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

January 2015



The 'Irene' Of Snowstorms

Four-Day December Storm Causes Unprecedented Outages

tatewide, the December 9-December 12 snowstorm of 2014 was reported to have caused more damage to electric utilities in Vermont than Tropical Storm Irene in 2011, which is widely considered the state's most devastating weather event of modern times. Communities and

their infrastructures clearly were not so severely damaged as they were by the floods brought on by Irene. But for the electric utilities that serve them? It was even worse.

Washington Electric Cooperative had proportionately more of its members out of power at one time than any other utility in the state. It simply hit our service territory hard. WEC serves rural areas in 41 towns in central Vermont, many of those areas remote and difficult to reach. While WEC has a smaller membership (customer base) than Green Mountain Power, Vermont Electric Cooperative, and the Burlington Electric Department (which got by virtually unscathed), the percentage of its members who suffered at least one outage as a result of nine-to-eighteen inches of accumulated wet, heavy snow was higher than GMP and VEC. The longest single outage for a Co-op member was seven and a half days, but the greatest number were for around three hours. More significant was that outages for so many people were recurring.

Diary Of An Ordeal

From Start to Finish, This Outage Was One for the Ages

Readiness

hatever else can be said about the four-day snowstorm that swept into Vermont during the night of Tuesday, December 9, it was not a surprise. Its severity, and the damage it wrought, surpassed what anyone expected, but knowing a major storm was coming Washington Electric Cooperative spent several days going into readiness mode.

> "We'd been monitoring the forecasts," said Engineering & Operations Director Dan Weston. "I check the weather services frequently, and check again at home before I go to bed. We're always a week ahead; especially if we see a storm system coming in through Ohio or up the Coast, we're in touch constantly with Roger Hill." (A WEC member in Worcester, Roger operates a weather-reporting and –consulting business called Weathering Heights.)

With the storm approaching, Weston held preparedness meetings with members of his operations team, particularly Brent Lilley (whose title is Operations & Construction Services Manager, and serves as Weston's point man for directing crew operations in the field); Right-of-Way Coordinator Mike Myers,

Even so, Washington Electric was the first of Vermont's major

continued on page 6

the person most familiar with the tree-clearing companies continued on page 4

Washington Electric Cooperative

East Montpelier, VT 05651

Inside

Equal to the task! Boosted by CRC, the Co-op was able to handle more than 8,000 calls during the storm and the recovery afterwards, a major improvement in member service. Page 3.

It was an epic storm, but just the start of winter. For a review of steps for staying safe and being prepared for the next one, see page 10.

You may be getting interested in backup power. Remember these words: Transfer Switch. For further information, see page 9

Stephen Knowlton has joined your Co-op's board, to serve until new board elections in May. Page 11.



It snowed for four days in December and made quite a mess of things. Did you notice?

President's Message

Applauding A Remarkable Team Effort in the December Storm

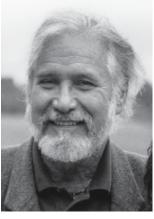
By Barry Bernstein

appy New Year to all of our WEC members and our employees. The transition to 2015 allows us to begin with a fresh slate after ending December with the "Epic Mega-Storm," the most expensive storm in our Co-op's history, blanketing our entire

1,250 miles of lines. The cost of the storm - which we're tallying at more than \$600.000 - makes it the most expensive to hit us ever.

We are focusing most of this issue of Co-op Currents on the impact both of the storm and the prolonged restoration efforts on our Co-op and our members. We had more than 70 field personnel working to overcome the effects of this storm at one point, including WEC

President



employees, our rightof-way contractors, and crews from Burlington Electric, Lyndonville Electric, Stowe Electric, and New Hampshire Electric Cooperative. In addition we had people stocking and restocking the warehouse supplies, member services staff taking your calls, and dispatchers identifying

outage points on our system and directing crews to locations needing repair. It was truly all hands on deck, with Board directors, staff members from different departments, and family members of our staff - sisters, wives, husbands, children, parents - all lending support to everyone working on our system before crews left in the early morning and when they returned in late evening.

Co-op Currents

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BARRY BERNSTEIN



WEC is part of the alliance working to advance and support the principles of cooperatives in Vermont.

456-8843

I would like to share a passage from a letter that was sent to all of our employees from the WEC Board and General Manager Patty Richards, after a very long,nine-day recovery effort.

To Our Washington Electric Cooperative Employees:

On behalf of the WEC Board, the members of our Cooperative, and each of us personally, we want to thank each and every one of you for the incredible work performed during December's epic mega-storm. We can't begin to express how much we appreciate all the work that everyone did and the personal sacrifices that were made to restore power to WEC members. Your tireless hours and dedication were very much noticed and so very much valued; from the line crew and those in the field, to member service representatives taking calls, to the dispatchers and engineers coordinating assignments. and the amazing support system provided by all helping hands to get through one of the hardest and most far-reaching storms in WEC's history.

At its peak, more than 250,000 Vermonters were without power, while 55 percent of our members were in the same situation. As you also know best, many experienced reoccurring power outages as our line crews had to go back to the same areas that they had repaired, after yet more trees came down. As tired as everyone was, you all persevered together as a team, and it was amazing for us to watch and be part of.

> Sincerely, Your Board of Directors and General Manager

Legislature Gets Underway

2015 marks the start of the Vermont Legislature's winter session and there will be at least one major piece of energy legislation on the docket. It proposes to establish a "Renewable Portfolio Standard" (RPS) in Vermont. An RPS sets requirements for every electric utility to meet regarding renewable energy thresholds, designated by RECs (Renewable Energy Certificates). In Vermont, these certificates would demonstrate utilities' progress toward a power supply portfolio that must be 90-percent renewable by 2050.

At this point only two utilities have reached or exceeded that goal: WEC and the Burlington Electric Department, Gáz Metro/GMP, which supplies nearly 80 percent of the electricity in Vermont, has reached 47-percent renewables in its power portfolio. This issue was debated last year but did not get out of the House Energy & Natural Resource Committee.

Other major electric issues are before the Vermont Public Service Board: creating a new net-metering program to be ready by 2017, and incentives for air source heat pumps (ASHP). These are in the workshop stage, and WEC will be an active participant in that process. We should expect to hear rulings on these issues by the PSB before the end of the year.

Interim Director Appointed

I wish to officially welcome Stephen Knowlton to the WEC Board, taking the seat that was left vacant by the death of Director Marion Milne in August. Steve brings a background and commitment to renewable energy and we are excited to have him join the Board.

We were very fortunate to have a difficult decision choosing from among several extremely well-qualified members who put their names forward for our consideration. Each brought a wide and varied background and depth. The Board is very appreciative that these members asked to be considered for the position.

The Epic Mega Storm: Thanking our members, too

I've taken to referring to the December storm and its long aftermath for WEC by this appropriate term. I have thanked our employees, but want also to thank our members for their patience and understanding through a very difficult nine-day period as we recovered from the storm. The WEC team worked very hard to get your power back on, in very difficult circumstances, and they really were extraordinary in their efforts. Most of them have families, and their families, too, sacrificed during the recovery effort.

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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 Administrative Assistant Deborah Brown, 802-223-5245.

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Let's hope the winter of 2015 will be a little kinder to us, and please stay safe and prepared for outages - with a plan and options for when we face another Mother Nature event.



Trial By Fire CRC Handles Thousands of Calls During December Storm

into the system."

outage outlook.

