

# WEC CO-OP CURRENTS

## 'Adult Education for High School Students'

### Students Get Down and Dirty at Summer Energy Camp

They were told to bring old clothes and be prepared to get dirty. Although it was mid-summer they would need suitable clothes for working in both a cool, drafty basement and a hot, stuffy attic.

*(First energy-related lesson: heat rises.)*

On that final day of the week-long Summer Energy Camp, when teachers Charlie Wanzer and Michael Horowitz took their teenaged campers to the leaky 19th-century home of an East Montpelier dairy farmer armed with caulk, insulation, and weather-stripping, the conditions were exactly as advertised. They crept around the ancient stonework in the farmhouse's chilly, low-ceilinged basement, forced pink board and caulk into hard-to-reach gaps between ceilings and walls, tacked weather stripping on the doors, and climbed into the attic with a bright light to install insulation.

For some of the students, the classroom work earlier in the week was far more appealing.

"The camp was great," said Julia Gulka, 17, a senior this year at Cabot School. "I liked how there was a classroom component, and also hands-on, doing the dirty work – both sides of the energy field. I don't think I'd want to do [the latter] for a job."

Charlie Spence, now a senior at Twinfield, had the opposite reaction. "I'm not that fond of the classroom," said Charlie, 17. "I crawled up to work in the attic. I liked that – but I kind of collapsed up there. I'm not used to breathing in that type of confined space."

Alyssa Johnson-Kurts of Worcester, a 14-year-old freshman this year at U-32, had her own take on the experience.

"Honestly, I went to camp having pretty much no idea what I was getting myself into," said Alyssa. "Energy auditing and weatherization are not what I want my field of expertise to be in the future – but I feel like my career will be environmentally centered, definitely. I think the camp really showed us how to do some cool stuff." But referring to the work at the farmhouse she added, "[including] what I don't want to do. I'd rather do more in the way of politics – or maybe engineering; but less hands-on."

Charlie and Julia are also contemplating work in the energy field – this school year.

"We have to do a senior project," said Julia (who, like Charlie and Alyssa, lives in a Washington Electric Co-op-member household), "and I decided to look at the carbon footprint of our whole school. Energy

*continued on page 8*



Wendell D. Cilley, 1951-2008

## PSB Approves Coventry Expansion

### WEC To Hold Membership Vote Immediately

The Vermont Public Service Board has approved Washington Electric Cooperative's application for permission to install a fifth engine at WEC's electric-generating station at the Coventry, Vermont, landfill. The PSB ruling came on Wednesday, September 17, as *Co-op Currents* was going to press.

WEC will now take the next step

– holding a vote of the membership on the Coventry expansion proposal. Plans were for the Co-op to mail ballots to all WEC members on Friday, September 19. The ballots might arrive sooner than this issue of *Co-op Currents*. Along with the ballots, members will receive voting instructions and information on the

*continued on page 2*

**Washington Electric Cooperative**  
East Montpelier, VT 05651

### Inside

**2008 Capital Credits program.** The time for WEC to distribute annual equity payments to Co-op members is approaching. Details of this year's program, and a request to help us reach former members who qualify, are on page 4.

**Wendell Cilley, a five-term member of the WEC board,** has died unexpectedly. Friends and co-workers share their memories of Wendell on page 3.

**Washington Electric's GIS system helps the Co-op identify and correct outages** more rapidly. But it requires constant, specialized updating. Page 6.

**... and that updating (above) is performed by Sandy Gendron.** Get acquainted with Sandy on page 2.



Lillian Alexander of Cabot applies pink board and caulk to tighten up an air leak at an East Montpelier home. Lillian was one of nine area students involved in July's Summer Energy Camp. Story on page 1.

# Kawasakis and GIS

## Roads and Maps Make Up Her Day

Sandy Gendron has long dark hair, a ready smile, and an office bedecked with plants and photos of her large family – including her two children (ages 19 and 20), her parents, and her nine (count 'em) brothers and sisters.

Her title at Washington Electric Co-op is Information Database Technician – though that doesn't tell you much about her work, which is quite specialized. It is Sandy's job to continually update the Co-op's computerized outage management system, which is an electronic rendering of the entirety of WEC's electric distributions system. And we're talking "entirety": every pole, every transformer, all the protective devices on all the wires, all the meters and the homes and businesses they're attached to. (See "Rule and Compass," page 6.) At the same time, she produces new, revised maps of the system for the daily use of the line crew and engineers in the field. It's a job that takes skill and intense attention to detail.

Maybe with a job like that, you need an outlet. And Sandy has an outlet. She's a biker.

Sandy drives to work, almost regardless of the weather, on a Kawasaki Ninja motorcycle. Some days she'll ride in from Hardwick on the Kawasaki 250; other days she'll bring the 650. She does force herself to park

the bikes in the winter.

Initially, Sandy was hired as a contractor. That was back in 2006. WEC had divided up the responsibility of updating its GIS (Global Information Systems) files – for the outage management system and the hardcopy maps – among other staffers, expecting to get caught up a little at a time. After it became clear that the task was larger than that – and, in a sense, never-ending – the Co-op advertised for temporary help.

That's when Sandy came along. She had worked in the mapping department at the U.S. Department of Agriculture office in Morrisville and was familiar with this specialized field of data entry, which involves transcribing precise measurement from the field technician's staking sheets into the computer program.

"The USDA uses ArcGis, the same program we have here," says Sandy. "But the program at Washington Electric is a little more in-depth. Kevin Stevens [WEC's information systems specialist] helped me learn how to use it."

Still, though, the idea was for Sandy to be a temporary, contracted employee. But her work is so integral to the Co-op that she was brought on staff in January 2008.

So she's kind of new, but not exactly. "Sandy is very professional and we really rely on her," says WEC General



Information Database Technician (and road warrior) Sandy Gendron

Manager Avram Patt. "But with her office being up on the second floor, which is away from most of the staff except for the Finance Department, we don't see that much of her. She is very attentive to her work.

"But if nothing else, I know in the morning that she's here when I see the Kawasaki in parking lot."

Sandy's 19-year-old son Derrick

attends the University of Northern Ohio. Her 20-year-old daughter, Jessica, however, lives with her in the home Sandy recently purchased from her parents in Hardwick.

Perhaps not surprisingly, Jessica has inherited the motorcycle gene. "She likes to ride," Sandy shrugs. "I guess our family is just into bikes." 

## Coventry Expansion

*continued from page 1*

expansion project. Officially, the vote is to be held on Tuesday, October 7, but members who vote by mail will need to make their decision sooner in order to be sure their ballots are received and counted on time.

"We assume that most members will prefer to vote by mail," said WEC General Manager Avram Patt. "For those ballots to be counted, they must reach the Barre Post Office by 3 p.m. on Monday, October 6."

The self-addressed envelopes that accompany the ballot will be addressed to the Co-op's specially designated post office box in Barre, which is used for voting purposes only. To be certain that their ballots reach Barre by the deadline, the Co-op recommends that voters mail their ballots no later than midweek of the week of September 29.

Members who wish to vote in person can do so at Washington Electric's office on Route 14 in East Montpelier on Tuesday, October 7, between 4 p.m. and 6 p.m. only, during the Special Membership Meeting convened for the sole purpose of conducting the vote. During those two hours, members of the Co-op's Ballot Committee will be on hand to accept ballots, and General Manager Patt and members of the Board of Directors will be present to answer any questions people stopping by may have. Ballots cannot be accepted at the Co-op office at any other time except on October 7 during those two hours.

When WEC opened the Coventry generating station in July 2005 it included three Caterpillar engines, which use methane gas, piped in from the NEWS landfill, for fuel. As

the methane resource at the landfill increased, WEC sought permission from the PSB to add a fourth engine in 2006. After receiving the Public Service Board's approval the Co-op brought the proposal to the membership for a vote – as required by law – on October 31, 2006. The members approved the fourth engine by a vote of 1,670 in favor to 51 opposed.

"We hope that our members will give their support to this expansion just as enthusiastically," said WEC President Barry Bernstein, "because it allows us to provide them with lower-cost power coming from an environmentally friendly resource that's right here in Vermont."

If the members approve the \$3.1-million project on October 7, construction could begin the following day. Unlike the 2006 expansion, this one will necessitate enlarging the generating room to accommodate an additional engine. The goal is to have the building closed in again by Thanksgiving – and then to have all five engines running early in 2009. Pizzagalli Construction in Burlington will be the general contractor.

