



## WELCOME

Sioux Valley Energy is a not-for-profit, member-owned electric distribution cooperative, serving more than 27,000 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 | 47092 SD Hwy 34 Colman SD 57017

**Brandon Service Center** PO Box 857 | 108 N Heritage Road Brandon SD 57005

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

# LET'S WORK COOPERATIVELY

Sioux Valley Energy is here to supply our members' energy needs with safe, affordable, and reliable electricity.

We at Sioux Valley Energy value the professional relationship we have with you as the contractor. 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/my-electricity/ 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 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

#### **Beneficial Electrification:**

Ben Pierson, P.E., Manager of Beneficial Electrification
Sheila Gross, Energy Services Specialist
Reggie Gassman, Manager of Customer Electrical Services
Jim George, Electrical Contractor
Kim C. Hansen, Journey Electrician
Michael Uhing, Journey Electrician
Nick Smith, Journey Electrician
Derek Bundesen, Journey 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* Chad Williams, Colman Operations Manager Cody Fritz, Brandon Operations Manager Tim Fey, Manager of Contractor Relations Michele Nielson, P.E., Manager of Engineering Chris Graff, 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,** *Engineering Coordinator* Kara LeBrun, Administrative Coordinator

## Public Relations:

**Jay Buchholz, CKAE,** *Key Account and Community Relations Executive* 

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## ELECTRIC HEAT PROGRAM

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.

Check out the new programs and increased rebates for 2022!

## Residential Rebates

To receive an incentive, homeowners must submit a copy of the invoice with verification of heat pump make/model.

- Air-to-air with non-electric backup furnace \$600
- Air-to-air with all-electric backup furnace \$1200
- Geothermal Rebate \$1200 federal tax credit 26% 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 Rebate of \$300 per structure.

*Under 2 ton. Rebate eligibility is once every 10 years per account.* 

## Ag/Commercial Rebates:

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

Heat Pump - \$50/ton up to 150 ton • Electric Resistance - \$10 per kW up to 600 kW

### **Electric Heat Rate:**

Members can receive a reduced electric heat rate of 6.35 cents per kWh compared to the regular rate of 10.26 cents per kWh for their October through April billing cycles. 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 electrical contractor. The installation is free for heat pumps 2 ton and larger or 240-volt electric resistance heat over 5 kW, or a one-time \$200 fee is charged. Fees apply for sub-metering three-phase equipment. Apartment complexes of eight units and under can be sub-metered with proper coordination. A monthly reduced basic service charge is given to tenants in all-electric heated apartments larger than eight units in lieu of sub-metering. The sub-meter records the usage for the electric heating equipment and subtracts it from the main meter. Electric heating is not controlled. The sub-meter is mounted next to the electrical panel when possible.





## 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 replacing an existing home's heating/cooling system, contact SVE to learn more about heat pumps.



## **ELECTRIC** HEAT PROGRAM

Continued



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#### **2022 HEAT PUMP COMPARISONS** 90% efficient natural gas 96% efficient 96% efficient propane furnace SVE's 6.35¢ heat rate 90% efficient natural gas propane furnace (October-April billing cycles) furnace furnace Air-Source Heat Pump 74¢/ 70¢/ 68¢/gallon 64¢/gallon (Based on rating of 8.2 HSPF, utilized most in therm therm October, November, March & April) Geothermal Heat Pump 47¢/ 43¢/ 43¢/gallon 40¢/gallon (Based on COP rating of 3.8) therm therm Electric Resistance \$1.63/gallon \$1.79/therm \$1.53/gallon \$1.67/therm (Based on 100% efficient)

## 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, or when an outside installation is preferred. This should be done when the electrical panel is set, but before insulation and drywall are installed – siding installation preferred but not required. 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.

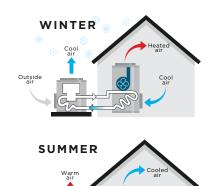
#### Loans:

Residential loans are available upon approved credit up to \$10,000, 5% interest with a 7-year term for heat pumps, weatherization, and Kohler generators.

