

Norris Electric *News*

Your Touchstone Energy® Partner 

2016 Scholarships Awarded

Fifty-seven students applied for the 2016 scholarships offered by Norris Electric Cooperative. Paperwork was sent to all area high schools for seniors to complete. The forms were also available on the co-op website. A panel of judges reviewed the applications and with much difficulty narrowed down the list to three students.

Hunter Ingram, son of Holly and Robert Ingram of Lawrenceville, Rivet High School; Julie Gower, daughter of Steven and Tricia Gower of West Union, Hutsonville High School and Alexandria Kline, daughter of Terry and Rebecca Oldham of Newton, Newton Community High School each received a \$1,000 scholarship to further their education.

Keith McKinney, Co-op Manager said, "The employees and board members of Norris Electric Cooperative have always been involved in our local schools and communities. We live here too, and like our members, have a vested interest in the future of our children. These scholarships are just a small way we can help make a difference for students like Alexandria, Hunter and Julie."

Congratulations to all area graduates!

Boerngen awarded IEC Memorial Scholarship

Faith Boerngen, daughter of Jennifer Boerngen of Dieterich was recently named the recipient of the Thomas H. Moore IEC



Memorial Scholarship awarded annually. Boerngen, a graduate of Dieterich High School, plans to pursue a degree in nursing from Lake Land College and then continue on to Southern Illinois University – Edwardsville to receive her bachelor's degree.

The IEC Memorial Scholarship Fund was established in January 1994, by the Board of Directors of the Association of Illinois Electric Cooperatives (AIEC) to provide financial assistance to deserving students in the "electric cooperative family."

The "driving force" behind the creation of the fund was Thomas H. Moore, long-time Executive Vice President and General Manager of the AIEC. Moore strongly believed in

the scholarship program and, upon his death in 2008, the fund was named in his honor.

The fund awards ten \$2,000 scholarships each year which must be used for education costs to attend two- or four-year institutions and technical schools. Scholarships are based on grade point average, college entrance test scores, work and volunteer experience, participation in school and community activities, and a biographical statement and knowledge of electric cooperatives.

Eligible students can contact his/her local electric cooperative office for information and a scholarship application. The deadline to apply is December 31, 2016.

Solar Effect on Norris Electric System

Last month we talked about how electric rates work. Specifically, how Norris Electric is charged for power through a demand charge (kW) and an energy charge (kWh). And, in turn, we talked about how our members are charged for electricity from Norris.

We talked in detail about the different components of your bill including the basic facilities charge, the kilowatt-hour (kWh) charge for residential members, and the demand charge (kW) for our large power members.

If you recall, Norris has a summer peaking load from 4 p.m. to 9 p.m. and a winter peaking load that is typically from 4 p.m. to 9 p.m., but can occasionally occur from 6 a.m. to 9 a.m. on very cold winter mornings. The peak demand periods in the summer are typically when air conditioners are working the hardest.

So how does renewable energy fit into the load profile of Norris Electric? There are different types of

renewable energy including solar and wind generation. We are going to talk about solar in more detail since it is the most common type of renewable energy in our area.

