

WEC CO-OP CURRENTS

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

June 2002

Attendance Up, As WEC Holds 63rd Annual Meeting

Substation, Bylaws Approved By Members

It was the largest gathering at a Washington Electric Co-op annual meeting in years. An estimated crowd of just under 200 Co-op members, employees, board members and guests assembled at the Elks Club in Montpelier on Tuesday, May 21 to shoot the breeze over a dinner of chicken and mostaccioli, vie for door prizes and put the finishing touches on the Co-op's annual elections. They also received updates on their consumer-owned utility from the manager and officers of the board, and heard guest speaker Jito Coleman, Vermont's Small Business Person of the Year, describe his company's adventures installing wind- and solar-energy systems in the far corners of the globe.

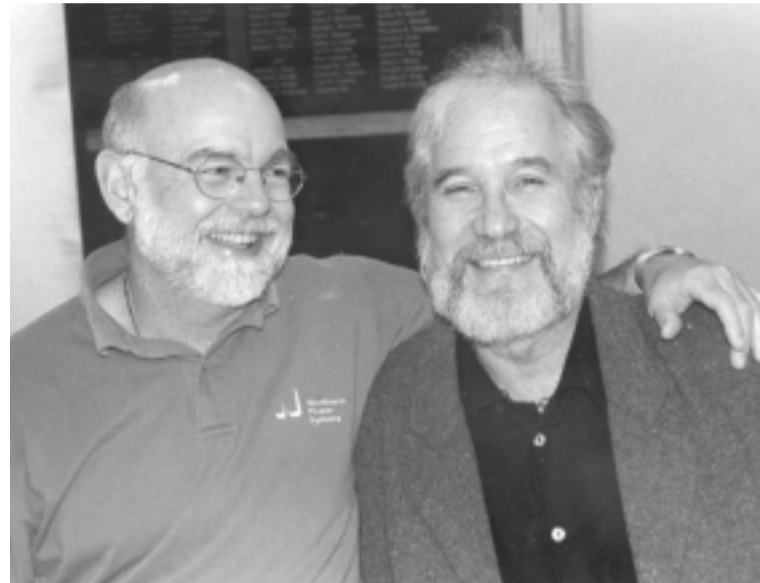
Normally, Co-op annual meetings attract around 125-140 people. This year's larger turnout stemmed from the increased attention WEC has received due to its February termination of its contract for nuclear power with Vermont Yankee, and its replacement of most of

that wholesale power with less-expensive electricity generated from methane at a Connecticut landfill. Judging from questions raised by the audience, the details and implications of WEC's withdrawal from Vermont Yankee were on many people's minds. As always, though, WEC members showed up with a lot to say and a lot of questions for their officers and directors (see sidebar, "Q-and-A," page 5).

Leaving nuclear power behind and embracing renewable energy were the themes of this year's event. (Co-op member Linda Fox of Walden baked a special "pull the plug" cake for the occasion, which was divided up and served for dessert.) WEC President Barry Bernstein, of East Calais, reiterated that the board's direction was based not only in distrust of nuclear power for environmental and safety reasons, but for financial reasons as well.

For those same reasons, the board

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Guest speaker Jito Coleman, left, and WEC President Barry Bernstein share a laugh at the 63rd Annual Membership Meeting.

Damaged Transmission Lines Idle WEC Substations

It's almost inevitable, in a violent summer thunderstorm, that some people in rural areas will lose power (hopefully, briefly). The high winds can knock trees into the power lines, and lightning strikes can disable the electric equipment on the lines or even break a pole.

But one of the worst things that can happen is when an entire substation is disabled. The substations themselves can be damaged in the storm, but what happened to Washington Electric Co-op four times in late June was that transmission lines carrying power to

WEC substations were knocked out. Substations receive high-voltage power, and then reduce the voltage and send

the power along to consumers via distribution lines. When transmission lines go out for any reason, the substation is idled and everyone who is served by it loses power.

For the most part WEC does not own the transmission lines that feed our substations; they are the

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Trees down and power lines down. It happens. But it's tough for everyone when it happens to transmission lines.

Inside

Not only virtuous, but practical too. Waitsfield businessman Jito Coleman had lots to say at the Annual Meeting about the status and the future of renewable energy. Page 4.

'Values' at the heart of the Enron affair. See Manager's report, page 3.

Internet access now available through WEC. Washington Electric has partnered with VermontLink.net to offer Co-op members discount rates and quality service. Check it out on page 2.

Fran Bard retires after 23 years at Washington Electric. Story on page 6.



All manner of critters and people gathered in Tunbridge on June 22-23 for the Vermont History Expo. WEC was there, too. Photos on page 8.

'Short Circuits,' 'Linemen's Corner' and more, inside.

Washington Electric Cooperative
East Montpelier, VT 05651

WEC Partnership Provides Members A New 'Link' To The Web

Washington Electric Co-op members who are in the market for a new Internet service provider may find just what they're looking for through WEC's new partnership with the VermontLink network. Now, WEC members can receive unlimited Internet access with local dial-up for just \$17.95 a month, which is a savings of roughly \$3 to \$5 over the fees of most Internet providers.

