



Programs and Services Guide for contractors



2024

2024

Programs and Services Guide

General information

Applying for a rebate	2
Otter Tail Power Company representatives	3
Federal tax credits and incentives	4
Fuel price break-even points	5

Minnesota rebate programs



Heat pumps	9
Electric water heating	12
Electric heating technology rebates	12
Thermal-storage technologies	13
CoolSavings AC cycling	13
Residential insulation	14
Window rebates	14
Appliance rebates	15
Appliance recycling	15
Electric equipment rebates	16
Electric vehicle rebates	16
Electric vehicle charging station	16
Smart thermostats	17
Lighting	17
Drive Power	19
Compressed air efficiency	23
Commercial refrigeration	24
Refrigeration optimization	25
Commercial food service equipment	25
Publicly Owned Property (POP) Solar	26
Custom efficiency project grants	26
Integrated Building Design Plus	27
Recommissioning energy studies	27

North Dakota rebate programs



Heat pumps	29
Thermal-storage technologies	30
Electric heating technology rebates	31
Electric water heating	31
Electric vehicle charging station	32

CoolSavings AC cycling	32
----------------------------------	----

South Dakota rebate programs



Heat pumps	33
Electric water heating	36
Electric heating technology rebates	36
Thermal-storage technologies	37
CoolSavings AC cycling	37
Electric vehicle charging station	38
Smart thermostats	38
Lighting	39
Drive Power	40
Custom efficiency project grants	43

Rates and resources

Off-peak rates and energy control	44
Water Heating Control Rate	45
Air-conditioning control	46
Fixed Time of Delivery Rate	47
Deferred Load Rate	48
Dual Fuel Rate	49
Residential Demand Control Rate	50
Off-peak Electric Vehicle Rate (MN only)	51
Outdoor Lighting Rate	52
RDC lease-to-buy program	53
Electrician and contractor workshops	53
Notices	54
Electric vehicle and Fixed Time of Delivery wiring diagram	55
Generic off-peak meter socket and wiring diagram	56
RDC—Brayden 9312 wiring diagram	57
Underfloor thermal storage 8 to 14 hours of control	58
Underfloor thermal storage 14 to 20 hours of control	59
Appliance energy-use chart	60
Electric vehicle usage and cost estimate	63

General information

Applying for a rebate

Customers must provide detailed receipts and equipment documentation, including manufacturer and model numbers, and a signed Customer Rebate Application or other rebate forms.

Submit rebates by email to:

Rebates@otpc.com


Or by mail to:

Rebates

P.O. Box 496

Fergus Falls, MN 56538-0496

- Bids and quotes are not acceptable proof of purchase.
- Documentation for air conditioner and heat pump rebates must clearly indicate ducted or ductless design and other required performance ratings.
- Acceptable proof of equipment efficiency, where required, includes AHRI certificates reflecting required equipment efficiency levels or manufacturer specification sheets with proof of efficiency levels for models installed.
- Find AHRI certificates at **ahridirectory.org**.
- Any other documentation of equipment efficiency must receive prior approval.
- Customer Rebate Applications may be found online at **otpc.com/RebateApplication**.
- Some programs have additional guidelines and documentation requirements. Contact one of our representatives listed on page 3 for assistance.
- All documentation is needed with the initial form submission to avoid delays in processing or disqualification.
- Allow eight weeks for rebates to process.
- Energy control rebate projects that total **\$10,000 or more require preapproval** and may be evaluated for a custom rebate amount to ensure project demand response value and a payback period of no less than one year. Customer must provide project cost details including alternative equipment under consideration and timeline for project completion for evaluation purposes.
- Rebates will not exceed 75 percent of project cost. Geothermal heat pump rebates will not exceed 50 percent of project cost. (Note: Inflation Reduction Act and state rebates are not included in project cost calculations.)
- Funding limitations apply.
- We reserve the right to change or eliminate rebate programs without notice.

 Download the Customer Rebate Application at **otpc.com/RebateApplication**.

Otter Tail Power Company representatives

Contact these individuals directly or call our **Idea Center** at **800-493-3299**.



Chris Waltz, C.E.M.
Manager, Sales
Fergus Falls, MN
218-739-8492
cwaltz@otpc.com



Bill Gronwold
Energy Management
Representative for the
Fergus Falls, MN area
218-205-1689
wgronwold@otpc.com



Jeff Hoff
Energy Management
Representative for
Jamestown and
Oakes, ND areas
218-739-8462
jhoff@otpc.com



Brandon Johnson, C.E.M.
Energy Management
Representative for the
Bemidji, MN area
218-739-8215
bjjohnson@otpc.com



Todd Kadry
Industrial Services
Engineer
Fergus Falls, MN
218-739-8286
tkadry@otpc.com



Andrew Martig
Energy Management
Representative for the
Morris, MN area
320-247-3118
amartig@otpc.com



Lori Moxness
Manager, Energy
Management
Fergus Falls, MN
218-205-1942
lmoxness@otpc.com



**Brad Nelson, C.E.M.,
C.L.E.P., C.D.S.M.**
Energy Management
Representative for
Milbank, SD and
Wahpeton, ND areas
605-949-1779
bnelson@otpc.com



Mark Remer, C.E.M., C.E.P.
Senior Industrial Services
Engineer
Fergus Falls, MN
218-739-8967
mremmer@otpc.com



Aaron Sigette, C.E.M.
Energy Management
Representative for
Crookston and
Hallock, MN areas
701-230-3305
asigette@otpc.com



Scott Sigette
Energy Management
Representative for
Devils Lake, Langdon, and
Rugby, ND areas
701-351-3502
ssigette@otpc.com



Jesse Tomford
Manager, Industrial
Services
Fergus Falls, MN
218-739-8474
jtomford@otpc.com

Federal tax credits and incentives

The federal Inflation Reduction Act of 2022 provides tax credits and incentives for energy-saving electric items. These incentives may be used in conjunction with our rebate programs.

TAX CREDITS

Federal tax credits are available to both commercial and residential customers for certain energy-saving electric equipment.

Some of the tax credits at right are only available to residential customers. **Be sure to consult your tax professional before making equipment purchases.**

UPFRONT DISCOUNTS

We expect upfront discounts to be available in 2024. The availability will depend on how quickly state governments are able to implement them.

For more information on eligibility, visit otpc.com/IRA.

Tax credit

Electrical equipment	Tax credit
Battery storage installation	30% of project cost
Geothermal heating installation	30% of project cost
Electric panel	30% of cost (\$600 cap)
Electric vehicle charger	30% of cost (\$1,000 cap)
New electric vehicle	\$7,500
Used electric vehicle	30% of cost (\$4,000 cap)
Heat pump air conditioner/heater	30% of cost (\$2,000 cap)
Rooftop solar installation	30% of project cost
Home efficiency	30% of cost (\$1,200 cap)

Maximum upfront discount

Electrical equipment	Discount
Electrical panel	\$4,000
Electric stove	\$840
Electric wiring	\$2,500
Heat pump water heater	\$1,750
High-efficiency heat pump	\$8,000
Heat pump clothes dryer	\$840
Home efficiency	\$1,600
Whole home energy reduction	\$4,000

ENERGY OUTLOOK: WINTER 2023-2024

The chart and comments below are based on the Department of Energy, Energy Information Agency Short-Term Energy Outlook forecast for average heating costs during the 2023-2024 winter.

- Retail energy prices are expected to remain relatively flat or decrease in the United States.
- National natural gas and propane inventories are higher than average due to production growth and a mild winter in the East, though heating oil inventories are well below the five-year average due to falling demand.
- Overall household expenditures are expected to be lower due to lower energy prices and the forecast of a warmer winter.

Midwest price and expenditure forecast for winter heating fuels

Fuel		21-22 actual	22-23 actual	23-24 forecast	% change
Propane (gallon)	Consumption	691	665	679	2%
	Price	\$2.30	\$2.19	\$1.90	-13%
	Total cost	\$1,591	\$1,453	\$1,288	-11%
Natural gas (MCF)	Consumption	64	61	63	3%
	Price	\$10.48	\$12.04	\$9.49	-21%
	Total cost	\$669	\$730	\$593	-19%
Heating oil (gallon) U.S. avg.	Consumption	435	400	439	10%
	Price	\$3.93	\$4.31	\$4.15	-4%
	Total cost	\$1,709	\$1,723	\$1,824	6%

Source: Department of Energy, Energy Information Agency, November 2023

COMPETITIVE RATES

We're dedicated to keeping our prices below state and national averages.

Residential rates (cents/kWh)			
	Minnesota	North Dakota	South Dakota
State average	14.95	11.73	13.25
Otter Tail Power Company	10.97	10.03	11.37

Residential rates (cents/kWh)	
United States residential average	16.09
Otter Tail Power Company total system average	10.79

Commercial rates (cents/kWh)			
	Minnesota	North Dakota	South Dakota
State average	12.32	9.09	10.50
Otter Tail Power Company	10.18	7.11	7.90

Commercial rates (cents/kWh)	
United States commercial average	13.04
Otter Tail Power Company total system average	8.40

Source: U.S. Energy Information Administration, Table 5.6A Average Price of Electricity to Ultimate Customers by End-Use Sector, October 2022

 Visit [otpc.com/pricing](https://www.otpc.com/pricing) for updates on rates and riders.

COMPETITIVE RATES

The rates per kilowatt-hour (kWh) shown to the right reflect calculated bill charges for residential and small commercial customers in October 2023 based on typical seasonal monthly use. The cost per kWh is an all-in cost and includes energy, customer, and facilities charges, as well as all applicable riders including cost-of-energy. Use these when calculating a break-even comparison.

Residential customer costs

Rate name	Code	Average annual kWh use	Typical prices (cents/kWh)		
			MN	ND	SD
Large Dual Fuel	165/170	15,180	0.07655	0.05904	0.05287
Large Dual Fuel with ancillary load	168/169	15,180	0.07772	0.05904	0.05531
Small Dual Fuel	185/190	15,470	0.07387	0.04221	0.04845
Controlled Water Heating	191	2,300	0.10984	0.10609	0.09021
Deferred Load	195/197	13,400	0.09087	0.06119	0.06194
Fixed Time of Delivery	301/302	15,350	0.05721	0.04563	0.04324

Small commercial customer costs

Rate name	Code	Average annual kWh use	Typical prices (cents/kWh)		
			MN	ND	SD
Large Dual Fuel	165/170	28,401	0.07024	0.05117	0.04883
Large Dual Fuel with ancillary load	168/169	28,401	0.07257	0.05117	0.05127
Small Dual Fuel	185/190	21,730	0.07109	0.03820	0.04508
Controlled Water Heating	191	4,130	0.09314	0.08081	0.07203
Deferred Load	195/197	24,000	0.08445	0.05376	0.05588
Fixed Time of Delivery	301/302	33,400	0.05234	0.04013	0.03887

Costs per kWh are provided as examples only to show approximate comparisons for off-peak rates.

CALCULATING EQUIVALENT COSTS

The formulas below can be used to calculate the equivalent electricity rate or alternate fuel price.

When comparing the price of electricity—off-peak or firm service—against the cost to heat with an alternate fuel, it's important to factor in equipment efficiency.

Alternative fuel price conversion to electric

Fuel price ÷ Equipment efficiency x 3,413 ÷ Fuel BTU content = Electric rate per kWh

Electricity rate conversion to alternate fuel

Electric rate per kWh x Equipment efficiency x Fuel BTU content ÷ 3,413 = Fuel price per gallon or MCF

BTUs available by energy type

Energy type	BTUs available
Propane	91,600 BTU/gallon
Natural gas	1,000,000 BTU/MCF
Fuel oil	140,000 BTU/gallon
Electricity	3,413 BTU/kWh

An accurate cost comparison must consider equipment efficiency, the total energy cost, including facilities and customer charges on electric and natural gas rates, and delivery and storage costs on delivered fuels such as propane.

For a quick calculation, use the tables on the preceding pages. If you're developing a new construction project, our Energy Management Representatives are happy to work with you. (See page 3.)

BREAK-EVEN PRICE CHART

This chart compares fossil fuels with 100 percent efficient electric technologies at various per kilowatt-hour prices for electricity.

Price comparison of fossil fuels with 100 percent efficient electric technologies

Electricity Price/kWh	Propane add (\$/gallon)		Natural gas add (\$/MCF)		Fuel oil add (\$/gallon)	
	Efficiency		Efficiency		Efficiency	
	80%	90%	80%	90%	70%	85%
\$0.0300	\$0.64	\$0.72	\$7.03	\$7.91	\$0.86	\$1.05
\$0.0325	\$0.70	\$0.79	\$7.62	\$8.57	\$0.93	\$1.13
\$0.0350	\$0.75	\$0.85	\$8.20	\$9.23	\$1.00	\$1.22
\$0.0375	\$0.81	\$0.91	\$8.79	\$9.89	\$1.08	\$1.31
\$0.0400	\$0.86	\$0.97	\$9.38	\$10.55	\$1.15	\$1.39
\$0.0425	\$0.91	\$1.03	\$9.96	\$11.21	\$1.22	\$1.48
\$0.0450	\$0.97	\$1.09	\$10.55	\$11.87	\$1.29	\$1.57
\$0.0475	\$1.02	\$1.15	\$11.13	\$12.53	\$1.36	\$1.66
\$0.0500	\$1.07	\$1.21	\$11.72	\$13.18	\$1.44	\$1.74
\$0.0525	\$1.13	\$1.27	\$12.31	\$13.84	\$1.51	\$1.83
\$0.0550	\$1.18	\$1.33	\$12.89	\$14.50	\$1.58	\$1.92
\$0.0575	\$1.23	\$1.39	\$13.48	\$15.16	\$1.65	\$2.00
\$0.0600	\$1.29	\$1.45	\$14.06	\$15.82	\$1.72	\$2.09
\$0.0625	\$1.34	\$1.51	\$14.65	\$16.48	\$1.79	\$2.18
\$0.0650	\$1.40	\$1.57	\$15.24	\$17.14	\$1.87	\$2.27
\$0.0675	\$1.45	\$1.63	\$15.82	\$17.80	\$1.94	\$2.35
\$0.0700	\$1.50	\$1.69	\$16.41	\$18.46	\$2.01	\$2.44
\$0.0725	\$1.56	\$1.75	\$16.99	\$19.12	\$2.08	\$2.53
\$0.0750	\$1.61	\$1.81	\$17.58	\$19.78	\$2.15	\$2.62
\$0.0775	\$1.66	\$1.87	\$18.17	\$20.44	\$2.23	\$2.70
\$0.0800	\$1.72	\$1.93	\$18.75	\$21.10	\$2.30	\$2.79
\$0.0825	\$1.77	\$1.99	\$19.34	\$21.76	\$2.37	\$2.88
\$0.0850	\$1.83	\$2.05	\$19.92	\$22.41	\$2.44	\$2.96
\$0.0875	\$1.88	\$2.11	\$20.51	\$23.07	\$2.51	\$3.05
\$0.0900	\$1.93	\$2.17	\$21.10	\$23.73	\$2.58	\$3.14
\$0.0950	\$2.04	\$2.29	\$22.27	\$25.05	\$2.73	\$3.31
\$0.1000	\$2.15	\$2.42	\$23.44	\$26.37	\$2.87	\$3.49
\$0.1050	\$2.25	\$2.54	\$24.61	\$27.69	\$3.01	\$3.66
\$0.1100	\$2.36	\$2.66	\$25.78	\$29.01	\$3.16	\$3.84
\$0.1150	\$2.47	\$2.78	\$26.96	\$30.33	\$3.30	\$4.01
\$0.1200	\$2.58	\$2.90	\$28.13	\$31.64	\$3.45	\$4.18
\$0.1250	\$2.68	\$3.02	\$29.30	\$32.96	\$3.59	\$4.36
\$0.1300	\$2.79	\$3.14	\$30.47	\$34.28	\$3.73	\$4.53

To find the break-even point for operating a high-efficiency heat pump, use the cost per kilowatt-hour tables on page 7.

