



Johnson Corner Solar Project  
Ready. Set. Go.

November. In Kansas that can mean frigid temperatures or a heat wave, sometimes within the same 24 hours. While the temperatures are erratic, in southwest Kansas the sun delivers approximately 50 more days of sunshine than the natural average<sup>1</sup>, making this area of the state the chosen location for the Sunflower system’s first solar array.

Enjoying both warm fall days and harbingers of winter, in early November workers began the construction of the Johnson Corner Solar Project, a 20-megawatt solar facility located approximately 2 miles southwest of Johnson City, Kan. Working through Mid-Kansas Electric Company Inc., Sunflower signed a 25-year power purchase agreement with Lightsource BP, an independent power producer to finance, build, own and operate the solar facility.

The project groundbreaking was held in June, and construction was originally scheduled to begin in September.

“With the strong increase in solar projects in the US in 2019, the equipment supply chains for modules and inverters are strained, which has caused some delays in equipment delivery dates,” said Kevin Christy, COO of North America for Lightsource. “Lightsource BP decided to delay the start of construction on site for a short period to accommodate equipment delivery dates that were later than the original schedule. Construction is now in full swing with commercial operation planned for early in the second quarter of 2020.”

Once energized, the facility will produce approximately 55,500 megawatt hours annually, comprising one percent of the Mid-Kansas and Sunflower combined-system’s energy.

“The Johnson Corner Solar Project will produce energy year round but especially during our summer-peaking hours,” said Corey Linville, vice president, power supply and delivery for Mid-Kansas and Sunflower. “In addition, locating the solar project at a current substation will reduce loading on an area transmission line and alleviate expensive upgrades. It’s a win-win for our Members and those they serve.”

Source:  
<sup>1</sup><https://www.bestplaces.net/climate/city/kansas/johnson-city>



Above: Crews from Sunflower and Pioneer Electric Cooperative work together as they upgrade the line with new insulators south of the Johnson Corner Substation on Nov. 14, 2019, in Stanton County. The line voltage will be upgraded from 69 kV to 115 kV.

Left: Sunflower’s Chad Dockter, left, Joshua Unruh, center, and Tyler Norris, right, inspect the Johnson Corner Substation on Nov. 5, 2019, as they prepare for the solar farm interconnection.

Below: Ground work continues on Nov. 6, 2019, at the site of the future Johnson Corner Solar Project near Johnson City, Kan.



INSIDE  
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ISSUE

#PassTheRURALAct

“While there may not be broad agreement on issues like tax rates, there is strong agreement on the value electric cooperatives provide their members and their place in the tax code.”

—Rep. Adrian Smith, R-Neb., RURAL Act lead sponsor



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# Protecting the Bulk Electric System: it's a big deal

## Sunflower staff completes NERC audit to assess compliance program

Sunflower recently completed the 2019 North American Electric Reliability Corporation (NERC) audit. It's a big deal, one for which staff have been preparing for months. Actually, every day Sunflower staff are preparing for the next audit because the NERC audit examines how Sunflower plans, operates, and protects the bulk electric system (BES) on a daily basis.

In an industry filled with abbreviations and acronyms, the NERC compliance process added even more abbreviations and acronyms, so it's no wonder that not everyone understands what a NERC audit entails.

### First, the "players."

The Federal Energy Regulatory Commission (FERC) is an independent regulatory agency whose five members are appointed by the President and confirmed by the Senate. Congress granted FERC authority to regulate the interstate transmission of electricity, natural gas, and oil.<sup>1</sup>

As part of the response to the Northeast Blackout of 2003, the Energy Policy Act of 2005 significantly changed FERC's role in the electric market, giving it more authority to protect the reliability and security of the BES through the establishment and enforcement of mandatory standards. It also required FERC to designate an independent oversight body as an Electric Reliability Organization (ERO).<sup>2</sup>

FERC then certified the NERC, a not-for-profit international regulatory authority, as the ERO. NERC's jurisdiction includes users, owners, and operators of the North American BES, which serves more than 334 million people.<sup>2</sup>

