BUTTE ELECTRIC JULY 2023 VOL. 24 NO. 3

A Touchstone Energy® Cooperative

CCOPERATIVE CONNECTIONS

Power on Wheels

Solar Power Education Pages 8-9

Flipping the Switch Pages 12-13

Members of Sioux Valley Energy's Beneficial Electrification Department install panels on a 50 kW community solar array at the Sioux Valley Energy Colman office.

We're Here to Serve You



Matt Sleep CEO

"We're here to serve you." We've all heard this phrase countless times. These words may sound generic, but to us – your local electric cooperative – they mean everything.

In 1940, a group of ranchers around the Newell area came together to form Butte Electric Cooperative for the common good. We began constructing 400 miles of electric transmission and distribution line, bringing electricity to townships in Butte, Lawrence, and Meade counties. In doing so, Butte Electric helped these communities thrive. That mission-focused heritage is the golden thread that is woven throughout our history.

Today, we continue to power our communities serving 5,493 members with 1,399 miles of transmission and distribution line.

While our focus has remained steady on providing reliable energy to our members, today's energy landscape and consumer expectations are far different than they were decades ago. We're adapting to keep pace with changing technology, evolving needs, and new expectations.

As your trusted energy advisor, we want to help you save energy (and money) and provide advice and information on various energy topics. For example, if you're looking to save energy, check out www.butteelectric.com/together-we-save for energy-saving tips and ideas to increase your home's energy efficiency. Consider scheduling a free energy audit with one of our energy experts to identify ways you can save energy at home. Understanding how your home uses energy can help determine the best ways to modify energy use and keep more money in your wallet.

If you're considering a rooftop solar installation, our energy advisors would be happy to give you an unbiased view of the pros and cons. Investing in a solar system is a big decision, and it's important to fully understand the costs, responsibilities, and potential energy savings. We can look at your home's interval usage data and help you determine the best-sized solar system for your home to help you avoid overpaying. We understand that homeowners must undertake their due diligence, and Butte Electric is here to help you through that process.

On a similar note, electric vehicles (EVs) are gaining popularity in our area, and we recognize that many members may be considering one of their own. Butte Electric provides information about EV charging and electrical requirements so you can make informed decisions about EVs. We provide a candid assessment of residential and business charging requirements for all types of EVs. Butte Electric also offers a special time-of-use rate to save on EV charging and avoid putting additional stress on the electric grid. No matter what our members drive, we want to help you achieve optimal energy savings.

ELECTRIC VEHICLE CHARGING RATE



So, the next time you hear us use the phrase "we're here to serve you," we hope you know we mean it. Serving our members is ingrained into who we are. We continue to evolve with the times, and in return, we've found additional ways to serve you and help power your life.

We're here whenever you need us. Connect with us online, in person, through the SmartHub app, or through our social media channels. However you choose to connect, please let us know how we can serve you better.

COOPERATIVE CONNECTIONS



(ISSN 1531-1031)

Board of Directors

Cris Miller, Spearfish – President Dan Marrs, Whitewood – Vice President Thomas Brunner, Nisland – Secretary James Mortenson, Spearfish – Asst. Secretary Travis Schenk, Spearfish – Treasurer Daniel Hefner, Whitewood Chandy Olson, St. Onge Steve Smeenk, Newell Paul Winkler, Newell

Office Personnel

Matt Sleep - Chief Executive Officer Kim Wince - Chief Financial Officer Laine Mitchell - Communications Director Lee Ann Gaer - Staff Accountant Angie Alexander - Administrative Assistant Heather McCann - Member Services

Operations Personnel

Brett Fosheim - Chief Operations Officer Bart McLellan - Spearfish Operations Manager Chuck Even - Sturgis Operations Manager Craig Douthit - Work Order Clerk Adam Zvorak - Foreman leff Hughes - Foreman James Gyles - Foreman Lineman: John Branham Jacob Breidenbach Mike Davis Corev Hines Kyle Nudd Dave Pietz Elliot Rayman Dalton Steiger Adam Willuweit

Butte Electric Beacon Cooperative Connections is the monthly publication for the members of Butte Electric Cooperative, Inc., PO Box 137, Newell, SD 57760. Families subscribe to Cooperative Connections as part of their electric cooperative membership. Cooperative Connections' purpose is to provied reliable, helpful information to electric cooperative members on electric cooperative matters and better rural living.