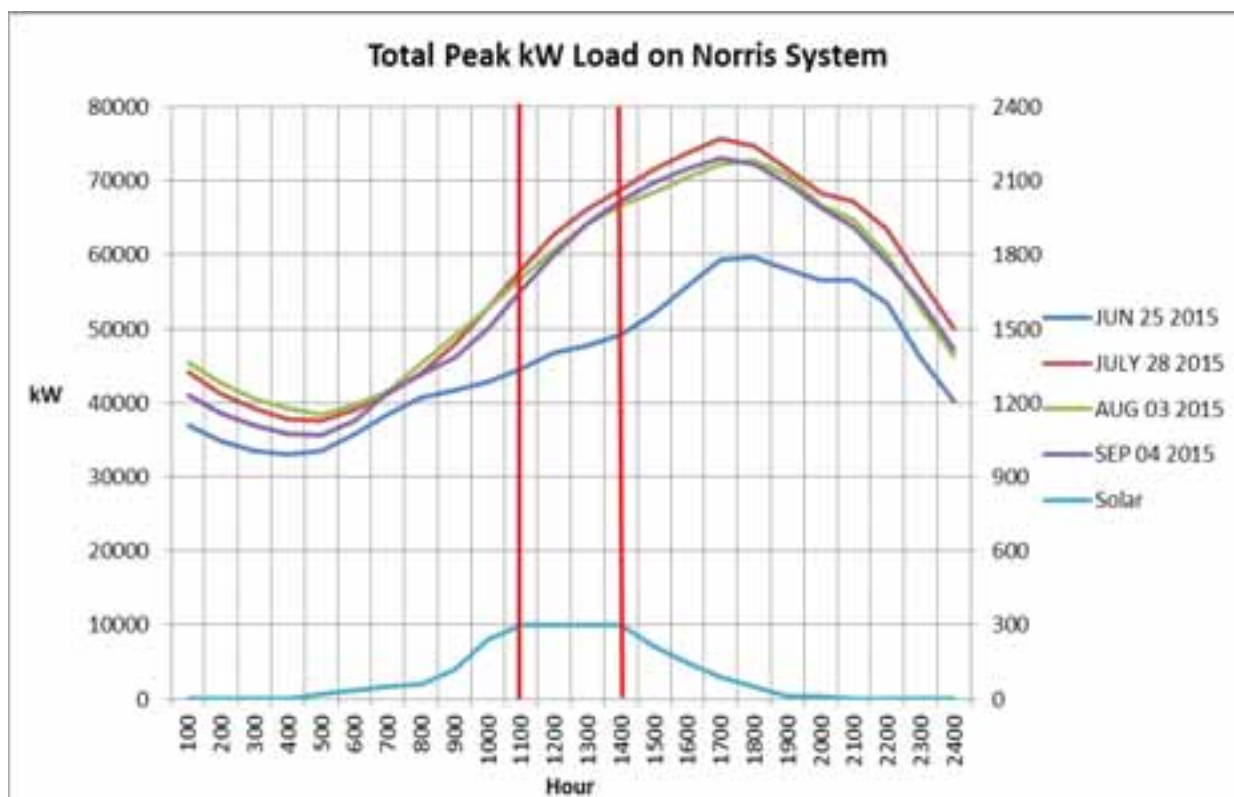
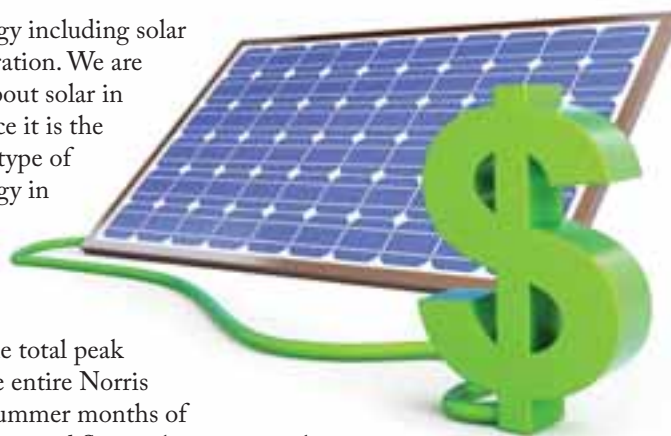
Solar Profile

The chart below shows the total peak kW load on the entire Norris system in the summer months of June, July, August, and September 2015. The peak load in these months occurs around the 5 p.m. hour and Norris is charged for that peak kW demand. The curves are similar in shape for those four months.

The solar load at the bottom of the graph shows a typical solar load profile. The red vertical lines represent the window of time during the day a typical south-facing solar system reaches its peak production. The blue line shows the power produced during the day starting with a little production after 8 a.m.,

reaching the peak from 11 a.m. – 2 p.m. and production declining to close to zero around 5 p.m.

The solar system is producing kilowatt-hours during that approximate 9 hour timeframe, producing the most from 11 a.m. – 2 p.m. So Norris is not charged for as many kWhs and the member is benefitting from reduced kWh charges from Norris during those hours.



