

Power Lines



INSIDE ...

- * Realistic Policies Needed
- * PURPA Notice
- * Win Cash
- * From the Boardroom
- * Scholarship Applications
- * Energy Audits



MAILING ADDRESS

P.O. Box 272550
Fort Collins, CO 80527-2550

STREET ADDRESS

7649 REA Parkway
Fort Collins, CO 80528

970-226-1234 Phone
800-432-1012 Toll free
970-226-2123 Fax

www.pvrea.com Web
pvrea@pvrea.com Email

NEXT BOARD MEETING

October 28



Make Your Voice Heard

BY BRAD GASKILL, CHIEF EXECUTIVE OFFICER

Next month, the American people will take to the polls to choose the next president of the United States, members of Congress and, in many cases, state legislators and local officials. As electric cooperatives strive to meet our present and future energy needs, we are asking lawmakers what they'll do to ensure that consumers continue to enjoy safe, reliable and affordable electric power.



Brad Gaskill

Today, many policy-makers and elected officials believe renewable energy, such as wind, solar and biomass, provide the solution to addressing climate change and establishing energy independence. But to keep the lights on and electric rates affordable, electric cooperatives will need to make use of all available generation resources, including renewables, nuclear power and fossil fuels, such as coal and natural gas, that use the latest environmental technology.

Our nation's electric system, commonly referred to as "the grid," relies on a network of power plants, transmission lines and distribution facilities woven together in an intricate web to provide us with electricity. When a piece of this puzzle doesn't fit or goes missing, brownouts and blackouts can occur — as many folks in the Northeast remember from August 2003 and those in the West recall twice during the summer of 1996.

America once enjoyed a surplus of electricity generating capacity, but due to uncertainty over environmental regulation and other factors, fewer power plants have been built in recent years. Excess capacity is vanishing even as the demand for electricity is forecast to increase 30 percent over the next 20 years. Also, the price of construction materials,

especially the steel and concrete used to build new power plants, is increasing at an alarming rate, making each delay in government approval for these plants more and more costly. The challenges Americans face are immense.

As a result, electric cooperatives are urging lawmakers to fast-track plans for building new transmission lines that connect rural regions, where renewable electricity is generated, to the population centers where it's consumed. We are also asking lawmakers to cut through the red tape that prevents construction of new nuclear power plants and to invest in research and development for promising new technologies that capture and permanently store carbon from coal-fired power plants as a way to reduce carbon dioxide emissions, which are blamed for contributing to global climate change.

These steps will head off an impending electric power crisis while significantly lowering greenhouse gas emissions. Even better, they will help ensure that any climate change goals ultimately adopted remain politically and economically sustainable over the decades necessary to make a difference.

Electric cooperatives are currently engaged in a grassroots campaign called "Our Energy, Our Future: A Dialogue With America." Nearly 400,000 letters and emails have already been sent to Congress by your fellow consumers from all across the United States, each asking critical energy questions.

Now is the time to make your voice heard. In addition to casting your vote on November 4, you can also help educate and inform lawmakers about these concerns. To join the effort, I invite you to visit www.ourenergy.coop.

I look forward to visiting with you again.

During Upcoming Election Season, Let Candidates Know We Need Realistic Policies

It's election season in America. And the issue of our energy future is on the candidates' lips. It fills their television ads and colors their campaign messages. And in almost every case that color is a shade of green. Renewable energy has emerged as a centerpiece of every campaign message. You see them standing in a field of wind turbines or squinting into the bright promise of solar panels. Everyone says they have a plan for our energy future. But how do we know if they have the right plan?

Nationally, about 48 million megawatts of power is generated from wind. While this may sound like a lot, it amounts to barely 1 percent of America's electricity needs. In 2007, 9 percent of America's electricity was generated from renewable sources. The percentage for the nation's electric co-ops was 11 percent. Co-ops provide enough electricity from renewable sources annually to power a quarter million homes and are adding more each year. One hundred and fifty electric co-ops either own wind turbines or buy output from wind farms and have plans to double their capacity by 2010. Adding renewable sources to our energy mix takes time and is not cheap.

As Federal Energy Regulatory Commission Chairman Joseph Kelliher put it, "We are confronting three realities." These are operating in a high-cost environment (primarily rising fuel prices); the need for massive investments in new generation, transmission and distribution; and uncertainty over regulation due to climate change.

