2024 CONTRACTOR GUIDE

Products | Processes | Procedures

Updated 3.1.2024

SIOUX VALLEY ENERGY
A Touchstone Energy® Cooperative

800-234-1960

PO Box 216 Colman, SD 57017

www.siouxvalleyenergy.com

FOR YOUR SAFETY

BEFORE DIGGING 811 is the national call-before-you-dig phone number. Anyone who plans to dig should call 811 or click **https://call811.com** before digging to request that the approximate location of buried utilities be marked with paint or flags so that you don't unintentionally dig into an underground utility line. This call needs to be made two to three business days in advance of the planned digging.

PREPARATION IS THE KEY. The best way to prepare to make the 811 call or the request on-line is to review the ticket format as shown to the right. Also, prior to calling, the proposed dig site must be marked with white paint, stakes or flags. This will assist the locators in knowing the area of the work and where to mark the lines. At the close of the call, a ticket number will be provided to you. This number is very important

IN CASE OF EMERGENCY **In the event that you smell natural gas while digging, or when entering a building, immediately leave the building. DO NOT turn lights on or off. Call 911 first, then call the utility company or the 811 Center. If you do not have power, see a downed power line, or any other situation that could cause imminent danger, call 911 or the utility company.**

7 ESSENTIAL TIPS

FOR CONSTRUCTION SAFETY NEAR POWER LINES

Follow these tips to stay safe when working near power lines.

1. **CALL 811 BEFORE YOU DIG** — *Call 811 a few days before the start of any digging project to prevent damage to underground lines.*
2. **ASSESS THE WORKSITE** — *Assess the worksite, taking inventory of any potential hazards and making sure to look up and around to determine the location of overhead power lines.*
3. **CONTACT THE ELECTRIC CO-OP** — *Always contact the local electric co-op before working near overhead power lines.*
4. **TREAT POWER LINES AS ENERGIZED** — *Treat all power lines as energized. Work with the local electric co-op to safely operate equipment near power lines.*
5. **ESTABLISH SAFE CLEARANCE** — *Before work begins, establish a safe clearance boundary around power lines.*
6. **ALWAYS USE A SPOTTER** — *Always use a spotter when operating heavy equipment whose sole responsibility is keeping a lookout.*
7. **COMPLY WITH OSHA** — *Comply with all OSHA requirements and applicable state and federal safety regulations.*

811 Know what's below. Call before you dig.

Required Ticket Information

Dial 811

https://call811.com

Name of person doing the excavation:

_____

Phone Number _____ Extension _____

Caller Name _____

Homeowner Mailing Address _____

City _____ State ___ Zip _____

Alternate Contact _____

Phone _____

Best Time to Contact _____

Work to Begin Date _____Time _____

Duration of work via hours/days _____

County _____

City/Town _____

Excavation Address _____

Nearest Cross Street _____

Type of Work _____

Depth of Excavation _____

Tunneling or Boring (Y/N) _____

Excavating in Right of Way (Y/N) _____

Explosives (Y/N)_____

Work being done for _____

Description of the Excavation Site (Marking Instructions)

_____

_____

_____

Examples:

A. Excavation in rear of lot, mark from house to back lot line

B. Mark 15' either side of white flagged route

Remarks (include driving instructions on rural tickets w/o street address) _____

_____

Rural Tickets might require this information if a specific rural address is not provided by the caller:

Latitude/Longitude Coordinates _____

or

Township ___ Range ___ Section/Quarter _____

LET'S WORK COOPERATIVELY

Sioux Valley Energy's mission is Serving Our Members. Always.

Sioux Valley Energy values the professional relationship we have with you as the contractor. This relationship helps us serve our members. We've developed this guide to help answer frequently asked questions and provide new information about our programs and services.

KEY CONTACTS

All departments can be reached by calling 800-234-1960.

New Residential/Commercial Services:

- Contact Sioux Valley Energy's Engineering Department
- 1-800-234-1960
- Hours: 7:30 a.m. to 4:30 p.m., M-F
- Online forms: https://www.siouxvalleyenergy.com/new-construction-or-upgrade-service

Water Heater Sales/Program Rebates:

Contact the Beneficial Electrification Department at 800-234-1960.

Locates:

Dial 8-1-1 two business days before digging

Gopher State One Call (MN)
http://www.gopherstateonecall.org

South Dakota One Call (SD)
https://www.sdonecall.com/

Outages and Emergencies:

Call 9-1-1 first with any emergencies

Sioux Valley Energy 24-hour Dispatch: 800-234-1960 for outages

Beneficial Electrification:

Ben Pierson, P.E., Manager of Beneficial Electrification
Reggie Gassman, Beneficial Electrification Specialist
Sheila Gross, Energy Services Specialist
Michael Uhing, Lead Journey Electrician
Jim George, Electrical Contractor
Kim C. Hansen, Journey Electrician
Nick Smith, Journey Electrician
Colton Spader, Apprentice Electrician
Derry Van Hofwegen, Journey Electrician
Dana Foster, Customer Electrical Services Technician
Sarina Hanson, Beneficial Electrification Coordinator

Engineering and Operations:

Ted Smith, P.E., Vice President of Engineering & Operations
Chris Graff, P.E., Director of Operations
Chad Williams, Colman Operations Manager
Cody Fritz, Brandon Operations Manager
Tim Fey, Manager of Contractor Relations
Michele Nielson, P.E., Manager of Engineering
Andrew Chmela, P.E., System Engineer
Jim Kuyper, Lead Staking Engineer
Jason Sage, Lead Staking Engineer
Tim Schoolmeester, Staking Engineer
Terry Plecity, Staking Engineer
Ryan Gruber, Staking Engineer
Trevor Reif, Staking Engineer
Kim Brendsel, Staking Engineer
Matt Seivert, Staking Engineer
Angela Boughton, Lead Dispatcher/Engineering Coordinator

Public Relations:

Jay Buchholz, CKAE, Manager of Public Relations
Brandon Lane, Economic Development & Community Relations Executive

CONTENT

Sioux Valley Energy is a not-for-profit, member-owned electric distribution cooperative, serving more than 29,000 members across seven counties in eastern South Dakota and southwestern Minnesota since 1938. Headquartered in Colman, S.D., and led by General Manager/CEO Tim McCarthy,

Sioux Valley Energy is the largest distribution cooperative in South Dakota.

