

Electric Division

When most people think of a utility company, they think ‘electric.’ That’s because it is the one utility service used by every citizen, every day. Electricity has only been available for less than 150 years, but it has become essential to providing the comfort we rely on.

In the later part of the nineteenth century, not long after Thomas Edison established the first electric utility company in New York City, the Norwich Electric Light Company was established by the founders of the Norwich Gas Light Company. Norwich Gas Light Company had been incorporated in 1854 to provide gas for cooking and lighting. However, by the last decade of the century electricity was superseding gas for lighting.

While the Norwich Electric Light Company started its operation on Chestnut Street, it began building a steam generating electric plant adjacent to the Norwich Gas Light Company on North Main Street in Greeneville. These two companies merged in 1897 to form the Norwich Gas and Electric Company. The City of Norwich ultimately took ownership of this company in 1904, creating the City of Norwich Gas & Electric Department.

By the end of the first year as a municipal utility, the Gas & Electric Department reported the customer base grew from about 400 customers to almost 600 customers, and the price of electricity ranged from \$0.06 per kilowatt hour (kWh) to \$0.14 per kWh. The Norwich citizens also saved at least two mils in taxes for that year in avoided costs no longer paid to the privately owned Norwich Gas & Electric Company.

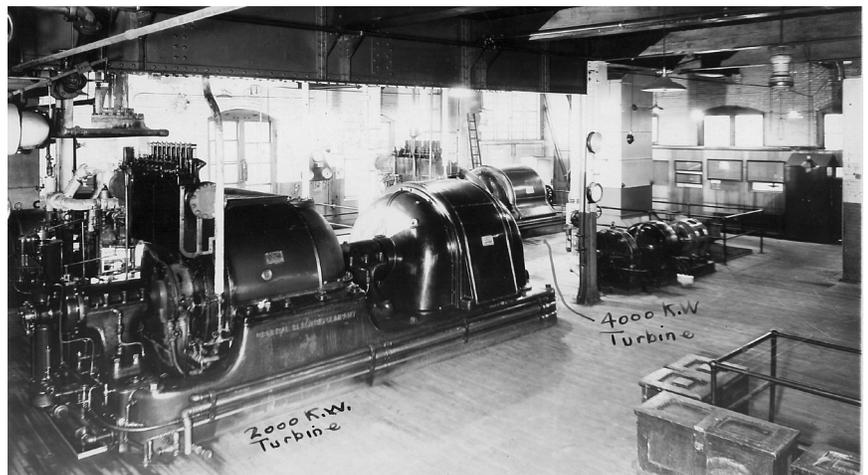
Department leaders spent the first decade of operation focusing on ways to expand and upgrade the service and available power capacity to keep up with the growing demand for electricity. It was crucial to encourage industries to expand or relocate to Norwich. One avenue they pursued was hydro-electric power. In 1908, the Department began purchasing hydro power from the Uncas Power Company to meet the increasing demand for electricity.

You Can Rely on Us! 2014 marks the 110th year Norwich Public Utilities has been providing reliable utility services to Norwich.

We wrap up this year with a brief history of the Electric Division as well as a look at the workforce ‘behind the scenes’ at NPU.

In the first two decades of operation, the Electric & Gas Department maintained steady growth in its customer base, continuing to provide low cost power and generating a profit for the City. In the early 1920s, the Department was now a business worth over \$1 million. This led to the first request by a private company to buy the Department. In 1924, the Eastern Connecticut Power Company (the parent company of the Uncas Power Company) offered \$2.5 million for the operation. This request was quickly rejected for two important reasons: the price offered was inadequate and Eastern’s rate structure would result in a significant increase for customers. Soon after, a second private company submitted a proposal to purchase the Department for \$3 million. This request, while also turned down, would not be the last offer to purchase the Department.

Throughout this time, the City’s “Great White Way” was established, which referred to bright, decorative street lighting installed in the downtown area. The city celebrated this accomplishment by lighting the lamps for the first time on the evening of Armistice Day, November 11, 1924.



Inside the steam plant, where electricity was generated ~ circa 1930

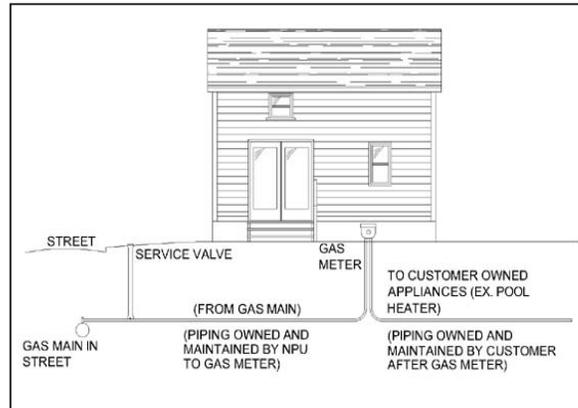
In 1927 the Department’s first hydro station, located on Second Street on the Shetucket River, was built and placed into service. This was followed about a decade later by the construction and operation of the Occum hydro facility. The Greeneville hydro station, located at the Greeneville Dam, was built in 1966. These facilities are still in service today, generating 6% of the overall power consumed in the City.