### air-source **HEAT PUMP**

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

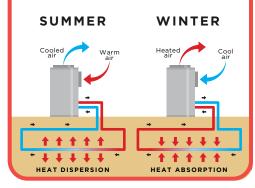
- Pulls heat indoors from the outdoor air in the winter and from indoor air in the summer
- When properly installed, requires little maintenance and delivers 1.5-3.5 times the energy it uses
- Easy to convert from propane or oil system
- More efficient than gas
- Dehumidify better than standard central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



## around-source HEAT PUMP

New home construction

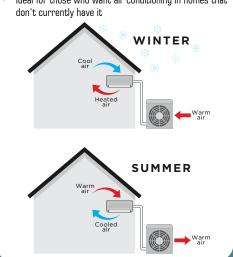
- One system for heating, cooling, and water heating
- Uses the abundant, natural energy the earth stores beneath us
- Highest efficiency, documenting heating efficiencies of up to 500%, meaning homeowners get \$5 of heating for every dollar they spend
- Excess heat energy can be routed to the water 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
- 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
- Ideal for those who want air conditioning in homes that



Outside air



## COMMERCIAL PROGRAMS

Sioux Valley Energy offers a variety of programs for commercial accounts. Call our Beneficial Electrification Department at 800-234-1960 to learn more about how these programs can help businesses with its energy costs.

## Commercial Electric Heat Rebate

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

- Rebates:
  - + Heat Pumps \$50/ton up to 150 ton.
  - + Electric resistance heating equipment \$10/kW up to 600 kW.
- 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 over 5 kW, or a \$200 installation fee is charged.
- 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

Rebates are available for retrofit LED lighting projects in existing agricultural and commercial facilities. A rebate of 10 cents per watt saved (up to 50% of the project costs or a maximum rebate of \$1,000 per structure) is available. Lifetime member maximum for commercial lighting program is \$5,000.

## 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.

## Commercial Public Electric Vehicle (EV) Charger

SVE member businesses that promote the charging infrastructure for electric vehicles by installing a Level 2 or larger charging station for public/employee use are eligible for up to a \$500 rebate.

## Westinghouse/HTP Water Heaters

Commercial and agricultural members can purchase a high-efficiency Westinghouse/HTP water heater from the Cooperative for \$400 plus applicable tax. Limited warranty – 10-year tank/1-year parts. Water heater must be connected to load management equipment. Comes with high-temp stat installed. (Some restrictions apply. See Pages 9-11 for more details.)

## Third-party Irrigation

A rebate of \$750 is available (\$150 credit applied annually for five years) per device for a third-party device (such as AgSense, Intellifarms, 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.



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/my-programs/ commercial-andindustrial-memberresources/podcast

We also offer a monthly "Business Power Up" electronic newsletter. Contact jay. buchholz@ siouxvalleyenergy. com to sign up for Business Power Up.



www.siouxvalleyenergy.com

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## **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, Manager of Customer Electrical Services, for assistance in calculating paybacks for specific scenarios. Privately owned, for-profit small businesses/farms may be eligible up to 25% of the project costs through the USDA Rural Energy for America Program (REAP). Small solar energy systems are eligible for a 26% federal tax credit through 2022. The tax credit decreases to 22% in 2023. It will expire after 2023 for residential applications but will continue at 10% for commercial applications.
- 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 www.siouxvalleyenergy.com and select "DG Interconnection Information" under the "My Electricity" tab. Or contact Sioux Valley Energy at 800-234-1960. You may also visit pvwatts.nrel.gov



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## RENEWABLE ENERGY

## Things to Consider

## Renewable Energy Credits

Want to support renewable energy without the cost or hassle of installing solar? Consider SVE's Renewable Energy Credit program (REC) that allows members to off-set their energy usage up to 100% with renewable energy for pennies a day. Check out the data for the solar demonstration project at our Brandon Service Center to learn more about the production output based on the sun/weather conditions for where we live. Visit siouxvalleyenergy.com/my-programs/solar. Stay tuned as we continue to share more about beneficial electrification technologies and opportunities to become more efficient and save money!

