

WEC CO-OP CURRENTS

Vol. 63, No. 6

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

September 2002

Vermont Struggles With Renewable Energy Policy

Business is booming for a number of Vermont-based companies plying the renewable-energy trade. Consider NRG Systems of Hinesburg, which has a corner on wind measurement, a vital step for customers siting large wind-power installations.

"We make equipment such as sensors and data-logging instruments to measure the wind and analyze the site's potential," says NRG President David Blittersdorf. "We're the leading company that does this, with probably 40-to-50 percent of the world market. It's a nice little niche."

In Waitsfield, Northern Power Systems designs and builds custom energy systems for a variety of exotic installations, including some in the most forbidding climates on Earth. NPS has tripled its workforce over the past five years and now employs 89 people. Company president Clint "Jito" Coleman – Vermont's 2002 Small Business Person of the Year – was guest speaker at Washington Electric Cooperative's annual membership meeting in May.

In the 1970s Coleman realized that the growing nuclear industry was not the

answer to the world's energy needs, "but I realized we couldn't change directions unless we had viable alternatives. Renewable energy," he says, "became the viable alternative."

Solar Works Inc. in Montpelier also has a global clientele. In 1995, Solar Works began working with black South Africans newly liberated from apartheid, training teachers and technicians in photovoltaic (PV) technologies to bring power to their rural communities. Domestically, company founder Leigh Seddon predicts that Solar Works could sell more than \$1 million in energy systems this year in New York state because of an aggressive campaign there of publicly sponsored economic incentives promoting the use of renewable energy.

That these companies and others like them are based in Vermont is no accident. Environmentally attuned Vermont activists grasped the economic and cultural implications of the 1970s oil embargo and were inspired to find solutions in solar, wind and other renewable technologies.

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Green Mountain Power Corp.'s wind farm in Searsburg is Vermont's first wind-electric installation.

'Hedge' Fund

WEC's Strategy For Summer Power Costs

Now that it's September we can look back on the hottest months of the summer and breathe a sigh of relief. New England – more importantly Vermont, and most importantly our rural electric co-op – suffered no rolling blackouts, brownouts, or other power shortages.

It could have happened. The National Climatic Data Center reported that Summer 2002 was "the warmest summer since 1936," during the Dust Bowl years. Locally, Worcester weatherman Roger Hill said that temperatures were less extreme. Precipitation was the bigger

weather story this year, Hill said, with a lot of thunder and lightning storms from May through July but drought-like conditions resuming in August. August was also the hottest month, with temperatures averaging 1.7 degrees above normal, and even in September central Vermont recorded days when the mercury soared into the 90s.

But the New England electric grid turned out to be in pretty good shape this year. In recent summers the electricity supply was threatened by a combination of hot weather – an ingredient in power

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Inside

2002 Capital Credit program. It's time for WEC to distribute equity payments to Co-op members. Details of this year's program, and a request to help us contact former members, on page 4.

Memories of 9/11. A year after that tragic day, WEC President Barry Bernstein contemplates its meaning for our communities. Page 3.

Concern about TIPS. A Co-op member queries Washington Electric about its intentions, and the general manager responds. See Letters, page 2.



More on Vermont and green energy on pages 6 & 7.

Vermont's alternative energy bill that never happened. A bill designed to stimulate renewable energy never saw the light of day. Page 6.

Washington Electric Cooperative
East Montpelier, VT 05651

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.

Unmasking

To The Editor:
Who wrote the excellent story about Gene Pierson in the latest issue ('All In A Day's Work At A Country Garage,' *Co-op Currents*, July/August 2002)? This was a very well done piece, combining the business perspective, changing technology and the flavor of Vermont today.

We are working with students at the Waits River Valley School in producing a school newspaper. One of important things to the writers and reporters, and to potential future writers, is the recognition that a byline brings.

The people at the Washington Electric Co-op have always seemed

like neighbors, largely because of their portrayal in *Currents*. Let us know who does the writing and the photography! Those are local jobs, too, and ones our young people can aspire to.



GP's Auto Service in East Corinth.

Terry King and Mary Alice Osborne (In The Woods In Vermont – but still connected) West Topsham

We appreciate the letter-writers' interest, and their support of Co-op Currents' efforts. Unless otherwise noted by a byline or photo credit, all the stories and photographs in *Co-op Currents* are produced by the editor, Will Lindner.

Concerned About 'TIPS'

To The Editor:
The executive branch of the federal government has recently proposed enlist-

ing people like linemen and meter readers as domestic spies against their customers in the program they call TIPS. I, and I'm sure many other members, would very much like to be assured that WEC will refuse to cooperate in any such program.

C. Leon Harris
Adamant

General manager responds...

Earlier this year, Attorney General Ashcroft announced the formation of a "Terrorism Information and Prevention System" (TIPS), in which it was proposed that employees of certain types of companies (utilities, fuel dealers, parcel delivery services and others) would be recruited to report suspicious activity that might be connected to terrorism. The type of employees who would be asked to participate are those whose jobs take them into peoples' homes or businesses, or onto their property.

This proposal raised many concerns from a wide variety of businesses as well as from politicians and interest groups across the political spectrum. The Barre-Montpelier Times Argus called a number of area businesses that might be included in TIPS, and the response from them

ranged from non-committal to highly skeptical. In that article, I responded on behalf of WEC to the effect that we would not ask our employees to be reporting on unspecified "suspicious" activity.

WEC has always and will continue to cooperate with law enforcement officials when there is reason to believe that our employees may have observed something related to a specific crime that has occurred. If police are investigating a break-in, theft, vandalism, arson or other incident, we would expect our employees to cooperate with that investigation, as any citizen should.

We do not believe that the Co-op's employees or employees of other types of businesses should be recruited and trained by the government to observe and report on unspecified "suspicious" activity.

As I said, the TIPS proposal received a lot of criticism from all quarters when it was proposed. To date, WEC has received no direct communication from any government agency on this. We do not intend to ask our employees to spy on Co-op members.

Avram Patt

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.

