Vol. 62, No. 8

The newsletter of Washington Electric Cooperative, Inc., East Montpelier, Vermont.

# \$1 Million Grant Puts WEC On Road To

## Wind Power

t didn't take long for the word to get out. Practically as soon as U.S. Rep. Bernard Sanders, I-Vt., announced that he had obtained a \$1 million federal appropriation for Washington Electric Cooperative to develop a wind-energy project, General Manager Avram Patt started hearing from people with sites in mind for the Co-op's windmills and turbines.

"I just thought you'd like to know that so far we've been contacted by seven members and other area residents who either would love to have a wind farm on their property or who have sites to suggest in their town," Patt wrote to Sanders a few days after the November 5 press conference where Sanders made the announcement.

He continued: "Two are farmers who are aware that farmers in other parts of the country are getting income from wind generation without losing the agricultural use of their land." These initial proposed sites might not make it through a screening process that hasn't even been devel-

oped yet. "But you never know," he said. "We're keeping a list for when we get going on this in earnest."

That will be a while. But the million-dollar grant, for the development of central Vermont's first wind-power project, was momentous enough.

Federal procedures for processing grants can take months, but WEC is in no hurry. Lots of decisions must be made prior to construction. For example, the grant money might go further for WEC members if Washington Electric teams with another wind-energy developer in a larger-scale project that would produce electricity for other consumers in addition to ourselves.

"We want to stay as flexible as possible," said Patt. "This could potentially be an opportunity for central Vermont to have a significant source of renewable energy, not just our Co-op."

The \$1 million appropriation will help get the project off the ground. But it will fall far short of paying for it — which is

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U.S. Rep. Bernard Sanders, I-Vt. (left), announces a \$1 million federal grant to help WEC develop a wind power installation. Co-op Manager Avram Patt looks on at the November press conference in Montpelier.

# Vacancy To Be Filled On Co-op Board

Members Encouraged To Apply

n opportunity to serve in a leadership and policy-making position with your electric co-op has arisen unexpectedly with the resignation of Jay O'Rear from WEC's Board of Directors. That leaves a vacancy on the nine-member board, which President Barry Bernstein and the other directors hope to fill as early as January.

Any WEC member in good standing with the Cooperative is welcome and encouraged to apply. The first step is to send a letter or email expressing your interest to Board President Bernstein. Letters should be sent to the Co-op's

address: P.O. Box 8; East Montpelier, Vermont 05651. Bernstein's email address is: Bbear@aol.com.

Bernstein has also invited anyone who wants to consider board service to call him or one of the other board members. Their phone numbers are listed in the *Co-op Currents* masthead on page two. The board has established a cutoff date of January 5, 2002, for people formally to make their wishes known if they want to serve on the board.

O'Rear was elected in 2000, and was therefore about halfway through his first

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December 2001

#### Inside

#### Challenging economic times.

As year ends, WEC President Barry Bernstein looks back at 2001, ahead to 2002. See President's Message, page 2.

#### High rates, but average bills.

PSB figures reveal the system-wide impact of Co-op efficiency programs. See Manager's Report, page 3.

Renewables, efficiency and Gov. Dean's statewide energy policy. WEC's wind-power project will fit right in. Page 8.

WEC drains Wrightsville reservoir in police probe. Page 6.



Art is the focus, technology the means, at Cone Editions. See Co-op Business Profile, page 4.

#### **Washington Electric Cooperative**

East Montpelier, VT 05651

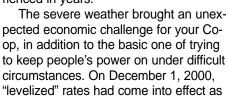
#### President's Message

## 2001: A Tricky Financial Year For Your Co-op

By Barry Bernstein

s always, the end of the year is a time for your elected Co-op leaders and WEC staff to reflect on

the events of the previous 12 months and plan for the year ahead. But as 2001 winds down it has at times been hard to believe it was December, with the kind of weather we were having early in the month when this message was written. It didn't seem possible that eight months ago the Co-op's employees were struggling to reach power lines in very deep snow in rough Co-op terrain during the snowiest winter Vermonters had experienced in years.





WEC President Barry Bernstein

a result of our petition to the Public Service Board. Members began paying the same rates year-round, rather than paying higher rates during the winter (and lower rates in summer).

> From the perspective of an entire year's worth of electricity sales, levelized rates are supposed to be revenue-neutral for the Coop. But the snowy winter of 2001 presented WEC's Board of Directors and management with the difficult task of offsetting the huge financial drain that was caused by significant and constant storm expenses, precisely when we had just switched to a rate structure that brought the Co-op lower revenues during the winter.

That string of events left WEC with some tricky financial challenges as we moved through the rest of the year and began planning for this coming winter. Nevertheless, I am hopeful – due to lower-than-expected purchased power

costs and an insurance settlement, and thanks to the hard work of General Manager Avram Patt, Management & Projects Administrator Denise Jacques, Finance Director Janet LaRochelle, and the Board of Directors - that we will meet our financial goals.

Maybe the weather will cooperate, too.

#### Substation a major accomplishment

On another subject, construction was completed early in the summer on our new Moretown substation, which is now on-line and serving Co-op members in that part of our territory. After site preparation, most of the construction work was performed by our own co-op line crews and support staff, under the direction of Operations Manager Dan Weston.

In addition to thanking our employees for their impressive accomplishment, thanks also go to our consultant engineers, Dufresne & Henry of Randolph, who designed the substation.