Subscription information: Cooperative members devote 50 cents from their monthly electric payments for a subscription. Non-member subscriptions are available for \$12 annually. Periodicals postage paid at City, SD 57427.

Postmaster: Please send address changes to Butte Electric Beacon, PO Box 137, Newell, SD 57760; telephone (605) 456-2494; fax (605) 456-2496; email butte@butteelectric.com

This institution is an equal opportunity provider and employer.

THREE WAYS TO BEAT THE HEAT AND SAVE ENERGY

Lower your electric bills this summer without sacrificing comfort.

This time of year, members usually see their electric bills rise with the temperature due to the increased use of their air conditioning systems. Many people work their systems harder than necessary, throwing hard-earned money down the drain. Save money during these hot summer months by using energy more efficiently. On average, air conditioning systems can account for 40 to 50 percent of your monthly power bill during the hottest months of the year. Ultimately, only you can control the amount of energy you use. A few simple, free steps can help you take charge of your energy consumption and save you money.

1. TURN ON THE FAN

Use ceiling fans to disperse cool air. They can make rooms feel a few degrees cooler than they actually are, allowing you to keep your thermostat at a higher temperature. You can save up to 4 percent of your household energy consumption for each degree you raise your thermostat. Be sure to turn off fans when you leave a room.

2. WAIT ON HOUSEHOLD CHORES

Delay heat-producing activities – such as dishwashing and laundry – until evening. These appliances heat your home, creating extra work for your air conditioner.

3. CLOSE THE BLINDS

Keep blinds and curtains closed during the day, especially for east- and west-facing windows. At night, open windows across from one another for cross-ventilation.

Summer is hot enough already. Make your power bill one less thing to sweat about!

Energy Efficiency

TIP OF THE MONTH

Summer is a prime opportunity to enjoy the great outdoors. To reduce home energy use, avoid using your oven and use a grill instead. Not only will cooking outdoors eliminate the electricity used to power the stove, but it will also avoid raising the temperature inside your home, reducing the need for air conditioning or cooling.

You can also avoid using the oven with tasty no-bake recipes. Get creative in the kitchen (or the backyard) and find new ways to save energy!

Source: energy.gov

Fireworks Safety Tips

Summer is synonymous with barbecues, parades and fireworks. The National Safety Council advises everyone to enjoy fireworks at public displays conducted by professionals, and not to use any fireworks at home. They may be legal but they are not safe.

In 2017, eight people died and over 12,000 were injured badly enough to require medical treatment after fireworksrelated incidents. Of these, 50% of the injuries were to children and young adults under age 20. Over two-thirds (67%) of injuries took place from June 16 to July 16. And while the majority of these incidents were due to amateurs attempting to use professional-grade, homemade or other illegal fireworks or explosives, an estimated 1,200 injuries were from less powerful devices like small firecrackers and sparklers.

Additionally, fireworks start an average of 18,500 fires each year, including 1,300 structure fires, 300 vehicle fires and nearly 17,000 other fires.

Fireworks Safety Tips: If You Choose to Use Legal Fireworks

If consumer fireworks are legal to buy where you live and you choose to use them, be sure to follow the following safety tips:

- Never allow young children to handle fireworks
- Older children should use them only under close adult supervision
- Never use fireworks while impaired by drugs or alcohol
- Anyone using fireworks or standing nearby should wear protective eyewear
- Never hold lighted fireworks in your hands
- Never light them indoors
- Only use them away from people, houses and flammable material
- Never point or throw fireworks at another person
- Only light one device at a time and maintain a safe distance after lighting
- Never ignite devices in a container
- Do not try to re-light or handle malfunctioning fireworks
- Soak both spent and unused fireworks in water for a few hours before discarding

- Keep a bucket of water nearby to fully extinguish fireworks that don't go off or in case of fire
- Never use illegal fireworks

Sparklers Are Dangerous

Every year, young children can be found along parade routes and at festivals with sparklers in hand, but sparklers are a lot more dangerous than most people think.