"There is tension among these three realities; they work at cross-purposes," Kelliher added. "If we try to do all three, the result will likely be failure."

Cost and availability are two of the driving factors in America's move toward renewable energy and are a significant challenge confronting the electric cooperatives in America today. Despite innovative programs, the reality is that our energy needs are growing faster than our ability to provide for them. Demand for



solar and wind generation systems is exceeding supply, and the technology to create alternative sources is changing rapidly as new processes are developed. And, after years of declines, the cost of renewable systems like solar photovoltaic have leveled off and even risen in the past two years.

We live in a time of transition. In time, renewable sources will play a greater role in our energy mix. But we must move forward carefully, in a way that will protect our current and future electricity supplies as new sources slowly come on line. If we, as a nation, create a plan that is balanced and fiscally viable we can avoid the failure Kelliher warns about.

We at Poudre Valley Rural Electric Association agree that we must develop alternative and renewable sources as part of our ongoing effort to ensure that we can respond to growing demand and the concerns raised by climate change. New legislation requires electric cooperatives to provide 10 percent of their power from renewable sources by 2020, and we are working to achieve this goal. But along with regulation from government comes some responsibility for achieving these goals. All electric utilities receive federal subsidies in one form or another. Calculations based on federal government financial reports show that rural electric cooperatives get as little as

\$1 for every \$10 received by municipal utilities. And investor-owned utilities, like Xcel Energy, can also take advantage of production tax credits for investing in alternative energy generation, like wind and solar, which subsidizes the cost of these sources for them.

Perhaps the single most important, and cost effective, thing we can do right now to help us move through these years of transition is energy conservation. Concentrated effort in this area will reduce the need for new generation and save every consumer money. The National Rural Electric Cooperative Association and the Natural Resources Defense Council recently announced they have signed a memorandum of understanding outlining an array of joint programs that aim to improve energy efficiency in America.

Poudre Valley REA has several programs you can take advantage of to help conserve electricity and reduce your energy bill. It offers home energy audits for members. There are also several rebate programs in place you can take advantage of, from adding solar panels to installing dual-fuel heating systems. It will even

"In partnership with the federal government, electric cooperatives met the greatest engineering challenge of the 20th century — spreading the benefits of electric power to the most remote corners of our nation. As we strive to meet the energy needs of a new century, we call on government to join with us once again and make the contributions necessary to ensure that all Americans continue to enjoy safe, affordable and reliable electric power."

— GLENN ENGLISH, CEO OF THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

give you a free compact fluorescent lightbulb just for stopping by the office. In addition, you can sign up for the Green Power program and support its wind power efforts. (This month's Power Lines Winner is Ronald J. Gubler)

Providing electricity to you and your family is a responsibility that we at PVREA take serious- [continued on page 9]



POUDRE VALLEY RURAL ELECTRIC ASSOCIATION, INC. NOTICE OF PURPA IMPLEMENTATION

NOTICE TO MEMBERS OF POUDRE VALLEY REA: The Energy Independence and Security Act of 2007 (EISA 2007) requires qualifying utilities to consider adopting four new standards promulgated by Title I of the Public Utilities Regulatory Policies Act (PURPA). The Poudre Valley Rural Electric Association, Inc. (PVREA) is a qualifying utility under the provisions of EISA 2007 and PURPA. Therefore, you are hereby advised that the board of directors of the association will consider all written submissions made by any member of PVREA or others on December 23, 2008, during the board meeting at headquarters located at 7649 REA Parkway, Fort Collins, CO, for the purpose of compliance with EISA 2007 by having a hearing and making a decision on whether to adopt the four proposed standards.

DELIBERATION AND CONCLUSIONS: Any member or other person must submit written testimony or offer relevant materials for consideration by the board of directors ON OR BEFORE 5:00 p.m. TUESDAY, DECEMBER 9, 2008, at the office of the association. Emails and other materials may be sent to pvrea@pvrea.com. Members may also make written submissions to be delivered via U.S. Postal Service or hand delivered at the PVREA office by the deadline. Materials submitted by anyone may be made available for review upon request to the association.

The board of directors will discuss the materials at the meeting on December 23, 2008, and may request additional testimony or material be submitted and will then render a decision as required by EISA 2007 as soon as practicable. The decision will be available on the Association's website after it is adopted.

