

Utility Rates 2018

BRAINERD PUBLIC UTILITIES SERVICE RATES

This pamphlet represents rates for electric, water, and wastewater treatment services provided by Brainerd Public Utilities (BPU), effective April 1, 2018. BPU's rates are set by the Brainerd Public Utilities Commission. All rates are subject to change if deemed appropriate by BPU.

If you have any questions regarding any of the information in this pamphlet, please contact the appropriate BPU staff below:

Scott Magnuson, Superintendent Todd Wicklund, Finance Director Trent Hawkinson, Electric Supervisor Mike Larson, Wastewater Supervisor Julie Batters, Accounting Supervisor Aaron Andersen, IT Supervisor

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CITY OF BRAINERD RATES

This pamphlet also represents wastewater collection and stormwater rates that BPU bills on behalf of the City of Brainerd. The City of Brainerd's rates are set by the Brainerd City Council. If you have any questions in regards to these two rates, please call the City Engineer's Office at 218-828-2309.

RELIABLE PUBLIC POWER PROVIDER



BPU is a designated gold level "reliable public power provider" by the American Public Power Association. The RP_3 designation certifies that BPU has demonstrated leading practices in reliability, safety, workforce development, and system improvement.

BPU takes pride in providing electricity to Brainerd and the surrounding areas because our customers are not only our owners, but also our neighbors. As a community–owned, not-for-profit utility, our focus is directly on the customer. The prestigious RP_3 designation indicates that our service meets high industry standards.

The $\rm RP_3$ designation is good for three years, but BPU continues to look for ways we can improve service to the community. BPU is always open to suggestions from their customers to help us to continue to achieve this commitment.

Electric Department

BPU's Electric Department provides safe and reliable electricity to customers in Brainerd, portions of Baxter and surrounding townships. BPU takes public power seriously and strives to provide affordable electric rates to its customers. Our professional and dedicated field



crews are on call 24/7, 365 days a year, to ensure your lights stay on. BPU will continue to make investments in the future to ensure safe and reliable electricity for all of its customers.



<u>Hydro Dam</u>

The hydro dam provides a reliable renewable energy source from the Mississippi River, and is able to generate 3.2 megawatts of electrical power. Generation from the hydro dam represents approx-

imately 10.5% of energy used by BPU customers.

Water Department

Brainerd's water filtration plant treats approximately 1.55 million gallons per day. The plant removes iron and manganese from the water, which is pumped out of six wells that were drilled near the facility. BPU is able to achieve 95% removal of those minerals which helps to improve the taste and ap-



pearance of the water. After filtration, the water is pumped to two water towers and the distribution system and ultimately to customer taps.



Wastewater Department

The Brainerd Wastewater Treatment Facility (WWTF) is a Class A facility designed to treat an average wet weather flow of 6.0 MGD with a CBOD5 Influent concentration of 240 mg/L and a TSS concentration of 240 mg/L.

The facility receives wastewater from the communities of Brainerd and Baxter. The Brainerd interceptor system consists of 2,745 feet of 20-inch force main, 587 feet of dual 20-inch river crossing main and 1,510 feet of 30-inch interceptor sewer. The WWTF treats approximately 2.2 million gallons of wastewater daily from the two cities.



ELECTRIC RATES – COMMERCIAL

Each customer will pay a power cost adjustment (PCA) each month based on the kWh that are used. The PCA is based on BPU's cost of power purchased wholesale from Minnesota Power.

The monthly service charge applies to all rate classifications, regardless of usage on meter.

General Service

Monthly Service Charge	\$24.25	Monthly
Energy Charge	\$0.0903	All kWh

The General Service Rate applies to commercial customers, for a single or three phase electric service supplied through one meter at the secondary voltage available at the customer's location. Customers that use 2,500 kWh or less each month will be billed the General Service Rate.

