

The

# Enlightener



North Star  
Electric Cooperative, Inc.

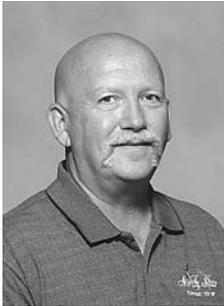
Your Touchstone Energy® Partner



VOLUME 50 NUMBER 10

BAUDETTE, MINNESOTA

OCTOBER 2005



By Dan Hoskins  
General Manager

## Get ready—winter is near

You know, I don't even know where to start. With all that has been going on down south on the Gulf Coast last month, I feel compelled to write about how lucky we are. There are just so many stories coming out of there that it is hard to imagine the destruction of that area. I was fortunate enough to travel along the coastline in April of this year, and they had not even recovered from the hurricane that they had in September of last year. But I think the best story is the way most Americans have pulled together and assisted with the rescue and recovery efforts in one way or another to help those folks out. That's why I believe this is the greatest country of all, the good old USA!

So, now let's talk about a couple of things a little closer to home that are meaningful to us, and one of those things is your backup heating source. Yes, I know winter is coming, and we'd better make sure all things are in working order. Have you checked your filter? Have you run your backup system? Got your summer fill of propane or heating oil or whatever your backup system uses? Go over your

checklist and get it ready, because you know, with a reliable backup system, when Minnkota controls the electric heat, your switch-over should be unnoticeable.

And speaking of load control, let's visit about this for a minute. Remember the "good old days" of 20 to 40 hours of control per year? Well, those years are gone for good. (365-01-003-05 Lee/Yvonne Hancock) Those hours per year did not represent the true idea for load control, but we enjoyed those years because load control was so low that we hardly even noticed, and we were not concerned about

a reliable backup heating source. But, my, how times have changed. In 2002, we had 409 hours of control, in 2003, 427 hours of load control and last year, 527 hours of load control. These hours are a little more realistic.

This winter, Minnkota is estimating 550 to 650 hours of load control. But even when you signed up to receive off-peak electric heat, your Cooperative promoted a good backup heating system and said that control hours could be in the hundreds of hours.

*Continued on page 6*

### Total Annual Heating Costs

50 Hours Control	Off-peak heat 500 Hours Control	625 Hours Control	Propane Only
\$587	\$664	\$686	\$1,008

#### ASSUMPTIONS:

- Average 1,500 sq. ft. home
- 17,520 kwh/yr. heating needs
- 7 kw/hr. average demand
- 3.3¢/kwh off-peak electric rate
- 3,413 Btu/kwh
- Propane \$1.39/gal.
- Furnace efficiency  
–electric 100%, propane 90%

#### EXAMPLE CALCULATION:

(Off-peak heat, 625 hours of control)

Electric furnace cost:		
(17,520 kwh – 625 hours x 7 kw/hr.) x 3.3¢/kwh	=	\$434
Backup propane furnace cost:		
625 hrs. x 7 kw/hr. x $\frac{3,413}{.9}$ ÷ 91,600 Btu/gal. x \$1.39/gal.	=	\$252
Total	=	\$686

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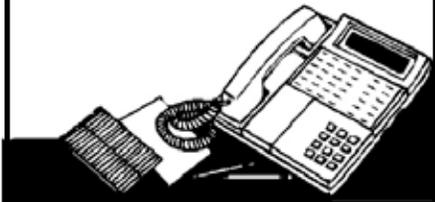
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**Electrical  
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1-888-6OUTAGE  
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## August 2005 Operating Report

Revenue .....	\$ 581,173
Cost of Power .....	\$ 296,810
Operation, Maintenance, Administration .....	\$ 195,489
Depreciation and Interest .....	\$ 138,875
Margin on Operations .....	\$ (50,001)
Average use per Residential .....	849
Total kWhs Sold .....	6,029,009

## OFF-PEAK LOAN PROGRAM FOR AUTOMATIC BACKUP SYSTEMS

If your off-peak backup heating system is in need of repair or replacement, we may be able to help.

From 1977 to 2000, we had an average of 34 hours of load control per heating season. This past heating season, we had 527 hours. The years of 20 to 40 hours of control are gone. This year, Minnkota Power Cooperative estimates 550 to 650 hours of load control.