NERC was tasked with developing standards and enforcing compliance standards for the BES. NERC develops and enforces the standards, which are subject to approval by FERC. To successfully implement the standards, NERC delegates some of the ERO functions to six Regional Entities in the U.S.<sup>2</sup>

Periodic audits (at least every three years for transmission operators) are conducted by the Regional Entities that report to NERC. Sunflower and Mid-Kansas belong to the Midwest Reliability Organization (MRO), which is headquartered in St. Paul, MN, and has jurisdiction in all or parts of 17 states, as well as two Canadian provinces.<sup>2</sup>

### Next, the rules.

NERC's mission is to reduce risks to the reliability and security of the BES to ensure that the BES is fortified against uncontrolled outages. NERC has developed Reliability Standards for asset-owning and/or operating generation and transmission electric utilities, as well as larger electric

distribution systems. These standards define, direct, and measure the protocol for planning, operating, and protecting the BES. The standards developed by NERC include Critical Infrastructure Protection (CIP), Emergency Preparedness and Operations (EOP), Facilities Design, Connections, and Maintenance (FAC), and Protection and Control (PRC).<sup>3</sup> If electric entities do not meet required standards (which vary according to how they are registered), they face the possibility of fines and other mitigation requirements.<sup>1</sup>

During September and October, MRO conducted both on-site and off-site audits to assess Sunflower's protocols and practices for Critical Infrastructure Protection (CIP) and Operations and Planning (O&P). CIP standards regulate how electric utilities prepare for cyber and physical threats to the BES, and O&P standards regulate how the BES is planned and operated.

Sunflower's 2019 NERC audit spanned three weeks, during which time MRO staff interviewed Sunflower's subject matter experts (SMEs) and reviewed previously submitted documentation. Sunflower performed well, and the auditors generally praised Sunflower's compliance program, SMEs, and corporate culture of compliance.

The MRO classified its findings as No-Finding, Potential Non-Compliance, and Area of Concern. Audit results will be sent to MRO's Risk Assessment Mitigation (RAM) Team, who will independently review the audit results and seek feedback from Sunflower staff.



### And the "winner" is...

Although the audit process has participants and rules to follow, it's not a game. The participants are not competing against each other. They are, in fact, on the same team and have the same goal: to ensure the BES can deliver reliable electricity to consumers at the end of the line.

"While it's probably safe to say that no one relishes an audit of any kind, the NERC audit is an important way to make sure the standards for planning, operating, and protecting the BES are met by electric utilities across North America," said Paul Mehlhaff, Sunflower's manager of Corporate Compliance. It's just another way that Sunflower and Mid-Kansas are responsible to our members and the thousands of Kansans they serve."

Sources:

<sup>1</sup><https://www.ferc.gov>

<sup>2</sup><https://www.nerc.com>

<sup>3</sup><https://blog.rsisecurity.com/how-to-achieve-nerc-cip-compliance/>

# Winter Driving

70% of the nation's roads are located in snowy regions. Avoid driving during winter storms unless it is absolutely necessary. If you must travel, here are tips to better protect your family, your vehicle and yourself.

- Get wipers replaced as soon as they show signs of wear.
- Remove ice and snow from all windows, mirrors and lights.
- Check tires. Good winter tires can shorten braking distance by as much as **25%**.
- Keep a survival kit (include a flashlight, blanket, water, shovel and windshield scraper).
- Check washer fluid and oil levels.

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## SUNFLOWER ELECTRIC POWER CORPORATION

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# Holistic Integrated Tariff Team makes recommendations to SPP

Sunflower Electric Power Corporation and Mid-Kansas Electric Company not only provide wholesale generation and transmission services to our six member-owners, but we are also actively engaged at the state, regional, and federal levels to promote policies that are in the best interest of their members-owners. One area of high involvement by Sunflower and Mid-Kansas are the working groups and committees at the Southwest Power Pool (SPP), the regional transmission organization to which Sunflower and Mid-Kansas belong.