#### **Beneficial Electrification**

Sioux Valley Energy is the source for energy and information for our member-owners. 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 members while being environmentally responsible. This is one of the reasons we do hands-on demonstration projects to explore technology like the solar array project at the Brandon Service Center and our all-electric Nissan Leaf vehicle, EVie.

## Solar Demonstration Project

Sioux Valley Energy constructed a 24.8 kW solar project (enough to power two average homes without electric heat) in May of 2015. In order to gain more insight, our wiring department installed and maintains the system. The 80 panels are on low profile racking and we faced them 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. Our design did not include battery storage technology. We installed the array for about \$3 per watt which included a REAP (Rural Energy for America) grant for 25% of our costs. The solar panels have a life expectancy of 30 to 50 years while the inverters may need to be replaced within 10 years. The projected return on investment is 16-20 years. The array has required very little maintenance and the power that is produced is put back on the grid.

As of Jan. 1, 2022, the array has produced 215,170 kWhs since its May 2015 commissioning. The current lifetime capacity factor for this system is 15.6%. The data is based on the results of the demonstration project utilizing panels facing south, southwest and west. The average annual production would propel EVie, the co-op's Nissan Leaf, 90,000 miles per year.

We continue to research changes in the industry such as the role battery storage may potentially play in the future of renewable energy.

Learn more about our Solar Demonstration project at www.siouxvalleyenergy.com



**ELECTRIC VEHICLE PROGRAMS** 

Electric vehicles (EVs) are becoming a hot item in the auto world, with many manufacturers offering at least one model. Improved versions are on the horizon and for good reason. EVs provide environmental advantages and tax credits, along with lower operating costs, often balancing out the initial investment. They require no oil changes, belts, air filters, spark plugs, and many other parts that occasionally need replacement in a gasoline-powered car. Charge up with clean, American-made electricity.



## **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.

**New EV Purchase Rebate** https://www.siouxvalleyenergy.com/my-programs/rebates

- Rebate for the purchase of an electric vehicle in 2022 (requires the selection of an off-peak rate option as outlined above and installation of sub-metering equipment).
  - \$500 for all battery electric vehicles (BEV) \$250 for plug-in hybrid electric vehicles (PHEV)
- Members can choose to take advantage of a rebate to receive one year's worth of Renewable Energy Credits (RECs) for 100% of their energy to come entirely from renewables after the purchase of an electric vehicle.

### **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 breaker 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. SVE will place an EV ready home sticker on the future EV charger breaker location in the panel.

## **Commercial Public EV Charger Rebate**

A rebate up to \$500 is available for the purchase/installation of a public/employee Level 2 or greater charger.

#### **KWH RATE COMPARISONS** AT A GLANCE 7 a.m. to 10 a.m. 4 p.m. to 9 p.m. **PROGRAM** to 4 p.m. 10 a.m. 9 p.m. to 7 a.m. Time of Use Rate 16.15¢ 5.84¢ 16.15¢ 5.84¢ EV Plug-In Rate 16.15¢ 10.26¢ 16.15¢ 5.84¢ 10.26¢ 10.26¢ Regular 10.26¢ 10.26¢ Electric Heat Sub-meter 6.35¢ 6.35¢ 6.35¢ 6.35¢

\*The Time of Use (TOU) Rate was developed for members who are seeking opportunities to have a direct impact on their electric bill through their conservation efforts and daily usage habits. Contact the Member Services Department to sign up for a three-month risk-free trial period to get acclimated to the new rate structure without the concern of paying a higher amount than the regular rate program. Use SmartHub to manage and review usage. (See Time of Use Rate on Page 8.)



For Americans with daily commutes of less than 250 miles, electric vehicles may be a good choice. Wiring new garages to be ready for future EV purchases is a smart choice.

Learn more at: www.siouxvalley energy.com/myprograms/electricvehicles-evs-1





#### DYK?

SVE offers a thirdparty residential energy audit for existing homes for a \$100 fee. An energy audit is a great tool to help members determine the location of energy leaks to prioritize efficiency upgrades.

