

Advantage Advantage

MARCH-APRIL 2022

Street Light LED Conversion Nears Completion

LED Technology means savings for residents

or many years, the predominant light source type for streetlights in communities was high pressure sodium (HPS) light bulbs. Beginning in 2012, the

Electric Distribution Department began the conversion of streetlights within New Ulm from HPS light bulbs to Light-Emitting Diode (LED) bulbs. Since the beginning of the conversion roughly 3,100 fixtures have

been

Not only has dramatic savings been captured due to the conversion to LED technology, but the Electrical Distribution Department had foresight to purchase dark sky compliant lighting when possible.

converted to LED bulbs. By the time 2023 arrives, the remaining 570 streetlights within New Ulm will have been converted to LED bulbs.

A deciding factor to convert streetlights to LED was to take advantage of the reduced energy consumption of LED bulbs. LED light sources have good performance characteristics due to efficiency, long durability, and the availability of adjusting lumens of the fixture to meet needs of a particular

situation. Studies by a variety of institutions, such as Iowa SUDAS (Statewide Urban Design and Specifications), states "light produced by LEDs is

whiter and provides significantly better color rendering of objects" and "improves the visual ability of the human eye." Lastly, due to LED bulb durability/life

span, time and money spent replacing HPS bulbs occurs less frequently. LED bulbs purchased by NUPU have a 10-year warranty and a 20-year lifespan.

Most LED converted streetlights range from 45-68 watts/5,030-7430 lumens all the way to 135 watts/15,000 lumens in New Ulm.

When HPS bulbs were used, these numbers ranged from 50 to 400 watts to capture the same number of lumens. The dramatic difference in wattage range due to LED design efficiency has resulted in a savings of 1,353,300 kWh (kilowatt hours) and 284 kW (kilowatts) since the conversion program began in 2012. According to the Department of Energy, the average residential

Lights continued on page 2



Lights from page 1

customer in the country in 2020 used 10,715 kWh per year. The savings from converted streetlights to LED can be compared to the 2020 residential electrical usage from 126 residential homes in a year.

Not only has dramatic savings been captured due to the conversion to LED technology, but the Electrical Distribution Department had foresight to purchase dark sky compliant lighting when possible. While not all streetlights installed are dark sky compliant, all street lighting 26 to 31 feet high are dark sky compliant. When people first hear the term "dark sky lighting," they think only of the benefit of being able to see stars. While this is true, dark sky lighting uses fixtures which aim light where it is necessary instead of directing it upward in the direction of the sky. This makes sure lighting is aimed at the desired location using energy more efficiently.

Dark sky lighting has many other positive aspects, such as reducing the negative impact artificial lights have on migratory birds, fireflies, and sensitive ecosystems.

If you are interested in dark sky lighting, visit www.darksky.org, www.jmu.edu/planetarium/lightpollution.shtml. www.ncsl.org/research/environment-andnatural-resources/states-shut-out-light-

pollution.aspx, or other sources you trust.



"Municipal Utilities: Good for All of Us."

ach year, Minnesota Municipal Utilities Association (MMUA) offers the Tom Bovitz Memorial Scholarship Award Program to high school seniors. Any high school senior who resides in an area where their electrical and/or gas utility supplier is a member of MMUA may participate. High school seniors may participate by submitting an essay interpreting one or more aspects of the theme "Municipal Utilities: Good for All of Us."

NUPU is once again offering a local \$500 scholarship to high school seniors within our service territory. The local winning entry is sent to MMUA for the possibility of one of four additional scholarships offered by MMUA. Information regarding the Tom Bovitz Memorial Scholarship program and its criteria may be obtained by contacting Derek Nelson, Energy Services Representative at New Ulm Public Utilities, DerekN@newulmmn.gov 507-233-2110 or visiting www.mmua.org/services/tom-bovitzmemorial-scholarship-program.

NUPU will also supply information regarding this scholarship to local high school guidance counselors at Cathedral High School, Minnesota Valley Lutheran High School, and New Ulm Public High School.

The deadline for local entries to NUPU is April 15, 2022. Local entries may be delivered to NUPU, 310 1st N. St., New Ulm, MN 56073 or emailed to DerekN@newulmmn.gov.



A REBATE between \$100 to \$320 for central air conditioner /mini-split AC systems install, depending on SEER (Seasonal Efficiency Energy Rating).