Minnesota rebate programs



The following rebates and incentive opportunities are available through the 2024 Minnesota Energy Conservation and Optimization (ECO) plan.

NEW AND HIGHER REBATES!

Heat pumps

Documentation of qualifying efficiency ratings may be found through AHRI at ahridirectory.org. Indoor and outdoor components must match to qualify for rebates and tax credits. Air-to-water heat pump efficiencies are based on manufacturer specification sheets.

To qualify for our rebates, equipment must meet the performance requirements below. For federal tax credits or incentives, follow the federal Inflation Reduction Act (IRA) rating requirements. Our rebates can be claimed in addition to federal incentives.

Minnesota air conditioner (AC) and heat pump rebates

Type	Configuration	Required ratings*		Rebate
		SEER2	HSPF2	
Energy Star AC	Ducted/ductless	≥ 15.2	—	\$100/unit
Standard heat pump	Ducted/ductless	≥ 14.3	≥ 7.5	\$300/ton
Cold-climate heat pump	Ductless	≥ 16.0	≥ 9.5	\$600/ton
Cold-climate heat pump	Ducted	≥ 15.2	≥ 8.1	\$800/ton

Contractors: Always provide an AHRI certificate to your customers for tax and rebate documentation.

Customers: Always get and keep an AHRI certificate for your new system. Submit copies with your rebate application.

Type	Required ratings	Rebate per ton
Air-to-water	COP ≥1.7 A5W110	\$800
Geothermal: Residential	See table on page 10.	\$1,200
Geothermal: Commercial		\$900

Federal IRA tax credit requirements

	SEER2	EER2	HSPF2	COP at 5°F*	Capacity ratio**
Ducted (CEE Tier 1)	≥ 15.2	≥ 10.0	≥ 8.1	≥ 1.75	≥ 58% at 17°F/47°F or ≥ 70% at 5°F/47°F
Ductless (CEE Tier 2)	≥ 16.0	≥ 9.0	≥ 9.5	≥ 1.75	≥ 58% at 17°F/47°F or ≥ 70% at 5°F/47°F

* COP at 5°F must be met using the Appendix M1 test method.

** 5°F, 17°F, and 47°F are rated capacity data points as determined by the Appendix M1 tests.

NEW REBATE!**HEAT PUMPS ON ENERGY CONTROL RECEIVE ADDED BENEFITS!**

A customer may receive an additional **\$40 per ton rebate** when an ECO rebate-eligible cold-climate or geothermal heat pump is installed on our Dual Fuel, Deferred Load, or RDC Rate, or when a qualified air-to-water heat pump is installed on our Dual Fuel Rate.

- Commercial customers installing an **ECO-eligible heat pump may qualify for financing options in addition to receiving rebates.**
- ECO energy-efficiency rebates will not exceed 75 percent of project costs. Geothermal heat pump rebates will not exceed 50 percent of project costs.
- **For more information please review our rebate guidelines on page 2.**

COLD-CLIMATE HEAT PUMPS (CCHPs)

CCHPs operate at an overall seasonal efficiency of 250 percent or more. They offer customers heating and cooling at a fraction of the cost of fossil fuel systems, and deliver comfort down to sub-zero temperatures. **Our rebates combined with federal tax credits make these systems highly cost-effective installations.**

GEOHERMAL HEAT PUMPS (GHPs)

GHPs are clean, safe, efficient, and environmentally friendly and can deliver four to six units of heat for each unit of energy used. As a result, GHPs can reduce annual heating and cooling costs by up to 70 percent.

Geothermal heat pump ratings

GHP	Loop type	COP	EER
Water to air	Open loop	4.1	21.1
Water to air	Closed loop	3.6	17.1
Water to water	Open loop	3.5	20.1
Water to water	Closed loop	3.1	16.1
Direct exchange	—	3.6	16
GHP single unit ≥ 6 tons	—	3.1	13



GHPs must meet ENERGY STAR® requirements at time of installation to qualify for IRA benefits and our rebates. If a unit is not labeled ENERGY STAR®, proof of the minimum COP and EER ratings must be provided with rebate application.

The GHP rebate per ton amount depends on whether the rate serving the account location is classified as residential or commercial.

AIR-TO-WATER HEAT PUMPS (AWHPs)

AWHPs improve the efficiency of hydronic underfloor heat storage systems by using free energy available in the air and transferring it through water for heating. This makes an AWHP a great option to upgrade the efficiency of an existing hydronic underfloor heating system or for a new system installation where geothermal might not be feasible. When paired with a buffer tank containing transfer coils, an AWHP can provide added savings by preheating domestic hot water.

BUFFER TANK OR DESUPERHEATER

Add a buffer tank to an ECO-qualified AWHP or a desuperheater to an ECO-qualified GHP installation and receive an additional **\$200 per ton rebate** when used for domestic hot water preheating. Buffer tank requires heating coils.

Tonnage based on associated heat pump unit. Limit 20 tons.

HEAT PUMP WATER HEATER


A customer who installs a heat pump water heater can receive a **\$200 rebate**.

NEW REBATES!

QUALITY INSTALLATION REBATE

Opportunities for certified HVAC installers: Put your training and expertise to work for your customers while you build your business. Contractors certified through the following are eligible to offer customers quality installation rebates:

- North American Technician Excellence (NATE).
- Minnesota Air Source Heat Pump Collaborative.
- Manufacturer or distributor sponsored training.
- Similar preapproved certifications.

 Visit otpc.com/certification for more information on certification options.
Be sure to forward your certifications to us to add to our new online Find a contractor tool.

A customer can receive an additional rebate of **\$200 per ton** for a quality heat pump installation and **\$50 per unit** for a quality air-conditioner installation. Applies to central or ductless mini-split systems.

HEAT PUMP AND AIR-CONDITIONING MAINTENANCE TUNE UP

A customer can receive a **\$150 rebate** for a heat pump tune up and a **\$75 rebate** for an air-conditioner tune up. A tune up must be completed by a licensed contractor and include coil cleaning, refrigeration charge check, air filter cleaning, and air flow measurement and correction if not done by homeowner or contractor at equipment installation. A customer can receive one rebate for each account once every ten years.

HIGHER REBATES

Electric water heating

A customer that installs a new electric water heater with a uniform energy factor (UEF) of .90 or higher may qualify for a controlled water heater rebate when it's served on our Deferred Load, Dual Fuel, Controlled Water Heating, or Residential Demand Control Rate. Firm service rates also may qualify when an energy control device is connected.

Receive a \$10 per month bill credit. A customer may choose to connect a radio receiver to their firm service electric panel to avoid the cost of adding an additional service panel and meter.



Controlled water heating rebates

Rebate	Application	Kilowatt requirements	Conditions
\$400	≥ 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$200	≥ 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$200	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$100	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$50/kW	Minimum 120-gallon storage capacity, Heavy Duty Commercial	Minimum of 12 kW	New or replacement controlled load; \$5,000 maximum rebate

Contractors: We do not unlock water heaters. Be sure you have access to electronic or manual keys for the specific brand of water heater sold before installing a locked grid-enabled water heater.

Rebate information on heat pump water heaters can be found on page 15. Controlled service is not required for a heat pump water heater rebate.

HIGHER REBATE

Electric heating technology rebates

Rebates are available for electric heating technologies when a minimum of 9 kilowatts (kW) is permanently connected and served through our Dual Fuel or RDC Rate.

- Receive a **\$20 per kW rebate** for baseboard, cove heat, garage unit heater, or radiant electric heating including floor warming.*
- Receive a **\$40 per kW rebate** for an electric plenum heater, electric boiler, ducted electric furnace, ECO-qualified cold-climate or geothermal heat pump, or electric cable or panel storage heating system.**
- Rebate for electric cable or panel storage heating is limited to Dual Fuel Rate installations only. For RDC Rate installations see our thermal-storage rebate on page 13.

*Floor warming is nonstorage heating placed beneath flooring material.

** Electric cable or panel storage heating is limited to installations under new construction slab foundations.



HIGHER REBATE

Thermal-storage technologies

A **\$75 per kilowatt (kW) rebate** is available for storage technologies served on our Deferred Load, RDC, or Fixed Time of Delivery Rates.

A system must have adequate capacity to heat or cool the space during the maximum control period allowed by the rate to qualify for a rebate. An underfloor system requires a sand base to serve as a heat sink. Qualifying projects must be new installations and a minimum of 9 kW in size.

In combined thermal-storage/heat pump systems, a customer will receive an additional **\$40 per ton rebate** for an ECO rebate-qualified cold-climate or geothermal heat pump installed on our Deferred Load or RDC Rate. **This rebate may be combined with efficiency rebates offered through our heat pump program.**

Eligible storage applications include:

- Central furnaces.
- Room units.
- Underfloor cable or panel systems embedded in sand.
- Electric boilers installed to serve underfloor hydronic systems embedded in sand.
- Ice storage applications.

CoolSavings AC cycling

CoolSavings cycled air-conditioning control helps our company manage summer electricity demand. Systems are cycled on and off every 15 minutes during peak events June through September. Setup is free when authorized by the property owner.

- Central air conditioners or heat pumps served through a qualified general service or RDC meter are eligible.
- Systems served through our Deferred Load or Dual Fuel Rates do not qualify.

RESIDENTIAL CUSTOMERS

Receive an average credit of **\$8.25 each month** or \$33 per season (June through September).

COMMERCIAL CUSTOMERS

Receive an average credit of **\$6 per ton** of connected cooling load per month from June through September.

Operational notes

Please review rate details on page 46 and notices regarding equipment restart delay and low voltage control strategy on page 54.

 Find enrollment forms at otpc.com/CoolSavings.

NEW REBATE!

Appliance rebates

Receive rebates on eligible, standard-sized ENERGY STAR®-rated appliances.

Eligible appliances include:

Appliance rebates

Rebate	Appliance
\$200	Heat pump water heater
\$50	Refrigerator
\$50	Chest or upright freezer
\$50	Dishwasher
\$50	Clothes washer
\$50	Electric clothes dryer
\$50	Heat pump clothes dryer
\$50	Induction cooktop or range with induction cooktop
\$25	Air purifier
\$25	Dehumidifier



Limit one rebate per appliance type.

Compact refrigerators and freezers less than 7.5 cubic feet do not qualify.

Dehumidifiers must have a minimum capacity of 50 pints per day.

Appliance recycling

Customers may recycle **up to two old, but working, refrigerators or freezers per year**. During the same appointment a customer also may recycle a working, but inefficient, window air conditioner and dehumidifier. Pickup is free with service available May 1 through September 30.

Appliance recycling rebates

Rebate	Appliance
\$50	Refrigerator 10 to 27 cubic feet in size
\$50	Freezer 10 to 27 cubic feet in size
\$25	Window air conditioner (limit 2)
\$10	Dehumidifier (limit 2)



Visit otpc.com/ApplianceRecycling for more information about scheduling a pickup.

NEW REBATE!

Electric equipment rebates

New for 2024, customers who purchase new electric technologies can receive rebates.

Residential new electric equipment	Rebate per unit
Push mower	\$250
Rider mower	\$750
Snow blower	\$150
Lawn tools (weed trimmer, leaf blower)	\$25

Commercial new electric equipment	Rebate per unit
School bus	\$5,000
Push mower	\$100
Rider mower	\$500
Forklift: Under 6,000-pound lifting capacity	\$2,500
Forklift: Over 6,000-pound lifting capacity	\$3,000

**NEW REBATE!**

Electric vehicle rebates

A customer who purchases an electric vehicle (EV) from a qualified dealer can receive a rebate that may be combined with federal tax credits. Rebate levels are as follows:

Electric vehicle type	Rebate per vehicle	Federal tax credit per vehicle*
New Battery Electric Vehicle (BEV)	\$3,000	\$7,500
New Plug-in Hybrid Electric Vehicle (PHEV)	\$1,500	\$7,500
Used Battery Electric Vehicle (BEV)	\$1,500	\$4,000
Used Plug-in Hybrid Electric Vehicle (PHEV)	\$750	\$4,000

* Review IRS guidelines to confirm electric vehicle federal tax credit amounts. Vehicle eligibility is continually updated based on manufacturer production changes. [irs.gov/clean-vehicle-tax-credits](https://www.irs.gov/clean-vehicle-tax-credits)

Note: Used electric vehicles must be purchased from a licensed dealer to be eligible for rebates. Private-to-private sales are not eligible. For a review of EV usage costs, see page 63.

HIGHER REBATE

Electric vehicle charging station

A customer installing a Level 2 electric vehicle charging station as a permanently connected load on an eligible rate may qualify for a **\$500 rebate**. Our rebate can be combined with a federal tax credit for 30 percent of costs up to \$1,000. Eligible rates include Dual Fuel, Deferred Load, Fixed Time of Delivery, RDC, and our Electric Vehicle Charging Rate. See page 51.



REBATE ADDED

Smart thermostats

A residential customer who installs a qualified Tier II or Tier III smart thermostat may receive a rebate. Rebate level is dependent on thermostat communication capabilities (tier level) and use of electricity for heating and/or cooling. **Only one rebate per household.** Rebate may not exceed the thermostat invoice amount.

- Rebates of **\$100 for Tier II and \$150 for Tier III** qualifying smart thermostats are available to customers who use central heating electric technologies including air-source heat pumps, geothermal heat pump systems, plenum heaters, and boilers.
- Rebates of **\$100 for Tier III** qualifying **line voltage** smart thermostats are available to customers who use non-central heating electric technologies as their primary heat source, including baseboard.
- Rebates of **\$35 for Tier II and \$50 for Tier III** qualifying smart thermostats are available to customers with electric cooling but without electric heating.

 Find the current list of qualifying smart thermostat models online at otpc.com/SmartThermostats.



Lighting

Customers that install energy-efficient lighting technologies may qualify for rebates as shown in the tables on the following page.