You must have a reliable backup heating system.

**North Star Electric will lend up to \$2,500 for upgrading members' existing off-peak backup systems when the following terms and conditions are met:**

1. On approved credit
2. \$2,500 maximum
3. 6 percent interest
4. 1 to 3-year term
5. Payment will be added to existing electric bill (\$25 minimum per month)
6. \$35 filing fee
7. Must be an existing off-peak member
8. Automatic backup system only (no wood or manual systems)
9. Must furnish sales receipt from contractor or vendor
10. Job must be completed before loan is approved for payment by member services department
11. Outstanding loan balance at termination of service is due in full

### WE NEED YOUR METER READING

Please read your meter on or as near the 25<sup>th</sup> of EACH month as possible. We must have your reading by the 5<sup>th</sup> of the next month to avoid an estimated bill. If a bill consecutively estimates two times, the crew will read the meter and a \$15 fee will be added to the account.

#### — Please Note —

*Bills that are past due will be charged a 1.5 percent late payment fee. Bills that are 30 days past due will also be charged a \$2 delinquent notice fee.*

# Check your ground fault circuit interrupters (GFCI) every month

If an inexpensive electrical device were properly installed in every U.S. household, nearly 70 percent of the electrocutions that occur in homes each year could be prevented.

Most of the electrocution that happens in the U.S. every year is from the standard 115-volt outlets that we all use daily. The life safety device, the National Electrical Safety Foundation says, is the ground fault safety circuit interrupter, commonly known as a GFI or GFCI. To prevent electrical shock they sense power flow fluctuation at an electrical outlet and automatically cut the power.



GFCIs take three forms for residential use:

1. The most common type is the GFCI receptacle found in bathrooms, kitchens, garages, basements and outdoors.
2. Dead front GFCI units generally used to protect hot tubs and swimming pools.
3. GFCI circuit breakers installed in the service panel or remote-disconnect, also used to protect hot tubs and pools.

The safety assured by the (GFCI) is dependent on the unit being in good working condition. All GFCI products are required by the manufacturer to be tested monthly.

To test: Plug something that uses power into the GFCI receptacle and push the test button. The power should go off when the test button is pushed. When the reset button is pushed, power should be restored. If the test button does not interrupt the power, the unit is defective and needs to be replaced.

## North Star Electric Cooperative, Inc. Mission Statement

*To improve the lives of our member-owners and community by responsibly providing electric energy and other beneficial services while maintaining the very highest standards of performance.*

## CURRENT ELECTRICAL INSPECTORS

State law requires that every new electrical installation in any construction, remodeling, replacement or repair shall file a certificate for inspection with the State Board of Electricity and be inspected by a Minnesota electrical inspector.

- *St. Louis county:*  
**Lee Herseth**  
10078 Gappa Road  
Ray, MN 56669  
Phone: (218) 875-3028  
7:00 a.m. - 8:30 a.m. (Mon. thru Fri.)
- *Roseau, Lake of the Woods and Koochiching counties:*  
**William Crunden**  
29513 Corlan Dr. N.E.  
Blackduck, MN 56630  
Phone: (218) 835-8567  
7:00 a.m. - 8:30 a.m. (Mon. thru Fri.)

*Neither rain,  
nor snow,  
nor the dark  
of night . . .*



Electric co-op line workers are trained to deal with any power emergency. But there's one thing that can't be taught: dedication. Dedication to duty is a quality line workers are born with. That's why you'll see them in a driving storm repairing downed power lines. That's why your power is restored in the middle of the night.

That's why they decided to be line workers in the first place. And they expect no special awards or recognition.

It's reward enough for them to know your family is safe and warm – regardless of the weather.

