

Algoma Utilities century of progress dates back to era when flatiron use forced more power

*Open House
Friday, Oct. 1, lunch,
exhibits, tours for public*

A century of remarkable progress by Algoma Utilities, a municipally-owned facility, will be marked Friday, Oct. 1, with an open house, hosting the public to a complimentary lunch served from 11:30 a.m. to 1:30 p.m., and tour of its offices from 11 a.m. to 4:30 p.m.

Utility General Manager Jim LeCloux said the modern building, constructed in 1992, helps the staff deliver prompt and efficient economical power and water service to the city of Algoma businesses, commercial operations and residents. He said the utility here is one of 37 owners of Wisconsin Public Power Incorporated, which is its source of power.

The enormous changes that the utility has had to meet are illustrated with historic records, reviewed for utility history exhibits, which will be displayed for open house visitors.

LeCloux said the community enjoys significantly lower charges for electrical power because it is managed by the local Utility Commission and does not have investors getting dividends. Power supplied by Wisconsin Public Service to the region outside the city system is significantly more costly.

Comparing charges for power 100 years ago to the present must take into account the changing value of money. Comparing the cost of an item 100 years ago to the present, would have an inflation factor of at least 10 times, and perhaps more.

Because use of electrical power varies per household, customers of the utility here may average close to \$70 a month, but Utility Office Manager Nancy Johnson said many are outside that average. She explained, "There are instances where a single resident with very light use of appliances and electronic devices may be billed as low as \$11 a month for using 100 kilowatts. But others are in the \$60 to \$70 range and a few pay around \$100 a month." She said power usage by many has soared with the addition of more appliances, computers, electronic devices and power tools.

When it all started in 1904, power supplied by the new municipal utility was billed in a much different way. A fixed monthly charge was established on a schedule of 55 cents for the first three lights per month, 50 cents for the next three lights and 40 cents for each addi-

Utility Manager Emil Storm in 1974, for the *Algoma Record-Herald*, he wrote the flatiron was the first appliance to make power demands in the city. Storm wrote, "One of the first appliances to come into general use was the electric flatiron. From 1910 until 1916, the utility's steam engine generator was run on Wednesday afternoons to provide current for ironing."

This year there are 1,978 power meters in use in the city — 1,632 in residences and 346 in commercial and industrial operations. This results in total electricity sales of 39,740,000 kilowatts, LeCloux said. Of that total, commercial and industrial bought 28,155,000 kilowatts.

Since April of 1999, the electrical rates have not changed. The residential electric service rate is a fixed charge \$4.50 per month, with an energy charge of close to 6 cents (.0585) per kilowatt-hour. The commercial electric service rates are: customer charge single phase, \$8 per month; customer charge three phase, \$11.50 per month; and energy charge of close to 6 cents (.0602) per kilowatt-hour.

As Algoma has grown, so has the scope of the electrically-powered facilities grown. In 1904 there were 32 streetlights, today there are over 415. The utility had a staff of three, and now it has 11 full- and part-time employees.

In the utility's 1904 rate schedule, it charged more for saloons and business houses closing later than 9 p.m. Their first three lights cost 70 cents each, the next three 60 cents and each additional light per month was 50 cents.

It may be surprising to learn that the first electrical power schedule in 1904, according to Storm's newspaper article, stated, "The generator was operated from dark to daylight, as day current was considered unnecessary. Streetlights were burned from dark to midnight when they were turned off completely. The streetlights were carbon arc lights, where two pieces of carbon were automatically held apart so the electric current would produce an electric arc as it jumped across the gap."

By 1916, it was evident that, with so many added lights and appliances, day current would be necessary. To provide that, in 1916 a new boiler and steam engine were purchased.

The following is from the 1974 article written by Storm:

This new 24-hour service soon appealed to the local industrial plants and in 1919 service was extended to the Plumbers Woodwork Company, with the new plant of the Algoma Net Company and Algoma Wood Products asking for service. This generating equipment soon became overloaded and, in 1920, Algoma, together with Sturgeon Bay and Kewaunee, contracted with the Wisconsin Public Service Corporation of Green Bay to furnish these cities electricity by running a high voltage line from Green Bay to Kewaunee, thence to Algoma.

With the coming of more and more appliances, the city distribution system soon became inadequate, and a program was inaugurated in 1923 to replace all of the poles and wires in the city, as they were also in a bad rundown condition. This program was completed in 1928, at which time the voltage of the system was again increased from 2,300 to 4,000 volts, giving more capacity to the lines and eliminating the three 75-kilowatt transformers in the basement, which had been a bottleneck in this system.