- Preapproval is required for rebates exceeding \$4,500.
- LED exit lighting does not qualify for new construction lighting rebates.

Commercial customers may qualify for all rebates. Rebates for lighting controls are based on total wattage of lighting load connected to the control technology.

Residential customers may qualify for hardwired retrofit replacement lighting and new construction lighting rebates when rebate amount exceeds \$20. Screw-in lighting rebates for retrofit and new construction are not available except through point-of-sale rebates at participating retail stores.

In-store rebates are available through select retailers in our area, resulting in greatly discounted purchase prices. No paperwork required! Visit otpc.com/LEDs.

 For more information about fluorescent lamps, high-intensity discharge (HID) lamps and ballasts, and disposal requirements, contact your local county recycling offices.

Or, in Minnesota, call the Minnesota Pollution Control Agency at **800-657-3864**.

Replacement lighting

Existing	Replaced with	Rebate per watt saved
Low-efficiency incandescent	Screw-in LED indoor (with and without removal prevention devices)	20¢
	Screw-in LED outdoor (with and without removal prevention devices)	10¢
	Hard-wired LED indoor	60¢
	Hard-wired LED outdoor	40¢
Low-efficiency fluorescent	Hard-wired LED	60¢
Standard T8 fluorescent lamps	LED lamp-only retrofit	40¢
Mercury-vapor lamps	Hard-wired LED indoor	60¢
	Hard-wired LED outdoor	40¢
	Screw-in LED indoor	40¢
	Screw-in LED outdoor	20¢
Standard HID	Hard-wired LED indoor	60¢
	Hard-wired LED outdoor	40¢
	Screw-in LED indoor	40¢
	Screw-in LED outdoor	20¢
Exit lighting fixtures	High-efficiency exit lighting (based on maximum demand reduction of 20 watts/fixture)	60¢
Occupancy/daylight sensing controls		\$200/connected kW
Luminaire level lighting controls		\$200/connected kW

New construction high-efficiency lighting

LED technology	Wattage	Rebate per fixture or lamp
Indoor LED fixture	<30	\$15.00
	30 to 49	\$25.00
	50 to 79	\$35.00
	80 to 99	\$50.00
	>99	\$75.00
Outdoor LED fixture	<30	\$10.00
	30 to 49	\$15.00
	50 to 79	\$20.00
	80 to 99	\$25.00
	>99	\$30.00
Screw-in indoor LED*	<10	\$1.25
	10 to 24	\$3.50
	25 to 49	\$8.00
	50 to 75	\$13.50
Screw-in outdoor LED*	<10	\$1.00
	10 to 24	\$1.50
	25 to 49	\$3.50
	50 to 75	\$6.00
Occupancy/daylight sensing controls		\$200/connected kW
Luminaire level lighting controls		\$200/connected kW



* Screw-in bulb rebates are available for commercial customers only.

Drive Power

ADJUSTABLE-SPEED DRIVES (ASDs)

Reduce energy use up to 50 percent by installing an ASD to match motor speed to the requirements of a fluctuating load.

- **\$60 per horsepower rebate** for nonseasonal centrifugal applications.
- **\$40 per horsepower rebate** for seasonal and HVAC centrifugal applications.

ELECTRONICALLY COMMUTATED MOTORS (ECMs)

Rebates are available for commercial customers that retrofit existing exhaust and HVAC fans with energy-efficient ECMs. Rebate is based on motor horsepower.

System designer or installing contractor must ensure the entire facility complies with the IEEE Standard 519 after completion of the ASD installation or retrofit. Failure to comply with this rule may result in disqualification of any rebate request.

ECM rebate

Horsepower	Rebate
0.125	\$15
0.25	\$30
0.33	\$50
0.50	\$70
0.75	\$100
1.0	\$125
1.5	\$175

NEW REBATE!

HAND DRYERS

A commercial customer who purchases an electric hand dryer can receive a **rebate of \$250 per dryer**. Hand dryers must operate without electric heating elements to qualify.

MOTORS

Our motor rebate program encourages industrial, commercial, and agricultural customers to purchase energy efficient new, replacement, or retrofit motors.

- 2007 EISA legislation set NEMA Premium® as the efficiency standard for 1-horsepower to 200-horsepower totally enclosed fan-cooled (TEFC) and open drip-proof (ODP) motors manufactured after December 2010.
- Motor efficiency **must exceed** NEMA Premium® efficiency to qualify for rebates for new motors and replacement of nonoperating motors.
- TEFC and ODP motors replaced prior to failure **must meet** NEMA Premium® efficiency levels to qualify for rebates.
- Certain qualified motors may have limited availability in the market.



Totally enclosed fan-cooled motor rebates

HP	Percent rated efficiency 1200 RPM		Percent rated efficiency 1800 RPM		Percent rated efficiency 3600 RPM		Rebate per motor
	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	
1	84.0	82.5	86.5	85.5	78.5	77.0	\$40
1.5	88.5	87.5	87.5	86.5	85.5	84.0	\$60
2	89.5	88.5	87.5	86.5	86.5	85.5	\$80
3	90.2	89.5	90.2	89.5	87.5	86.5	\$90
5	90.2	89.5	90.2	89.5	89.5	88.5	\$150
7.5	91.7	91.0	92.4	91.7	90.2	89.5	\$230
10	91.7	91.0	92.4	91.7	91.0	90.2	\$300
15	92.4	91.7	93.0	92.4	91.7	91.0	\$450
20	92.4	91.7	93.6	93.0	91.7	91.0	\$600
25	93.6	93.0	94.1	93.6	92.4	91.7	\$600
30	93.6	93.0	94.1	93.6	92.4	91.7	\$700
40	94.5	94.1	94.5	94.1	93.0	92.4	\$800
50	94.5	94.1	95.0	94.5	93.6	93.0	\$1,000
60	95.0	94.5	95.4	95.0	94.1	93.6	\$1,100
75	95.0	94.5	95.8	95.4	94.1	93.6	\$1,200
100	95.4	95.0	95.8	95.4	94.5	94.1	\$1,600
125	95.4	95.0	95.8	95.4	95.4	95.0	\$2,000
150	96.2	95.8	96.2	95.8	95.4	95.0	\$2,400
200	96.2	95.8	96.5	96.2	95.8	95.4	\$2,800
250	95.8	95.8	96.2	96.2	95.8	95.8	\$3,500
300	95.8	95.8	96.2	96.2	95.8	95.8	\$4,200
350	95.8	95.8	96.2	96.2	95.8	95.8	\$4,200
400	95.8	95.8	96.2	96.2	95.8	95.8	\$5,000
450	95.8	95.8	96.2	96.2	95.8	95.8	\$6,000
500	95.8	95.8	96.2	96.2	95.8	95.8	\$7,000

Open drip-proof motor rebates

HP	Percent rated efficiency 1200 RPM		Percent rated efficiency 1800 RPM		Percent rated efficiency 3600 RPM		Rebate per motor
	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	
1	84.0	82.5	86.5	85.5	78.5	77.0	\$40
1.5	87.5	86.5	87.5	86.5	85.5	84.0	\$60
2	88.5	87.5	87.5	86.5	86.5	85.5	\$80
3	89.5	88.5	90.2	89.5	86.5	85.5	\$90
5	90.2	89.5	90.2	89.5	87.5	86.5	\$150
7.5	91.0	90.2	91.7	91.0	89.5	88.5	\$230
10	92.4	91.7	92.4	91.7	90.2	89.5	\$300
15	92.4	91.7	93.6	93.0	91.0	90.2	\$450
20	93.0	92.4	93.6	93.0	91.7	91.0	\$600
25	93.6	93.0	94.1	93.6	92.4	91.7	\$600
30	94.1	93.6	94.5	94.1	92.4	91.7	\$700
40	94.5	94.1	94.5	94.1	93.0	92.4	\$800
50	94.5	94.1	95.0	94.5	93.6	93.0	\$1,000
60	95.0	94.5	95.4	95.0	94.1	93.6	\$1,100
75	95.0	94.5	95.4	95.0	94.1	93.6	\$1,200
100	95.4	95.0	95.8	95.4	94.1	93.6	\$1,600
125	95.4	95.0	95.8	95.4	94.5	94.1	\$2,000
150	95.8	95.4	96.2	95.8	94.5	94.1	\$2,400
200	95.8	95.4	96.2	95.8	95.4	95.0	\$2,800
250	95.4	95.4	95.8	95.8	95.0	95.0	\$3,500
300	95.4	95.4	95.8	95.8	95.4	95.4	\$4,200
350	95.4	95.4	95.8	95.8	95.4	95.4	\$4,200
400	95.8	95.8	95.8	95.8	95.8	95.8	\$5,000
450	96.2	96.2	96.2	96.2	95.8	95.8	\$6,000
500	96.2	96.2	96.2	96.2	95.8	95.8	\$7,000

Explosion-proof motor rebates

HP	Percent rated efficiency 1200 RPM	Percent rated efficiency 1800 RPM	Percent rated efficiency 3600 RPM	Rebate per motor
1	82.5	84.0	76.0	\$40
1.5	86.5	84.0	84.0	\$60
2	85.5	85.5	84.0	\$80
3	87.5	85.5	85.5	\$90
5	88.5	88.5	86.5	\$150
7.5	90.0	90.0	86.5	\$230
10	90.0	90.0	89.5	\$300
15	91.0	91.7	90.2	\$450
20	90.0	91.7	90.2	\$600
25	92.0	93.0	91.0	\$600
30	92.4	93.0	91.0	\$700
40	93.6	93.6	92.0	\$800
50	93.6	93.6	92.4	\$1,000
60	94.1	94.0	93.0	\$1,100
75	94.0	94.5	93.6	\$1,200
100	94.5	94.5	93.6	\$1,600
125	94.5	95.0	94.1	\$2,000
150	95.0	95.4	94.1	\$2,400
200	95.0	95.8	95.0	\$2,800
250	95.0	95.0	95.0	\$3,500
300	95.0	95.4	95.4	\$4,200

ADDED REBATES

Compressed air efficiency

Often referred to as the fourth utility in industrial plants, compressed air systems typically operate at just 10 percent to 15 percent efficiency, making compressed air production one of the most energy-intensive and costly operations in many industrial settings.

Rebates are available for audits of commercial compressed air system efficiency and measures to improve customer compressed air system efficiency.

Compressed air efficiency rebates

System	Rebate
No-loss drains	\$150 per drain
Efficient compressors <50HP	\$200 per HP
Flow controllers	\$2,500 per controller
Low-pressure drop filters	\$3 per compressor horsepower
Storage tanks	\$20 per compressor horsepower
Leak studies >50 HP	50% of cost up to \$3,000
Compressed air recommissioning study	100% of cost up to \$10,000
Compressed air audit	50% of cost up to \$10,000

Contact our Energy Management Representatives or Industrial Service Engineers listed on page 3 for information about studies.



ADDED REBATES

Commercial refrigeration

Commercial refrigeration rebates are available for qualifying high-efficiency refrigeration technologies including LED display case lighting, condenser systems, subcooling systems,

refrigerated display cases, strip curtains, night shades, and air-circulation systems.

Rebates apply to new and retrofit applications unless otherwise noted.

Commercial refrigeration rebates

Case measures	Incentive
Antisweat heater control (retrofit)	\$20/linear ft. of case
Case lighting controls (retrofit)	\$60/linear ft. of case
Condenser-based antisweat heater control	\$40/linear ft. of case
Door addition to open cases—cooler (retrofit)	\$50/linear ft. of case
Door addition to open cases—freezer (retrofit)	\$75/linear ft. of case
High evaporator temperature cases	\$20/linear ft. of case
High-efficiency glass doors	\$40/linear ft. of case
Night shades—coolers and freezers	\$20/linear ft. of case
Replace island case—multideck with doors (retrofit)	\$45/linear ft. of case

Condenser measures	Incentive
Adiabatic condensers (new)	\$45/total rack HP
Digital capacity modulation	\$30/total rack HP
Low-speed condenser fans (new)	\$165/total rack HP
Preservation of condenser subcooling (retrofit)	\$40/HP
Solid-state condenser fan controls (retrofit)	\$50/HP
TXV to EEV	\$15/total rack HP

Fan motor measures	Incentive
High-efficiency evaporator fan motor (new)	\$10/motor
High-efficiency evaporator fan motor (retrofit)	\$40/motor
Permanent magnet fan motor (new)	\$10/motor
Permanent magnet fan motor (retrofit)	\$40/motor

Compressor measures	Incentive
Conversion to solid-state compressor controls (retrofit)	\$50/HP
Floating heat pressure on rack (retrofit)	\$25/HP
Floating heat pressure (stand alone)	\$60/HP
Parallel rack (retrofit)	\$100/HP

Door measures	Incentive
LED lighting—low-temp	\$100/door
LED lighting—mid-temp	\$100/door

Other measures	Incentive
Outdoor air cooling (natural cool)	\$2/cfm airflow
Strip curtains—coolers and freezers	\$8.50/square ft. of curtain

Preventive maintenance discounts

Compressor horsepower serviced	Customer price	Maximum reimbursement
1 to 30 HP	\$29.95	\$525
31 to 100 HP	\$39.95	\$800
101 to 200 HP	\$49.95	\$1,050

NEW

Refrigeration optimization

This program focuses on customers operating large refrigeration systems with digital control capability. We'll assess savings based on system size, control setting opportunities, and other system characteristics.

Eligible customers can expect to reduce energy costs significantly and improve reliability of refrigeration systems.

We'll reimburse eligible customers up to **\$10,000 toward the cost of a refrigeration optimization study** and up to **\$2,500 toward expenses** for contractor services to implement control setpoint changes. Customers must use our program study provider and receive prior approval to ensure reimbursement.

Commercial food service equipment

Commercial food service equipment rebates are available for ENERGY STAR® electric appliances, including food-holding cabinets, ovens, cooktops, griddles, dishwashers, refrigerators, electric steamers, freezers, and ice machines.

Electric kitchen equipment often provides a competitive advantage over alternate fuels by improving the cooking process, increasing production, improving food and air quality, and reducing kitchen safety hazards.

Commercial food service equipment rebates

Item	Rebate/unit
Electric hot food holding cabinets (HFHC)	
Full size (20 cubic feet)	\$400
3/4 size (12 cubic feet)	\$300
Half size (8 cubic feet)	\$200
Electric ovens, cooktops, and griddles	
Combination oven	\$700
Convection oven	\$75
Electric fryer or griddle	\$200
Dishwasher (electric water heater required)	
High temp booster heater (electric only)	\$200
Low temp	\$400
Under-counter units	\$50
Refrigerator	
Less than 30 cubic feet	\$25
30 cubic feet and larger	\$75
Miscellaneous	
Electric steamer	\$600
Freezer	\$75
Ice machine	\$75

Publicly Owned Property (POP) Solar

We offer our Publicly Owned Property Solar program to eligible public entities including public education facilities and city, county, or tribal governments. This program is designed to showcase the benefits of solar photovoltaic (PV) generation and support projects that assist local communities. Federal and state incentives can combine with our rebate to reduce or eliminate upfront costs.