#### And now, a recession

After our struggles and successes in 2001, we move into 2002 under very different economic circumstances. The US economy has officially entered a recession. Unemployment reached a five-year high in October of 5.4 percent, and may still be climbing. Vermont, which had lagged behind that trend, is unfortunately catching up, with IBM recently laying off 500 workers and two plants closing in the Northeast Kingdom. Our service territory and many WEC members have begun to feel the effects of the slowing economy.

However, the recessionary economy

may present some opportunities for our Co-op in terms of short-term power savings and some lower-cost power purchases. WEC also continues to work on securing replacement power for when our Vermont Yankee power contract ends in 2002. Our goal continues to be to find long-term sources of renewable, clean and economic electricity - not generated from fossil fuel or through nuclear power. Your WEC Board and management are pursuing landfill methane-gas projects, wind, and hydroelectricity.

Thanks to U.S. Rep. Bernie Sanders, WEC was awarded a \$1 million grant to help us secure a future wind source to meet some of our power needs.

The management and Board of Directors are well aware of WEC's high electricity rates, and we remain committed to holding down costs as much as possible. Our energy-efficiency programs begun more than 10 years ago - have proven to be our members' best hedge against the inherently high costs of delivering power in a rugged, rural service

We continue to be diligent in controlling, to the best of our abilities, those variable costs in the Cooperative's budget over which we can exercise some measure of control. And we're hopeful that the average inflation rate in the rural Northeast of 1.7 percent over the past 12 months the lowest rate in more than 40 years will be helpful in our efforts.

As we end 2001 I want to extend my wishes for a healthy and happy holiday season to all of our valued Co-op employees, and to the more than 9,000 members of Washington Electric Cooperative.

### **Co-op Currents**

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The Board of Directors' regularly scheduled meetings are on the last Wednesday of each month, in the evening. Members are welcome to attend. Members who wish to discuss a matter with the Board should contact the president though WEC's office. Meeting dates and times are subject to change. For information about times and/or agenda, contact Management and Programs Administrator Denise Jacques, 802-223-5245.

Washington Electric Cooperative Inc.

#### Statement of Non-Discrimination

Washington Electric Cooperative Inc. is the recipient of federal financial assistance from the Rural Utilities Service, an agency of the U.S. Department of Agriculture, and is subject to the provisions of Title VI of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Age Discrimination Act of 1975, as amended, and the rules and regulations of the U.S. Department of Agriculture, which provide that no person in the United States on the basis of race, color, national origin, age or handicap shall be excluded from participation in, admission or access to, denied the benefits of, or otherwise be subjected to discrimination under any of this organization's pro-

The person responsible for coordinating this organization's nondiscrimination compliance efforts is Avtam Patt, the Cooperative's General Manager. Any individual, or specific class of individuals, who feels that this organization has subjected them to discrimination may obtain further information about the statutes and regulations listed above from, and/or file a written complaint with, this organization; or the Secretary, U.S. Department of Agriculture, Washington, D.C. 20250; or the Administrator, Rural Utilities Service, Washington, D.C. 20250. Complaints must be filed within 180 days after the alleged discrimination. Confidentiality will be maintained to the extent possible.

#### **Manager's Report**

## WEC'S Rates, And Your Monthly Bill

Why WEC's Average Bills Are In Line With Other Utilities

The first 150 kWh you use

as a WEC member

are sold at a significantly

reduced rate.

By Avram Patt

few years ago we presented some analysis comparing WEC's rates and bills with

those of other Vermont utilities. I want to present updated information, because we believe in informing our members, and because some of the information may be surprising.

According to statewide statistics recently provided by the Public Service Board (PSB), for the year ending December 2000, the monthly bill paid by the average WEC residential member was only slightly higher than the bill paid by the average customer statewide, and was in fact slightly lower than the average residential bill for some neighboring utilities.

Here are some selected average monthly residential bills actually paid in the year 2000:

Vermont Electric Co-op	\$80.81
Green Mountain Power	\$80.38
WEC	\$79.69
Central VT Public Service.	\$78.13
Statewide (all utilities)	\$73.64

A number of municipal utilities have average bills that are lower than these numbers. Also, these figures do not include rate increases that GMP and CVPS received in 2001.

It is hard to make a precise "apples-toapples" comparison because of differences among residential customers in various areas. WEC has a relatively high number of seasonal residential members, who usually use less electricity than fulltime residences. On the other hand, most utilities have significantly more multi-family buildings than WEC, and apartments tend to have lower energy consumption than the single-family homes on our lines. This general comparison shows that when you look at the bottom line on the average residential electric bill, WEC is in range with other utilities.

How can this be the case when WEC's rates are higher than other utilities'?

There are a few key differences in both the rate structures of the utilities, and the amount of electricity that their customers

#### **The Customer Charge**

All utilities include a monthly customer charge on their bills to help cover a part of the fixed costs of serving you regard-

less how much electricity you use or don't use in any month. WEC's customer charge is lower than some of our neighboring utilities', including GMP and CVPS.



The first 150 kWh you use as a WEC member are sold at a significantly reduced rate. CVPS and GMP do not have such a low-cost block in their rates. Consequently, WEC members with low electric usage will often have lower bills than customers of

those utilities for the same energy used.



Avram Patt

#### **Usage - The Most Important** Difference

The most important factor influencing the bottom line on your bill is the amount of electricity you actually use. The statistics show that residential members

on WEC's lines use less electricity than customers at most other utilities, and less also compared to the statewide average.

