

SUPPLEMENT TO THE HISTELEC NEWS

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"ELECTRICITY IN BATH 1890 – 1974" (Part IIb)

by the late William E. Eyles

Continuing the story from the last two issues of our newsletter of the Bath Undertaking with the second section of part II from William Eyles booklet, published in 1974 (This is therefore the third installment).

PART II b - PUBLIC OWNERSHIP - BATH CORPORATION

Further Extension of Works

With all the additional equipment acquired and still more to come - Turbo generators, boilers, mechanical stokers, etc. - the Works must have been bursting at the seams and it became an absolute necessity to provide for further extensions. Fortunately for the Committee the Corporation were the owners of the adjoining properties, which embraced the Full Moon Hotel, etc., and arrangements were therefore made in 1924 for the Electric Lighting Committee to take over and develop a portion of the stables and yard of the Hotel as well as a portion of the Monumental Masons' yard at the rear abutting on to the river.

The old buildings on the site were demolished and the site cleared at a cost of nearly £800 and the new extension to the Works provided, costing £34,270. The remainder of the Hotel yard (not taken over for the above mentioned extensions) was added in the early 1930's. The Works originally accommodated in a building towards the eastern end of Dorchester Street had now spread two-thirds of the way along the street towards the Old Bridge.

Bulk Supply - West Wilts

When the Corporation were considering the question of the provision of additional generating plant in 1923 they had in mind the possibility of a bulk supply being required from Bath to West Wilts and in 1924 this possibility became a reality. An Agreement (14th March 1924) was made with the Western Electric Distributing Corporation Ltd. to give such a supply at a point near Conkwell Wood, where the Company's overhead line commenced. In 1925 the Company transferred their powers to supply electricity in the West Wilts area to the West Wilts Electric Lighting and Power Co. Ltd., the latter Company being purchased by the Wessex Electricity Company on 30th November 1937. Following the provision of the line to Conkwell, it became necessary in 1926, on account of the development of the power load, to duplicate the single line and a Supplemental Agreement (10th July 1926) was made whereby the Corporation provided an additional line between their Works and a point between Bathford and Kingsdown.

By 1930, however, because of the further additional load, which it was anticipated would be required, negotiations again took place between the Corporation and the Company. At that time the Central Electricity Board had published their Scheme for South West England and South Wales and with a view to avoiding overlapping of works and capital expenditure the whole matter was referred to the Board. The outcome was that the Board arranged, amongst other things, for an overhead transmission line from Bath to a site near Melksham in return for an annual payment, which was shared between the Corporation and the Company. The Company paid, of course, agreed charges for the actual bulk supply of electricity.

Mr. Francis Teague

Mr. Teague, who was appointed City Electrical Engineer in 1901, resigned from the position in 1925. He had certainly seen the Department through some extremely difficult times, but now under his supervision it had grown into a prosperous undertaking. There were 121 applications for the post, the successful applicant being Mr. J.W. Spark M.I.E.E., then Borough Electrical Engineer at West Hartlepool. His commencing salary was £820 per annum. Mr. Teague was retained as Consulting Electrical Engineer at a salary of £425 per annum.

Bath Corporation Act, 1925

This was an Act of Parliament obtained by the Corporation for a multiplicity of purposes including such matters as street works, purchase of the toll bridges in the City, etc. Opportunity was taken to obtain powers not previously available to the Corporation under General and Private Acts and Orders relating to various matters including electricity. As to electricity, authority was given to the Corporation to provide showrooms and exhibit specimen installations and give demonstrations as to the uses of electricity; to lay electric cables in private streets; to let out on hire or effect, repairs to electric fittings or apparatus and to make Byelaws etc. The letting out on hire of electric apparatus to consumers, e.g. water heaters etc. soon became very popular with consumers.