New PURPA Standards to Be Considered

(1) *Integrated Resource Planning.* Each electric utility shall (A) integrate energy efficiency resources into utility plans; and (B) adopt policies establishing cost-effective energy efficiency as a priority resource.

(2) *Rate Design Modifications to Promote Energy Efficiency Investments.* (A) IN GENERAL - The rates allowed to be charged by any electric utility shall (I) align utility incentives with the delivery of cost-effective energy efficiency; and (II) promote energy efficiency investments. (B) POLICY OPTIONS - In complying with

subparagraph (A), each utility shall consider (I) removing the throughput incentive and other regulatory and management disincentives to energy efficiency; (II) providing utility incentives for the successful management of energy efficiency programs; (III) including the impact on adoption of energy efficiency as one of the goals of retail rate design, recognizing that energy efficiency must be balanced with other objectives; (IV) adopting rate designs that encourage energy efficiency for each customer class; (V) allowing timely recovery of energy efficiency related costs; and (VI) offering home energy audits, offering demand response programs, publicizing the financial and environmental benefits associated with making home energy efficiency improvements, and educating homeowners about all existing federal and state incentives, including the availability of low-cost loans, that make energy efficiency improvements more affordable.

(3) *Consideration of Smart Grid Investments.* (A) IN GENERAL - Each state shall consider requiring that, prior to undertaking investments in nonadvanced grid technologies, an electric utility of the state demonstrate to the state that the electric utility considered an investment in a qualified smart grid system based on appropriate factors, including - (I) total costs, (II) cost-effectiveness, (III) improved reliability, (IV) security, (V) system performance, and (VI) societal benefit. (B) RATE RECOVERY - Each state shall consider authorizing each electric utility of the state to recover from ratepayers any capital, operating expenditures, or other costs of the electric utility relating to the deployment of a qualified smart grid system, including a reasonable rate of return on the capital expenditures of the electric utility for the deployment of the qualified smart grid system. (C) OBSOLETE EQUIPMENT - Each state shall consider [when] authorizing any electric utility or other party of the state to deploy a qualified smart grid system to recover in a timely manner the remaining book-value costs of any equipment rendered obsolete by the deployment of the qualified smart grid system, based on the remaining depreciable life of the obsolete equipment

(4) *Smart Grid Information.* (A) INFORMATION - All electricity purchasers shall be provided direct access, in written or electronic machine-readable form as appropriate, and to the extent practicable, to the following information from their electricity provider: (I) PRICES - Time-based electricity prices in the wholesale electricity market, and time-based electricity prices or rates that are available to the purchasers; (II) USAGE - Purchasers shall be provided with the number of electricity units, expressed in kWh, purchased by them; (III) INTERVALS AND PROJECTIONS - Updates of information on prices and usage shall be offered on not less than a daily basis, shall include hourly price and use information, where available, and shall include a day-ahead projection of such price information to the extent available; and (IV) SOURCES - Purchasers and other interested persons shall be provided annually with written information on the sources of the power provided by the utility, to the extent it can be determined, by type of generation, including greenhouse gas emissions associated with each type of generation, for intervals during which such information is available on a cost-effective basis. (B) ACCESS - Purchasers shall be able to access their own information at any time through the Internet and on other means of communication elected by that utility for smart grid applications. Other interested persons shall be able to access information not specific to any purchaser through the Internet. Information specific to any purchaser shall be provided solely to that purchaser.

Please note that PVREA purchases its full power requirements from Tri-State Generation and Transmission Association, Inc. (hereinafter "Tri-State") under a long-term full-requirements contract. For this reason, PVREA would not be able on its own to affect certain of the PURPA standards, and its ability to affect aspects of other standards may be limited as well. In addition, the third standard is directed to action by regulatory commissions when reviewing filings by investor owned utilities, and it may not be applicable to cooperative electric associations. Commenters are urged to take such limitations into account when presenting their views.

WIN CASH FOR READING PVREA'S POWER LINES

Every month, one PVREA member is eligible to win a cash award. To find out if you are a winner, just look for your name and, if you find it, call 970-226-1234 by the last day of October. Good luck.