POP Solar projects may qualify for an incentive of **\$1,500 per kilowatt AC** of nameplate-generating capacity, and up to 50 percent of project installation costs for qualifying solar PV projects.



To qualify, customers must:

- Participate in energy-efficiency projects including implementing any with a simple payback of two years or less based on an assessment by our company of onsite energy-efficiency opportunities.
- Submit cost-effectiveness evaluation of the proposed solar PV installation.
- Use North American Board of Certified Energy Practitioners (NABCEP) certified solar PV installers.
- Develop a community/school/campus awareness, participation, and educational integration plan.
- Select a site that offers optimal solar PV generation potential to maximize the benefits of distributed solar PV installations across our company's Minnesota service area.
- Agree to transfer the renewable energy credits (RECs) from the POP Solar installation to our company.

Our POP Solar rebate may be combined with Solar for School, Solar for Public Buildings grant funds, and federal Inflation Reduction Act incentives, which include direct payment options to nonprofit organizations.

Custom efficiency project grants

Custom efficiency project grants help customers make efficiency upgrades that benefit their unique business operations. Eligible applications that may qualify include but aren't limited to:

- Air compressors
- Chillers
- Process improvements
- Commercial electric cooking equipment
- Heat-recovery systems
- Building envelope improvements

Grants are calculated based on kilowatt-hours of energy saved, kilowatts of demand reduced, and project costs. Thorough documentation is required for proper evaluation prior to approval. Incentives for grant projects may be capped.

Integrated Building Design Plus

Our FREE design assistance program allows qualifying building owners, architectural and engineering firms, and developers to participate in an integrated design process that puts energy efficiency at the forefront of plans for new construction.

Buildings must be at least 5,000 square feet and exceed baseline energy efficiency by 5 percent to qualify. Benefits include:

- Free computerized energy-use modeling of design alternatives.
- Reimbursements to your architectural and design teams for time commitments.
- Cash incentives for incorporating energy efficiency into your final building design.
- Review of construction documents to ensure that your final building plans reflect intended efficiency.
- Verification to confirm that your building has been constructed to meet intended efficiency levels.
- Assistance for design professionals in optimizing geothermal heating and cooling opportunities.



The best opportunity to impact the energy use of your new building is during the design phase.

Recommissioning energy studies

Recommissioning and retrocommissioning, both commonly referred to as RCx, are processes that ensure specific building systems perform interactively according to the design intent and the owner's operational needs.

Note: Commercial compressed-air system and refrigeration studies are also available. See pages 23 and 25 for details.

Recommissioning ensures that a previously commissioned building is running at optimal performance.

Retrocommissioning involves tuning up an existing building that never was commissioned formally after construction. The retrocommissioning process identifies less-than-optimal performance in an existing facility's HVAC systems and identifies cost-effective energy-saving adjustments.

Several program options are offered.

Pre-approval is required.

TRADITIONAL RCx

Traditional RCx is a six-month or longer study process to gather data on energy-using systems in a commercial building.

The benefits include:

- **A rebate of 30 percent of the RCx study cost and \$400 per kilowatt saved, up to \$20,000**, for eligible customers upon implementation of required measures.
- Potential energy cost savings of up to 20 percent.
- A more comfortable facility with fewer occupant complaints.
- Longer equipment life.
- A detailed building assessment completed by a qualified engineering professional.

Eligible buildings must contain at least 50,000 square feet of conditioned space.

TURNKEY RCx

Turnkey RCx identifies energy-saving projects and ensures that upgrades are completed on time, so savings of up to 20 percent on energy bills begin rapidly. The cost of approved Turnkey RCx studies are reimbursed as follows:

- **First half paid** when the study is completed.
- **Second half paid** when implementation of all required efficiency improvements are successfully completed.

Eligible buildings must contain at least 50,000 square feet of conditioned space.

Contact your Energy Management Representative or Industrial Services Engineer (see page 3) early in the development of your project to learn more about these programs.

RCx LITE

RCx Lite offers lower study costs and a shorter timeline with reduced energy-saving requirements. RCx Lite measures may include tuning set points, optimizing controls, and using low/no cost upgrades capable of achieving savings of 3 percent to 12 percent in most facilities. RCx Lite offers:

- Savings of up to 75 percent of those achieved in a traditional, but more costly RCx study—often for as little as 25 percent of the cost.
- A rebate of 50 percent of the cost of the RCx Lite study up to a maximum of \$10,000 upon completion of required measures.

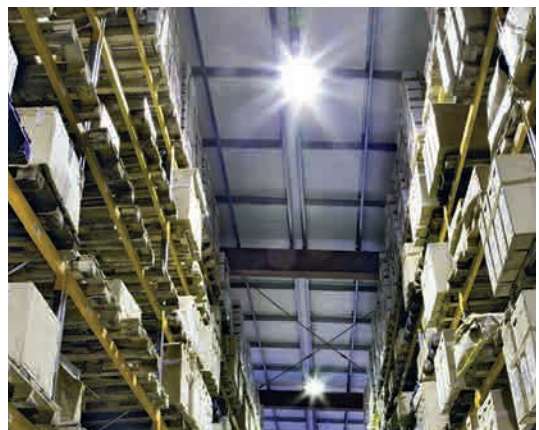
Eligible buildings must have 25,000 to 50,000 square feet of conditioned space.

TURNKEY RCx LITE

This is a fast-track, low-risk program to help building owners capture energy savings from existing building equipment and operations.

- Customers often cut 5 percent to 10 percent of energy costs by participating.
- A rebate of up to \$9,500 per participant can cover 100 percent of the program cost.

Eligible buildings must have a digital control of their building's HVAC equipment via a building automation system (BAS).



North Dakota rebate programs



The following rebates and incentive opportunities are available through our 2024 off-peak program offerings.

Heat pumps

Documentation of qualifying efficiency ratings may be found through AHRI at ahridirectory.org. Indoor and outdoor components must match to qualify for tax credits. Air-to-water heat pump (AWHP) efficiencies are based on manufacturer specification sheets.

To qualify for our rebates, equipment must meet the rebate requirements below. For federal tax credits or incentives, follow the federal Inflation Reduction Act (IRA) rating requirements.

Our rebates can be claimed in addition to federal incentives when federal IRA requirements are met.

North Dakota heat pump rebates

Heat pump type	Eligible rates	Rebate per ton	
Cold-climate ducted	Dual Fuel, Deferred Load, or RDC Rate	\$600	HSPF \geq 9 or HSPF2 \geq 7.6
Cold-climate ductless		\$400	HSPF \geq 10 or HSPF2 \geq 9.5
Geothermal		\$700	—
Air-to-water	Dual Fuel Rate	\$400	COP \geq 1.7 A5W110

Contractors: Always provide an AHRI certificate to your customers for tax and rebate documentation.

Customers: Always get and keep an AHRI certificate for your new system. Submit copies with your rebate application.

Federal IRA tax credit requirements

	SEER2	EER2	HSPF2	COP at 5°F*	Capacity ratio**
Ducted (CEE Tier 1)	\geq 15.2	\geq 10.0	\geq 8.1	\geq 1.75	\geq 58% at 17°F/47°F or \geq 70% at 5°F/47°F
Ductless (CEE Tier 2)	\geq 16.0	\geq 9.0	\geq 9.5	\geq 1.75	\geq 58% at 17°F/47°F or \geq 70% at 5°F/47°F

* COP at 5°F must be met using the Appendix M1 test method.

** 5°F, 17°F, and 47°F are rated capacity data points as determined by the Appendix M1 tests.

To qualify for a rebate:

- A cold-climate or geothermal heat pump system must be served on our Dual Fuel, Deferred Load, or RDC Rate.
- An air-to-water heat pump must be on our Dual Fuel Rate.
- Units must be subject to control according to the rate.
- Systems must be designed to meet heating requirements.
- Rebates totaling more than \$10,000 require prior approval and evaluation.
- See page 2 to learn more about applying for our rebates.

COLD-CLIMATE HEAT PUMPS (CCHPs)

CCHPs operate at an overall seasonal efficiency of 250 percent or more. They offer customers heating and cooling at a fraction of the cost of fossil fuel systems. Our rebates make these systems competitive to install and their hyper-efficient operation delivers comfort down to sub-zero temperatures.

GEOHERMAL HEAT PUMPS (GHPs)

GHPs are clean, safe, efficient, and environmentally friendly and can deliver four to six units of heat for each unit of energy used. As a result, GHPs can reduce annual heating and cooling costs by up to 70 percent.

AIR-TO-WATER HEAT PUMPS (AWHPs)

AWHPs improve the efficiency of hydronic underfloor heat storage systems by using free energy available in the air and transferring it through water for heating. This makes an AWHP an option to upgrade the efficiency of an existing hydronic underfloor heating system or for a new system installation. Systems can include electric resistance backup heating for the coldest weather. And when paired with a buffer tank, an AWHP provides added savings by preheating domestic hot water.

GHPs must be installed on an eligible off-peak rate to qualify for our rebate.

GHPs must meet ENERGY STAR® requirements at time of installation to qualify for IRA benefits.

HIGHER REBATE

Thermal-storage technologies

A **\$75 per kilowatt rebate** is available for installation of **up to 500 kilowatts** of thermal-storage applications served on our Deferred Load, RDC, or Fixed Time of Delivery Rate.

A system must have adequate capacity to heat or cool the space during the maximum control period allowed by the rate to qualify for a rebate. An underfloor system requires a sand base to serve as a heat sink. Qualifying projects must be new installations and a minimum of 9 kilowatts in size.

In combined thermal-storage/air-source heat pump systems, the thermal-storage rebate applies only to the thermal-storage load. Heat pumps may be rebated separately.

Rebates totaling more than \$10,000 require prior approval.

Eligible applications include:

- Central furnaces.
- Room units.
- Underfloor cable or panel systems embedded in sand.
- Electric boilers installed to serve underfloor hydronic systems embedded in sand.
- Ice storage applications.

HIGHER REBATES

Electric heating technology rebates

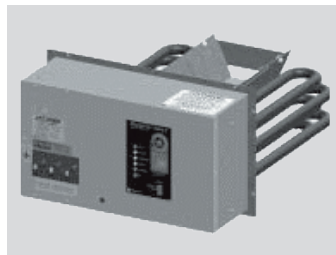
Rebates are available for electric heating technologies when a minimum of 9 kilowatts (kW) is permanently connected and served through our Dual Fuel or RDC Rate.

- Receive a **\$20 per kW rebate** for baseboard, cove heat, garage unit heater, or radiant electric heating including floor warming.*
- Receive a **\$40 per kW rebate** for an electric plenum heater, electric boiler, ducted electric furnace, or electric cable or panel storage heating system.**
- Rebate for electric cable or panel storage heating is limited to Dual Fuel Rate installations only. For RDC Rate installations see our thermal-storage rebate on page 30.

**Floor warming is nonstorage heating placed beneath flooring material.*

***Electric cable or panel storage heating is limited to installations under new construction slab foundations.*

Rebates totaling more than \$10,000 require prior approval.



HIGHER REBATES

Electric water heating

A customer that installs a new electric water heater with a uniform energy factor (UEF) of .90 or higher may qualify for a controlled water heater rebate when it's served on our Deferred Load, Dual Fuel, Controlled Water Heating, or Residential Demand Control Rate. Firm service rates also may qualify when a control device is connected.

Receive an \$8 per month bill credit. A customer may choose to connect a radio receiver to their firm service electric panel to avoid the cost of adding an additional service panel and meter.

Controlled water heating rebates

Rebate	Application	Kilowatt requirements	Conditions
\$400	≥ 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$200	≥ 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$200	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$100	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$50/kW	Minimum 120-gallon storage capacity, Heavy Duty Commercial	Minimum of 12 kW	New or replacement controlled load; \$5,000 maximum rebate

Contractors: We do not unlock water heaters. Be sure you have access to electronic or manual keys for the specific brand of water heater sold before installing a locked grid-enabled water heater.

South Dakota rebate programs



The following rebates and incentive opportunities are available through the 2024 South Dakota Energy Efficiency Partnership (EEP) and our off-peak program offerings.

Heat pumps

Documentation of qualifying efficiency ratings may be found through AHRI at ahridirectory.org. Indoor and outdoor components must match to qualify for rebates and tax credits. Air-to-water heat pump (AWHP) efficiencies are based on manufacturer specification sheets.

To qualify for our rebates, equipment must meet the performance requirements below. For federal tax credits or incentives, follow the federal Inflation Reduction Act (IRA) rating requirements.

Our rebates can be claimed in addition to federal incentives.

South Dakota air conditioner (AC) and heat pump rebates

Type	Configuration	Required ratings		Rebate
		SEER2	HSPF2	
Energy Star AC	Ducted/ductless	≥ 15.2	—	\$100/unit
Standard heat pump	Ducted/ductless	≥ 14.3	≥ 7.5	\$300/ton
Cold-climate heat pump	Ductless	≥ 16.0	≥ 9.5	\$500/ton
Cold-climate heat pump	Ducted	≥ 15.2	≥ 8.1	\$700/ton

Contractors: Always provide an AHRI certificate to your customers for tax and rebate documentation.

Customers: Always get and keep an AHRI certificate for your new system. Submit copies with your rebate application.

Type	Required ratings	Rebate per ton
Air-to-water	COP ≥ 1.7 A5W110	\$800
Geothermal: Residential	See table on page 34.	\$1,100
Geothermal: Commercial		\$900

Federal IRA tax credit requirements

	SEER2	EER2	HSPF2	COP at 5°F*	Capacity ratio**
Ducted (CEE Tier 1)	≥ 15.2	≥ 10.0	≥ 8.1	≥ 1.75	≥ 58% at 17°F/47°F or ≥ 70% at 5°F/47°F
Ductless (CEE Tier 2)	≥ 16.0	≥ 9.0	≥ 9.5	≥ 1.75	≥ 58% at 17°F/47°F or ≥ 70% at 5°F/47°F

* COP at 5°F must be met using the Appendix M1 test method.

** 5°F, 17°F, and 47°F are rated capacity data points as determined by the Appendix M1 tests.

NEW REBATE!

HEAT PUMPS ON ENERGY CONTROL RECEIVE ADDED BENEFITS!

A customer may receive an additional **\$100 per ton rebate** when an EEP rebate-eligible cold-climate or geothermal heat pump is installed on our Dual Fuel, Deferred Load, or RDC Rate, or when an air-to-water heat pump is installed on our Dual Fuel Rate.

- EEP energy-efficiency rebates will not exceed 75 percent of project costs. Geothermal heat pump rebates will not exceed 50 percent of project costs.
- **For more information please review our rebate guidelines on page 2.**

COLD-CLIMATE HEAT PUMPS (CCHPs)

CCHPs operate at an overall seasonal efficiency of 250 percent or more. They offer customers heating and cooling at a fraction of the cost of fossil fuel systems, and deliver comfort down to sub-zero temperatures. **Our rebates combined with federal tax credits make these systems highly cost-effective installations.**

GEOHERMAL HEAT PUMPS (GHPs)

GHPs are clean, safe, efficient, and environmentally friendly and can deliver four to six units of heat for each unit of energy used. As a result, GHPs can reduce annual heating and cooling costs by up to 70 percent.