Right-Of-Way Reclearing Projects Scheduled

Affected Members with 'Special Trees' Should Call the Co-op

For the Period Through December of 2002

The Co-op will continue working to improve service reliability by reclearing power-line rights of way in the areas described below. Right-of-way reclearing normally involves removing trees and pruning vegetation for 15 feet on either side of a single-phase distribution line, and for 25 feet on either side of a three-phase main distribution line. Except where noted, all of these projects involve single-phase lines, those carried by poles without cross-bars. Reclearing projects often involve a tap. That's where a single-phase line takes power from another line.

Throughout the year, post cards are mailed to members notifying them that right-of-way maintenance is to take place. Also, WEC's automated message-delivery system will place a phone call (if a phone number is on file) to all households affected by such maintenance projects up to two or three weeks before work on the property is to begin. Calls will be placed in the evening when most members are likely to be home. If no one answers, Co-op staff will attempt to reach that member during the day.

Because the evening calls are automated, they cannot hold the line if, for example, a child answers. If you believe you may have received a call from WEC, please call during office hours to check. If you are notified that a portion of your property is to be recleared and you especially hope to save any particular trees that are within the right-of-way, call the Co-op.

The Co-op's Right-of-way Management Coordinator Mike Myers, also a forester, will be happy to talk with you about any problems.

Towns

Duxbury	Tap along Birch Street.
Chelsea	Line to Christine Lilyquist(CH-19).
Walden/Hardwick	Dutton Road to Nichols Pond.
Corinth	Line from Fairgrounds to Frank Williams (CO 61-B-5).
Wheelock/Stannard/Greensboro	Line from Flag Pond to Route 16.

Message from the President

FIRST 9/11 ANNIVERSARY TURNS THOUGHTS TO 'COMMUNITY'

By Barry Bernstein

As I listened to the radio in the background during most of the day on Wednesday, September 11, it was impossible not to think of where I had been a year ago on that day, and of the events that unfolded as a result of the terrorist attacks on 9/11 as well as the other major events of this past year.

The last 12 months have caused considerable anxiety for the American public. I'm thinking of the rash of anthrax letters following 9/11, and the bankruptcies of Enron, WorldCom and other corporations that violated the public trust and caused thousands of people to lose their jobs and the value of their pensions.

Last year on the morning of 9/11, I arrived at the Burlington airport, preparing to fly to Florida to give support to a friend who had been diagnosed with terminal cancer. I got to the airport shortly after the second plane hit the World Trade Center, but I was unaware of the attacks at the time. I noticed that my flight had been canceled, and that there was a quiet, eerie feeling in the terminal. A ticket agent soon told me what had happened.

There have been only a few times in my life that I can equate with the feelings I had that day. Particularly, I think of the assassinations of President John Kennedy, Senator Robert Kennedy and Rev. Martin Luther King. After each of those events I experienced stages of feelings that allowed me to cope with such stark and shocking reality. First came a feeling of great uncertainty, soon followed by a period of heightened consciousness that led me to focus on the importance of my family, my community and my values. I have observed that in the wake of these momentous events we eventually are able to draw on the tremendous survival strength within us, then get on with the issues of everyday life.

Recently, on the first anniversary of 9/11, many of us were compelled once again to slow our fast-paced lives, if just for a short time, and reflect upon all that has transpired. I strongly believe that a constructive response to the tragedies of

9/11 is to become more active and involved in our local communities.

The terrorist attacks were a horrible demonstration of what can happen when people are alienated, deprived, angry and resentful. Those same symptoms can occur in our own country – the school shootings of recent years come to mind – and in our own communities, though hopefully without the extreme results we saw in New York, Washington and Pennsylvania last year.

As citizens, we can encourage federal policies to address the myriad, serious problems our fellow human beings in other parts of the world endure, such as poverty, disease, contaminated water, warfare and ignorance. But perhaps we can have a more direct effect by focusing on the needs much closer to home.

I would urge us all to take a look at how we can get more involved locally – even though I recognize that many of us are already quite busy. Nonprofit organizations that confront hunger, domestic violence, the needs of children and other problems can always use our help. Our churches and temples, and even our own families, offer opportunities for us to be more deeply and meaningfully involved.

There are many ways to respond to what happened one year ago, but the best way I can think of is to begin building a better world by building a better community.

O'Brien film on heroin

In that vein I'd like to share an area of concern that is affecting many families right here in our communities and our state. We have all been reading of the growing use of heroin among young people in Vermont. There has been more news reporting recently on this subject than I can ever remember, and unfortu-

nately I have had the experience of talking with families who have been affected.

I recently attended the opening of a documentary film titled "Here Today," which was done by filmmaker Bess O'Brien. The subject was the heroin problem in St. Johnsbury and how people and families directly affected in that community are addressing it.

I was deeply moved by the film. Making the experience even more meaningful for me was the discussion that took place after the showing, between the audience and members of some of the families that were portrayed in O'Brien's film. People shared a breadth of personal experience with the subject matter that drove home

to everyone how tragic heroin addiction is for individuals, families and communities.

"Here Today" is being shown around Vermont. In the Washington Electric Co-op area it was scheduled to be shown at the Hardwick Town Hall on Sunday, September 22, and on Friday, September 27, in White River at St. Paul's Parish Hall. If you find out about these or other showings in time to attend them, I would urge you to do so. Bess O'Brien, of Kingdom County Productions in Barnet, and all the fami-

lies who shared their stories so openly are to be commended for giving us an opportunity to engage with a growing problem that knows no boundaries.

The terrorist attacks were a horrible demonstration of what can happen when people are alienated, deprived, angry and resentful. Those same symptoms can occur in our own communities.



WEC to deepen its commitment

Your electric co-op intends to take part, more than before, in community causes. The Board of Directors recently voted to increase the Co-op's contributions to local nonprofit organizations. The Board is working on a plan to present to the membership, which will allow members to donate their annual capital credit refunds to a fund which the Board would then use to ensure a greater contribution to community organizations that serve our membership. We hope to be able to have this option in place prior to capital credit distributions in 2003.