## Gopher State One Call



**It's the LAW**  
**CALL BEFORE YOU DIG**  
Minnesota Statewide One Call  
Notification Center  
**1-800-252-1166**

*Share a favorite recipe with  
your North Country neighbors!*

Send to:  
North Star Electric  
Cooperative, Inc.  
Attn: The Enlightener  
P.O. Box 719  
Baudette, MN 56623





# Office notes

From Ann Ellis, Manager of Finance and Administration

*“Press on. Nothing in the world can take the place of persistence.”*

~ Ray Droc

## “Off-peak pretty much sucks”

That’s a direct quote from a member in a survey done recently. But IS it that bad? I’m guessing that this person either (1) would rather not have to use any of their more expensive backup fuel, OR (2) does not have an automatic and adequate backup system. I’ll admit that the first reason hits home for me too, but I’m still grateful that I’ll be enjoying low-cost off-peak electric heating for 82 percent of the heating season.

## What’s the bottom line?

In August we were told to expect 750 hours of load control this winter. That’s getting close to double what we’ve had the last couple of years. Financially disastrous? Not if you put it into perspective.

If there are 4,000 heating hours in a winter, that’s about 18 percent of the time. If you pre-bought enough backup propane for the winter at \$1.39 and have an average LP furnace for backup, that LP is equivalent to about 7.5 cent electricity. So if 18 percent of the time you have to use your backup (equate that to 7.5 cent electricity), but 82 percent of the time you’re heating with low-cost, 3.3 cent off-peak electric, your average cost for all heating would equate to 4.04 cents per kWh - still a real bargain - almost half the cost of burning LP all winter.

## Higher price for less control?

You might think that you’d be better off with less control and a higher price for the off-peak, but if Minnkota raised their 4 cent threshold, which is where they now begin to control rather than purchase more expensive replacement power, your off-peak rate would have to also go up. But we are told that the availability of additional power at 5 cents, and even 6 cents, will be hard to find enough of this winter to make a real difference in the number of control hours.

## It’s all about a good backup system

Need help looking at how to improve your backup system? Call our Member Service Department in Baudette or Littlefork. They have answers and low-cost loans to help you.

At your service we remain. . .

*North Star will be serving coffee and goodies at the Baudette and Littlefork offices during regular working hours from Monday, Oct. 24, to Friday, Nov. 4. Stop by – have a cup of coffee on us – let us answer any questions you might have.*

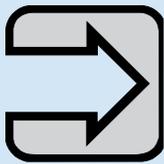
# October is Co-op Month!

## Problems paying your electric bill?

Energy assistance may be available!

If you are receiving a low income or suffering from a temporary financial shortfall, the following agencies may be able to assist you with your electric bill. We urge you to contact them immediately to avoid disconnection if you feel you are eligible for aid

- **Lake of the Woods County Community Services**  
P.O. Box G-0200  
Baudette, MN 56623  
Phone: 634-2642
- **Northwest Community Action Council**  
P.O. Box 67  
Badger, MN 56714-0067  
Phone: 1-800-568-5329
- **Koochiching County Community Services**  
1000 5th St.  
International Falls, MN 56649  
Phone: 283-7000
- **Kootasca Community Action, Inc.**  
2232 2nd Ave. E.  
P.O. Box 44  
International Falls, MN 56649  
Phone: 283-9491 or 1-800-559-9491
- **Kootasca Community Action, Inc.**  
1213 SE 2nd Ave.  
Grand Rapids, MN 55744-3984  
Phone: 1-800-422-0312
- **Arrowhead Economic Opportunity Agency**  
702 3rd Ave. S.  
Virginia, MN 55792-2797  
Phone: 1-800-662-5711



## West End News

*By Steve Ellis*  
*Baudette District Operations Supervisor*



We have been keeping busy with new services, road jobs and the Work Plan job in the Pitt area. Crews have completed this job as well as the line upgrade in the golf course area.

We have also been doing some right-of-way work in the Birchdale area as well as other hot spots we have identified.

Seasonal meter readings will start shortly, so if you see a North Star truck on your property, there is a good chance this is what they are up to. We also inspect all of our facilities while doing this.

Just a reminder that November 1 is the cutoff date for installing underground services. Overhead lines are built year-round but it is just too hard on equipment to install underground in the frost.

New service plans, anyone? If you plan on building, or just simply need to upgrade your existing service, please contact us well in advance so that your project may be scheduled in our work plans.

Please be careful around overhead lines, as they are very dangerous when working around them. Always keep their presence in mind; if you see or have any questions about your power lines, contact us for help.

For those of you doing any fall burning, remember that power poles are easy to ignite and difficult to extinguish. Please use caution when burning around our facilities.