"We believe this might be especially helpful to the former customers of other Internet companies that have discontinued dial-up services," said WEC General Manager Avram Patt. "Beyond that, the cost savings and the fact that VermontLink is a locally owned and operated company out of East Hardwick are benefits that we think will appeal to many of our members. We recommend the services of

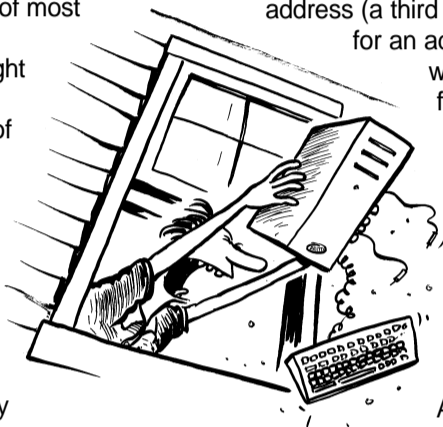
VermontLink.net to our members, and that's why we have formed this partnership."

For the discounted monthly rate of \$17.95, WEC members can receive unlimited local dial-up from most telephone exchanges in the Co-op's service territory. VermontLink.net provides fast connection speeds, capacity for two email address (a third address can be added for an additional \$1 a month), web mail access and free technical support.

You can sign up for VermontLink service by going to Washington Electric's web page (www.washington-electric.coop) and following the instructions at that site.

Alternatively, you can call VermontLink.net at 533-

2442 (toll-free: 1-866-885-4657) and tell them you're a Co-op member. They'll walk you through



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 through WEC's office. Meeting dates and times are subject to change. For information about times and/or agenda, or to receive a copy of the minutes of past meetings, contact Management and Programs Administrator Denise Jacques, 802-223-5245.

the process.

Once connected, the full range of Internet services is yours – without all the advertisements and electronic junk-mail that comes with an account through one of those giant corporate providers, and with personal, local technical support. (Technical support is available Mondays-Fridays from 8 a.m.-6 p.m.)

WEC members can obtain added convenience by paying VermontLink each month when they pay their electric bill. Information on this option is available by calling the Co-op.

Seasonal members, too

WEC and VermontLink are also

extending a special offer to seasonal Co-op members. They can purchase five months of full Internet service for a total yearly payment of \$89.75. This way, seasonal members can continue their Internet use without skipping a beat when they're here. During the rest of the year they'll continue to receive webmail service for their VermontLink.net email accounts at no additional charge.

Find out more about the WEC-VermontLink.net connection by logging onto the Co-op's web page: www.washingtonelectric.coop. You can sign up for services while you're there. Members are also invited to call Washington Electric for further information.

Transmission Lines

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property and the responsibility of Green Mountain Power Corp., and we contract for service from that company. (WEC does own about 18 miles of transmission line in the Tunbridge area.) When the transmission lines are disabled for some reason WEC's crews must wait for them to be repaired before they can power up the substation again and discover whether the storm has also damaged equipment on our distribution lines.

On Sunday, June 23, the GMP transmission lines feeding WEC's South Walden sub were disabled by a fallen tree. Consequently, 1,000 Co-op members lost their power for 45 minutes. On Tuesday, June 25, the lines feeding WEC's Mount Knox substation on Route 302 in Orange County were knocked out. Mount Knox is our largest substation,

serving some 1,600 members in Groton, Topsham, Corinth and other towns. They all lost their power for two hours.

Then on Wednesday, June 26, it happened to South Walden again, causing a two-hour and 40-minute outage for those same 1,000 members who had been affected three days earlier. And then — almost unbelievably — the South Walden sub lost power a *third* time on Friday morning, June 28, on account of a transmission line mishap.

Transmission lines are built sturdier than distribution lines, and have much wider rights-of-way.

"That's why it's unusual for weather to cause problems on transmission lines," said an exasperated Co-op General Manager Avram Patt. "When it happens it's a real headache for the members we serve. We'll try to see what influence we can have in preventing more of these incidents."

Members Write

Co-op Currents welcomes letters to the editor that address any aspect of the Co-op's policies and operations, or any matters related to electricity. Readers can write to *Co-op Currents*, P.O. Box 8, East Montpelier, VT 05651. Letters to the editor will not be published in the Annual Meeting (April) issue.

Annual Meeting A Good Show

Editor, *Co-op Currents*:

After being absent from two annual meetings, I greatly enjoyed and appreciated the meeting at the Elks Club (on May 21). It was a delight to see a gang of directors, healthy and energetic, devoted to advancing the electric co-op and seeking the best sources of power, especially solar and wind. I include the president, the manager, and the editor of *Currents*, who I believe are part of the intelligence and energy – human energy – that generated a tremendous improvement since 20 years ago.

Also great to see good attendance at the meeting.

I would not fail to list the speaker, Clint Coleman, as an important part of the meeting – the best speaker, with the best message and information, ever. He with his company, Northern Power Systems, are solving many energy and environmental problems and needs. My thanks to him, and to the Co-op for having him as the speaker.

Wilmer Brandt
Marshfield.

Our thanks to Mr. Brandt for his kind words and his attendance at the meeting.

— Editor

Manager's Report

Enron's Rise And Fall, From The Co-op's Vantage Point

By Avram Patt

Maybe you've heard all you want to hear about this already or maybe not, but I have some things to say about Enron. Over the last several months, I have on a few occasions started to write an article, either for this newsletter or as an opinion column for the local paper. Each time, the news developed faster than I could write. The simplest thing would be to just send everyone a bunch of articles from the last six or seven years of *Co-op Currents* with a stick-on note that says: "We told you so!" That might be a little over-simplified, but not by much...



