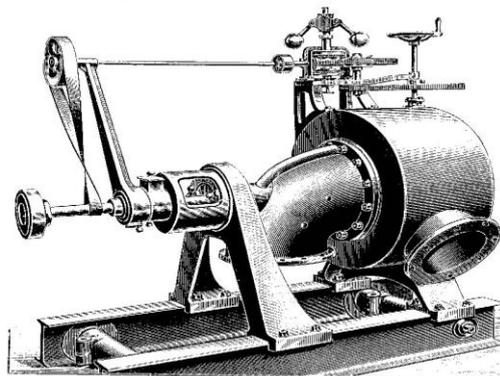


Fig.2 A Gilkes ‘Trent’-type water turbine similar to the one installed in Higher Mill in 1909

Wartime censors, however, stopped one dramatic story ever reaching the papers. In February 1942 one of the great diesel engines in the Malthouse blew up, launching a massive piece of the machinery into two of the other generators. Dick Hitchcock was in the cinema when the lights went out. "When I got to the Malthouse the engine hadn't stopped. The crank shaft was still going round with a six foot connecting rod smashing everything to hell. There were flames coming out where the exhaust pipes had broken off and the water pipe had broken too so there was a hundred gallons of water a minute going up in the air from the cooling system."

The explosion had knocked out three of the power station's four generators, leaving only the smallest 50kW equipment to supply the entire town. Next day Dick and his colleagues went round every house in Lyme removing the power fuses so that consumers were only able to use the remaining current for lighting. It was more than a year before a supply was brought along the coast from Bridport, which was on the national grid.



Fig. 3 Dick Hitchcock (right) and shift engineer Rolf Hawker on Marine Parade, Lyme Regis in summer 1940

The technical details of Lyme Regis electricity are briefly as follows. The supply began on 1st June 1909 using a 110 volt DC system supplied by 20 Kw dynamo driven by a 35HP Gardner horizontal paraffin engine and a 5 kW dynamo driven at Higher Mill by a Gilkes 7½ HP turbine. There were 90 public street lamps, 16 of 75 candle-power and 74 of 23 candle-power. They were to be lit from half an hour after local sunset to 11.30pm except on Sundays when they would be switched off at 10.30pm. The contract allowed the Lyme Regis Electric Light & Power Company not to light the streets on nights when the moon was bright. The entire capital cost including equipment and premises was about £3,000. Lyme was only the third town in Dorset, after Bournemouth and Christchurch, with a public electricity supply. Sherborne followed in 1912 and Dorchester in 1913.

By 1923 there were 97 street lamps and 144 consumers in a town of 2,300 people. A further Gardner engine had increased output by 18 kW. But the business was struggling and the borough council bought it from the Dorset Electric Supply Co for £3,400. In 1924 it re-equipped the power station and changes the town over to a 440 volt three-wire DC system. One of the Gardner sets was

converted and a new 50kW Marshall set installed. A year later two more 75kW Marshalls were bought. Back-up for the DC system was in the form of a 264-cell battery.

In the early 1930s an assisted wiring scheme was introduced and by 1936 more power was needed. A 15kW Gilkes water turbine was installed in the Town Mill next door to the power station and, in 1937, a second-hand 100 kW Petters' set from Totnes.

By 1939 there was talk in the council of moving over to the national grid but nothing happened until February 1942 when the explosion occurred.

In November 1947, when two thirds of the town had been converted to grid AC, a fire destroyed the power-station. However, through temporary measures the council's electricity department managed to restore power to the town during the following afternoon.

By the early 1940s the council's electricity department was headed by the Borough Electrical Engineer, Arthur Brown who had been in post since he left the Navy at the end of the First World War. There were three shift engineers: Charlie Camplin, Les Sharley and Stan Stocker manning the power-station 24 hours a day. When Charlie and Stan went off to the war they were replaced by Rolf Hawker and George Rice. Then there were three labourers headed by Tom Tabberer, and two apprentices: Edgar 'Eggy' Loosemore and Dick Hitchcock.

Fig.4 The Town Mill

If any readers have any more information, photographs or artefacts about electricity in Lyme Regis before nationalisation, Martin Roundell Greene would be very grateful to hear from them. Contact him on 01460 77434 or mrg@clarityenglish.co.uk He has begun writing a little book about "*Electric Lyme*".

Electric Lyme will be a semi-permanent exhibition sponsored by Western Power Distribution, and is due to open this summer at the Town Mill, Lyme Regis. 01297 443579. www.townmill.org.uk