## THAT'S SMART

## 2022 Offers for Smart Devices

### TIME OF USE RATE

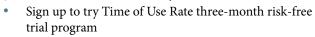
The Time of Use Rate (TOU) was developed for members who are seeking opportunities to have a direct impact on their electric bill through their conservation efforts and daily usage habits. Members save money by shifting energy use to off-peak times. Members with SmartHub can manage and review their usage.

- 16.15 cents per kWh from 7-10 a.m. and 4-9 p.m.
- 5.84 cents per kWh any other time of the day (compared to regular rate of 10.26 cents).
- Members with electric heat will continue to receive the reduced heat rate.
- There is a three-month risk-free trial to get acclimated to the rate.

## **SMART THERMOSTAT**

### **SMART THERMOSTAT REBATE - \$50**

Smart thermostats are great tools to help members keep their homes smart and energy-efficient. Many smart thermostats can learn heating and cooling behavior and will auto-schedule based on preferences. Homeowners can conveniently control their home's thermostat from a computer, tablet, or smartphone making it a great tool to work in conjunction with SVE's Time of Use Rate. Members can make the switch to a smart thermostat or install one in their new home and receive a \$50 rebate. To obtain the rebate, members must:





• Complete rebate form with invoice attached. For new construction, the builder can sign off if no invoice is available, must provide make/model info. The online form can be accessed at https://www.siouxvalleyenergy.com/forms/smart-thermostat-residential-rebate



Members can sign up for SmartHub and manage all aspects of their electric account online or with a mobile device. Review and pay their bill, receive outage notifications, manage usage, report service issues, and so much more! View data day by day in half-hour increments to manage usage, troubleshoot an issue, or to see how SVE's Time of Use Rate might work for them.





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## 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 for rentals. Ag and commercial members can purchase water heaters but limited warranties also apply.)

Sioux Valley Energy offers two brands to choose from: Marathon or Westinghouse/HTP. Both brands can be used for residential applications; Westinghouse/HTP is the only brand available for ag/commercial applications. Marathons are available in 85 and 100-gallon models. Westinghouse/HTPs are available in 80 and 115-gallon. A 30-amp circuit is required and they are rated for both 240 and 208-volt installations.

#### The Marathon and Westinghouse/HTP water heaters are offered for \$400 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 \$400 water heater from the Cooperative, warranty information and load management obligations. Water heaters are in stock at the service centers in Colman, Brandon, 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:

\$400 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®**

## Grid-Enabled 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 <sup>1</sup>	TANK HEIGHT	HEIGHT TO WATER CONN.	DIAMETER	APPROX. SHIP WEIGHT (LBS.)	ENERGY FACTOR	UNIFORM ENERGY FACTOR (UEF)	
TALL	85	84	MRG85245C	77	91	21	66-1/4	70-1/4	28-1/4	134		0.92	
TALL	100	101	MRG105245C	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:  $\frac{4500W}{2.42 \times 90^{\circ}} = 21 \text{ GPH}$ 

## WESTINGHOUSE/HTP

## Grid-Enabled 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:

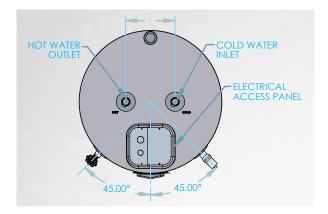
- Can be unlocked in less than 30 seconds
- Just as easy to service as traditional electric water heaters
- Can be configured for different operating voltages/inputs
- No new/unique software or controls are required
- Complies with Law 114-11 The Energy Efficiency Improvement Act of 2015.