Colman Service Center
PO Box 216 | 23491 471st St
Colman, SD 57017

Brandon Service Center
PO Box 857 | 108 N. Heritage Rd
Brandon, SD 57005

Hartford Service Center
1185 Ruud Trail, Suite 4
Hartford, SD 57033

Pipestone Service Center
PO Box 336 | 1102 7th St SE
Pipestone, MN 56164

ELECTRIC HEAT PROGRAMS

Heating and cooling use a large chunk of energy dollars. Electric heat is clean, reliable, safe – and it also can be very efficient. It's tough to beat the efficiency of an electric heat pump that not only cools in the summer but also heats in the winter. Heat pumps – geothermal or air-to-air systems including ductless solutions – are designed to be used in any application, whether it's new construction, a renovation project, or replacing existing equipment. Sioux Valley Energy offers rebates and a special electric heat rate to make choosing electric a great value.

Electric Heating Systems

Today's electric heat pump combines ultra-reliable heating and cooling with unbeatable operating efficiency. In the winter, a heat pump will keep the home warm and comfortable; in hot, muggy summertime weather, the same system will keep homes cool, humidity-free and comfortable.

An air-source heat pump, when properly installed, requires little maintenance and delivers 1.5 to 3.5 times the energy it uses.

A geothermal system can help save the homeowner up to 70% in annual heating and cooling costs.

If you're working with clients to build a new home, or are replacing an existing home's heating/cooling system, contact SVE to learn more about heat pumps.

Check out www.energystar.gov/about/federal_tax_credits to learn more about tax incentives on heat pump equipment and other efficiency upgrades related to the Inflation Reduction Act of 2022.

RESIDENTIAL REBATES

To receive an incentive, submit a copy of the invoice with verification of heat pump make, model, and efficiency ratings.

- **Air-to-air with non-electric backup $600**
- **Air-to-air with all-electric backup $1200**
- **Geothermal Rebate $1200**
  Traditional heat pump whole-home systems must be a minimum of 2 ton with backup equipment to qualify.
  Rebate eligibility is once every 10 years per account.
- **Ductless air-source heat pump –** *(2-ton and larger)* **Rebate of $300 per structure.**

AG/COMMERCIAL REBATES:

To receive an incentive, submit a copy of the invoice with make, model, and kilowatt of equipment.

- **Heat Pump – $100/ton up to 150 ton**
- **Electric Resistance – $10 per kW up to 600 kW (minimum of 8 kW)**

ELECTRIC HEAT RATE:

Members can receive a reduced electric heat rate which is 40 percent less than the standard rate for their October through April billing cycles (minimum 8kW and larger). Electric heat rate applies to residential and general service accounts. Tenants in all-electric heated apartments larger than eight units can receive a monthly reduced basic service charge in lieu of sub-metering for the heat rate. Rate is applicable for 240-volt heating equipment.

SUB-METER:

In order to receive the reduced electric heat rate, a sub-meter must be installed by a Sioux Valley Energy electrician. The sub-meter will be mounted next to the electrical panel when possible. The installation is free for heat pumps 2 ton and larger or 240-volt electrical resistance heat 8 kW and larger, or a one-time $300 fee is charged. Fees apply for sub-metering three-phase equipment or when a second sub-meter is required for an existing structure. Apartment complexes of eight units and under can be sub-metered with proper coordination. The sub-meter records the usage for the electric heating equipment and subtracts it from the main meter. Electric heat is not controlled.

AIR CONDITIONING CONTROL PROGRAM DISCONTINUED:

Sioux Valley Energy has not promoted new controlled air conditioning for several years. As of January 1, 2024, the AC Load Control Program has been discontinued. Members who could be remotely removed from air conditioning control have been disconnected. All others will require a site visit to remove controls. This will be done as time allows or any time a site visit is required for load management or sub-metering work such as when a new or replacement heating and cooling system is installed. Any sub-metered water heater will also be switched to a $6 monthly credit.

Sub-meter Connections for New Construction or Replacement Equipment:

Sub-meters will be mounted next to the electrical panel for a newly constructed home/building that will have a heat pump or other resistance heating. Contact SVE when the equipment is operational. If a water heater was also purchased from the Cooperative, it should be operational as well to connect load management equipment in the convenience of one trip. Contact SVE to prewire the sub-meter if the electrical panel is flush-mounted, in an interior room, when an outside installation is preferred, or if the home is slab on grade. This should be done when the electrical panel is set, but before insulation and drywall are installed. We will also prewire to accommodate winter electric construction heat when a temporary 240-volt electric furnace/heater is being used as long as the customer will have a permanent electric heat pump or heat source. If there are multiple panels in close proximity with electric heat, 12-2 wire can be run between the panels to use one sub-meter. Sub-meter installation timing is critical in apartment complexes or bio-sensitive environments such as hog facilities. For replacement heat pumps or resistance equipment, in order to ensure the sub-meter connections and rates are correct, please contact us for a courtesy check.

2024 HEAT PUMP COMPARISONS (EFF. 4/1/24)

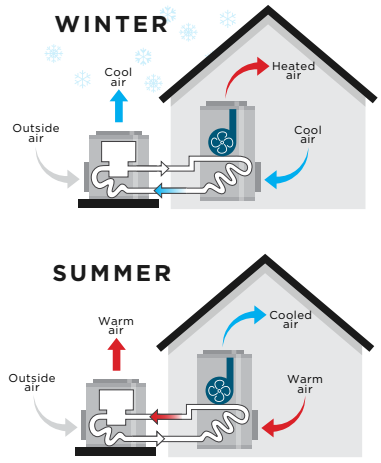
	EQUIVALENT TO:				
SVE's 6.55¢ heat rate (October-April billing cycles)		96% efficient propane furnace	96% efficient natural gas furnace	90% efficient propane furnace	90% efficient natural gas furnace
Air-Source Heat Pump (Based on rating of 7.5 HSPF2/8.8 HSPF, utilized most in October, November, March & April)		65¢/ gallon	71¢/ therm	61¢/ gallon	67¢/ therm
Geothermal Heat Pump (Based on COP rating of 3.8)		44¢/ gallon	48¢/ therm	42¢/ gallon	45¢/ therm
Electric Resistance (Based on 100% efficient)		$1.69/ gallon	$1.84/ therm	$1.58/ gallon	$1.73/ therm

Loans: Residential loans are available upon approved credit up to $15,000, 5% interest with a 7-year term for heat pumps and weatherization projects.