Efficiency Requirement is a minimum SEER of 14.5 and must be AHRI Certified.

Rebate Applications Reminder!

New Ulm Public Utilities would like to remind customers that rebate applications may change from year to year. Some rebates are first-come-first served. Whether you are a customer or a vendor using rebate applications, please look to www.newulmmn.gov/206/Energy-Rebates for the most recent versions.

Sawyer Interns at Wastewater Treatment Plant

ecent college graduate, and St. Peter native, Isaac Sawyer, is interning at the New Ulm Public Utilities Wastewater Treatment Plant.

"I took a course in environmental science in high school and that sparked my interest in this field," said Isaac.

After graduating from St. Peter High School, Isaac chose the Watershed Program at Vermillion College to continue his education, with a double major, also studying treatment of wastewater.

"I wondered about who maintains and analyses wastewater," he said, explaining why he chose this field. "I really wanted to get more experience and build my resume."

That interest led to a conversation between Isaac's college instructor and Dan O'Connor, New Ulm's Wastewater Treatment Plant Supervisor, about the possibility of an internship.

"The instructor, whom I know, contacted me to say he had a good student who just finished his AA degree, is from this area, and was looking for an internship," said Dan.

After an informal interview and email conversations, an internship was created and offered to him through the Public Utilities, and a program through South Central Service Cooperative (mnscsc.org).

Isaac's duties include a little bit of everything that is necessary to keep



operations running smoothly at the treatment plant including maintenance, preventative maintenance, and basic everyday operations.

"I do rounds in the morning which consists of pumping biosolids, sampling, and visually making sure that everything is running as it should be," said Isaac.

O'Connor explained that Isaac also gains experience handling work order systems through daily, weekly, quarterly, and annual preventive maintenance activities. This includes checking on, and periodically changing out, equipment parts and

their components to keep them in good working order.

"We may have Isaac get some experience at the Water Filtration Plant as well, if we are able to arrange it," said O'Connor.

To work at a public utilities in the wastewater treatment area, a degree is not necessary, but studies in the fields of water resource technology, engineering, science, safety, maintenance, and environmental studies are all helpful to become employed and be successful.

Isaac enjoys the positive interaction with his coworkers, talking about their common interests, as well as the preventative maintenance work on the equipment.

"I grew up working on vehicles and such, so it is what I am used to. The people here have similar interests with me," said Isaac, who enjoys hunting, fishing and hiking.

Isaac will further his studies in August, at Stevens Point, Wisconsin, to study fisheries and water resources. His ultimate career goal is to work as a United States Geological Survey (USGS) hydrologic technician, monitoring rivers, lakes and streams for erosion and other important data that reports on the health of the water and surrounding area.

"I can also see coming back here to work," he said. "It's very much a possibility."

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When you create an account on newulmmn.gov, you can take advantage of many items such as:

- search for jobs
- make electronic payments
- view city calendars and activities
- and utilize NOTIFY ME.

NOTIFY ME: When customers, vendors, and residents utilize Notify Me, the City of New Ulm and New Ulm Public Utilities can send important notifications on any topic through a customized email and/or text message. The Notify Me module allows you to subscribe to email and/or text message notifications

from the Calendar, News Flash, Job Postings, Bid Postings, Alert Center, and Blog modules. If interested in the Notify Me module, create an account and find the Notify Me icon on the Public Utilities website and make sure to be notified on what interests you the most—the Public Utilities News Flash postings!



Commercial and Industrial Rate Reclassification Changes

recently finished the rate reclassification of commercial and industrial customers and has sent letters to customers changing rate classes.

A rate reclassification is conducted yearly during the last few weeks of January. A rate reclassification looks at a customer's usage from January through December of the prior year. All utilities NUPU offer are looked at to verify if reclassification is necessary based on customer usage/consumption and the rate schedule approved by the New Ulm Public Utilities Commission.

Rate schedules for utilities can be found at www.newulmmn.gov/438/Utility-Rates-Fees-and-Charges.

A reminder to commercial and industrial customers: reclassifications are done annually and can change yearly based on usage. If you have questions on rates, call NUPU at 507-233-2110.



