



Frequently Asked Questions about Irrigation Load Control

Why is there an Irrigation Load Control program?

The primary purpose of the load control program is to reduce the demand for energy on our system and the entire Nebraska Public Power District (NPPD) system. By moving the electrical demand of irrigation to the overnight and early morning hours, we reduce the strain on the facilities that deliver electricity and reduce the likelihood of system failures during peak usage times. Statewide the highest demand for energy comes in the summertime due to the high number of electric irrigation systems being run on top of the already high electrical use that comes from typical summer loads.

Why are there different rate options for electric irrigation services and what are they?

CCPPD offers three irrigation rates. The rate a customer chooses defines when their system can be controlled.

Anytime Control is the cheapest of the three rates and it means CCPPD can control your pump every time that NPPD calls for control. At a maximum this rate means a service can be controlled for 12 hours a day Monday through Saturday and 6 hours a day on Sunday.

Every Other Day Control is broken into two groups and is the middle rate option when it comes to cost and hours of control. Irrigators in this group can be controlled up to 12 hours a day on Monday, Wednesday, Friday and 6 hours on Sunday; or they can be controlled on Tuesday, Thursday, Saturday and Sunday.

Finally, the most expensive option is No Control, and it means just that, your well will not be controlled.

These rates are based on the actual cost of service. If you choose to go with Anytime Control that essentially means your well will never be running on a peak energy usage day as declared by NPPD. We do allow irrigators to go to a lesser control option if they find themselves needing additional hours of run time.

Why do I have to pay the capacity charge every year?

The capacity charge covers all the costs of having a service, providing equipment, doing maintenance, and all other operational and administrative costs. The capacity charge is like the customer charge on your home or farm electric bill, which is a flat rate every month. The difference between your irrigation service and farm or home service is that the cost for the year is paid up or can be spread over four months instead of being split into 12 months. Capacity charges are based on the peak demand of your service. As a reminder CCPPD is not for profit. Capacity and energy charges are all based on the cost of service. Regular cost of service studies are completed for all accounts every few years. These cost of service studies make sure that every different rate class is paying its fair share of power and operational costs.

What if I am on the Anytime Control rate and I get behind with my irrigating?

CCPPD will allow you to change to a lesser control rate throughout the season. You will need to pay the difference between the rates and typically the switch will happen within a couple hours.

What if my well breaks down and I need power for repairs?

Just give us a call at the office 402-372-2463 and choose option 3 for irrigation. Let us know what well number you are working on, and we will release control. Once your repairs are complete call us back and we will get your well back into the control cycle.

What does it mean to 'flatten the curves' of energy usage?

Load control is often referred to peak shaving, load balancing or curve flattening. By balancing the energy usage, the power plant output can also be balanced. Think about how you use energy in your home through the night, then when you are getting up and ready for the day. As you move through your day at home or at work to lunch time notice how your air conditioner has come on as the sun came up and the temperatures increase through the day. As you run the dishwasher and toss in a load of laundry your usage continues to rise. Fast forward a few hours and as people are returning home from work, they do the same things. They start cooking, toss in a load of laundry and since it is still the heat of the day the air conditioner keeps running. As you slow down and prepare for bed your energy usage decreases and the setting sun means your air conditioner can slow down its day as well. By controlling irrigation load we are trying to move that piece of demand from the hours when electric usage is already high to the overnight hours when electric loads have reduced for the day.

Why does my well shut off before the reported control time?

When NPPD sends out messages calling for control we need to have our eligible load shut off before that hour. If we are called to control at 10 am then we need to start sending out commands approximately 25 minutes prior to that time, so that all the irrigation load is off before 10 am. Depending on how the controller is hooked up in the field there is often a delay from the controller receiving the message until usage has dropped to zero, which also is a factor in the early start time.

If control ends at 10 p.m. then why doesn't my well turn back on right away?

Just like it takes time to control all the wells, it also takes time to get them all released. Once again, we can't start releasing control until after the release time.

It's cloudy today, why are you controlling?

When we are in periods of drought throughout the state and irrigation loads are high then the temperature carries less weight and control is still needed because of the high irrigation usage.

Or on the flip side...It's 95° today and blistering hot, why aren't you controlling my irrigation wells?

The thing to remember is load control is based on usage across the entire state, not just our immediate area. Even though we may be dry in our area the rest of the state or just pockets of the state may have received rain and thus some irrigation has shut down lowering statewide loads. So as much as we want to get the rain here, as long as it is raining somewhere in the state it will have an effect on load control.

What time will load control start, and what time will load control end?

Unfortunately, the answer to this question is often we don't know for sure. At CCPPD we control load when our power provider Nebraska Public Power District (NPPD) tells us we need to control and when we can release control. Our first load control message of the day usually arrives by 8:30 a.m. As NPPD watches loading across the state they may push control to a later time. As the day continues and loads drop then NPPD will start releasing us from load control. Often times we only get 5-10 minutes of notice before we can release control for the day. One thing for certain is that NPPD can't control us for more than 12 hours a day Monday through Saturday and 6 hours on Sunday. If we are called to control at 10 a.m. then we know that the latest we will control to is 10 p.m.

How do I know if I am being controlled?

When you look at CCPPD's control box, which is called a Demand Response Unit (DRU), there should always be a green 'Power' light on. When your well is under control there will also be an amber/orange colored 'Demand' light on. These lights can be hard to see, especially in direct sunlight. If you aren't out at the well site then you can check for text messages or check the CCPPD website under Irrigation and then Demand Waiver, finally you can follow CCPPD on social media: Facebook, Twitter or Instagram.

How do I sign up to receive text messages and how much does it cost?

If you want to receive text messages about load control, just call into the office and we will get you set up to receive daily messages. There is no cost for the text messaging service.

Why does control start some days at 9 a.m. and other days not until 5 p.m.?

NPPD has the utilities across the state divided into 10 groups. With these ten groups they try to spread out the control hours. Only one group may need to be controlled starting at 9 a.m. or until 11 p.m. Likewise all 10 groups may need to be controlled during the peak hours. By having 10 groups and spreading out control NPPD can avoid having severe drops or increases in load in a short period of time. Sharp fluctuations need to be avoided thus keeping supply and demand of energy in balance and maintaining reliability. Control start and release times as well as no control days are spread among the 10 groups as evenly as possible.

Why am I required to install a capacitor on any irrigation motor larger than 10 horsepower?

Capacitors are used to improve the power factor of the motor. Contact an electrician to install your capacitor. Capacity charges will be adjusted for all systems that run at less than 90% power factor.

Why does there need to be a road in to my well?

In order to participate in the load control program and receive the reduced rate CCPPD will install a load control unit on electric irrigation services. CCPPD needs access to this controller as well as all the electric equipment in order to test, repair, and maintain equipment. The road must be 10 foot wide in order to accommodate CCPPD vehicles.

Why is my neighbor's pivot still running and mine isn't?

Your neighbor may be on a different control rate, or they may have a diesel motor. Sometimes based on the amount of load control needed and control levels set by CCPPD not all wells will need to be controlled. If only partial control is needed, then CCPPD will keep control hours as even as possible between groups.

Please call the office if you need any additional information: 402-372-2463.

