Bylaw Change to be Presented at Annual Meeting

Chippewa Valley Electric Cooperative's annual meeting is set for February 25, 2012, at the Cornell High School Auditorium. One item of business for this year's annual meeting is a proposed bylaw change. The change is to allow Chippewa Valley Electric Cooperative to have first interest in capital credits in instances of bankruptcy. The full wording appears at right.

The reason the proposed bylaw change is being presented is to protect the interest of Chippewa Valley Electric Cooperative. The cooperative has had requests for service from large mining operations. The capital credits generated by those types of business can become very large, and this bylaw change would allow Chippewa Valley to get first claim to those capital credits should the organization go out of business and leave the cooperative with a large unpaid bill.

Your board of directors and the cooperative attorney have reviewed the bylaw change and are recommend-

ing its approval. Any bylaw change requires approval by the members, and an official notice of the proposed change along with a ballot will be sent with the annual meeting notice in the February 2012 Wisconsin Energy Co-

operative News magazine. The voting will then be tabulated at the February 25, 2012 annual meeting.

If you have questions regarding the proposal, please feel free to contact our office.

Proposed Amendment to CVEC Bylaws, Article VIII

Section 6. Security Interest in Patronage Capital. The Cooperative shall have a continuing, first priority security interest in the patronage capital allocated and credited to any patron to secure the payment of any and all obligations owed by such patron to the Cooperative and the performance of the patron's obligations to the Cooperative. The patron shall execute such documents as the Cooperative may request to confirm and perfect this security interest. The patron further authorizes the Cooperative to file appropriate financing statements to perfect that security interest. The

rights of the Cooperative under the security interest hereby granted may be exercised in the event of the default in payment by the patron of the patron's obligations or in the event of the bankruptcy or insolvency of the patron. Such indebtedness of the patron shall be subtracted from the capital allocated and credited to the patron in any retirement thereof made to said patron or to his estate, heirs or surviving joint member. The Board of Directors shall determine when confirmation and perfection of the security interest shall be required.



Fee Increase Effective January 1, 2012

A collection fee of \$35 will be charged to a member when a crew is dispatched to a location for collection of overdue energy billings.

During regular working hours, a reconnection fee of \$50 will be paid for reconnecting any account that has been disconnected. The after-hours reconnection of electricity to any disconnected account will require a fee of \$125.

Scholarships Available to High School Seniors

This spring, Chippewa Valley Electric Cooperative will be awarding numerous \$500 scholarships to graduating high school seniors from member families through our Federated Youth Foundation Scholarship Program.

Each scholarship is worth \$500, and applications can be obtained from your high school guidance counselor or from Chippewa Valley Electric Cooperative (cvecoop.com).

Eligibility will be determined according to the following criteria:

- The student must graduate during the 2011–2012 school year and be enrolled in a post-secondary program at a college, university, or vocational school.
- The applicant's parents (or legal guardians) must be members of Chippewa Valley Electric Cooperative, and they must currently be receiving service.

- The applicant must display average or above average academic records.
- The applicant's family income will NOT be a deciding factor in awarding the scholarships.

To apply for the scholarships, eligible applicants must complete a questionnaire about school activities, leadership positions, community involvement, and awards and recognitions. In addition, each applicant must write a 200-word essay about future goals and objectives, as well as values and attitude on life.

The completed scholarship applications must be returned to the cooperative office by **April 1, 2012.** The applications will be reviewed by a special Scholarship Committee, and the scholarships will be awarded to the students at an honors ceremony or at graduation.

If you have any questions about the scholarship program, please call Nicole at Chippewa Valley Electric Cooperative, 715-239-6800 or 1-800-300-6800.

Here's How a Geothermal Heat Pump Works

The concept of using geothermal, or ground source, for heating and cooling a home is nothing new, but it remains a mystery to some. This article is an attempt to explain how a ground source heat pump (GSHP) system works.

From the perspective of cooling, or air conditioning, it is a little-known fact that it is not possible to add "cold" to a system. What actually happens is the heat is removed, or transferred.

Heat pumps and air conditioning units are generally rated in tons. This term is derived from the fact that heat absorption per day is approximately the heat of fusion of one ton of ice at 32 degrees Fahrenheit. This is approximately the power required to melt one short ton (2,000 lb.) of ice at 32 degrees Fahrenheit in 24 hours. It is generally accepted in the HVAC industry that a ton is equal to 12,000 BTUs per hour, or 3,517 Watts.

The earth is like a solar battery

Space

Atmosphere

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absorbing nearly half of the sun's energy. The ground stays a relatively constant temperature through the seasons, providing a warm source in winter and a cool heat sink in summer.