Sparklers burn at about 2,000 degrees – hot enough to melt some metals. Sparklers can quickly ignite clothing, and children have received severe burns from dropping sparklers on their feet. According to the National Fire Protection Association, sparklers alone account for more than 25% of emergency room visits for fireworks injuries. For children under five years of age, sparklers accounted for nearly half of the total estimated injuries. Consider using safer alternatives, such as glow sticks, confetti poppers or colored streamers.



Call Before You Dig!

Dixie Koistinen

Dixie Koistinen advises diggers to call 811 before digging. This is a great tip for anyone doing constuction or yard work this summer. Dixie is the daughter of Jerome and Lisa Koistinen from Lake Norden, S.D., members of H-D Electric.

Kids, send your drawing with an electrical safety tip to your local electric cooperative (address found on Page 3). If your poster is published, you'll receive a prize. All entries must include your name, age, mailing address and the names of your parents. Colored drawings are encouraged.

RECIPES

Summer DESSERTS

VICKY'S RHUBARB CAKE

Ingredients:

- 1 egg
- 1 cup sugar
- 1 cup cream (sweet or sour)
- 1 1/2 cups flour
- 1 tsp. soda
- 1/4 tsp. cinnamon
- 2 cups rhubarb (slice thin)

METHOD

Mix in order. Grease and flour pan. Pour batter into pan and sprinkle 1 cup brown sugar, 1/2 cup nuts, and 1/2 cup chocolate chips over the top. Bake at 350°F for 50 minutes.

Vicky Hoffman South Dakota

CHERRY CLOUD 9 DESSERT

Ingredients:

1 white cake mix 1 (3 oz.) pkg. cherry jello 1 (8 oz.) carton of Cool Whip 1 (24 oz.) can cherry pie filling

METHOD

Bake 1 white cake mix in 9x13" pan according to directions. Poke holes in cake and pour in 1 (3 oz.) pkg. cherry jello made with only 1 $\frac{1}{2}$ cups water. Refrigerate.

When this is cool, cover with 1 (8 oz.) carton of Cool Whip. Gently spoon on 1 (24 oz.) can of cherry pie filling. Refrigerate and serve.

This is a pretty red and white dessert to serve during holiday gatherings. Jane Ham

Rapid City, S.D.

EASY RASPBERRY MOLTEN CAKES

Ingredients:

4 oz. semi-sweet chocolate 1/2 cup (1 stick) butter 4 tsps. raspberry extract 1 cup confectioners' sugar 2 eggs 1 egg yolk 6 tbsp. flour Raspberry Sauce (recipe follows) **Raspberry Sauce:** 1 package (10 ounces) frozen

- raspberries in juice, thawed
- 1/2 teaspoon raspberry extract

METHOD

Preheat oven to 425°F. Butter 6 (6 oz.) custard cups or soufflé dishes. Place on baking sheet.

Microwave chocolate and butter in large microwavable bowl on HIGH 1 minute or until butter is melted. Stir with wire whisk until chocolate is completely melted. Stir in raspberry flavor and vanilla. Stir in sugar until well blended. Whisk in eggs and yolk. Stir in flour. Pour batter into prepared custard cups.

Bake 10 to 14 minutes or until sides are firm but centers are soft. Let stand 1 minute. Carefully loosen edges with small knife. Invert cakes onto serving plates.

For the Raspberry Sauce, mix raspberries and raspberry extract until well blended. Serve with cakes.

mccormick.com

Please send your favorite recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2023. All entries must include your name, mailing address, phone number and cooperative name.

Seal in Savings with Efficient Exterior Doors

Q: I like the style of my front door, but it is drafty. Can you recommend ways to fix the drafts and make it more energy efficient?

A: The front door of your home has a lot of meaning. It sets the stage for the home and is the first impression for your guests. Beyond curb appeal, the front door is a good place to look for energy savings.

Efficient exterior doors seal tightly and don't allow air to pass through. Limiting airflow from exterior doors can result in lower heating and cooling costs. Throughout the years, the construction of exterior doors has improved to increase their efficiency. If your door is older, it likely is not insulated.

There are two strategies to address an inefficient front door: Purchase a new one or work with what you have.