Richards, in a post-

storm report to the

WEC board, was

able to make this

unprecedented

statement:"We

For her part, Richards spoke

them on the storm and the overall

"We also gave them progress

updates on our line crew work, and

could be out for multiple days," she

alerted them that they should advise

members they spoke to that their power

said. "This was a difficult

message for people to hear

- our MSRs conveyed the

same message numerous

to inform them of the

magnitude and scale of

what was going on so they

times – but it was important

regularly to CRC coordinators to update

n October of 2013, conducting her first Washington Electric community meetings as the new general manager of the Co-op, Patty Richards

got an earful. One WEC member after another voiced exasperation about their inability to get through and talk to someone during out-

age events when they called hoping to report they had lost their power.

WEC had already been researching alternative solutions to this long-standing problem. These complaints added further impetus, and by the following spring Washington Electric had contracted with the Cooperative Response Center (CRC), a company based in Austin, Minnesota, that is owned cooperatively by more than 200 rural electric co-ops in the U.S. and provides them an array of communications services. Vermont Electric Cooperative, based in Johnson, is one of those CRC clients, and provided an excellent recommendation. WEC joined up, and the company now serves as Washington Electric's backstop for both overflow and after-hour calls. WEC's member services representatives, or MSRs, are on duty at the Co-op's East Montpelier office from 7:30 a.m. to 5 p.m. on normal weekdays and are also called in on the weekend when WEC is facing large storms and the resultant heavy phone traffic, as happened in December. CRC stays in the loop and on duty for the entire time during those situations, and any calls the MSRs are unable to answer, because the incoming lines are busy, are automatically forwarded to CRC.

This new arrangement with CRC was instrumental in taking outage calls during the December storm and the extended repair period that followed, and despite the distance from Vermont was a huge help in identifying where trees had taken down wires during the storm.

"We could not have been as productive as we were in our recovery work without them," said Richards,

Previously, WEC utilized the services of a smaller answering service, but its capabilities and capacity were too-often inadequate for the Co-op's

needs. CRC also has the advantage of working exclusively with electric co-ops; its representatives understand the terminology,

complexities, and urgency of the calls they take.

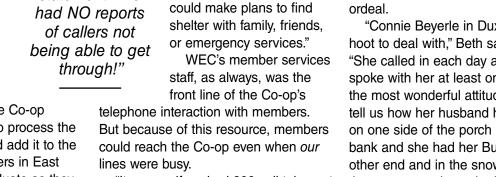
So how did it work out?

Richards, in a post-storm report to the WEC board, was able to make this unprecedented statement: "We had NO reports of [callers] not being able to get through!" The Cooperative Response Center took 7,910 calls from Washington Electric members, which would have been a sheer impossibility had WEC not contracted with the

company. The value of this service from CRC, besides simply having more people to answer the phones so that members don't have to try over and over to get through, is that CRC can access Washington Electric's computerized territorial map and outage management system. In that respect it is quite

literally an extension of the Co-op itself. This enables CRC to process the information it receives and add it to the data that WEC's dispatchers in East Montpelier weigh and evaluate as they guide repair efforts in the field.

"People can call and report a tree on the power lines, and CRC will enter that directly into our outage-management system so the dispatchers will have the most critical information." said Richards. "If they're calling solely to report an outage, CRC enters the outage location



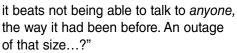
Call Handling

We make it our priority

e care of your custom

"It was as if we had 200 call takers at any given time during that long stretch of days," said Richards.

"It was a godsend," said Member Services Supervisor Susan Golden. "Some people, when they reached us, would say, 'Are you in East Montpelier? Good.' So maybe some were a little put off by not talking to someone local, but



She could only imagine the chaos and inefficiency the old system would have caused.

People stories

Member Services Representative Beth Ouellette pointed out that being backed up by call takers from CRC enabled Beth and Susan and their coworkers, Dawn Johnson and Elaine Gonier, to take a little more time with the members who in fact did reach the WEC office. While they couldn't indulge in long conversations, some personal relationships developed during the ordeal.

"Connie Beyerle in Duxbury was a hoot to deal with," Beth said afterwards. "She called in each day and each of us spoke with her at least once. She had the most wonderful attitude and would tell us how her husband had his soda on one side of the porch in the snow bank and she had her Bud Lite on the other end and in the snow bank. After the storm was done she brought us a box filled with chocolates, two jars of canned jelly, and a half-pint of maple syrup for each one of us MSRs that they make themselves."

("If I was a millionaire," Connie said after it was all over, "I'd give each one those people a million bucks!")

Susan had a similar story. Understanding that the member services reps were handling one call after another, and that some of the calls were difficult, one woman told Susan sympathetically, "Maybe I should give you my private number in case you need to talk." "You were able to establish a good rapport with many of the members," Susan said. "All in all, for a horrible situation. I think it went pretty well." Patty Richards noted one criticism that she heard from a few people. Apparently some of the calls CRC handled ended up going to the company's center in Dunlap, Tennessee. "And they speak so softly down there," said Patty. "I had people tell me they couldn't hear what they said. I'd want to tell them, 'Hey, you're speaking to Vermonters. LET IT RIP!"



Calls to Washington Electric during overflow periods go first to Minnesota, and when those lines are busy are forwarded instantaneously to CRC centers in Tennessee or Texas. With these resources, CRC can provide up to 200 extra call takers, people who are experienced in electric utility matters.

The four-day snowstorm in December wasn't the first outage event for WEC since CRC came onboard, but it was by far the largest. In fact, it was very likely the largest and longestlasting outage in the Co-op's 75-year history; it affected well over half the Co-op's membership, and repairs to damaged power lines deep in the woods and high up in the mountains lasted a full nine days.



I'd give each one of them a million bucks!"They are, from left, Elaine Gonier, Beth Ouellette, Dawn Johnson, and Susan Golden.

Diary Of An Ordeal

continued from page 1

under contract with WEC; Safety & Environmental Coordinator Scott Martino, whose long years working out of the warehouse have made him intimately familiar with stocking up and preparing for storms; and System Technician Ed Schunk, who keeps the closest eye on the Co-op's system infrastructure – poles and wires in 41 central Vermont towns – and knows where the system may be most vulnerable and where it's probably most secure.

Yet WEC isn't a large company beset by bureaucracy. Weston confers also with mechanic Brad Nutbrown, who maintains the Co-op's diverse fleet of vehicles, and Maintenance Technicians Dan Couture and Mike Gray, who stock the trucks for the line crews and (Mike Gray in particular) check the condition of the two-way radio system. Everyone's kept in the loop, including the people who will serve as dispatchers, IT Manager Kevin Stevens, and the engineering staff. The member services representatives, who will handle phone calls once the outage reports start coming in, need to clear their schedules for extra duty, and Weston meets regularly with General Manager Patty Richards to keep her informed; together Richards and Weston participate in statewide storm-readiness phone meetings orchestrated by the Vermont Division of Emergency Management. Barry Bernstein, president of WEC's Board of Directors, receives weather forecasts forwarded by Weston. Richards keeps the full board updated starting several days before a storm, through the storm, and then for a few days after.

All are kept in the loop as the Co-op, in Weston's words, hopes for the best and prepares for the worst.

