

# Irrigation Load Management

## 2005 SUMMER NEWSLETTER



## “Behind the Scenes” Changes in Load Management

As a farmer, what kind of things typically consume your time during the month of November? Chances are, irrigation load control is probably one of the last things you are thinking about during the fall. But load control was on the front of our minds at Southern Power District, as we made plans to upgrade our computer system that administers the load control program.

For 10 years, Southern had been utilizing an Ilex/SCADA system (supervisory control and data acquisition) to monitor our substations, and to control irrigation wells through the load management program. If you are not a person who is “technically savvy”, here’s how it works: information about loads in substations is gathered by remote transmitter units (RTU’s) at each substation site. Then, that information is transmitted via an extensive tower radio system back to the main computer, or SCADA system for analysis. This same system also transmits signals to the load control boxes on your irrigation wells, and directs them to shut off your power when load control is in effect.

This SCADA system had worked well for Southern since 1995. However, after 10 years, this system

was becoming more and more obsolete. We discovered that if we were to ever need parts to repair the system, that they were not available. Technical support was also difficult to obtain for the dated system. The time had come for an update.

For the 2005 Load Control season, Southern has installed, tested, and is now using an upgraded version of this same SCADA system. This upgrade was installed in January 2005, and is now offering more efficiency to Southern staff as they monitor substation loads. It will also be a better system for irrigation staff who administer the load control program. The irrigation wells have already been tested, and the system successfully “shedded”, then “restored” power just as it should.

There are numerous advantages we’ve seen with this program in the few months that it has been up and running. It has provided easier access to information for Southern staff. The system is now networked, so that staff in Irrigation Management, Engineering, Operations, and Information Technology can all be linked to the system and have access to “real time” information. Additionally, these staff members can access the

## Behind the Scenes...

system remotely to provide better after-hours service on control days.

Historical information about substation load is now able to be stored for longer periods of time. This allows Southern to track their performance and pinpoint problem areas when they arise. There is also protection in place to block viruses from entering the

system.

As an irrigation customer, you will not notice any changes in your load management or irrigation as a result of this change. But with the upgrade, you will continue to enjoy the same “trouble free” service that you have in previous years.

## Temporary Bypass

Southern Power District may be able to provide you with a short-term waiver from load control if you are required to troubleshoot your system for repairs, or if you need to walk your pivot “dry”. Power can usually be restored within one hour.

For the fastest results,

please contact Irrigation Manager Anthony Bohaty prior to 9:00 a.m. on the day you are requesting temporary restoration.

## Load Control Changes

If you find you need to take a pump off interruptible service, or change to a lesser controlled rate, all you need to do is pick up the phone and call Southern. Normally we can change a pump over to full power or a different

interruptible rate within the hour you request it.

Remember...you will be subject to a \$100 service charge per well, per change, as well as additional horsepower and kWh charges.

## SPD Sees Large Irrigation Growth

When all new irrigation installations and upgrades are completed for 2005, we will have added 350 new services, amounting to 15,000 horsepower to our system. In comparison, three years ago we added only 9,548 horsepower to our system. Because of the increase in demand we've seen in recent

years, we were once again faced with not accepting applications after the February 1st non-firm deadline. All applications received prior to this date were estimated and built as requested by our customers.

To plan for next year's deadlines, please refer to page three for application deadlines.

## Load Management Information...

Beginning June 1st, KRVN 880-AM Radio will announce load management messages each morning at 8:29 a.m., Monday through

Saturday. The early release messages will air at 4:59, 5:59; 6:59, 7:59 8:59 and 9:59 p.m.

This message schedule will continue throughout the load management season, or until mid-September.

KRGI 96-FM will also provide early release information in the evenings.

If Sunday emergency control is necessary, Southern will make these announcements, also through KRVN 880 AM and KRGI-FM 96.5.

Load management information is also available via our toll-free hotline at 1-800-652-9809, and from email updates. If you would like to be notified via Southern's e-mail update listing, please contact Anthony Bohaty, Irrigation Services Manager at [abohaty@southernpd.net](mailto:abohaty@southernpd.net).

### Load Control Boxes

Remember...if you see a red and green light in your load control box window, that means you are under control. A single green light means you are **NOT** under control. If you think you are being controlled in error, please call the Irrigation Hotline at 1-800-652-9809 to check which groups are currently under control, or contact the Grand Island office at 1-800-579-3019 to verify your current rate of control.

## *Dates to Remember...*

Next season, if you would like Southern to install underground wiring to your new irrigation service, November 1st is a day to mark on your calendar. You must submit your application prior to this date.

You may still submit an application for service between November 1st and February 1st. Applications received during this period are accepted, but underground wiring will not be installed by Southern. You will be responsible for making arrangements with an electrician. February 2nd-May 1st is the time period for the receipt of "non-firm" applications. These applications will be completed based upon the availability of labor and materials, and are completed in chronological order based on the date of applications...there are no exceptions to this policy.