If you want to replace your front door for aesthetic purposes, make it more functional or improve its efficiency, consider upgrading to an ENERGY STAR[®]-certified model. The ENERGY STAR[®] certification ensures the door you buy meets efficiency criteria for your local area. It also means the National Fenestration Rating Council independently tested and verified the door.

Certification requires any windows in the door to be double or triple pane to reduce heat flow, which results in a more efficient home. While windows in doors offer aesthetics, more glass means less efficiency. ENERGY STAR[®] offers different criteria based on the amount of glass the door has. That means that the bigger the windows in a door, the lower the efficiency. The most efficient doors have no glass or windows in them.

U-factor is the primary rating for efficiency on doors and windows. U-factor is the inverse of R-value, which is the rating used for insulation. Unlike R-value where higher is better, the lower the U-factor, the more energy efficient the door. Check the U-factor on ENERGY STAR[®] doors at your local hardware store or online to help choose the most efficient door in your preferred style.

ENERGY STAR[®]-certified doors are made of the most efficient materials, such as fiberglass, wood cladding and steel with polyurethane foam core. They are built to fit snugly into their frames, reducing drafts and airflow.

When it comes to doors, you don't have to sacrifice style for efficiency. There are many styles available to match the architecture, whether your home is historic or modern.

When completely replacing a door and the frame, you can use expanding foam or caulk to fill the space between the door jamb and structural framing. ENERGY STAR[®] doors have specific installation instructions to ensure the desired efficiency.

If a new door isn't in your budget, there are less expensive options to reduce air leakage and improve your home's efficiency.

All of that coming and going throughout the years can wear out weatherstripping. If you can see daylight around the edges of the door or underneath it, it's time to stop those air leaks.

Weatherstripping around the door jamb can be adjusted to make a snug seal or replaced if it's too far gone. Apply one continuous strip along each side, and make sure it meets tightly at the corners.

There are many different types of weatherstripping products on the market, so shop around for what's right for you. Don't forget the door sweep at the bottom of the door.

Adding a storm door can also help and is less expensive than replacing the entire door. Most storm doors have options for using a screen or glass. Swapping the screen for the glass insert can help save energy in both the winter and in the summer if you use air conditioning. Consider a storm door that's easy to switch between glass and screen so you can maximize the benefits.

Open the door to energy savings by improving the efficiency of your exterior doors – without compromising the aesthetics of your home.



Miranda Boutelle Efficiency Services Group

HOME HEALTH CARE

Home Health Care

Dr. Saini Provides Home Health Care for Patients

Scott Waltman

For Dr. Mona Saini, providing care to patients in their homes is incredibly satisfying.

Saini lives in Custer and works for Monument Health. She started with what's since become Monument during her residency in Rapid City about eight years ago and has been in Custer for the past five years.

She started home visits early during the COVID-19 pandemic and has kept providing the service since, she said.

Taking care of patients in their homes is convenient for those folks and a privilege for Saini. She said it feels more personal for her and helps alleviate anxiety for people who have a hard time getting to the hospital or clinic.

The disappointing part of modern medicine is that not much home health care is provided, Saini said.

The home visits are part of her work for Monument, but not the only part. She's a general practitioner and also provides prenatal care. She and the other five physicians in Custer all do outpatient clinic, hospital and emergency room work. Not all, though, provide home health care.

Saini earned her undergraduate degree from Oakland University on the north side of Detroit and went to medical school

at the Indiana School of Medicine-Fort Wayne.



Dr. Mona Saini

Her parents are the children of farmers, and she appreciates the rural values of hard work, being humble

> and appreciative and family values. "I lived in Michiga

"I lived in Michigan almost all my life, and I didn't even know all this was out here," Saini said of the Black Hills area.

She appreciates the community and the opportunity to help people without them having to leave the comfort of their homes.

"I love taking care of my rural health patients," Saini said. "I truly do"

"The disappointing part of modern medicine is that not much home health care is provided."

She said she had an interest in rural health care while she was still in school, which is what led her to apply for a residency in Rapid City.

Saini's parents grew up in India, but she's found a wonderful home in Custer.