Hire Purchase

The system of letting electrical apparatus out on hire was adopted in the first place to a limited extent, limited as to districts because of the necessity of raising the voltage to consumers' premises from 110 to 220 and to the insufficiency of copper section in the mains. When these limitations (in 1928) were nearly met, the City Electrical Engineer considered there was considerable scope for developing a hiring scheme, particularly for domestic appliances, and the Council agreed that the then existing hiring rate of approximately 15% per annum of the cost (10% depreciation and 5% maintenance) should be continued. However popular this scheme may have been it had in 1939 to be suspended because of the War.

It was reintroduced in 1947 and provided that the hire purchase price should be ascertained by increasing the retail price by 10% to be repayable within 10 years for cookers, 7 years for water heaters, 5 years for refrigerators, 3 years for wash boilers and 3 years for cleaners. In the case of cookers and water heaters prospective hire purchasers could have the option of having the equipment maintained by the Corporation if they exercised the option at the time of purchase. An incentive to the scheme was the giving of a commission on the retail price to bona fide electrical contractors, who introduced customers to the scheme.

Assisted Wiring Scheme

In 1928 enquiries were being received by the Electricity Department from the occupiers of the smaller classes of residential property for the installation of electricity by means of hire purchase. Their wishes were met by the adoption of a scheme applicable to all private residences (not new properties) rated up to £22 per annum. It provided that the installation should be for not less than six and not more than twelve lighting points. The consumer paid for the net cost of the installation, plus 10%, the repayments being spread over a period of three years. Ten per cent of the cost had to be paid before the work was put in hand and the balance by eleven quarterly payments. A consumer could, at his option and at extra cost, have a plug in the kitchen or living room and a two-way switch for landing or bedroom lights.

A scale of charges, based on the number of lighting points installed, was agreed with electrical contractors in the City; for example they were paid for the installation of 6 lights £6 10s or for 12 lights £11 17s. The hire purchase customer paid a total of £7 3s for 6 lights or £13 0s 8d for 12 lights. Over the succeeding years the scales were slightly revised.

South-West England and South Wales - Electricity Scheme 1929

The Electricity (Supply) Act 1926 was a landmark in the history of electricity supply and certainly altered the pattern of events in the industry. Under the Act the Central Electricity Board was constituted and the Board was charged with many powers and duties

including the adoption, with or without modifications, of Schemes prepared by the Electricity Commissioners for specific areas. Such schemes were to make provision (1) for determining what generating stations (either existing or new) should be "selected stations at which electricity should be generated for the Board; (2) for interconnection by means of main transmission lines of the "selected" stations one with another as well as interconnection with other areas; and (3) for the standardisation of frequency etc. Such a Scheme was made in 1929, which affected Bath. By name it was the South-West England and South Wales Electricity Scheme 1929 and it comprised the whole of South Wales, the Counties of Hereford, Monmouth, Somerset, Devon, Cornwall, Dorset, Wiltshire, Southampton, parts of the counties of Berks, Gloucester, Oxford and West Sussex and the Isle of Wight. The Scheme at first provided for six "selected" stations with eleven other generating stations working under temporary arrangements and Bath was one of the eleven. However, in 1934 seven generating stations of which the Bath Corporation station was one were included as additional "selected stations."

The link-up of Bath with this system of supply had been foreshadowed because a transmission line to a site near Melksham had already (in 1930) been sanctioned in anticipation of the Board's Scheme. The Board fixed 1st January 1935 as the date from which "selected" stations in the area of the Scheme would operate to the Board's directions and Bath quickly found itself an active participant in the Scheme. In fact, during the first three months of the Scheme coming into force, i.e. January, February and March 1935, the number of units sold by the Corporation to the Board was over six million and the number purchased from the Board over eleven million. The method of calculation for payment for the supplies was prescribed.

Showrooms and Offices

The need to "dress the shop window" was recognised as far back as 1913 when alterations were made to one of the rooms in the old premises for adaptation as a showroom and a supply of radiators and other appliances obtained for exhibition. The showroom was opened in the early part of 1914. However, a first class showroom with facilities for demonstrations etc. such as is known and expected today was first envisaged in 1931 when arrangements were made for the *Electricity Committee to take possession of the site of the Full Moon Hotel and adjacent premises (see Lot 1 on the plan on page 16) at a cost of £5,500. This figure represented the capital value of the rents at that time received by the Corporation for the premises of which they were then the owners.