An example of the preparatory actions this process can lead to was Weston's decision to have some poles delivered to a location in Corinth where Schunk and his consultants had earmarked a few of those in service as "Condemned." They were on the list





Above, a contracted right-of-way clearing crew sets about the task of cutting broken trees off the power lines in an off-road corridor in Tunbridge. As this photo shows, much of the storm's damage came from trees that fell in from outside the right-of-way. At right, First Class Line Worker Doug deGroseilliers (left) and Equipment Operator Donnie Singleton connect the primary conductor of a sagging line to the neutral, making it safe for the tree crew to do its work.

to be replaced when the opportunity arose, but with the storm bearing down Weston opted to have poles at the ready at this potentially vulnerable location.

As Tuesday evening approached, Brad Nutbrown readied the fleet, Dan Couture and Mike Gray stocked the utility boxes that ride on the trucks with extra fuses, sleeves, splices, and other line-repair equipment, the chain saws were gassed up and sharpened ... and on Tuesday afternoon everyone went home for rest, in preparation for the hard work ahead.

Everyone except the on-call linemen. Their weekly shifts run from Wednesday to Tuesday, so as the first flakes fell Larry Gilbert and Hans Pope-Howe, the designated nighttime crew, were ready if needed. Forester Mike Myers would assist them with ground reconnaissance.

"We got called in at around five o'clock," Myers recalled later. "I'd just barely gotten home when the first outages were reported. It started in Walden, and then we lost the Jackson Corner substation in Williamstown at around nine that night. We got pulled out of Walden and sent there because there were so many people affected. That became the priority. "The damages got worse as the night went on," Myers continued. "The whole group [WEC's entire Operations team] arrived the next morning, which was Wednesday. I stayed out with Larry and Hans through that day, and we added a tree crew. I had called all five of our tree-crew contractors before leaving the night before and told them to respond to the warehouse in the morning. Brent and Dan coordinated who they would be paired up with. That's the ideal combination to have out there in these situations." Pretty much everywhere they went, the workers encountered places where the right-of-way was cluttered with fallen trees, many resting on and tangled up in the power lines. The linemen would

ground the power so it was safe for the tree crews to go in with their chainsaws and reduce the chaos. The line workers could then tackle the work, while the tree crews stayed ahead of them. These teams often were enhanced by someone like Mike Myers who could "bird-dog" the area and provide information to the linemen and dispatchers about the conditions he was encountering.

All in all, things didn't go too badly those first 30 hours of so. By Wednesday night these outfits had reduced the Co-op's outages from 2,400 or so to about 500. But it was continuing to snow, and now the precipitation was wetter and heavier – the dreaded "winter mix." It accumulated until there was 18 inches in some places, and the trees were bending farther and farther until thousands of them broke.

"For me, it was just amazing, the





amount of weight on individual trees," said Myers. "The softwoods – the balsam fir and white pine – loaded up to where they weighed two or three times their normal weight. It froze on those trees and never got warm enough to unload. Even in a light wind you'd look up at these trees and they'd be swinging like it was blowing twenty-miles-an-hour. It makes you feel vulnerable. It's scary how much damage could be done to our system."

Bird-dogging

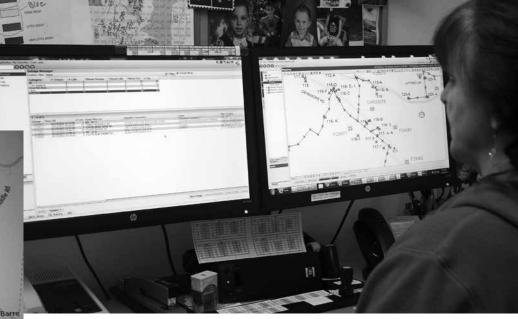
WEC's mechanic, Brad Nutbrown, Dan Couture (a former motorcycle mechanic, himself), Mike Gray (who had a career as a radio technician), and forester Mike Myers developed their own skill sets before coming to WEC. But now they work for a small electric utility, one that needs all its staff to wear many hats. So when there's an outage event like the one in December they team up with the rest of the employees, everyone working in some capacity to get people's power back on. Their task is to scout a broad area in the vicinity of an outage while the linemen are busy, to see what condition the poles and wires, the trees and the branches are in. They have learned to read the messages that open or closed fuses, and blinking or not-blinking fault indicators, can tell them, and they report their findings to those directing the recovery. It's called bird-dogging, and other

First Class Line Worker Hans Pope-Howe, contemplating the next job in front of him on Day 6 of the December restorations. Equipment Operator Donnie Singleton is a ground worker, specializing in operating the levers that control the derricks and maneuvering WEC's poles and equipment.

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WEC's outage management system includes a computerized map of the entire territory and information on each outage. Photo below: With GIS, technician Sandy Gendron tracks the location of each WEC vehicle.





WEC employees - Scott Martino, and engineers Brian Wilkin and Mike Patterson - perform this job, as well. Frequently they're working the same hours, in the same unpleasant conditions, as the linemen. Other duties may call them in for a while. Dan Couture had to stay in touch with Wesco, the South Burlington company that provides WEC its electrical supplies; the crews were going through them at a record clip. Brad, on top of his bird-dogging duties, had to stay on top of the mechanical equipment, and at one point worked for 21 straight hours when one of the garage doors froze shut.

Otherwise, they were out scouting the system. Bird-dogs learn to make small corrections themselves, which sometimes are sufficient to restore power to nearby homes. They can do some fuse work with an Extendo stick, and cut away branches and trees if it's a relatively quick operation. But mainly their job is reconnaissance to make the Co-op's outage response much quicker and more efficient. When they've finished in an area they affix a tag to a power pole to indicate that that span has been patrolled.

The hours were long and the work was tiring, trudging crosslots through the woods, "up to your thighs in snow," as Mike Gray put it. And there can be some sobering moments in bird-dogging.

"Scott and I were patrolling a line in Plainfield," Mike recalled. "I was waiting at a fuse point while Scott went into the woods; then I saw him come out a little way up the road and walk toward me. Just about the time he got back a tree fell exactly where he had come out."

signals pass through the electrical infrastructure - the components of which are detailed on the OMS mapping system - AMI also gives the dispatchers a remarkable picture of what's happening along the power lines. Line workers used to have to hunt for a blown fuse or damaged equipment, driving slowly along the roads or trudging deep into the woods. But dispatchers now can direct them to the precise location, Weston says, "ninety-nine times out of a hundred."

"I can't say enough about how much AMI helped us," he exclaimed when all was said and done. "Kevin Stevens was

dispatching one day and said to me, 'How did we ever do this ten years ago?"

A key to using AMI most effectively is hearing from members whose power has gone out (thus the importance of WEC's connection to CRC; see story, page 3). Their information is logged into the OMS and patterns begin to emerge. It takes the first several calls for that process to start.

"The computer

then does predictions," dispatcher Steve Hart explained. "If you get information from people beyond a

Daytime dispatchers were usually some combination of Sandy Gendron, Kevin Stevens, Steve Hart, and Brian Wilkin. They worked from 6 a.m. to 10 p.m., with Steve pulling one 24-hour shift. They each had geographic territories assigned to them, configured on the basis of WEC's substations, and directed the efforts of three or four line crews in those areas. WEC's resources were tremendously enhanced a few days into the marathon when four other public utilities - Stowe Electric Department, Lyndonville Electric Department, Burlington Electric Department, and New Hampshire

Electric

Cooperative -

arriving with a

very welcomed

Aid assistance

approximately

resources WEC

As for the

first five or six

strategy? For the

days, said Steve,

it was a numbers

game. "If you see

people on it, that's

where you're going

to send your crew."

At night the

sole dispatcher

a line with 200

doubled the

could deploy.

bucket truck.

