



# news & views

from Lincoln Electric Cooperative, Inc.

Your Touchstone Energy® Cooperative 

LINCOLN ELECTRIC COOPERATIVE, INC.

## Crossing the Big Pond

*Co-op accepting comments on Lake Koocanusa power cable crossing*

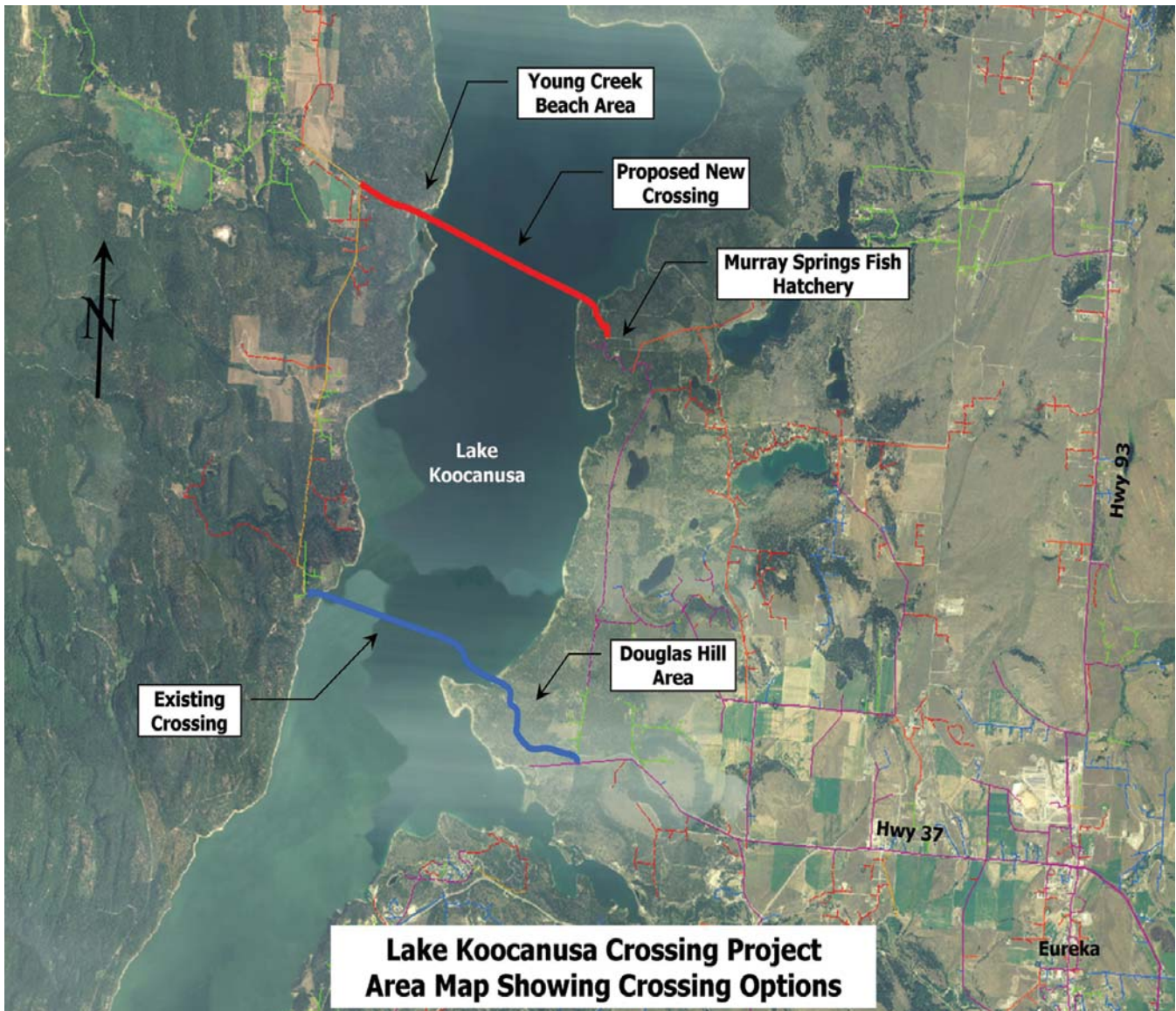
By Jamie Stark,  
Engineering Manager

The West Kootenai is currently served by power lines buried under the Lake Koocanusa

lake bed. The facilities were buried back in 1971 prior to the reservoir being filled. LEC installed four underground power line cables, two energized at 25 kilovolts (kV), and two as spares. The

route started in the Douglas Hill area on the east shore, continued near Lake Livermore, crossed the Kootenai River and exited near the property now owned by Pat Marvel. During the

installation, InterBel Telephone also installed a phone line, then later in 1993 laid a fiber optic line along the same route. The overall distance is approximately  
*Continued on page 5*



**Lake Koocanusa Crossing Project Area Map Showing Crossing Options**

# Montana's appliance rebate program begins

*Members can double up on savings if they act fast!*

If you're looking to buy a new appliance for your home, it might be worth your while to take advantage of the State of Montana's appliance rebate program, in addition to LEC's appliance rebates. The State's program was created through the Recovery Act, which is providing Montana with \$928,000 for rebates for residents who buy certain ENERGY STAR qualified

residential appliances. The Montana program is expected to start in late May 2010 and will run until funding is gone, so act fast. Montana is offering the following ENERGY STAR qualified appliance categories and rebate amounts

- Clothes washers — \$100
- Dishwashers — \$50
- Freezers — \$70
- Refrigerators — \$100

Any Montana resident is eligible for the program, including those who rent their homes. However, a maximum of two appliance categories may be claimed per household. For example, a rebate for a refrigerator and a rebate for a dishwasher could be claimed.