PUC AND EAC MEETING HIGHLIGHTS

PUC Agenda Highlights (January-February 2022)

- Approved Commissioner appointments.
- Approved \$500 local Tom Bovitz Scholarship.
- Approved Net Energy Billing Service Rates.
- Selected the EAA (Energy Acquisition Adjustment) option to put into effect as of February 1, 2022.
- Authorize the City Manager to enter into a Natural Gas Supply Agreement with Minnesota Municipal Gas Agency (MMGA).
- Approve the purchase of low

pressure PermaPipe steam piping and condensate return piping for First Methodist Church project.

- Accepted proposals to develop plans and specs for Unit 1, 4, and 3A electromechanical relays.
- Approve replacement of the Remote Terminal Unit (RTU) at the Center Street Substation.
- Approved proposal to advertise bids for the Transmission Line Bypass at Center Street Substation.
- Approved proposal for replacement of 69kV at the Center Street Substation.
- Approved Mainstar software upgrade.

March is...

- Natural Gas Utility Worker's Day, March 18
- World Water Day, March 22

April is...

- Lineman Appreciation Day, April 18
- Earth Day, April 22
- Administration Professionals Day, April 27
- Arbor Day, April 29



New Ulm Residents were asked:

What do you think would be a good activity for kids to help them learn about conservation and good stewardship for the planet we live on?

Virginia: When you brush your cats and dogs, put the fur outside so the birds can line their nests with it. Helps to make a soft nest.

Alyssa: My kids love walking around sleepy eye lake & picking up all the trash. My son actually asks daily when we can do that again.

love watching their seed grow!

Clear Lake Farms: We do a nature scavenger hunt, and plant a seed. The kids learn about animal prints, leaves, moss etc, and

Lori: Have them clean around a street drain and explain that all litter on streets and parking lots goes directly into the Minnesota River untreated through the drains.

Rod: Clean litter along New Ulm's bike route.

GUSTOMER tips & tricks

Carolyn: We cleaned the ditches with a church group and I was absolutely blown away by the volume of trash we collected. I love the Adopt-a-Highway program that some areas of Minnesota have!



igstar AT YOUR SERVICE Employees of the Month Honored



DARLIS
BODE
Wastewater/
Water
Admin Clerical
Assistant



DAVE KUEHN Chief Engineer Electrical Production



KAREN HULKE Storeroom Operator NUPU Admin Distribution Center

arlis has stepped in and done wonderful job learning the administration duties and role of the Wastewater clerical assistant, NUPU had three out of five clerical assistants resign and/or retire in 2021. During the transition into her new position, she also was tasked with daily Utilities administration duties as well as training in a new employee. Darlis is not afraid to ask questions, does her job effectively and efficiently, all while keeping a smile on her face.

ave has been with the Electric Production Department for nearly 42 years. He has been involved with every part of steam and electrical production from Relief Fireman to Chief Engineer. He has an unbelievable depth of knowledge of the whole plant and of the electrical grid. He has kept the Power Plant up to date in many ways. These last 2 years he has improved the plants efficiencies with new controls on #4 Boiler, #6 Turbine, #2 Boiler and new VFDs on #1 Boiler and feedwater pumps though out the plant. Also, while keeping the plant running efficiently, he has hired many new employees these past 2 years even though it was a very tight labor market and very hard to find people with the appropriate license. Dave is always willing to share his knowledge and will come in at any time to help with all the problems that can arise in the electrical and steam system. I believe Dave cares very much about this department and wants it to be running well into the future.

aren is an employee at the Material Distribution Center, She was promoted from Storeroom Clerk to Storeroom Operator in June 2021. Karen has done a great job of taking on the additional responsibilities of her new position. She is very detail oriented in her work and strives to keep a very accurate inventory. She is always looking for ways to improve processes and efficiencies and will offer suggestions on how to improve them. She is very much a team player and a very valuable employee of the MDC.

Program to Reduce Energy Burden of Manufactured Homes



According to Clean Energy Resource Teams (CERTS), manufactured homes use more energy than similarly sized housing of other types, because of inefficiencies such as poor insulation and air sealing.