Customer-Owned Underground Gas Lines

Some of the underground natural gas piping on your property may belong to you. Customer-owned underground piping is defined as any buried gas lines that extend away from your gas meter (see illustration). Typically, customer-owned gas piping is used to supply heat and hot water to another building such as a detached garage, but it can also be used to heat swimming pools and for cooking on a gas grill.

If you have this type of gas line on your property, it is your responsibility to initiate any inspection and necessary repair or replacement of customer piping by a qualified professional, such as a licensed heating/cooling

contractor or plumber. Buried piping should be inspected periodically for leaks and for corrosion if the piping is metallic. If a gas leak is detected, it might be necessary to interrupt your gas service temporarily until repairs are made.



The above drawing shows which piping owned by NPU and by the homeowner

Remember to contact “Call Before You Dig” at 811, a free service, before you start a project. It is important that you know the exact location of all buried utility lines before performing any excavation work. When excavating near buried gas piping, all excavation should be done by hand.

If you suspect a problem with any natural gas lines, please call NPU’s Gas Emergency Line at **860-887-7207**.

Energize Norwich Celebrates a Successful First Anniversary

Energize Norwich recently celebrated its first anniversary. Energize Norwich is a partnership between NPU, the State of Connecticut’s Clean Energy Finance and Investment Authority (CEFIA), SmartPower and a number of local financial institutions working to help residents of Norwich lower their monthly energy bills by converting to natural gas and making their homes more energy efficient.

Energize Norwich’s team is very busy and successful it this first year, including the following:

- 744 new customers that signed up to receive natural gas; more than half are already receiving or will receive natural gas before the end of this construction season
- \$790,000 in new revenue generated when all new services are installed and in service
- \$830,000 in annual estimated savings for 744 new natural gas customers, or approximately \$1,116 per household annually (\$93 per month)
- \$197,800 in rebates paid through the program in the last 12 months
- \$281,458 in incentives paid through the program in the last 12 months
- 600 new natural gas customers signed up for service between 2011 and the launching of Energize Norwich Program.

- 4 million pounds in carbon dioxide emissions were saved, based on calculations from the Yale School of Forestry & Environmental Services; over 20 years this will represent more than 60 million tons of avoided carbon dioxide emissions, or the equivalent of taking more than 6,000 average passenger cars off the road for a year!



The grass roots, community outreach efforts of Energize Norwich included:

- 40 public meetings, reaching an audience of more than 530 residents
- 6,700 pieces of marketing and educational information provided via mail
- 500+ direct customer emails
- 6,500 phone calls (incoming and outgoing); more than 325 hours on the phone providing information and answering customers’ questions
- 1,400 radio advertisements

This work was funded through the issuing of bonds by the City of Norwich. Two referendum totaling \$11 million passed overwhelmingly by voters in 2010 and 2012. As of early September 2014, just over \$300,000 in funding remains to connect services to customers who have committed to natural gas.

For more information on our natural gas expansion efforts, call Katie Moors at 860.823.4514.

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In addition to the power generated at the steam plant and hydro units, electric power was also purchased from the Connecticut Light & Power Company. The first substation was built adjacent to the steam plant on North Main Street and was fed by a 22,000 volt transmission line. By the 1960s, four additional substations were built in Norwich to handle the growing demand for electricity. The final and largest substation was built in the Bean Hill area of Norwich in 1972. This station was expanded to twice its original size in 1982.

During World War II, the War Production Board ordered the steam plant shut down, and power was provided by Connecticut Light & Power. The steam plant resumed operation in 1945, and continued to operate until the 1960s when it was decommissioned and replaced by energy generated from other power plants.

Following the War, the Department experienced an unprecedented decade of system growth, customer satisfaction, and strong earnings. As a result, the Connecticut Light & Power Company proposed a lease/purchase of the Department. The new offer was for \$10,050,000 to be paid to the City over 20 years. This proposal was soundly defeated by a referendum vote by the citizens of Norwich.



Lineman, circa 1946

Municipal Electric Energy Cooperative (CMEEC). CMEEC's goal as a self-directed power supply agency was to provide greater control over where, how and at what price electric power was purchased for municipal utility customers. CMEEC has since expanded to include the municipal utilities from South Norwalk, the Third Taxing District of the City of Norwalk, and Bozrah Light & Power (owned by Groton Utilities).

In recent years, the focus of the Department has included a strong and committed stewardship of our natural resources. In 1997, we began operation of the first fish passageway in our region located on the Greenville Dam. This was followed a decade later by the construction of a fish ladder at the Occum Dam. These passageways are designed to promote the reintroduction of natural fish migration in the Shetucket River.