Purchases made prior to the start of the program eligibility period are not eligible for state rebates, but still qualify for Lincoln Electric's ENERGY STAR rebates. So, double up on the savings while you can. More information, including rebate forms and a list of Frequently Asked Questions, is available on the Montana Department of



Environmental Quality website at <http://deq.state.mt.us/Recovery/energy/applianceRebate.mcp>.

For lists of ENERGY STAR qualified appliances, visit <http://www.energystar.gov> and visit [www.lincolnelectric.coop](http://www.lincolnelectric.coop) for information on LEC's rebate program.



**Lincoln Electric Cooperative, Inc.**

## News & Views

Published monthly by Lincoln Electric Cooperative, Inc.  
Eureka, Montana

Lincoln Electric's board of trustees meets monthly at the Eureka office. The regular meetings are scheduled for the third Monday of each month at 7 p.m. Members with items of interest are encouraged to contact the general manager in advance of the meeting.

### Board of Trustees

- Tina Taurman** — President, Dist. 2,  
Trego — Stryker
- Marianne Roose** — Vice President, Dist. 3,  
Fortine — Glen Lake
- Ethel White** — Secretary, Dist. 4,  
Eureka — Tobacco Plains
- George Elam** — Dist. 1, Flathead
- G.I. Burk** — Dist. 1, Flathead
- Courtney Pluid** — Dist. 3,  
Fortine — Glen Lake
- John Hossack** — Dist. 4,  
Eureka — Tobacco Plains
- Kathern Munteer** — Dist. 5,  
Koocanusa Shores — Pinkham
- Jim Reynolds** — Dist. 4, Eureka -  
Tobacco Plains
- Mike Workman** — Dist. 5,  
Koocanusa Shores — Pinkham
- General Manager Michael T. Henry

**In case of power failure:**  
Call 889-3301 or 1-800-442-2994  
Anytime day or night  
**After hours voice-mail for**  
messages 889-3304

Visit us on the Web at:  
[www.lincolnelectric.coop](http://www.lincolnelectric.coop)  
e-mail: [info@lincolnelectric.coop](mailto:info@lincolnelectric.coop)

## Business and Boardroom Briefs

The regular meeting of the board of trustees was conducted April 19, 2010. A quorum of trustees was present and the board took the following action:

- Reviewed bids and approved a right-of-way clearing bid from CLS Contracting to clear 109 miles of right-of-way.
- Approved of changes to Policy 302 - Line Extension.
- Approved completing a Member Satisfaction Survey this fall using NRECA Market Research.
- Approved signing a Smart Grid Agreement with PNGC Power.

	Year to Date 3/31/2010	Year to Date 3/31/2009
YTD Kwh Sales	34,291,114	41,373,371
YTD Revenue	\$2,246,766	\$2,638,053
YTD Cost of Power	\$1,016,483	\$1,250,571
YTD Operating Exp	\$1,070,872	\$1,045,592
YTD Margins	\$166,965	\$348,476
# of Members	3,930	3,861
# of Meters	5,191	5,140
Miles of Line	918	899
Total Utility Plant	\$27,120,880	\$25,878,042
Member Equity	\$6,782,933	\$6,686,808
Avg Residential Usage (kWh)	1,438	1,819
Avg Residential Billing	\$97.39	\$117.56

# Big Pond

Continued from page 3

8,000 ft. from shoreline to shoreline.

About nine years after the cable was energized, one of the cables failed or “faulted.” This cable was abandoned in place and one of the spares was energized to take over. To help the remaining cables last longer, LEC lowered the operating voltage to 7.2 kV shortly after the fault occurred.

Currently, both energized cables continue to serve the West Kootenai without prob-



*Engineering Manager Jamie Stark and an environmental consultant who provided a biological assessment for the project inspect the east side of Lake Koocanusa where the proposed cable would enter the lake.*

lems. But, the facilities are approaching their 40-year anniversary. Typically this type of cable has a lifespan of 30 to 50 years. With one cable down and only one spare, LEC decided to be proactive and replace the power line before a major problem happens. If another fault were to occur, there would be no guarantee the spare would be able to do the job.

In 2009, LEC contracted with a consulting firm to prepare a feasibility study to determine the options for LEC to best serve the West Kootenai. Several ideas were

explored, but two alternative solutions emerged from the study. The first option would be to replace cable near the same route. The other option would be to relocate the crossing north. Both had advantages and problems.