Members with questions are invited to contact anyone on the board of directors (see page 2 for names and contact information) or to call Avram Patt, the Co-op's general manager.

"We really want to encourage people to vote and to support this project," said Patt. "The benefits of Coventry have been clear to everyone since we built the plant and got it running in 2005, and we all stand to benefit even more by increasing production there."

One hundred percent of the power generated at the Coventry station goes to Washington Electric Cooperative members. 

## Co-op Currents

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Avram Patt Donald Douglas Will Lindner

*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 Administrative Assistant Deborah Brown, 802-223-5245.*

# Remembering Wendell Cilley

## WEC Director Passes Away on Labor Day

Washington Electric Co-op and the entire central Vermont community lost a uniquely gifted man and a quiet voice who spoke to our better natures, with the unexpected death of Wendell Cilley, 56, of West Topsham, on September 1, 2008. Wendell died while working under an automobile, when the supports gave way. He left behind his wife Lesley Denisen of West Topsham, their daughter Flora, 27, of Portland, Maine, son Ben, 24, of Portsmouth, New Hampshire, and his mother Elsie of West Topsham, as well as a brother, two sisters, and many relatives in a well-known central Vermont family.

*“He touched so many lives.”*

Wendell also left behind friends and co-workers at Upper Valley Services in Bradford, where he had worked for 26 years with adults with developmental disabilities; and the clients of that agency, who knew Wendell as a dedicated advocate for their dignity.

With Wendell's passing, Washington Electric lost a board member who brought patience and understanding to the board's discussions, a commitment to the board's goals of energy efficiency and local, renewable sources of power, and a heartfelt concern for WEC's employees and the 10,000 Co-op members who rely on Washington Electric for attentive service and dependable power.

“I relied on Wendell more than he knew,” said WEC President Barry Bernstein, “always seeking and drawing out his thoughts on issues I had strong opinions on, to see if they met the test of Wendell's reflections and values.”

“Wendell was a very active member of the board,” said WEC's director of engineering and operations, Dan Weston, who worked particularly closely with him because he (Wendell) headed the board's Power & Operations Committee. “He was sincerely concerned and cared about member service, and about the safety of our employees and the public. All this sounds politically correct to say under the circumstances, but Wendell walked the walk. It wasn't just lip service.”

“Wendell was a genuine guy, and he cared,” said General Manager Avram Patt. “He was one of those people that everyone recognized as a good person. In everything he did at WEC, he was looking out and caring for WEC's members, his neighbors in his community and beyond. He will be greatly missed. We extend our deepest condolences to Wendell's family.”

### Native son

Wendell Cilley was first elected to the Co-op's board of directors in 1993. But his ties to Washington Electric go back much farther than that. His parents, Charles and Elsie Cilley, took

out their first WEC membership in 1946, and as Wendell explained in his 1996 re-election bid, “I have lived in WEC households off and on since I was six years old.” A few years ago, Wendell remarked that he was an adult before he realized that not everyone gets to attend their utility's annual meeting. Wendell always showed up, usually with his mother at his side.

“Wendell came from a farming/logging family,” said his close friend and fellow WEC director Don Douglas. “As we would drive together around Orange County he could relate stories about being stuck in the mud or snow up on nearly every hillside or down in the swamps on the other side of the ridge. Charlie and Elsie Cilley were wealthy despite their lack of cash. They provided for their family from the bounty of the land. Lumber and maple syrup were the main cash crops, and frugality was a necessity. Wendell learned to repair broken-down farm machinery and really loved getting something going that everyone else had give up for scrap. He demonstrated that living without money does not mean you have to be poor.”

Wendell attended elementary school in the small village of Cookeville, went

to Spaulding High School in Barre, and then attended Yale University for a year. This was followed by a stint in the Marine Corps, and graduation

### In Wendell's Words

*“Growing up in WEC households since age 6, my long-term association with the family farm and with the logging business, my travel and work in other countries, and my experiences in human services would allow me to bring a unique perspective on the impact of policy and its implementation on all member/owners.”*

(Running for the WEC board, 1993.)

*“I would continue to bring to the Trustee role a genuine commitment to safeguard the financial, environmental and quality-of-life interests of WEC's owner/members . . . especially those for whom the cost of electric service is a substantial percentage of the monthly expenses.”*

(Running for re-election, 1999.)

*“The best part of my work, as a case manager and as a member of the WEC Board, is meeting the people who participate in making things work.”*

(Running for re-election, 1999.)

*“The issue of climate change and how we address it is for me the most important issue that WEC and its members will face in the next few years.”*

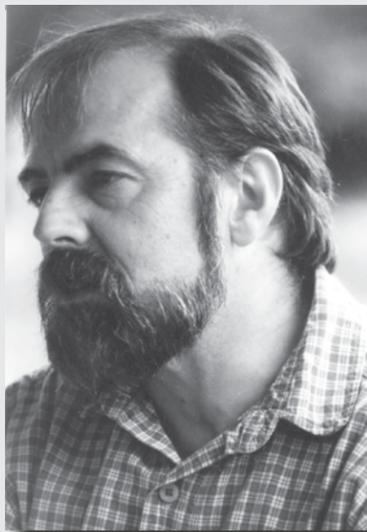
(Running for re-election, 2002.)

*“The road to the top of the gorge reminded me of an uncle who had remarked, about a similar winding road in Vermont, that the corners were so sharp he could see his own taillights in his mirror.”*

(Visiting the Te Apiti wind farm, New Zealand, 2006.)

*“One of the most important of a director's many duties is to listen. I would continue to bring to the Co-op Board a ready ear and a reasoned response.”*

(Running for re-election, 2008.)



from the University of Vermont with a degree in industrial arts education. He then traveled to Australia and New Zealand, taking human services jobs in both places and beginning what would become a career of helping people with disabilities. He met Lesley in New Zealand, where they started a family. They returned to Vermont in 1982.

When Wendell was elected to the Washington Electric board it was a time of transition and turmoil for the Co-op. Michael Duane, WEC president from 1991 to 1997, recalled that Wendell's personal attributes and lifelong ties to the area helped the board get through those contentious times.

“There was a lot of change going on at the Co-op,” said Duane. “We were transitioning into a new way of doing business, with an emphasis on energy conservation, and there was a lot of controversy. As a Vermonter with deep roots in Orange County, he supported all the changes we were attempting to make, and he had a very calming influence on the board. In his sort of quiet manner, when he spoke everyone listened. The Co-op board and the Co-op staff and the Co-op membership knew him and his family roots, so he had a lot of credibility with people who were having a hard time with the transitions going on.

“I think he was very instrumental in helping smooth out the controversies occurring as we moved into a new direction at the Co-op. It was great having Wendell there, great to know him and work with him on the board, and I was very sad to hear that he passed away.”

Wendell's empathy with people on all sides of an issue wasn't an act, which is probably why he was so often successful at helping resolve conflicts.

*continued on page 5*

### Filling The Board Vacancy

Wendell Cilley's death on September 1, 2008, leaves an unexpected vacancy on Washington Electric Co-op's nine-member board of directors. As this issue of *Co-op Currents* was being assembled, WEC President Barry Bernstein of Calais said that the board had not had an opportunity, so soon after Wendell's death, to decide how to replace him.

When a board vacancy occurs for any reason the procedure outlined in the Co-op's bylaws is for the directors to appoint an interim replacement. There is no prescribed method for that to be done, nor is there a strict time frame for it. Bernstein said that the Co-op wants to have an open, transparent, and inclusive process for making that appointment, and therefore he encouraged people who were interested or had suggestions to contact him directly, or through the Co-op. (Barry Bernstein's contact information can be found on page 2.)

When the appointment has been made, the interim director will fill the vacancy until elections are held, on schedule, in conjunction with Co-op's Annual Meeting next spring. At that time there will be four seats on the ballot: the customary three for three-year terms, plus the election of a candidate to finish the remaining two years of Wendell's term. The interim director will have the opportunity to stand for election in May if he or she chooses.

The board solicits your help in finding a qualified, interested candidate for filling this important position.

## WEC 2008 Equity Distribution Plan

# Co-op Seeks Former Members For Capital Credit Refunds

Washington Electric Cooperative is preparing to issue capital credit refunds to current and former members, as authorized by WEC's Board of Directors. Under the 2008 Equity Distribution Plan, capital credits will be returned to eligible people who bought power from the consumer-owned electric utility during the following two years: 1989 and 2007. Safeguarding the Co-op's financial stability, the Board of Directors has targeted a total amount of approximately \$325,000 for distributions in 2008.