air-source HEAT PUMP

Energy-efficient, cost-effective, and reliable year-round

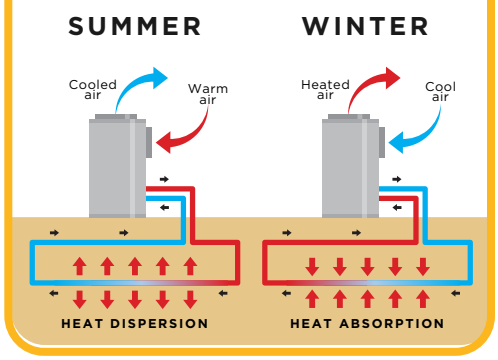
- **Pulls heat** indoors from the outdoor air in the winter and from indoor air in the summer
- When properly installed, requires **little maintenance** and delivers 1.5-3.5 times the energy it uses
- **Easy to convert** from propane or oil system
- More **efficient** than gas
- **Dehumidify better** than standard central air conditioners, resulting in **less energy usage** and more cooling in summer months



ground-source HEAT PUMP

New home construction

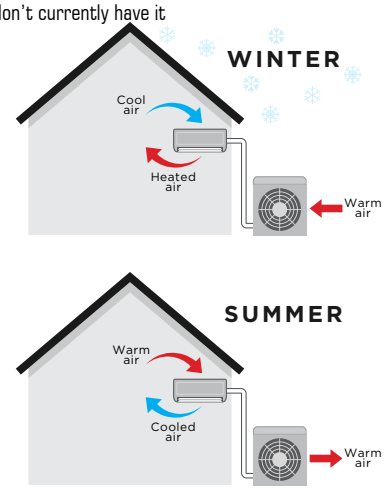
- **One system** for heating, cooling, and water heating
- Uses the abundant, **natural energy** the earth stores beneath us
- Highest efficiency, documenting heating efficiencies of up to **500%**, meaning homeowners get $5 of heating for every dollar they spend
- Excess heat energy can be routed to the water heater, **saving** homeowners up to **two-thirds** of their water heating costs year-round
- Higher installation costs than standard forced-air furnace and central air conditioner, but **shorter payback periods** because of increased operating efficiency



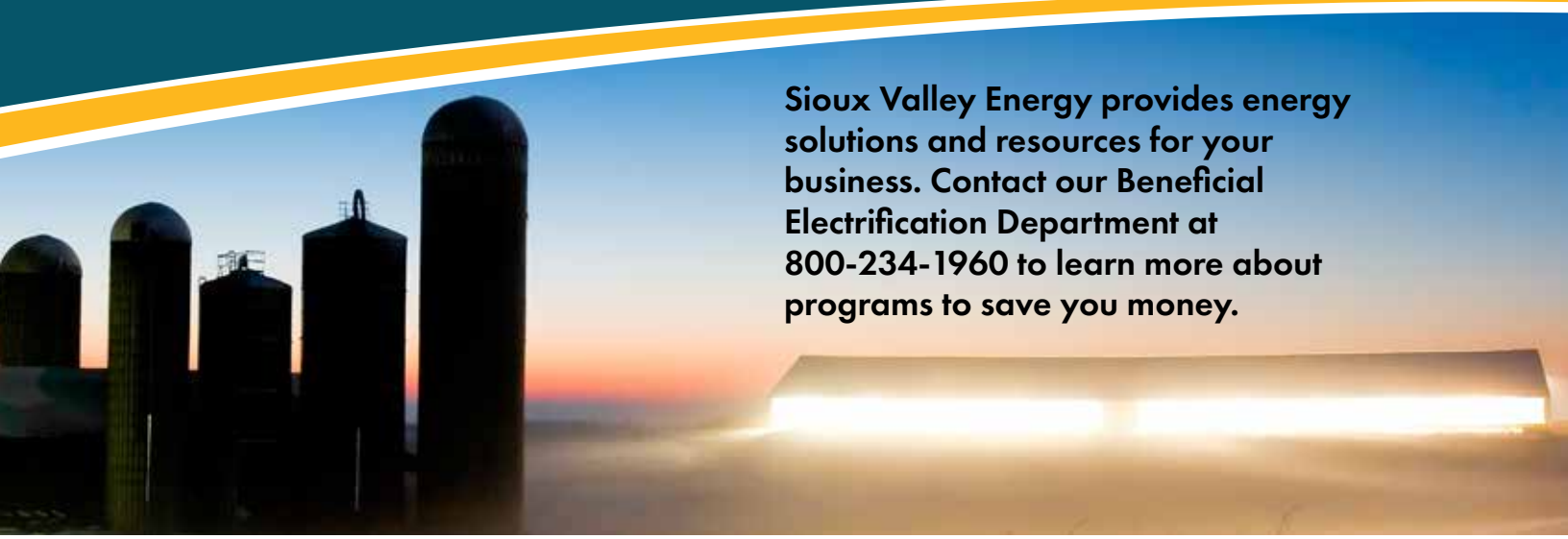
mini-split/ductless HEAT PUMP

Ideal for home renovation

- Like an air-source heat pump, but **smaller**
- **Ductless,** so works on houses that don't have duct work
- **Cost effective** and **easy to install**
- Only runs when and as hard as it needs to, thus is **extremely energy efficient**
- Scalable so one outdoor compressor can **run multiple units** inside
- Ideal for those who want air conditioning in homes that don't currently have it



COMMERCIAL PROGRAMS



Sioux Valley Energy provides energy solutions and resources for your business. Contact our Beneficial Electrification Department at 800-234-1960 to learn more about programs to save you money.

Want to learn more and receive updates from Sioux Valley Energy?

Contact us to subscribe to our quarterly *Contractor Connections* newsletter designed just for builders and contractors. Contact sheila.gross@siouxvalleyenergy.com to sign up.

Our "Inside the Grid" podcast hosted by Jay Buchholz is another resource you may find useful. You can find the podcast on Apple Podcasts and other podcast services. You can also find the podcast at https://www.siouxvalleyenergy.com/inside-grid-podcast

Commercial Electric Heat Rebate

Electric heat rebates are available for agricultural, commercial, and multi-family facilities.

- **Rebates:**
  - + Heat Pumps $100/ton up to 150 ton.
  - + Electric resistance heating equipment $10/kW up to 600 kW. *(Minimum of 8kW required.)*
- A sub-meter can be installed on electric heat equipment to receive a reduced rate for the billing cycles of October to April. The sub-meter is free for heat pumps 2 ton or larger and electric resistance heat 8 kW and larger, or a $300 installation fee is charged. The electric heat rate is 40% lower than the regular rate.
- Fees apply for sub-metering three-phase equipment.
- The electric heat rate is not available for large power accounts. Apartments up to eight units can be sub-metered for the reduced rate. Tenants in all-electric heated apartments larger than eight units can receive a reduced basic service charge in lieu of sub-metering.

Commercial Lighting Rebate Discontinued

The retrofit commercial LED program has been discontinued for 2024.

Commercial Energy Audit

Sioux Valley Energy will reimburse commercial power members up to $1,000 for a third-party commercial energy audit for a facility inspection or to analyze the efficiency/payback of upgrading equipment technologies, or for the technical report required for a grant application.

Commercial Electric Vehicle (EV) Charger Rebate/Rate Program

Rebate and rate programs are available for EV charging equipment installed for commercial, public, workplace, multi-family, and fleet applications. Enrollment in an EV rate program is a requirement of the rebate. Lifetime member maximum of $5,000. Contact SVE for more details.