Avram Patt

There are certainly enough corporate scandals at the moment, whether it is Enron, the telecommunications giant WorldCom, Adelphia, Rite Aid drugstores, or the related scandals involving audit firms like Arthur Anderson. We all have our opinions about what's been happening in the corporate world in general, and I have mine, but as they say – "don't get me started!"

I'll limit my comments to the business of providing energy.

There is no question now that Enron, and probably some other companies, deliberately and with malice aforethought, manipulated the energy markets, directly causing all or most of the California energy crisis of two years ago. They set up schemes to be paid huge premium prices for helping fix "congestion" problems on the grid that they had themselves deliberately created. And as it turns out, even those congestion problems were by-and-large phony.

In addition to all their deceptive accounting practices, which other kinds of companies have also been engaging in, Enron appears to have engaged in price gouging and outright fraud in the buying and selling of energy. And while they inflated their earnings to keep their stock price up, it now appears they were at the same time hiding cash from their windfalls.

They got what they wanted

Is this just a case of a rogue company, one bad apple? Unfortunately not. While Enron may be the biggest company tainted by scandal, and the California energy crisis may have been the "perfect storm"

of greed, tripling of electric bills and fake shortages, there are companies in other states now being investigated for market manipulation and other misdeeds. The problem was predictable, and we at WEC were certainly not the only ones who saw this coming. (I have a stack of reports from places like Consumers' Union that now read like prophecies.)

Most of us might never even have heard of the idea of deregulating the electric utility business had it not been for Enron, its disgraced former CEO Kenneth Lay, and others like him. Years before the public and ratepayers knew what was going to hit them, Enron was pushing and lobbying hard, in Congress, at federal regulatory agencies, state regulatory agencies and legislatures (including Vermont's).

They got what they wanted for the most part. Then, once "retail choice" started being offered, these companies milked these new systems quite expertly and took money – obscene amounts of it – right out of the pockets of ratepayers and even taxpayers.

Let's also not forget that Enron's Ken Lay was the largest campaign contributor to our President. But I'm not being partisan—Enron put its money wherever it would be noticed, and it was noticed and welcomed in a very non-partisan manner by elected officials of all persuasions. We know that Enron and other major energy trading companies pretty much wrote the administration's energy policies, and that Ken Lay hand-picked appointments to the Federal Energy Regulatory Commission.

In my job I read more about this stuff than most people do. Among the most recent quotes I've come across about this debacle, one was particularly to the point. Allan Richardson, CEO of the American Public Power Association, which represents the nation's municipal utilities (WEC is also a member), had this to say at the APPA's annual conference in Dallas: "The process of deregulation is more corruptible than the process of regulation."

So, should anyone be surprised or shocked? No. Enron and other energy companies of their type, philosophy and ethical standard have been at the core of our energy industry for a number of years. They were the movers, the influencers, and we now know they were only in it for the money, any way they could

make it. They were never interested in serving the average consumer. I hope, after all the pain and suffering of the thousands who lost their jobs and their retirement savings, the innocent investors deceived by executives and accountants, and those who suffered through rolling blackouts and other miseries, that we can now say good riddance to the idea that what's good for companies like Enron is good for the USA.

Maybe another way of saying this is: If we give the Enrons of the world what they want, we will end up getting what they want.

It doesn't have to be that way. Although I am a strong believer in co-ops as a way of doing business, there are also plenty of good people working at investor-owned utilities in Vermont and the country who are decent, ethical, competent, and who somehow find a way of serving customers and shareholders at the same time.

Ethics and values make a difference. They determine how a company does business, how it treats customers and employees. We are all worse off as a

'The process of deregulation is more corruptible than the process of regulation.'

— Allan Richardson,
American Public Power Association

result of both the rise and fall of Enron. Again, it's no accident. The leaders of that company (and too many like it) were deliberate in what they were trying to do, and values like honesty, fairness and good citizenship had nothing to do with it.

There's a difference

It has been strange to sit here at Washington Electric Co-op and watch the deregulation and retail-choice debate unfold, then watch companies move into states that deregulated in the hopes of making a killing – big ones like Enron and also a variety of fly-by-night, back-room operations.

Then, when they realized that there wasn't any money to be made from residential consumers, we watched Enron withdraw from that market, and others just fold up and disappear. Money had to be made somewhere, and the companies with muscle struck gold in California, manipulating and cheating while the peo-

ple suffered. And the same has happened, to lesser degrees, in other states.

Who asked for this? Companies like Enron and Dynegy did, and too many people listened to them, or their money. Now that these companies are having their troubles, politicians and regulators act like they never knew them.

At the Co-op, we're human too. We make mistakes – and in our past, at any rate, we made some big ones. The people who work for the Co-op, the people who manage it and the board members elected to govern it, need to be accountable just like anyone else.

But there is a difference between WEC and Enron and it's not just in size. Our purpose is to serve, and to make a difference. We are in this for the long term, and so we care about whether our system is in good shape; we care about delivering reliable service. We care about helping our members avoid using more energy than they need to.

And we care about where our energy comes from. We are increasing our supply of renewable energy, not so we can see how much more profit we can make, but because it's the right thing to do, and if we do it right, it shouldn't cost more in the long run.