The average WEC residential member uses about 508 kWh per month, and about half of our members use this amount or less. Statewide, the average residential consumer uses 598 kWh per month, and the average GMP customer uses 643 kWh per month, for comparison. We believe that the efficiency and member-education programs we have been promoting for 11 years have a lot to do with this. Our members enjoy the same conveniences of electricity as other Vermonters, but they tend to use less kWh each month to achieve that.

#### The Energy Efficiency Charge

All Vermont electric utility customers pay an additional charge on their bills to support the statewide efficiency programs operated by Efficiency Vermont. These funds are not kept by WEC or other utilities, but are forwarded to the state.

The amount of the charge is set differently for each utility. For WEC members, it is by far the lowest in the state. This is

in recognition of the fact that the Co-op and our members have already invested more in reducing energy usage than other utilities have, and because the Co-op continues to operate certain residential efficiency programs that other utilities no longer do (or never did).

In 2001, this charge has been 0.49 percent (an additional 49 cents on a \$100 bill). For all other utilities, the energy efficiency charge adds between \$1.67 and \$3.41 to a \$100 bill. Although WEC's efficiency charge will be going up slightly in 2002, it will remain far below other utilities'. This charge is not included in my previous comparison calculations, but it does contribute to the bottom line on all Vermont consumers' bills.

#### The Bottom Line: We Pay Bills, **Not Rates**

Although WEC's rates are higher than neighboring utilities', for a very large number of our members this does not mean that their bills are necessarily higher. As the average-bill comparison numbers indicate, the typical WEC member's bill is in line with or sometimes lower than customers' bills with other utilities.

I recently checked my own usage and billing history to verify this. Our home has three bedrooms. We do not use electricity for heat, hot water, cooking or clothes

drying, so our usage is relatively low. In the last 12 months our usage has ranged from a low of 202 kWh to a high of 499 kWh per month.

Based on current rates. I calculated what our bills would have been had our house been in Worcester village and served by GMP, rather than on a Worcester back road served by WEC. For one of those months, the bill would have been almost identical. For six of those months, a bill from GMP would have been between \$1 and \$8 less, and for five of those months it would have been between \$1 and \$6 more had I been a GMP customer.

#### **Capital Credit Refunds**

One item not included in comparing WEC's bills with those of other utilities is the capital credit refund. WEC pays capital credit refunds in years where our board determines that financial conditions permit, and we have done so for the past

four years.

This year, WEC members received an average refund of about \$11 based on our margins from 2000 alone. (If you were on the Co-op's lines in 1982 you also received an additional amount.) While the capital credit refund is not included in statewide rate and bill comparisons, members should keep in mind that a cooperative is the only type of utility that returns margins to its consumers.

#### But why are WEC's rates higher than other utilities'?

Although what is most important to any consumer is the bottom line on their electric bill, WEC's rates are higher than others'. While a low- to moderate-usage consumer may not necessarily pay more in dollars on WEC's lines than elsewhere, the fact remains that if you use 700 kWh per month - for example - your total bill will be higher on our lines. Although we explain what goes into our rates from time to time in Co-op Currents, it's worth explaining briefly here again.

WEC has an annual budget of almost \$10 million. About half of that is spent directly on purchasing or generating the electricity we sell to you. The other half is what it costs to actually operate our system, including all our construction, maintenance, payroll, billing, administration, insurance and property tax expenses. If you review the financial report we provided to you in last April's issue prior to our Annual Meeting, I think you will see that we have been doing a good job of controlling, and often reducing, costs in many of these areas. When we compare ourselves to other utilities our operating costs do not appear to be high, and are often

However, WEC is the most rural utility in the state. There are just over 7 members, on average, on each of our 1,200 miles of line, and 98 percent of those members are residential and seasonal and do not consume a lot of electricity. Our few commercial and industrial members are not big ones. Our 10 largest accounts include schools and a dairy farm; there are no big manufacturers, office buildings, hospitals, ski areas or other major users on our system.

Other utilities have much denser customer bases, ranging from 10 customers per mile (Vermont Electric Co-op), to 31 (GMP), to 111 per mile (Burlington Electric Dept.), and they usually have a

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## **Cone Editions Solving Artists' Problems At Rural Crossroads**

xperts tell us that the brain Is divided into two hemi-Ispheres, and they each command distinct sets of characteristics. The left brain thinks in ways that are linear, rational and logical, while the right brain is more intuitive, aesthetic and perhaps artistic.

Experts need to travel to the intersection of Willey Hill and Powder Spring roads, five miles through the woods of East Topsham off of Vermont Route 302. Nearby, in an imposing white building close to an old farmhouse, right- and left-brain functions collide at a furious clip at a business called Cone Editions.

It's surprising to find the little community of houses, a church and a farm or two in this isolated rural outclave. It's even more surprising to find a business that operates all over the U.S. and in other parts of the world, employs 16 people and recently opened a branch in Bradford to market one of its product lines. These left-brain operations are balanced by the right-brain fact that Cone's customers, predominantly, are artists.

The products we sell are born out of a need (artists encounter) in the studio," says Larry Danque, who moved from Florida to take a management position at Cone Editions. "We take that need and develop products that respond to it."