At first, laying new cable along the existing route seemed to make the most sense. LEC already has all the necessary feeder lines coming in and out of the reservoir. No new system improvements and protection studies would be required. Also, anytime a utility crosses a large body of water with power lines, permitting with

local, state and federal agencies becomes a significant part of the process. By using the existing route, we presumed that the permitting would be minimized since our existing cable had already been authorized. This was not the case. Our consultant along with the U.S. Forest Service determined that there are significant archeological sites along the route that would present new problems if we laid cable near the existing route.

Another major problem is that we would have to offset the new cable route at least 600 feet from the existing route to avoid InterBel’s fiber optic line. Lastly, the terrain both in and out of the water presented installation challenges. The east side of the shore is construction friendly since it is fairly flat and sandy. The west shore is a different story...very rocky and very steep. Special boring and trenching equipment would be needed both in and out of the water. The consultants also performed a bathymetry study on the bottom of the reservoir and

*Continued on page 6*

## Coming this fall!

Co-op Connections Card



**The Touchstone Energy Co-op Connections discount card**

## System Wide Power Outage Planned

**The Bonneville Power Administration (BPA) is requiring a system wide power outage to complete critical maintenance on the transmission line serving all Lincoln Electric Cooperative members.**

**All Co-op Members will be without power on Sunday, June 6 from 1 a.m. - 7 a.m.**

We apologize for the inconvenience, but this crucial maintenance will provide long term reliability for co-op members. If you have any questions, please contact the office.



**Lincoln Electric Cooperative, Inc.**  
Your Touchstone Energy Cooperative



**889-3301  
1-800-442-2994**

# Big Pond

*Continued from page 5*

found that portions of the existing route were cluttered with rocks and debris which could damage new cables.

The other option examined is nearly three miles north of the existing crossing. This route would start at the Murray Springs Fish Hatchery and head toward the reservoir by means of a boat launch access road.

From there, the cable would cross the reservoir and exit at the Young Creek beach area. It would continue a short distance on land and connect to the existing overhead power line along the county road. This plan has several advantages. First, the terrain both in and out of the reservoir is better for installation. The shore areas are relatively level and sandy, making trenching easier. The bathymetry scans showed the bottom is shallower and free of debris, so less cable would be needed and there is less chance of damage. However, there are challenges with this option. The scans of the bottom showed a channel in the middle of the reservoir that would need special attention when laying cable. On the west beach, special erosion precautions may be needed in place to protect the cable. Also, since the main feeder

will be relocated, new system protection studies will be required.

The biggest hurdle with the new location would be to bring the main power line feeder north to the fish hatchery. Fortunately, LEC had planned a feeder extension project to that area when developing our construction work plan. Call it coincidence or call it luck, but the two projects merged together superbly.

These options were presented to your Board of Trustees back in November. They made the decision to move the crossing north, mainly due to one driving factor — the new northern route increases reliability. The current system feeds the entire West Kootenai from the south. If a problem occurs, a majority of the area is affected. The new design will bring the main feeder into the heart of the West Kootenai and would then feed both west and south. So if problems occur, fewer people would be affected. Plus, the new route has less potential for future damage since the shorelines and reservoir bottom are more favorable to construction.

The next step in the process was determining how to cross the reservoir with 8,000 feet of cable. The detailed design is not complete yet, but the initial plans



*This is the mouth of Young Creek on the west side of Kootanusa where the cable would exit the lake and connect to existing overhead feeder lines.*

are to rebuild the main single-phase overhead line along Sophie Lake road into a three-phase feeder this fall.

From the fish hatchery, the power line will be underground in conduit to the water's edge. Tentatively in April 2011, we hope to lay the cable in the reservoir since that is typically a low pool. This will be done by using a barge with special spools of cable long enough to cross the bottom. The cable will be pulled into the conduits from the barge, and then hydro plowed into the reservoir bottom for approximately 80 to 100 feet. The remaining cable will be weighted and laid on the reservoir bottom.

What is a hydro plow? It is a specialized piece of equipment submerged into the water with a cable chute behind. It creates a trench with jets, then lays the cable directly into the trench and the sediment then falls back over the top. It is very effective

for this type of installation since there is minimal impact to wildlife and aquatic habitat.

So where are we now? Our consultant has submitted all the necessary permits to the county, state and federal agencies. Currently, LEC is accepting public input about the project through June 18th in conjunction with U.S. Forest Service regulations.

LEC is hosting a public hearing to answer questions and take comments on June 15th at 6:30 p.m. at in our Board room. Written comments can be sent to Jamie Stark, Engineering Manager, PO Box 628, Eureka, MT 59917. We will also be posting project updates via our website and newsletter as we draw closer to construction time.

In the meantime, always feel free to contact us about this project, or other items that we can assist you with.

## Have You Heard About Commercial Lighting Rebates?

- **Businesses convert to more efficient lighting**
- **Save 30-50% on the cost of lighting**
- **Improve lighting quality**
- **Reduce maintenance costs for years**
- **LEC rebates help make for a quick payback**
- **Project must be pre-approved**
- **Call for more details or visit us on the web**



**Lincoln Electric  
Cooperative, Inc.**

**406-889-3301**

**[www.lincolnelectric.coop](http://www.lincolnelectric.coop)**