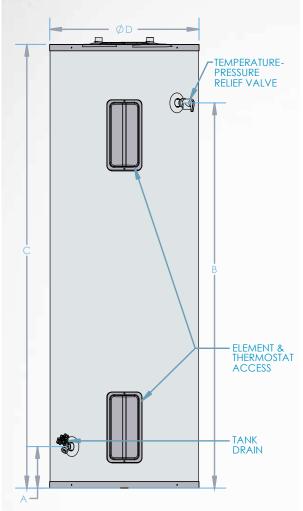
#### Standard features:

- 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		
WESTINGHOUSE®/ HTP GRID-ENABLED MODELS* CARRIED BY SVE	NOMINAL GALLON	DOE-RATED STORAGE VOLUME (GALLONS)	A	В	C*	D	Е	HOT/ COLD INLETS	MINIMUM DELIVERED TEMP	MAXIMUM DELIVERED TEMP.	HIGH TEMP. LIMIT
WEG080C2X045H	80	78	6.5"	60"	69"	23.25"	8"	3/4" NPT	110°F	170°F	190°F
WEG115C2X045H	115	111	7.25	60.25"	70.5″	27"			43.3°C	76.7°C	87.8°C
GRID-ENABLED MODELS* 240V 208V		SAFETY LISTING	FIRST HOUR RATING		FIRST HOUR RATING BIN		ECOVERY FICIENCY	RECOVERY AT 90°F RISE	UEF	SHIPPING WEIGHT	
WEG080C2X045H	4500	3400	UL 174	86 Gallons		HIGH		98%	20 GALLONS	.93	151 LBS
WEG115C2X045H	4500	3400			allons	HIGH		98%	20 GALLONS	.90	224 LBS

<sup>\*</sup> 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.

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## 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 air conditioners. 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 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.

## SIOUX VALLEY

**Colman Service Center** PO Box 216 | 47092 SD Hwy 34 Colman SD 57017

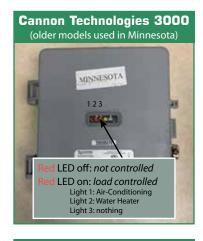
**Brandon Service Center** PO Box 857 | 108 N Heritage Road Brandon SD 57005

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

## **Load Control** Receivers **Used by Sioux** Valley Energy

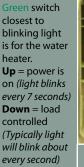
Please contact Sioux Valley Energy if you need to bypass a load control device.

## Aclara (used in Minnehaha County and parts of Lake and Moody counties in South Dakota and in Minnesota) Steady Green LED: = controller has power d I FD on: = There is a fault LED: = load is being controlled



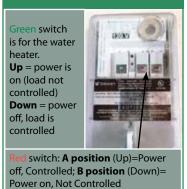


## Enermet





#### **Enermet**







### WHO INSTALLS THE EQUIPMENT?

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

## 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 conditioners, irrigation systems, and grain dryers 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 \$400 upfront 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.

#### South Dakota:

Water heaters may be controlled up to four consecutive hours. If load control is still needed after a four-hour period, the water heaters will be cycled ON for one hour and OFF for two hours.

#### Minnesota:

Water heaters may be controlled up to 45 minutes of every hour depending on the severity of the peak.

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

Participating in the air conditioning load management program is voluntary. With the efficiencies and integrated smart technologies of today's heat pumps, SVE does not actively promote this program, but members can request it. Air conditioning may be controlled May-September. During a control period the compressor is cycled ON and OFF in 15-minute intervals. The fan that circulates the air through the duct system inside the home is allowed to run continuously during a control period. New members who sign up for the program are given a \$6 monthly credit for the air conditioning season. Some members are grandfathered under the electric heat rate for controlled air conditioning.

### GRAIN DRYER LOAD MANAGEMENT

During a control period, fans used for natural air drying will remain off 100% of the time. Members may elect to have an auto restart control installed on the fan which will automatically restart the fan when the control period ends. This program/rate is not active for new installations.

#### 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 (\$150 credit applied annually for five years) per device for a third-party device (such as AgSense, Intellifarms, 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 35 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 75,500 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, air conditioners. irrigation systems and other big energy



For more information, contact Reggie Gassman in **Beneficial** Electrification at 800-234-1960.

## **GENERATORS**

## Interlock Kit/Kohler Generator Program

## Generator Services

Keep appliances on, homes warm, games on TV, sump pumps running, and lights shining during the next power interruption. Sioux Valley Energy is now offering services of installing interlock kits with a generator inlet and Kohler stand-by generators to give peace of mind for Mother Nature's temperament. Contact Reggie Gassman in Customer Electrical Services for an estimate or more information at 800-234-1960.

