An oversized trailer, semi-trucks and a crane were all necessary for delivery of a transformer for the CapX2020 Hampton-Rochester-La Crosse transmission line project.
There aren’t many things more festive than holiday lights decorating the inside and outside of a home during the holidays. Whether it be a gentle glow of soft white lights or the blinding splash of color from thousands of blinking lights, they all add to the holiday cheer. If you are planning to string five strings or 500 strings of lights, make sure to do it right this year.

Lighting technology has improved greatly in recent years, making the selection and benefits even better for the consumer. LED (light-emitting diodes) lighting is the newest and most energy-efficient string lighting available. LEDs are available in clear, single color strands or multi-color strands, and can be connected together to offer many different color combinations. There are blinking light options available along with the traditional icicle lights using LEDs. The options are almost endless when it comes to using LED holiday lighting.

LEDs use a fraction of the energy that standard incandescents use. Based on the type of LED used and the application, LED holiday lighting could save you up to 90% in energy costs when compared to incandescent lighting. In addition, LEDs don’t burn a filament to produce the light so they also don’t put out excess heat in the process.

LED lighting options, including holiday lighting, can be more expensive compared to standard incandescent lighting, so RPU is again offering a rebate for LED holiday lighting and decorations. The rebate (depending on the number of lights) can be up to $12 per string of lights. There is no cap on the number of strings you can purchase and the rebate is available no matter where you purchase them. Some restrictions apply, so make sure to visit the RPU website (www.rpu.org) for full details.

Once you’ve purchased all of the LED holiday lighting strings that you need this season, now what do you do with all of your old strands? RPU can help with that too. Due to such high demand last year, RPU will again recycle all of your old holiday light strands for FREE this year. Just bring your old strands of lights into the RPU Service Center lobby and drop them into the bins designated for holiday light recycling.

RPU will recycle all of your old holiday light strands for FREE. Bring your old strands to the RPU Service Center by or before January 31, 2016.
BUY ENERGY EFFICIENT HOLIDAY LIGHTS OR DECORATIONS & APPLY FOR A REBATE:

1. Purchase LED holiday plug-in (not battery operated) lights and decorations in 2015.
2. Complete this page and submit it to RPU by March 31, 2016 with your original sales receipt and the LED packaging showing the LED logo and number of lights per string.
3. Rebate is limited to 50% of LED string or package cost, tax excluded.

BUY ENERGY EFFICIENT HOLIDAY LIGHTS OR DECORATIONS & APPLY FOR A REBATE:

Customer Name

Home Phone # (with area code) Daytime Phone # (with area code)

Mailing Address City State Zip + 4

Installation Address (if different from above) City State Zip +4

Account #

Residential Commercial

Rochester Public Utilities
Attn: Rebate Processing
4000 E River Rd NE • Rochester, MN 55906-2813
507.280.1500 • www.rpu.org

Recipient must be an electric customer of Rochester Public Utilities. Valid only on purchases made in 2015.

<table>
<thead>
<tr>
<th>Lamp Size</th>
<th># of Lamps per String</th>
<th># of Strings</th>
<th>Cost per String</th>
<th>Rebate per String (D x .50)</th>
<th>Total Rebate (C x E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini</td>
<td>Other</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mini</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GRAND TOTAL REBATE:

* Rebate is 50% of string or package cost (tax excluded), up to maximum amounts listed below:

<table>
<thead>
<tr>
<th># of Lamps</th>
<th>Maximum Rebate per String</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 99</td>
<td>$3.00</td>
</tr>
<tr>
<td>100 - 199</td>
<td>$6.00</td>
</tr>
<tr>
<td>200 - 299</td>
<td>$9.00</td>
</tr>
<tr>
<td>300 or more</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

OFFICE USE ONLY:

ID # _____________________

Thanks for Celebrating Public Power Week at the Silver Lake Plant

We had a great time opening the doors of the Silver Lake Plant (SLP) in downtown Rochester for tours during Public Power Week. We hope that you enjoyed learning about the steam production at the plant, the history, and the power production coordination that comes from there.

Thanks to the positive response received during this tour opportunity, we will look for future tour opportunities of other RPU facilities. Thank you for coming through SLP and for celebrating Public Power Week 2015 with us!
Is Your Home Protected?