West Central Electric Cooperative's solar trailer serves as an interactive exhibit showcasing solar power generation in action for members. Equipped with a built-in generator, battery storage unit, inverter, and six rooftop solar arrays, the trailer is a great resource for public outreach and education efforts in South Dakota.

Solar trailer takes renewable education on the road

Frank Turner

frank.turner@sdrea.coop

Solar panels are creating a buzz in the energy industry. Every day, co-op employees around the state answer an ever-growing list of questions, such as "Can solar save me money on my energy bill?" and "Are solar panels a reliable source of energy?"

Addressing increasing public interest, West Central Electric Co-op, serving towns such as Murdo and Kennebec, has developed an innovative approach to public outreach regarding solar panels. Their solution: a solar trailer — a portable structure designed to inform the public about the efficiency, pros and cons of solar panels.

"West Central Electric has approxi-

mately 3,700 members and I get two or three calls a month from our members asking about solar power," said Jessie Tucker, the co-op's member services manager.

Tucker noted that the recent surge in solar power interest isn't limited to West Central. Co-ops throughout the state have been fielding similar inquiries. So, when the concept of a solar trailer was introduced in 2021, several nearby co-ops, including Rushmore Electric Power, were quick to get on board.

"We thought, wouldn't it be great if we had something that we could show to the membership and explain how solar panels work and go from there," said Tucker. "We envisioned the trailer as a resource that could be utilized throughout western South Dakota, if not the entire state." With support from surrounding coops, the trailer was completed in June 2022. Although the trailer is a work in progress, it has already been showcased at several co-op outreach events over the past year, including Black Hills Electric's Co-op Day and more.

The solar trailer serves as an interactive exhibit where members can step inside for a first-hand experience. Upon pressing a button, the six rooftop solar arrays activate and start generating a total of 1.92 kilowatts of energy directly from the trailer's roof. Apart from solar panels, the trailer is equipped with a built-in generator, a battery storage unit, and an inverter that converts power from direct current (DC) to alternating current (AC).

The trailer, according to Tucker, highlights the benefits of a diversified approach to South Dakota's energy mix. For a reliable and dependable energy grid, renewable sources such as solar need to be paired with other forms of power generation.

"What we are really trying to com-

municate is that you can't fully rely on distributed generation, whether it's solar or wind," Tucker explained. "For reliability and safety, it's important to consider all available energy sources. Solar power has its limitations, especially when the sun isn't shining or during the night."

The introduction of a solar trailer comes as co-ops across the state are in the midst of their own solar initiatives. Just last month, Sioux Valley Energy completed its own solar project that permits its members to purchase a 20-year subscription to the power output from a newly constructed 140-panel solar array located in Colman, S.D. The project allows members who are passionate about renewable energy a direct route to purchase solar power through their local co-op.

"A lot of people are very interested in solar power, but they don't want to go through the process of using up land and roof space," said Ben Pierson, manager of beneficial electrification for Sioux Valley. "Members aren't interested in constructing these projects themselves, so our solar project offers those members an alternative way to get involved in solar."

More than 30 members participate in the subscription program, and because the project was entirely financed by the participating members, it won't impact other members of the co-op.



The solar trailer has been featured at several co-op public outreach events.

"This project was one hundred percent funded by the members that are purchasing the output of those panels," said Pierson. "This project allows these members to see a local, physical solar asset in their community that is working for them and is credited on their bill each. So really our focus with renewable is really about member choice."

The landscape of renewable energy is vast and ever-changing and every co-op is planning their own approach, but with resources like the solar trailer, tools for education and engagement are within reach for members wanting to learn more.



The interior of the solar trailer is equipped with battery storage and outlets – powering everyday electrical appliances, such as a hairdryer.

Get Smart About Home Lighting

Having the ability to control lighting from anywhere, even a country away if needed, is enticing. But that's only a glimpse into the benefits these smart lighting solutions.

Laine Mitchell

lainem@butteelectric.com

For decades a flip of the switch was the only choice for illuminating our homes. While we still have this tried-and-true option, a new era of innovative and intelligent technologies is upon us. Smart lighting offers an array of cuttingedge functionality and convenience. Let's look at the main benefits of smart lighting options.

Smart lighting is energy efficient. Most smart bulbs utilize LED technology, which is much more efficient than traditional incandescent lighting. By connecting to Wi-Fi, smart lighting gives you more control over how and when you light your home, which can result in less energy used for lighting.