Geothermal heat pump ratings

GHP	Loop type	COP	EER
Water to air	Open loop	4.1	21.1
Water to air	Closed loop	3.6	17.1
Water to water	Open loop	3.5	20.1
Water to water	Closed loop	3.1	16.1
Direct exchange	—	3.6	16
GHP single unit ≥ 6 tons	—	3.1	13

AIR-TO-WATER HEAT PUMPS (AWHPs)

AWHPs improve the efficiency of hydronic underfloor heat storage systems by using free energy available in the air and transferring it through water for heating. This makes an AWHP a great option to upgrade the efficiency of an existing hydronic underfloor heating system or for a new system installation where geothermal might not be feasible. When paired with a buffer tank containing transfer coils, an AWHP can provide added savings by preheating domestic hot water.



GHPs must meet ENERGY STAR® requirements at time of installation to qualify for IRA benefits and our rebates. If a unit is not labeled ENERGY STAR®, proof of the minimum COP and EER ratings must be provided with rebate application.

The GHP rebate per ton amount depends on whether the rate serving the account location is classified as residential or commercial.

HIGHER REBATES

Electric water heating

A customer that installs a new electric water heater with a uniform energy factor (UEF) of .90 or higher may qualify for a controlled water heater rebate when it's served on our Deferred Load, Dual Fuel, Controlled Water Heating, or Residential Demand Control Rate. Firm service rates also may qualify when an energy control device is connected.

Receive an \$8 per month bill credit. A customer may choose to connect a radio receiver to their firm service electric panel to avoid the cost of adding an additional service panel and meter.



Controlled water heating rebates

Rebate	Application	Kilowatt requirements	Conditions
\$400	≥ 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$200	≥ 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$200	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$100	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$50/kW	Minimum 120-gallon storage capacity, Heavy Duty Commercial	Minimum of 12 kW	New or replacement controlled load; \$5,000 maximum rebate

Contractors: We do not unlock water heaters. Be sure you have access to electronic or manual keys for the specific brand of water heater sold before installing a locked grid-enabled water heater.

HIGHER REBATES

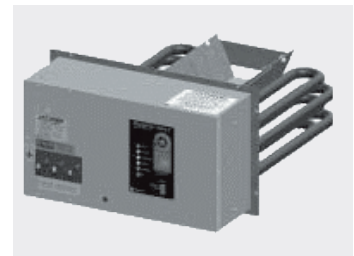
Electric heating technology rebates

Rebates are available for electric heating technologies when a minimum of 9 kilowatts (kW) is permanently connected and served through our Dual Fuel or RDC Rate.

- Receive a **\$20 per kW rebate** for baseboard, cove heat, garage unit heater, or radiant electric heating including floor warming.*
- Receive a **\$40 per kW rebate** for an electric plenum heater, electric boiler, ducted electric furnace, or electric cable or panel storage heating system.**
- Rebate for electric cable or panel storage heating is limited to Dual Fuel Rate installations only. For RDC Rate installations see our thermal-storage rebate on page 37.
- Receive a **\$100 per ton rebate** for qualified heat pumps installed on our Dual Fuel or RDC Rate. **Rebate may be combined with efficiency rebates offered through our heat pump program.**

*Floor warming is nonstorage heating placed beneath flooring material.

**Electric cable or panel storage heating is limited to installations under new construction slab foundations.



Rebates totaling more than \$10,000 require prior approval and evaluation.

HIGHER REBATES

Thermal-storage technologies

A **\$75 per kilowatt (kW) rebate** is available for installation of **up to 500 kilowatts** of thermal storage applications served on our Deferred Load, RDC, or Fixed Time of Delivery Rate.

A system must have adequate capacity to heat or cool the space during the maximum control period allowed by the rate to qualify for a rebate. An underfloor system requires a sand base to serve as a heat sink. Qualifying projects must be new installations and a minimum of 9 kW in size.

In combined thermal-storage/heat pump systems, a customer will receive an additional **\$100 per ton rebate** for an EEP rebate-eligible cold-climate or geothermal heat pump installed on our Deferred Load or RDC Rate. **This rebate may be combined with efficiency rebates offered through our heat pump program.**

CoolSavings AC cycling

CoolSavings cycled air-conditioning control helps our company manage summer electricity demand. Systems are cycled on and off every 15 minutes during peak events June through September. Setup is free when authorized by the property owner.


- Central air conditioners or heat pumps served through a qualified general service or RDC meter are eligible.
- Systems served through our Deferred Load or Dual Fuel Rates do not qualify.

RESIDENTIAL CUSTOMERS

Receive an average credit of **\$8.25 each month** or **\$33 per season** (June through September).

COMMERCIAL CUSTOMERS

Receive an average credit of **\$6 per ton** of connected cooling load per month from June through September.

 Find enrollment forms at otpc.com/CoolSavings.

Eligible applications include:

- Central furnaces.
- Room units.
- Underfloor cable or panel systems embedded in sand.
- Electric boilers installed to serve underfloor hydronic systems embedded in sand.
- Ice storage applications.

Operational notes

Please review rate details on page 46 and notices regarding equipment restart delay and low voltage control strategy on page 54.

HIGHER REBATE

Electric vehicle charging station

A customer installing a Level 2 electric vehicle charging station as a permanently connected load on a qualified rate may qualify for a **\$500 rebate**. Our rebate can be combined with a federal tax credit for 30 percent of costs up to \$1,000. Eligible rates include Dual Fuel, Deferred Load, Fixed Time of Delivery, and RDC.

**ADDED REBATE**

Smart thermostats

A residential customer who installs a qualified Tier II or Tier III smart thermostat may receive a rebate. Rebate level is dependent on thermostat communication capabilities (tier level) and use of electricity for heating and/or cooling. **Only one rebate per household**. Rebate may not exceed the thermostat invoice amount.

- Rebates of **\$100 for Tier II and \$150 for Tier III** qualifying smart thermostats are available to customers who use central heating electric technologies including air-source heat pumps, geothermal heat pump systems, plenum heaters, and boilers.
- Rebates of **\$100 for Tier III** qualifying **line voltage** smart thermostats are available to customers who use non-central heating electric technologies as their primary heat source, including baseboard.
- Rebates of **\$35 for Tier II and \$50 for Tier III** qualifying smart thermostats are available to customers with electric cooling but without electric heating.



 Find the current list of qualifying smart thermostat models online at otpc.com/SmartThermostats.

Lighting

Customers that install energy-efficient lighting technologies may qualify for rebates as shown in the tables on the following page.

- Preapproval is required for rebates exceeding \$4,500.
- LED exit lighting does not qualify for new construction lighting rebates.

Commercial customers may qualify for all rebates. Rebates for lighting controls are based on total wattage of lighting load connected to the control technology.

Residential customers may qualify for hardwired retrofit replacement lighting and new construction lighting rebates when rebate amount exceeds \$20. Screw-in lighting rebates for retrofit and new construction are not available except through point-of-sale rebates at participating retail stores.

In-store rebates are available through select retailers in our area, resulting in greatly discounted purchase prices. No paperwork required! Visit otpc.com/LEDs.



For more information about fluorescent lamps, high-intensity discharge (HID) lamps and ballasts, and disposal requirements, refer to the South Dakota Department of Environment and Natural Resources website or call **605-733-3153**.



Replacement lighting

Existing	Replaced with	Rebate per watt saved
Low-efficiency incandescent	Screw-in LED indoor (with and without removal prevention devices)	10¢
	Screw-in LED outdoor (with and without removal prevention devices)	5¢
	Hard-wired LED indoor	25¢
	Hard-wired LED outdoor	15¢
Low-efficiency fluorescent	Hard-wired LED	25¢
Standard T8 fluorescent lamps	LED lamp-only retrofit	15¢
Mercury-vapor lamps	Hard-wired LED indoor	25¢
	Hard-wired LED outdoor	15¢
	Screw-in LED indoor	10¢
	Screw-in LED outdoor	5¢
Standard HID	Hard-wired LED indoor	25¢
	Hard-wired LED outdoor	15¢
	Screw-in LED indoor	10¢
	Screw-in LED outdoor	5¢
Exit lighting fixtures	High-efficiency exit lighting (based on maximum demand reduction of 20 watts/fixture)	25¢
Occupancy/daylight sensing controls		\$100/connected kW

New construction high-efficiency lighting

LED technology	Wattage	Rebate per fixture or lamp
Indoor LED fixture	<30	\$10.00
	30 to 49	\$15.00
	50 to 79	\$25.00
	80 to 99	\$30.00
	>99	\$50.00
Outdoor LED fixture	<30	\$5.00
	30 to 49	\$7.50
	50 to 79	\$10.00
	80 to 99	\$15.00
	>99	\$20.00
Screw-in indoor LED	<10	\$1.00
	10 to 24	\$2.25
	25 to 49	\$5.00
	50 to 75	\$10.00
Screw-in outdoor LED	<10	\$1.75
	10 to 24	\$1.00
	25 to 49	\$2.50
	50 to 75	\$4.00
Occupancy/daylight sensing controls		\$100/connected kW

Drive Power

ADJUSTABLE-SPEED DRIVES (ASDs)

Reduce energy use up to 50 percent by installing an ASD to match motor speed to the requirements of a fluctuating load.

- **\$20 per horsepower rebate** for nonseasonal centrifugal applications.
- **\$10 per horsepower rebate** for seasonal and HVAC centrifugal applications.

ELECTRONICALLY COMMUTATED MOTORS (ECMs)

Rebates are available for commercial customers that retrofit existing exhaust and HVAC fans with energy-efficient ECMs. Rebate is based on motor horsepower.

System designer or installing contractor must ensure the entire facility complies with the IEEE Standard 519 after completion of the ASD installation or retrofit. Failure to comply with this rule may result in disqualification of any rebate request.

ECM rebates

Horsepower	Rebate
0.125	\$15
0.25	\$30
0.33	\$50
0.50	\$70
0.75	\$100
1.0	\$125
1.5	\$175

MOTORS

Our motor rebate program encourages industrial, commercial, and agricultural customers to purchase energy efficient new, replacement, or retrofit motors.

- 2007 EISA legislation set NEMA Premium® as the efficiency standard for 1-horsepower to 200-horsepower totally enclosed fan-cooled (TEFC) and open drip-proof (ODP) motors manufactured after December 2010.
- Motor efficiency **must exceed** NEMA Premium® efficiency to qualify for rebates for new motors and replacement of nonoperating motors.
- TEFC and ODP motors replaced prior to failure **must meet** NEMA Premium® efficiency levels to qualify for rebates.
- Certain qualified motors may have limited availability in the market.

Totally enclosed fan-cooled motor rebates

HP	Percent rated efficiency 1200 RPM		Percent rated efficiency 1800 RPM		Percent rated efficiency 3600 RPM		Rebate per motor
	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	
1	84.0	82.5	86.5	85.5	78.5	77.0	\$30
1.5	88.5	87.5	87.5	86.5	85.5	84.0	\$45
2	89.5	88.5	87.5	86.5	86.5	85.5	\$60
3	90.2	89.5	90.2	89.5	87.5	86.5	\$70
5	90.2	89.5	90.2	89.5	89.5	88.5	\$125
7.5	91.7	91.0	92.4	91.7	90.2	89.5	\$175
10	91.7	91.0	92.4	91.7	91.0	90.2	\$225
15	92.4	91.7	93.0	92.4	91.7	91.0	\$350
20	92.4	91.7	93.6	93.0	91.7	91.0	\$450
25	93.6	93.0	94.1	93.6	92.4	91.7	\$450
30	93.6	93.0	94.1	93.6	92.4	91.7	\$525
40	94.5	94.1	94.5	94.1	93.0	92.4	\$600
50	94.5	94.1	95.0	94.5	93.6	93.0	\$750
60	95.0	94.5	95.4	95.0	94.1	93.6	\$825
75	95.0	94.5	95.8	95.4	94.1	93.6	\$900
100	95.4	95.0	95.8	95.4	94.5	94.1	\$1,200
125	95.4	95.0	95.8	95.4	95.4	95.0	\$1,500
150	96.2	95.8	96.2	95.8	95.4	95.0	\$1,800
200	96.2	95.8	96.5	96.2	95.8	95.4	\$2,000
250	95.8	95.8	96.2	96.2	95.8	95.8	\$2,500
300	95.8	95.8	96.2	96.2	95.8	95.8	\$3,000
350	95.8	95.8	96.2	96.2	95.8	95.8	\$3,000
400	95.8	95.8	96.2	96.2	95.8	95.8	\$3,500
450	95.8	95.8	96.2	96.2	95.8	95.8	\$4,000
500	95.8	95.8	96.2	96.2	95.8	95.8	\$5,000

Open drip-proof motor rebates

HP	Percent rated efficiency 1200 RPM		Percent rated efficiency 1800 RPM		Percent rated efficiency 3600 RPM		Rebate per motor
	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	New and replacement of nonoperating motors	Replacement of operating motors	
1	84.0	82.5	86.5	85.5	78.5	77.0	\$30
1.5	87.5	86.5	87.5	86.5	85.5	84.0	\$45
2	88.5	87.5	87.5	86.5	86.5	85.5	\$60
3	89.5	88.5	90.2	89.5	86.5	85.5	\$70
5	90.2	89.5	90.2	89.5	87.5	86.5	\$125
7.5	91.0	90.2	91.7	91.0	89.5	88.5	\$175
10	92.4	91.7	92.4	91.7	90.2	89.5	\$225
15	92.4	91.7	93.6	93.0	91.0	90.2	\$350
20	93.0	92.4	93.6	93.0	91.7	91.0	\$450
25	93.6	93.0	94.1	93.6	92.4	91.7	\$450
30	94.1	93.6	94.5	94.1	92.4	91.7	\$525
40	94.5	94.1	94.5	94.1	93.0	92.4	\$600
50	94.5	94.1	95.0	94.5	93.6	93.0	\$750
60	95.0	94.5	95.4	95.0	94.1	93.6	\$825
75	95.0	94.5	95.4	95.0	94.1	93.6	\$900
100	95.4	95.0	95.8	95.4	94.1	93.6	\$1,200
125	95.4	95.0	95.8	95.4	94.5	94.1	\$1,500
150	95.8	95.4	96.2	95.8	94.5	94.1	\$1,800
200	95.8	95.4	96.2	95.8	95.4	95.0	\$2,000
250	95.4	95.4	95.8	95.8	95.0	95.0	\$2,500
300	95.4	95.4	95.8	95.8	95.4	95.4	\$3,000
350	95.4	95.4	95.8	95.8	95.4	95.4	\$3,000
400	95.8	95.8	95.8	95.8	95.8	95.8	\$3,500
450	96.2	96.2	96.2	96.2	95.8	95.8	\$4,500
500	96.2	96.2	96.2	96.2	95.8	95.8	\$5,000

Explosion-proof motor rebates

HP	Percent rated efficiency 1200 RPM	Percent rated efficiency 1800 RPM	Percent rated efficiency 3600 RPM	Rebate per motor
1	82.5	84.0	76.0	\$30
1.5	86.5	84.0	84.0	\$45
2	85.5	85.5	84.0	\$60
3	87.5	85.5	85.5	\$70
5	88.5	88.5	86.5	\$125
7.5	90.0	90.0	86.5	\$175
10	90.0	90.0	89.5	\$225
15	91.0	91.7	90.2	\$350
20	90.0	91.7	90.2	\$450
25	92.0	93.0	91.0	\$450
30	92.4	93.0	91.0	\$525
40	93.6	93.6	92.0	\$600
50	93.6	93.6	92.4	\$750
60	94.1	94.0	93.0	\$825
75	94.0	94.5	93.6	\$900
100	94.5	94.5	93.6	\$1,200
125	94.5	95.0	94.1	\$1,500
150	95.0	95.4	94.1	\$1,800
200	95.0	95.8	95.0	\$2,000
250	95.0	95.0	95.0	\$2,500
300	95.0	95.4	95.4	\$3,000

Custom efficiency project grants

Custom efficiency project grants help customers make efficiency upgrades that fit their unique business operations. Eligible applications that may qualify include but aren't limited to:

- Air compressors
- Chillers
- Process improvements
- Commercial electric cooking equipment
- Heat-recovery systems
- Building envelope improvements

Grants are calculated based on kilowatt-hours of energy saved, kilowatts of demand reduced, and project costs. Thorough documentation is required for proper evaluation prior to approval. Incentives for grant projects may be capped.