LEVEL 2 CHARGER REBATES: (Minimum of 7.7 kW charging capacity wall-mounted or pedestal chargers, 240 V NEMA 14-50 outlet is not eligible)

- Single Plug EV Charger Rebate $500 per charger
- Dual Plug EV Charger Rebate $1,000 per charger

LEVEL 3 CHARGER REBATES: (50 kW or larger required)

- Rebate of $2,500 per charger

Third-party Irrigation

A rebate of $750 is available per device for a third-party device (such as AgSense, Fieldwise, etc.) that allows SVE to control usage during peak times. Members participating in the load management program receive a reduced rate per metered kW for the billing cycles of June through October.

ELECTRIC VEHICLE PROGRAMS

With today's technologies, the average all-electric vehicle can go nearly 300 miles on a single charge which covers the daily commute for most drivers, even in rural areas. Plug-in hybrid vehicles have an average range of 20 to 50 miles on the electric battery, along with having a gasoline engine. EV's have lower operating costs, are virtually maintenance free, and have no tailpipe emissions. Electric motors provide quiet, smooth operation and their power and quick acceleration make them fun to drive. Enjoy the convenience of charging up at home. In addition to SVE's EV rebate and special rate programs, instant dealership rebates are available for eligible models at the time of purchase. To learn more about EVs, visit https://www.siouxvalleyenergy.com/electric-vehicles-ev to check out the EV resource tool.

EV Rate Options

- **Time of Use Rate (TOU):** Sioux Valley Energy members can take advantage of off-peak rates for whole home usage, including EV charging.
- **Plug-in Rate:** Sioux Valley Energy members can take advantage of off-peak rates for EV charging – sub-meter installation required. (Some restrictions apply.)

New EV Purchase Rebate

- Rebates for the purchase or lease of an electric vehicle in 2024 (requires the selection of an off-peak rate option as outlined above).
  - **$500 f**or all battery electric vehicles (BEV)
  - **$250** for plug-in hybrid electric vehicles (PHEV)

EV-Ready New Home Construction Rebate

A rebate of $300 is available for a home that at a minimum has 1-inch conduit installed from the electrical panel to the garage to provide a means for future EV charger installation. If preferred location is known, installation of a 40-amp (minimum) branch circuit and NEMA 14-50 receptacle is also acceptable. A picture verifying conduit or receptical installation is required..

Commercial EV Charger Rebate/Rate Program

Rebate and rate programs are available for EV charging equipment installed for commercial, public, workplace, multi-family, and fleet applications. Enrollment in an EV rate program is a requirement of the rebate. Lifetime member maximum of $5,000. See Page 5 for more details.

KWH RATE COMPARISONS

AT A GLANCE (RATES EFFECTIVE 4/1/24)

PROGRAM	7 a.m. to 10 a.m.	10 a.m. to 4 p.m.	4 p.m. to 9 p.m.	9 p.m. to 7 a.m.
Time of Use Rate	16.31¢	5.92¢	16.31¢	5.92¢
EV Plug-In Rate (Effective 5/23)	58.4¢	5.92¢	58.4¢	5.92¢
Regular	10.55¢	10.55¢	10.55¢	10.55¢
Electric Heat Sub-meter	6.55¢	6.55¢	6.55¢	6.55¢

$HIFT TO TIME OF USE RATE & $AVE

SVE offers a three-month risk free trial to help members get used to scheduling tasks and conserving energy.

smart hub — **Sign up for Smart Hub today**

Thinking Solar?

If considering solar power generation for the home or business, here are a few things to keep in mind before making the purchase:

1. Make the existing home/business more energy efficient before buying a solar system. Adding insulation and sealing air leaks can cut energy costs immediately and may help to reduce the size of the solar system required. SVE offers an energy audit.

2. Research before investing in a solar system. The payback period for solar can range from fewer than 10 years to more than 20 years, depending on the system cost, amount of electricity produced at the peak times the homeowner or business utilize it, energy cost, and available incentives. SmartHub is our free account management tool to view usage and compare how it may line up with typical solar production. Contact Reggie Gassman, Beneficial Electrification Specialist, for assistance in calculating paybacks for specific scenarios. Privately owned, for-profit small businesses/farms may be eligible for a portion of the project costs through the USDA Rural Energy for America Program (REAP). Learn more about federal tax incentives at: www.energystar.gov/about/federal_tax_credits

3. Understand how a solar system meshes with the Cooperative's system. Most solar systems are designed to provide a portion of the electricity needed, but it won't provide 100% of a home or business' needs, meaning it will still need to be connected to SVE's grid. Contact SVE regarding the interconnection policy, essential safety precautions, and rate structure for purchasing excess energy from the planned system.

4. Choose a reputable contractor/installer. As with any major improvement project, purchasing solar panels from the right installer/contractor at a fair price is as important as the product being purchased. Sioux Valley Energy is a resource to consult with about the planned project.

For more information on connecting solar to the SVE system, visit our website at https://www.siouxvalleyenergy.com/solar-energy-center. Or contact Sioux Valley Energy at 800-234-1960.
You may also visit pvwatts.nrel.gov

Things to Consider

Renewable Energy Credits

Purchasing Renewable Energy Credits (RECs) from the Cooperative is a great way to support renewable energy without the cost or hassles of installing solar at your home or business. RECs allow members to off-set up to 100% of their energy use with renewable energy for very little cost.

Beneficial Electrification

Sioux Valley Energy is your source for energy and information for members seeking to know more about beneficial electrification and renewable energy. Electric cooperatives across the country, including SVE, are exploring a multitude of ways to offer beneficial electrification products and services to enhance efficiency and savings to be members while being environmentally responsible. This is one of the reasons we do hands-on demonstration projects to explore technologies – such as the SVE employees building and maintaining two solar arrays, battery storage projects, learning from two electric fleet vehicles – the Nissan Leaf and Ford Lighting truck, along with a large assortment of EGO lawn and tool equipment. Visit https://www.siouxvalleyenergy.com/solar-energy-center to learn more about our projects and view their production.

Solar & Battery Demonstration Projects

SVE constructed a 24.8 kW solar project at its Brandon, South Dakota, facility (enough to power two average sized homes without electric heat) in May of 2015. The 80 panels are on low profile racking and are faced south, southwest and west to learn which direction has the most impact on usage and demand shifting in our region and weather conditions. An inverter monitoring system allows us to track each panel. We installed the array for around $3 per watt with the assistance of a REAP grant. The projected return on investment is 16 to 20 years. As of January 1, 2024, the array has produced 282,314 kWhs since it's commissioning with a lifetime capacity factor of 15.85%. The average annual production would propel the co-op's Ford Lighting truck 70,000 miles per year.

