

RPU Plugged In

There's more to outages
than meets the eye ...

Learn about what to do
before, during, and after a
power outage.



THERE'S MORE TO OUTAGES than Meets the Eye ...

We have already experienced a couple large power outages this spring – one because of snow accumulation and one because of a strong wind storm. Do you know what to do in times of a power outage?

Power outages can happen for any number of reasons, including overgrown vegetation, equipment failure, animals, auto accidents, and storms. We understand that it is an inconvenience for customers anytime the power goes out. Many RPU employees are also RPU customers, experiencing the same outages as you. In those times, all available resources are made available to address the outage immediately.

RPU's first and foremost concern during any outage regardless of size, is safety for customers, the community, and RPU employees. We will never compromise the safety of anyone to expedite power restoration.

Never go near a downed power line. Stay away from the area and contact RPU immediately at **507.280.9191**. Even if a power line looks like it is disconnected, it still can be energized and will cause severe injuries if contact is made with it.

Here are some simple tips to help you prepare for an outage:

- Keep flashlights and batteries available.
- Keep your cellphone charged if bad weather is approaching.
- If you have overhead service, regularly assess your trees and have a qualified/ licensed tree trimmer clear branches and limbs away from overhead lines.
- If you lose power, keep refrigerators and freezers closed to better maintain temperature inside.
- Install a battery backup on your sump pump.
- Keep RPU's outage number accessible (**507.280.9191**) and remember to call RPU to report your outage.
- Never go near a downed power line.

If your house is fed from overhead lines and there is possible storm damage to the line or connection into your home, you will need to take additional steps to safely have your power restored. Keep in mind, the electric service can get pulled down or dislocated from your house and still be working. There are parts of your electric service into your house that are your responsibility, as the homeowner, and there are components that RPU owns.

- If a line is down, regardless if it is working or not, it may require additional attention to ensure safety and proper service.
- Call RPU's outage line at **507.280.9191** to have a crew inspect your overhead service.
- If repair work is required, RPU will disconnect your service, and will then instruct you to have a licensed electrician make necessary repairs.
- Once the electrician has completed their work, they will notify a city electrical inspector to ensure the work was done properly.
- The inspector will then notify RPU for a reconnection.

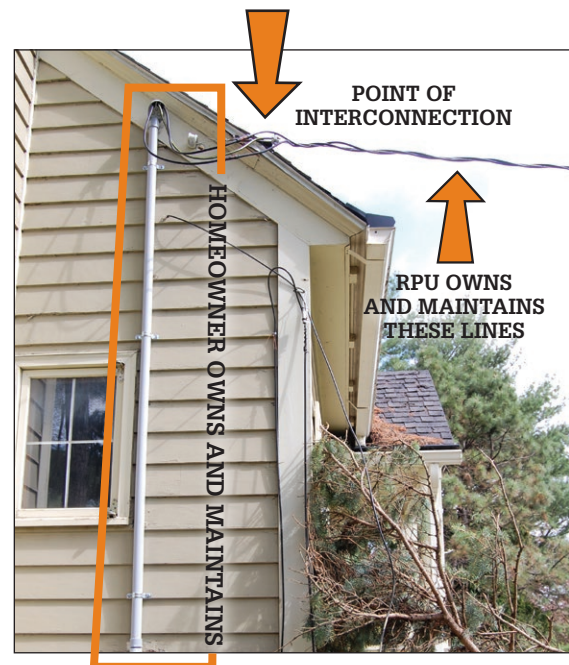
Your safety, along with the safety of our employees and community, are our priority.





Strong winds pulled the stack away from the house and caused tears in the service wire insulation. This is a dangerous hazard that requires a licensed electrician to fix (middle photo).

Two examples of overhead electric services that have been repaired by a licensed electrician, inspected by a city electrical inspector, and then reconnected by RPU (bottom photos).



Homeowner owns and is responsible for repair from point of interconnection into the home. RPU owns and maintains from that point back to the utility pole.

STAY UP-TO-DATE

The local media is an ally for us when the power goes out. As information is available, we try to keep in contact with the local media. We do our best to share causes, locations, and the number of customers affected by the outage, but sometimes confirming this information takes time and we do not want to provide misinformation.

Just as many media outlets follow RPU on Twitter @rpuoutages, customers are also welcome to stay informed as information during outages is available. Currently, more than 800 people are following RPU on Twitter.