**Q: I get mailers selling a similar coverage for utilities. Does that coverage have anything to do with RPU?**

**A:** No, RPU’s only underground utility repair coverage is Service Assured®. Other companies send out mailers and postcards advertising services to cover underground utilities for $5.49 per month or more. Protecting underground utilities should be left to the professionals who work with these utilities every day such as RPU’s electric line workers and water operators. If you choose to go with a third-party company, RPU strongly recommends investigating their work record and their contract fine print. Buyer beware.

**Q: Where can I get more details on Service Assured®?**

**A:** All of the information on Service Assured® can be found on the RPU website, www.rpu.org. This includes terms and conditions, pricing, and diagrams of what is owned and maintained by the homeowner, and what is owned and maintained by RPU.

To enroll in RPU’s Service Assured® program, visit www.rpu.org or call us at 507.280.1500 to request an enrollment form be mailed to you.

* Contact us to determine your eligibility; some exclusions apply.

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**TYPICAL RESIDENTIAL UNDERGROUND ELECTRIC SERVICE**

**FIGURE 2 Underground Electric Service**

<table>
<thead>
<tr>
<th>SERVICE ASSURED® covers from</th>
<th>1</th>
<th>to</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Transformer or Secondary Pedestal (RPU OWNED)</td>
<td>2 Service Line (CUSTOMER OWNED)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Meter (RPU OWNED)</td>
<td>4 Meter Socket (CUSTOMER OWNED)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL RESIDENTIAL WATER SERVICE**

**FIGURE 1 Water Service**

<table>
<thead>
<tr>
<th>SERVICE ASSURED® covers from</th>
<th>1</th>
<th>to</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Corporation Stop (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Service Line (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Curb Valve (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Curb Box (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Angle Stop (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Meter (RPU OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Meter Tail (RPU OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Full Flow Gate Valve (CUSTOMER OWNED)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*DRAWING NOT TO SCALE. DIAGRAM IS A TYPICAL CONFIGURATION.*

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If you don’t have RPU’s underground utility repair coverage Service Assured®, you could get stuck paying thousands of dollars out-of-pocket to repair your damaged underground water or electric services.

For only $2.99 per month,* you can rest assured that you won’t be hit with costly repair bills if your underground electric or water service breaks!

**Q: Are there really parts of my electric and water service that I own as the homeowner?**

**A:** Yes, as a homeowner you own a number of components necessary for getting electric or water service into your home. Without having a professional contractor or RPU Service Assured® coverage, you may be left without service.

**Q: My home is fairly new. It can’t happen to me, right?**

**A:** The age of your home may not matter when it comes to what is underneath the ground. Weather, soil, and frost can play a big part in the disruption of underground utilities, rather than how new your home is.

**Q: Can I get coverage on just one utility?**

**A:** Yes, for $1.99 per month you can cover just one of your utilities, but cover both for just $1 more!
RPU is actively working with key stakeholders and energy regulators as the industry investigates best approaches to the future of the electric distribution grid, or commonly called “grid modernization.”

RPU’s distribution grid is a key asset and component in the delivery of electricity to the Rochester community. The aggregate distribution grid, in coordination with the high voltage transmission grid and the electric generation facilities, form the three key backbone components of utility systems in the United States and worldwide.

In May 2015, the Minnesota Public Utilities Commission (PUC) began an inquiry of the Electric Utility’s distribution grid, with a focus on grid modernization. Representing RPU at this forum was Mr. Steve Cook, a senior electrical engineer, with 25 years of experience in design and operation of distribution systems.

He presented information about RPU’s electric system, distribution planning process, and the current status of grid modernization at RPU.

Also presented was information on what RPU considers to be some of the benefits and challenges of distribution grid modernization. RPU stressed that as a municipally-owned and operated electric system, RPU is very sensitive to the reliability of its system and the potential impact of investing tens of millions of dollars in grid modernization technology, without seeing a positive benefit to the majority of our customers from a reliability or rate perspective.

The other utility presenters represented Xcel Energy, Ottertail Power, Minnesota Power, GRE (Generation and Transmission Co-op), and Dakota Electric Association. Based on the presentation it appears that the major utilities in the state are currently in similar status with implementing distribution grid modernization features. Some of the utilities had installed limited remote switches with command and control features controlled from their system operations center in parts of their system, and others might have been further down the path of automated meter reading. As a group, the utility presenters expressed a concern about the costs of the systems on the distribution system and the benefit to the entire customer base.

After the utilities presentation portion there was time for the utility panel to answer questions from the other stakeholders at the event. RPU’s representative was an active participant on the utility panel and fielded several questions from the audience on distribution planning, design, and general operation.
The CapX2020 Hampton-Rochester-La Crosse transmission line project is celebrating another major milestone. On September 15, 90 miles of high-voltage transmission line was energized between Pine Island, Minnesota, and Holmen, Wisconsin.