The people who work at WEC come here because we need to make a living just like everyone else. But as a cooperative, there is also a purpose to what we try to do here. Co-ops around the world have seven "Cooperative Principles" that guide us. We print them from time to time in this newsletter, and you can find them on WEC's website under "member info." There is a Statement of Values that prefaces those seven principles, and I think it's worth closing with:

"Cooperatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others."

Did you think "Enron" when you read those values? Probably not.

Does WEC measure up to these cooperative values? Well, there are a lot of minutes in the day and a lot of days in a year, and we may not make the mark in every single one. But those truly are our values and they set WEC's course and direction. It is what we aim to be, and I do think it is who we are. Those cooperative values have staying power that the Enrons of the world can't buy.



Love that chicken! Elks club workers (above, left) prepare to distribute a tableful of comestibles for WEC diners. Top right, President Barry Bernstein, standing, opens the meeting, with board members Cornelia Swayze and Roger Fox alongside. Bottom right, Ballot Committee members Van and Gene Parent tend to their lists.

Annual Meeting

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will also work to avoid power generated from fossil fuels as much as possible.

"We've been committed for a long time to moving the Co-op in the direction of stable, safe sources of energy," said Bernstein, adding that it was not in the best interests of the nation nor of the Co-op to be tied to Middle East oil. "Most contracts for power generated from fossil fuels have escalation clauses (that allow companies to increase their wholesale electricity price as the cost of fuel goes up). Since energy is around 50 percent of our costs, it's important that we find sources that are diverse, stable and as local as possible."

WEC has done that with its three-year methane contract with Bio Energy Partners, a partnership of the national trash-handling giant Waste Management Inc. and Caterpillar Inc., the Texas-based heavy equipment manufacturer. With the cost of power from Vermont Yankee at around 5.2 cents per kilowatt-hour (kWh), and the price of the methane-generated power from Connecticut to average 3.6 cents/kWh over the course of the contract, WEC has reduced its costs as well as affirmed its principles.

The goal now, said the board president, will be to find other, longer-term supplies of affordable renewable energy. The search is underway, with assistance from WEC's consultant, La Capra

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Q & A:

WEC Members Never At A Loss For Questions

Every year, the people who attend the Annual Meeting have something to say," said WEC General Manager Avram Patt, looking back on the comments and verbal exchanges at the 63rd Annual Membership Meeting on May 21. "You never know what it's going to be – a compliment, or a complaint that's obviously been building up for a long time.

"But it's their right," he said. "It's their time. Sometimes," he smiled, "there can really be surprises."

This year's surprise came from a member who moved that the minutes from last year's Annual Meeting be read aloud. The motion was seconded, discussed, and put to a vote. The 'nays' had it; most people did not want to listen to the minutes from a meeting a year in the past. However, WEC's management decided then and there that the Annual Meeting minutes will henceforth be posted on the Co-op's website – starting this year. (It has been done.)

Most of people's comments and questions were directed at the Co-op's sale in February of its minority shares in the Vermont Yankee nuclear power plant. The sale yielded the Co-op \$275,000, and it seemed clear that some people hoped they'd get money back; they do, after all, own the Co-op.

"Where did (the money) go, when we sold stock in Vermont Yankee?" one man asked.

Treasurer Donald Douglas answered, "We will be (applying) those dollars to future budgets. The Rural Utilities Service (the federal agency that serves as a bank for rural electric cooperatives) has certain requirements. We can use the money to avoid future borrowing."

Someone else asked, **"Will it defray the cost of electricity to the consumer?"**

General Manager Patt replied, "Indirectly – if, for example, it enables us to avoid future borrowing for the con-

struction of power line, or if we can use it to pay down debt. One way or another, it has to be applied to Co-op functions. We're prohibited from actually turning it around to the members."

Another man rose. **"Will we have decommissioning costs (from Vermont Yankee)?"**

Douglas answered, "We have shed those. We no longer have any responsibility for the plant."

The room broke into applause. But Board President Barry Bernstein cautioned, "If anything happens to Vermont Yankee we won't be able to get out of the consequences, because we all live in Vermont."

When the discussion turned to renewable energy and WEC's contract for methane-generated power from a Connecticut landfill, a member rose to compliment the Cooperative on its new direction. Then, referring to the controversial Vermont Egg Farm in Enosburg, he asked, **"Have you looked at that pile of chicken manure in Franklin County?"**

Chicken manure is not considered as potent for producing methane as manure from mammals, but finding some way to dispose of the enormous quantities of waste is one of the major issues between the Vermont Egg Farm and its neighbors. Bernstein said, "We'll put that on our

radar screen."

"How much of our energy do we get from Hydro Quebec?" another member asked.

Said Bernstein, "Our HQ contract lasts through 2015, and it accounts for 25 percent of our power."

On the subject of the landfill in New Milford, Connecticut, where WEC will purchase power for the next three years, a member asked, **"Are we the only purchaser there?"**

Patt said that we were. The gas-recovery and power-generation system was installed at the landfill in 1991, and has had other major clients in the past. The facility now is nearing the end of its productive life as a generator of landfill gas. (The three-year contract is guaranteed, and the facility may be productive for another year or two after WEC's contract expires; in that case, WEC will have the right of first refusal.)

Another member inquired whether it was possible to get power from the WSI landfill in Moretown.