Interested in Solar?

The Earth receives 170 gigawatts of power from the sun at any given instant. In one hour, this amount of sunlight is enough to power the world for one year! We have this immense power plant in the sky, necessary for life on this planet, and the fuel comes to us free of charge. It should make us ask, why don't we just use this for our energy needs? It's free, it's clean, and it works virtually everywhere. The equipment is robust, simple, and long lasting with a 25-year warranty on solar electric panels. Solar energy is compatible with the electric grid, and as grid infrastructure is updated over time, especially with renewables in mind, solar-derived electricity can help balance the grid. Solar production occurs when the grid needs it the most (hot summer days when air conditioning is at a maximum). It also does not require an investment in transmission lines because the energy is generally produced right where it is used. It can theoretically lead to a more reliable and secure grid because the power is distributed in a thousand small power plants rather than one or more large plants.

How Could This Work on Your Home or Business?

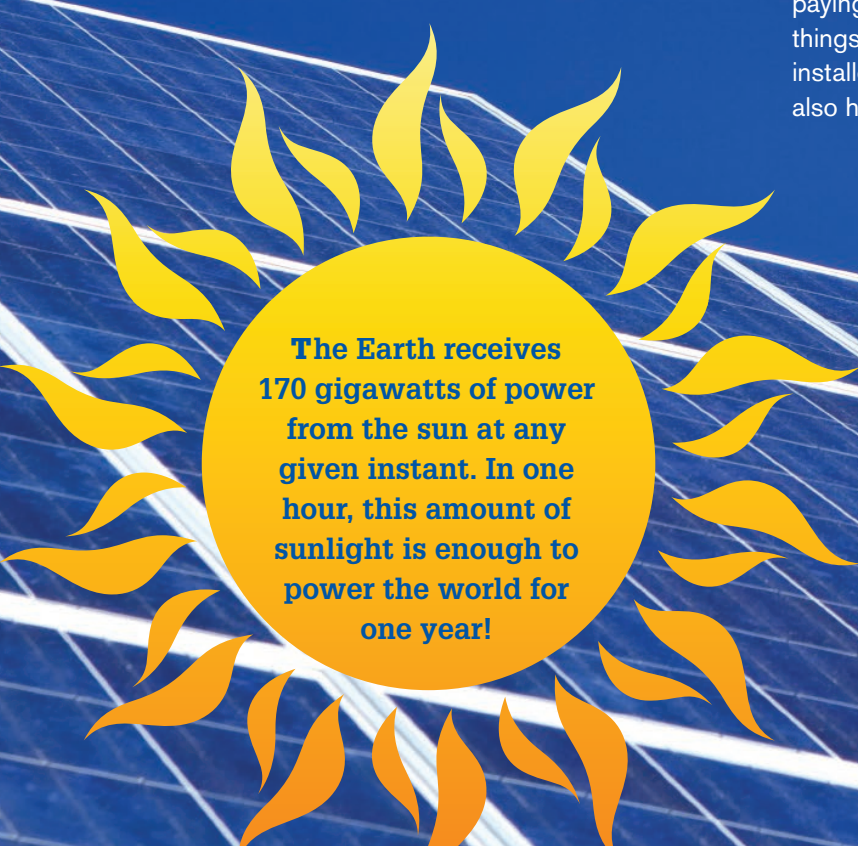
The first thing to do is make sure your energy usage is efficient. Just as you wouldn't put water into a bucket with a hole in it, you want to stop wasting energy before you add it. While there are a variety of sources for energy efficiency information, a great first step is a home energy audit. RPU offers these for a discount in conjunction with the Neighborhood Energy Challenge, a free and fun energy workshop (www.rpu.org/your-home/rebates-programs/energy-audits.html).

Below is a list of other websites with helpful information about solar energy.

- Rochester Public Utilities, www.rpu.org
- Cascade Meadow Wetlands and Environmental Science Center, www.cascademeadow.org
- MN Department of Commerce Energy, <http://mn.gov/commerce/energy/topics/clean-energy/Solar/>
- Department of Energy, <http://energy.gov/>

What about the Cost of Solar Energy Systems?