The SPP is a member-owned organization that oversees the bulk electric system (BES) and wholesale power market in fourteen states across 546,000 square miles. Basically, SPP acts as the “air traffic controller” of the power grid by ensuring that power gets to customers and by eliminating power shortages. In addition to facilitating the Integrated Marketplace in which generation is bought and sold, SPP also develops transmission upgrade plans and designs tariffs so that utilities are adequately compensated for use by others of their transmission assets.

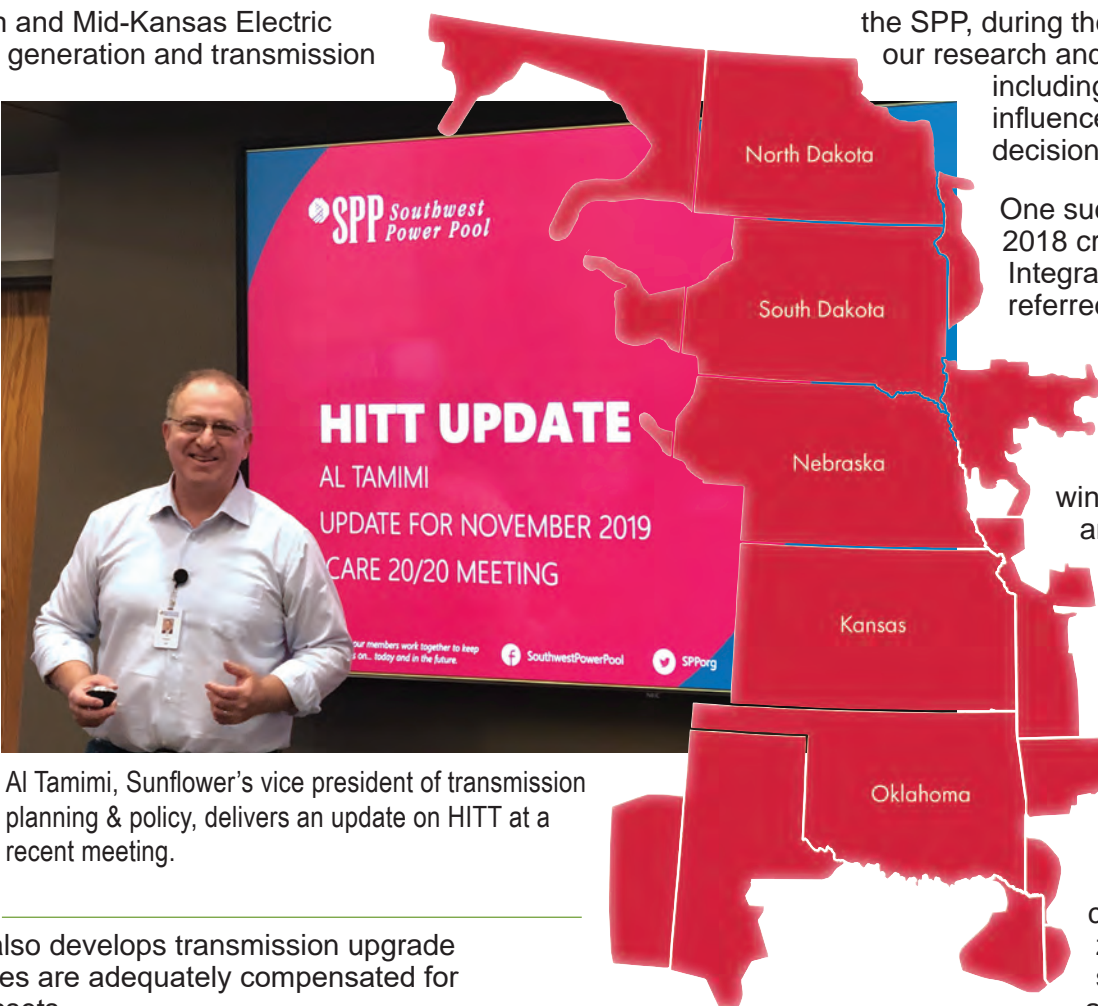
SPP has 99 members that include a diverse group of electric utilities, such as electric cooperatives, investor-owned utilities, municipal systems, and independent power producers. SPP’s members appoint their staff to participate in SPP’s many working groups and task forces that analyze and develop solutions for various matters.