The anniversary of 9/11 gives us the opportunity to be thankful for our way of life and the great human spirit that enables us to move forward.

Washington Electric Co-op on September 11, 2001.

WEC 2002 Equity Distribution Plan; Co-op Seeks Former Members For Capital Credit Refunds

Washington Electric Cooperative is again preparing to issue capital credit refund checks to current and former members, as authorized by WEC's Board of Directors.

Under the 2002 Equity Distribution Plan, capital credits will be returned to eligible people who bought power from the consumer-owned electric utility during the two years 1983 and 2001. For the third consecutive year WEC will cap the refund program at \$200,000.

Capital credits are returned to members (customers) for those years in which WEC's revenues exceed its operating expenses. Essentially, capital credits are a way of dividing those surplus revenues – called margins – among the member-owners. The amount of a member's refund is based on the size of the Co-op's margins during the years in question, and how much electricity the member purchased. Each member has a capital credit account – which is a book-keeping entry managed on an annual basis by the Cooperative – in his/her name.

Half (\$100,000) of the money earmarked for the 2002 Equity Distribution Plan will go to members from the year 1983, when WEC's margins totaled \$208,284. The Board anticipates that the program will pay off approximately 50 percent of the 1983 margins. The remaining

\$100,000 in the 2002 Distribution Plan will address capital credits for 2001. WEC's margins last year totaled \$367,020, so the \$100,000 earmarked for capital credits amounts to 27 percent of the total. The Co-op will therefore calculate 27 percent of each member's 2001 capital credit account, and apply that sum to the member's refund (leaving the rest as credit in the member's account, payable in some future stage of WEC's refund program.) For former members, no longer with the Co-op, refunds of \$20 or more will be paid by check. Current members who are eligible for refunds based on their 1983 and/or 2001 payments will receive a credit in that amount on their November electric bill.

WEC has sent out notices of the 2002 Equity Distribution Plan to eligible former members, using the person's last-known address. Listed below are the names of people whose notices were returned as undeliverable. WEC is asking friends, acquaintances and relatives of the people listed here to contact those potential recipients or their rightful heirs, and have them call Washington Electric Cooperative at 802-223-5245 or toll free at 1-800-932-5245.

WEC will issue this year's capital credit refunds sometime in November 2002.