General Service Demand

Monthly Service Charge	\$38.00	Monthly
Energy Charge	\$0.0897	0 - 2,500 kWh
	\$0.0421	Excess kWh
Demand Charge	No charge	0 - 8 kW
-	\$17.25	Excess kW

The General Service Demand Rate applies to commercial customers with electric usage of more than 2,500 kWh each month, for four consecutive months, for a single or a three phase electric service supplied through one meter at the secondary voltage available at the customer's location. This rate classification will also be charged demand. The demand charge is based on the highest 15 minute interval of electric usage during the billing period.

If the customer's kWh usage is less than 2,500 kWh each month for 12 consecutive months, they will then be charged the General Service Rate.

Large Power – Secondary

Monthly Service Charge	\$120.00	Monthly
Energy Charge	\$0.0342	All kWh
Demand Charge	\$19.50	All kW

Large Power – Primary

Energy Charge \$0.0338 All kWh	
Demand Charge \$18.30 All kW	

Application

The electric service requirements on the customer's premises must be delivered at one point and metered at (or compensated to) the voltage of delivery. This rate shall apply for all customers having a demand in any month in excess of 250 kW.

Type of Service

Service will be alternating current; 60 hertz; under one of the following classifications:

• Secondary Voltage – Single or three phase, 600 volts or less

• Primary Voltage – Three phase, 4,160 volts to 34,500 volts, supplied from BPU. Service voltage available in any given case is dependent upon voltage and capacity of existing lines in the vicinity of customer's premises. Service is in accordance to BPU Electric Service Regulations and any applicable riders.

Billing Demand

Billing Demand is the kW measured during the 15 minute period of customer's greatest use during the month, as adjusted for the power factor. When customer's average monthly power factor is less than 85 percent lagging, the maximum measured demand will be adjusted by multiplying 85 percent and dividing by the average monthly power factor in percent. The average monthly power factor will be computed by the formula, average monthly power factor equal (100*kWh)/Sqrt (kWh^2 + kVarh^2).

A customer will be removed from large power if the demand remains below 250kW for 12 consecutive months. The customer will then be charged the General Service Demand Rate. However, if the demand meets or exceeds 250kW again in any given month, the customer will then be classified a large power customer with the next month's billing cycle and will remain at this rate according to BPU's Electric Service Rate Policy.

Economic Development

The Economic Development Rate (EDR) is offered for new load generated by General Service Demand and Large Light and Power electric customers. The following table shows the discount rate over a five (5) year period.

Year	GSD	LLP
1	21%	13%
2	17%	11%
3	13%	9%
4	9%	7%
5	5%	5%

All the components of the electric charges will be calculated using the current electric service rates to get the gross electric charges. The EDR discount rate is then applied to the gross electric charges and will show as a credit on the customer's utility bill. Each year on the anniversary of the date that the EDR rate was implemented the EDR discount rate will decrease and at the end of five (5) years, the EDR discount rate will cease.

Dual Fuel

Monthly Service Charge Energy Charge \$5.50 Monthly \$0.0504 All kWh

A dual fuel system uses two independent heating systems to heat your business. BPU dual fuel customers use electricity as the primary source of heat. Propane, fuel oil, or natural gas can be used as the back-up heat source. The back-up heat source must be automatic and of adequate size to heat your business during peak interruptions. For example, an electric heat source, such as a plenum heater, with fuel oil, propane, natural gas or electric storage heat as the back-up heating system would qualify.

This program is available to customers who already have an electric service. This rate is interruptible up to 400 hours per season and will be remotely controlled by BPU to prevent excessive peak usage. The space heating load will be separately metered and may be interruptible at any time. This type of service is single phase or three phase, 60 hertz, at available secondary voltage.

Off Peak

Monthly Service Charge	\$5.50	Monthly
Energy Charge	\$0.0497	All kWh

This program is available to customers who already have an electric service. This rate is for interruptible service to energy loads, which are remotely controlled by BPU. This space heating load will be separately metered. Service under this schedule will be available for approximately eight (8) hours per day, normally 11:00 p.m. to 7:00 a.m. or as established by BPU. This type of service is single phase or three phase, 60 hertz, at available secondary voltage.