The Community Solar Project was commissioned at the Colman headquarters in June of 2023. It has 140 panels rated at 450 watts each with a total DC capacity of 63 kW and a maximum AC output of 50 kW. Members of SVE had an opportunity to purchase output of one or more panels with a 20-year subscription. The output is credited to their monthly electric bill. This project was fully funded through member subscription and a federal direct pay incentive of 30% through the Inflation Reduction Act. The array is expected to produce 87,000 kWhs annually, which equates to an annual reduction of approximately $9,000 towards the investors' electric bill. A 115 kW battery storage project was installed in the Fall of 2023. This battery storage unit is a pilot program to help SVE understand better the possible future role in batteries as a means to assist in peak usage events. It will be used to inject power to the grid during peak times. It will be able to deliver 30 kW to the grid for a period of up to three hours during peak usage events.

Two 14.4 kW pilot home battery storage projects were completed in January of 2024. These systems will help SVE learn more about the effectiveness of battery systems when paired with SVE rates such as the TOU rate to help lower a member's electric bill.

RESIDENTIAL WATER HEATER PROGRAM

Hot water for life! Purchase water heaters from Sioux Valley Energy and give your customers efficient, lifetime tank warrantied water heaters for as long as they own their home. Six-year warranty on parts, some restrictions apply.

SALES

Lifetime tank warrantied water heaters are available for residential applications.
(Some restrictions apply for limited 10-year tank/1-year parts.)

Sioux Valley Energy offers two brands to choose from: Marathon or HTP. Marathons are available in 85 and 100-gallon models. HTP is available in an 80-gallon size. A 30-amp circuit is required and they are rated for both 240 and 208-volt installations.

The Marathon® and HTP water heaters are offered for $500 plus applicable tax for any size. The special up-front pricing is in lieu of a monthly load management credit. All water heaters will be connected to our load management program for the lifetime of the water heater. This program is in compliance with the Department of Energy regulations and also helps Sioux Valley Energy shift demand during peak usage on the system. Due to the larger capacity and efficiency of these water heaters, members are rarely inconvenienced by participating in the load management program. For new construction, we encourage builders to let the homeowners know about the value they received in purchasing a $500 water heater from the Cooperative, warranty information and load management obligations. (Homes/accounts requiring more than one water heater may purchase first unit at $500 and the second at $1,000.) Water heaters are in stock at the service centers in Colman, Brandon, Hartford, and Pipestone. Water heaters are required to be paid for at the time of purchase or prior to pick up with on-line payment options available. With approved credit, water heaters can be billed on the regular electric bill. Contact SVE at 800-234-1960 to order a water heater.

WARRANTY/REPAIR SERVICES

SVE takes care of registering water heaters for warranty. For new construction, the first homeowner gets the lifetime tank warranty. For the member's convenience, a red sticker with contact information will be added to the unit when load management is installed. If an issue or question on the unit should arise, contact SVE's Customer Electrical Services Department at 1-800-234-1960 for warranty or repair services.

DYK?
Water heating accounts for about 12% of a home's energy use.

Using an energy-efficient electric water heater, combined with Sioux Valley Energy's load management and signing up for ***Time of Use Rate*** can help reduce costs.

COST:
$500 plus applicable tax for any size water heater with participation in the SVE load management program. Special up-front pricing is in lieu of a load management credit.

MARATHON® ELECTRIC WATER HEATERS

MARATHON® FEATURES:

Lifetime Tank Warranty

- The last water heater homeowners will buy for their home
- Limited lifetime warranty registration completed by Sioux Valley Energy
- Unmatched strength, toughness and durability

Easy Installation and Service

- Lightweight design for one-person, low-cost installation
- Easy maintenance with bowl-shaped bottom that drains completely and no anode rod to replace

Non-Metallic Tank:

- Seamless, blow-molded polybutene inner tank will not rust or corrode
- Outer tank resists dents, scratches and salt air
- Offers the best durability, withstands the harshest environments and eliminates smelly water due to chemical reactions with sulfates

High Efficiency

- Two-and-a-half inches of polyurethane foam insulation minimizes stand-by heat loss, allowing only 5 degree F loss in 24 hours
- Saves money on the homeowner's energy bill

MARATHON® GRID ENABLED MODEL SPECIFICATIONS

DESCRIPTION				FEATURES			ROUGHING IN DIMENSIONS (SHOWN IN INCHES)				ENERGY INFORMATION	
TYPE	NOMINAL GALLON CAPACITY	RATED GALLON CAPACITY	MODEL NUMBER	UEF FIRST HOUR RATING G.P.H.	EF FIRST HOUR RATING G.P.H.	RECOVERY IN G.P.H. 90° F RISE[1]	TANK HEIGHT	HEIGHT TO WATER CONN.	DIAMETER	APPROX. SHIP WEIGHT (LBS.)	ENERGY FACTOR	UNIFORM ENERGY FACTOR (UEF)
TALL	85	84	MRG85245	77	91	21	66-1/4	70-1/4	28-1/4	134	-	0.92
TALL	100	101	MRG105245	83	95	21	66-3/4	70-3/4	30-1/4	152	-	0.90

Uniform Energy Factor, Energy Factor and rated gallon capacity based on Department of Energy (DOE) requirements.

- This water heater is intended only for use as part of an electric thermal storage or demand response program. This water heater will not provide adequate hot water unless enrolled in such a program and is activated by your utility company or another program operator. Please confirm the availability of such a program in your local area before purchasing or installing this product.
- Water heaters furnished with standard 240 volt AC, single-phase non-simultaneous wiring. If heating elements of different wattages than those shown are demanded, they must be specifically requested. For height to top of T&P and heat traps add 3-1/2 inches to the height to water connection.
- Maximum test pressure: 300 PSA. Maximum working pressure: 150 PSI.