Capital credits are returned to Co-op members (customers) for those years in which WEC's revenues exceed its operating expenses. 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 in the years in question, and how much electricity that member purchased. Each co-op member has a capital credit account – which is a bookkeeping entry managed on an annual basis by the Cooperative – in his/her name.

This year \$224,021.35 of the money earmarked for the 2008 Equity Distribution Plan will go to members from the year 1989, when WEC's margins totaled \$269,975. Last year's distribution plan (2007) included \$46,000 to begin retiring credits from 1989 after completing distributions for 1987. (No capital credits are being returned for 1988 because there no allocations were made to the capital credit accounts that year.) This year's allocation for 1989 will complete the retirements for that year. (When distributions for a given year are allocated in part, it does not mean that some members are paid and others aren't; rather, each qualified member is paid proportionally.)

The remaining \$100,000 in the plan will address capital credits for 2007. WEC's margins last year totaled \$805,996; the money allocated for capital credit refunds in the current plan amounts to just under 13 percent of that total.

For former members, no longer with the Co-op, refunds of \$20 or more will be paid by check. If an amount of less than \$20 remains in the former member's account, a check will be issued once the Co-op has received a properly executed authorization form (contact WEC for details).

Current members who are eligible for refunds based on their 1989 and/or their

2007 payments will receive their refund as a credit on their electric bill, regardless of the amount.

Members and former members will be given the opportunity to contribute their 2008 capital credit refund to the Community Fund administered by Washington Electric Cooperative. Funds contributed by members in 2008 will be combined with any remaining 2007 contributions and with the contributions from people who have elected to donate all future years of capital credit refunds to the WEC Community Fund. The total contributions will be used to make donations via the Fund in 2009, per WEC Policy 6. A year-end report on the Community Fund donations will be published in *Co-op Currents* early in 2009, and when possible and appropriate, through other means.

All individual retirements will be reduced by any uncollectible or delinquent amount(s) owed to the Cooperative, as permitted by the WEC Bylaws. No early retirements will be made to the estates of deceased members. No distribution will be made in the year 2008 for construction capital investments credited to patrons' accounts from contributions-in-aid-of construction for new power line extensions. No distribution will be made to patrons who purchased and paid for renewable energy credits (RECs) in 2007.

WEC may impose a \$10 annual service charge on all patronage (capital credit) accounts for years in which the credits have been retired and went unclaimed. This service charge can be applied to unclaimed accounts annually, until the balance in those accounts is \$0.

Earlier this summer WEC sent out Capital Credit Patronage Refund Authorizations to eligible former members, using the person's last-known address. Listed below are the names of people or accounts whose authorizations 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 the former member or beneficiary contact Washington Electric Cooperative directly at 802-223-5245, or toll-free at 1-800-932-5245.

WEC will issue this year's capital credit refunds in November 2008.

### A

A & W Artesian Well  
Abare, Jr. Robert L.  
Abbiati, Stuart M.  
Adams, Steven  
Aldrich, Georgia  
Allen, Charlotte A.  
Allen, Robert R.  
Allen, Wyman P.  
Amato, Gerard R.  
American Tel & Tel Co.  
Anderson, Lou A.  
Andrews, Daryll & Kim  
Andrews, Kathleen  
Antonovich, Daniel  
Appleton, Sylvia  
Ashe, William  
Asquith, Laura  
Atwood, Renee  
Austin, Norma O.  
Austin, Walter & Virginia

### B

Baack, Gary L.  
Bacon, John E.  
Bair, Estate of Samuel  
Baker, Joseph  
Barch, J. Ralph  
Barnard, Kathy B.  
Barnett, Dorothy K.  
Barnocky, Stephen W  
Barrows, Michael  
Bassett, Paula P. & Harold  
W. II  
Beadle, Rubie A.  
Beane, Marion  
Beardsworth, Rhonda  
Beaupre, Ronald R. &  
Donna J.  
Beck, Florenc L.  
Beckler, Minnie W.  
Bellemare, Susan A.  
Bellemare, Susan A.  
Bello, Donna & Gary  
Bent, Robert & Jacqueline A.  
Hughes  
Bergeron, Laurie A.  
Bettis, Jr. Roy  
Billado, Robert W. & Regina  
Blair, Duane & Kelly  
Blair, Richard N.  
Blair, Robert J.  
Blais, Raymond A.  
Blanchard, Beverly  
Blanchard, Robert  
Blanchette, Norman W.  
Blodgett, Arthur D.  
Blow, Paul J.

Bohuslav, Keith & Gail  
Bond, Lillian  
Bosma, Mikel  
Boulanger, Claude &  
Madeline  
Bourdeau, Estate of Joseph  
Bowell, Erlene M.  
Bowen, Jacqueline L.  
Boyce, Madison L. &  
Marcia L.  
Boylan, James G.  
Bradford, Susan J.  
Breslett, Claire L.  
Briggs, David H.  
Brissette, Robert R. &  
Suzanne E.  
Brolin, Ruth  
Brown, Philip F.  
Brown, Raymond & Donna L.  
Brown, Walter F.  
Brownell, Lauren L.  
Bruce, James R. & Victoria D.  
Brush, Lois D.  
Bryant & Dailey  
Buck, Arthur D.  
Bunce, Harold S.  
Burbo, Charles E.  
Burdick, Louise S.  
Burnham, Ellen  
Burton, Rima  
Butler, Daniel E.  
Butler, Jr. Walter R.  
Buxton, William

### C

Cade, Linda  
Cadorette, Dorothy  
Callahan, Timothy E. &  
Luvia L.  
Cameron, William  
Campbell, Judith  
Canfield, William J.  
Cano, Victor  
Cano, Victor  
Caplan, Karen & Patrick  
McCulloch  
Carignan, James A. &  
Doris G.  
Carroll, Wayne M. & Shelley  
Carruth, Philip W.  
Case, John E.  
Casey, George  
Cate, Thomas  
Cathrew, Ralph S. &  
Priscilla C.  
Cavaller, Marie  
Chamberlin, Shirley  
Champany, Sydney & Mary

Chapin Dorothy  
Chaplin, Carl  
Chateauvert, Paul  
Chater, John A.  
Chipman, Stanley J. &  
Beverly A.  
Choen, David & Gertrude  
Ciurleo, Christine  
Claffin, Kathryn  
Clancy, David W.  
Clark, Daniel H. & Karin  
Clark, Harry  
Clark, Susan  
Clark, Ted M. & Lisa M.  
Cochran, Barbara  
Cofske, Harvey J. &  
Natalie C.  
Colbeth, Bernard W.  
Colbeth, Bernard W.  
Colling, Kevin & Dianne  
Coltey, George  
Connors, Paul C. &  
Pamela A.  
Converse, Joseph  
Cooper, Jon  
Coughlin, David A.  
Counter, Dorothy B.  
Couchaine, Paula & Mike T.  
Coutant, Florence  
Couture, Laurent P. & Claire  
Cox, Mark  
Craig, Ken  
Craw, Robert W.  
Cressey, Reginald (Executor  
– Earl Cressey Estate)  
Crosby III, Chester A.  
Crowther, Irene M.  
Cullen, Joan  
Curschmann III, Christian H.  
Curtis, Alan  
Curtiss, Robert M.  
Czajkowski, Frances T.

### D

Dagostino, James  
Daigle, Raymond B. &  
Nancy E.  
Daniels, Steven A.  
Darr, David D.  
Davidson, Mark & Jeanne  
Davies, Christ  
Davis Sr., Clayton & Tammy  
Davis, Ernest E. & Theresa  
Davis, Lorena  
Davis, Vicki  
Davulis, James J.  
Decola, Barry & M. Kelley

Demingware, Cora  
Depalo, Caroline  
Desmeules, Mark P.  
Deuso, Lisa M. & Timothy  
Deutsch, Irving & Wendy  
Dexter, Robert  
Dickinson, C. F.  
Dickinson, Ernest  
Dimick Sr., George A. & Elsie  
Doherty, Eugene  
Dolinsky Jr., Edward J.  
& Ann M.  
Donahue, Russ W. & Linda  
Donahue, Timothy A.  
Douglass, Thomas L.  
Dow, Wendall W.  
Dowd, Blanche M.  
Drew, Marie A.  
Driscoll, Peter  
Driscoll, Peter M.  
Driscoll, William  
Drury, Denise  
Duchaine Jr., Morris  
Duggan, Rita C.  
Dunbar, Bessie B.  
Duncklee, Norman (Mable  
Duncklee Estate)  
Dunster, Gary C.  
Dunster, Melvin, & Cathy  
Durkee, Debbie  
Dux, Thomas J.  
Dwinell, Joanna R.  
Dwyer, Helen D.