Smart lighting provides convenience and control. You

can manage most smart bulbs from an app on your smartphone or pair them with your voice assistant, like Amazon Alexa. You can conveniently control lighting settings anywhere in your home or when you're away. Whether you want to set a lighting schedule or adjust brightness levels, these smart options offer effortless control from the comfort of anywhere!

Smart options empower you to personalize home lighting. Bright,

SMART LIGHTING



If you're looking to take the plunge and integrate multiple smart bulbs to your home lighting system, your best bet may be a kit, like the Philips Hue Starter Kit. Photo Credit: Philips

warm, purple, green—whatever mood you want to create, smart lighting can help. For a more traditional look, try dimmable white bulbs. If you desire the perfect ambiance for movie night, look for adjustable bulbs with vibrant colors. The possibilities are endless.

While smart lighting offers convenience and control, keep in mind your wall light switch must be on so the bulb receives power, enabling it to connect to a Wi-Fi network.

If you're seeking additional options to operate the lights, consider smart light switches. Today's smart switches tend to play



Smart plugs are a great starter option and allow convenient control of lamps or other lighting fixtures that are plugged in to a wall outlet.

nicely with smart bulbs. If you want to control your smart bulbs with a physical switch (in addition to using your phone and voice commands), look for smart switches with a built-in feature that allows both. Many smart light switches include motion detectors as well.

If you're ready to integrate multiple smart bulbs into your home lighting system, the best value may be a kit like the Philips Hue Starter Kit. Most kits include several bulbs and additional tools to get started.

If you're new to smart home tech and looking to start small, a smart bulb in a high-traffic area of your home might be the best option. Additionally, smart plugs are a great starter option and allow convenient control of lamps or other plug-in lighting fixtures. Smart plugs are inexpensive and convenient - simply plugging into your existing outlet. Similarly to smart bulbs, electronics connected to the smart plug are controlled from a smartphone app.

Whether you're looking for more convenience, colorful options, or better ways to manage energy use, smart lighting can provide multiple benefits. Determine which smart lighting features are most important for your needs, then start shopping!



Installing smart bulbs throughout your home is as simple as installing a traditional bulb.



The Meier Family and Illuminating Rural South Dakota

Frank Turner

frank.turner@sdrea.coop

In the rural heartland of Firesteel, S.D., a transformational moment still echoes in the minds of thirdgeneration ranchers Ken and Kathleen Meier. Over a span of 56 years on their farmstead, they have run cattle, reared horses, and even raised two children. After all of those years, however, they still vividly remember the moment when electricity illuminated their rural community for the first time in the early 50s.

It's safe to say, their memories go back a long way. And yet, their bond with their home extends even further, reaching back a century to when their families were still establishing roots in the frontier of the rural prairie.

Ken recalls the unlikely story which brought his grandpa, Anton Meier, from Iowa to the captivating, rolling landscape near Timber Lake, S.D., in 1923.

"Well, my grandpa was ornery when he had a bit too much to drink," said Ken. "Anyway, after a night of drinking, they threw him out of a bar in Iowa, so he crawled into a train car for a nap. When he woke up, he was in South Dakota."

According to Meier, his grandpa Anton quickly fell in love with the state and decided to relocate his family to a new frontier near Timber Lake. In a coincidental twist of fate, Kathleen's family also settled in the same area around the same time. Unlike Anton's serendipitous journey, Kathleen's grandfather, Frank Holzer, had a more traditional approach.

"My grandpa didn't get a free ride," laughed Kathleen. "He came down with our family from North Dakota

with a horse and a milk cow tied to the back of the family's covered wagon."

When their families first settled the area, it was the era of kerosene lamps, horses and hard work. Yet in their childhood, both Ken and Kathleen witnessed the transition from kerosene lamps to electric light bulbs, a change that would propel their families and their communities forward.

"I must have been 9 or 10, but I remember when Moreau-Grand put our line up," Ken reminisced. "The memory of those first poles being driven into the ground by a couple of guys with an old International Truck has stuck with me. It was just something you don't forget."