Rates and resources

Off-peak rates and energy control

Approximately one-third of our customers participate in one of our off-peak rates. As partners with us, they permit us to shut off a predetermined portion of their electric load during peak, test, high energy price, maintenance, or emergency periods.

THE RESULT IS MONEY SAVED

Our off-peak rates offer discounted prices—some up to half our average price of electricity charges.

In addition to providing our customers with low-cost electricity, energy-management programs help us manage electrical loads on our system by reducing peak demand levels. That benefits both our customers and us.

SIGN UP FOR UPDATES

To assist customers who partner with us in load management, we provide information about energy-control periods.

- **Visit otpc.com/EnergyControl** to view energy management events from the past 48 hours as well as upcoming expected events.
- **Register online for alerts** and we'll send messages about control activity for the location and rate associated with your account.

Three types of alerts are available:

1. **Anticipated control notifications** inform recipients when we expect to control energy but haven't yet started.
2. **Actual control notifications** inform recipients when control begins and ends on our system.
3. **Day-ahead declared peak-pricing** notifications are for customers on our General Service Time of Use and Irrigation Rates and include peak pricing cost per kilowatt-hour and hours of application.

PROPER INSTALLATIONS ON CONTROLLED SERVICE RATES

We'll supply and maintain the necessary metering, penalty metering, and control equipment for the rates described on the following pages.

Customers pay for all associated equipment beyond our point of connection, such as electric service panels, wiring, and controls.

Controlled-service systems must be permanently connected and interruptible. Systems that do not interrupt loads during control events in accordance with rate requirements are subject to penalty charges and removal from the controlled-service rate.

The controlled-service meter and controlling devices must be wired separately and located adjacent to each other. With prior approval, a control device may be located inside the building adjacent to the customer's main disconnects.

Installation diagrams are provided on pages 55-59.

Water Heating Control Rate

Electric water heating is energy efficient and clean. And our Water Heating Control Rate can save customers up to 30 percent compared to our standard price of electricity.

Low cost option: Customers not interested in, or not able to install separate service panels, may receive monthly bill credits in return for allowing us to control water heaters wired to their firm-service meters. **Bill credits average \$8 to \$10 each month (varies by state).**

Save even more! Water heaters also may be installed on certain electric space-heating rates, including our Dual Fuel, Deferred Load, and Residential Demand Control Rates, which offer greater savings.


In all cases an electrician must provide wiring to our radio receiver.

REBATES AVAILABLE

Rebates are available for new electric water-heating installations with proof of a uniform energy factor (UEF) of .90 or higher when installed on a qualified off-peak rate.

Controlled water heating rebates

Rebate	Application	Kilowatt requirements	Conditions
\$400	≥ 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$200	≥ 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$200	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	New controlled load
\$100	≥ 50-gallon < 80-gallon tank	Minimum of 4.5 kW	Replacement controlled load
\$50/kW	Minimum 120-gallon storage capacity, Heavy Duty Commercial	Minimum of 12 kW	New or replacement controlled load; \$5,000 maximum rebate

 A customer may receive a bill credit each month with a simple installation. Learn more at otpc.com/WaterHeating.

CONTROL LIMITS AND COST OF ENERGY

- Rates permit control throughout the year for up to 14 hours a day.
- We interrupt long control periods whenever possible to allow your water heater to recover.
- Rates vary by season with winter-season rates applied October 1 through May 31 and summer-season rates June 1 through September 30.
- Cost-of-energy charges apply.

Air-conditioning control

The CoolSavings air-conditioning control program helps our company manage summer electricity demand. Participants allow us to cycle their central cooling systems on and off every 15 minutes **only** during summer season peak events.

To qualify:

- The property owner must authorize enrollment.
- The cooling system must be served through a general service or Residential Demand Control meter.
- System must include a disconnect on the outside of the building.
- Window and ductless air-conditioning units do not qualify.
- Systems served through Deferred Load and Dual Fuel Rates do not qualify for CoolSavings.

SETUP IS FREE. SAVE ALL SUMMER!

- We install a radio receiver.
- Residential participants receive an average credit of **\$8.25 each month or \$33 per summer season** (June through September).
- Commercial customers receive an average credit of **\$6 per ton** of connected cooling load per month from June through September.

We reserve the right to deny participation for limited-use structures.

OPERATIONAL NOTES

Please review the notices regarding equipment restart delay and low voltage control strategy on page 54.

 For enrollment forms visit otpc.com/CoolSavings.

CONTROL LIMITS

- Summer-season control applies June 1 through September 30 with a maximum of 300 hours of cycled control permitted.
- In place of cycled control, commercial customers with dual stage air conditioners may have the first stage run without interruption while the second stage is shut off during the entire control event.



Deferred Load Rate

Our Deferred Load Rate cuts heating and cooling costs by nearly 30 percent from our standard electric rates.

SUMMER-SEASON CYCLING

Heat pumps installed on our Deferred Load Rate are eligible for cycled control during occasional summer-season peak events. Cycling provides 15 minutes of control followed by 15 minutes of service and allows the heat pump to keep spaces cool and comfortable.

REBATES AVAILABLE

In addition to qualified electric-heating applications, water-heating equipment and Level 2 electric vehicle charging equipment may be added to this rate and qualify for rebates when permanently connected, metered, and subject to control.

CONTROL LIMITS AND COST OF ENERGY

- This rate permits control 12 months a year with cycled control available for heat pumps June through September.
- We may control deferred loads up to 14 hours a day.
- When system conditions permit, we include a recovery period if a control event lasts several hours.
- Rates vary by season. We apply winter-season rates October 1 through May 31 and summer-season rates June 1 through September 30.
- Cost-of-energy charges apply.
- Controlled-service systems must be permanently connected and interruptible.
- Systems that do not interrupt loads during control events are subject to penalty charges, and application of this rate may be discontinued.

Dual Fuel Rate

A customer may qualify for a rate of about half our standard price when they install a dual-fuel system that uses off-peak electricity as their main heating fuel. A secondary natural gas, propane, or fuel oil system supplies heat during control periods. The switch from electricity to the secondary fuel and back to electricity is accomplished automatically with radio signals.

SUMMER-SEASON CYCLING

Heat pumps are eligible for cycled control during occasional summer-season peak events. Cycling provides 15 minutes of control followed by 15 minutes of service. Cycling occurs only during peak periods when energy control is needed and allows spaces to remain cool and comfortable.

REBATES AVAILABLE

In addition to qualified electric-heating applications, water-heating equipment and Level 2 electric vehicle charging equipment added to this rate may qualify for rebates when permanently connected, metered, and subject to control.

CONTROL LIMITS AND COST OF ENERGY

- Two Dual Fuel Rates are available. One applies to systems with current transformer (CT) metering. The other is for systems installed with standard metering.
- Summer-season cycling of heat pump loads is available.
- This rate permits control for up to 24 hours a day with water heater control limited to 14 hours a day.
- Rates vary by season with winter-season rates applied October 1 through May 31 and summer-season June 1 through September 30.
- Cost-of-energy charges apply.
- Controlled-service systems must be permanently connected and interruptible. Systems that do not interrupt loads during control events may be subject to penalty charges, and application of this rate may be discontinued.

Residential Demand Control Rate

Our Residential Demand Control (RDC) Rate offers savings up to 25 percent compared with our standard residential rate.

It's applied to all electricity used in the home and most suitable for customers with electric heat or higher-than-average electricity use.

Our RDC Rate lets customers determine the demand level they want to maintain during energy-control periods. To ensure comfort, we recommend a demand level no lower than 3 kilowatts.

We'll send a radio signal to initiate control. Electric heating, water heating, and a clothes dryer often are connected to the RDC unit and automatically controlled when needed.

REBATES AVAILABLE

In addition to qualified electric-heating applications, water-heating equipment and Level 2 electric vehicle charging equipment added to this rate may qualify for rebates when permanently connected, metered, and subject to control.

CONTROL LIMITS AND COST OF ENERGY

- This rate permits control of RDC customers up to 14 hours a day during the winter season from October 1 through May 31.
- This rate permits control of water heaters installed on our RDC Rate up to 14 hours a day throughout the year.
- Our RDC Rate varies by state and season. It features customer and facility charges, an energy charge per kilowatt-hour, and a demand charge per kilowatt.
- Demand is billed based on the customer's highest one-hour demand reading taken during a winter-season control period in the most recent 12 months.
- Cost-of-energy charges apply.
- We offer a monthly credit June through September to RDC customers who enroll their central cooling system in our CoolSavings AC cycling program.

Off-peak Electric Vehicle Rate (Minnesota only)

With our Drive On Off-peak Electric Vehicle Rate, Minnesota customers can recharge their electric vehicles overnight for less. On this rate, energy is delivered only between 10 p.m. and 6 a.m. to take advantage of the lowest priced off-peak energy. Eligibility requirements include proof of electric vehicle ownership and appropriate electrical service interconnection facilities.

Electric Vehicle Charging rebate

Application	Rebate
Level 2 charging station	\$500

Note: Rebates on Level 2 electric vehicle charging equipment are available to customers in all states when installed as permanently connected additional load on a qualified off-peak rate.

SCHEDULE AND COST OF ENERGY

- We energize off-peak electric vehicle loads served on our Off-peak Electric Vehicle Rate during predetermined off-peak hours between 10 p.m. and 6 a.m., 365 days a year.
- Rates vary by season with winter-season rates applied October 1 through May 31 and summer-season rates June 1 through September 30.
- Cost-of-energy charges apply.
- Systems must be interrupted between 6 a.m. and 10 p.m.

Outdoor Lighting Rate

Outdoor Lighting Rates are available to supply lighting fixtures that are owned by our company and the energy to operate them in a single monthly charge. Charges vary by state and equipment type. Charges listed below were in effect on January 1, 2023, in Minnesota, June 1, 2021, in North Dakota, and May 1, 2021, in South Dakota.

LED Outdoor Lighting Rates

LED Type 1	Approximate lumens	Approximate wattage	Minnesota charge	North Dakota charge	South Dakota charge
LED5	5,175	47	\$8.21	\$7.44	\$7.97
LED8	9,003	76	\$15.48	\$13.88	\$13.92
LED3PT	2,759	26	\$10.08	\$10.01	\$9.70
LED5PT	5,404	47	\$12.87	\$12.75	\$12.28
LED10	12,388	95	\$16.53	\$15.71	\$15.93
LED13	16,691	133	\$20.60	\$20.66	\$19.83
LED20 - Flood	23,067	199	\$20.16	\$18.98	\$19.19
LED30 - Flood	32,003	261	\$38.39	\$30.96	\$32.92
LED Type 2 - Metered at primary					
PLED5	5,175	47	\$7.34	\$6.95	\$7.48
PLED8	9,003	76	\$14.07	\$13.08	\$13.12
PLED3PT	2,759	26	\$9.60	\$9.74	\$9.43
PLED5PT	5,404	47	\$12.00	\$12.26	\$11.79
PLED10	12,388	95	\$14.76	\$14.71	\$14.93
PLED13	16,691	133	\$18.13	\$19.26	\$18.43
PLED20 - Flood	23,067	199	\$16.46	\$16.89	\$17.10
PLED30 - Flood	32,003	261	\$33.54	\$28.21	\$30.17

Appropriate standard wood pole is included in the Monthly Charge.

Aluminum alloy poles and LED flood visor options available for an added charge.

Optional equipment	Description	Minnesota charge	North Dakota charge	South Dakota charge
Standards 30 foot	Aluminum alloy pole	\$11.67	\$11.67	\$11.67
Standards 40 foot	Aluminum alloy pole	\$10.87	\$10.87	\$10.87
Lighting visor LED 20 - Flood	LED flood visor	\$0.76	\$0.76	\$0.76
Lighting visor LED 30 - Flood	LED flood visor	\$1.38	\$1.38	\$1.38

Decorative lights	Approximate lumens	Approximate wattage	Minnesota charge	North Dakota charge	South Dakota charge
DLEDA7 (Arlington)	5,837	66	\$87.77	\$87.77	\$87.77
DLEDG7 (Granville)	7,440	68	\$86.11	\$86.11	\$86.11
DLEDE 17 (Esplanade)	20,000	170	\$110.56	\$110.56	\$111.27

Arlington and Granville models include black aluminum 14 foot pole.

Esplanade includes black aluminum 30 foot pole.

RDC lease-to-buy program

We offer for sale or lease a Brayden 9312 residential demand controller with 8i, 10i, 12i, 14i, or 16i relay options.

This is a full-feature demand controller. Its display allows system monitoring with large LED digits. The audible alarm sounds if the customer exceeds the set demand limit. And it allows the customer to reprogram appliance control order without an electrician. Purchase price is \$875.


Customers may choose to take advantage of our lease-to-buy program that features 48 monthly payments of \$20 and a final buyout payment of \$1.

Electrician and contractor workshops

Electrician code credit workshops: Conducted in conjunction with Minnkota Power Cooperative, Inc. of Grand Forks. Eight CEU credits are available for the eight-hour sessions. Workshops begin at 8:00 a.m. and lunch is provided. Tim Pull is the instructor.