By early 1932 a tender in the sum of £27,765 was accepted for the construction of new showrooms and offices on the site, which were officially opened on Thursday, 26th October 1933. The Architect for the building was Mr. W.A. Williams of 25, Queen Square, Bath. The premises joined the extensions provided in

1924 and the Electricity Works and offices now occupied practically the whole of the south side of Dorchester Street up to the Old Bridge. The new showrooms and offices were provided some few years in advance of anticipated requirements as a measure to help relieve unemployment. For the purpose of a Coronation display, the Department in 1937 took over the use of the ground floors of Nos.1, 2,3 and 4 New Bond Street and No.2 Northgate Street (Ealand's corner) and then continued to utilise the premises as additional showrooms until October 1939 when, owing to the war, such use was discontinued.



Fig.5 The Full Moon Hotel – site of the new Showrooms and Offices
(Courtesy Bath Reference Library)

*The name of the Committee was changed from Electric Lighting Committee to Electricity Committee in 1926 obviously because the Committee dealt with other matters concerning electricity as well as lighting.

Alderman Sir Harry Hatt

In 1934 the Committee suffered the loss of their Chairman, Alderman Sir Harry Hatt, J.P., who died on 19th March. He had been Chairman of the Committee since 1902 and held the position of Mayor during the year 1915-1916. A portrait of the late Sir Harry Hatt was presented to the Committee and placed in the corridor adjoining the Committee Room at the Dorchester Street offices.

Suggested Link with New Refuse Destructor

In 1934 the Council were contemplating the provision of a new refuse destructor and had in mind a destructor at which the steam produced could be used to generate electricity. Not that this was an entirely new idea because back in 1895 it was thought that the destructor on the Upper Bristol Road might be thus used as a centre of electricity supply, but nothing came of the idea.

On this occasion the idea was pursued with a certain amount of enthusiasm Representatives of both the Electricity and Surveying Committees made a trip to Gjentofte (one of the districts of Copenhagen) where a fairly new destructor had been provided and the steam raised used to generate electricity. Following this visit it was decided that a similar scheme be prepared for a

new destructor, either on part of the Electricity Works in Dorchester Street or on a site in the Upper Bristol Road. Whether it would have been a success is not known because due to the intervention of the war in 1939 the scheme was abandoned.



Fig.6 New Showrooms and Offices
(Courtesy J. Roberts)

The War

The Second World War naturally severely restricted the activities of the Department and the adoption of any new ideas for progress. It had more than a full time job to maintain under difficult conditions a continuity of supply. During that time, on account of the air raids on Bath, damage was suffered to the mains and apparatus of the undertaking in various parts of the City. In fact the cost of making it good amounted to £13,994.

Street Lighting

When the Council (who are the responsible authority for street lighting) became the owners of the Electricity Undertaking in 1897 the lighting of the streets by means of gas lamps was gradually superseded by electric lamps. In 1897 the number of public lamps lit by electricity was only 88, but by 1939 (when on account of the war street lighting was suspended) the number had risen to no less than 2,975.

In 1936 an experiment in street lighting was made, the road chosen for the experiment being the London Road between Cleveland Bridge and the then City boundary at Lambridge. As a result sodium discharge lamps were then brought into use for lighting the classified roads in the City. In addition to the supply of energy for lighting the streets of the City energy was also supplied to the following lighting authorities: Monkton Combe Parish Council, Batheaston Parish Council and Bathford Parish Council.

The Electricity Department on the Council's behalf had always cared for the direct maintenance and inspection of all street lighting. Following nationalisation of the industry this work was for a time carried out by the South Western Electricity Board for and at the expense of the Corporation. As from 1st October 1951, however, the work was taken over by the Council when a separate street lighting section under the supervision of the City Engineer was set up and is still maintained for the purpose.