Due to those and other inefficiencies CERTS conducted a two-year effort to reduce the energy burden in manufactured home park locations in Minnesota. In February, with help from CERTS, New Ulm Public Utilities purchased energy conservation kits for residents at New Ulm Mobile Village. Roughly 154 conservation kits were delivered to residents with help from Mark Schaefer, New Ulm Mobile Village Site Manager. Kits included (3) 9-watt,

(2) 11-watt LED light bulbs, hot water pipe insulation, water temperature gauge, low flow bathroom and kitchen sink aerator, and a low flow shower head. As with all homes and buildings, energy conservation can be accomplished with easy and inexpensive actions.

More information on energy saving actions for manufactured homes can be found at www.cleanenergyresourceteams.org, then by typing MANUFACTURED HOMES in the search bar. Additional information can also be found for single family homes, renters, and landlords on the same site.



Dave Kuehn Retires after nearly 43 Years with NUPU Electric Production Department

How long have you been with the Electric Production Dept? I have been employed with the Public Utilities since May of 1979. So, 42 years and 10 months.

What position did you start in? I started as a fireman trainee, which was one of the entry level positions at the time. I was pretty much an apprentice and taught on the job.

What were your duties over the years? When I started, I ran the two boilers on the 400 lb. side of the plant. One was coal fired and the other natural gas fired. As openings from transfers or retirement came about, I obtained my Engineers License and moved to the Relief Boiler Operator Position for a couple years, and then to the Boiler Operator position which I held for about nine years. I then moved to the Relief Operator position, which entailed running the turbine/ generators and electrical grid in the city. After a couple years of this I became a Plant Operator until 1999 when I was promoted to the Assistant Chief Engineer. When the Chief Engineer retired in 2018 I was promoted to that position.

What did you enjoy most about your job? Working with the people in the department—they have made all the difference with how the plant runs.



What did you find challenging? I think the biggest challenge was learning the MISO (Midwest Independent System Operators) protocols. We are a member, and we purchase some of our electricity from them. The reports and politics are very hard to discern.

Can you share some technology changes you've seen over the years? We have updated to electronic controls on all three of our boilers with VFDs (variable frequency drives) for better efficiency. I saw the installation of #7 combustion turbine with its programmable logic controls. Last item was to add new controls to our #6 Elliott steam turbine/generator.

What would you like New Ulm residents to know about NUPU? NUPU strives to make our system very robust to make it reliable. We do not have many long-term outages due to this. It is very redundant as to how we can back feed electricity as needed to keep the lights on. Also we do everything possible to keep rates affordable for our consumers. I have to mention that a lot of people don't know that we supply 140-pound steam to two major industrial customers and keep the District Energy downtown fed with 7-pound steam.

If you could have done any other career aside from this one, what would you have done? I don't really know off hand. I grew up on a farm and loved agriculture, but it wasn't in the future for me,

What do you plan to do in your retirement? My wife and I like to go camping and riding the Parks of Minnesota. Watching grandchildren's activities and seeing them grow up. Plus, I have a lot of unfinished projects at home.

Hobbies? Camping, riding, fishing, hunting, and sports in general.

Family? I have three daughters, seven grandchildren, my parents, and four brothers and three sisters.

Call for Pet Photos for 2023 Rebate & Conservation Calendar

This IS my happy face!
"Bruno"

The 2023 Conservation & Rebate Calendar will feature those animals, past and present, who share, or have shared, our lives, our beds, our homes and our hearts. Be it cats, dogs, hamsters, horses, parrots or ferrets, send us your favorite photos of your furry, scaly, or feathered friends. Pets shown in a variety of seasons would be appreciated. Please identify the pet(s) names as well as your name on back or with photos submitted. **DEADLINE: October 15, 2022.**

• Submit printed photos to: New Ulm Public Utilities Attn: 2023 Calendar 310 1st North St. New Ulm, MN 56073



OR email high resolution digital photos to: DerekN@newulmmn.gov





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NEW ULM PUBLIC UTILITIES MARCH-APRIL 2022 NEWSLETTER

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NEW ULM PUBLIC UTILITIES 310 1st North Street

MAIN NUMBER	233-2110
Billings & Connections	359-8259
Administration	359-8264
Electric Distribution Dept	359-8295
Gas Dept	359-8289
Material Distribution Center	233-2134
Power Plant Chief Engineer	233-2128
Power Plant Operator	233-2129
Utilities Director	359-8264
Wastewater Treatment Plant	359-8360
Water/Steam Dept	359-8279
AFTER HOURS ALL CALLS	359-8204