Abbiati, Stuart M	Blake, Bruce B	Coleman, Wilgar	Drown, James	Smoren, Rudolph	Hart, Stanley	Johnson, Jr., John E
Abel, Richard C	Blanchette, Norman W	Colli, Jr., George A	Duesing, Louis	Fredette, Duane	Hartley, Mary B & Wm O	Joly, David L & Judith A
Adams, Paul	Blow, Paul J	Collins, Carol J	Duffy, Joann S	French Jr, Bert S	Hartman, Jeffrey J	Jones, Clifton H
Adsit, Suzanne	Boucher, Ronald L &	Colson, Frank A	Duggan, Rita C	French, Colleen	Haskell, Catherine	Jones, Donald
Ahladas, Penny	Jeanne	Comley, James & Caroline	Duketete, Paul	French, William J	Hayden, Edward V	Jones, Peter J
Alden, George P	Boulanger, Claude &	Comolli, Elio	Dunbar, Bessie B	Freund, Allen & Ellen	Haydon, Harold	Jones, Robert W
Aldrich, Byron w & Roberta	Madeline	Condit, Gloria A	Dunbar, Duane H & Jane	Fullerton, Michael F	Hayes, Walter	Jones, William B
Aldrich, Georgia	Bower, Ronald F	Congdon, John H	Dunham, Lloyd J	Gaboriault, Thomas R	Hayes, William	Jordan PD Sportsman Club
Alexander, Rhoda Triplett	Bradshaw, Barry F	Conn, Ray	Dunham, Violet	Gadaree, Harold	Haynes Jr., Robert E	Joslyn, Sharon
Allee, Robert E	Breer, Maria	Cooney-Moore, Maureen	Dunn Jr, Richard F	Gahagen, Jacqueline	Haynes, Charles W &	Joyal, Pearl
Ames, Kenneth	Briggs, Stephen L	Cordaro, Nell	Dux, Thomas J	Gaillard, David D & H Ruth	Susan H	Justice, Marjorie
Anders, Irving	Broe, Joan M	Corriveau, Bruce	Dwinell, Berton W	Gaines, Jeffrey	Hazelton, Brian & Valerie	Kalinowski, Franklin A
Anderson, Paul & Jody	Brooks, Karen	Corriveau, Juliett	Eckstein, Edward	Gajewski, Erban & Viola	Heath, Robin	Kampmann, Phebe
Andrews, Kathleen	Brown, Dale & Judith H	Cotnoir, Randy	Edgerton, Robin E	Gajewski, Joseph & Helen	Hebert, Delores J	Kappler, Peter H & Jane A
Angeli, Anthony & Annette	Brown, David	Counter, Dorothy B	Edson, Nancy	Galbreath, Maurice &	Heffernan, Michael N	Kaufman, Nancy
Apolito, Sandra & John	Brown, Katherine L	Covey, John	Eldred, Allan	Beverly L	Hegg, Lee Ann	Kaula, Joan
Ashford, Arnold R	Brown, Kenneth	Cox, Daniel C	Emerson, Lawrence	Gale, Pliny	Heise, Bernard	Keith, Gerald M &
Assad, Dennis G	Brown, Philip F	Cressey, Earl R &	Emery, Debra	Gale, Pliny N	Hempt, F.	Dorothy M
Atkinson, Elliot R	Brown, Robert	Renette A	Emery, Luvia	Gandin, Dan L & Lerinda P	Henderson, Donna	Kelbaugh, Jayson
Atkinson, Polly	Brownell, Madeleine P	Crouse, Allen	Emery, Vena S	Garcia, Norbert O	Herron, Davis	Kessler, Rodger
Atwater, Bonnie F &	Bryant & Dailey	D'Agostino, James	Eniti, Anita T	Gardner, Seth & Carol	Hersey, Lee C	Kilmurry, John M
Thomas V	Buck, Arthur D	Dailey, Mrs. Elwin	Entriken, Walter	Gates, Clay	Hibbert, Robert & Sue	Kindestin, Joann F
Bador, Clayton F & Elsie M	Buck, Barbara J	Dailey, Nanna	Espasadin, Joseph	Geake, Walter	Higgins, Andrew	Kingsbury, L
Baird, Donald	Buckley, Charles	Dailey, Normand	Estate of Frank Schlosser	Gehr, William G	Hill, Charlotte	Kittredge, Roy
Baird, Kenneth R	Burke, Patrick J	Daley, George	Estate of John Ennis	Gendron, Alphonse	Hill, David C	Knapp, James E &
Ballschneider, George &	Burke, Thomas R	Dalley, Gary E & Christine I	Estate of Joseph Bourdeau	Gerow, Stanley & Jeannine	Hilliari, B H	Marilyn M
Gregg	Burkholder, Bonnie L &	Danforth, Robert	Estate of Lawrence Bond	Getty, Alice S	Hiltz, Frank & Brenda	Knowles, Richard
Ballschneider, George &	Steven L	Danziger, Jethro	Estate of Lillian Boudreau	Giacherio, Peter	Hoar, Charles E & Ethel M	Knowles, Winston
Irene	Bushey, Reed A	Darling, Charlene & Darling	Estate of Lucy Beegan	Gile, Ramona	Hoar, Raymond B	Knox Jr., Gordon
Balzanelli, Richard &	C & R Farm	Sr., David N	Estate of Robert Cross	Gochee, David O	Hodgkins Sr., John R	Komblith, Polly
Jeanne	Caesar, William	Darrow, Agnes	Estate of Theophilus Taylor	Goddard, Elizabeth A	Hoffman, Alfred R & Carol-	Kuehn, Kate E
Barbieri, Nichola J	Cain Jr., David E	David & Gertrude Cohen	Estate of Wayne R. Lewis	Gokey, Marian M	Rae	Kumpf, Milton F
Barden, Norman L	Calderara, Joseph A	Charitable Trust	Evans, Charles G	Golbranson, John &	Hoffman, Mark R & Miller,	Ladd, John P
Barker, James	Calderwood, Wesley	Davidson, Albert W & Lois	Evans, Craig F	Dorothy	Janet	Ladd, Thurman
Barker, Walter	Campbell, Jon M	Davidson, Ralph P	Fair, Forrest G	Gonyeau, William F	Hoffman, Robert G	Lakatos, Peter
Barnett, Harold C	Campbell, Richard	Davis, Anne T	Fairbanks Jr, John A &	Goodine, Henry A	Hoiska, Bentti	Lamb Sr, Jonathan A
Barnhart, Katherine	Carbo, Judith	Davis, Loretta	Connie T	Goodwin, Doris	Holloway, Leith	Landa, Anita
Barnocky, Stephen W	Carbone, Arnold & Kathy	Davis, Norman	Farland, Eugene W &	Goss, John & Suzanne	Holmstrom, Raymond &	Landry, Alex
Barrows, Michael	Carlson, Katherine M	Deangelis, Joseph &	Katherine	Graves, Virginia H	Lister, Robert G	Landry, William B
Bates, William & Trudi	Carminati, Gene M &	Deborah	Farnham, Carl	Gray, James R	Hook, Wayne A	Langmaid, Stephan
Bayley, Anna R	Judith L	Deaquair, Dwight	Farnham, Carl R & Sally	Gray, Malcolm & Shapiro	Hooper, C Jay & Jacquelyn	Lanning, Stephen A
Bayne, David	Caron, Charles F	Decola, Barry & M Kelley	Featherstone, Paul	Gray, Ronald & Patricia	Hooper, Glayds S	LaPerle, Barbara &
Beane, Marion	Carroll, James & Nancy C	Decoteau, Gary & Carol	Fenoff, Bertram & Barbara	Greaves, Mark	Hoover, Karen S	Laurence
Beaucage, Donald &	Carruth, Philip W	Deforge, Robert	Ferguson, Floyd	Green Land Inc.	Hopkins, Flora B & Hopkins	Laperle, Romeo & Gertrude
Deborah	Casavant, Richard & Carole	Deluca, Joseph	Fielder, Paul H	Greenhouse, Rebecca	Sr., Stephen	Larivee, Roland
Beck, Theodor C	Cathrew, Ralph S &	Dematteis, Joseph	Filiault, Richard	Greenway, Maurice	Hopkins, Leota C & Ralph A	Larow, Gary
Beckler, Minnie W	Priscilla C	Denault, Raymond	Finelli, Janis	Gregory, Helen M	Howard, Harold F	Larsson, Denis & Janisse
Beckly, Eva M	Cavalier, Marie	Deneergaard, Chris	Finley, Marilyn B	Griffith, Peter	Hubbard, Eugene C	Lavalette, Zelma
Beebe Jr, Charles C	Chaffee, Robert	Deneergaard, Chris	Fisher, Carleton	Griswold, Stillma	Hubbell, Jane S	Lavalley, Francis L
Beiley, Janice	Chamberlain, Judith A	Deneergaard, Chris	Fisk, Floyd	Grogan Robert S &	Hutchins, Clyde H &	Laware, Barry M
Bell, Robert H	Champanier, Paul L	Deneergard, Chris	Fitch, Arthur	Barbara P	Cecile C	Lawless, Rowena J &
Bello, Donna & Gary	Champany, Irene	Desantis, Sarah	Flannigan, Steven M &	Grove, Richard S	Hyde, Jack	Morehouse, Lawrence
Bengel, James M	Chater, E W	Deutsch, Irving & Wendy	Lisette L	Gurnett L A	Ickovic, Thomas	Lawliss, G C
Bennett Jr, Donald S &	Cheney, Linda L	Dexter, Robert	Fletcher, Marion	Haddad, Alfred J	Isham, E Joyce	Lawliss, Harold
David K Sturges	Chicoine, Roland	Dexter, Robert R	Flood, Richard	Haggett, Clifton E	Isley, Sandra	Lawrence Sr, Irving W &
Benoit, John & Pam	Chipman, Stanley J &	Dickinson, C F	Flye, James	Hale, Robert A & Marjorie	Jackman, Alan	Glady's W
Berman, Mary D	Beverly A	Diefenbach, John	Fontaine, Marc	Hall Jr., Kenneth J	Jackson, Muriel L	Lawton, Mary B
Berno, Howard M	Choquette, Jane	Diemer, Roy	Fornwalt, Jeffrey	Hall Jr., Kenneth J &	Janeway, Charles	Leach, Robert W
Berry, Arnold	Chouinard, Raymond	Dion, Raymond	Forrend, Jon	Linda L	Jaroch Jr, Eugene R	Leland, Luise G
Berry, Gladys	Christenson, Norman	Disalvo, Bradley R	Fournier, Jeannette B	Hamelin, Charles E	Jedinak, Gary N	Lemay, George E
Bessette, Arnold	Christopher, James M	Disenhaus, Nancy & Cate,	Fowle, Howard F	Hamilton, R D	Jefferys, William H & Ena V	Lemnah, Herbert
Bessette, Michael	Cianciola, David P & Kerry	Thomas	Fowler, Bruce N	Hanson, Lloyd	Jerome, Edward A	Lech, Carol A
Bird, Edward E & Janet R	Clark, Arnold	Domencich, Thomas A	Fowler, Howard	Hardie, Philo J	Jerome, Kathlee	Lerner, Earl
Bird, Norman	Cloud, Rhoda I	Downing, Maurice	Fowler, Karen	Harris, Lois & Crespin,	Johnson, Andrew	Lever, Roger L
Bishop Jr, Leroy J	Coburn, Jr., Donald A	Doyle, Patrick M	Fox, Mildred	Debra	Johnson, Arthur & Juanita J	Levy, Paul
Blair, Robert J	Cole, Arthur	Driscoll, Peter	Franzone, Vincent &	Hart, Lillian	Johnson, Henning W	Lewis, Joyce A