Danque's background is in photography, and his own work provides an example of the value of Cone Edition's products. Danque has been working for years to develop to its fullest potential a wall-sized, black-and-white photograph that he shot from inside a dark masonry structure in St. Augustine. The eye falls upon earthen block walls and a cracked cement floor, and a pair of iron doors, partly opened, with sunshine streaming in. What is remarkable about Danque's photo is the vivid texture of the rough interior walls and floor as they are illuminated by the slanting sunlight.

Danque explains that black-and-white photography has traditionally been about contrast - the stark difference between light and shade. In this photograph, however, there's considerably more than contrast going on. The unique shapes and peculiarities of the walls draw attention much as if you were seeing them through 3-D – or as if you were there.

"The dynamic range is more attuned to what the human eye can see," Danque

In the production of the typical blackand-white photograph that texture slips





proprietor Jon Cone. Above right, Larry Danque stands beside his intriguing St. Augustine photograph.

away, and much of the artistic value of a

In fact, who even knew there were

Or this: Artists working with computers

become frustrated when their printer inks

fail to precisely reproduce the colors they

created for the image on-screen. When

that happens, you need a software prod-

uct that enhances your printer's ability to

manipulate the inks. Or maybe you need

a more responsive ink. Or paper of a dif-

quirky relationships - an obscure conflict

ferent texture. (Inks and papers have

scene is lost. Who even knew it was

there?

problems like this?

if there ever was one.)

It takes an artist to comprehend what fussbudgets other artists are. That's where proprietor Jon Cone's right brain comes in. Cone spent the 1980s - the "heyday" for print making in the U.S. as a gallery owner and collaborative artist in New

York City. A collaborative artist is one who works with a creative artist to help bring the latter's vision of a project fully to fruition. (Who knew there were such peo-

In the old days, Cone would help artists figure out how to manipulate the materials they were using to make a print, whether it was lithography (grease pencils on limestone), etchings (produced by making scratches on copper, or burning the patterns in with acids), woodcuts, pastels, etc. Cone reveals that for artists, the process of creating an image is at least as important as the image itself. Referring to a well-known woodcut artist,

he says, "the reason she likes carving images in wood is that she likes working with the grain, the resistance, of wood."

Ever curious about new media, Cone bought a Macintosh computer in the early 1980s, "and got totally absorbed in it." It opened up new possibilities in print-making, and took him deeper into the collaborative process because most artists were

> utterly at sea with this technology. Increasingly, he made it the focus of his work

Meanwhile, Cone and his wife (and business partner) Cathy were getting acquainted with Vermont. They traveled frequently to West Brattleboro, to the part-time residence of print artist Wolf Kahn. In the spring they would open

his farmhouse for the season: in the fall they harvested his raspberries.

Eventually they decided to make the leap themselves. Searching for property, their main criterion was to be within 45 minutes of Montpelier. With son Spencer in tow, they found the property in East Topsham and became members of Washington Electric Cooperative. They set up shop temporarily in a rented space in Northfield while they constructed their new studio where the old barn had been, and in 1993 hired staff and swung into operation.

This incarnation of Cone Editions was to be dedicated entirely to computer-generated art, in all its facets. One of Cone's first steps was to put his livelihood in hock to purchase a \$123,000 Iris printer.

"It was huge," he says. "It would produce a 3'-by-4' print with a quality that was photographic.

Unfortunately, things didn't start off so well with the printer that cost more than a lot of people' houses. The Iris required frequent repairs, and no one could figure out why until Washington Electric did some sleuthing. WEC determined that the service line (the wiring that connects a home or business to the nearby power pole and transformer) was mismatched for the Iris. Once that was replaced the Iris purred like a kitten.

#### **New York to** Vermont

covered.

Whatever the solution,

Cone Editions has you

#### **Modern Times**

And it did a lot of purring, because Cone discovered that people were willing to pay good money to use the Iris. At first the customer base tended to be businesses - good for left-brain edification but a starvation diet for the right brain. Eventually, though, the word got out among artists that the Iris existed and that Jon Cone, up in Vermont, had one.

In fact, Jon Cone had several. He began marketing the printer for Iris Graphics, traveling nationwide from 1993 to 1997. Meanwhile, his company was



Art and computer technology meet at Cone Editions.

branching out - a trend that has continued so that today Cone, Danque and Managing Director Bill Bergh are hardpressed to itemize all the nuances of their

One offshoot, Inkjetmall.com, sells inks, papers and software to about 20,000 customers. Piezography performs similar services for some 5,000 customers working in black-and-white. They provide tech support and trouble-shooting for clients whose printers, papers, inks and other paraphernalia won't cooperate. And they teach three-day workshops for artists, photographers and others, giving them the technical skills that allow them to be creative rather than panic-stricken when they sit down at their costly keyboards and monitors.

"It gets complicated," Cone admits, referring to his hydra-headed business. "We're also still a functioning studio."

These days, work is no longer

attached to place. That Cone Editions, with its specialized and far-flung clientele, can prosper, and provide a dozen highlyskilled employment positions, on the power lines of a very rural electric co-op

in Vermont, reveals much about the modern world.

It also reveals that if you were to follow almost any of WEC's distribution lines, like the threads of a quilt, you would find

that the Co-op community is a surprising and interesting weave.

If you want to try that in the virtual sphere, by computer, Cone Editions can probably help you out.

"Since September 11,

I would say to the

people of Vermont that

the United States must

break its dependence on

Mid-East oil to protect

our national security.

It is a danger to our

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governments in which

businessmen give

substantial sums of

money to terrorists."

- Rep. Bernard Sanders

#### Wind Power

continued from page 1

another reason there could be some kind of partnership in WEC's wind-energy future.