### E

Eckstein, Edward  
Edson, Edward A.  
Edson, Theresa & William  
Eiriksson, Karl J & Susan  
Eldred, Allan  
Curtiss, Robert M.  
Emerson, Charles A. &  
Sheila J.  
Engborg, Evelyn R.  
Eniti, Anita T.

### F

Fadden, Linda & James  
Fagant, Carol L.  
Fairbrother, Lawrence W.  
Farland, Eugene W.  
Farley, Sheldon & Linda S.  
Farnsworth, Gary F. & Joan  
Ferguson, Floyd  
Ferno, Herbert  
Feuerstein, Robert G.  
Finley III, James T. &  
Donna T.

Finnegan Jr., Walt &  
Mary Jean  
Fisher, Stephen C.  
Fletcher, Romaine  
Flinn, Edwin K.  
Flood, Shirley  
Fogg, Alan C. & Julia L.  
Folsom, Jennifer L.  
Fontaine, Marc  
Foote, Peter A.  
Forte, Lisa  
Fortin, Lawrence  
Fox, Sheryl  
Fredette, Donald J. &  
Marie S.  
Freeman, Ronnie  
French, Colleen  
French, Steven J. &  
Tamera B. Lawson

### G

Gable, James  
Gabree, Ethel  
Gahagen, Jacqueline  
Gahagen, Jacqueline  
Gaines, Jeffrey  
Galbreath, Maurice &  
Beverly L.  
Gallucci, Anthony J.  
Gardella, Sandy E.  
Garfield, April  
Gauthier, Linda A.  
George, Christie  
Gilbert, Louise B.  
Gillespie, Robert S.  
Gittelsohn, Paul & Carolyn  
Goodwin  
Glew, Charles A.  
Glidden, Benjamin & Patricia  
Godfrey, Brian  
Godin, Brenda H.  
Gonyaw, Rodney & Karla  
Goodine, Henry A.  
Goodrich, David S. & Ann W.  
Goslant Jr., Elmer L.  
Gospodarek, Melanie & John  
Gove, Robert & Marion  
Barton  
Graves, Virginia H.  
Gray, James R.  
Gray, Joan  
Greaves, Pamela  
Greenberg, Leo F.  
Griffin, Bridget R.  
Griffin, Dennis R.  
Griffin, Robert  
Griffith, Estate of Joseph  
Groschner, John & Holly

Grossman, Henry L.  
Grout, Clifton J. & Cynthia  
GTE Vermont  
GTE Vermont  
GTE Vermont  
GTE Vermont  
Guarcello, G.  
Guckel, Helen R.  
Guild, Michael B.

### H

Haakenson, Philip J.  
Haggett, Clifton E.  
Haggett, Dana L. & Lisa A.  
Haggett, Jonathan Jay &  
Martha K. McGinnis  
Hale, Mr & Mrs. Robert A. &  
Marjorie  
Hale, Warren  
Hamelin, Charles E.  
Haney, Shirley J.  
Hankins, Nancy C.  
Hansa-Cripps, Jyoti  
Hansen, Hans  
Hardy, Viola P.  
Harrington, John  
Harris, Mary K.  
Hart, John R.  
Hartman, Jeffrey J.  
Hayes, Julia G.  
Hayes, Kathleen  
Hayes, Walter  
Hayward, David A.  
Healey, Robert  
Heath, Donald  
Hebebrand, William E.  
Heffernan, Michael N. &  
Pamela  
Heims, Neil & Iren Smolarski  
Henning, Robert H.  
Henry, Tom  
Herman, Sylvia  
Higgins Jr., Robert J.  
Hill, Aaron L. & Sandra W.  
Hill, William G. & Mildred L.  
Hilliiker, Leonard  
Hodgdon, Clara T.  
Hodgeman, Irma T.  
Hogsett, David  
Holland Jr., Bert T.  
Holliday, James & Lynda  
Holmes, June E.  
Holmstrom, Raymond &  
Robert G. Lister  
Holtermann, Hildegard C.  
Holtslag, Joseph P.  
Hood, Janice  
Hooper, Curtis J.

Horst, John & Kathleen  
Houghton, Elliot C.  
Howard, Jeffrey S.  
Howland, Estate of Susan  
Hoyts, John  
Huessy, Hans G.  
Hull, Katherine  
Hunka, Ronald G. & Sylvia  
Hunt, Miles D.  
Hunt, Thomas G.  
Hutchins, Gerald H. & Betty  
Hutchinson, Ann  
Hutchinson Jr., Delmer S.

### I

Irving, Marion R.

### J

Jackson, John & Paul L.  
Dubois  
Jacobs, Donald  
Jarvis, Kelley  
Jewell, Adelaide R.  
Jewett, Philip A.  
Johnson, Arthur D. &  
Juanita J.  
Johnson, Betty L.  
Johnson Jr., John E.  
Johnson, R. E.  
Johnston, Kenneth  
Jones, Robert W.  
Jones, Robert W. & Joyce  
Jones, Robert W. & Joyce  
Jones, Robin A.  
Jones, William B.  
Joslyn, Sharon  
Joy, Sandra L.  
Jurkiewicz, Helene  
Justice, Marjorie

### K

Karlen, Richard W. &  
Karen J.  
Kashima, Kennon &  
Vanessa Malcarne  
Keiser, Peter R. & Gayle E.  
Kelley, Bonnie L. & Robert L.  
Harmon  
Kelly, Kevin & Christine  
Kemberling, Rick & Doreen  
Kilburn, Rebecca J. &  
Paul R. Jr.  
Kilian, Jon  
Kimball, Andrew  
Kimball, Earl C.  
Kimball, Ruth W.  
Kinerson Richad C. & Lois E.

Kinney, Wayne  
Klee, Karen  
Kober, James  
Kohl, Arlene W.  
Kontrovitz, Maureen  
Kopacz, Frederick

**L**  
Labadie, Patricia  
Labrie, Hughes  
Ladd, Thurman  
Lagassey, Estate of Donald  
Laird, Robert  
Lakatos, Dr. Peter  
Lamb Sr., Jonathan A.  
Lamberton, Catherine  
Lance, John E. & Jean  
Landino, Henry A.  
Lane, Dennis A.  
Langlois, Robert  
Langone, Robert J.  
Lanphear, Doris H.  
Larivee, Estate of Annie  
Larkin, Edwin & Blanche  
Larow, Gary  
Lash, Jonathan  
Lawliss, Estate of Bernice  
Lawliss, Harold  
Lawrence, Frank R.  
LeBlanc, George  
Leggett, John I. & Kathryn  
Olmsted  
Leland, Peter H. & Luise G.  
Lemay, George E.  
Lemieux Jr., Lloyd E.  
Leonard, Mark R.  
Lever, Roger L.  
Lewis, Brian L. & Stephanie  
A. Schmitz  
Lewis, Janette C. (executor for Madge K. Rock Estate)  
Liss, Bryan  
Listebarger, James K. & Michele Posey  
Litchfield, Janet & Elroy L.  
Lord, Marian B.  
Lunt, Dudley C. & Anna  
Lyman, Rodney H.  
Lynn, John C.  
Lyons, Suzanne S.

**M**  
MacAuley, James  
Machen, David  
Mack, Roger G. & Marie J.  
MacLaurin, Richard N.  
Magoon, Richard G.  
Mallett, Heather L.  
Manavola, Joseph & Camille  
C. Canova  
Mandel, Lisa  
Mangino, Albert L. & Stella  
Manly, Susan S.  
Manning, Kelly L.  
Mardin, Donna B.  
Markham, Larry C. & Susan  
J.  
Marsh, Harold N.  
Marshall, Francis A. & Carlene  
Marshall, James H.  
Martel, Joseph  
Martin, Annette  
Martin, Laurie E.  
Martin, Lawrence K. & Elizabeth L.  
Martin, Robert  
Mascitti, John  
Mascitti, Paul  
Massey, Edward & Norma  
Mayhew, Wanda  
Maynard, Donald & Louise B.  
McBride, Christine  
McDanolds, Doris  
McFarland, Stephen  
McFarland, Stephen J.  
McGill, Charles H. & Shirley  
H.  
McLaughlin, Harold & Dona  
T.  
McNaughton, Diane L.  
McQueen, Raymond  
Mears, Edgar  
Meeks, Charles & Susan  
Menard, Anita L.  
Menard, Judith R.  
Menard, Katherine  
Merchant, Daniel A.  
Merriam, John P. & Caroline  
Youngblood  
Merritt, Barry  
Merritt, Robert E.  
Messer, Richard K.  
Miller, Grace  
Miller, Iva  
Mills, Ellen  
Milne, Mary L.  
Misiak, Ronald A. & Karen  
Montgomery, Milton  
Montgomery, Robert E.  
Montpelier Woodworks In  
Moody, Dorothy A.  
Moore, Helen K.  
Moore, Mavis  
Moore, Pearl F.  
Morgan, Lorraine A. & Charles K.  
Morgan, Ruth M.