This Mutual

the NHEC crew



Of the three largest and hardest-hit Vermont utilities (the other two being Green Mountain Power Corp. and Vermont Electric Co-op), Washington Electric was the first to finish its reconnections.

> was Cathie Vandenberg, a 21-year WEC veteran who, although she is the plant accountant, has dispatched in many a storm. Hers was a less-hectic shift, as WEC kept just one crew out overnight - the others leaving the field by 9 p.m. or so. Starting Wednesday, Cathie spent hours on the radio with the on-call team of Construction Foreman Rich Hallstrom and Apprentice Lineman Scott Matheson. It was a slower pace, which provided her time to compile and analyze all the information that had accumulated during the day, and study the map to assess where specialized equipment would be needed, such as the bucket trucks, the snow machines, and the off-road "tracker" with its hydraulic lift and steel treads that enable it to crash through the woods like a tank. "I would provide all that to Brent in the morning, and he would use it to

make decisions about where to send crews," said Cathie. "The first couple of days we really didn't know what the problems were because in so much of the territory no one had gotten in there yet to report back to us. It got clearer as we went along, but every night we were dealing with new information."

According to Dan Weston, Cathie was the right person for this job. "She's extremely detail-oriented," he said. "It helped us get a handle on things for that next day."

Relief at last

The big break in dispatching the big break for everyone - came with the weekend, when the outage numbers started settling down. Rather than having 300 or 500 members out because of damages along a three-phase feeder, it was more like 20 or a dozen people - and, soon, fewer than that - on a smaller local circuit.

Now the dispatchers could start prioritizing members who had been out the longest or who had medical equipment in their homes, and also farms and small businesses. Yet these repairs were more scattered and took time, too, and by the middle of the following week the linemen noticed that lots of the houses they were reconnecting were empty, their occupants having taken refuge elsewhere.

Of the three largest and hardest-hit Vermont utilities (the other two being Green Mountain Power Corp. and Vermont Electric Co-op – Burlington Electric being a largely urban utility with many of its lines underground), Washington Electric was the first to finish its reconnections. It's true that WEC is smaller than GMP and VEC, but it had the highest percentage of customers out at one time, and is also the state's most rural utility (measured by the average number of meters per mile of line).

So it was no small accomplishment, and a relief to the line workers and bird-dogs who, by Friday, December 19, were able to return to their families on schedule at the end of the day; and to the volunteer cooks, dishwashers, and grocery shoppers no longer needed for pre-dawn breakfasts and late-night dinners; to the member services representatives, who could return to their myriad other duties with a greater sense of calm than they had felt in more than a week; to the dispatchers and tree crews and Mutual Aid linemen and so many more.

It fell across the road, and a car collided with it. The driver wasn't hurt and WEC's two bird-dogs took their chainsaws and cleared it away. This could have been a closer call for Scott than it actually was, but in Mike's opinion it was close enough.

Dispatching

WEC's computerized outagemanagement system (OMS) was greatly enhanced by the system-wide completion, in 2012, of AMI - the advanced metering infrastructure, which some call "smart metering." The technology enables two-way electronic communications between computers at WEC's headquarters and meters at members' homes. Because the

certain location that their power is off, it guesses where the fault is, and then you can 'ping' other meters close by to see if they ping back; if there's no response it changes the reading from 'predicted' to 'verified' - a definite fault. It eliminates a lot of leg work and simplifies things."

(AMI has its idiosyncrasies, too, Steve added, and you need to learn to control for them because if the system makes a mistake it makes a lot of them quickly. "It's just a machine," he said.)

From the information on the screens before them and reports from the bird-dogs and line workers, the dispatchers organized the assignments for repairs. The process was directed by Brent Lilley and Dan Weston.

And, of course, to Washington Electric's members, many of whom had had a rough 10 days. In the aftermath, Patty Richards, WEC's general manager, told the story about one member's experience, and it sounded almost like an Abbott-and-Costello routine.

"Our longest single outage was for eight days," she said.

(Oh, that's bad.)

"But it was a seasonal account."

(Oh, that's good. Maybe they weren't there.)

"They were there!" she said.

(Oh, that's bad!)

"But they were fine," she finished.

"They said 'We're okay. Go fix other people's power!"

The 'Irene' of **Snowstorms**

continued from page 1

utilities to complete its repairs and resume service to its entire membership.

The comparisons to Irene provide an insight into the severity of the four-day snow-and-"winter mix" event for the Co-op and its 10,800 members. The average length of WEC's outages was hardly insignificant: 28 hours and 56 minutes. The longest single outage for a Co-op member was seven and a half days, but the greatest number were for around three hours.

More significant was that outages for so many people were recurring. Over the course of the event, power was restored to 29,886 meters. That's almost three times the number of households and businesses on the Co-op's lines, and since around 45 percent of Washington Electric members escaped outages altogether, it speaks to the untamed nature of the beast, where problems cropped up over and over again.

"You had to walk every inch of the line," recounted Jason Preston, a WEC line worker who has been with the Co-op for seven years and who worked at various times in Marshfield, Plainfield, Calais, and Chelsea. Normally a problem – be it a blown fuse, trees fallen across the power lines, or some other cause - might affect one or two spans of line (running from pole to pole), but in the December storm line workers encountered consecutive span after span with obstructions. Which was why, as Jason said, they had to keep walking



through the snow to assess the damage that lay ahead.

"Then you'd get the power restored," he said, "just to go back three days later to the same place and restore it again."

Indeed, Washington Electric Co-op member Lydia

Flanagan, who lives a mile or so up Larkin Road in the mountains outside Tunbridge Village, said on the Monday, December 15 - three days after the storm had ended -

that she was still hearing trees breaking and falling in the forest surrounding her

> busy replacing a broken pole beside Lydia's driveway, as well as the next pole down the line, which had also been broken. She'd been without

(Left) There's a power line in there somewhere. In one of WEC's hardest-hit areas, off of Larkin Road in Tunbridge, there were hardly any unscathed spans of line. At right, Hans Pope-Howe dangles a plum line to check whether a newly set power pole is straight and vertical.

power for almost a week, but claimed that she was okay with it; she was using the outdoors for a refrigerator, and her home was warm because she heats primarily with wood (electricity providing her backup heat source).

Lineman Hans Pope-Howe worried that the heavy, soggy snow weighing upon trunks and branches so continually spelled trouble for months to come. Standing at dawn in the WEC garage before heading out on

the sixth day of what would prove to be a nine-day ordeal of 16-to-18 hour shifts, Hans said, "Those trees are already bent. The next storm or the one after could send them over."

The storm was also notable for

"This time, it was good.

healthy trees from outside

of our right-of-way that got

loaded with snow and came

-Operations Director Dan Weston

its widespread impact. Outages affected some 5,500 Washington Electric members, rounding off to a crashing through our system." perhaps unprecedented 55 percent of the Co-op's

> membership. Not many towns were spared, but WEC Operations Director



lines, lower the voltage, and dispatch it over distribution lines for home and business use. The main lines leading out of a substation are three-phase "feeders," which carry electricity to the smaller circuits, to which most members' homes are attached. When those main lines, or feeders, are impacted, a high number of Co-op members see their power go dead.

"One of the reasons we had the number of members out that we did is that a number of our substations are located in the upper elevations," Weston explained. "The Walden, Jackson Corner (in Williamstown), and Tunbridge substations were the hardest hit by far. They are located in areas that received in excess of twelve inches of wet, heavy snow."