All sessions will be in person. **Cost: \$80 per attendee.**

Date	Location	Address
Wednesday, January 10	Fargo Holiday Inn	3803 13th Ave. South, Fargo, ND
Thursday, January 11		
Thursday, January 18	Bemidji Eagles Club	1270 Neilson Ave. SE, Bemidji, MN
Tuesday, January 23	Bigwood Event Center	925 Western Ave., Fergus Falls, MN
Tuesday, January 30	Minnkota Power Cooperative	5301 32nd Ave. South, Grand Forks, ND
Wednesday, January 31		

 Register online at minnkota.com.

HVAC, electrician, and refrigeration contractor workshops:

Sponsored by Otter Tail Power, these contractor workshops will provide information about 2024 rebate programs and Inflation Reduction Act incentives and tax credits. Breakout sessions will be held for HVAC, electrical, and refrigeration. Equipment vendors and speakers will be present.

Free two-day workshops.

Date	Location	Address
Tuesday - Wednesday, February 6 - 7	Shooting Star Casino	777 SE Casino Rd., Mahnomon, MN
Tuesday - Wednesday, February 13 - 14	Dakota Magic Casino	16849 102nd St. SE, Hankinson, ND

 Register online at otpc.com/ContractorWorkshops.

NOTICE

Regarding our CoolSavings air-conditioning cycling program

1. Equipment restart delay

The radio receivers we install for our energy control programs are factory programmed with a **Cold-load Pick-up (CLP) feature**. The CLP feature will delay equipment operation for **30 minutes** should power be interrupted for any reason. This delay will occur if power is cut during an HVAC service call or due to an unexpected power outage.

This feature is a common and normal manufacturer feature.

Customers should expect a full 30-minute delay before air conditioning will operate if power has been interrupted at the circuit breaker or through a power outage.

HVAC and electrical technicians completing maintenance calls should be aware of and expect this delay.

The CLP feature is manually disabled on radios installed to serve Irrigation and Large Dual Fuel Rates.

2. Low-voltage control strategy

Our cooling equipment load control devices are connected through the **cooling system's low voltage (24-volt) side**. Line voltage power load is not interrupted. This safeguards equipment, enabling it to complete the refrigeration cycle and preventing any restarts at high head pressure.

If you are aware of any contrary installations, please call our Idea Center at 800-493-3299.

NOTICE

Unintended control of central air conditioners wired to Electro Industries plenum heaters

A customer whose central air conditioner is wired to their thermostat through the Electro Industries plenum heater control board may experience control of their air conditioner when our company initiates control of the off-peak meter.

This unintended control could affect a central air conditioner wired and served through a firm service meter (not enrolled in an energy control program).

A customer may contact their HVAC contractor to request a service call if they believe their system is broken.

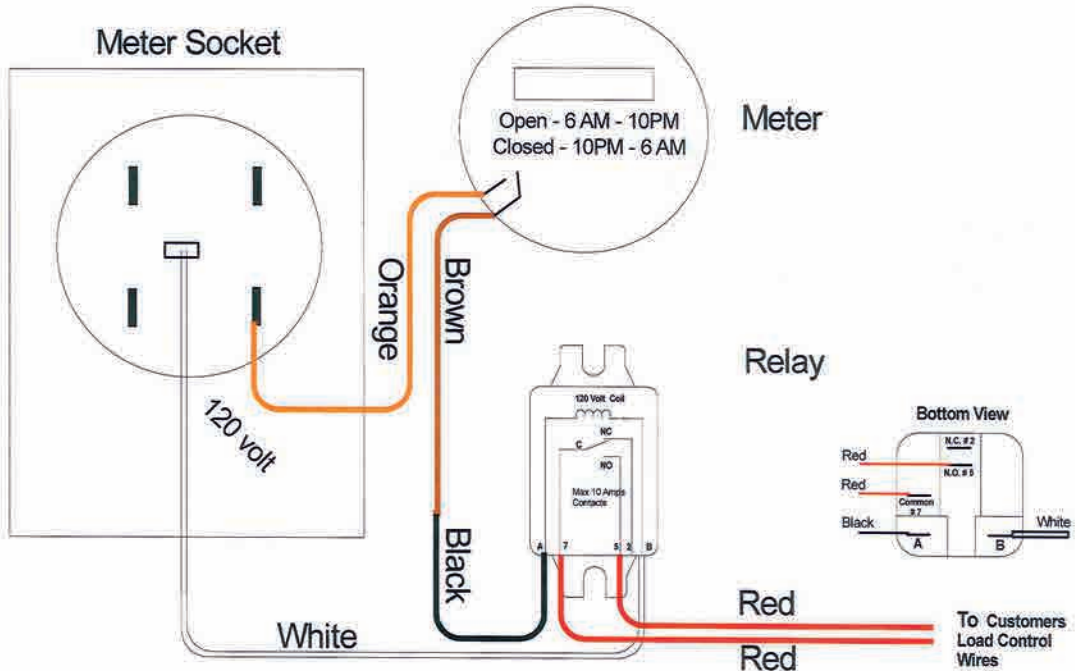
A correction to the wiring configuration is required to avoid control of central air conditioners wired through the general (or firm) service.

Please note the following:

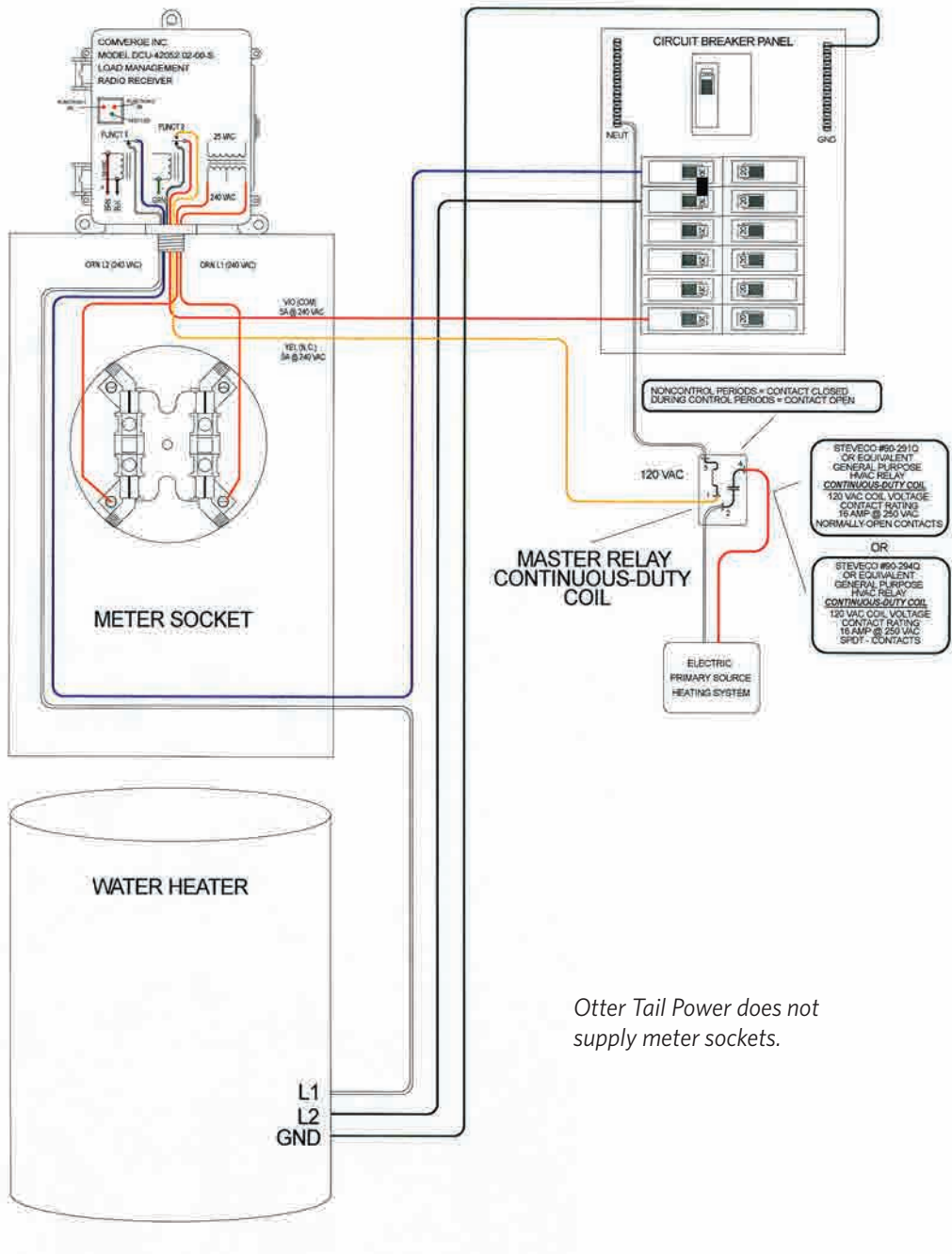
- All equipment wired through the off-peak meter must remain available for control during peak conditions. Circumventing control for loads enrolled in off-peak programs is fraud and penalties apply.
- Customers with heat pumps served through our Dual Fuel or other off-peak rates should request to move to our **Dual Fuel or Deferred Load Cycling Rate**.

If you have questions, you may wish to contact Electro Industries directly. For rate-related questions, please call your local Energy Management Representative. (See page 3.)

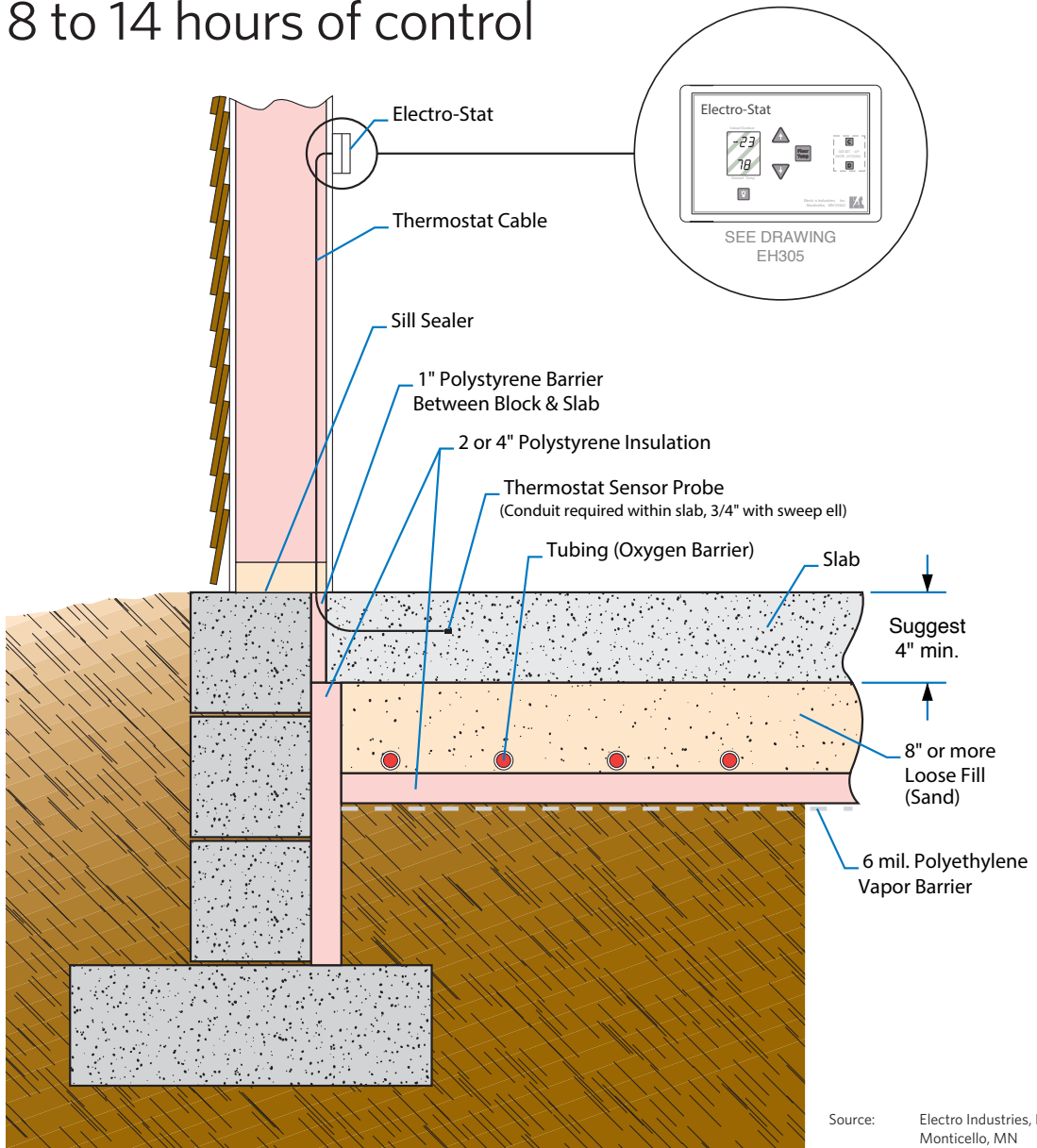
Electric vehicle and Fixed Time of Delivery wiring diagram