Lewis, Raymond	McLaughlin, Harold & Dona T	Nye, Karl	Potrzeba, Robert J & Elizabeth	Sahlman, Peggy Jo	Stanaway, Susan D	Wassell, Eleanor P
Lewis, Wayne R	McQuade, George K	O'Brien, William R	Elizabeth	Saltimbocca, N V	Starrett, Corinne	Watkin, T S & William
Lightfoot, William F	Mears, Edgar	Olson, Steig	Potter, Fletche R	Saltimbocca, N V	Stern, Catherine	Watson, Ethel L
Lillie, Frank	Meech, George	Ordway, Kelvin E	Pratt, Rebecca & Bruce R	Saman, Peter	Stohr, Rose	Watson, Harold
Lipski, Jed	Menard, Robert W	Oriol, Jack	Preble, W James & Virginia	Sanborn, Kendall A	Story, Helen B	Weart, Richard C & Theresa
Lisle, Scott & Consuelo P	Mercadante, John & Barbara	O'Riordan, Kevin	Pregent, Alice	Sancibrian, William	Stryker, Jon	Weber, David J
Litwin, George	Ortiz, Angel J	Ortiz, Richard & Melanie	Pregent, Raymond & Elizabeth	Sare, Ronald L	Stuart, Richard	Webster, Russell G
Longley, Brenda	Ortiz, Richard & Melanie	Osgood, Alzada A	Prosperi, Robert	Sargent, Charles A	Subasic, Joseph	Wechsler, Elizabeth & Robert
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Renewable Energy

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Yet these companies are also survivors.

"I'd say 95 percent of the renewable-energy businesses that started in the '80s are gone," says Seddon. "A big reason was that (President) Ronald Reagan rescinded federal tax credits for renewables in 1985."

They have found their niches in Denmark, Germany, Spain and other countries determined to shed their dependence on nuclear energy, and in states like California, New

Jersey and Massachusetts that promote solar and wind technologies to protect themselves from volatile fossil fuel markets.

But as for actually working in Vermont... Well, that's a different matter. Blittersdorf estimates that NRG Systems does 40 percent of its business in the U.S. (the rest, overseas). So what portion of that is in Vermont?

He laughs. "About point-zero-zero-one percent. In Vermont we talk about being a green state, but (that's) Disneyland. We import 90 percent of our energy."

Northern Power Systems has a limited number of Vermont projects, but generally looks farther afield for its work.

"The U.S. is just out-to-lunch on (investment in renewable energy)," Coleman said at WEC's May annual meeting.

Solar Works now derives just 5 percent of its income from its home state, Seddon estimates. But the company promotes Vermont school-based programs that foster enthusiasm for solar power.

After all, children are likely to live most of their lives in a world powered by renewable energy.

"Shell expects not to be an oil company by 2030," Seddon says.

"By 2050, solar and other renewables will be providing the world's energy. There's not a single long-range energy report that contradicts that."

Beth Sachs of the Burlington-based Vermont Energy Investment Corp. concurs.

"The most liberal and conservative views of when we're going to run out of fossil fuels aren't that far apart," says Sachs. "What energy efficiency is going to do is to help us build a bridge to renewables."

Why Vermont's political, economic and business leaders seem uninterested in

what lies beyond that bridge baffles Seddon. The state has perhaps the highest per-capita number of solar installations in the country – many of them functioning remnants of the era before Reagan rescinded renewable-energy tax credits. "Clean energy funds are an economic-development engine. The fact that the Legislature (doesn't have) the foresight to capitalize on that drives me wild."

On the bright side

Contrary to public perception, advocates say there is no dearth of the natural resources requisite for green, renewable power. Despite New England's reputation for gloomy weather, there is sufficient sunshine for grid-connected businesses and homeowners to benefit from Vermont's 1998 net-metering law, which permits people who generate their own electricity to discharge excess power into the local utility lines; they earn credits for that power, and pay only for the "net" power they use from the utility.

Solar energy systems remain expensive, but a provision of the net metering law waives the 5-percent sales tax on equipment for net-metering projects. In 2002 the Legislature extended that exemption to solar hot water systems and

off-grid installations.