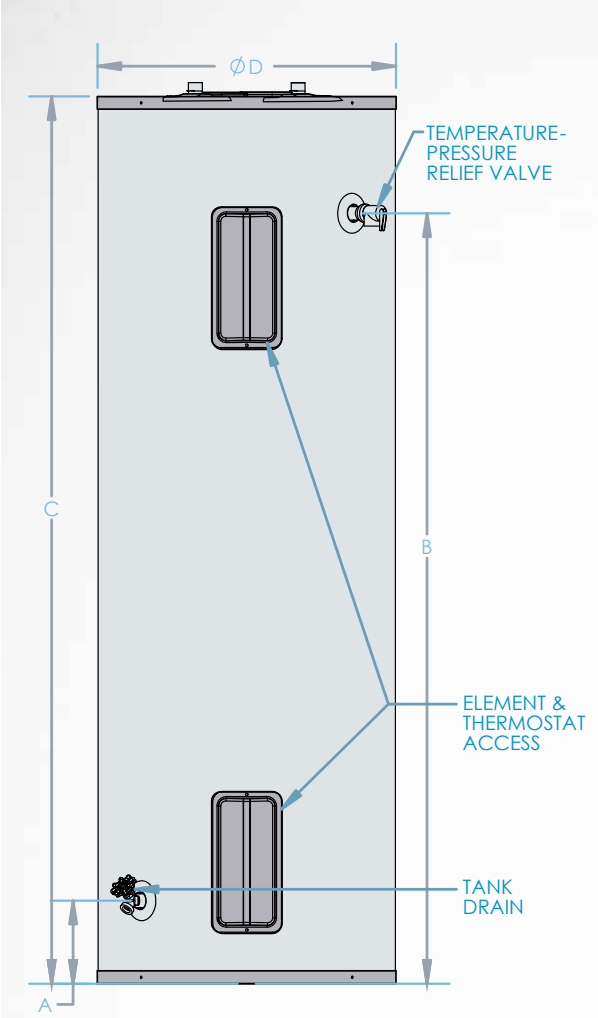
* Warranty is provided to original customer in a residential application after online product registration is complete. Registration must be completed within 90 days of installation. See Warranty Certificate for complete information.

† Recovery calculations are based on 4500-watt elements used in non-simultaneous operation.

† Recovery=wattage/2.42x temp. rise °F.

Example: $\frac{4500W}{2.42 \times 90°} = 21$ GPH

HTP ELECTRIC WATER HEATERS



Premium tank construction for long life:

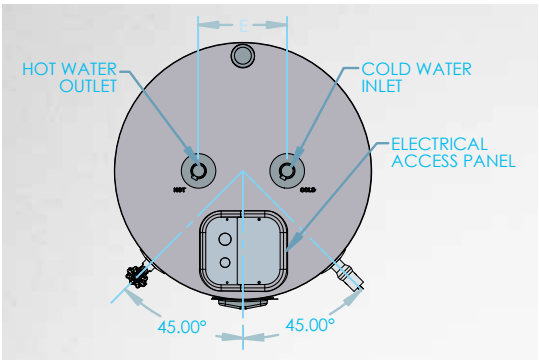
- 316L stainless steel tank
- Titanium elements for best corrosion resistance and long life
- Heavy duty foam insulation for minimal heat loss

Simple and fast lockout box solution:

- Can be unlocked in less than 30 seconds
- Just as easy to service as traditional electric water heaters
- Can be configured for different operating voltages/inputs
- No new/unique software or controls are required
- Complies with Law 114-11 The Energy Efficiency Improvement Act of 2015

Standard features:

- Limited LIFETIME Warranty registration completed by SVE
- Heavy duty insulation
- Electrical connection box
- Stainless steel tank



In the box:

- T&P relief valve
- Installation manual
- Brass full port drain valve

SPECIFICATIONS AND DIMENSIONS

WATER TEMPERATURE RATINGS

HTP GRID-ENABLED MODELS* CARRIED BY SVE	NOMINAL GALLON	DOE-RATED STORAGE VOLUME (GALLONS)	A	B	C*	D	E	HOT/ COLD INLETS	MINIMUM DELIVERED TEMP	MAXIMUM DELIVERED TEMP.	HIGH TEMP. LIMIT
EVG080C2X045H	80	78	6.5″	60″	69″	23.25″	8″	3/4″ NPT	**110°F** 43.3°C	**170°F** 76.7°C	**190°F** 87.8°C

GRID-ENABLED MODELS*	WATTAGE 240V	WATTAGE 208V	SAFETY LISTING	FIRST HOUR RATING	FIRST HOUR RATING BIN	RECOVERY EFFICIENCY	RECOVERY AT 90°F RISE	UEF	SHIPPING WEIGHT
EVG080C2X045H	4500	3400	UL 174	86 Gallons	HIGH	98%	20 GALLONS	.93	151 LBS

* The height indicated in dimension C is for the tank only. The nipple fitting at the top of the tank adds an additional 2.5 inches.

LOAD MANAGEMENT

What you need to know...

Load management refers to controlling various customer electric loads during times of peak usage on the electric system. During peak electric usage times, load management helps shift the load peak to when customers do not use as much electricity by controlling equipment such as water heaters and irrigation. By managing these loads, the Cooperative can reduce the potential costs of wholesale power purchases, which saves money and resources. Load management saves member-owners over $1.5 million in power supply costs each year by shifting electrical loads to off-peak periods. Members can save through program incentives, special rates, and bill credits by having equipment connected to the load management program.

When is Load Control Initiated?

Load control is initiated whenever it is deemed necessary by our power suppliers – East River Electric Power Cooperative in South Dakota and L&O Power Cooperative in Minnesota. Most load control is initiated during temperature extremes, mainly in the afternoons and evenings during summer month high temperatures and mornings and evenings during winter month low temperatures. However, load control is used every month of the year to some degree to help keep energy costs as low as possible.

How do I know if system is being controlled?

South Dakota members can log on to http://lmreports.eastriver.coop/loadgraphandcontroldatagen.htm. Click on the load management tab and click on current status to see what loads are being controlled.
If your client would like to know which group they are in, please contact Sioux Valley Energy's Customer Electrical Services Department at 800-234-1960. Minnesota members may contact the dispatch center at 800-234-1960 to check on their control status.

Who Installs the Equipment?

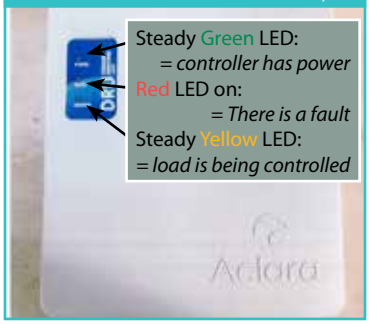
Qualified Sioux Valley Energy electricians install load control receiver equipment and associated wiring.

Load Control Receivers Used by Sioux Valley Energy

Please contact Sioux Valley Energy if you need to bypass a load control device.

Aclara

(used in Minnehaha County and parts of Lake and Moody counties in South Dakota and in Minnesota)



Cannon Technologies 3000

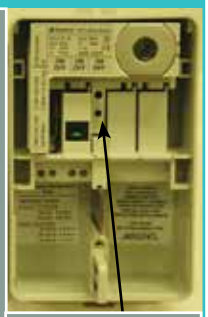
(older models used in Minnesota)

Cannon Technologies 3100

(used in Brandon area and Minnesota)

Enermet

Green switch closest to blinking light is for the water heater.
Up = power is on *(light blinks every 7 seconds)*
Down = load controlled
(Typically light will blink about every second)



One of these lights will be blinking.