Does that mean the substations shouldn't be built in those locations? "They're where they need to be," said







In this set of photos, the team of Doug deGroseilliers (checked coat), Donnie Singleton, and Hans Pope-Howe replace a broken pole by a member's driveway in Tunbridge. With Donnie operating the derrick controls on the back of the truck, which hoists the new pole off the ground, Doug guides the base toward the hole that's been prepared for it. In center photo, Hans is perched in a bucket (attached to WEC's track vehicle), stabilizing the top of the pole.

Weston, explaining that for cost and efficiency purposes utilities construct their subs in close proximity to the customers they serve.

One of the most important responsibilities an electric utility has is to maintain a well-trimmed right-of-way – the corridor through the woods, usually around 30 feet wide, that envelops the poles and wires. Professional tree-pruning and maintenance keeps

the vegetation from growing to within reach of the power lines above. WEC has more than 1,250 miles of right-of-way, and manages it according to a rotation that, ideally, will see each

section re-cleared on approximately an eight-year schedule. A few years ago, WEC expanded its ROW clearing program. That effort has paid benefits, with members enduring far fewer outages during routine storms.

This storm, however, was far from routine, and cleared rights-of-way were no safeguard.

"We trim those feeder lines wider, and more often" than the smaller (single-phase) distribution lines, Weston said, "because so much depends on protecting them. This time, though, it was good, healthy trees from outside our right-of-way that got loaded with snow and came crashing through our system."

The emphasis on "healthy" is important, because WEC's staff patrols the lines as frequently as possible to scout and remove "danger trees" – the obviously leaning, and compromised trees that present obvious peril. Because they're outside the ROW, WEC must reach agreement with the landowner to remove them. But in most locations in December, it wasn't danger trees that caused the wreckage, but strong, healthy conifers and other species.

Blur

The final component that made the December storm historic was how long it took the Co-op to permanently restore electricity to its entire membership. First Class Lineman Kyle Sands, who has worked for the Co-op for nearly eight years, said that before now the longest he could recall restoring power after a storm was in July 2010, when a microburst caused severe damage in Brookfield.

"That was, I think, four or five days," said Kyle. "And it was all in one location, basically. It wasn't spread all over the

system like this one."

"We are working with regulators and state officials, including FEMA, to address these large dollar impacts, and will pursue cost recovery from available resources." — General Manager Patty Richards The last restoration was completed on Friday, December 19, ten days after the storm began on the night of Tuesday the ninth. Asked to describe what that period was like for

them, one lineman after another - in fact, one WEC employee after another, because the entire staff participated in this effort, from the member services reps who answered outage calls, to the engineers and staff mechanic and other operations personnel who scouted the lines ahead of the linemen and tree-clearing crews, to administrators and bookkeeping staff who provided meals for the field workers, to the dispatchers who directed the 24/7 restoration work from WEC's headquarters - said it all became a blur. Long hours, as much (for some) in the dark as in the light; activities repeated over and over, whether it was chain sawing broken trees away from the lines or studying the computerized map of the Co-op system to plan the next repair project, or answering calls from members reporting new outages or inquiring about the Co-op's progress in getting to older ones, or cooking meals at 5:00 in the morning and 9:00 at night to provide a measure of comfort, caring, and relief to those whose lives had been altered by the necessity of doing their jobs.

Tallying the damages

The year-end snowstorm cost Vermont utilities more than \$23 million to repair damages to their systems and



One day Member Services Supervisor Susan Golden and General Manager Patty Richard decided to see for themselves what was going on in the field. Above, Susan (left) perched on a track machine in Moretown with WEC Mechanic Brad Nutbrown (center) and Apprentice Lineman Mike Bent.

restore power. GMP is reporting the storm cost at \$18 million, followed by Vermont Electric Cooperative coming in at \$3.5 million. For WEC the costs were roughly \$600,000 for the storm. While smaller compared to the two larger utilities, these dollars are significant in scale for Washington Electric relative to its total cost-of-service.

"We are working with regulators and state officials, including FEMA" – the Federal Emergency Management Agency – "to address these large dollar impacts, and will pursue cost recovery from available resources," said General Manager Patty Richards.

When these financial matters get resolved, you'll read about it in *Co-op Currents.*

And the members?

The prolonged and repeated outages and restoration was no day at the beach for thousands of Washington Electric Cooperative members, either. Their lives were rendered anything but normal. Here it was, shortly before Christmas, and some 5,500 of them, at the worst, had power they couldn't depend on, or no power at all.

Under such circumstances, WEC's member services representatives – Susan Golden, Beth Ouellette, Elaine Gonier, and Dawn Johnson – are the front line of WEC's team in terms of interacting with members, for it is they who answer the calls that come in, until the system reaches its capacity and calls are diverted to a new resource for WEC, the Cooperative Response Center, based in the Midwest.

"I'd say ninety percent of the people who called were great; they were patient and they understood the situation," said Member Services Supervisor Golden, as her coworkers agreed.

It didn't mean that they were having fun. But, the majority of WEC members know they are subject to outages by dint







Line Worker Doug deGroseilliers pushes dirt from the blades of an augur that's being used to carve out a hole for a replacement pole. The crew hit ledge a few feet down, but since options weren't available for placing the pole it called for extra stabilization methods.

Setting a replacement pole is just the beginning of what must be done. Above, Line Worker Hans Pope-Howe attaches the transformer that will reduce the power voltage for this member. Further tasks included attaching the transformer to the underground service to the house, and securing hardware to the pole. Such extensive work was needed in places all over WEC's service territory.



The 'Irene' of Snowstorms

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of living in a rural area, so they have patience – up to a point. Several days in, they can reach the end of their rope.

Patty Richards, the general manager, attempted to alleviate the burden of the member services reps by speaking to people who needed to vent.

"One woman I talked to said, 'I get it, but I can't stand it anymore. I'm emotionally beside myself," said Richards. "She had two young kids, she couldn't cook, she couldn't keep the heat on. I talked to her at noon one day and kept communicating with her throughout the day. I told her, 'We're going to get there today,' and we did. But living without power for so many hours was simply too much, emotionally. She was crying. For some of our members their places became unlivable due to cold temperatures, lack of water, and inability to cook meals." Certainly there were people who felt the Co-op's response was inadequate. Nonetheless, WEC's employees who had interactions with members on the phone and in the field mostly received support and gratitude. Mike Myers, Washington Electric's forester and rightof-way coordinator (Mike works with the contracted tree-clearing crews) related

one story that many employees were laughing about.

"One lady in Woodbury, on the second or third night, did a dance for us in her window, jumping up and down to show us how happy she was after we got her power back on," said Mike. "There were a lot of people thanking us on the road. But after eight or nine days, people had had it."

Steve Hart, a member of the engineering crew who worked in dispatching during the storm, told of a little girl who had handed the linemen a note that said, "Thank you. Olive."

And one of the most thoughtful messages among several that were taped to the Co-op's office refrigerator was this one from a member in the western part of WEC's territory.



There are lots of places on WEC's system that you can't reach by truck. In these photos Hans Pope-Howe, with Donnie Singleton guiding him, drags a new pole into the woods behind WEC's track vehicle to replace a pole (middle below) whose top had snapped off and was dangling from the conductor.



"I want to thank all the WEC staff, and especially the linemen who work out in the wet snow and cold getting power restored to other members' homes, farms, and workplaces. We didn't lose power here in North Fayston, but could have. This storm was a monster. Thank you. Merry Christmas and Happy New Year.