"We'll need to look at the total projected costs," Patt said. "That includes researching a location, addressing the permitting and regulatory issues, and construction. (The grant) should get us through the preliminary steps and then partially - but not very far - into the construction phase."

Eventually, the price tag could reach several million dollars.

Siting the wind farm will probably be the most interesting part of the project for the public. Two factors will be the most important for the Co-op.

"First and foremost will be a scientific evaluation of the wind capacity," said Patt. "But also, having willing landowners and neighbors will be a critical criterion of this process."

#### A Co-op strategy

Wind-generated electricity fits into WEC's plans for replacing a significant portion of its current power portfolio with renewable energy. WEC's contract for wholesale power from Vermont Yankee will expire in a year (November 2002). Other contracts are winding down as well. In all, Washington Electric faces decisions for replacing from 30 percent to 60 percent of its contracted wholesale power.

The Co-op's Board of Directors has made a commitment to replace as much of that power as possible through longterm commitments for affordable, renew-

able energy, whether contracted from other generation sources or produced by WEC-owned facilities. WEC will also have to increase its power supply as membership in the Cooperative continues to grow. The Board is determined to address these needs largely through "green" energy, and has been researching potential sources for landfill gas (methane), wind and small-scale hydro to add to its own hydroelectric facility at the Wrightsville dam.

Now power from a Coop-owned wind farm figures prominently in the

#### A national strategy

told the people of Vermont that the United States must break its dependence on fossil fuel and Mid-East oil in order to protect our environment," Sanders said. "We cannot continue to contribute to global warming, acid rain and the creation of a toxic and unhealthy world." He added that dependence on fossil fuel also subjected the U.S. economy to rampant volatility in

continued, "I would say... that the United States must break its dependence on fossil fuel and Mid-East oil to protect our national security. It is a danger to our wellbeing as a nation (to) provide tens of billions of dollars to non-democratic governments in the Mid-East in which businessmen there give substantial sums of that

money to terrorists including Osama bin Laden.'

Although the Northeast has not been thought of as a promising region for wind-generated energy, Sanders said that research indicated the potential here is significant - conceivably, enough to replace the 250 megawatts produced from nuclear processes at Vermont Yankee, without the deadly waste byproduct.

Sanders called wind "the world's fastest-growing new power source, having

increased by about 24 percent each year since 1990."

Ironically, in Texas - notorious for its oil companies - wind is now the cheapest form of new electric generation, costing about 3 cents per kilowatt hour (kWh). Patt conceded that the cost in Vermont would be higher than that — tempered, however, by the fact that the cost of the technology is starting to come down.

Green Mountain Power Corp. owns the only existing wind farm in Vermont. Located in Searsburg, in the far-southern part of the state, the facility contains 11 tall, somewhat futuristic-looking towers, each with three long fan blades. They produce six megawatts of electricity, which can power 2,000 homes and reduce greenhouse gas emissions by 22 million pounds per year.

For comparison, Washington Electric, with approximately 9,000 members, consumes a total of around 10 megawatts of electric power. How much of that demand can be met by a clean-running WEC wind installation has yet to be determined.

At the press conference announcing the \$1 million grant, Rep. Sanders stressed that there was a new and sobering reason for pursuing wind energy. "Before September 11, I would have

oil prices. "But since September 11," Sanders

### **Deadlines for Board Candidates,** Bylaws In 2002

In conformance with Washington Electric Cooperative's Bylaws, three seats on the Co-op's nine-member Board of Directors will expire at the time of WEC's Annual Meeting, tentatively scheduled for Tuesday, May 21, 2002. Board members are elected at-large. Members interested in offering themselves as candidates for positions on the board must gather the signatures of at least 25 Co-op members on a petition and present it at WEC's headquarters on Route 14 in East Montpelier. The deadline for submitting the petitions is Friday, March 22, 2002. The Co-op's office can provide guidance and information about the petition and election process.

The annual meeting, and the member-voting that accompanies it, are also Co-op members' opportunity to present amendment proposals for WEC's bylaws, which govern many aspects of the Co-op's functions and its relationship to its member-owners. Copies of the bylaws are available at the Co-op's office, and WEC members can receive guidance from the Cooperative in how to present an amendment for the voters' consideration. The deadline for proposing amendments for the May 21 Annual Meeting is Monday, February 11, 2002. Members must submit petitions with the signatures of at least 50 Co-op members by that date.

#### **Mad River Glen Renews Discount Offer** to WEC Members

Washington Electric Cooperative (WEC) is proud to offer a member discount at the nation's only cooperatively-owned ski area, Mad River Glen in Waitsfield, Vermont. This discount is valid for WEC members through the end of the 2002 ski season (or April 2002). This discount is valid only when the WEC member provides sufficient photo ID (driver's license, etc).

Call the Co-op to get your coupon.

MAD RIVER GLEN'S 2001 - 2002 SPECIAL TICKET PRICING:

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## **Co-op Drains Reservoir In Police Investigation**

ach morning in early November as Co-op General Manager Avram
Patt drove toward Montpelier from his home in Worcester, he kept his eye on the dramatic, and unusual, changes in the water level taking place in the Wrightsville Reservoir and the North Branch of the Winooski River. And he wondered, "When is someone going to put two and two together?"

Someone, that is, besides the Co-op employees who were aware of what was happening, and the state police, who had asked the Agency of Natural Resources to have the reservoir drained for a criminal investigation.