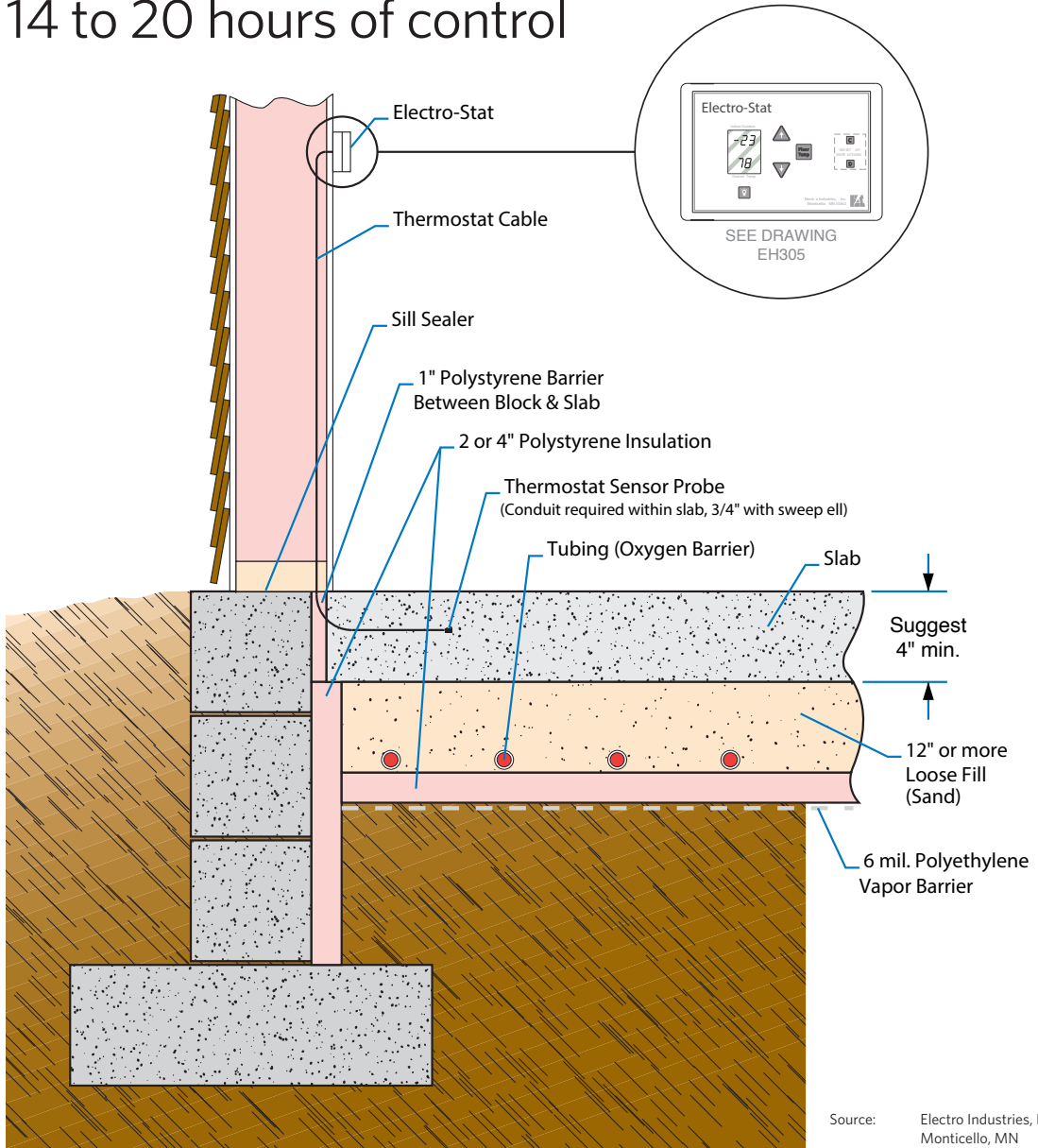
Generic off-peak meter socket and wiring diagram



Underfloor thermal storage 8 to 14 hours of control



Underfloor thermal storage 14 to 20 hours of control



Source: Electro Industries, Inc.
Monticello, MN

Appliance energy-use chart

Cost calculations are intended to be examples only and are based on a per-kilowatt-hour rate of 10.84¢ for firm service, off-peak water-heating rate of 8¢ a kilowatt-hour, and

off-peak heating rate of 4.76¢ a kilowatt-hour. Your actual price may vary by your state, season, and rate. All cost calculations are rounded to the nearest kilowatt-hour and cent.

Seasonal use

HEATING AND COOLING						
Detail		Approx. wattage	Summer-season cooling kWh	Winter-season heating kWh	Cooling cost	Heating cost
Cold-climate heat pump 3 ton operating to 0°F, 10 HSPF		3700	1473	6685	\$159.67	\$724.65
Cold-climate heat pump 3 ton operating to 0°F, 10 HSPF		off-peak rate	3700	1473	\$70.11	\$318.21

Cold-climate heat pump provides 100% of cooling and 82% of heating requirements with energy efficiency of 170% or higher!

COOLING ONLY								
Detail		Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
A/C room—9,000 Btu		1050	120	720	126	756	\$13.66	\$81.95
A/C central—15 SEER 2.5 ton		2000	240	860	480	1720	\$52.03	\$186.45
ASHP—15 SEER 2.5 ton		off-peak rate	2000	240	480	1720	\$22.85	\$81.87

Monthly usage calculations

MONTHLY — HEATING AND COOLING								
Detail		Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
Baseboard heater (4 ft., 250 watts/ft.)		1000	100	200	100	200	\$10.84	\$21.68
Fan—ceiling		60	15	330	1	20	\$0.11	\$2.15
Fan—portable		115	18	52	2	6	\$0.22	\$0.65
Furnace fan motor—intermittent		350	160	415	56	145	\$6.07	\$15.75
Furnace fan motor—continuous		350	720	720	252	252	\$27.32	\$27.32
Heat recovery air exchanger		125	300	720	38	90	\$4.07	\$9.76
Portable heater		1500	30	300	45	450	\$4.88	\$48.78

WATER HEATING							
Detail		Approx. wattage	Low kWh	High kWh	Low cost	High cost	
Water heater on the off-peak water-heating rate: \$0.08							
Family of 6		off-peak rate	4500	540	725	\$43.20	\$58.00
Family of 4		off-peak rate	4500	360	485	\$28.80	\$38.80
Family of 2		off-peak rate	4500	180	245	\$14.40	\$19.60
Water heater on the off-peak heating rate: \$0.0476							
Family of 6		off-peak rate	4500	540	725	\$25.70	\$34.51
Family of 4		off-peak rate	4500	360	485	\$17.14	\$23.09
Family of 2		off-peak rate	4500	180	245	\$8.57	\$11.66

WATER HEATING CONTINUED

Detail	Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
Heat pump water heater 3.24 EF; heat pump mode	500	—	—	77	112	\$8.35	\$12.14
Hot tub 4-person, circulating pump	1500	30	45	45	68	\$4.88	\$7.32
Hot tub 4-person inside, 120 volt heater	1500	120	180	180	270	\$19.51	\$29.27
Hot tub 4-person outside, 120 volt heater	1500	90	540	135	810	\$14.63	\$87.80
Hot tub 4-person inside, 240 volt heater	6000	30	45	180	270	\$19.51	\$29.27
Hot tub 4-person outside, 240 volt heater	6000	90	135	540	810	\$58.54	\$87.80

KITCHEN APPLIANCES

Detail	Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
Dishwasher	1300	8	40	10	52	\$1.13	\$5.64
Coffeemaker	1000	4	30	4	30	\$0.43	\$3.25
Frying pan	1150	5	15	6	17	\$0.62	\$1.87
Microwave	1100	5	15	6	17	\$0.60	\$1.79
Toaster oven	1500	2	15	1	23	\$0.11	\$1.63
Range							
Broiler	3000	1	10	3	30	\$0.33	\$3.25
Oven	3500	10	50	35	175	\$3.79	\$18.97
Small element	1200	10	25	12	30	\$1.30	\$3.25
Large element	2300	10	25	23	58	\$2.49	\$6.23
Self-cleaning cycle only	3200	3	6	10	19	\$1.04	\$2.08
Refrigerator-freezer							
Non frost free 17 cubic feet	500	150	300	75	150	\$8.13	\$16.26
ENERGY STAR® frost free 19 cubic feet	400	150	300	60	120	\$6.50	\$13.01
Freezer ENERGY STAR® 19-22 cubic feet—chest	350	180	420	63	147	\$6.83	\$15.93
Refrigerator/freezer non frost free 17 cubic feet	500	150	300	75	150	\$8.13	\$16.26
Refrigerator/freezer ENERGY STAR® frost free 19 cubic feet	400	150	300	60	120	\$6.50	\$13.01

HOUSEHOLD APPLIANCES

Detail	Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
Clothes dryer	5000	6	28	30	140	\$3.25	\$15.18
Clothes washer	500	7	40	4	20	\$0.38	\$2.17
Dehumidifier	350	120	720	42	252	\$4.55	\$27.32
Humidifier—portable	100	90	300	9	30	\$0.98	\$3.25

TELEVISION							
Detail	Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
LED 30"	50	60	440	3	22	\$0.33	\$2.38
LED 42"	80	60	440	5	35	\$0.52	\$3.82
LED 50"	100	60	440	6	44	\$0.65	\$4.77
LCD 50"	150	60	440	9	66	\$0.98	\$7.15
Plasma 50"	300	60	440	18	132	\$1.95	\$14.31

LIGHTING							
Detail	Approx. wattage	Low hrs. of use	High hrs. of use	Low kWh	High kWh	Low cost	High cost
Incandescent bulb (60w)	60	17	200	1	12	\$0.11	\$1.30
Compact fluorescent (60w equivalent)	13	17	200	0.2	3	\$0.02	\$0.28
LED (60w equivalent)	9.5	17	200	0.2	2	\$0.02	\$0.21
Chandelier (5 lamps, 40w each)	200	8	100	2	20	\$0.17	\$2.17
Fluorescent tube (2 tube, 4 ft.)	96	17	320	2	31	\$0.18	\$3.33
Christmas lights—1000 mini incandescent	408	60	240	24	98	\$2.65	\$10.61
Christmas lights—1000 mini LED	69	60	240	4	17	\$0.45	\$1.80
Christmas lights—300 C9 incandescent	2100	60	240	126	504	\$13.66	\$54.63
Christmas lights—300 C9 LED	29	60	240	2	7	\$0.19	\$0.75

Hourly usage calculations

MEDICAL EQUIPMENT			
Detail	Approx. wattage	Kilowatt-hours/hour of use	Cost/hour of use
Oxygen concentrator	600	0.6	\$0.07
Sleep apnea machine (CPAP)	60	0.06	\$0.01

COMPUTERS			
Detail	Approx. wattage	Kilowatt-hours/hour of use	Cost/hour of use
Desktop computer	100	0.10	\$0.011
Laptop	50	0.05	\$0.005
Monitor—17" CRT	100	0.10	\$0.011
Monitor—17" LCD	35	0.04	\$0.004

RECORDING AND GAMING DEVICES			
Detail	Approx. wattage	Kilowatt-hours/hour of use	Cost/hour of use
Xbox One	180	0.18	\$0.02
DVD player	40	0.04	\$0.004
DVR	150	0.15	\$0.016

Formula to find the cost to operate any appliance

Operating cost = wattage/1,000 x hours used x cost per kilowatt-hour

Appliance wattage is on the label at the back or bottom of most small appliances. Customers should check their electric service statements for the price per kilowatt-hour that they're paying.

DECEMBER 2023

Sunday

Monday

Tuesday

Wednesday

3

4

5

6

10

11

12

13

17

18

19

20

24

Christmas
Eve

31

New Year's
Eve

25

Christmas Day

26

27

JANUARY 2024

Sunday	Monday	Tuesday	Wednesday
	1 New Year's Day	2	3
7	8	9	10
14	15 Martin Luther King Jr. Day	16	17
21	22	23	24
28	29	30	31

Thursday	Friday	Saturday
4	5	6
11	12	13
18	19	20
25	26	27

February 2024

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

March 2024

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 2024

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

FEBRUARY 2024

Sunday

Monday

Tuesday

Wednesday

4

5

6

7

11

12

13

14

Valentine's Day

18

19

Presidents' Day

20

21

25

26

27

28

Thursday	Friday	Saturday
----------	--------	----------

1	2	3
8	9	10
15	16	17
22	23	24

29		
----	--	--

March 2024

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 2024

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2024

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

MARCH 2024

Sunday

Monday

Tuesday

Wednesday

3

4

5

6

10

Daylight Saving (start)

11

12

13

17

St. Patrick's Day

18

19

First day of spring

20

24

31

Easter

25

26

27

Thursday	Friday	Saturday
	1	2
7	8	9
14	15	16
21	22	23
28	29	30

April 2024

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2024

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2024

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

APRIL 2024

Sunday	Monday	Tuesday	Wednesday
	1	2	3
7	8	9	10
14	15	16	17
21	22	23	24
28	29	30	

Thursday	Friday	Saturday
4	5	6
11	12	13
18	19	20
25	26	27

May 2024						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2024						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 2024						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

MAY 2024

Sunday	Monday	Tuesday	Wednesday
			1
5	6	7	8
12 Mother's Day	13	14	15
19	20	21	22
26	27 Memorial Day	28	29

Thursday	Friday	Saturday
2	3	4
9	10	11
16	17	18
23	24	25
30	31	

June 2024

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 2024

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August 2024

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE 2024

Sunday	Monday	Tuesday	Wednesday
2	3	4	5
9	10	11	12
16 Father's Day	17	18	19 Juneteenth
23 30	24	25	26

JULY 2024

Sunday	Monday	Tuesday	Wednesday
	1	2	3
7	8	9	10
14	15	16	17
21	22	23	24
28	29	30	31

Thursday	Friday	Saturday
4 Independence Day	5	6
11	12	13
18	19	20
25	26	27

August 2024						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2024						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2024						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST 2024

Sunday

Monday

Tuesday

Wednesday

4

5

6

7

11

12

13

14

18

19

20

21

25

26

27

28

Thursday	Friday	Saturday
1	2	3
8	9	10
15	16	17
22	23	24
29	30	31

September 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2024

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 2024

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

SEPTEMBER 2024

Sunday	Monday	Tuesday	Wednesday
1	2 Labor Day	3	4
8	9	10	11 Patriot Day
15	16	17	18
22 First day of fall	23	24	25
29	30		

Thursday	Friday	Saturday
5	6	7
12	13	14
19	20	21
26	27	28

October 2024

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 2024

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

OCTOBER 2024

Sunday	Monday	Tuesday	Wednesday
		1	2
6	7	8	9
13	14 Columbus Day	15	16
20	21	22	23
27	28	29	30

Thursday	Friday	Saturday
----------	--------	----------

3	4	5
---	---	---

10	11	12
----	----	----

17	18	19
----	----	----

24	25	26
----	----	----

31 Halloween		
-----------------	--	--

November 2024

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2024

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 2025

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER 2024

Sunday

Monday

Tuesday

Wednesday

3

Daylight Saving (end)

4

5

Election Day

6

10

11

Veterans Day

12

13

17

18

19

20

24

25

26

27

DECEMBER 2024

Sunday	Monday	Tuesday	Wednesday
1	2	3	4
8	9	10	11
15	16	17	18
22	23	24 Christmas Eve	25 Christmas Day
29	30	31 New Year's Eve	

Thursday	Friday	Saturday
5	6	7
12	13	14
19	20	21 First day of winter
26	27	28

January 2025						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2025						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

March 2025						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JANUARY 2025

Sunday	Monday	Tuesday	Wednesday
			1 New Year's Day
5	6	7	8
12	13	14	15
19	20 Martin Luther King Jr. Day	21	22
26	27	28	29

Address/phone directory

CALL BEFORE YOU DIG

Before digging, call the toll-free number for your state to locate buried power lines, pipes, and cables. **Call 811** at least 48 hours before you dig. Alternate number for each state is listed below.

Minnesota 800-252-1166

North Dakota 800-795-0555

South Dakota 800-781-7474

STATE ELECTRICAL INSPECTOR(S) FOR MY REGION

Name _____ Phone _____
Address _____
Counties served _____

Name _____ Phone _____
Address _____
Counties served _____

Name _____ Phone _____
Address _____
Counties served _____

STATE ELECTRICAL BOARD/COMMISSION FOR CONSTRUCTION CODES AND LICENSING

Minnesota 651-284-5034

North Dakota 701-328-9522

South Dakota 605-773-3573

For more information about any of our programs,
call our **Idea Center** at **800-493-3299**.



otpc.com