Gregory Viens North Fayston

Thank you, Mr. Viens. And Happy New Year.

Generators And UPS Systems This Storm Was A Reminder of the Options For Backup Power

utages can occur at any time of the year, caused by weather, mishap, or a failure of equipment. Potential causes also include an interruption of power on the transmission system before the power even gets to Washington Electric Cooperative's lines.

However, Vermonters know that the chances of an outage are higher during

the winter than at other times of the year. We recently had proof of that in the four-day December storm in which, perhaps for the first time, more than half of WEC's members lost their power

at least once. Some of those WEC members had backup power-supply systems, but most did not.

So, whether you're recovering from the storm, preparing for another, or considering buying your first backup system after this event, there are some things to keep in mind. At the top of the list is being prepared to use your system: making sure it's ready to operate, and reacquainting yourself with how your standby system functions.

Here's another thing WEC members should do, and it's a high priority: You should notify the Co-op that you have backup power - not so WEC can place you farther down the priority list during restorations (only in the rarest of circumstances could that be a factor), but because the safety of our Co-op employees, and perhaps others, is at stake. WEC tags members' account numbers with a symbol indicating that they have a backup power supply, and what kind of mechanism it is. It's extremely important that those records be up to date to assure the safety of our staff.

Transfer switch.Your contact with the Co-op for this purpose also provides WEC the opportunity to make sure that your backup system has a transfer switch to separate your home from the utility grid when you use it. If that's not done, manually or automatically, it could allow the power you generate to go not only to those areas in your house you want to run off of your generator but could also travel into WEC's electric system. There is a transformer outside (in most cases you can clearly see it, attached to the top of the power

pole closest to your home) that

ado, and botify the b backup safety of es, and at stake. backup safety of backup safety of backup safety of backup safety of treduces the voltage of power going into your building; when power flows the other way, however (from your house to the transformer), the transformer would

increase the voltage, sending the power under greater voltage back through WEC's lines.

During power outages line workers often disconnect and isolate damaged sections of power line prior to making repairs. But although they take precautions, if electricity generated by a Co-op member should come from the opposite direction these workers could be seriously injured. Ground workers who are assisting the line crews by scouting for downed power lines or other problems also can be put at risk if a home or building where power is being generated is not disconnected from WEC's lines.

Generators. The most common form of backup power in rural areas is the electric generator. Generators for home use can vary from a few hundred dollars to several thousand, and generate power at a few thousand watts or much more. Most people buy systems rated within the 5,000-7,500-watt range, and use extension cords to carry the power from their generators to their most important appliances. Generators can be portable (most commonly, on wheels) or stationary.

Many generators must be intentionally started by their owners, but some models have an automatic "on" switch



that activates within 15 seconds or so after the power goes off; it simultaneously disconnects the building's electric system from the utility. However, this can be an expensive option.

What generators have in common is that they run on some kind of fuel (gasoline, propane, diesel). Therefore, they emit exhaust, so they must be positioned outside the home, not in the basement. Because it is flammable, the fuel should be stored in an outbuilding that is not attached to the home, and not in an enclosed garage.

Since generators are standby equipment, usually used infrequently, it increases the chance that your fuel will get old. Stale fuel can damage your generator, even causing it not to work. One way to guard against this is to write the date the fuel was purchased on the storage container. After a few months, pour it in your car's gas tank (if it's a compatible fuel) and refill the container with fresh fuel. You can also add stabilizer to the fuel.

It's a good idea to start your generator once each month if it's not getting used. (Some warranties are void if the unit is not regularly test-run.) Don't forget to check the oil. And because of the risk of flooding or very wet ground, it's best to elevate the generator on a platform, even a low one.

UPS: The uninterruptible power

that there's no noise, no need to move equipment and fuel tanks around, and no combustion fumes. Thus they can be kept inside. They're comparatively small, and also stationary once they're connected. They may be more expensive to purchase than a generator, but prices for this technology are coming down and many are competitive with some of the generators on the market.

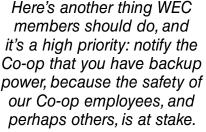
Another good thing is that UPS systems that comply with code are equipped with switches that automatically disconnect the home from the utility's electric system.

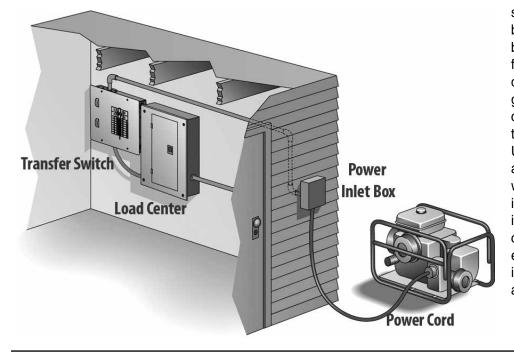
A UPS system houses a battery in a box with electrical inputs (plugs), enabling the owner to attach whatever appliances or devices are most important. There are also whole-house UPS systems that can be hardwired into the building's service box. The Co-op recommends that this be done by a licensed electrician. Part of your research should be to inquire how long the battery will hold a charge.

The trend we're seeing is toward powerful storms, and storms with significant impact, becoming more frequent. That's why having backup power might be a good option for you.

You needn't go it alone. WEC's Products & Services Director, Bill Powell, can provide information and guidance to any member who calls, with your needs, circumstances, and budget considerations in mind. He'll politely remind you that, whatever your choice or decision is, safety precautions (think: TRANSFER SWITCH) are paramount.

For anyone who has a generator that you're using and have not alerted the Co-op, please do so right away.





supply (UPS) is a batterybased alternative for backup power that's easier for people who can't or don't want to manage a generator. Aside from that convenience, perhaps the chief advantage of a UPS is that it activates almost instantaneously when there's a power interruption. For this reason it's effective at safeguarding computers and other electronic equipment used in home-based businesses and offices. Other advantages are



Precautions For The Winter-Outage Season

Ways to Stay Safe if You Lose Your Power

everal thousand Washington Electric Cooperative members just had the unwelcome experience, in December 2014, of losing their electric power – in some cases for several hours, in some for several days, and in some cases losing it, then regaining it as line crews made restorations, and then losing it again as more trees, branches, and power lines fell under the weight of accumulated wet, heavy snow.

As related in these pages, Washington Electric's employees, assisted by Mutual-Aid crews from other public utilities, worked around the clock in difficult winter conditions, for nine days, to restore the power. But a lesson that WEC hopes will be re-learned by every Co-op member is that rural utilities will inevitably suffer some degree of outages caused by storms and other events, and that people should prepare themselves for these potentially serious incidents.

Here are steps you can take to preserve your comfort, safety, health, and warmth.

Water. A critically important preparation is to lay in a supply of water - for drinking, washing, and flushing the toilet - because an outage will shut down your pump. Have a half-dozen five-gallon water containers, filled and stored where they won't freeze. If a major storm is approaching, you might also fill your bathtub, which will provide additional water for your most important needs.

Food. You may lose your ability to cook if your power goes out. A camp stove and a few cylinders of propane could get you through - though you should use it outside so the fumes can dissipate. You can use a snowbank or the cold outdoor air to preserve some foods, but you should also have a supply of foods that need no refrigeration: canned vegetables and meats, canned soup, cereal, and pasta, for example. Make sure you have a manual can opener.



You've got to admit, it's beautiful. In an e-mail, WEC President Barry Bernstein commented that on his road in Calais the trees were so bent with ice that the branches brushed the tops of the cars passing by. That was also true on this country road in Williamstown.

your home, and know where it is.