Off Peak Heating

An off peak heating customer uses electricity as their primary source of heat. An off peak heating system utilizes a thermal (heat) storage system that heats up during off peak times, typically 11:00 p.m. to 7:00 a.m. In-floor electric mats, electric boilers for in floor hot water heat, and brick storage units are all examples of storage heat system. The heat is then released into your business the following day to provide 100% of your heating as needed.

Off Peak Electric Hot Water Storage

An off peak water heating customer is required to have a 100 gallon or larger, UL approved, water heater installed. The water heater storage system heats water during off peak times, typically 11:00 p.m. to 7:00 a.m. The heated water can then be used anytime during the day.

Security Lights

BPU offers a security lighting program. The security lighting is available to both residential and commercial customers. BPU maintains the security light. This service is offered for a monthly fee of \$12.00 (+tax) per security light. For further information please contact the BPU Repair Office at 829-2193.

Distributed Generation

Please go to BPU's website, **www.bpu.org/services/electric**, for further information on distributed generation.

DEMAND CHARGES

Electric utility rates are designed to maintain equity among the various ratepayer classes, ensuring that no single customer is subsidized by the utility's other customers.

Commercial Rates

The two basic types of commercial rates are the General Service Rate and the General Service Demand rate. The General Service Rate is much like a residential bill in that it has only an energy charge for the electricity consumed during a billing period plus a monthly customer charge to cover the fixed costs for providing electric service to a customer. The energy charge is indicative of the utility's cost of producing and delivering one kilowatt-hour (kWh) of energy.

With the General Service Demand Rate, the major components of the customer's bill are the energy charge and the demand charge. The energy charge is based on the amount of electricity consumed over the entire billing period, plus a monthly service charge. The demand charge is related to the maximum demand for electricity that a customer places on the utility's system during the billing period. The demand is measured in thousands of watts or kilowatts (kW). The demand charge is based on the highest 15 minute interval of electric usage during the billing period.

Principal Behind Demand Charges

Demand is measured to determine the amount of the utility's equipment that is dedicated to serving a specific customer's peak needs. Imagine a trucking company who has contracted to deliver 30 loads of dirt to a construction site. If he can deliver one load a day, he can meet the contract with one truck. If he must deliver all 30 loads within the same 15 minutes, he will need 30 trucks. The trucker will have to set his charges depending on the demand on his resources. It would be difficult for the trucker to justify making his customer who buys one load of dirt a month pay the cost of the 30 trucks he bought to meet the contract with the high peak demand for deliveries. It would be more fair for the customer with the high peak requirement to bear the burden for his demand needs.

How To Reduce Demand Charges

Demand customers may be able to reduce the size of their bill by reducing peak demand. The key to reducing peak demand is optimal scheduling or shifting of electrical equipment within the facility. The goal is to reduce the load at any single given time. Following are some suggestions to reduce demand.

- What energy-efficient improvements can be made?
- Does all the equipment need to be running at the same time? If not, what can be turned off while other equipment is running?
- If the equipment requires heaters, start one machine at a time allowing the first machine to come up to the temperature before starting the second.
- Often there is equipment that is operated infrequently. If this is the case, can some other equipment be turned off while this equipment is running?

Often timers can be utilized to give you the control needed to achieve these demand reductions. However, if your electrical use is high and you have a large number of electrical loads, it may be feasible to install a computerized load-control system to coordinate and optimize the operation of your equipment.

ELECTRIC RATES - RESIDENTIAL

Each customer will pay a power cost adjustment (PCA) each month based on the kWh that are used. The PCA is based on BPU's cost of power purchased wholesale from Minnesota Power.

The monthly service charge applies to all rate classifications, regardless of usage on meter.

Residential Service

Monthly Service Charge	\$15.75	Monthly
Energy Charge	\$0.0774	All kWh

The Residential Electric Rate is available to single phase residential customers that are served through one meter at a voltage of 120/240 volts. Each apartment or dwelling unit shall be considered a single private residence.