## Interlock Kits with Generator Inlet Box (30 or 50 amp option): (Most installations less than \$500)

One of the simplest and least expensive methods of readying a home for the connections of a portable generator is to install an interlock kit in the main electrical panel and a permanently installed generator inlet on the outside of the home. By feeding the entire electrical panel with the generator, homeowners will not have to run any extension cords from the generator throughout the house. Most interlock kits can be installed for less than \$500.

## Stand-by Generators:

A permanently installed standby generator keeps

the power on during an outage. It's installed outside (like an AC unit) and comes on automatically - all within seconds of a power outage. There's a higher investment to install a standby generator, but it

takes all the work and worry out of dealing with a power interruption. Standby air-cooled units come in a range of sizes from 10 kW to 20 kW.



## Loan Program:

Loans up to \$10,000, 5% interest with a 7-year term are available to assist qualifying members in the purchase and installation of Kohler stand-by generators by SVE personnel. Loans do not include the costs associated with the gas installation/connection.

## **GENERATOR PROGRAMS**

AT A GLANCE



Colman Service Center PO Box 216 | 47092 SD Hwy 34 Colman SD 57017

**Brandon Service Center** PO Box 857 | 108 N Heritage Road Brandon SD 57005

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

#### **PROGRAM**

Interlock Kits with Generator Inlet Box (30- or 5<u>0-amp</u> option)

Kohler Stand-By Generators

Loan Program

#### **DESCRIPTION**

Connects portable generator at main electrical panel through a generator inlet outside the house.

Permanently installed stand-by generator comes on automatically. Air-cooled units range from 10 kW to 20 kW and includes a heater kit. Requires a natural gas or propane installation/hook up (not included).

Loan assists with purchase and installation of Kohler-stand-by generators by SVE personnel. (Does not include natural gas or propane installation/connection costs.)

#### Incentive

Contact SVE (Most installations less than \$500)

> Contact us for pricing

7-year, 5% interest loans up to \$10,000



## **AVAILABLE SERVICES**

Serving Our Members. Always. It's behind everything we do. At Sioux Valley Energy we also offer these services to our members.

## 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. Our dispatchers are standing by to answer after-hour questions and can forward messages for more detailed questions to be answered the following business day.

## House, Building, or Equipment Move

Every year 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.

## 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, residential generator installations, 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.

## 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.





# 7 ESSENTIAL TIPS

## FOR CONSTRUCTION SAFETY NEAR POWER LINES

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



**CALL 811 BEFORE YOU DIG** 

Call 811 a few days before the start of any digging project to prevent damage to underground lines.



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.



CONTACT

Always contact the local electric co-op before working near overhead power lines.



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.



**ESTABLISH SAFE** CLEARANCE

Before work begins, establish a safe clearance boundary around power lines.



**ALWAYS USE A SPOTTER** 

Always use a spotter when operating heavy equipment whose sole responsibility is keeping a lookout.



Comply with all OSHA requirements and applicable state and federal safety regulations.

RE-ENERGIZING SAFETY

Contact your local Touchstone Energy® Cooperative for more information.



## BEFORE DIGGING

## Call 811 or Click https://call811.com/

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.

Dig notification processing is very easy if the caller is knowledgeable of the planned excavation activity and prepared to answer all questions. A clear and complete knowledge of the excavation activity and the specific worksite is required to process a dig notification.

**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.

## **Uniform Color Code** White - Proposed Excavation Pink - Temporary Survey Markings Red - Electric Power Lines, Cables, Conduit and Lighting Cables Yellow - Gas, Oil, Steam, Petroleum or Gaseous Materials Orange - Communication, Cable TV, Alarm or Signal Lines, Cable or Conduit Blue - Water, Irrigation or Slurry Lines Purple - Reclaimed Water, Irrigation or Slurry Lines **Green** – Sewers and Drain Lines Marking of Underground facilities may not be exact. To expose the facility, CAREFULLY HAND DIG 18 inches (24 inches in Minnesota) either side of the markings.