Today, those original poles placed in the ground more than 70 years ago still stand tall on their ranch. Kathleen, too, recalls the transformative impact they had.

"I was about the same age when we first wired our house," said Kathleen. "I remember how fun it was to just turn the lights on and have bright lights."

However, the electrification of their neighborhood brought more than just the novelty of flipping a switch. Kathleen's family promptly modernized their home. Their stove and fridge transitioned from kerosene to electric, and they even invested in a milking a machine. The arrival of electricity didn't just bring about change; it revolutionized daily life on the ranch, making it cleaner and more efficient.

"Our old washing machine ran on a gas engine," said Kathleen. "You had to stomp on a pedal to get that motor started. It smoked up the entire house. Once we had electricity all we had to do was plug it in."

Progress didn't stop at the washing machine. "It didn't take long for things to change," added Ken. "I remember when I was about thirteen, my neighbor purchased the first television in the neighborhood, so everything happened fast. We would all go to watch whatever was on."

The transition has continued to benefit the Meier family. Today, their son, Kent Meier, works in the power industry with Border States Electric, a company that sells electrical equipment, tools and appliances. Their daughter, Cindy Lindskov has carried on the family tradition as a fourth-generation rancher in Isabelle, S.D., a town conveniently located just a stone's throw away from her parents.

It's amazing how much has changed over the years," said Ken. "Since the day we first got electricity, Moreau-Grand has done a great job of keeping our light on and burning bright."

One of the original utility poles on Ken and Kathleen Meier's land was created in 1950, yet it still functions to this day.



SOLAR PROJECT UPDATE

SOLAR POWER

National Grid Renewables is building a solar farm next to an existing substation near New Underwood. Photo courtesy of Western Area Power Administration

New Underwood Solar Power Update

Scott Waltman

Next year, a new solar farm near New Underwood should be providing power for homes and businesses in South Dakota and beyond.

Wild Springs Solar is being developed by Minnesota-based National Grid Renewables. The same company already operates a wind farm in Clark County, so it might already be familiar to some residents.

The solar farm is projected to be the biggest one in the state, according to National Grid Renewables. It's being built on roughly 1,000 acres.

Plans call for it to produce 128 megawatts a year. That could power 16,000 South Dakota homes, though some of the electricity will also be sent

out of state.

The solar farm is being built near an existing Western Area Power Administration substation, making for easier power distribution to groups like Basin Electric Power Cooperative, one of the largest providers of electricity in the Dakotas.

"When determining where to site renewable energy projects, things we consider include but are not limited to accessibility to transmission, land availability, resource, customer demand and community support," a Wild Springs Solar representative. "The Wild Springs project area was selected for proximity to the electrical transmission system, New Underwood substation, land suitable for a solar project from an environmental, regulatory/permitting, design perspective and cooperative landowners."

Construction on the solar farm began in January.

Basin Electric, which is based in Bismarck, N.D., is a transmission cooperative that serves about 3 million customers in nine states. It has an agreement with National Grid Renewables to purchase 114 megawatts of electricity.

For Basin Electric, the agreement amounts to the first time it has agreed to buy solar power on a large scale. The cooperative has plans to bring on more than 150 megawatts of solar capability in the next two years.

Andy Buntrock, Basin Electric's vice president of strategic planning and communications, said stressing reliability is a priority for the cooperative this year.

"When we communicate on renewables we emphasize that they are just part of an all-of-the-above energy strategy that ensures reliable and affordable power for our membership," he said. "It's important that we maintain dispatchable generation that has a reliable fuel source, while taking advantage of non-dispatchable generation like our first-ever solar project in South Dakota."

Coal and natural gas are examples of dispatchable generation. They are fuels that are highly dependable because they are in constant supply.

"The construction of the Wild Springs Solar Project in South Dakota represents our commitment to bringing clean, renewable energy and economic development to the state of South Dakota. The project will contribute significantly to the tax base, as well as the local communities," the National Grid Renewables spokesperson said.

In 2020, the South Dakota Public Utilities Commission approved a construction permit for Wild Springs Solar. That procedure set out what's being built near New Underwood, including:

- 340,000 solar panels.
- A tracking system.
- Access roads.
- A substation.
- An operation and maintenance building and parking lot.
- Electric collection lines.