Perhaps most surprising is the outlook for wind-generated electricity in the

Green Mountain State, a state some call "the Kuwait of New England" for its wind-power potential.

"Wind is one of our biggest natural

resources," says Blittersdorf, whose company tests its measurement devices at Vermont locations. "We have a raw potential of 6,000 to 7,000 megawatts of wind. The state's average electricity load is 650 to 700 megawatts, so potentially we have 10 times enough wind to meet our average energy needs."

But Vermont has just one wind farm – Green Mountain Power Corp.'s Searsburg installation, where 11 turbines generate six megawatts (MW) of electricity, roughly equivalent to the power needs of 2,000 homes.

Things may change. Washington Electric Co-op is in the early planning stages for wind power, facilitated by a \$1-million federal grant obtained with the help of U.S. Rep. Bernard Sanders.

"Our needs are smaller than what an economically designed wind project would produce," says WEC General Manager Avram Patt, "so we will probably do our project in conjunction with some

'Shell expects not to be an oil company by 2030.'

-- Leigh Seddon

The Energy Bill That Wasn't

As the 2002 session of the Vermont Legislature convened in January, renewable energy believers had their hopes pinned on S. 264.

The bill, titled "An Act Relating To Promotion of Energy Efficiency and Renewable Electric Generation," would not make Vermont another Massachusetts, where a tax of .2 cents per kilowatt hour on electric ratepayers nets \$40 million annually to promote renewable energy; nor a California, where consumers receive 50-percent rebates on the cost of wind and solar equipment.

But it contained provisions that supporters believed would help launch a vigorous renewable-energy industry, creating jobs, mitigating environmental degradation caused by fossil-fuel and nuclear energy production, and increasing Vermont's energy independence. The bill would have:

- **promoted "green pricing,"** in which electric utilities provide customers an opportunity to pay a premium on their monthly charges to support renewable-energy projects;
- **instituted Renewable Portfolio Standards (RPS),** requiring utilities to include among their sources of wholesale electricity certain minimum percentages of green power;
- **introduced group net metering,** thereby expanding Vermont's 1998 net-metering law, which applies only to individuals;
- **provided incentives for people to purchase renewable-energy systems** through a pilot program funded not by taxpayers but by \$750,000 of federal oil-overcharge money;
- **expanded the sales tax exemption for renewable-energy equipment** to include solar hot-water systems and off-grid installations, rather than net-metering projects only.

Proponents were elated when the Senate passed S.264 by a vote of 27-1. But trouble arose immediately in the House Commerce Committee. The first thing to go was Renewable Portfolio Standards (RPS) for utilities, the only provision that represented an actual requirement of anyone to move toward green energy. And that requirement, in gradual installments over three years, reached only to 3 percent.

The legislators' concern was Vermont's business climate.

"Our research determined that even if you went up to 4 percent (RPS) by 2009, the impact would be less than 1 percent (in rate hikes)," said Scudder Parker of the

Department of Public Service, an advocate and designer of the bill. Notes Andy Perchlik of Renewable Energy Vermont (REV), "One percent is a small price to pay as an insurance policy against (dependence on) Middle Eastern oil."

No matter. Portfolio standards were gone.

Next on the chopping block was the \$750,000 for green-energy incentives for consumers. At least one small wind-energy company folded after the loss of this provision, its owner claiming that his potential customers were counting on these economic incentives. Leigh Seddon, of Solar Works Inc. in Montpelier, was sympathetic. "We sold zero systems in Vermont during this period," he said, "because people were waiting for the tax credit or rebate to come into effect."

If there was any life left in the bill it was extinguished when representatives of IBM objected to the voluntary green-pricing provision. With rumors circulating that IBM was planning to eliminate jobs in Vermont (it did so a week later), IBM's community-relations officer told House members that green pricing would put pressure on the company to buy more expensive electricity.


"We're reluctant, in this economic climate," said House Speaker Walter Freed (R-Dorset), "to do anything that would strain IBM's situation."

Environmentalists were stunned.

"Renewable portfolio standards were already out of the picture," said Patrick Berry of the Vermont Natural Resources Council. "There was nothing left in the bill that was onerous to them, (but) they made the roundabout argument that if green pricing became available, if IBM opted not to do that it would look bad for them publicly."

S. 264 was dead. The House did rescue two remaining provisions by attaching them to an unrelated energy law: Group net metering survived by becoming *farm* net metering, applying principally to methane electric-generation systems; and the sales tax exemption on equipment for net-metering installations was extended to solar hot-water and off-grid renewable energy systems.

REV's Andy Perchlik said that the downfall of the promising bill was that no true champion of renewable energy emerged in the House.

"But it took the bottle bill six years to get passed," he reasoned. "There are a lot of positive things to look at, and that's the only way we're going to move forward. There will be some kind of renewable-energy bill for the next session. It's too early to know what that will be, but we're going to bring them a bill." 

other wind-power developer – which also means there will be more renewable energy available for other Vermonters.”

Burlington Electric Department also has wind power on its radar screen. A BED representative said in June that the municipally owned company was “at the edge of committing to (a long-term arrangement for) wind.”

WEC and BED are already setting high standards for electric utilities by boosting the green portion of their power “portfolios.” WEC leads the way, with 40 percent of its wholesale power coming from renewable sources. BED’s mix is 30-percent green, owing to its McNeil woodchip generating facility.

And therein lies Vermont’s verifiable claim to national leadership: biomass incineration for both energy production (Vermont has two woodchip power-generation facilities) and energy efficiency.

“In terms of using wood for community applications, Vermont is unquestionably the national leader,” says Tim Maker, director of the Biomass Energy Resource Center in Montpelier. “Over 15 years we’ve demonstrated that the technology is there, that it’s not a nuisance to operate, that it’s economical and it keeps resources and money at home.”

Twenty-five Vermont schools now heat with modern woodchip incinerators. On average, they have reduced their heating costs by 75-80 percent, according to Maker.