“The completed lines will allow for continued reliable electric service in Minnesota and Wisconsin, including the growing Rochester area,” says Grant Stevenson, Senior Project Manager for Xcel Energy. “The transmission lines will also provide new outlets for renewable energy.”

The newly energized segment includes 40 miles of 345 kilovolt (kV) transmission line in Minnesota stretching from Pine Island to the Mississippi River.

Structure setting is underway on the 161 kV transmission line running from the Chester Substation, located east of Rochester to Farmington Township, where the 161 kV line connects into the 345 kV line. Crews will continue setting structures and stringing conductor through December. Helicopters will be used at times for stringing and attaching components.

Work is also taking place on the final 345 kV segment between Pine Island and Hampton. The entire Hampton-Rochester-La Crosse project is scheduled to be energized in 2016.

As part of the CapX2020 work, Rochester Public Utilities expanded the Chester and Northern Hills Substations.

“It has been a pleasure to work with Rochester Public Utilities,” says Stevenson. “We have the same goal of bringing reliable electricity to customers now and in the future.”


One challenge in completing the 90-mile segment included moving a 542,000 pound transformer into the North Rochester Substation near Pine Island. Crews used a 385-foot trailer and three 600-horsepower trucks to make the move in the dead of winter. (See the top of this page for a photo of the delivery trailer.)
LAKE ZUMBRO DRAWDOWN

The annual drawdown of Lake Zumbro is scheduled to begin November 1. The drawdown is necessary for planned maintenance and shoreline restoration work. This schedule is subject to change depending on weather and preliminary engineering work for the Lake Zumbro dredging project. RPU's drawdown plan is as follows:

- On Sunday, November 1, start the gradual drawdown from summer pool elevation 914.5 MSL and continue releasing water until a target elevation of 911.5 MSL is achieved.
- Maintain the lake level at or about 911.5 from November 7 thru Sunday, November 15.
- On Monday, November 16, the lake refilling will begin. The level will be slowly raised back up to normal winter pool at a rate no more than 0.5 feet per day while maintaining a minimum release of 70 cfs. We anticipate a minimum of eight days will be required to raise the lake level to normal winter pool of 913.0 MSL to minimize the impact on downstream resources.

During the months of November through March, Rochester Public Utilities (RPU) will attempt to maintain the lake level at the winter pool level of 913.0.

Real-time lake level information, along with Lake Zumbro hydro updates, is available on the RPU website (www.rpu.org). For additional information regarding the Zumbro Hydroelectric Facility, please contact Tony Benson at 507.280.1534.

TIPS FOR LAKE ICE SAFETY

Be extremely careful during winter activities that involve Lake Zumbro, such as ice fishing, snowmobiling, or just walking out on the frozen lake. Here are some tips to keep in mind:

- Watch the weather and river flow conditions.
- Ice thickness and condition can vary greatly. Be very cautious.
- Look out for ice heaves and exposed logs and snags.
- Be cautious in the vicinity of the dam. De-icing equipment has been installed along the upstream face of the dam resulting in open water and/or thin ice.
- Do not proceed past the warning signs and buoys.
2015 “Be Bright” ENERGY STAR® LED Campaign

Be Bright this fall! Through December 31, while supplies last, our residential electric customers are eligible for reduced pricing on ENERGY STAR qualified LED light bulbs. We’ve partnered with Arrow Ace Hardware, Batteries + Bulbs, Home Depot, Hy-Vee, Lowes, Menards, Sam’s Club, Target, Walmart, and other participating retailers to offer discounted LED bulbs. ENERGY STAR-labeled LEDs use 80% less energy and last up to 25 times longer than incandescent light bulbs – but less watts doesn’t mean less light! LEDs produce bright light for less cost because they use less electricity and last longer than incandescent and compact fluorescent bulbs – saving time and money on replacements.

By replacing the five most used bulbs in your home with energy-efficient LEDs, you can save about $40 in energy costs during the first year alone. LEDs also produce less heat than incandescents – improving safety.

While these financial savings are a big draw, LEDs also offer environmental benefits to help make our community a little greener.

Remember, supplies are limited, so get your discounted LEDs before they sell out! (Visit www.rpu.org for the entire retailer list. Discounted LEDs purchased during this promotion are not eligible for our LED rebate program.)