Required Ticket Information

**Dial 811** 

Name of person doing the excavation:

Phone Numb	er	Extension
Caller Name		
Homeowner	Mailing Ad	dress
City	S	State Zip
Alternate Co	ntact	
Phone		
Work to Beg	in Date	Time
Duration of v	vork via ho	ours/days
County		
City/Town _		
Excavation A	ddress	
Nearest Cro	ss Street	
Depth of Exc		
Tunneling or	Boring (Y/I	N)
Excavating in	Right of V	Vay (Y/N)
Explosives (Y	/N)	
Work being o	lone for	
Description o	of the Exca	vation Site (Marking Instructions)
Examples:		
A. Excavation	in rear of lo	t, mark from house to back lot line
B. Mark 15' e	ither side o	f white flagged route
Remarks (inc street addre		g instructions on rural tickets w/o 
		uire this information if a specific ovided by the caller:
Latitude/Long	gitude Coo	rdinates
		or
Township	Range	Section/Quarter

https://call811.com



#### 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.



## 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/my-electricity/new-construction-or-upgrade-service 2. Fill out and submit application for service. The following information will be needed on the application:

z. Fili out allu subilit applica	tion for service. The follow	wing information will be fied	ded 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 stag for an estimate or are you ready		☐ Planning stages and loo	oking 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					
what phase of service:	()	lf 3-phase, indicate voltage)	208 voltage	☐ 480 voltage				
What is the service size?		□ 200 amp □ 400 amp		☐ 600 amp				
Has the building site been stake	d for construction?		☐ Yes	□No				
Date the electric service is neede	ed.							
Construction will be scheduled at depending on the depth of frost e								
Type of Heat (select both primar	ry and back-up source)	☐ Electric Resistance	☐ Air-Source Heat Pump	Geothermal Heat Pump Tons				
		Ductless Heat Pump	☐ Natural Gas	Propane				
		☐ Home is wired to be EV	ready	□ Solar				
What technologies are you plan interest in? Contact SVE for more		<ul><li>Business wanting Level infrastructure</li></ul>	2 or larger EV charging	☐ Wind				
following options.	e information on the	■ Biogas		☐ Battery Storage				
		Generator (SVE offers Kohler standby generators or the installation of interlock kits)						



Contact your local Touchstone Energy Cooperative before you add, move or upgrade any building on your farm. It's the best way to stay safe around power lines and comply with any regulations.

RE-ENERGIZING FARM SAFETY





# ENGINEERING SERVICE UPGRADE RELOCATION REQUEST CHECKLIST

When calling in (800-234-1960) for a service upgrade or relocation request, it's helpful to know the following information:

1. Contact the Sioux Valley Energy Engineering Department during business hours (Monday-Friday from 7:30 a.m. to 4:30 p.m.). An online form is available at: https://www.siouxvalleyenergy.com/my-account/forms/service-upgrade-or-relocation-request-form **2. Fill out and submit application for service.** The following information will be needed on the application:

Name/Organization:							
Email:	Phone:						
Member Name:	Account Number:						
Service/Location Address:	Meter Number:						
Are you just in the planning stages and looking for an estimate or are you ready to begin?	ooking for an estimate	Ready to Begin					
Electrician Name:		Electrician Phone Number:					
Builder Name:		Builder Phone Number:					
What is the work you want done/scope of project?							
Reason for rebuild or relocation?							
If load is being added, what type of load and how much? (Please include estimate of electric heat kW, motor load HP, etc.)							
Are you planning to add motors, fans, VFD equipment, etc.? If so, please explain. <i>You must contact the SVE Engineering Department at 800-234-1960 before work begins</i> to verify if transformer size/phase are adequate to meet your needs.							
Date the electric service is needed.							
Construction will be selected after a number been been received. Freet sharper annive for underground installation between New 1 and May 1							

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.



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**Brandon Service Center** PO Box 857 | 108 N Heritage Road Brandon SD 57005

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



www.siouxvalleyenergy.com f @svecoop 💆 @siouxvalley o v siouxvalleyenergy