Resignation of Mr. J.W. Spark

In 1945 Mr. J.W. Spark who had served the office of City Electrical Engineer in Bath since 1925 retired from the service of the Corporation. He must, on retirement, have been proud of the fact that with only two exceptions the Department had under his care shown a handsome surplus on each year's working. Mr. Edgar Allan Newburn from Walsall was appointed as the new City Electrical Engineer from among 58 applicants for the post.

Surplus Energy from Private Firms

A few of the large firms in the City generated energy themselves for their own use and two of those firms W. and R. Cook Ltd., wholesale clothiers of Twerton and Isaac Carr and Co. Ltd., woollen manufacturers of Twerton Mills, had agreements with the Corporation whereby they not only took energy as required from the Corporation but when they had surplus energy which they had generated themselves supplied it to the Corporation.

Charges

When the Corporation took over the Electricity Undertaking in 1897 the general rate for the privilege of having a supply of electricity was 6d. a unit with a transformer rent in addition. Sixpence was then an appreciable sum of money. With weekly wages as low as they were (see page 12 for examples) wages were required for more important things in life than lighting the home with electricity. Oil lamps, in many cases, or perhaps even candles, was all that the poorer folk could afford. Alderman Sir Barry Hatt in his remarks at the opening of the new Showrooms in 1933, and reported in the Bath and Wilts Chronicle and Herald at the time, said that electric lighting in the early days was a luxury and his ambition was that it should be within the means of the poorest - and so it came to be.

Soon after the Corporation acquired the Undertaking efforts were made to reduce the charge and by 1902 the cost per unit was 4d 4½d or 5d according to the number of units used. For heating and power the cost was then 2½d a unit which in 1904 was reduced to 1¾d a unit with a reduction in the charge for lighting "during the hours of daylight" to 2½d a unit, special two rate meters being provided for the purpose. However by 1915, due to increases in the cost of coal and the cost of production generally, charges began to rise so much so that by 1921 the lighting charge had reached 9d a unit.

It was following this period that the Undertaking began to show signs of prosperity and the Council were gradually able not only to reduce charges but also able to introduce several new methods of alternative rates of charges. More particularly perhaps, so far as concerned the small householder, was the introduction in 1922 of a "domestic rate for private residences. The adoption of this Scale was to meet a demand for a system of charging which would avoid the necessity of separate wiring and meters for (1) light, (2) power and (3) heat.

The system applied in the first place only to private houses with a rateable value of £50 per annum and under. In the case of houses rated up to £25 there was a fixed annual charge of 20% of the rateable value plus 2½d per unit for current consumed for any purpose and for premises rated over £25 and up to £50 a fixed annual charge of 15% of the rateable value plus 2½d a unit. The "Domestic Standing Charge" system was continued in force and, with subsequent reduction in charges, by 1936 a consumer on the Rateable Value scale paid as low as ½d a unit (or at the rate of 3 units for a penny if a cooker or water heater was installed) with an annual Standing Charge of £1 7s in respect of a house with a rateable value up to £12 rising in steps to £4 5s for a house with a rateable value up to £40, plus 1/- for every £1 of rateable value over £40. At this period the "Power" rate was approximately 1d a unit. Over the years there were many other alternative tariffs available to consumers such as Industrial Two Part rate for power consumers, shop window lighting, etc. but in too much detail to be dealt with here, except perhaps to refer to pre-payment meters. For example when the Kingsmead flats were nearing completion in 1932 "penny in the slot" meters were fixed throughout the flats or, again, in 1934 when prepayment meters were fixed in Council houses. Following the war the economic position made it necessary to increase charges, but comparatively speaking not substantially.

Transfer to State Ownership

Since 1897 the Corporation had on more than one occasion come very near to losing possession of their electricity undertaking either because of public opinion, offers to buy or because of threatened private Acts of Parliament. The time, however, had now arrived when they had no choice in the matter - a time when public opinion had no influence and when argument in the Council Chamber would have been of no avail - because Parliament had, by passing the Electricity Act 1947, decided that the electricity industry should be nationalised.