Enermet

Green switch is for the water heater.
Up = power is on (load not controlled)
Down = power off, load is controlled

Red switch: **A position** (Up)=Power off, Controlled; **B position** (Down)= Power on, Not Controlled

Zellweger

Blinking light indicates unit has power. Usually, switch farthest away from light is the water heater switch. The switch nearest the light is usually air conditioning.

BBC

Used only in South Dakota to control water heater.

* Cellular-based controls coming in March of 2024

What Will it Cost Me?

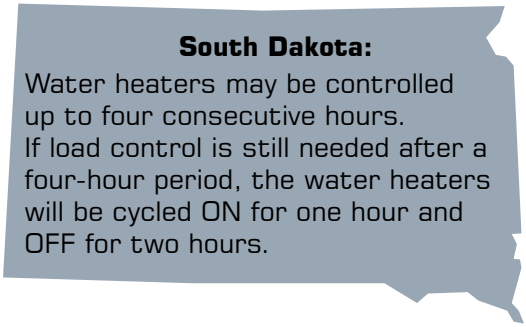
There is no charge to install or remove load management equipment for a member's home or business.

What if I Decide I No Longer Want My Equipment Controlled?

To continue to receive incentive program benefits, members must keep their equipment on the load management program. Load control equipment for air conditioning and irrigation systems can be removed anytime at the request of a member. Load control equipment connected to water heaters as part of the incentive program must adhere to the term agreement listed on the application form.

Water Heater Load Management

Load management equipment will be installed or tested, if existing, by SVE personnel when the water heater is installed and fully operational. Contractors/members agree to allow load management to be installed in order to receive the special pricing. For new construction, it's more convenient for us and the new homeowner if the builder notifies us to schedule this installation prior to the closing of the home.



No controlling is done after 11 p.m. so tanks should be full of hot water each morning.

Recovery Rate:

Water heater recovery rate is approximately 22 to 26 gallons of hot water per hour depending on the season.

Air Conditioning Load Management Changes

The Board of Directors approved discontinuing the air conditioning load management program. We have not actively promoted new controls on air conditioning for several years. This is a large project and will take some time to get everyone disconnected and converted over to the regular program. Members who can easily be remotely disconnected from the program will be done so immediately—about 1,100 members. These are the members that have Aclara-manufactured load controls and all Minnesota members. For members who have other manufactured devices, approximately 2,800, they will be removed from the program as time allows with our electrician's schedule or any time we are on site for a courtesy check or equipment installation. Anyone who purchases a water heater or new or replacement heat pump/electric heating equipment that is under the old air conditioning program will be taken off of controlled air conditioning and a sub-metered water heater will be switched to the $6 monthly credit program when we do their courtesy checks.

Irrigation Load Management

Irrigation systems are turned off during control periods. They will remain off with no cycling until the peak usage period has passed. Irrigation systems are the last to be controlled and the first to be restored during a control period. Control notifications via phone, text or e-mail are available to any member. Members participating in the load management program receive a reduced rate per metered kW for the billing cycles of June through October. SVE can install traditional load management devices or a third-party remote managed irrigation system can be used. A rebate of $750 is available per device for a third-party device (such as AgSense, Fieldwise, etc.) that allows SVE to control during peak times.
*(*Former Alliant Energy customers are not eligible.)*

DYK?
Sioux Valley Energy has had a load management program for more than 40 years and was among the first co-op utilities in the nation to have one.

Sioux Valley Energy members are part of a larger program through our power supplier. Collectively, more than 80,800 electric loads in homes, farms and businesses of member consumers throughout eastern South Dakota and western Minnesota currently participate in the program. These loads include electric water heaters, irrigation systems and other big energy users.

NEW CONSTRUCTION SERVICE REQUEST CHECKLIST

1. Contact the Sioux Valley Energy Engineering Department at 1-800-234-1960 during business hours (Monday-Friday from 7:30 a.m. to 4:30 p.m.). Online forms available at https://www.siouxvalleyenergy.com/new-construction-or-upgrade-service

2. Fill out and submit application for service. The following information will be needed on the application:

Name/Organization:				
Email:			Phone:	
Billing Address:		City:	State:	ZIP:
Service Address:		City:	State:	ZIP:
County:	Township:	Range:	Section:	Quarter:
Are you just in the planning stages and looking for an estimate or are you ready to begin?		❒ Planning stages and looking for an estimate		❒ Ready to Begin
Electrician Name:			Electrician Phone Number:	
Builder Name:			Builder Phone Number:	
What type of service?		❒ Commercial	❒ City	❒ Rural
What phase of service?	❒ Single-phase	❒ Three-phase *(If 3-phase, indicate voltage)*	❒ 208 voltage	❒ 480 voltage
What is the service size?		❒ 200 amp	❒ 400 amp	❒ 600 amp
Has the building site been staked for construction?			❒ Yes	❒ No
Date the electric service is needed.				
Construction will be scheduled after payment has been received. Frost charges apply for underground installation between Nov. 1 and May 1, depending on the depth of frost encountered. These charges are in addition to the line extension charges for new service or upgraded service.				
Type of Heat (select both primary and back-up source)		❒ Electric Resistance	❒ Air-Source Heat Pump	❒ Geothermal Heat Pump ____ Tons
		❒ Ductless Heat Pump	❒ Natural Gas	❒ Propane
What technologies are you planning to integrate or have interest in? Contact SVE for more information on the following options.		❒ Home is wired to be EV ready		❒ Solar
		❒ Business wanting Level 2 or larger EV charging infrastructure		❒ Wind
		❒ Biogas		❒ Battery Storage
		❒ Generator (SVE offers the installation of interlock kits)		

Statement of Non-Discrimination

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint (https://www.usda.gov/oascr/how-to-file-a-program-discrimination-complaint) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

AVAILABLE SERVICES

24-Hour Dispatch Center

Sioux Valley Energy's in-house dispatching service runs 24 hours, seven days a week, 365 days a year. That means when you call in to report an electrical outage, you'll have the satisfaction of speaking to a friendly, courteous "real person." Occasionally, when a wide-spread storm disrupts service to hundreds or thousands of members at the same time, your call may be answered by a computerized system.

Cable Locating

Call before you dig. Sioux Valley Energy contracts with Summit Utility Services to provide our members, contractors and other utilities with professional underground cable locating services. Call 811 to request an underground locate. Sioux Valley Energy receives the locate request via a web-based software program that allows our dispatchers to screen the tickets and send our locators to those requests where our facilities would be affected. This process assures members that when our cable is in the area, it will be located accurately and within 48 hours.

811 Know what's below. Call before you dig.

Energy Audits

SVE offers a third-party residential energy audit for existing homes for a $100 fee. This includes a walk through weatherization inspection of insulation, doors and windows along with infrared imaging and blower door testing. An energy audit is a great tool to help members determine the location of energy leaks to prioritize efficiency upgrades and improve comfort.