In 1929, a string of 50-watt bulbs, five feet apart, were run along three blocks of Fourth Street and three blocks of Steele Street for a Fourth of July celebration. These lights were so well received that the city council ordered them left up and turned on only on weekends. These lights were left up until 1943, when a new system of ornamental mercury vapor lights was installed. They were mounted on concrete poles with underground wiring. This really lit the main streets. When these lights were ordered, they were of the latest design and, in order to see some in use, a body of city officials traveled to Davenport, Iowa, as there were none nearer.

Install in Alleys

As old electric lines were replaced, the new lines were installed in alleys. The corner lights in the downtown area were eliminated because of the new mercury vapor lighting. It now left this section of the city without any poles on the streets.

In 1956, the Wisconsin Public Service Corporation planned on replacing its 66,000 volt high-line going through Algoma, from Alaska to a mile north of the city. This line was rather unsightly going through our city because of the bends and turns along the lakefront and river, requiring many guy wires and double pole construction. It was also a constant source of radio interference, because of high voltage and old insulators. Because of these facts, it was agreed by the Wisconsin Public Service Corporation and the city of Algoma that they run a new line on the

west side, on the outskirts of the city, and locate their substation there.

A 4,000-volt secondary feeder was run from their substation to a new substation our utility provided to service our city. This setup also eliminated the 12,000-volt Rio Creek line running through our city, which did cause some congestion.

Our utility ran five new circuits from our new substation — one circuit for our water pumping stations, one power circuit for industry and three lighting circuits. All five are equipped with automatic circuit breakers, eliminating switchboard operators.

All electric poles are installed by the electric utility and in order to prevent congestion, are rented to the Wisconsin Telephone Company.

Office in Plant

The old, original water and light plant office consisted of a desk located in the plant building by the lake. Here the meager records were kept and the billing was done by the superintendent. The crew consisted of two full-time men who worked 12 hours a day at the plant with a day off every three weeks. These first two men were Charles Lawrence and Bert Seiler. Although Seiler stayed with the utility only a year or two, Lawrence was with the utility as plant operator for 37 years, until he reached the age of 80 years, when he retired.

An extra man was hired for part-time work to unload a carload of coal, etc. The superintendent would spell off the plant men when they had a day off. Besides billing and bookkeeping, his duties consisted of taking care of the electric lines and water mains, reading meters, installing electric services for new customers, trimming trees, etc. Between times, the superintendent wired homes and store buildings. The light and water bills were collected by the old Bank of Algoma.

The old grain elevator at 520 Parkway Ave. was dismantled in about 1930, leaving the old stone foundation standing. The utility purchased this property and in 1932 built a large warehouse and garage on the old foundation, leaving space for a future office, if necessary. In 1933, after much pressure from the local retail merchants, the retail store at 310 Steele St. was closed and the office was moved to the 520 Parkway Ave. warehouse, where office space had been provided. This change put the utility plant and office close together again and worked out well for many years.

In 1970, because of the limited office space, a new addition was added to the present office and warehouse. This addition, costing \$110,000, was for a new modern office and garage to house the many trucks and equipment that had accumulated the past number of years. This addition was entirely built with the cash reserves the utility had on hand.

When the water and light plant was first started, it was operated by a superintendent who was under the control of a Board of Public Works, composed of city council members. However, in 1933, by request of the Public Service Commission of Wisconsin, the Board of Public Works was dissolved and a Utility Commission inaugurated. No council members are permitted to serve on this commission, nor any other persons who may have a conflict of interest. Members are appointed by the city council and this commission is non-political, although under the general supervision of the city council.

Superintendents Listed

Spindler, the first superintendent, was hired in 1903 and stayed only three months. He left before the plant was in actual operation. Bates, also an outsider, who followed Spindler, served about one year. Then George McCosky, a local young man, was hired. He was a versatile man, adept at a number of occupations. He was an expert machinist, moulder and boilermaker, mason, carpenter, electrician, steam engineer and bookkeeper. After two years of not seeing eye-to-eye with the city council, he resigned. The council then hired a young steam engineer from Milwaukee named J.O. Posson. He proved to be a good man and spent 12 years here, going to the city of Kaukauna in 1918. There he distinguished himself by harnessing the Fox River for power and promoting cheap electricity, so that today Kaukauna is still known as the electric city.