Because the issues are complex and the outcomes are very important to rate payers at the end of the line, staff representing Sunflower and Mid-Kansas have continued to be active in SPP’s working groups. Recently, effort has gone into convincing the SPP board and membership that the current transmission cost allocation method negatively affects rate payers in wind rich areas like that of Sunflower and Mid-Kansas. Cost causation principles (in essence, the utilities needing/causing and using transmission upgrades or build outs should bear the majority of the transmission costs) need to be followed.

While Sunflower and Mid-Kansas are two of the smaller electric utilities in

the SPP, during the course of several years, our research and consistent interaction—including 22 presentations—have influenced a number of policy decisions at SPP.

One such example is the March 2018 creation of the Holistic Integrated Tariff Team, also referred to as HITT, to take a holistic look at many issues challenging the SPP region with a special emphasis on transmission cost allocation practices in wind-rich zones like Sunflower and Mid-Kansas. In July, the HITT delivered 21 recommendations that will be assigned to SPP’s committees and working groups for consideration. Included in the HITT report are recommendations to establish local planning criteria and create new larger pricing zones, two issues on which staff representing Sunflower and Mid-Kansas have been leading and actively involved.



Al Tamimi, Sunflower’s vice president of transmission planning & policy, delivers an update on HITT at a recent meeting.

“The electric industry is changing faster than ever before, and it’s up to us to stay on top of those changes for the sake of our members,” said Al Tamimi, vice president of transmission planning and policy at Sunflower and Mid-Kansas. “The influx of wind and other renewables in the region and the implementation of the Integrated Market have changed the dynamics of the SPP system. When we saw that the current tariff approach disproportionately impacts electric consumers in wind rich areas, we felt compelled to address the issue and encourage a reform.”

Although more work has yet to be accomplished for full implementation of the HITT’s recommendations, the committee’s recent recommendations indicate that justification by Sunflower and Mid-Kansas for a different cost allocation method has been heard by the SPP board and members. That’s good news for our members and the thousands of Kansans they serve.



## IT MATTERS Use your voice to protect tax exempt status of your co-op

Electric co-ops throughout the nation are in danger of losing their tax-exempt status due to an unintended consequence of the 2017 Tax Cuts and Jobs Act passed by Congress. That bill redefined government grants to co-ops as “non-member” income.

That’s a problem because, under federal tax law, at least 85% of a co-op’s revenue must come from its consumer-members. Before the change, government grants were considered capital.

Co-ops now risk their tax-exempt

status if they accept grants from local, state or federal governments to restore power after a natural disaster, bring broadband service to rural communities, invest in local economic development projects or create energy efficiency programs.

The RURAL Act, a bipartisan bill that would allow co-ops to once again accept grants without losing their status, would fix this issue.

Co-op leaders, consumer-members and NRECA have mounted a full-scale campaign to gain support for the RURAL

Act since it was introduced in Congress in April. Unless Congress passes the RURAL Act, co-ops may be forced to pay the new tax by raising rates for their consumer-members, many of whom live in high-poverty areas.

Cooperative members are encouraged to contact their members of Congress to let them know the importance of passing the RURAL Act.

It’s fast. It’s easy. It can make a difference. Visit [action.coop/register-composeletters/1399/](http://action.coop/register-composeletters/1399/).

Source: [www.cooperative.com](http://www.cooperative.com)

*Our Mission: To provide reliable, long-term power supply and transmission services to our member-owners and the people they serve at the lowest possible cost consistent with sound business and cooperative principles.*



**Mid-Kansas**  
ELECTRIC COMPANY, INC

neighbors serving neighbors





The Current is published three times per year for the member systems, friends and employees of Sunflower Electric Power Corporation and Mid-Kansas Electric Company. If you have a story idea or would like to subscribe, please send an email to [chertel@sunflower.net](mailto:chertel@sunflower.net) or write to The Current News, PO Box 1020, Hays, KS 67601; (785) 259-4822.