Dual Fuel

Monthly Service Charge	\$5.50	Monthly
Energy Charge	\$0.0504	All kWh

A dual fuel system uses two independent heating systems to heat your home. BPU dual fuel customers use electricity as the primary source of heat. Propane, fuel oil, or natural gas can be used as the back-up heat source. The back-up heat source must be automatic and of adequate size to heat your home during peak interruptions. For example, an electric heat source, such as a plenum heater, with fuel oil, propane, natural gas or electric storage heat as the back-up heating system would qualify.

This program is available to customers who already have an electric service. This rate is interruptible up to 400 hours per season and will be remotely controlled by BPU to prevent excessive peak usage. The space heating load will be separately metered and may be interruptible at any time. This type of service is single phase or three phase, 60 hertz, at available secondary voltage.

Off Peak

Monthly Service Charge	\$5.50	Monthly
Energy Charge	\$0.0497	All kWh

This program is available to customers who already have an electric service. This rate is for interruptible service to energy loads, which are remotely controlled by BPU. This space heating load will be separately metered. Service under this schedule will be available for approximately eight (8) hours per day, normally 11:00 p.m. to 7:00 a.m. or as established by BPU. This type of service is single phase or three phase, 60 hertz, at available secondary voltage.

Off Peak Heating

An off peak heating customer uses electricity as their primary source of heat. An off peak heating system utilizes a thermal (heat) storage system that heats up during off peak times, typically 11:00 p.m. to 7:00 a.m. In-floor electric mats, electric boilers for in floor hot water heat, and brick storage units are all examples of storage heat system. The heat is then released into your house the following day to provide 100% of your heating as needed.

Off Peak Electric Hot Water Storage

An off peak water heating customer is required to have a 100 gallon or larger, UL approved, water heater installed. The water heater storage system heats water during off peak times, typically 11:00 p.m. to 7:00 a.m. The heated water can then be used anytime during the day.

Energy awareness and tracking makes it easy to understand your business or home.

MyMeter provides critical energy usage information to allow both commercial and residential customers to manage and reduce energy costs in their homes and businesses.

MyMeter delivers energy information via a simple and intuitive interface. This makes it easy for you to see how factors, such as outside temperature, occupancy, and equipment useeimipread your usage patterns.

In addition to electric usage, MyMeter tracks water use, allowing you to see your daily water consumption. You can set markers, so if an abnormal amount of water use is detected by your meter, you can be notified of a possible leak, which can ultimately save you from receiving a high water bill.





MyMeter is conveniently accessed through the home page of BPU's website at www.bpu.org. Customers can log into MyMeter with their account number, name and email address.



Comparisons of historic usage and local temperature data help you identify trends and provide opportunities to make energy improvements.

Energy Markers give you the ability to track time-based events to see the impact energy improvements or changes in energy use behavior have on your consumption.

Customizable real-time alerts via email and text messaging draw attention to peak demand events and abnormal consumption patterns. Armed with this information and accompanying analytic tools, endusers learn that their energy use is a process they can manage, not just a bill they have to pay. The result is cost-effective behavioral energy savings.



Brainerd Public Utilities • 8027 Highland Scenic Rd-Baxter MN • (218) 829-8726

COMMERCIAL ENERGY REBATES

BPU has partnered with Energy Insight, Inc. to administer services related to commercial and industrial energy conservation. Energy Insight personnel work one-on-one with BPU customers. They visit business sites, review project plans, assess technologies, calculate potential energy savings, and help participating businesses get maximum rebates to lower their upfront costs of energy-saving facility projects and continue to enjoy the energy savings for years to come. Following is a list of areas they can help you with.

Commercial Refrigeration and Food Service Heating and Cooling Lighting – New Construction Lighting – Retrofit New Construction Design Review Pumps and VFD's Specialty Measures

Please contact Mike Swanson, Energy Analyst, at **ms@energyinsightinc.com** or **952-767-7469** to set up an appointment to discuss your rebate options.