In the late 1990s, Norwich received designation as one of four 'Clean Cities' coalitions in the state. At that time, we began introducing alternative fuel vehicles (AFV) into our fleet, including two Ford Ranger electric pickup trucks. These were among the first commercial-use electric trucks in Connecticut. Since that time, our AFV fleet has expanded to include natural gas powered vehicles, electric hybrid, and biodiesel blend. Many of our electric bucket trucks are AFVs.

In the last decade, NPU instituted an aggressive Energy Efficiency Program designed to save customers money, and in conjunction, developed renewable energy technology. This included the installation of solar panels on the City's Central Fire Department, solar hot water projects and wind turbines. Future pilot programs include high efficiency street lighting and a solar garden.

Throughout the 110 years of municipal ownership, Norwich's hometown utility company has weathered countless changes brought on by wars, threats of corporate buyouts, economic depression, and major storms. Not only has NPU made it through the tough times, but we have prospered and grown to the successful business we are today, serving more than 17,000 homes and businesses. More importantly, our customers continue to benefit from low cost, highly reliable utility services. This was our goal in 1904, and continues to be our goal in 2014.



Reliable Public Power Provider

In 2013, NPU was designated a Reliable Public Provider by the American Public Power Association.



Linemen repairing power lines, circa 2009

Communitycalendar

NORWICH PUBLIC UTILITIES

October 2014

October 17-19, 2014

The Friends of Otis Book Sale

Early Bird Preview: Friday, Oct. 17th

9-10 AM; \$10 Admission

Free General Admission:

Friday, Oct. 17th: 10 AM - 3 PM

Saturday, Oct. 18th: 10 AM - 3 PM

Sunday, Oct. 19th: Noon - 3 PM

Proceeds benefit Otis Library.

November 1, 2014

Woman's City Club Autumn Fundraiser

The Woman's City Club of Norwich is

holding its Autumn Wine Tasting from

5 PM - 7 PM at the NFA Slater Atrium.

Proceeds benefit its scholarship fund. To

purchase tickets, call 860-887-2315 or

860-887-7515, or purchase at the door.

November 22, 2014

O'tis a Festival at Otis

Benefitting the Otis Library, this community event features hand-crafted items, children's events, musical performances, unique demonstrations, and photos with Santa. Proceeds from this event will benefit Otis Library. For more information, visit www.otislibrarynorwich.org

November 28, 2014

Light Up City Hall

Ring in the Holiday season at the Light Up City Hall Event, which includes entertainment and a special visit from Santa. Event starts 5 PM. For more information, call 860-823-3751.

November 29, 2014

Norwich Winterfest Parade

The annual Norwich Winterfest Parade kicks off at 1 PM from Chelsea Parade. This year's theme is "the Wonder of Winter." For more information, email norwichwinterfestival@yahoo.com

Local events can be found on the Community Calendar on our website, norwichpublicutilities.com, and the calendar on the City of Norwich's website, norwichct.org.

Behind the Scenes: It takes a small village to run NPU

Over the last year and culminating with this edition of *Community Matters*, we have provided a brief glimpse of NPU's four utility service divisions. Now we complete the series with a brief look at the workforce that operate 'behind the scenes.' The men and women in these roles work hard to support the key services we provide, and ultimately support you, our customers.

A unique benefit for our customers is that no matter the time of the day or day of the week you contact NPU, an employee is at the end of the phone ready to assist. Control Room Operators are on duty 24 hours a day to dispatch crews to respond to any utility emergency. During regular business hours, you can call or visit our local Customer Service Center to speak with a Customer Service Representative.

Field Service Technicians and Meter Readers are always around town, attending to utility-related needs at homes or businesses. They may be installing new meters, responding to an emergency carbon monoxide (CO) call, servicing heating equipment or reading meters.

Engineers and Project Coordinators assist customers with new or expanded utility services, energy efficiency and renewable energy projects, or improving infrastructure with new technology to ensure all safety and reliability standards

are met. The Maintenance crews keep the facilities and vehicles in good working order.

Purchasing and Stores personnel keep essential spare parts and supplies readily available, allowing crews to make repairs in a timely manner. The Accounting staff process and pay all the bills, keeping the books balanced to maintain NPU's solid financial health.

Geographical Information Systems (GIS) Technicians use GPS technology to map and mark out our utility infrastructure for more efficient response times and to ensure the safety of the crews and contractors performing work on our systems.

Information Technology and Business Intelligence staff make sure all the right technology is in place for enhanced customer service and to allow employees to do their jobs efficiently, including those making management decisions, communications, and providing clerical support.

Providing more than 40,000 people with gas, water, electric and sewer services every day requires a great deal of work being done very well by a dedicated group of men and women committed to anticipating and meeting the needs of our customers.



This bulletin is printed on paper with 50% post-consumer fiber, and it costs about 10 cents to print. Proudly printed in Norwich.

Here to Serve You

Visit our web site for more information:

www.norwichpublicutilities.com

Please call, fax or e-mail us your questions, comments and suggestions.

Norwich Public Utilities, 173 North Main Street, Norwich, CT 06360

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