"Most landfills in Vermont are too small," answered Patt. "They need to be a certain size (for it) to be worth the investment in equipment. We are looking at a landfill facility in Coventry."

Associates of Boston, and with a \$1 million federal grant awarded to the Co-op for pursuing a new wind-power project.

"I'm personally very excited about the opportunities ahead of us," said General Manager Avram Patt.

South Walden substation a go

However, the first order of business at the Annual Meeting was to complete the voting begun by mail on April 30, when the Co-op sent ballots to all 9,400-plus member homes and businesses. At issue were:

- four seats on WEC's nine-member Board of Directors;
- two proposed bylaws amendments;
- and whether the membership would approve construction of a new electric substation in South Walden.

Presently, WEC members in that area are served by an old and inadequate facility, which, directly and indirectly, provides power for some 1,400 members in South Walden, Cabot, Wheelock, Stannard, West Danville, Woodbury, East Calais and Greensboro. The proposal to construct a new, \$400,000 substation passed by a vote of 882-81. Perhaps members understood that the Co-op had already received approval and financing from its federal lending agency, the Rural Utilities Service, as part of a comprehensive four-year work plan. With the RUS loan already built into WEC's budget, the South Walden project will not raise electric rates.

The bylaw-amendment proposals were also successful. In 2000, the state Legislature revised the statutes that govern electric cooperatives in Vermont, for the first time allowing WEC and Vermont Electric Co-op to seek commercial financing for certain newly approved member services. The bylaw amendment, like the state law, now clarifies when such financing must be put to a vote of the membership – basically, for projects not related to the Co-op's primary function of providing electricity in its rural territory.

The amendment passed by a vote of 791-74, concluding a two-year process of bringing WEC's bylaws up to date and consistent with state law.

The second amendment revised definitions of conflicts-of-interest for board members, and was approved 694-178. Previously, the bylaws stated that "No person shall be eligible to become a Director ... who ... is in any way financially interested in ... any entity selling electric energy or supplies to the Cooperative." The new language bars anyone with "a direct, material interest in" such an entity. The reason for the change was that people with scattered investments and little direct involvement in them – mutual funds, for example – could have been ineligible for board service.

The voters also decided who will serve – and for how long – on WEC's Board of Directors.

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Coleman Spins A Vision Of Tomorrow's Energy World

The best reason for retail electric utilities to move away from power generated by fossil and nuclear fuels, and replace it with renewable energy, "isn't because it's green and it's cool," said Jito Coleman, president of Northern Power Systems.

"It's because, in the end, it is going to be less expensive."

Coleman, whose Waitsfield-based company provides renewable and hybrid electric-generation systems to clients as near as Waterbury and as far away as Antarctica, was addressing an audience with ample evidence that he was right. He was the featured speaker at Washington Electric Cooperative's 63rd Annual Membership Meeting, held on May 21 at the Montpelier Elks Club.

In December 2001, WEC ended its power-supply contract with Vermont Yankee and replaced much of that wholesale electricity with power generated from methane at a landfill in Connecticut (see *Co-op Currents*, March 2002). Yankee had supplied 30 percent of the Co-op's power. Compared to Yankee's nuclear power, electricity from the landfill costs WEC nearly 2 cents less per kilowatt-hour. Projections are that the switch will save the Co-op at least \$330,000 annually for the next three years.

Coleman's firm, Northern Power Systems, installs its energy systems in some of the remotest parts of the planet, and in some of the most hostile environments. He augmented his presentation with slides showing projects in such places as northern Alaska, Antarctica, Brazil and the Caspian Sea. One long-standing Northern Power Systems contract requires it to serve seismic stations that monitor compliance with the Comprehensive Nuclear Test Ban Treaty.

The technologies employed by the Waitsfield company have proven to be durable as well as effective. Coleman said that a system installed in Antarctica in 1985 had failed only once; and in that climate where frigid, 200-mile-an-hour winds are not uncommon, the company schedules just one site visit a year.

In certain ways, however, those extreme climates are unusually conducive to wind and solar power.

"When the sun shines in Antarctica it shines 24 hours a day," said Coleman. "The solar collectors can lie flat on the ground."



Clint "Jito" Coleman, president of Northern Power Systems and Vermont's Small Business Person of the Year.

Relying on nature to generate power makes abundant sense in those far-flung regions, where transporting fossil fuel to run generators or building electric transmission lines would be impractical or impossible. But Coleman said that the domestic energy picture is changing – and must change. Renewable technologies are becoming more affordable (you

Germany, Denmark and Spain have undertaken aggressive programs to shed nuclear energy and produce as much as 50 percent of their power through wind-generation stations.

can buy PV panels off the shelf in some Home Depot outlets), and more practical for use in the developed world.

"Now that the technology has matured, and prices of the other energy sources have gone up, we are bringing renewable energy back to the grid." Coleman said the "intrinsic values" of energy self-sufficiency, environmental protection, and conservation – rather than consumption – of resources are leading people "to embrace a newer vision of the world."

A part of that vision is distributed generation – power produced by small installations for local use, rather than at massive power plants which then ship the electricity for hundreds of miles on electric transmission lines (resulting in a weakening of power, called "line loss").

"Distributed generation is much more efficient," Coleman said. "It harkens back to Thomas Edison's original vision of generation, which was essentially small-scale facilities distributing power around the community."