GSOC (Gopher State One Call) ... If you plan to do any digging, please remember that it is the law that you MUST contact GSOC before you do any digging. The ground is crawling with more than worms; it's full of wires and cables of all kinds! To save yourself, and most likely many others, the inconvenience and cost of a dig in, please plan your project well in advance, and notify GSOC first. Call 1-800-252-1166.

Until next time, stay safe.

# Help Keep Your Lights On



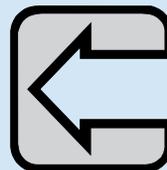
Careless ditch burning can destroy utility poles and junction boxes, leading to unnecessary power outages. Pole damage ranges from surface charring to destruction, and may cost land-owners anywhere from \$2,000 on up, depending on the location of the pole and the severity of the damage.

Please use extreme caution when burning around our electrical equipment, and always tend to a fire once it is lit. Let's all do our part to keep the lights on and costs down.



## East End News

*By Allan Baumgartner*  
*Littlefork District Operations Supervisor*



New services are picking up as usual for this time of year. Our crews are building them as more keep coming in. If you are going to need a new electric service this fall, call our office to set up an appointment for an on-site meeting.

Our Work Plan jobs will also keep our crews busy through October and November. Our contractor installed two underground 3-phase cables and our crews are in the process of terminating them so they can be energized yet this fall.

In October, we will start reading seasonal meters that are out on islands or where crossing the water is required to get to them. We may also be changing out these meters to the new AMR-type meters.

EIR Testing will be coming to our International Falls Substation around October 19 to service and test about 33 OCR's located in that service area, as well as in Big Falls.

We had 16 outages in September. Once again, a major lightning storm played a big part. On September 12, at 1:15 a.m., a lightning strike hit Minnkota's 69,000-volt transmission line and faulted out a large post insulator. Our crew helped Minnkota get the International Falls and Kabetogama substations back on by 9:00 a.m. Later the same day, we had eight transformer fuses to replace of our own, caused by the storm.

Continued from page 1

So, why does Minnkota control load? First of all, they do not control load to sell on the open market. This is a misconception by a lot of folks, and it is simply not true. Minnkota sells the associated cooperatives and municipals all the energy that they can generate for our firm load, plus Minnkota purchases additional energy from the power pool when it is affordable. Did you know Minnkota purchased \$3.7 million worth of energy from the power pool and avoided an additional 406 hours of control last year? If they had not done this, we would have had 933 hours of load control last winter.

Although Minnkota can serve our firm load, it is the off-peak heating loads that they do not have enough capacity for. If they cannot buy some energy on the open market at a reasonable price, then they control the off-peak load, and right now, there are not too many kWhs out there that are reasonably priced. Here is another "did you know." (353-06-001-02 Vickie Mollberg) In the last few years, more than 90 percent of the generation plants developed in the United States have been fired by natural gas, and with the natural gas prices skyrocketing as are other fuel prices, this makes energy costs in the power pool very expensive. Plus, there are other reasons for Minnkota to control load, which include maintenance at one of the generating plants, transmission line constraints, high energy prices in the wholesale market as mentioned above or cold weather.

So, consider this; there are approximately 4,000 heating hours in the winter heating season. Minnkota is controlling approximately 625 hours, and most of these are in the direct winter season, December through February. You still have 3,375 hours of non-control at a terrific low cost of 3.3 cents per kWh.

In closing, I would like to tell you that things will straighten out, and all fuel prices will go down, and there will be plenty of affordable energy on the market so we can get by with minimal amounts of load control. BUT, in reality, we know that is a long shot, so what I can tell you is to fill up that backup heating system fuel tank and make sure that your backup system has been checked over and is ready for the load control transition.