The Act provided that the Council's Undertaking should, in common with others, be transferred to the British Electricity Authority and the Area Board at a date not earlier than 1st April 1948, which was the date ultimately decided upon as the Vesting Date. The Act also provided for the payment to local authorities of £5,000,000 as compensation for the loss of their Undertakings and for certain other financial arrangements as would be necessary for the redemption of loans etc. Although electricity may be turned on or off at the flick of a switch, the transfer of the Corporation's undertaking on 1st April 1948 could not be accomplished so easily. Obviously many transitional problems presented themselves.

Whilst the vesting of the generating station in Dorchester Street was a comparatively simple matter (the Vesting Agreement was completed on 20th September 1949) the vesting of the other assets of the Undertaking proved to be difficult to say the least.

Over the years 1897 till 1948 numerous arrangements had been made for the acquisition of land for Sub-Stations etc. by way of Conveyances, Leases or Licences with owners of private properties as well as arrangements with other Committees of the Council in respect of land under their control. With the post war development of housing estates the position was accentuated by the provision of Sub-Stations on the various estates, which in the majority of cases were provided without any arrangement between the Committees, the Sub-Stations having been built as a matter of course as part of the development.

To ascertain precisely all the land and properties used for electricity purposes including easements and other rights obtained since 1897 (in some cases no documentary title could be found) entailed a considerable amount of research. In fact it was ten years, hence before all the information was collated, terms negotiated and agreed with the Board as to which properties should vest and those, which should not vest. In those cases where property did not vest arrangements were made for leases to be granted to the Board. The Vesting Agreement with the Board was eventually executed on 9th June 1958.

In addition to property as such, the British Electricity Authority was entitled to take over the Corporation's Electricity Reserve Fund actually invested or set aside for investment with the result that the Corporation transferred to the Authority investments to the value of £12,700 namely £7,700 2½% National War Bonds 1949-51 and £5,000 3% Savings Bonds 1965-75.

Naturally the Council and the ratepayers were anxious to know what compensation they were to get for their highly efficient and of considerable value. In fact, the Chairman of the Committee informed the City Council at their meeting in February 1947 (reported in the Bath and Wilts Chronicle and Herald at the time) that the City Electrical Engineer estimated that in the open market, it would be worth as much as £1,000,000. As already mentioned the Act provided that a sum of five million pounds should be divided among local authorities for the severance of their undertakings, but up and down the country there was a very large number of authorities holding out their hands and this they had to do for quite a time. In fact it was 1950 before Bath received its share, which was £15,806 6s 7d. That the Corporation received such a meagre sum was no reflection on the part of the British Electricity Authority, the Area Board or the Council. The amount was computed in accordance with Regulations made under the Act.

A small addition to the finances of the Corporation was the payment by the Board of a sum of £1,500 in respect of agency work carried out by the Corporation for the Board after vesting date for such items as accountancy and legal work plus £50 for the services of the Corporation's Valuation Department in preparing special assessments.

Brief Review of Municipal Ownership

It may not be considered out of place to review, if only briefly, the picture of Municipal ownership of the electricity undertaking as a whole if only to see if the faith was justified of those, who in the early days considered that the Undertaking in Bath would prove to be a prosperous venture.

From the Municipal records as well as from the meticulously prepared 1948 statements of the former City Treasurer, Mr. Frank W. Payne, it is possible to deduce a few facts and figures which it is hoped will be of some interest. For instance when the Corporation acquired the Undertaking in 1897 the number of electricity consumers was 191, the area supplied being merely the central part of the City. By 1948 the number of consumers was 23,108 (21,063 credit and 2,045 prepayment) and the area supplied 25.41 square miles (Bath 8.05 and the adjacent Rural Areas 17.36). From what must have been but a few employees at the commencement the number on the pay roll in 1948 was 287.