The plant will use solar panels that have been developed by First Solar.

National Grid Renewables is establishing a charitable fund for the New Underwood School District with plans to donate more than \$500,000 in the first plant's first two decades.

"Our National Grid Renewables onsite team has also worked closely with the school board and district to provide additional education about solar energy and the Wild Springs Solar project to some of the local high school classes, including a personalized tour of the site," the company representative said.

But National Grid sees benefits that extend far beyond the Pennington County community. The upside, according to National Grid Renewables, will also include:

- Offsetting 193,000 metric tons of carbon dioxide emissions each year.
- A \$22 million economic impact in the project's first 20 years of operation.
- \$12 in new tax revenue in the first two decades.
- 225 new construction and operation jobs.

And when the plant is producing power, that should equate to the removal of 41,000 vehicles from roads in a year's time. WAPA helped clear the way for the project in 2021, finding the solar farm would have no significant impact on environmental resources or humans, said Eric Barendsen, public affairs specialist for WAPA.

That's also when WAPA entered into an agreement with Wild Springs Solar and the Southwest Power Pool allowing the solar farm to be connected to WAPA's New Underwood Substation.

Ultimately, that will help Basin Electric power South Dakota.

The cooperative transmits power to two generation and transmission cooperatives in the state – Rushmore Electric Power Cooperative and East River Electric Cooperative. Those co-ops then send electricity to their distribution cooperatives, which provide electricity to homes, schools and businesses across South Dakota.

The Clark County wind farm uses 77 turbines to create 200 megawatts of power, the National Grid Renewables representative said. It began operation in 2019 and employs 10 people.



Construction began earlier this year on a large solar farm near New Underwood in Pennington County. Some of the power will be purchased by Basin Electric and be distributed to cooperatives in South Dakota.

REGISTER TO WIN!

Bring this coupon and mailing label to the Touchstone Energy® Cooperatives booth at Dakotafest or the South Dakota State Fair to win a prize!

Your Phone Number:____ Your E-mail Address:____



JUNE 23-25 46th Annual Main Street Arts & Crafts Festival Centennial Park Hot Springs, SD

JULY 1

Hill City's Annual Star-Spangled Celebration 8 a.m. Hill City, SD 605-574-2368

JULY 4 Northern Hills CASA Half Marathon and 5k 7 a.m. Spearfish City Park Spearfish, SD www.nhcasa.org

JULY 7-8 Buffalo Gap Blow Out Rodeo 6 p.m. Buffalo Gap, SD 605-890-1533 JULY 8-9 Brookings Summer Arts Festival Brookings, SD 605-692-2787

JULY 12 Tracy Area Gardens & Quilts Tour 2 p.m. Tracy, MN

JULY 13-16 Pioneer Days White, SD 605-690-4458

JULY 14-16 Burke Stampede PRCA Rodeo Burke, SD 605-830-2083

JULY 15 Huron MS Walk/Run 8 a.m. Lake Byron Huron, SD 605-350-5922 JULY 21-23 Winner Elks 54th Annual Rodeo Winner, SD

JULY 28-29 Farley Fest Lake Farley Park Milbank, SD www.farleyfest.com

JULY 29 BBQ Pit Row and Car Show Winner, SD

JULY 30 Bergen Threshing Bee 9 a.m. Bristol, SD

AUG 21 30th Annual Bishop's Cup Golf Tournament Minnehaha Country Club and The Country Club of Sioux Falls Sioux Falls, SD 605-988-3765

AUG 18 Black Hills Super 6 Mountain Bike Race 8 a.m. Big Hill Trail Spearfish, SD www.nhcasa.org

SEPT 4 Hidewood Valley Stream Threshing Show Steam Whistle Blows 1 p.m. 47236 183rd St Clear Lake, SD

SEPT 29-30

Junkin' Market Days Ramkota Exhibit Hall Sioux Falls, SD 605-941-4958

> Note: Please make sure to call ahead to verify the event is still being held.

To have your event listed on this page, send complete information, including date, event, place and contact to your local electric cooperative. Include your name, address and daytime telephone number. Information must be submitted at least eight weeks prior to your event. Please call ahead to confirm date, time and location of event.