However, he concedes, “We don’t claim that wood is the cleanest form of renewable energy. We’re working hard to develop technology that will bring emissions close to those of natural gas, which is the cleanest-burning fossil fuel. At Union-32 High School particulate emissions from the furnace are 18 times better than a modern residential wood stove.”

‘Out to lunch’

Since resources are not Vermont’s problem, proponents see a crucial role for the public sector to stimulate renewable-energy development. Andy Perchlik, director of Renewable Energy Vermont (REV, of which WEC is a member), says, “This state has failed to create major initiatives to promote and recruit renewable-energy companies and make it a focus of

economic development. That’s what we’re pushing.”

Perchlik suggests installing solar panels on more state buildings, and laments that the new interstate rest areas will not use renewable energy. (“They could be demonstration sites.”) The state prison

being built in Springfield will incorporate some excellent efficiency measures, but no renewable energy – another missed opportunity. The most responsive state agency, Perchlik says, is the Department of Forest & Parks, which uses solar technology at certain campgrounds.

On the whole, Perchlik sees state leadership as shortsighted. “Some business interests have pounded it into their heads that the cost of electricity is Vermont’s number-one problem,” and that renewables would exacerbate that situation. That led

to the recent defeat of legislation that would have provided \$750,000 of oil overcharge money – derived from a federal legal settlement with the petroleum industry – for a program of incentives for grid-connected home energy systems (see “The Energy Bill That Wasn’t,” page 6).

“That \$750,000,” says Scudder Parker of the Department of Public Service, “might have stimulated \$2 million to \$3 million of activity.”

The lack of state support for renewables is not the only obstacle facing wind-power entrepreneurs. A growing aesthetics debate threatens to split the conservation community, as trails organizations and property owners enamored of unspoiled views object to wind-turbine proposals – and in turn are labeled “NIMBYs” by green-power proponents.

Under Act 248, every homeowner who wants to install a net-metered renewable-energy system must obtain a Certificate of Public Good (CPG) from the state Public Service Board (PSB). As with Act 250, the process invites public input.

“It takes just one person to object, and it stops everything completely,” complained a small wind-power entrepreneur who recently folded his business.

Alternatively, wind power enthusiasts can forego the Certificate of Public Good and simply obtain local zoning permits for their turbines. But without a CPG they cannot connect to the power grid and

obtain the benefits of net metering.

“Our public policy should be to encourage grid connection,” says Solar Works’ Leigh Seddon, “which feeds clean energy back into the system and reduces the use of fossil fuels and nuclear power.”

A working landscape

Peter Meyer, a hearing officer with the PSB, contends that most net-metering systems are quickly approved. In early June the board issued its 62nd certificate. Most were solar projects, but Meyer estimates that 14 or 15 were wind turbines.

“The question before the board,” he says, “is whether the benefits (to the community) of receiving the net-metered power outweigh any adverse local aesthetic impacts.”

That analysis has implications for the state’s wind-energy future. It favors larger, utility-scale projects, which may be visually more intrusive than backyard towers and turbines but will provide a more quantifiable public good.

The laborious siting of Green Mountain Power’s Searsburg wind farm provides clues to a project’s success. Good sites are high enough to capture the wind resource but do not despoil prominent ridge lines; they are reasonably near electric transmission lines, and ideally can be accessed by an existing road. They need not be invisible.

With these issues in mind, the DPS and Renewable Energy Vermont, with a \$45,000 federal grant, have convened government administrators, utility representatives, wind-power developers, renewable-energy advocates, representatives of trails associations and planning commissions, seeking to build consensus on the issues that could torpedo wind-

power proposals.

“We’ve talked about aesthetics, endangered species, wildlife, avian mortality (birds killed by turbine blades), the economic viability of sites,” says Parker, of the DPS.


A public-education component is a must.

“People need a way of being prepared to deal with proposals, which must come forward in a logical and good-faith way,” says WEC’s Avram Patt. “We’ve had the opposite experience with cell towers, where suddenly a bunch of companies started saying ‘We want to put one here and we want one there.’”

“Aesthetics is in the eye of the beholder,” Patt says, “but experience indicates that when people understand and think about what these towers and turbines are doing it influences their reactions. Many people think they are quite beautiful and graceful.”

The discussion of renewable energy could lead Vermont to reconsider its dearly held concept of a working landscape. The economic, cultural and spiritual values of a working agricultural or forested landscape are widely accepted. But while renewable-energy advocates foresee opportunities for clean industries that could make our state more self-reliant, independent and prosperous, they involve new uses for the land.

Vermont has decisions to make.

(This article is condensed from an original version that appeared in the Summer 2002 edition of the Vermont Environmental Report, published by the Vermont Natural Resources Council. Interested readers can contact VNRC at 802-223-2328.) 



Sandy Macys

Will there be more wind turbines on Vermont’s landscape? Vermonters are divided.

Summer Power Costs

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shortages because consumers crank up their air conditioners – and temporary shut-downs of certain generation resources (mainly nuclear power plants) for repairs. In 2002 the region’s electric generation facilities for the most part operated normally.

As a result, the independent systems operator – ISO New England, which is based in Massachusetts and coordinates power transmission for all the region’s utilities – never even issued an alert about a possible shortage.

“There are a series of protocols that ISO uses to start letting people know that there might be a problem,” said Patt. “This year there were occasional calls for voluntary conservation measures, but that was all. The system has various reserves available, power plants that can be called into action if necessary. There were a few days when those reserves got slightly lower than the ISO would like, but they proved to be adequate throughout the season.”

Strategic hedge

Power supply is one thing. Power cost is another.

And while it’s essentially the responsibility of the ISO to ensure that sufficient power can be generated and transported throughout the region, it is the Co-op’s responsibility to obtain wholesale power as affordably for its members as it can.

WEC’s strategy this summer was to buy a little “insurance.” Taking direction from the Board of Directors’ Power and Operations Committee, Stan Faryniarz of La Capra Associates, WEC’s energy consultant, pre-purchased small blocks of extra power that would be available during June, July and August, at specific times of day when spikes in both energy usage and cost were most likely to occur.