What is the solar system doing to reduce demand on the Norris system?

In reality, little to nothing. The solar system is not producing during the times of peak demand for Norris.

What can be done to help reduce peak system demand?

We talked about some basic ideas to help reduce demand last month. Here are some additional ideas that could help reduce peak system demand:

- A typical solar system faces south to take advantage of the opportunity for most kilowatt-hours produced. Recent developments in solar system design show a hybrid design of some panels facing south-east and/or south-west to compliment the traditional south facing systems to lengthen the load profile output. The system may produce a few less kilowatt-hours but can help reduce the peak demand on a utility system.
- Battery storage is also a developing technology that could help reduce peak demand. Being able to store the energy produced

from peak output and releasing that stored up energy during peak hours could be very beneficial to reduce peak demand.

- Technology in the home could also be beneficial including smart thermostats such as the NEST learning thermostat and other learning devices that do not allow major appliances such as an electric water heater to run during peak demand periods.
- Smart appliances would also be beneficial to reduce demand. Some dishwashers already have a timer built in to delay running for a set amount of time where you can delay it for two or four hours when you go to bed so it runs during the night. Some clothes dryers also have a similar timer. As we talked last month, simply avoiding using larger appliances during peak times can also help reduce demand.

Why are we talking about renewable energy and the affect it has on the load profile of Norris?

Norris Electric promotes renewable energy by giving the

member a one-to-one credit for the energy they produce. We think that is a very fair policy to promote renewables. We also try to educate members on renewable energy and this series of articles is part of our educational campaign.

We have seen a considerable increase in solar installations in our area the last three years and we think that trend will continue with the 30 percent federal tax credit being extended through 2021.

We also wanted to inform our members we are considering a renewable energy rate which would include a demand charge. We will make every effort to make this as fair as possible to all our members, whether they have renewable energy or not.

Please contact our office if you have any questions about renewable energy at 877-783-8765.



2015 Capital Credits Allocations Statements

As a not-for-profit cooperative, Norris Electric is owned by the member-consumers we serve. When you pay your electric bill, you are accumulating equity in your cooperative. One of the benefits of belonging to a cooperative is that any monies left over after expenses are paid are allocated back to the members in the form of capital credits according to your usage.

If you received electric service from Norris Electric in 2015, you will receive a card in the

mail which shows the amount being allocated to your capital credit account. This is not a charge you owe nor can it be used to pay your electric bill. It is a statement of your equity in Norris Electric Cooperative for the year 2015.

Capital credits will be returned to the members when Norris Electric Cooperative's Board of Directors decides that the co-op is strong enough financially to do so. This notice is for our members' information only and does not require any action on their part.

Great discounts when you use your Co-op Connection Card!

Here are just a few:

Bike & Hike, Effingham, IL
5% off in stock items. \$20 off bike tune ups.
Excludes fitness equipment.

Camp Lakewood Campground, Effingham, IL
10% off

Growing Green Lawn Care, Lawrenceville, IL
5% discount for all Norris Electric members. 10% discount on all new customers.

Kiefer Landscaping LLC, Effingham, IL
10% off all retail products. Not valid with any other offer.

Kuhl's Trailer Sales, Inc., Ingraham, IL
10% off RV parts & accessories. Not valid with other offers.

Meadowview Golf Course, Mattoon, IL
Buy (1) 18-hole green fee and cart, receive a free small bucket of range balls

As a Norris Electric Member, make sure to use your free Co-op Connections Card for discounts and valuable offers at local businesses and national retailers for those everyday purchases and gifts. Go online to search for local and national deals by zip code or by category at www.connections.coop.

Need a New Card? Contact us at 1-877-783-8765



Get the latest updates and happenings at Norris Electric.



Energy Efficiency Tip of the Month



Use small electric pans, toaster ovens or convection ovens for small meals rather than your stove or oven. A toaster or convection oven uses one-third to one-half as much energy as a full-sized oven.

Source: energy.gov