Generators

An interlock kit with generator inlet box can generally be installed by SVE electricians for around $600. This is the most practical way to ready a home for the connection of a portable generator. SVE no longer sells Kohler stand-by generators, but we are available to help you determine the capacity of the equipment you may need during an outage. Contact us for a list of local contractors that currently install stand-by generators for your home or business.

House, Building, or Equipment Move

Sioux Valley Energy assists with safely moving houses through its service territory by making special arrangements for electrical services that may be in the way of the large structure. As per state law, SVE requires a 48-hour notice prior to each house move along with a deposit that can be made at one of our service centers or can be given to a line worker on site. Deposit amounts are based on the number of miles the house will be traveling and the loaded height of the house. Any additional costs will be billed following the move and any excess funds from the deposit will be refunded in the form of a check.

Power Quality/Voltage Concerns

Power quality concerns will also remain a high priority for us in 2024 as it has in the past. We receive requests from commercial and homeowner accounts when they have equipment problems that may be power related. We will continue to assist members by setting power quality recorders to determine if SVE has a power issue or determine if there is an issue on the member's side that we can reveal and/or address. The cell-based recorders that we have purchased over the past couple of years have greatly enhanced our ability to find issues and improved our efficiency with investigations.

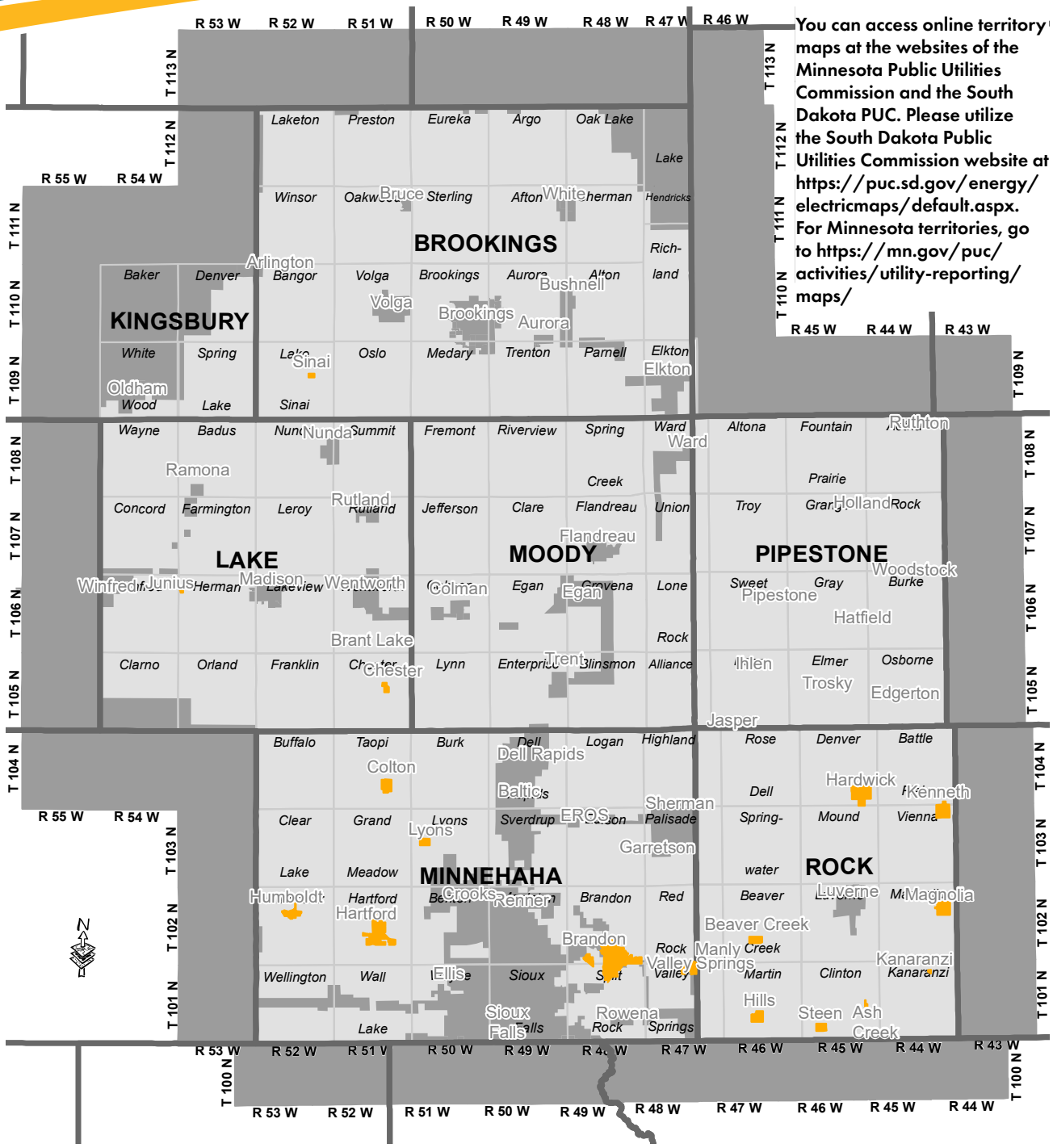
Wiring

Sioux Valley Energy's Beneficial Electrification Department offers unique wiring services such as fault locating and repair, pole setting and replacement, overhead wiring installations or upgrades, and power quality or stray voltage concerns members may have. For more information, contact our Beneficial Electrification Department at 800-234-1960.

Yard Lights

Nothing is more comforting when coming home on a dark night than a yard light to shine the way. Members have the option of a 70 watt or 150 watt LED light that can be mounted anywhere on the property where power is installed. Rental options and price levels vary. For more information or to get a rental light installation scheduled, contact our dispatch center at 800-234-1960.

SIOUX VALLEY ENERGY A Touchstone Energy® Cooperative SERVICE AREA



You can access online territory maps at the websites of the Minnesota Public Utilities Commission and the South Dakota PUC. Please utilize the South Dakota Public Utilities Commission website at https://puc.sd.gov/energy/electricmaps/default.aspx. For Minnesota territories, go to https://mn.gov/puc/activities/utility-reporting/maps/

Towns Served:

South Dakota: Brandon, Chester, Colton, Hartford, Humboldt, Junius, Lyons, Sinai, Valley Springs, and portions of Sioux Falls & Crooks **Minnesota:** Ash Creek, Beaver Creek, Hardwick, Hills, Kanaranzi, Kenneth, Magnolia, & Steen

- SVE Served Towns
- SVE Territory
- County Boundary
- Townships
- Non-SVE Territory

The information displayed on this map represents current data from a working file which is updated continuously. Information is believed reliable, but its accuracy cannot be guaranteed.

Date: 2/8/2023