Morris, Estate of Richard  
Morris, Estate of Richard  
Morris, Robert  
Morrison, June K.  
Morse, Linda A. & Bert  
Morse, Lucille L.  
Moses, Jessie  
Mowery, Mary I.  
Mudge, George C.  
Mugford, Don G. & Richard F.  
Hutchins  
Mullen, Estate of Jeremiah  
Munger, Ellen & Scott  
Murphy, James P.  
Murphy, Mark W.  
Murray, Terrence M.

**N**  
Nadeau, Gregory P. & Lynn  
S.  
Nadeau, Philip  
Neader, Rhoda  
Nevens, Virginia  
New England Tele Co. (now  
Verizon)  
Newman, Marilyn  
Nickerson, Benjamin  
Noel, Lorenzo W.  
Noll, John C. & Barbara A.  
Nugent, Berkley  
Nye, Karl

**O**  
Ohland, Henry  
Oliver, Loretta J.  
Olson, Arthur E.  
O'Neill, Patrick  
O'Rear, Jay  
Ostrum, John P.  
Otis, Michael  
Overstrom, Brenda

**P**  
Pacini, Cecile A.  
Page, Elizabeth P.  
Page, Dr. Howard E.  
Page, Laura  
Paige, June S.  
Palisoul, Catherine  
Paradise, Stephen & Gina  
Parauka, Marion  
Parent, Mario P.  
Parker, Charlene  
Parker, Isobel  
Parker, Lola H.  
Parker, Mariann  
Parker, Thelma F.  
Parrot, Kenneth  
Parry, Joel G. & Sandra  
Paton, Julia A. & William  
Paton, Kenneth  
Patterson, Elizabeth  
Paul, Harry  
Paul, Kathleen L.  
Pearson, Robert A.  
Pendleton, Ruth E.  
Perdue, Gina & Michael  
Perreault, Lawrence  
Perrin, Merle  
Perry, Mark T. & Yvonne W.  
Perry, Sherman  
Perry, Timothy L. & Jennifer  
Persons, Cyrena  
Peterson, Susan M.  
Petryszak, Christopher  
Petitbone, Mary  
PHELPS, Lauren F. & Geoffrey  
Phillips, Kenneth A.  
Pierce, Donald W.  
Pike Hill Auto Service Inc.  
Pike, Francis H.  
Pike, Horace E. & Laurie A.  
Pilette, Susan  
Plante, Kathy  
Plante, Renee  
Pope, Arthur  
Powers Sr., Roger J.  
Pratt, Rebecca & Bruce R.  
Preble, W. J.  
Preston, Larry  
Prosser, Robert & Dorothy  
Sparrow  
Protas, Alan  
Pryce, Steve  
Pudims, Lynn  
Puffer, David  
Purcell, Timothy

**R**  
Randall, Raymond  
Rasco, Sharlene M.  
Raymond, Robert M.  
Reed, William  
Reid, William  
Repine, Terence  
Restelli, Terry L.  
Reynolds, Charles R.  
Rice, Jennifer  
Rice, Kevin & Donna M.  
Richardson, Bradley T.  
Richmond, Janice B.  
Richmond, William H.  
Ricker, Julie  
Rider, Helen E.  
Ripley, Beverly A.  
Riviere, M. S.  
Robinson, Charles M. & Kathleen B.

Robinson, Marilyn  
Rogers, David A. & Lynne Z  
Rollins, Flossie  
Rollins, Philip R.  
Romero Jr., Jose L.  
Romlein, Donald W.  
Rooney, Robert L.  
Roque, Winifred  
Rose, Robert C.  
Rouelle, Frances C  
(Executor-Alfred Rouelle Estate)  
Roux, Ellen L.  
Roux, Robert F.  
Rowell Jr., Francis E.  
Roy, David  
Roy, Mary H. & Brian A.  
Ruiz, Constance  
Russell, John  
Rutledge, Josiah & Jane  
Rutledge, Shirley A.

**S**  
Sales, Sue  
Saltimbocca, N. V.  
Sangermano, Peter & Diane  
Sawian, Raymond P. & Diane C.  
Sayles Jr., Thomas D.  
Schibuk, Norman & Enid  
Schiffert, George A.  
Schmidt, Christel H. & Linda  
Scott, James F. & Kathy  
Sears, Walter F. & Arlene M.  
Secor Sr., Bruce  
Sense, Dr. E.  
Sherman, Linda  
Shiday, Dahmay  
Shor, Betty  
Shor, Betty  
Shper, Paul A. & Grace  
Gilbert  
Sicely, Grace M.  
Simard, Michael & Jeanette  
Simmons Cable TV of Barre  
Simonds, Robert S.  
Simpson, Danita  
Sinon, George T.  
Skyview Casino Inc.  
Slack II, Dale A.  
Sleeper, Alfred  
Slopnick, Patricia H.  
Smith, Anthony L.  
Smith, Eric  
Smith, Jane E.  
Smith, Linda S.  
Smith, Michael A. & Kathleen  
A.

Smith, Peter  
Smith, Philip M. & Marcia D.  
Smith, Sharon  
Smith, Trent & Heidi  
Smith, Wayne G. & Norma H.  
Smith, William S. & Karen  
Storey  
Snyder, Marvin W. & Marabel  
P.  
Spaulding, Ruth M.  
Spear, Shirley L.  
Spencer, Fred P.  
Spencer, Lawrence A. & Ethel M.  
Sportsmen, Jordan PD  
Squires, Jeffrey & Anne P.  
Starr, Estate of William H.  
Starti, William G.  
Stevens, Jacalyn M.  
Stevens, Kenneth W. & Beverly  
Stiles, Lewis B. & Carol J.  
Stoeckel, Ronald  
Stone, Harvey A.  
Stratton, Robert L.  
Strayhorn, Alvin  
Street, Alison  
Stridsberg, Joseph  
Stridsberg, Lawrence  
Stryker, Jon  
Sullivan, C. Theresa  
Sullivan, Robert E. & Alice F.  
Surviva, Joyal  
Swenson, Susan E.  
Symons, Helen D.  
Symons, Richard A. & Helen  
D.  
Szulc, Alfred V. & Lynda  
Szymanski, Michael

**T**  
Tanner, Ardith S.  
Taylor, Estate of Theophilus  
Teehan, Dianne B. (Executor  
of Vera Brickett Estate)  
Tellier, Raymond R.  
Terry, Carlton P. & Wayne  
A., Sr.  
Tescher, Donald B. & Margaret E.  
Thibeault, Georgette  
Thivierge, Roger J. & Geneva H.  
Thomas, Judson S.  
Thompson, Colm  
Thompson, Jason  
Thompson, John D.  
Thompson, Priscilla  
Thompson, Thomas B.  
Thorne, Philip  
Thorstensen, Thomas &

Helen I.  
Thuren, Linda  
Thurston, Andrew S.  
Tibolt, William  
Tierney, Patricia  
Tierney, Robert G. & Eta M.  
Tolassi, Jane B.  
Tomaszewicz, Dave  
Tomaszewicz, David A.  
Touchette, Donald  
Towne, John W.  
Townsend, Zada  
Tripp, Yvonne L.  
Trudel, Leo L. & Julie ann  
True, Gerald  
Trust, Nichols  
Tucker, Theodore  
Tuller, Michael  
Turner, Elizabeth M. & Fred A  
Carbonell  
Turner, Emma M.