The up-front investment in equipment is more difficult than paying a monthly energy charge. Fortunately, there are a few things to help. There's a 30 percent tax credit on the full installed cost of systems. This is in place through 2016. RPU also has a rebate of \$1 per watt of system size, which works



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out to about 20-30 percent of the total system cost. There is a limited amount of funding from RPU available each year for solar. Businesses can also take advantage of accelerated depreciation. There is no Minnesota sales tax on solar installations or equipment, and systems are exempt from property tax (increases).

Generally residential systems will range from \$12,000 on the small end to \$40,000 on the large end. With the above incentives, the cost is approximately 50 percent of these costs. Payback times are generally in the 6-10 year range and can be a good long-term investment. Over the 25+ year system lifetime, a properly researched and installed system should pay for itself many times over. Not to mention it's good clean energy added to the grid!

Will Your Property Work for Solar?

South facing roofs are best, though southeast or southwest also work well. You also need a spot that is free of shade for the next few decades. If your roof has shade, even if it's just

the low winter sun, it may not be a good spot. Sometimes it's obvious just by looking that you have a good site. But if it's not, a solar professional can come and measure sun access on site. Most won't charge you for this, but always remember to shop around.

Solar energy systems are not for everyone and they do not work on every roof. But those who have a good site can have free energy for life if installed and researched properly. And finally, remember that whenever there's a huge spill of solar energy, it's just called a nice day!

Contributing to this article was Micah Johnson. Micah teaches the Community Education class sponsored by RPU on solar energy as well as conducts numerous speaking and guest lecturing engagements at area schools, fairs, and businesses. Micah is the operations manager at Solar Connection, a Rochester company that offers NABCEP certified solar energy design and installation. Solar Connection has installed hundreds of kilowatts of solar photovoltaics (PV) all over southeast MN. He is also a member of the southeast MN CERTs steering committee (Clean Energy Resource Teams) and is active in the MN Renewable Energy Society and the Rochester Area Builders, www.solarconnectioninc.com.

Call RPU to learn more about solar rebate funds available! 507.280.1500

Clearing Up the Confusion about the Storm Water and Wastewater Fees



ROCHESTER PUBLIC WORKS

201 4th St SE Rm 108
Mon-Fri 8:00am-5:00pm

STORMWATER MANAGEMENT
For more information visit:
www.rochesterstormwater.com

RESIDENTIAL WASTE WATER

4.92 Unit(s)

Waste Water Customer Charge

\$12.15

\$11.69

RESIDENTIAL WASTE WATER

\$23.10

RESIDENTIAL STORM WATER

Storm Water Utility Fee

Storm Water Customer Charge

\$3.18

\$3.00

RESIDENTIAL STORM WATER

\$6.18

Did you know that the storm water and waste water treatment fees on your monthly RPU bill are NOT RPU charges? Those services are actually the responsibility of the Rochester Public Works Department, which operates the storm water management practices, the sanitary sewer system, and the Water Reclamation Plant. However, to minimize overall costs for billing, postage, and customer service staffing for City services, RPU includes the billings for the storm water and waste water fees on the RPU bill, processes the payments received for these services, and answers basic inquiries about the amounts presented. RPU passes the funds collected through to Public Works.

Storm Water Fee

In 2003, the city of Rochester and more than 200 other entities received municipal storm water permits to address pollution associated with storm water. The permit establishes legal requirements about how storm water must be managed to protect our waterways. The City created a storm water utility and began collecting revenues in 2004. This monthly fee is charged to residential and non-residential owners of developed property to provide a funding source for storm water management to help protect people, property, aquatic habitats, and water quality in Rochester.

Residents pay \$6.18 per month and non-residential fees are variable depending on parcel size and amount of impervious surface.

The revenues are used to construct, operate, and maintain the storm water management system that collects, treats, and transports storm water away from neighborhoods and businesses into the Zumbro River as efficiently as possible.

For more information on the storm water fee or for more ideas on how to improve water quality, please visit www.rochesterstormwater.com.

Wastewater Treatment Fee

The fee has two parts. They are:

- A customer charge, which is a monthly fee for your connection into sanitary sewer system and for wastewater treatment. This year's fee is \$11.69 per month.
- A quantity charge is billed each month in billing units. Each billing unit represents a "CCF," which is 100 cubic feet of water or 748 gallons. The waste water units billed are based on the amount of water used during the month, with the following adjustment. For residential customers, the waste water quantity is capped at the average of your January through March water usages. This cap is applied so that you don't pay waste water fees on the water you might be using for irrigation of your lawn during the summer. You can find the waste water billed units just under the heading for Residential Waste Water as shown above.