One means for such generation is microturbines, which use natural gas ("but could use landfill gas") and generate power suitable for four or five homes. Coleman described a future in which electric utilities like WEC might install and maintain a number of these devices around their service territories. Virtues of distributed generation include cost stability, decreased reliance on Middle East oil, and less vulnerability to terrorism. "Americans," he said, "will soon see that having the resources that are important to them produced close by will become more and more evident."

He predicted that wind and solar power will become more mainstream, too. Europe is far ahead of the U.S. in turning to renewable power. Germany, Denmark and Spain have undertaken aggressive programs to shed nuclear energy and produce as much as 50 percent of their power through wind-generation stations.

The normalizing of solar energy will include photovoltaic systems being built into window panes, turning them slightly pink but reducing the need for large racks of panels mounted on rooftops and other obvious locations.

As for wind generation, "the only negative is the visual impact of the turbines," Coleman said. "Some people think they're beautiful; some think they're ugly. The trade-off is that there's no pollution. And you can take it down and no one will know it was ever there."

One Co-op member quizzed Coleman on the danger to birds who might fly into the 60-foot wind-turbine blades. Without meaning to, Coleman drew a laugh when he said that was "a dead issue." An earlier generation of wind turbines used lattices, or cross pieces, in the construction of their towers, and most avian mortality was caused by birds attempting to perch on those places. Engineers solved the problem by designing one-piece towers that do not attract birds into the paths of the spinning blades.

The potential for wind, solar and other renewable-energy technologies is great in the U.S.. North Dakota alone, said Coleman, could generate enough wind power to supply 25 percent of U.S. electricity needs.

Fran Bard, A Co-op Character, Retires

Nobody – NOBODY – ever accused Fran Bard of being a wallflower.

"Fran is definitely a person who will let you know what she thinks," said Brent Lilley, a field technician who has been with Washington Electric Co-op for 15 years. "As long as I've been here, Fran has been here. She's part of the organization, to me," Lilley said. "Every time she comes back to our office (in the rear of the Co-op's building) she's got something to say. She's a lot of fun. We've all had a good relationship."

On a workaday basis, that relationship ended on May 22 when Fran Bard, a member services representative and a Co-op employee for 23 years, retired. WEC threw a party for her at the Canadian Club in Barre, where the company

presented her with a new computer and printer as a parting gift. Her fellow employees came up with a gift of their own, a leather coat that they hoped would replace a favorite garment that was damaged.

The party was also attended by some of her former colleagues at WEC. "I got to see people like Hank (Poirier), Allen (Heath) and Rita (Roy)," Fran said. "I really enjoyed that."

Fran started with the Co-op in 1979. "I had been working the 3rd shift at Sprague Electric (in Barre) and I got sick of it," she recalled. "I've been at the same job here pretty much the whole time; it's just the title that's changed."

True. No one used terms like "member services representative" – or "sales associate" or "auto-

motive technician," for that matter – in 1979.

They did use the term "manager," however, and Fran Bard has worked under half a dozen of them at the Co-op. "She has always spoken her mind," said the current manager, Avram Patt. "If she had something to say, the managers heard it. And listened."

The words "blunt" and "forthright" apply to Fran, her colleagues said, but they aren't the only ones. Field Technician Mike Patterson observed that people often have "different faces" that they use in different situations. That applies to Fran, too.

"She's sometimes so gentle and tender with people," said Patterson. "But she can be a little more aggressive if she needs to be, and that's very helpful."

"She loves kids," Patt added. "If some employee brings their children to the office she's totally a Grandma. And she's the same way with my dog."

Patterson observed that the Co-op was a small company where all the employees needed to be able to rely on each other and have honest relationships.

"We all wear a lot of hats around here," he said, "and share the load of what needs to be done. The people in the field and the people in the office share information, which helps us all with our work. Fran has been like one of the crew back here (in Engineering) – plenty of fun to work with, with a great sense of humor."

Fran herself said she was ready for the change of pace that retirement

brings. She will be 62 in July.

"I moved to Northfield in December," she said, "and live in a nice and quiet area."

She plans to travel some, with Maine and Florida on her itinerary. Plus, she'll be seeing more of her grandchildren, Joshua and Jordan, who live in Graniteville.

But she'll miss her Co-op friends, too.

"Beth (Barcomb, member services representative and receptionist) is like a daughter to me," Fran said. "And there's my buddy upstairs, Janet (LaRochelle, the Co-op's director of finances). I'm going to miss her."

No more than her coworkers will miss Fran. Mike Patterson said, appreciatively, "She's added a lot of color to this place."



"If Fran had something to say, the managers heard it. And listened."

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The Bush Administration, previously skeptical about the existence of global warming, issued a lengthy report in June concluding that climate change is in fact occurring due to the accumulation of greenhouse gases in the atmosphere. Further, the administration acknowledged for the first time in the report that "human activity" is the reason for the warming trend.

Issuing the report was required under a 1992 climate treaty signed by then-president George H.W. Bush. Titled *U.S. Climate Action Report*, the document even broke new ground, citing emerging evidence that soot, along with greenhouse gases, may contribute significantly to global warming. However, the action that the "Action Report" calls for is not to reduce greenhouse gas emissions, but for this and other countries to begin adjusting to the changes wrought by a warming climate. It concludes that nothing can be done about the environmental consequences of several decades worth of heat-trapping gases already in the atmosphere.