**U**  
Uhouse, Martha & Joseph  
United Pentecos Church  
Untiedt, Jon W. & Mimi M.  
USDA Farmers Home  
Utt, Timothy & Sally

**V**  
Vail, Edith  
Vandegriek, Ellen  
Vazquez, Dr. Siro  
Veech, Roberta Lee  
Verge, Goldie B.  
Vigeant, Michael & Claudette  
Vreeland, Kurt A. & Jenifer K.  
Vt. Institute for Self Reliance

**W**  
Wade, James M. & Leanna  
Walters, Andrew M.  
Ward, Marion  
Ward, William E.  
Ward, William M. & Elaine R.  
Warley, Robert  
Watson, Christopher A.  
Watson, Harold  
Webster, Connie L.  
Webster, Thomas D. & Lucinda  
Weed, Candace  
Welch, Raymond R.  
Welch, Stanley H. & Glendine F.  
Welcome, Dennis J. & Barbara A.  
Welker, Glenn E.  
Wentworth, Roderick S.  
Wernicke, Joanne  
West, Clarence  
Wheeler, Estate of Helen  
White, Edward  
White, Kathleen D. & Roderick C.  
White, Roderick  
White, Sherry  
White, Wayne M.  
White, William J.  
Whitman, Emil F. & Bertha W.  
Whittemore, Charles L.  
Wild, David  
Wild, Hazel B.  
Willey, Douglas & Diane  
Lafriere  
Williams Jr., William J.  
Williams, Clyde A. & Laurie  
E.

Williams, David  
Williams, Douglas & Mary  
Jane  
Willis, Susan  
Wilson, Dallas M.  
Wilson, Daniel & Tracy  
Wilson, Edward J. & Ilona P.  
Wilson, Robert J.  
Winters, Gloria R.  
Winters, Linda  
Wiseman, Warren  
Wiseman, Warren  
Witham, Wendell  
Wnukoski, Joseph G.  
Wojcik, Walter P. & Barbara  
B.

Wolf, Guenther G.; Ralph  
Boch, & Christina H. Wolf  
Woods, Diane  
Woodward, Joanne M.  
Woodward, Patricia  
Woodworth, Janet L. & Nelson Craige  
Workstus Jr., John P.  
Wright, Andrew  
Wright, Andrew  
Wright, Jeffrey F. & Susan

**Y**  
Yarian, Stanley O. & Lucy  
Yeager, Peter & Jodi  
Young Jr., Edward  
Young, J. Peter  
Young, Roland A.

## Wendell Cilley

*continued from page 3*

Former WEC director Charles (Bud) Haas of Bradford, who drove to and from board meetings with Wendell for some years, said, "I never heard Wendell complain about anyone, or say a harsh word about anyone."

In the years after those major conflicts had subsided Wendell's commitment to Washington Electric – the utility that served his family, neighbors, and friends – never flagged. Just last May he was elected to his sixth three-year term on the board.

Wendell served as chairman of two committees: the Editorial Committee, which oversees the production and direction of *Co-op Currents*, and the Power & Operations Committee. In the former he advocated not only for articles that promoted the Co-op's convictions concerning conservation and renewable energy (in the August 2006 issue he

contributed an article about visiting the Te Apiti wind farm in New Zealand, the largest wind electric-generating facility in the Southern Hemisphere), but also more personal articles about WEC members that demonstrated how conservation made people's lives more comfortable and affordable.

But as a lifelong mechanic who never outgrew the farmboy's compulsion to tinker with machinery, his leadership of the Power & Operations Committee spoke to Wendell's technical side. He understood the challenges the staff faced in keeping a 1,200-plus-mile electrical system running, and staunchly supported technologies like WEC's Coventry generating plant, which burns landfill methane to produce affordable and abundant electricity.

Even with Power & Operations, though, his greatest contribution was not his technological, but his human, side.

"He was a tremendous asset, because he got out and talked to people – his neighbors and friends on the Co-op's system," said Operations Director Weston. "I repeatedly heard Wendell speak up and say that although members might not be calling in and complaining about our reliability, or a tree leaning, or some other issue, he was aware from one-on-one discussions with people that there was a concern. Wendell would call up and advocate, both for the person and the Co-op as well, so there would be a resolution."

The employees of an organization are often at some remove from board members – even at a cooperative utility where the directors are themselves customers and members. For those on the staff fortunate enough to know him, Wendell erased those boundaries.

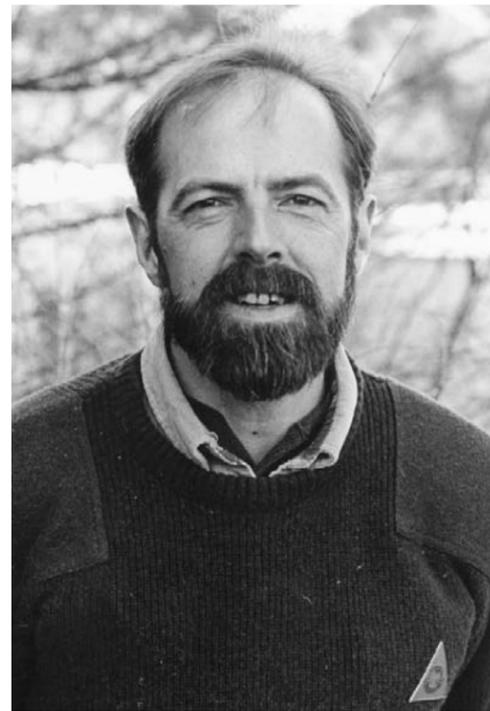
"I loved the twinkle in his eye," said Denise Jacques, director of administrative services and a longtime WEC employee. "He was quick with a wink and a warm smile, or a friendly pat on the back," she said, and remembered, too, Wendell's easy sense of humor. Sitting at her computer, Jacques typed out some adjectives that described Wendell Cilley: patient, quiet, caring, smart, eloquent. "And," she wrote, "he had a genuine concern for WEC, its employees and members."

## 'Absolute respect'

Of course there was far more to Wendell Cilley than his service and dedication to Washington Electric Co-op. Speakers at his memorial ceremony at the Waits River Methodist Church on September 5 remembered these stories: the husband and father who worked with his neighbors to start a cooperative preschool for their children – the Sugar Maple Nursery School, which survives to this day; the fix-it fanatic who carried his toolbox everywhere and was famous for coaxing another month, another year, another two years (!) out of old cars that others had given up on; the baseball fan who took his son to Fenway Park in Boston in a truck with no reverse gear.

Except for his family, however, there was probably no greater expression of who Wendell was than his work with developmentally disadvantaged clients at Upper Valley Services. His career there –

*continued on page 7*



## Rule and Compass

# Accuracy's The Thing For WEC's Mapping System

Sandy Gendron's cherry tomato plant might be on the way out. It hasn't produced much this summer – but the fact that it produced anything at all is pretty remarkable considering that it's last year's tomato plant. Its survival for so long tells you something about its environment, which is Sandy's workplace at Washington Electric Co-op. The room is sunny, cozy, and warm.

And it's private. Sandy works in an upstairs office that is close to the finance department but fairly isolated from everyone else.

Yet the work she does in her secret little corner touches every Co-op member, whether they live in a housing development or on the loneliest stretch of dirt road on Washington Electric's system. Using materials provided to her by the engineering department, Sandy creates highly detailed maps that show every building with a meter, every utility pole, all the conductors (wires) of every type, the transformers, fuses, fault indicators, reclosers, and other devices that make up the electric-distribution system. In the bottom left corner of each map is a legend, showing the symbols for pieces of equipment and color codes (which we could not reproduce on the sample map) to designate three-phase, two-phase, and single-phase power lines. (Three-phase line has three parallel primary wires traveling from pole to pole; two-phase has two primaries, and single-phase lines have just one. Which do you live on?).

Here's what Sandy's work does for you: Those maps, on 11" x 17"-inch pages, are assembled into thick, soft-cover books that accompany the line crews and field technicians in their trucks and help them efficiently track down outages by showing precisely where a suspect fuse or transformer, for example, is located. Note that these are system maps, not road maps; WEC's operations staff already know pretty much every drivable road in the service territory, and since a lot of Washington Electric's power lines go across fields and through woods, road maps are only so helpful anyway.

So the maps guide the repair crews to the outage source more quickly.

But there's more to them than that. The mapping data Sandy Gendron inputs into her computer program are based on GPS (satellite-based Global Positioning System) technology. Sandy is doing two jobs at once. Primarily, she is updating Washington Electric's "outage management system" – the digital, computerized database WEC uses to determine where electrical faults are occurring before the dispatcher sends a repair crew out to fix them. In doing so she is also compiling updated pages for the map books, because the paper maps are a byproduct of the

updates to the outage management system.