God Bless,  
Dan

## Comparative energy costs for space heating

Electricity (Cents/kWh)	Fuel Oil Regular Furnace (\$/Gal.)	Fuel Oil Super Efficient Furnace (\$/Gal.)	Propane Regular Furnace (\$/Gal.)	Propane Super Efficient Furnace (\$/Gal.)	Natural Gas Regular Furnace (\$/MCF)	Natural Gas Super Efficient Furnace (\$/MCF)
3.0	0.74	0.98	0.48	0.72	5.27	7.91
3.2	0.79	1.05	0.52	0.77	5.62	8.44
3.4	0.84	1.12	0.55	0.82	5.98	8.96
3.6	0.89	1.18	0.58	0.87	6.33	9.49
3.8	0.94	1.25	0.61	0.92	6.68	10.02
4.0	0.98	1.31	0.64	0.97	7.03	10.54
4.2	1.03	1.38	0.68	1.01	7.38	11.08
4.4	1.08	1.44	0.71	1.06	7.74	11.60
4.6	1.13	1.51	0.74	1.11	8.09	12.13
4.8	1.18	1.58	0.77	1.16	8.44	12.66
5.0	1.23	1.64	0.81	1.21	8.79	13.18
5.5	1.35	1.80	0.89	1.33	9.67	14.50
6.0	1.48	1.97	0.97	1.45	10.55	15.82
6.5	1.60	2.13	1.05	1.57	11.43	17.14
7.0	1.72	2.30	1.13	1.69	12.31	18.46
7.5	1.85	2.46	1.21	1.81	13.18	19.78
8.0	1.97	2.63	1.29	1.93	14.06	21.10
8.5	2.09	2.79	1.37	2.05	14.94	22.41
9.0	2.22	2.95	1.45	2.17	15.82	23.73
9.5	2.34	3.12	1.53	2.29	16.70	25.05
10.0	2.46	3.28	1.61	2.42	17.58	26.37

The above figures are based on the assumptions and formulas listed below.

## Assumptions

Fuel Source	Btu Heat Content	Annual Seasonal Operating Efficiency	
		Regular Furnace	Super Efficient Furnace
Electricity	3,413 Btu/kwh	100%	100%
#2 Fuel Oil	140,000 Btu/Gal.	60%	80%
Propane	91,600 Btu/Gal.	60%	90%
Natural Gas	1,000,000 Btu/MCF	60%	90%

## Formulas

### Alternate fuel price to electric rate conversion formula:

$$(\text{Fuel Price}) \div (\text{Efficiency}) \times (341,300) \div (\text{Btu Heat Content}) = \text{Electric Rate}$$

*Example of \$0.85/Gal. Propane to Electricity with a Super Efficient Furnace:*

$$(0.85) \div (0.90) \times (341,300) \div (91,600) = 3.5¢/kwh$$

### Electricity rate to alternate fuel price conversion formula:

$$(\text{Electric Rate}) \times (\text{Efficiency}) \times (\text{Btu Heat Content}) \div (341,300) = \text{Fuel Price}$$

*Example of 3.5¢/kwh Electricity Rate to Propane with a Super Efficient Furnace:*

$$(3.5) \times (0.90) \times (91,600) \div (341,300) = \$0.85/Gal.$$

# Highlights of the board of directors meeting

September 7, 2005

These are the highlights from the board of directors meeting held on September 7, 2005. Detailed minutes are available at the Cooperative for member review. Regular board meetings are generally held the first Wednesday of every month. If you wish to speak with the board or have an item that you would like to have placed on the agenda, please contact Manager Dan Hoskins at least one week in advance to be included on the agenda.

All directors were present. They acted upon usual, routine business. In addition, they voted to approve the Annual Meeting Agenda and to approve the candidates selected by the Nominating Committees.

## Management and operations report

Manager Hoskins reported on meetings, anticipating increased load control hours this winter, Touchstone Energy advertising, working with Northland Connect to offer WildBlue satellite Internet service to our members, and relief efforts following Hurricane Katrina. He also reported on Operations Department activities including planning for the new 2006-2009 Work Plan, outages, hours of work without a lost-time accident, participation in the Baudette Safety Camp for Kids, purchase of a replacement track vehicle, contracted pole inspections, and overbudget bids coming in for the cold storage building. Alternate methods of construction will be priced.

## Office report

Finance Manager Ellis provided the financial report and reported on office activities including the effect of increased gas prices on the Operating Statement, the re-

allocation of electric capital credits, the allocation of DBS capital credits, the payment of capital credits planned for September, preparations for the upcoming annual audit, progress of a sales and use tax audit, annual meeting items, and personnel.