In 1918, Ed McCarthy became superintendent and, in 1920, D.V. Ackerman replaced him. Ackerman had been a plant operator at Kaukauna under Posson. Ackerman stayed until 1933 when E.W. Storm, who had been with the utility since 1920, took over. Storm continued as superintendent until 1966 when he retired and Henry Englebert, who was with the utility since 1928, became superintendent. Englebert continued as superintendent until 1973 when he

retired. Roland LeCloux, who came to the utility several years before World War II and after a stint in the Navy, came back to the utility in 1945, followed Englebert and is the present superintendent.

Financial Picture

Coming now to a little of the financial side of the picture, the cost of the original city water and light plant built in 1904 was \$42,000, which was financed by a bond issue against the city in general, and a certain amount of this was retired by taxes each year. Although electric and water rates were quite high because of fuel cost and small consumption, the profits were very small. In fact, the water department operated at a loss from year to year until about 1922. This loss was taken care of somewhat by the electric department, which did make a small profit, and the balance was taken care of by the city through taxes.

In 1922, the city still owed \$20,000 of the original bond issue. It was then decided to refinance the balance of this old bond issue and also raise more money to finance some improvements and replacements that were badly needed. This was done by another bond issue of \$35,000 against the utility which was retired by the utility 10 years later.

In 1924, another \$25,000 was raised by the bond issue, which was retired by the city 20 years later. This latter bond issue was for the purpose of erecting the elevated water tower and a large number of feeder mains on the west side of the city, adding to the distribution system, giving better service in general and giving better fire protection to the Plywood, which was badly needed.

Since 1921, with the coming of the highline, the electric utility has always been able to show a substantial profit, being permitted to earn a 6 percent return on its depreciated book value. On the other hand, the water department has always been a weak sister, the profits never coming anywhere near 6 percent.

The Public Service Commission of Wisconsin insists on each department standing on its own feet and, therefore, never allowed the electric department to run up a large profit, to offset the low profit of the water department. For this reason, water main extensions and other water improvements had to be financed by the city. These monies invested by the city in its water and light department were given credit by the utility as city equity in the utility.

However, since 1933, the utility has financed all its extensions and improvements out of its earnings, for both electric and water departments, with the exception of longer extensions, which are partially paid for by the consumer requesting such service.

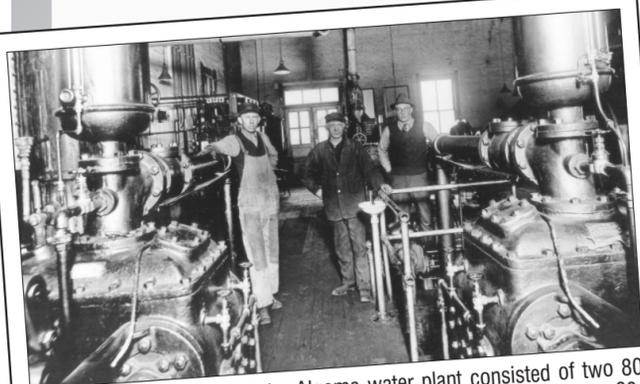
Some of these major improvements are new wells, auxiliary gas-driven pumping equipment, softening plant, water main extensions for the water department, new substation on west side and line extensions for the electric department. Besides doing its own financing the past number of years, the utility has been able to reduce its electric rates from time to time, maintaining a rate as low or somewhat lower than other cities of the same size.



Historic photo contributed by Stuart Storm

**They've come
a long way
since 1923**

ALGOMA UTILITIES was mighty proud of its first utility truck purchased in 1923 (left photo). E.W. Storm is on the pole (1928) on Navarino Street, between Frank and Parker. The trucks used today are a world away from that, in what they can do and the ease of operation. Top right, is the Versalift bucket truck for overhead line work; bottom right, is the Pitman digger-derrick, for drilling holes, setting poles and lifting transformers.



ORIGINAL EQUIPMENT of the Algoma water plant consisted of two 80-horsepower boilers, one 150-horsepower steam engine belted to an 80-kilowatt generator, two duplex-piston steam pumps, switchboard and necessary auxiliary equipment. The steam pumps are shown in this 1920 photo. The men are (from left) Emil Storm, Charles Lawrence and Dal Ackerman. Ackerman was superintendent at the time and later Storm occupied the position.