The residential wastewater covers all costs of providing wastewater service, including construction of the facilities needed. You may have noticed an increase in the 2013 customer charge. Both the customer and quantity fees are rising about 7½ percent according to a six-year schedule approved by the City Council in 2010. The rate increases fund about \$70 million worth of improvements from an expansion and sewer extension project begun in 2007.

RPU collects the storm water fee and wastewater fee on the RPU bill, but passes those fees on to the Rochester Public Works Department.

Department of Commerce Warns of Salespeople Pitching Energy Savings from Radiant Barriers

Due diligence urged in seeking most cost-effective energy improvements

The Minnesota Department of Commerce, Division of Energy Resources has issued an alert to consumers who are considering the purchase of radiant barriers in their attics. The Commerce Department, which has received recent reports of salespeople pitching the radiant barrier product in flyers and at free dinners throughout Minnesota, warns consumers that radiant barriers are not a cost-effective way to reduce heating or cooling loads in Minnesota.

"Radiant barriers in attics may be valid for homes in southern states," says Commerce Commissioner Mike Rothman, "but they save very little energy in Minnesota homes."

Radiant barriers consist of a reflective film, usually aluminum, laid over the top of attic insulation in existing homes. They are sold as an energy-saving product, with claims of significant reductions in both heating and cooling costs. However, their potential benefit is primarily in reducing air-conditioning cooling loads in warm or hot climates and in buildings with little or no insulation.

A Radiant Barrier Fact Sheet compiled by the Oak Ridge National Laboratory for the U.S. Department of Energy shows that the benefits of radiant barriers decrease significantly as one travels north. In southern cities like Miami or Austin, radiant barriers could reduce one's utility bill by as much as \$150 per year using average residential electricity prices. But by the time you reach colder climate states such as Minnesota, where air-conditioning loads

are considerably less, savings drop to only \$10 to \$40 a year. If there are no ducts or air handlers in the attic, the savings are much less.

So, consumers need to be aware that with the price of installation for a radiant barrier at \$2,000 or more, with a savings of \$20 per year, it would take 100 years to pay back the investment. It is also important to note that radiant barrier products have negligible benefit in reducing heating costs. It is unlikely that most Minnesota consumers would realize any measurable energy savings from radiant barriers in attics.

"We strongly urge all consumers to be cautious, conduct due diligence, and explore other proven means to make their homes and businesses more energy efficient," says Rothman. "Don't be misled by 'deals' or 'pilot programs' available for a limited time only. Get input and bids from at least three contractors, and make sure those contractors are reputable."

The U.S. Department of Energy and the Minnesota Department of Commerce agree that, in Minnesota, implementing air sealing and adding conventional attic insulation would be considerably cheaper and much more effective for saving energy than installing a radiant barrier. In fact, as attic insulation levels increase, the potential benefits from a radiant barrier decrease. Getting a home energy assessment through your gas or electric utility is also encouraged as a first step to identifying cost-effective energy improvements.

For more information on insulation and other energy-efficient measures to improve your home, contact the Division of Energy Resources at **800.657.3710** or **651.296.5175** or visit <http://mn.gov/commerce/energy>. The website offers free downloadable home energy guides, including the "Home Envelope" consumer guide that includes information on energy efficiency and choosing a contractor.

Source: Minnesota Department of Commerce News Release.



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Utility Payment Arrangements Available for Military Service Personnel

When a household member has been ordered to active duty, for deployment or for a change of duty station, some customers may find it hard to pay their utility bills. Minnesota Law protects military personnel from shut-off if they cannot pay their bill in full. To qualify for this protection, you must enter into and keep reasonably current with one of the payment plans described below.

1. If your household income is below the state median household income, pay 10 percent of your household's gross monthly income toward your RPU bill.
2. If your household income is above the state median household income, make and keep a payment plan.
3. If you receive energy assistance, pay 10 percent of your household's gross monthly income toward your RPU bill.

The full statute description for Minnesota Statute 325E.028 can be found on the state of Minnesota website <https://www.revisor.mn.gov/pubs/>.

If you would like to sign up for payment arrangements or have questions regarding the Military Service Personnel Disconnection Law, please contact RPU customer service at **507.280.1500**.

RPU Service Center Holiday Hours

The RPU Service Center will be closed the following days.

**Thursday, July 4 in observance
of Independence Day**