An additional benefit of a geothermal heat pump system is the ability to inexpensively heat domestic hot water, via an auxiliary circuit on the geothermal system called a "desuperheater." With a desuperheater, the same efficient system used to heat and cool your home is also used for heating domestic hot water.

In heating mode a GSHP moves heat via conditioned water from the ground to a compressor. The compressor raises the temperature from a nominal 50 degrees Fahrenheit to temperatures ranging from 95 to 125 degrees. On the "in home" side of the compressor, an evaporator coil (water to air) or a water coil (water to water) is placed in the supply plenum of the air handler or furnace, carrying the warm air throughout the home.

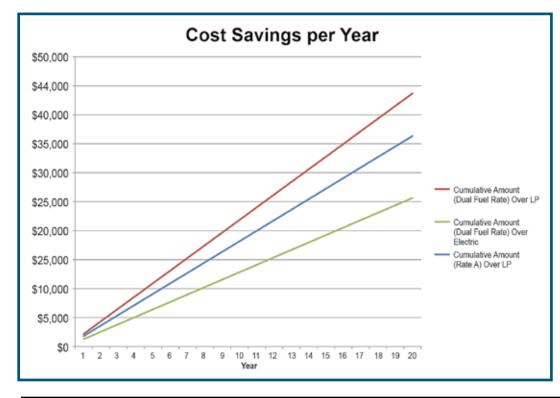
In the cooling mode, the process is simply reversed. Standard air conditioning technology can be used to explain the process for cooling. The heat moved from the system is rejected into the ground loop, which is much more efficient at removing heat from the system than a conventional air conditioner or air source heat pump.

A GSHP coefficient of performance (COP) is what makes a heat pump an attractive alternative to other

forms of heating or cooling. The heat transferred from the ground constitutes approximately 80 percent of the energy used to heat a home. The remaining 20 percent is gained from a highly efficient compressor.

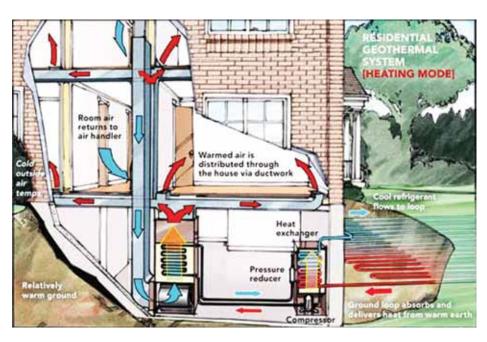
The cost to install a ground source heat pump system is approximately \$2,500 per ton, plus the cost of the ground loop(s). The average cost of the loop field is \$8,500.

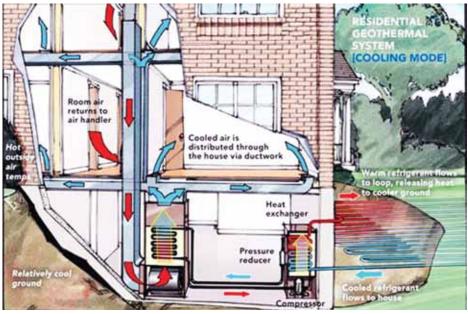
Chippewa Valley Electric Cooperative (CVEC) is committed to GSHP solutions. In an effort to help you with installation costs, we will assist with the financing of the loop



field. This assistance is in the form of a low-interest loan. CVEC will finance up to \$15,000 over 15 years at an interest rate of 4 percent for qualified applicants.

To gain the maximum benefit from a geothermal heat pump installation, we strongly encourage participating in CVEC's dual fuel program. The dual fuel program offers electricity, used strictly for heating loads, at a rate typically 43 percent less than the standard electric rate in return for allowing CVEC to control the load during periods of peak demand. By taking advantage of the dual fuel program, you can reduce the cost of operating





the system by approximately \$1,200 per year, as compared to operating the system on the standard, non-controlled rate. Installed properly, the homeowner will not even notice when the system is operating on the backup heat source during control periods.

A requirement of the dual fuel program is installation of a reliable back-up heating system, powered by a fossil fuel. Typically a high-efficiency gas furnace is installed. This back-up system can be operated as a standalone system, should the geothermal heat pump system ever fail.—Russ Falkenberg



Your Touchstone Energy® Partner King



Todd Howard, President/CEO Nicole Whipp Sime, Editor

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REMINDER: Cooperative Must Have Access!

Part of providing service requires that Chippewa Valley Electric Cooperative has access to members' property. If you have a locked gate across your driveway, Chippewa Valley Electric will install one of its padlocks with your lock so our crew can enter the property to maintain our equipment.

If you have any questions or concerns please contact our office at (715) 239-6800 or by email at cvec@cvecoop.com.