Communications. Your phone could be a lifeline to the outside world, but for winter preparedness it's a good idea to have a landline and a phone with a hard-wired receiver. A wireless telephone uses electricity to broadcast the signal to the receiver, so if you're

out of power you're out of luck. In most places the phone lines are strung along the same poles as the power lines, but they are in a lower position and less vulnerable than the electric lines at the top. Thus, there's a good

chance that your phone will continue to work in an outage. If you prefer a cordless phone normally, consider keeping a spare phone with a cord to the receiver, in a closet or drawer somewhere.

As for cell phones: Smart phones will allow you to monitor WEC's web page for storm/outage updates. Fully charge your phone if you hear of a storm coming. In rural Vermont cellular signals are not strong or even available in some places, but people can often find someplace nearby where a signal can be picked up. Being able to call your Co-op, emergency services, your town highway department, or neighbors whom you're concerned about, is important. It's also true that cellular towers depend on electricity, and although many are equipped with generators, towers might lose their power in some storms. Radio. Knowing what's going on in the outside world can make one feel less isolated, and also provide general

information about power restoration or the approach of another storm. If your power is out you'll need a batteryoperated radio. Make sure you've got one.

Backup Power. The best way to gird against a power outage is to be able to provide your own emergency

Assess your family's personal needs, devise an emergency plan in case you need one, and know what to do in the event of a long-term power outage.

power. This is a larger investment, but many Vermonters couldn't conceive of living without their generators. Another source of backup power is the UPS uninterruptible power supply, a batteryoperated system that

activates automatically when the power goes out and which you can program to provide electricity for your most important needs (including, if you have a home-based business, your computer system). See our feature on page 9 for more information on backup power

from their electric co-op.)

Other winter precautions. Besides outages, there are other possible dangers in winter. Accumulated snow can block the vents on people's roofs, or on the sides of their homes if they have wall-mounted heating units. This can prevent gases from escaping and cause potentially deadly carbon monoxide poisoning. Likewise, the vents for your clothes dryer can clog over time, and should be cleared out as a safeguard against fires.

People who use roof rakes to loosen snow on their roof edges should remember that they may be reaching into the area where the power line comes to the house. Contact with the service wire presents the danger of electrocution. Or the tongs of the rake might pull off the covering of the service connection - an immediate danger, but also potentially a

longer-term danger if those connections are exposed, adding to the possibility of an outage.

Temporary shelter. Sometimes the best way to cope with an extended outage is to leave. WEC's line crews found more homes unoccupied as time went by during the repair phase following the December storm. For people with medical issues, including a dependence on support devices requiring electricity, staying with friends or relatives may be the best solution if leaving the home is feasible. WEC keeps track of which members have these special needs (once we are informed of it), but cannot always prioritize power restoration to those specific locations in the context of massive outages. If you are in immediate danger, please call 911 and get help as soon as possible.

The message here is that it's entirely possible a storm like this will happen again, as storms are getting more severe and frequent (think of the ice storm in December 2013, Tropical Storm Irene in 2011, and the devastating flood in May 2010). We all depend on electricity in modern American life, but in rural America we must be prepared to do without it if need be. Assess your family's personal needs, make the Co-op aware of medical equipment that needs electricity, devise an emergency plan in case you need one, and know what to do in the event of a long-term power outage. Finally, keep your neighbors in mind. People who are elderly, or who have medical conditions, may need your help - and you'll be in their shoes one day.

Lights. Candles, flashlights, and a supply of batteries. LED flashlights are an excellent choice because they are more efficient and will not drain their batteries as quickly.

Heat. Many Vermonters use wood as a primary or back-up source of heat. That's good, because having heat that's not dependent on electric power is critical during an outage, even if it means living in one or two rooms for a few days. However, the increasingly popular pellet stoves do require electricity for their refueling mechanism. In any case, keep a fire extinguisher in

sources. You can also call the Co-op for more information about these systems, including cost and availability.

www.washingtonelectric. coop. That's our web site, and it now has features that enable you to report outages on line if your connection is working, and a regularly updated outage-tracking link you can follow to keep informed of circumstances in your town and county. There's also a blog, featuring frequent messages from the general manager about conditions in the service territory and WEC's progress making restorations. (The blog logged a lot of visitors during the December storm and its aftermath; it turned out to be a welcome way for members to hear



Knowlton Tapped For Interim Board Seat

Candidates for 2015 Elections Face a Feb. 16 Deadline

ashington Electric Cooperative regained its full complement of nine Directors in December, when the board appointed WEC member Stephen Knowlton, of East Montpelier, to fill the position formerly held by Marion Milne, who passed away on August 11.

Knowlton will serve until the Co-op's annual meeting, which will be held on Wednesday, May 6, 2015. If he wishes to retain a seat on the board, the Co-op's bylaws require that he run for election by the WEC membership. There will therefore be four board seats up for election this spring instead of the usual three, as the three-year terms of incumbent directors Richard Rubin, Mary Just Skinner, and Vice President Roger Fox will expire. Incumbents can stand for re-election if they wish.

As noted in the December 2014 issue of *Co-op Currents,* candidates interested in running for the board have until February 16 to submit formal petitions to WEC's offices in East Montpelier, signed by at least 25 WEC members. The petitions and other election materials are available from the Co-op. *Co-op Currents* will introduce the 2015 board candidates in our March issue.

Knowlton was selected for the interim appointment from a field of six WEC members who interviewed for the position. It's important to restate here that there were actually a few more people who expressed the wish to serve, but were technically



WEC member Stephen Knowlton has joined the Co-op's Board of Directors. Knowlton, who sought a board seat in last year's elections, fills a vacancy left by Director Marion Milne's death in August. Six Washington Electric members volunteered for this appointment, a welcome sign of the Co-op's vitality.

unqualified because their Washington Electric account – and, therefore, the membership in the Cooperative – was listed in the name of a spouse or partner. That need not be a barrier for any prospective board member. A membership at an individual location can be shared (though only one vote – which can be cast by either member – is allowed in elections). There are several practical advantages in this arrangement, and WEC will make the change at no cost for people wishing to do so.

Board President Barry Bernstein

said he was impressed by the level of interest expressed by members in serving on the Co-op's board, and by the qualities that they offered.

"We had several members who wanted to be considered," said Bernstein. "We faced the pleasant difficulty of deciding among a number of people with broad-based experiences that we felt would benefit our Cooperative. The board felt honored that members like these folks stepped forward. It's a good sign for the Co-op when that happens."

Stephen Knowlton ran for a seat

on the board in the 2014 elections and received 518 votes, but was not among the victorious candidates. Recently retired as a professor of physics at Auburn University in Alabama, Knowlton is a graduate of Middlebury College in Vermont and earned a PhD from the Massachusetts Institute of Technology (MIT). He has been a WEC member since 2001. In his candidate statement published here in April 2014, Knowlton wrote, "I am interested in the . . . issues of energy production, distribution, and usage in our changing times."

In that regard, Bernstein said, the six candidates reflected a strong general agreement with the Board's philosophy.

"All the people we interviewed felt good about the direction the Co-op is going in," said the president. "They said they were very proud of Coventry [WEC's electric-generating plant, which produces renewable energy using methane gas captured at the commercial landfill in Coventry, Vermont]. It was great to hear that level of support from these members."