RESIDENTIAL ENERGY REBATES

Making your home more energy efficient can reduce energy bills, improve comfort, and protect the environment. BPU provides rebates to help you make those energy-efficient improvements.

Please visit BPU's website, **www.bpu.org/services/rebates**, to find what rebates are available to you.

WATER RATES

Commercial water customers will be subject to Minnesota sales tax.

METER SIZE	MONTHLY RATE		INC MDH	LUDING
3/4 inch	\$	15.50	\$	16.03
1 inch		41.00		41.53
1 1/2 inch		60.50		61.03
2 inch		105.50		106.03
3 inch		185.00		185.53
4 inch		275.00		275.53
6 inch		445.00		445.53

Each water customer will be charged a monthly service charge, according to the size of their water meter. The monthly service charge is billed even if there is no water consumption.

In addition to the monthly water service charge, each customer is billed a commodity charge of \$3.05 per 1,000 gallons of water used.

If a customer lives outside the city limits, the customer is charged 200% for both the service and commodity charge.

Safe Drinking Water Fee

A \$0.53 water service connection fee is included in each monthly service charge. The drinking water service connection fee was established in 1993 by the MN Department of Health to help fund program activities related to compliance with the federal Safe Drinking Water Act.

WASTEWATER TREATMENT RATES

METER SIZE	MO CH	NTHLY IARGE
3/4 inch	\$	13.55
1 inch		15.50
1 1/2 inch		17.50
2 inch		16.50
3 inch		22.50
4 inch		25.50
6 inch		29.50

Each wastewater customer will be charged a monthly service charge based on the size of the customer's water meter. The monthly service charge is billed even if there is no water consumption.

In addition to the monthly service charge, each customer is billed a commodity charge of \$2.95 per 1,000 gallons of water used.

If a customer lives outside the city limits, the customer is charged 200% for both the service and commodity charge.

WASTEWATER DEBT SERVICE RATES

METER SIZE	DEBT SERVICE	
3/4 inch	\$	7.00
1 inch		9.10
1 1/2 inch		12.60
2 inch		15.40
3 inch		21.70
4 inch		27.30
6 inch		38.50

Each wastewater customer is charged a monthly debt service charge based on the size of their water meter. This charge is to fund a portion of the upgrade and expansion of the wastewater treatment facility.

If a customer lives outside the city limits, the customer is charged 200% of the above wastewater rate.

WASTEWATER COLLECTION RATES

This charge is billed on behalf of the City of Brainerd to cover the maintenance costs of the City's wastewater collection system. Each wastewater customer will

meter. The monthly service charge is billed even if there is no water consumption.

SIZE
3/4 inch
1 inch
1 1/2 inch
2 inch
3 inch
4 inch
6 inch

In addition to the monthly service charge, each customer is billed a commodity charge of \$1.43 per 1,000 gallons of water used.

If a customer lives outside the city limits, the customer is charged 200% for both the service and commodity charge.

SUMMER SPRINKLING RATES

Residential Customers

All residential customers are given a sprinkling credit on their wastewater treat-

customer's wastewater charges will be based n the customer's average water consumption during the billing months of December, January, and February.

No residential customer will be allowed to install a separate water meter for a sprinkling system.

Commercial Customers

Commercial customers must purchase a separate water meter for irrigation purposes. The customer is then charged for the water usage on this meter for the months of May through September. No wastewater charges are billed for this meter.

Backflow Preventers

Both residential and commercial underground sprinkling systems shall have a backflow preventer installed in the main service connection to the sprinkling system that is in accordance with the MN Plumbing Code requirement.

STORMWATER

This charge is billed on behalf of the City of Brainerd. The revenue collected for this charge is used to maintain and improve the existing stormwater drainage system for impervious surfaces (where stormwater cannot pene-trate into the ground). Residential customers are charged a \$3.30 monthly fee and commercial customers are charged according to the amount of impervious surface their property has.



AERIAL PHOTO OF BPU Service Center and Wastewater Treatment Plant



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www.bpu.org Visit us on **acebook**