## Member Memo

# Three Gift Ideas for Your Favorite Energy Nerd

The holiday season is the time for gift giving, but knowing what to get your loved ones isn't always easy. Below are gift ideas that are perfect for the energy nerd in your life! The costs range from \$25 to \$100, so there's something for everyone.

### Kill A Watt Meter

The Kill A Watt meter allows you to monitor how much energy your appliances are using. By simply plugging in the meter between the appliance and the power outlet, the device can display the energy use in either volts, amps, watts or Hertz. The large monitor clearly shows the electricity use depending on the type of units you choose. The Kill A Watt meter can also calculate cumulative electricity expenses by day, week, month or year, which can help you to plan ahead. This device is perfect to test the efficiency of older appliances, as well as new, efficient appliances to make sure they're meeting the energy savings that they promise.

### ENERGY STAR-Certified Sound Bar

Imagine listening to great sound while watching television, but also using less energy when doing so. This is what an ENERGY STAR-certified sound bar can provide. The ENERGY STAR-certified sound bar uses about 70% less electricity than regular sound bars, which saves energy and money. They include volume-leveling technology to ensure that commercials are not louder than the actual shows you're watching, and these lower volumes also save energy. Sound bars create a three-dimensional surround-sound effect, reducing the need for multiple speakers around the room, which also contributes to less energy use.

### Smart Power Strip

Power strips allow you to increase the number of outlets in your home, but unlike a normal power strip, smart power strips help to reduce "vampire power"—this is the energy used by electronics even when they're in standby mode.

The great thing about the smart power strip is that you can leave all your electronics plugged in without having to worry about them using standby power because the smart power strip shuts off electricity to those devices when they are in standby mode. This can help you save a significant amount of money over the year, and depending on your home, you can potentially save 10% to 20% of your home energy consumption.

There are three types of outlets in the smart power strip. The first is the "always on" socket, which is meant for things like Wi-Fi or a cable modem; the second is the "main" socket, which is meant for televisions or computers; and the final is the "secondary" socket, which should be connected to electronics like printers, speakers or gaming consoles.

Items can be purchased for approximately \$20 to \$30 at local retailers.

Source: NRECA's Straight Talk, Dec. 2019

# SPOTLIGHT ON COOPERATIVE CAREERS

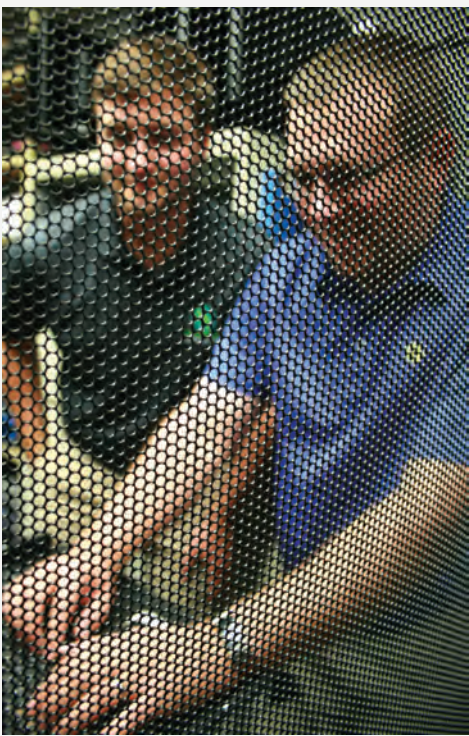


## Engineer

*"I find it rewarding to work with a great group of people in an environment that allows for creative problem solving."*

– Ryan Yokley,  
Senior Strategy Planning Engineer

An engineer's main purpose is to provide analysis, support, and expertise achieving the lowest cost, most reliable, and environmentally sound electric transmission and distribution possible.



## Computer Systems Technician

The responsibility of a computer systems technician is to support users, maintenance, modification, installation, testing, and implementation of new or existing computer hardware, network equipment, and software.

*"Sunflower is a great place to work. The job is challenging and allows me to work with the latest technology. The work environment provides opportunities for learning and growth."*

– Ernie Pfeifer,  
Computer Systems Administrator

## OUR MEMBER-OWNERS