As it turned out, those blocks of contracted power usually were more expensive than what WEC would have paid on the spot market. Contracting for the higher-cost power was a calculated risk, undertaken because if electric supplies got low, prices would rise. Having power locked in at a certain price could

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Summer Power Costs

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have enabled the Co-op to dodge an expensive bullet.

"WEC is almost fully supplied for its needs by electricity resources already under long-term contract," said Faryniarz, who lives in Vermont but works for La Capra in Boston. "But a small amount of its power needs – around 10 percent – is met through purchases on the spot market. That has to be done, because a utility's electric loads will fluctuate during the day."

Contracted sources of power, on the other hand, generally provide electricity at a fairly stable and consistent level. At times WEC's needs can exceed its supply of contracted power.

Nor is it any mystery when those times are likely to be.

"In the summer the first peak is from roughly 6 a.m. to 8 a.m., as folks get up and get their day going," said Faryniarz. "Then it dips off during the middle of the day, then typically peaks even higher from 5:00 to 7:00 in the evening. People are coming back home, doing their cooking, using their appliances, turning on lights and TV, and maybe turning up their air conditioning. That's a typical pattern for a utility with predominantly residential customers."

Last summer, the Co-op reasoned that if it was going to need extra power it would be during those two periods of the day. And since the same thing would be happening all over New England, prices on the electric spot market could climb.

That's why the Co-op locked in a certain amount of power, twice a day, at a fixed price (Faryniarz calls this "a strategic-hedge forward purchase"): to prevent being caught short and really being taken – financially – to the cleaners.

There were occasions when WEC was glad it had done so. One of those times was August 14.

"For a few hours that day power reached its legal price cap of \$1,000 per megawatt hour (MWH)," said Faryniarz. "Normally, on average over a year, the price is more like \$30/MWH. Under our forward contract for those time periods we were paying close to \$58/MWH."


Electricity is unlike other commodities. You can't buy it and put it on the shelf for later. It has to be used while the electrons are energized. Therefore, the electricity market is always in motion. If that \$58 power is not needed on a given morning or afternoon, WEC (through the ISO system) can sell it to another buyer and recoup some of the cost.

"By committing to these blocks of power ahead of time we created a hedge against potential price extremes," Faryniarz said. "It doesn't take too long for a utility to suffer bill shock when you're paying hundreds of dollars per megawatt hour."

For the most part, the "insurance" wasn't needed this summer. "We paid a

little more to avoid the possibility of maximum regret," Faryniarz conceded.

For his part, General Manager Patt endorsed the strategy.

"You buy car insurance," he said, "but you don't kick yourself because you didn't have an accident." 

WEC An Anomaly In Increasingly Urban New England

Preparing financially for its summer electricity needs is, for Washington Electric Co-op, a little bit like traveling to some foreign land and buying funny-looking currency.

That's because WEC is one of a dwindling number of New England utilities that still experience their peak electricity demands in the winter, not in summer. But when it plans for its power needs and projects costs for June, July and August, the Co-op has to think a little bit like those more urban utilities that set the pace for the summer electricity market. Even in New England, air conditioning in homes, offices and manufacturing plants is a major factor in boosting electricity usage, to the point that most utilities and their customers use more power in the summertime than they do in the cold, dark winter for heat and lights.

When a commodity is in greatest demand, its price increases proportionally. Therefore, in the summer electricity on the spot market will often be more expensive than in winter. Costs can soar on the hottest days, when millions are seeking the relief of air conditioning on top of the burdens already placed upon the electric system by manufacturing, industries, airports, commerce, traffic control and everything else.

"Summer peaking isn't only happening in Boston, Massachusetts and Providence, Rhode Island," said Stan Faryniarz, an energy economist at La Capra Associates in Boston, WEC's energy consultant. "Even Green Mountain Power and BED (Burlington Electric Department) now peak in summer. There are still places, particularly in Vermont, Maine and New Hampshire, where utilities like WEC peak in the winter. However, as air conditioning use in northern New England increases, and electricity-intensive wintertime uses – like space- and water-heating – decrease, fewer and fewer utilities will remain winter-peaking."

But it's not just air conditioning that makes WEC different from GMP and BED. (Washington Electric Co-op members, too, are putting AC in their homes.) WEC's winter-peaking pattern is also a product of its rural, residential membership. The Co-op has few industries or large institutions on its power lines; and of those few large power users, several are

schools that are not in session during the summer.

Also, undoubtedly a high percentage of Co-op members leave their homes each day to go to work, (hopefully) moderating their AC settings when they do.

Good 'shape'

It turns out that this "load shape" – WEC's system-wide power-usage pattern – works out well financially for the Co-op.


"WEC is not as exposed (to potential price spikes) as most utilities in New England," said Faryniarz. "Others have a load shape that requires them to purchase the greatest amount of power during those hottest summer hours, between 2:00 and 5:00 p.m., when companies are cranking their air conditioning in the workplace. WEC's shape, with its mid-day usage 'trough,' provides a built-in hedge against potentially high summer power costs."

WEC also has done certain things to protect itself against price spikes. This summer the Co-op bought blocks of power which, though not inexpensive, provided a measure of insurance against worst-case cost scenarios (see 'Summer Power Costs' on page 1).

And, said Faryniarz, "WEC has a lot of its power locked up ahead of time with long-term power contracts. But there are times when the Co-op's loads

(electricity needs) exceed its contracted power supply, and vice-versa. At those times it must buy and sell power to match supply with demand on an hour-by-hour basis. That's the function of the spot market."

Finally, the very fact that WEC is still peaking in the winter constitutes another built-in hedge against wholesale electricity price spikes. No one could argue that the Co-op's rates are low; that would be impossible to accomplish for a rural New England utility with an average of only 7.5 members per mile of power line. But since the rest of the region has shifted its peak demand to summertime, the chances of a winter price spike hitting \$1,000 per megawatt hour – which happened for three hours on August 14 – are remote.

"Actually," said Faryniarz, "we probably sold more power back to the grid that day... and got a nice price for it." 



WEC still winter-peaking? Like, no kiddin'.

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