***** Let Candidates Know We Need Realistic Policies

[continued from page 8] ly. It is our charge to keep the power on and deliver it at a price you can afford. During this era of transition, both we and our elected officials must be deliberate, level-headed and informed. The consequences of a misstep could be severe. We encourage you to contact your representatives and voice

your opinion. Let them know that your REA supports change. In return we expect realistic policies from our legislators that will protect the electricity supply that powers America.

Visit www.ourenergy.coop to find out how you can get involved in the dialogue.

FROM THE BOARDROOM

Spirae Developing Smart-Grid Technology

BY JIM PARK, PVREA BOARD OF DIRECTORS

A few weeks ago, several Poudre Valley Rural Electric Association board members had the unique opportunity to tour the Spirae, Inc. grid simulation laboratory in Fort Collins. The Spirae (pronounced spy-ray) lab is located in the old Fort Collins power plant building and works in conjunction with Colorado State University to explore new and more efficient ways to use energy. The focus of Spirae's work is developing the technology required to integrate renewable generation resources onto the power grid. One of the big hurdles in placing more renewable generated power on the grid is having the technology available to seamlessly adjust the generation resources to accommodate the variability and intermittent characteristics of wind and solar power.



Jim Park

The United States power grid could be described as the largest man-made machine ever to be developed and is a dynamic, almost living and breathing entity. Power demands constantly fluctuate, and generation has to adjust accordingly. The voltage and 60-cycle aspects of alternating current (AC) power must be maintained to close tolerances throughout the system to prevent catastrophic failures.

The "smart grid" technology being developed by Spirae

revolves around its ability to construct and test the equipment required to handle the grid dynamics common in real-world operation. This is accomplished by programming different on-site generators to simulate baseload, renewable and peaking generation coupled with typical load patterns. This technology will provide the ability to maintain a constant voltage and capacity on its laboratory grid that can then be implemented on a larger scale. Because of all the variables involved, it's kind of like juggling five tennis balls while bicycling down a rough country road at a precise speed.

Spirae employees will be traveling to Denmark in a couple months to put their technology on line, starting with a small demonstration project. The question was asked if this work will solve our electric energy problems, and the folks at Spirae replied that there is no single or easy solution. The eventual resolution will come from the use of all resources and improved technology on all fronts. Talented, dedicated people work at Spirae, and their technology advances are interesting and encouraging.

To learn more about Spirae, visit its website at www.spirae.com.

APPLY FOR SCHOLARSHIPS

Each year nine \$1,000 scholarships are offered by Poudre Valley REA to high school seniors and college undergraduate students who will be, or are, full-time students.

Applicants must be dependents of parents (or consumers themselves) who currently receive electric service from PVREA. If the PVREA consumer is a business, that business may appoint a candidate of its choice. Previous winners may reapply if they still qualify.

Applications are reviewed to make sure that 1) each is complete, 2) the applicant is eligible, 3) the required documentation has been submitted, and 4) the deadline has been met. Applications that meet all requirements are placed in a drawing from which one winner and one alternate are drawn for each scholarship.

Scholarship applications for 2009 will be accepted starting October 1.

Visit www.pvrea.com for a printable application form. Or stop by the PVREA headquarters, 7649 REA Parkway in Fort Collins (just east of I-25 at the Windsor exit).

All applications must be postmarked by February 13, 2009. In addition to the funds PVREA has established, Basin Electric and Tri-State Generation and Transmission also donate to the program.

An Energy Audit Can Save You \$\$\$

Well, folks, the Farmer's Almanac is predicting a cold winter. Now, while this might be good news for a much-needed pine bark beetle kill, it's not that great for those of us concerned about keeping our homes warm. But did you know that Poudre Valley Rural Electric Association has a program that offers home energy audits? Well, it's true. If you are a PVREA member, all you have to do is call Gary Myers at 970-226-1234, ext. 464, and he'll be happy to bring all his high-tech equipment out to your house and give you an assessment of how to make your home more energy efficient — and save money.

According to a recent U.S. Department of Energy study, weatherization measures saved a typical American home an average of 32 percent in energy costs. Many of the steps you can take to get those savings are inexpensive and easy to do. So give Gary a call. He can help



Gary Myers performs a home energy audit.

with advice on how to do it yourself or recommend local contractors. He can even offer tips if you are considering building a new house.

Home energy audits — just another way Poudre Valley REA is working to keep your electricity costs in line.