## Compliance and member services report

Manager of Compliance and Member Services Haukaas reported on load management activity, progress of the project to move off-peak metered water heaters from the off-peak meters in exchange for monthly ECC bill credits, faulty contactors that seem to be a result of low voltage, an IPP account with generator issues, the success of the Safety Camp for Kids, the fair booths, and Touchstone Energy products. He also reported on the results of the Operation Round-Up survey, which were very supportive of implementing the program. Board action will be requested at the October board meeting.

## Board reports

The board heard a presentation from Federated Rural Electric Insurance regarding coverages and premium costs. Minnkota Delegate Arnesen reported on their monthly meeting and commented on wind power and moving forward with a new coal-fired generating plant.

## Reliable backup systems a must

Because increased load control hours are predicted in the future, electric off-peak heating installations must be capable of 600 hours or more of interruption each winter season.

“In order to realize the full benefits of the load management program, it is very important that our members work with a qualified heating contractor to ensure that they have an automatic, adequate and well-maintained backup heating system,” said Wayne Haukaas, manager of compliance and member services.

The electric off-peak heating program continues to provide great value to members today, just as it did when it was first utilized in the late 1970s. The winter heating season is here, and North Star Electric stands ready to assist our members with their electric home heating options.



# Have you filled your tank yet?



## Guns and power lines don't mix

Hunting is a Minnesota favorite, ranking right up there with the fishing opener. Before you head out to the tree stand, review these hunting safety tips:

- Treat every firearm as if it was a loaded firearm.
- Be sure of your target before you pull the trigger. When you look through the site, look beyond your target. Make sure there isn't another hunter in your site or a building or structure, such as an electric facility.
- Never point a firearm at anything you don't intend to shoot.
- Never shoot at electric power lines or electric facilities such as substations or transformers. Not only is it extremely dangerous, it's against the law.
- Always carry a firearm so that the muzzle is under control.
- Firearms must always be unloaded when carried into camp or not in use.
- Make sure the barrel and action are clear of obstructions.
- Unattended firearms must be unloaded.
- Never climb a fence or ditch with a firearm. Never climb into a tree stand with a loaded firearm – remove the ammunition first.
- Never shoot at flat, hard surfaces, or the surface of water. The bullet can hit the surface and travel parallel to it for a long distance.
- If you see a power line on the ground, don't touch it! Touching an energized power line could kill you. Notify the local utility of a downed power line as soon as possible.
- Always avoid alcohol and drugs while hunting.

## Snowbirds on the monthly billing

Contact us before heading out for the winter



Each year we receive inquiries concerning what should be done if you leave your home or close your resort for the winter. Whether you leave for a short vacation or for the entire winter, please notify me at the Baudette office. Call Pat Olson at 634-2202 or toll-free (888) 634-2202.

If you are on the monthly billing, the most important thing to remember is to read your meters before you leave and report those readings to me. I will use those readings to figure your charges up to date and then, depending on what you plan to leave running while you're gone, I will set up an estimate. (556-44-048-07 Mike Polkinghorne) It is also helpful to know the estimated time you plan to be gone and a winter address, with phone numbers.

If the estimated bill is not totally accurate, any differences will be adjusted on the first billing after you return home and report the actual readings to me.

You may choose to pay your bills monthly while you are away, but then you could forget to make a payment. Your account will pick up penalties and run the risk of possible disconnection. Most members find it more convenient to take care of their bills in advance. We also have automatic payment available. Call Pat about ACH.

## Make sure your trick or treaters stay safe this year

With witches, goblins and superheroes descending on neighborhoods, here are some safety tips for parents to help prepare their children for a safe and enjoyable trick-or-treat holiday.

- Walk, slither and sneak on sidewalks, not in the street.
- Look both ways before crossing the street to check for cars, trucks and low flying brooms.
- Don't hide or cross the street between parked cars.



- Wear light-colored or reflective-type clothing so you are more visible. (And remember to put reflective tape on bikes, skateboards and brooms, too.)
- Carry a flashlight to light your way.
- Visit homes that have porch lights on.
- Accept your treats at the door and never go into a stranger's house.
- Use face paint rather than masks.
- Have a grown-up inspect your treats before eating.