The number of B.T. units generated in 1897 was 514,224, which figure steadily increased to no less than nearly 38 million in the year 1934, i.e. the year before the Corporation worked to the directions of the Central Electricity Board. From that time the number of units generated varied between 15 and 44 million a year. During the years 1935 to 1948 the Corporation sold to the Board an average of approximately 28 million units a year and bought from the Board an average of approximately 103 million units a year.

On the financial side nearly every year's working in the early days had shown a deficiency and more often than not there was only one place to find the money, namely from the Rates. During the years 1897 to 1922 there had been a surplus on five occasions only and the total for the five years amounted to no more than £3,539, whereas the deficiencies during the same period (1897-1922) amounted in total to £32,164 of which £23,949 was met from the Rates and the balance from the Reserve Fund or other sources. Fortunately there is another side to the story. As previously mentioned the year 1923 saw the commencement of an era of prosperity. Instead of a deficiency the Electricity Committee were able, with few exceptions, to show a surplus each year as a result of which they were able to transfer, between 1923 and 1948, no less than £60,840 towards the relief of the Rates, besides creating a worthwhile Reserve Fund.

However, due to the increase in the cost of coal, materials and wages, the expenses of running the Undertaking, coupled with the fact that it had been the policy of the Council to provide a cheap supply of electricity, resulted in a deficiency in the Accounts for 1946 of nearly £29,000. The Council was thus faced with the need to increase charges and when this question was before them in 1947 nationalisation was in contemplation. The report of the Council Meeting for February in that year, appearing in the Bath and

Wilts Chronicle and Herald at the time under the heading "Cheap electricity for Bath Citizens or raise charges and save Reserve for Government" indicates the alternative to an increase in charges, namely of drawing on their Electricity Reserve Fund, which for the year 1946 stood at over £90,000, instead of leaving it to be taken over by the Government on nationalisation. The Council decided to increase charges, but not sufficient it would seem to prevent further deficiencies in 1947 and in 1948, leaving the Accounts for 1948 to show the balance in the Reserve Fund having dwindled to a little more than £5,000.

Over the years of Municipal ownership much progress had been made in the methods of both generation and supply. Gone were the days when the majority of supplies were afforded by means of high tension mains with transformers in consumers premises. The inhabitants had now come to enjoy a safe supply of electricity provided by means of a standard system of distribution of alternating current of 415 volts, 3-Phase 50 cycles for power and 240 volts single phase 50 cycles for lighting and heating. Not only had the residents the benefit of improved and clean lighting in the streets and in their homes they had a supply of electricity which enabled them to have power for heating their houses with absolute cleanliness and with the least possible inconvenience, as well as an unlimited supply for the provision of hot water and for all kinds of modern and labour saving domestic appliances.

If in the early days the ratepayers had reason to feel disgruntled with the management of the Undertaking - at a time when they were being asked to foot the bill for deficiencies - the position had now completely changed and the views of those (incl. those of Mr. Hammond as far back as 1896 that electricity in Bath could prove a prosperous venture had been proved correct beyond all doubt.

Such then was the prosperous position of the Bath Electricity Undertaking when it was nationalised on 1st April 1948.

Chairmen of Electric Lighting Committee of Corporation

1888 - 1889	Mr. Alderman T.W. Gibbs
1889 - 1897	Mr. Alderman J.E. Sturges
1897 - 1901	Mr. Alderman A. Taylor
1902	Mr. Councillor Phillips
1902 - 1934	Mr. Councillor Hatt (elected an Alderman in 1911 and Knighthood in 1918)
1934 - 1947	Mr. Councillor W.F. Long (elected an Alderman in 1940)
1947 - 1948	Mr. Councillor Shepherd (elected an Alderman in 1964)

Electrical Engineers (1889 - 1948)

1889 - 1893	Henry George Massingham
1893 - 1901	G.F. Metzger
1901 - 1925	Francis Teague
1925 - 1945	James William Spark
1946 - 1948	Edgar Allan Newburn.