The Burlington Electric Department received the American Public Power Association's annual Energy Innovator Award in June for a program aimed at discouraging the use of halogen torchiere floor lamps in homes and businesses. "The goal was to educate our ratepayers about how inefficient and dangerous the fixtures are, something many halogen lamp owner were unaware of," said a BED spokesperson. BED's Safe Torch program encouraged people to turn in their halogens and replace them with safe, fluorescent torchieres. More than 1,000 halogen lamps have been collected under the program, which is a joint effort by BED and the Burlington Fire Department.

It seems likely that Nevada will get a permanent nuclear-waste disposal site whether it wants one or not. President George W. Bush and the U.S. Department of Energy have endorsed the construction of the controversial Yucca Mountain disposal site, but Nevada Gov. Kenny Guinn vetoed the project in April. It takes majority vote in both houses of Congress to override a governor's veto, and the first step was accomplished in May when members of the U.S. House voted 306-117 in support of an override resolution. In June the Senate Energy and Natural Resources Committee followed suit with a 13-10 vote. Next comes a vote by full Senate.

"It's still an uphill battle, but it isn't over yet," said Tess Hafen, a spokesman for Nevada Senator Harry Reid, a leading opponent of the Yucca Mountain scheme.

Things are happening in other states on the renewable-energy front. In Nebraska, MEAN (the Municipal Energy Agency of Nebraska) recently broke ground on a 10.5-megawatt (MW) wind farm that will generate enough power from seven large wind turbines to supply electricity to 4,000 homes. When completed, each turbine will be approximately 290 feet tall and weigh more than 40 tons; construction of the turbines will cost \$1.5 million to \$2 million each. Eventually, MEAN could build up to 20 wind turbines on the site. Meanwhile in North Carolina, electric cooperatives are getting ready to offer their members electricity generated from animal wastes (North Carolina has large hog and poultry industries.) It would be the first program offering the sale of electricity from renewable sources statewide.

On the other hand, coal is seeking a comeback. The National Coal Council, a government advisory board, has urged the federal government to support increased coal-based electricity production. The NCC has asked for tax incentives and more money for technological improvements to increase efficiency in coal-burning plants. The organization also wants a streamlined approach to emissions controls, including simplifying clean-air regulations and promoting emissions trading to reduce regulatory compliance costs.

States are reporting disappointing results with their electricity-deregulation schemes. In Illinois "customer choice" of their energy supplier – a cornerstone of the state's deregulation policy – went into effect May 1. But no one was "choosing" – except, that is, to stay with the utilities that had been serving them. Also, no new energy marketers were signing up to do business in the state. Public response to competition through electric deregulation was a big yawn. Rhode Island customers were also greeting deregulation – with its right to choose suppliers – with general indifference. And since the inception of deregulation in that state, Rhode Island's largest privately owned utility had raised its rates repeatedly – the opposite effect from what had been trumpeted as the advantage of utility competition.

WEC AT WORK NEAR YOU

Home-building season is here

Summertime is when WEC gets a first-hand look at growth in the central Vermont area, because almost every time a new home or building is constructed in our territory the Co-op gets a call requesting electrical service. If it's close to the road no more may be needed than to attach a new transformer and service lines to the nearest pole and run the wires to the house and meter. If the house is back in a field or woods, connections may require planting new poles or extending underground service. During construction season this is one of Co-op's primary responsibilities.

"We're in full swing with line connections, and it's following the same brisk pace as last year," said Dan Weston, director of engineering and operations.

In 2000, WEC added 179 new members, and in 2001 there were 170.

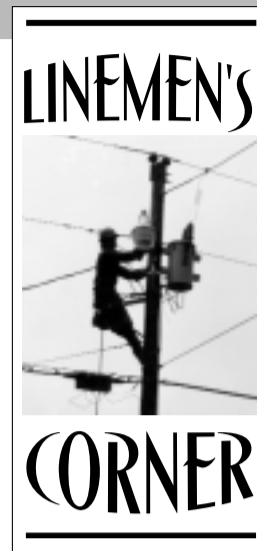
The new connections this summer are scattered throughout the service territory. "We have a few in **Williamstown**, and in **Duxbury** and **Fayston** in the Mad River Valley," said Weston. "There are scattered new homes in the **Walden** and **Danville** area, and several in **Vershire** and **Chelsea**. There's also some activity in **Roxbury**."

Repairs ahead in Tunbridge

A year ago WEC's service crews were out constantly from January through April repairing damages to the electrical system caused by storms. This year, the first major storm restoration effort didn't come until May 31, when severe winds and rain knocked out power in **Corinth**, **Topsham** and **Tunbridge**. Several poles were broken, and nearly 1,300 members were affected.

Then, on June 17, a failed insulator on the Co-op's transmission line caused an outage that briefly affected everyone served by the **Tunbridge** substation. Usually we get to blame other companies for transmission-line failures because mostly WEC owns *distribution* lines. But this was one of the few sections of transmission line owned by Washington Electric.

"That's an important line," said Weston, "because when it goes down it affects so many people. We want the members to know that we're tentatively looking at two planned outages before the school year starts so we can change out some problem insulators and make adjustments to the tension on the lines." You'll be notified in advance.



Getting going in Walden

Look for the dump trucks and earth movers soon in **South Walden**, where WEC members approved a new substation, to be built about 500 feet from the present facility on the Cabot-South Walden Road.