It is important to remember that these applications were not accepted in 2004 or 2005, due to the large demand both years for new services. It is unknown at this time if applications will be denied after May 1, 2006. This is why it is important to plan now, and get your application submitted prior to November, or February 1st.

## **Load Management Hours to Follow Same Guidelines as 2004**

Southern will be following the same operating procedures that were initiated during the 2004 irrigation season. Control may begin as early as 9 a.m. or continue as late as 11 p.m., but your well will not be controlled for more than 12 consecutive hours. For example, if your well is controlled starting at 9 a.m., your power will be restored by 9 p.m.

Also, just like last year, we will have the flexibility to delay load control start times to later in the day, when it is deemed that NPPD will not meet their expected load growth. In the past, these times were not flexible, and we were required to control irrigators at the time specified by NPPD, whether or not the control was ultimately needed. Irrigation Services Manager Anthony Bohaty says the

new strategy has worked well both for irrigation customers and for Southern. "This system gives customers more running time, and it allows NPPD more flexibility to take off loads more precisely, as they are needed."

Southern also has an emergency clause in our irrigation control rates. This allows us to enact load management at non-traditional times, if an emergency situation should arise. We can now use load management per a request from NPPD on a Sunday or holiday. We cannot predict how much Sunday control will occur, but in 2004 this option was never used. If the option had been available in 2003, there may have been one 4-5 hour block of control on one Sunday in July. If we are required to use the emergency clause this year, all rates except full power are subject to some control. Bohaty says "We anticipate the use of Sunday control to be light to non-existent. We will continue striving to provide customers with the least amount of interruption as possible."

### *Demand Meters*

Southern resets all demand meters each year in September. If you have well problems in the summer that may cause an unusually high demand reading, please contact your local service center to have your meter reset during the summer months. This will allow us to measure your demand reading for proper billing.

## **Knowing Your Account Number Speeds Trouble Calls**

When you are calling in after hours for service problems or for load management assistance, the account number (well number) of your irrigation service is important. This is a critical number for identifying your well's location and expediting the time it takes to dispatch a serviceman to your well. If you do not know your well number, then your name, along with a legal location is helpful.



Southern Power District



**P.O. BOX 1687  
4550 West Husker Highway  
Grand Island, NE  
68802-1687**

### Service Centers:

Grand Island (308) 384-2202  
Central City (308) 946-2964  
Franklin (308) 425-6217  
Hastings (402) 751-2535  
Holdrege (308) 995-5112  
Toll free 1-888-484-2470



### General Office:

(308) 384-2350 or  
1-800-652-2013

### Customer Irrigation Service:

(308) 381-5941  
1-800-579-3019 or  
customerservice@southernpd.net  
abohaty@southernpd.net

### LOAD CONTROL HOTLINE:

1-800-652-9809

## Don't Tamper with Load Control Switches

Please remember that no one other than Southern Power District employees are authorized to access the load control switch and the wiring connecting the switch to your well...not even your electrician, or well or pivot repairman. You are responsible for the actions of others if they perform any work on your motor controls.

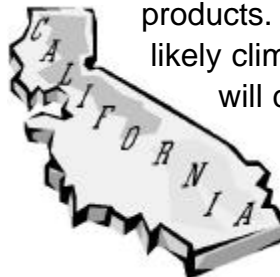
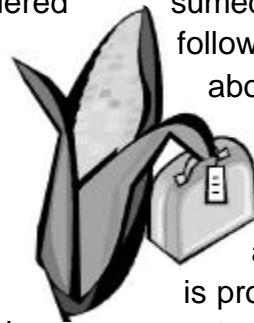
Running your well in the hand position during a control period is also a violation of your load control agreement.

Any unauthorized access will be considered "tampering". Penalties for unauthorized access include being billed for the full power rate and removal from the load management program.

If you suspect you have a problem with your load control switch - before, during, or after the load control season - please call your local Southern Power District service center.

## Nebraska Corn... Where Does It All Go?

Have you ever wondered where all of the Nebraska-grown corn travels to after it is harvested? According to the Nebraska Corn Board's Spring 2001 *Biotechnology Update*, about 51.5 percent of Nebraska's corn is exported to other states or even out of the country. Of the corn exported *within* the United States, California is the largest user of Nebraska corn, where 12 percent of the crop is con-



sumed. Texas and Oklahoma follow California, consuming about eight percent.

Within Nebraska, 20 percent of the corn is consumed by livestock, and another 15.9 percent is processed into ethanol, sweeteners, starch and other products. This percentage has likely climbed in recent years, and will continue to do so as more and more ethanol plants are developed across the state.

### Board of Directors:

Marvin Fishler, Chairman  
Mike Lowry, Vice-Chairman  
Adrian Choquette, Secretary  
Dean Klute, Treasurer  
Larry Benson  
Doug Boisen

Lynn Chrisp  
Neal Katzberg  
Robin Marshall

### President/CEO:

Gary Hedman

Dirk Nickel  
Robert Overleese  
Richard Schaffert  
George Silver  
Raye Woodman