It was well over a week before Patt got the inquiring phone call from the local newspaper that he had been expecting. "Is it true what we've heard...?"

Viewed from Route 12, the impoundment to the north of the Wrightsville Dam and the river to the south seemed to be experiencing two entirely different weather patterns. The reservoir was drying up, which people may have assumed was because of the drought that central Vermont had been experiencing ever since the end of last winter's snowmelt. The water retreated farther and farther from the beaches and boat launch.

Meanwhile, it looked like springtime in

the river channel south of the dam where water poured lustily between the river banks. It wasn't quite flood-like; the Dam Safety Section of the Department of Environmental Conservation (DEC) saw to it that the flows were moderated to protect the dam structure from damage. Also, the better part of the 210 million cubic feet of impounded water was being released into the river; the Agency set strict standards on the rate of release to minimize soil erosion and injury to aquatic habitat.

But when you empty a reservoir into a riverbed it will have a noticeable effect. The effect was – drought conditions to the north and something of a deluge to the south.

Finally the word got out: The Vermont Department of Public Safety had asked the Agency of Natural Resources to draw down the reservoir so that state police divers and investigators could look for the body of Audrey Groat, a 42-year-old Northfield woman who disappeared in August 1993. She was last seen in the vicinity of Shady Rill Road in Middlesex – just across from the Wrightsville Reservoir.

The courts have declared that Groat is dead, the victim, police believe, of a violent act. But her body has never been



**High and dry.** The Wrightsville Reservoir is down to sand and puddles in this November photo. WEC drained the basin to aid in a police investigation.

found. Sadly, that is still the case.

#### A foot a day

"The state owns the Wrightsville Reservoir and the dam itself, which is a flood-control dam," General Manager Patt explained after the investigation concluded. "We own the hydroelectric plant below the dam, so we control the water intake to our turbines as well as a gate near the bottom of the dam. We were the ones who could open up those ports to allow the reservoir to drain."

It wasn't quite that simple, however.

"Our pond drain stem was bent," said Steve Anderson, supervisor of the Coop's hydroelectric facility. "The stem connects to the drain gate and we couldn't operate the gate until it was repaired."

Having been forewarned about the investigation, WEC ordered a new 21-foot stem, and with divers and a bucket truck lowered it and set it in place. When the formal state order came on October 23, WEC was able to comply. Instructions were to lower the reservoir from its normal operating level of around 635 feet (above sea level) to 614.5 feet, which leaves only



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a pool in the bottom of the basin.

However, the Dam Safety Division worried that exposing too much of the dam, too quickly, to dry conditions would damage the state-owned structure. And the DEC had concerns about environmental degradation downstream. "The drawdown of the reservoir will result in conditions which... can be expected to cause discharges of silt to the waters of the state in violation of... the Water Quality Standards," said the order. It made a similar prediction about Vermont's Wetlands Rules

To minimize the impact, the DEC put restrictions on the volume of water permitted in the river channel and monitored the flow from a gauging station downstream. WEC's technicians had to be ready to adjust the pond gate in response to frequent readings of the gauge. The U.S. Geological Service had calculated that safe flows could be maintained by lowering the reservoir about 12 inches per day.

We kept it between six inches and a foot, pretty consistently," Anderson reported.

#### **Marketplace**

FOR SALE: Three 14-inch diameter ceiling fixtures by Enertron. White acrylic dome lens. Three 13watt fluorescent lamps per fixture (total 39 watts output, equivalent to 150 watts of incandescent lighting). Brand new. Retail price \$45 each. For sale at \$15 each. Call 223-6934.

FOR SALE: Dutchwest Sequoia woodburning stove, made by Vermont Castings. Clean burning, catalytic. Excellent operating condition; enamel, light tan in color; 26" x 22"(medium size), with pull-out tray for ashes. Priced to sell at \$400. ALSO: Two china cabinets. Contemporary. Solid light-colored wood. Top doors open to glass shelves with lighted mirror behind. One drawer for silverware with more space beneath. Dimensions: 6' x 32" x 15" (deep). Will sell each for \$125, or \$200 for the pair. Must see to appreciate. Call Lynne or Bob, evenings and weekends at 229-4247.

FOR SALE: Wood-coal New Yorker boiler, model WC-130 (130K BTUH), with installation manual. Must be disconnected, but is very accessible. Price: \$600, or best reasonable offer. Call Lisa Kuhn, 802-439-5605, and leave a message on the answering machine.

FOR SALE: A Christmas gift for the budding musician! De Armond 5-string electric bass (with low B string). Model Pilot V. White, a year and a half old. Excellent condition. \$250 or best offer. Call 476-3740.

#### An actual rainstorm

It was a noble effort by all involved, but it was in vain. After a little more than two weeks police called a halt to the draining and conducted their search, using a dive team and a specially trained dog. They knew where they wanted to look - in and around a well shaft used by the USGS to monitor the reservoir. Ms. Groat's body was not found, and the criminal investigation remains open.

Now, however, WEC had new problems. The Wrightsville facility supplies around 5-percent of WEC's total power needs, and the Co-op had lost a reservoir-full of water for producing it.

What's more, there was concern about how quickly the basin would refill, given

the region's long-standing drought conditions. WEC's water-quality certificate for the project requires the Co-op to maintain a minimum flow of 25 cfs (cubic feet per second) downstream. This would delay even longer the day when the reservoir would reach the 633-foot elevation at which WEC could again generate power.