"The site work has been awarded to the Hebert Excavating Corp. of Williamstown," said Weston. "They're expecting to commence by the middle of July and wrap up around the first of October."

Besides leveling and ground preparation, site work will include installing the cement foundations and pads for the electrical equipment, laying the crushed stone and erecting the fence. Then, during the winter, the new power transformers and other components will arrive. WEC's operations workers will start construction of the substation itself in the spring. The targeted completion date is July 1, 2003.

For crew, it's members first

Summer is the best chance Vermonters get to enjoy warmth and sunshine, fishing, boating and all the other activities you can only do at this time of year. WEC's employees also like a little time off – and they do get it. But Engineering & Operations Director Weston points out that the line workers frequently adjust their vacation schedules around the workload, because the summer is the best, if not the only, time to do many of the tasks described in this column.

"Our workload is member-driven," said Weston, "and most of our crew members work their vacations around the Co-op's workload. I appreciate that enormously, because it isn't always that way with companies."

If you drive by a lineman this summer, remember that he likes fishing, golfing and being with his family as much as you do. Give him a wave.

Have you spotted a tree problem – a "danger tree" somewhere in Co-op Country that looks like it could topple onto WEC's power lines and cause an outage? Please call and let us know so we can take care of it now.

Remember, the shortest outages are the ones that don't happen at all.

Visit WEC's website for up-to-date information on weather conditions, line maintenance and repair projects, and other Co-op concerns. See www.washingtonelectric.coop.

Annual Meeting

continued from page 5

Normally three seats expire each year, but this year an extra seat was open because a director resigned part-way through his term. The board had appointed an interim director pending the annual meeting.

The elections were not contested; there were just four candidates for the four seats, and all were incumbent Board members. The only thing to be decided was which candidate would finish out the term of the director who resigned, a period of one year.

Leading the balloting was Wendell Cilley of West Topsham (906 votes), followed by Donald Douglas of East Orange (890 votes) and Charles Haas of Bradford (878 votes). Cilley, Douglas and Haas, as the top three vote-getters, will serve full three-year terms. The fourth candidate, Richard Rubin of Plainfield, received 859 votes and will serve for one year. That seat will then be up for re-election for a three-year term.

'Challenges' in 2001

"This is one of the best turnouts we've had in a long time," said Barry Bernstein, president of WEC's Board of Directors, as the members and guests moved from the dining area at 7:40 p.m. for the start of the business meeting. "My thanks go out to all of you for coming."

Co-op member Albert Whitcomb from Plainfield rose to suggest that the meeting start with the Pledge of Allegiance; he then led the recitation. Bernstein introduced past and present board members, and special guests who included Robert Northrup (president) and Kelly McKenna (general manager) of the Vermont Electric Cooperative; Deputy Commissioner John Sayles of the Vermont Department of Public Service; William Gallagher and Brian Evans-Mongeon of the Vermont Public Power Supply Authority; and John Quinney, general manager of the Vermont Consumer Energy Cooperative.

General Manager Avram Patt bestowed service awards on WEC employees Brent Lilley (field technician, 15 years), Mike Patterson (field technician, 10 years) and Tammy Clark (member services supervisor, 10 years).

"Running the electrical system is our main job, every day," Patt said, "and learning to run it smarter and smarter is the most important thing we do. I have to hand it to our staff for their dedication and the amazing job they do for all of us."

Treasurer Don Douglas then recapped WEC's financial year (his full report was printed in the May issue of *Co-op Currents*). Douglas said that 2001 had been a difficult year economically: repeated, heavy snowstorms from January through April of 2001 put WEC's repair and maintenance costs \$250,000 over-budget; and revenue (from the sale of electricity) had declined by \$60,000,

The Vermont Historical Society staged its Vermont History Expo 2002 at the Tunbridge Fairgrounds on June 22-23. The weather was great, the musical performances attracted lots of listeners, and the presentations were varied and interesting. The historical societies of many Vermont towns set up booths showing how and why their communities originally were founded. Folks in period dress and Civil War uniforms, and meals cooked in kettles over campfires, provided the sights and sounds of Vermont's past. Together, Washington Electric Cooperative and Vermont Electric Cooperative were sponsors of the event, and staffed a booth with displays that showed how the electric cooperative movement brought power to rural Vermonters in the 1930s and '40s. At right, Rich Fleury of Plainfield, products and services director for Vermont Electric Co-op, was on hand to greet people on Sunday.



Young fiddlers Shona Sanford-Long (left) of South Royalton and Cody Spiegel of Washington play Celtic selections for passers-by.



Cpl. Grady Neill of the Vermont Civil War Hemlocks poses with his company's vintage weapon (left), while, above, Amanda Page of Springfield recounts tales of nurses during the War Between the States, as Tony Pare of Newport (in uniform) listens.

related to warm weather in the last months of the year.

WEC would cope with the unusually high maintenance expenses by deferring \$200,000 of those costs, applying the money incrementally to the budgets of the coming two years, Douglas

explained.

Patt interrupted the proceedings several times to call out numbers for door prizes – a perennial favorite of members who attend the annual affair. After reports and comments from Douglas, Bernstein and Patt, Jito Coleman of Northern

Power Systems delivered his presentation on renewable energy (see "Coleman Spins Energy Vision," page 5).

The meeting concluded close to schedule at 8:30 p.m.