Bernstein said it was important for the WEC board to be at full strength, with involvement and input from nine well-informed directors rather than eight, as the calendar turned to 2015. A new session of the Vermont Legislature is underway in Montpelier, with energyrelated issues on its agenda, and winter always brings its own seasonal demands upon the Co-op. Stephen Knowlton's interim appointment achieves that goal.

"I've been involved in this community for 45 years," said WEC President Barry Bernstein, "and this was one of those experiences where you're proud to be a part of it, to watch everyone support each other. It was amazing."



continued from page 12

was like, 'Not another dinner without daddy!'"

"Heather brought the little girl in, and it was so precious," said Debbie. "And now she wants to be a lineman!" Over the course of the nine-day outage, the staff and their families and friends – the community, really – served about 900 meals. It provided relief and helped lighten the load for people who had essentially put their own lives on hold to do their jobs for the Co-op and its members. But in doing that the women and men who got those meals together day after day made sacrifices almost as severe.

However, many of them said that coming together for the meals created a sense of unity among the Co-op's workers, of shared purpose, and respect for each other's commitment.





Chief Cook and Bottle Washer (in this case, literally) Debbie Brown, left, cleans up after a warm, indoor meal for the operations workers, while WEC President Barry Bernstein helps dry the dishes.

So many people contributed. Above, Mary Jane Fradette, from Hardwick – who isn't even a Washington Electric Co-op member – confers with WEC Director Annie Reed, while in the background the workers enjoy a satisfying meal.

Three Squares: WEC Staff, Family, And Friends Join The Effort

he meals kicked in on Thursday, the third night of the outages, when it became clear that the Co-op was in this for the long haul. They became a fixture for the duration: breakfast at 6 a.m.; a bag lunch packed for everyone heading out to the field so they wouldn't have to pack their own in the wee dark hours before work; dinner at 9:30 p.m. Every morning, and every night, warm, comforting meals were served in the meeting room of the Old Brick Church next to WEC's office building in East Montpelier.

There were no fancy caterers. The food was purchased, prepared, and served by the line crews' co-workers at Washington Electric, who afterward washed all the dishes and pots and pans and began planning for the next meal. More than once, WEC board members pitched in.

If there was ever a message that "We're all in this together," this was it.

"Debbie and the people who worked with her to organize feeding three meals a day for a large roomful of hardworking people were a critical part of our getting through this," said Engineering & Operations Director Dan Weston, referring to WEC's administrative assistant, Debbie Brown. "I believe they got less sleep than the linemen."

Preparing meals during extended outages is something WEC has done upon occasion. Weston, a former lineman for Central Vermont Public Service Corp., knows how important it is for this one concern - knowing where your next meal is coming from to be lifted from the backs of line workers, the "birddogs" who scout the lines ahead of them, and the contracted tree crews who clear away the tangled, broken trees and debris so the linemen can reach the poles and conductors. But this time it was a protracted commitment, extending for more than a week. Yet people showed up to cook, to serve, to wash dishes, to clean up, and then to shop for the next meal, morning after morning, night after night. And there wasn't an extra dime in it for anyone. Not only that, friends and relatives of WEC's staff pitched in, whether they were Co-op members or not. What happened was that a community came together in this cause. "After Dan had pitched the idea, Linda [Nelson, a longtime member of WEC's accounting department] came down and said, 'Do you have any thoughts about how we can do this?" Debbie recollected. "I just called my sister, Mary Jane. If Mary Jane can help someone, Mary Jane will do it. And she was outstanding." This seemed like familiar territory to Debbie and Mary Jane Fradette, who come from a large Hardwick-area



Bench strength. The linemen and WEC staff got loving support from family members, who showed up at all hours to help feed them. Above, from left, Lisa Couture, married to Maintenance Technician Dan Couture; Mary Jane Fradette, sister of Administrative Assistant Debbie Brown; Monique Baril, mother of lineman Mike Baril; and Ann Atkins, special friend of Debbie's son, Scott.



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Warm meals went down good for the field staff before and after 18-hour workdays. At right, WEC Director Roy Folsom, who grilled steaks for everyone on Saturday night.

family and are used to feeding hordes of relatives at special occasions. Mary Jane recruited her daughters, Marie Cloutier and Kathy Richardson, and Debbie recruited her husband Ron Brown, their son Ryan and his "We did whatever Debbie told us," Teia confessed.

Dan Couture, who keeps up the inventory in WEC's warehouse, was, like so many others, doing double duty and agent Corey Pulsifer, has proven an excellent neighbor to the Co-op time after time.)

It wasn't easy duty. To have breakfast on the table for 40 to 45 people at 6 a.m. meant arriving at the church before 5:00, and therefore getting up before 4 a.m. The operations workers, including the line workers from other utilities ("Thank God for those guys!" said Dan Weston) and the ROW clearing contractors, arrived in morning darkness at 6:00 or so, most of them having gotten home at 11:00 or later the night before. But one crew - usually composed of Construction Foreman **Rich Hallstrom and Apprentice Lineman** Scott Matheson - came in from the field, having worked through the night. For them it was the end of the shift, not the beginning.

(On Monday morning, December 15, the normally upbeat Rich Hallstrom plopped into a chair at one of the long breakfast tables, exhausted, and said glumly to dispatcher Kevin Stevens, seated across from him, "We only got nine people on last night."

Not much return for a full night's labors, was Rich's implication.

"Hey," Kevin responded, with quiet encouragement. "You got nine people on.")

One evening Roy Folsom, a member of the Co-op's Board of Directors, from Cabot, urged Debbie to take the night

> off and came in to cook steaks on an outdoor grille. It was a huge hit! Director Annie Reed helped out, too, and WEC President Barry Bernstein showed up frequently to encourage the workers and thank them personally. Barry also spent a lot of time drying dishes. Dan Weston's daughters, Torrie and Mariah, took a load off Debbie's shoulders on Saturday by shopping

for that evening's meal. The East Montpelier Volunteer Fire Department contributed a large pasta salad and desserts.

wife Jessica, and their other son Scott and his girlfriend Ann Atkins. Yet it wasn't just a Brown family affair.

Night Dispatcher Cathie Vandenberg pitched in before or after her shifts. Linda Nelson and Teia Greenslit (also from the

accounting department) alternated working breakfasts and dinners, Linda stopping early at Dunkin' Donuts for boxes of hot coffee. Finance Director Cheryl Willett's gregarious teenage son, Gabe, helped serve and clear away the dishes.

"I cooked" said Teia.

"I cleaned," said Linda.

during the storm and recovery. Whenever he wasn't in the warehouse he was out bird-dogging with the line crews in the cold and deep snow. Dan's wife, Lise Couture, became a mainstay of the kitchen crew.

One of WEC's young

linemen is Mike Baril. Mike's parents, Dennis and Monique Baril, and Monique's sister (Mike's aunt) Renee Billadeau, all from Barre Town, helped out. Critical to the whole operation was the church's generosity in allowing WEC to pretty much take over that space for the week-long marathon. (The Old Brick Church – through Pastor Herb Hatch It turned out that another benefit of these regular breakfasts and dinners was that family members could count on their loved ones, who worked for the Co-op, being someplace they could find them. That was a good thing for 10-year-old Eliza Lanphear, whose father, Kevin, is a Washington Electric lineman. For days, Kevin had gotten home well after Eliza went to bed, and had left in the dark morning before she awoke. So her mom, Heather, brought her in for one of the meals so she could see him.

"She was broken-hearted," Heather said afterward. "This was well into the storm, probably after a week or so. Eliza continued on page 11