Therefore, the Co-op asked the Agency to relax its rules and allow WEC to pass-through less water downstream of the dam.

"We felt pretty urgently that we needed to get the penstock (the long wooden conduit between the dam and the turbines) to fill up," said Anderson. "We didn't want cold weather to come along and freeze the little bit of water that was in

there. That could break sections of the penstock."

The state agreed, and the reservoir began refilling - slowly - on November 16. WEC remained worried for the penstock and the structure.

And then, surprisingly, an actual rainstorm (!) descended on the area on Friday, November 30, adding an astounding eight inches to the water level overnight. By Saturday, December 1, the reservoir had recovered and WEC was generating power again.

"I love it when a plan comes together," said a relieved Steve Anderson, as this unusual chapter in the Co-op's history came to an end.

#### **Board Vacancy**

continued from page 1

three-year term when he resigned this past November. WEC's bylaws spell out a procedure for filling board vacancies which assures that, to the maximum degree possible, directors are elected by the membership rather than appointed by the board. In this case, that means that O'Rear's replacement would serve until mid-May 2002, and then would have the option, like any Co-op member, of running for election at the Annual Meeting.

The winner of the May election still won't serve a full three-year term, but will finish out the remainder of O'Rear's term, which expires in April 2003. At that time annual elections will be held as normal for all three board positions scheduled to expire in 2003. The winners will then embark on new three-year terms.

#### What's involved?

Serving as a Washington Electric Cooperative director does not require any specialized background or knowledge of utility issues. Present board members include a college professor, a human services administrator, an attorney, a rural mail carrier, a couple of self-employed consultants, and small business proprietors. Over the course of WEC's 62-year history, numerous farmers, state employees and representatives of other professions have served.

It is not expertise, but an interest in community service and a facility for learning new things and working constructively with other board members, that are the best qualifications. The Co-op is a rural utility, which carries its own set of issues that separate Washington Electric from power companies that supply urban or village settings.

WEC's Board of Directors meets once each month, usually on the last Wednesday of the month. Meetings start at 6:30 p.m.. Directors are also appointed to serve on committees of the board; committees set their own meeting schedules according to their members' availability, but those, too, are frequently in the range of once a month. Committee meet-

ings might be held in the late afternoon or evening. Occasionally, the board goes on a local day-long or half-day retreat for concentrated work, learning, discussion and decision-making.

Co-op directors receive a \$75 per diem for attending regular board and committee meetings, plus compensation for mileage and other expenses.

O'Rear's resignation from WEC's Board of Directors was related to his family's decision to spend a part of the year out of state, with future plans uncertain.

He formally conveyed his decision to resign at the November board meeting. While WEC is losing the services of a valued board member, his absence creates an opportunity for someone else to bring his or her gifts and abilities to the board, and represent the interests of the more-than 9,000 home, business and farm owners in rural central Vermont who collectively own their electric utility.

The board will make its decision about the vacancy soon after the January 5

The Vermont Public Service Board requires all electric utilities to publish this Herbicide Use Notification periodically. Members of Washington Electric Cooperative are reminded, however, that it has long been the policy of this cooperative not to deploy herbicides in its right-of-way management program.

#### PUBLIC NOTICE

#### **PUBLIC NOTICE**

#### HERBICIDE USE NOTIFICATION

HERBICIDE USE NOTIFICATION

Vermont utilities maintain electric line rights-of-way with several methods, including the selective use of herbicides on trees and brush. They also encourage low-growing shrubs and trees which will crowd out tail-growing species and, thus, minimize the use of herbicides. The application of herbicides may start as early as April 1. Requests to utilities for notice by mail, however, must be made by March 1.

The Public Service Board requires Vermont utilities to carry out vegetation management techniques which allow maintenance of electrical systems in a cost-effective manner.

The types of herbicide treatment used to keep utility lines clear are: stump, injection, basal, soil and foliar. These are the common methods used, although they may not all be used by the utility in your town. Landowners have the options of requesting herbicide treatment on cut stumps only, or that no herbicide be used at all. In the latter case, an administrative fee would have to be paid to the utility. Only electric utility rights-of-way which have tail-growing tree species with the potential of threatening the electric utility system are treated.

Utilities advertise by radio and newspaper prior to herbicide applications on all lines. Lines usually are treated only once in a four-to-six year period depending on the specific management cycle of the utility. Please check with your utility regarding the cycle of a particular line.

Some utilities use metal letters and numbers on distribution and transmission line poles. Others use them only on transmission lines. The letters, such as V.E.C. (Vermont Electric Co-operative), or V.E.L.C.O. (Vermont Electric Power Company), are not found on every pole. A check of several poles on a line should aid you in determining whether poles are marked and which utility is the owner.

Persons owning or occupying land within 1,000 feet of a utility right-of-way may request in writing that the utility notity them individually by mail anytime, but at least 30 days prior to trea

If personal notification is desired, please fill out this coupon and return it to your local electric utility. For more information, contact:

Consumer Affairs Division, Dept. of Public Service 120 State St., Montpelier, VT 05602 1-800-622-4496

Plant Industry Division, Dept. of Agriculture Phil Benedict, Director 116 State St., Montpelier, VT 05602 1-802-828-2420

Name		Town/City of Affected Property
Street Address		Telephone Number (Home)
Town		(Work)
State	Zip Code	O.K. to Use Work Number: Yes \( \text{No} \)
Electric Account Number		Best Time to Call
Flectric Litility		
		Summer Residence
	ncern:	
Property of Co	ncern:	Summer Residence
Property of Con Line and Pole	ncern:	Summer Residence Commercial Property  Numbers  If you qualify for personal notification. If information is unobtainable, pleas

# Dean Energy Plan Advances Efficiency, Renewables

ashington Electric
Cooperative's first step down
the road toward wind electric
generation, embodied in a \$1 million federal grant secured for the Co-op by U.S.
Rep. Bernard Sanders, puts WEC
squarely in line with a new, statewide
energy plan announced in September by
Gov. Howard Dean.

