



Understanding Demand and Your Irrigation System

Knowing how your electric use is billed and how your demand and energy charges are calculated can be a valuable tool in managing your total energy costs and, ultimately, your bottom line.

So, is it a power bill or an energy bill? The answer is both.

Customers are charged for both the energy they consume and the demand for power their systems have. But what's the difference?

A customer's energy charge is measured in kilowatt-hours (kWh). To calculate a customer's energy charge, Idaho Power looks at the amount of electricity (or kWh) consumed during a billing period. The energy charge is a variable cost and is

based on the hours your system runs. For example, if an irrigation customer in Idaho had an energy usage of 4,000 kWh for one month, their energy charge would be \$229.06 (4,000 kWh x \$00.057265).

On the other hand, demand charges are represented by kilowatts (kW), which measure the rate at which energy is used at a point in time. Billing demand is the average kW supplied during the 15-consecutive-minute period of maximum use during the billing period. The demand charge recovers a portion of the capacity-related costs associated with generating, transmitting, and distributing electricity. Demand charges are fixed and correlated to the connected load of the irrigation system (motor horsepower

[hp] and pivot load). For irrigations customers in Idaho, the demand charge for in-season demand is \$14.06 per kW.

It's important to consider the demand of your system. The demand reading on your bill should be about 80% of your connected horsepower. If demand is higher than normal, keep the following in mind:

- A gradual increase in use with no system changes could indicate one or more of these issues: worn nozzles, leaks, or worn motor bearings
- A sudden demand increase could indicate leaks (pipe break or a hole in pump column) or pump problems



When running your pumps, try to avoid short periods of high-flow rates (flushing) during demand season as it will set the demand for that billing period.

Idaho Power's Irrigation Efficiency Rewards Program can assist with system repairs and upgrades through cash incentives. If you're looking to lower your demand and energy charges, contact your local agricultural representative (Ag Rep) or visit idahopower.com/irrigation for more information and a complete list of eligible components and their incentives.



Recent Changes to Idaho Irrigation Rate Design

Idaho customers — With your first bills coming in this season, you may have noticed a few changes to the rates and structure of your bill.

To continue serving our customers' growing energy needs safely and reliably, last summer Idaho Power filed a request to increase base rates for its Idaho customers. As part of the regulatory process, the company and intervening parties reached a settlement, which was ultimately approved by the Idaho Public Utilities Commission (IPUC) and provided for changes to irrigation rates, effective January 1, 2024. As part of this effort, the rate structure and rates have both changed. Idaho Power proposed changes to improve the way it collects costs by taking a step towards collecting costs in the way they are incurred — fixed costs through fixed charges and variable costs through variable charges.

The image below shows the Idaho irrigation rate design changes.

Rates & Structure Before the General Rate Case			Rates & Structure Effective January 1, 2024 Reflects a 5.2% Increase in Class Revenue		
RATE	In-Season	Out-Season	RATE	In-Season	Out-Season
Service Charge	\$22.00	\$3.50	Service Charge	\$30.00	\$6.00
Demand			Demand		
Billing Demand	\$7.06	N/A	Billing Demand	\$14.06	N/A
Energy			Energy		
First 164 kWh per kW	5.8436¢	6.7084¢	All kWh	5.7265¢	6.7288¢
All Other kWh per kW	5.5483¢	6.7084¢			

Tracking Mechanism	Rate	Rate	
		(Jan. 1 – May 31)	(June 1 – May 31)
Power Cost Adjustment	2.0929¢	0.9807¢	0.7447¢
Energy Efficiency Rider	3.10%	2.35%	

High-level changes that irrigation customers in Idaho may see on their bill include:

- Individual impacts vary per service location based on load factor. Higher load factor service points will typically experience smaller impacts.
- An in-season demand charge increase to \$14.06, and an in-season service charge increase to \$30.
- Energy (kWh) charges decreased — the rate you pay for kWh consumed is made up of the “base rate” plus the Power Cost Adjustment.
- Energy Efficiency Rider decreased from 3.10% to 2.35%.

Idaho Power filed a General Rate Case with the Public Utility Commission of Oregon (OPUC) and is currently working through that process.

If you have specific questions about your bill, please contact your local Ag Rep or visit our website for Idaho and Oregon customers.

Safety First: Navigating Power Lines During Irrigation Season

Electrical safety begins with making and executing a plan. Consider the following questions for a safe and productive season.

What is the appropriate clearance from the power lines to my irrigation equipment or haystacks?

Aluminum handlines, which are very conductive, and powerlines are a dangerous combination. Raising the handline in the air is unsafe when close to overhead powerlines. The Overhead Lines Safety Act specifies minimum clearances from equipment, haystacks, and buildings to the lowest conductor of a power line. Minimum clearances vary from 15 feet to over 50 feet depending on the voltage of the power line.

For more information, please visit idahopower.com/outages-safety, or contact your Idaho Power Ag Rep or safety professional to verify these distances.



When should I conduct maintenance on my electrical equipment?

Check with your qualified electrician for recommended service intervals. Idaho Power will disconnect your irrigation service and reconnect it for \$40 per service point.

Why should I check my center pivot?

Pay attention to end guns spraying onto distribution lines and equipment. The water can create an arc from phase-to-phase or phase-to-ground, which could cause power bumps. Also, ensure the end gun or overhang supports (rabbit ears) are at the minimum clearances from any power lines around your fields.