Here's how it works. If an electrical charge, caused by whatever reason (let's say, a tree falling against the line), has opened up a fuse and interrupted service, the Co-op uses clues to figure out which fuse has tripped. The very best clue is when a member calls in to report an outage – which gives us an opportunity to remind members, as fall and winter storms approach, to please call in your outages, rather than assuming WEC somehow knows about them.

One call from a member is good. Two is even better. With two calls the technicians operating the outage management system can zero in on the suspect fuse. That's when WEC might make a phone call of its own, to a third household or building that the system indicates may have been affected.

"Has your power gone off?" the WEC caller will ask. The member's response provides an additional, possibly convincing, clue where the problem is.

"With every call that comes in and is logged into the system, the accuracy with which the system can predict which fuse has opened up increases dramatically," says Weston.

In the office, then, the outage management system identifies the faulty device; and in their trucks, the crew members refer to their paper maps as they head toward your neighborhood, knowing with near certainty where they'll find the problem.

There are a myriad of further uses for these detailed maps showing

how the 10,000-member, 1,286-mile, 24,000-pole, eight-substation, integrated electric-distribution system fits together. One such use is that the maps document the Co-op's entire physical plant – its assets throughout the system, which are the basis for the property taxes Washington Electric pays in the towns where it operates.

### Sketches that aren't sketchy

Sandy Gendron doesn't make these maps up in her head. The laboriously detailed information comes from staking sheets provided by WEC's engineering department. The engineers, or field technicians, visit every site where WEC will be altering the system, whether by adding poles and wires to serve a newly constructed house or building, or by relocating a stretch of line to make it more accessible for maintenance, or by upgrading the line from single-phase to three-phase to accommodate an increase in usage. Changes like these are going on all the time on the Co-op's system, although there are more of them in the warmer months when there's more construction activity.

"Staking sheets" are called that because they stake out the route for the additions and changes. There are, literally, stakes in the ground to show the line-construction crews where to set the poles, and the sheets also detail the kinds of line to use and the equipment and materials to bring to the job from the warehouse. The top half of the staking sheet provides information and materials lists. The bottom half leaves room for a sketch of the project drawn

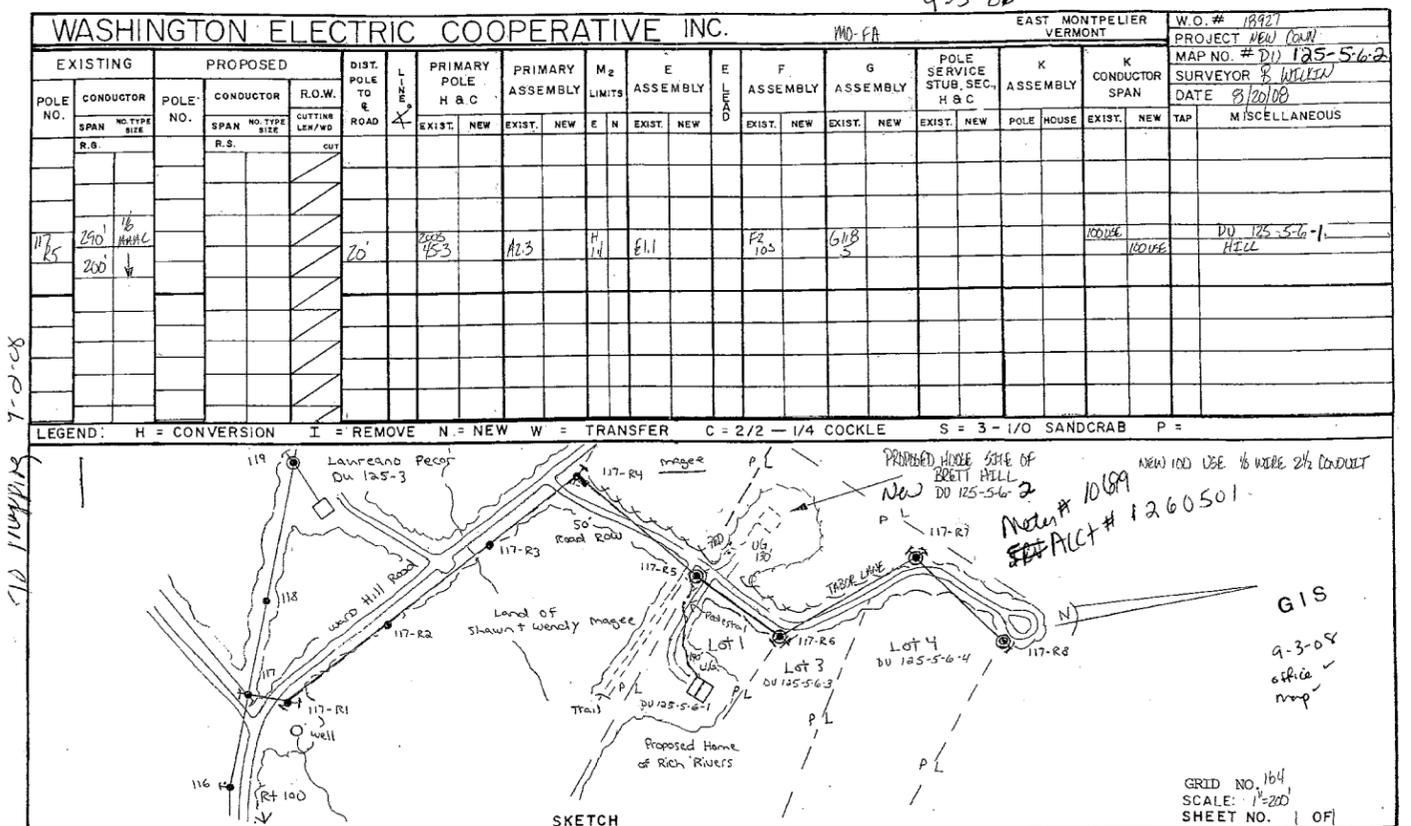
by the engineer. (See example below.) These aren't "sketches" like most of us make – which might more accurately be called scribbles or doodles. The engineers' sketches show roads and residences, hedgerows and tree lines, the existing power line and the route for the new – all in proportion, with accurate distances and precise angle measurements.

"The sketches are created from detailed measurements taken in the field and are extremely accurate," says Weston. "They would hold up in court." (To credit the WEC field technicians who create them, their names are Brent Lilley, Mike Patterson, Brian Wilkin, and Steve Hart.)

After the linemen have used the staking sheets to actually build or alter the system, the sheets go upstairs to Sandy, whose title is "information database technician." Sandy is as precise in entering the information into the computerized mapping system as the engineers were in their design and their drawings, and as the linemen were in their construction. She uses a rule and a compass to get lengths and angles exactly right. The ArcGIS computer program is specially written for the electric utility industry.

When she's finished, that redesigned section of power line in Middlesex, those new member connections in East Montpelier, that three-phase line that replaced two-phase in Orange, those newly added fault indicators in Moretown, and those renovated, upgraded main feeders to the substation in Walden, will all go into the outage management system. And the linemen, technicians, and dispatchers will all get new pages for their books.

And that will be that – until the next time something changes "on the ground," at the location represented by that particular page. Which could be next month or next year, because things don't stay the same for long in Co-op Country. And Sandy Gendron stays busy. 



A "staking sheet," prepared by Field Technician Brian Wilkin. These are first used to guide the line workers in system renovations or construction, and then Sandy Gendron transcribes the details and reproduces the drawings for the outage management database and the maps kept in WEC's service trucks.

**Wendell Cilley**

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and at Orange County Mental Health, precursor to Upper Valley – lasted some 23 years, in which time he served in several capacities: day services coordinator, case manager, transportation coordinator, staff supervisor...

“Wendell strongly believed that people with disabilities should be treated like everyone else,” said Lorraine Gaboriault, coordinator of Bradford programs for Upper Valley Services, who worked with Wendell for many years.

He entered the field around the time that Vermont adopted deinstitutionalization, closing the Brandon Training School and turning to local agencies to find home and workplace supports for the disabled.

“He was part of the movement to try to get developmentally disabled people assimilated in the community,” said Gaboriault. With Wendell playing a major role, the agency opened a bottle-redemption center. “They had people without disabilities coming in and getting

served by people with disabilities,” she said, which helped to normalize their presence in the community.

They also started a bakery, making and selling baked goods to local stores. And for a long time Wendell captained a work crew, finding tasks for the clients to perform (splitting wood, mowing lawns, bagging leaves, stocking shelves at food co-ops), always with the goals of reinforcing the clients’ self-concepts and underscoring their right and their ability to participate as members of society.