Years ago state policy makers compared Vermont's economy to a threelegged stool: it was supported by agriculture, tourism and manufacturing. Without saying as much, Dean has now advanced a three-legged stool for our state's energy needs. The legs are energy efficiency, use of renewable energy, and CHP (systems that combine the production of heat and power). The policy emphasizes the value of developing these resources in-state, leading to greater energy independence and less susceptibility by Vermont ratepayers to price fluctuations in the broader energy market.

"We want to bring balance to Vermont's increasing reliance on large-scale natural gas plants in southern New England," Dean said in a September 18 press release. "This plan lays out a path toward a future in which our economy is stronger, our electric energy system is more diversified and sustainable, our energy generation and use causes less environmental harm, and we have more real choices about the way we meet our energy needs."

#### **Efficiency**

The press release praised Vermont's accomplishments in energy efficiency, which have come largely through requirements imposed upon electric utilities by the Public Service Board.

"Savings from the past 10 years of efficiency programs have reduced today's Vermont annual electric energy needs by about 329,000 megawatt hours (MWh), or about 5.5 percent," the press release said. Note that it did not say energy efficiency had reduced the increase in electricity demand; it said we're actually using 5.5 percent less power than we did a decade ago.

The policy calls for even greater attention to efficiency measures.

"(Public) efficiency funding could reach the legislatively limited amount of \$17.5 million a year, perhaps by 2005," the press release said. Spending in the current fiscal year 2002 will total about \$12 million.

The money is raised through an ener-



Site work began in November for a new 350-bed correctional facility in Springfield (above). The prison will use a modern co-generation system for electricity and heat, saving significantly on the state's power bill.

gy-efficiency charge on all consumers. Washington Electric members pay the lowest charge of any consumers in the state because the Co-op has attained a high rate of involvement by its members in WEC-sponsored efficiency programs. Regardless which utility serves them, the governor's statement noted that people who reduce their bills through efficiency opportunities can offset much or all of the energy-efficiency charge.

#### **Renewables**

The second leg of the stool is renew-



Gov. Howard Dean

able energy systems – encouraging utilities to purchase their wholesale power from generators using (for example) photovoltaic (solar) installations, biomass (such as wood chips), and farm and landfill methane. WEC's environmentally friendly windmills will fall solidly into this category.

"Small-scale renewable energy systems are the most likely to require direct public support... in order to get the markets moving," the statement predicted.

"The governor's proposal is to make \$750,000 of Petroleum Violation Escrow funds (the settlement in a legal case) available in 2002 for renewable energy incentives."

### CHP: combined heat and power

CHP is the third avenue encouraged by Dean's energy policy. Here, the technology that produces electricity creates heat as a byproduct. Rather than wasting the heat, it is captured and put to use – either to heat the plant or institution using the CHP system, or for hot water. In this manner, the total efficiency gained is much greater than the efficiency of separate systems. It also reduces costs to consumers, and air pollution.

CHP systems can run on thermal or fossil fuels. This technology is to be put to use is Vermont's new 350-bed penal institution under construction in Springfield. "We are utilizing a co-generation system fired by liquefied natural gas," said prison Project Architect Mike Kuhn of the state Department of Buildings and General Services. "We're creating our own electricity and using the heat byproduct . . . to heat the buildings and the domestic hot water." In addition, the state saved more than \$1 million in construction costs by turning the installation and operation of the co-generation system over to Pocasset Energy of Massachusetts.

"We're going to see alternative energy technologies employed in the design of all state-owned buildings," predicted WEC General Manager Avram Patt. "In the long run it will protect Vermont tax-payers from price volatility and threats of shortages, and provide power from increasingly stable and affordable energy sources.

"Also," he said, "it will set an example for private, large-scale consumers to follow."

## Manager's Report continued from page 3

much higher percent of revenue from commercial and industrial customers as well.

Simply put, the cost of building, maintaining and paying taxes on a mile of WEC's system is borne by an average of 7 or 8 residential members, whereas at other utilities, that cost is spread over a greater number of customers, including a greater number of commercial and industrial accounts. In order to collect the revenue necessary to pay that cost, the Co-op's rate per kWh must be set somewhat higher.

#### In summary

Although WEC's rates are high, to a great extent the reason is that it (literally) "comes with the territory." We

keep our costs as low as possible without compromising reliability or safety, but it is more expensive, per-member, to operate an electric distribution system in a rugged, rural area. Yet even with a higher rate, a very large portion of our members pay bills that are in the same range, or lower, than the bills paid by other utility customers in Vermont

On the back of your bill we provide a short explanation of the various charges and other information that is printed on the front. More detailed information is also available in the "billing & rates" section on our website, or by contacting our member services department. And as always, if you have concerns or issues you wish to discuss further, please feel free to contact me or any of the members of your board of directors.