Gaboriault also described a characteristic of Wendell’s that his peers at Washington Electric Co-op noticed and appreciated.

“He hated conflict,” she said. “He would do anything to avoid conflict. But it didn’t make him weak at all. He listened really well. He tried to find common ground and speak to those issues rather than the issues that caused discord.

“He touched so many lives,” she added. “He was someone I could ask for help and advice.”

Upper Valley Services held a celebration of Wendell’s life on

September 17, with a grief counselor lending her expertise.

WEC member Terry Murphy of Corinth, a friend and neighbor, would sometimes see Wendell working with his Upper Valley clients. He remembered this as he sat on the porch of his house, which he and his wife Anne call Windy Hill, overlooking a sweep of green Orange County hilltops and pastures. He had drafted words to read at Wendell’s service in Waits River.

“Absolute respect,” said Murphy on that sorrowful occasion. “Steady, even tempo, in that silk voice that was filled with compassion and understanding. To Wendell it didn’t matter what your place was in the world, what color you were or religion you identified with. He treated us all the same. There is no greater measure of a person and their life than the people they touched and how they treated them. He touched us all, and we will miss him.”



*Elsie and Wendell Cilley, at the Co-op’s 2001 Annual Meeting.*

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## Energy Camp

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is a really pertinent topic, and Mr. Wanzer is a great teacher.”

Charlie said he and classmate Riley Carlson, who also attended the Summer Energy Camp, have a similar project in mind. “We’re going to do an energy audit of our school,” he said. “I’ve been looking at colleges that offer environmental studies. I think it’s important how we treat our world.”

### Community pitches in

Teachers Charlie Wanzer and Michael Horowitz are doing their part to encourage that ethic in their students. Wanzer teaches high school math and science at Cabot School, and received a Governor’s Award for Excellence in Teaching for a classroom curriculum about reducing the school’s “energy footprint.” Horowitz is a design and technology teacher at U-32, who also operates Sustainable Solutions, a green-design and solar energy-installation company. They both live what they teach: Wanzer and Horowitz own Five-Star Energy Star-rated homes.

Turning their commitment to energy conservation into a summertime day camp for high school students was Wanzer’s idea. As a science teacher he naturally wanted to emphasize the scientific component –

teaching not just the manual processes of weatherization but the scientific principles that explain why heat (another word for energy) behaves as it does within a building, and how those same scientific principles can be exploited to enable homes to retain their energy rather than losing it to the great outdoors.

Who better to learn that science and how to apply it than people of Alyssa, Julia, and Charlie’s generation, who will have less fossil fuel-derived energy to use (or waste) in their lifetimes than their parents’ generation? Similarly, who could benefit more from acquiring knowledge and skills sure to be in demand as Vermont develops jobs in new energy technologies? And who will be in a better position – should they become tomorrow’s leaders at Washington Electric Co-op – to help shape WEC’s and the state’s energy practices and policies in the coming, crucial decades?

In the end, Wanzer recruited nine students for the July 21-July 25 Summer Energy Camp, drawn from several of the region’s high schools. He also recruited Washington Electric Co-op, to endorse his grant application (for funding for the camp); additionally, WEC offered to pay students a stipend for performing energy-conservation projects in their communities when the camp was finished.

Wanzer said he engaged Horowitz as a co-teacher to elevate the students’ learning experience.

“I’m passionate about energy and education and quality experiences for



CVCAC weatherization specialist Brian Mudgett, with Alyssa Johnson-Kurts, preparing to work at a 19th-century farmhouse in East Montpelier.

students,” he explained, “but I’m not an energy expert, and I wanted to take this project to a new level. That’s what Michael brought. In the classroom component of the camp we did some pretty sophisticated mathematic calculations on the computer. Using the R values of walls and windows, we were able to figure out how much energy a house uses over a year, which was a pretty cool calculation; and also a calculation of use on the coldest days of the year. That’s Michael’s bread and butter. It’s beyond my normal scope.”

Wanzer then recruited other adult and organizational support. Rich Phillips, Marshfield’s town energy coordinator, showed up nearly every day to support, encourage, and work with the students. Local energy author Paul Scheckel, whose *Home Energy Diet* was used as a textbook in the camp, spent an hour with the students. And Bill Powell, WEC director of products and services, dropped in to preach the Co-op’s gospel of energy conservation and to monitor progress at the camp.

Particularly important was the Central Vermont Community Action Council. CVCAC Weatherization Director Paul Zabriskie agreed to have his staff perform an energy audit on the East

Montpelier farmhouse before the camp convened, so that the students could have a list of tasks to perform on the final day in the “hands-on” phase that they all appreciated (even if they didn’t all enjoy it). When that day arrived, CVCAC’s Brian Mudgett, who had personally performed the energy audit, was the students’ mentor, helping them perform the jobs they had talked about (in the clean, dry environment of a U-32 classroom) in the creepy, crawly crevices of a weathered Vermont farmhouse.

“This was deep immersion,” said Wanzer, describing the weeklong Energy Camp. “It was way different from teaching in a classroom where the bell rings every 40 minutes. We’d spend the morning doing calculations on the computer, then pile into a couple of cars and do a field trip, going out to see where these principles had been put into practice, going to Allen Lumber to scope out some of the materials, going to LACE [in Barre] for lunch. It was adult education for high school students. For me as a teacher it was a really nice change.”

### Atom to atom

Everyone knows that a drafty, leaky house is both hard and expensive to heat. Vermont, which has either the oldest or second-oldest housing stock in the nation (depending on your source of information), has widespread problems in this regard. The students

learned that convection and conduction are what’s going on in those situations – the former being heat transfer, atom to atom, through fluids or gases, the latter the transfer of heat through solids. “Conduction, for instance, is when you put your hand on a piece of metal and it feels cold,” Wanzer explained. “The energy – the heat – moves from your hand to the metal, in the same way it moves from your house to the outdoors. Losing energy from your house is going to happen; but you want to slow the rate by having a tight house that controls that process.”

The first phase of the camp – the classroom phase – was dedicated to these and related concepts, the science of heat dynamics and heat flow in the house (sometimes called “home performance”). The goal, as the students learned, is to control the movement of air and thereby achieve a “tight” house, whether in new construction or through renovations.

But a tight house brings its own set of problems, chiefly the threat of poor indoor air quality. Air must therefore be exchanged with the outdoors through mechanical ventilation. A heat recovery ventilator (HRV) transfers the energy in the warm air as it is being expelled to the cold air being brought in, which reduces the energy needed to heat the fresh outdoor air.

The second phase of the camp (in reality, these two phases overlapped) consisted of field trips where the students could see these “best practices” in operation. They visited a new six-unit co-housing project in East Montpelier being developed by six Co-op member/owners, including energy expert Andy Shapiro of the Vermont Energy Education Program. “They’re doing everything right there,” said Wanzer.

They also visited Carl Etnier’s home in East Montpelier. Etnier is an energy columnist for *The Sunday Times Argus*, and a central figure in Vermont’s “re-localization” movement. Wanzer described Etnier’s house as “an old farmhouse that has been heavily remodeled and has achieved a massive reduction in energy usage. The point was that best practices can be done even to an old house; it’s not rocket science.”

To round it out, the campers also went to see Wanzer’s and Horowitz’s Five-Star homes.

All this led up to Friday, July 25, when – clad in old clothes, protective gowns and face masks – the energy campers tried out their new knowledge and skills in the drafty East Montpelier farmhouse. It wasn’t everyone’s cup of tea but it was a day not soon forgotten. And though their efforts just scraped the surface of the serious energy conservation such homes require, it was a reminder of the kind of work we all need to do, statewide, to change Vermont’s energy profile in these uncertain times.

As Alyssa Johnson-Kurts put it, “I feel like we’re in big trouble. [The energy camp] triggered my awareness. I want to learn about conserving energy and decreasing our impact on the earth, as well as helping others to participate.”



Cabot teacher and Energy Camp coach Charlie Wanzer.



Summer energy campers and leaders: bottom (left to right) Brian Mudgett, Riley Carlson, Julia Gulka, and Maria Hoyt. Top (left to right) Charlie Spence, Charlie Wanzer, Lillian Alexander, Rich Phillips, Brett Ostrum, and Alyssa Johnson-Kurts. Missing, Michael Horowitz, Lynne McConnell, and Audrey Tassej Ayer.