Robust Turnout at WEC’s 76th Annual Meeting
Free Meal and Lots to talk About

I was the biggest turn-out for Washington Electric Cooperative’s Annual Membership Meeting that anyone can remember, and yet it came merely five months after one of the most unsettling membership experiences since the Co-op was founded 76 years ago: the storm last December that caused so much damage that more than half of WEC’s members lost their power, many for prolonged periods of time, and many of them repeatedly.

So what gives? It could be that Barry Bernstein, the president of WEC’s Board of Directors, hit on something real when, in his President’s Address, he described how the double-wave of normal weather patterns have changed over the years: last winter was by outages but formed at least a temporary bond with Washington Electric’s call-takers and field staff, who were working so hard to help them; these members also knew they had been swept up in an event that affected thousands of their fellow Vermonters.

1) Co-op members, many of whom were seriously inconvenienced by outages but formed at least a temporary bond with Washington Electric’s call-takers and field staff, who were working so hard to help them; these members also knew they had been swept up in an event that affected thousands of their fellow Vermonters.

2) WEC employees from all departments, who pitched in together even more than usual, and became a 24-hour-a-day team, not only in the effort to take calls, manage information, and restore electric power for 5,500 Co-op households, but to support, with food and encouragement, the boots-on-the-ground linemen, birdogs, and tree-clearing crews laboring in forbidding conditions throughout the service territory.

3) Families, who held down the fort while their loved ones, by necessity, put their WEC duties first; neighbors and friends who also chipped in however they could to get everyone through the ordeal.

“It was really a major event, in terms of physical demands and mental and emotional stress on everyone,” said Bernstein. “But seeing everyone come together was an experience that moved everyone who saw or was involved in it.”

In fact, this story of teamwork, community support, and deep and extended staff-member interaction attracted the attention of the National Rural Electric Cooperative Association, the organization representing more than 900 electric co-ops nationwide. The NRECA will recount WEC’s experience in an upcoming issue of its publication, RE Magazine.

Summer Is Really Here

A few months of waiting for warmer weather, it finally has arrived. The summer solstice (June 21) has come and gone, and these are the longest days of sunlight in the year. Hurrah! But, this being Vermont, the weather has been anything but reliable, with many days of wet, overcast, rainy weather.

By contrast, I recently returned from a two-week trip to northern California, where sunny days were the norm once again. The trees were dry, the grass was green, and people were outside enjoying the weather.

To have a chance of meeting this challenge.

President’s Message

WEC To Form A Progressive Response To New Energy Legislation
Plus, Heartfelt Thanks to Margaret Lucenti

Washington Electric Cooperative
East Montpelier, VT 05651

“The Co-op has returned $4.5 million to you, the members, since we started the capital credit program in 1999.”
— Treasurer Don Douglas
Salvatore and Margaret Lucenti at WEC’s 2001 annual meeting. Margaret Lucenti, a former WEC trustee, helped transform the Co-op at a critical period in its history. She passed away in May.

**H.40 – Vermont’s Renewable Energy Standard Bill**

WEC is proud to support new energy legislation that passed in the 2015 legislative session, and we applaud the state’s lawmakers for a job well done.

The governor signed the Renewable Energy Standard bill into law on June 11, 2015. The bill, known during State House deliberations as House Bill 40 and now as Act 56, establishes a renewable energy standard for all Vermont electric utilities, including WEC.

As we have said, WEC is already 100-percent renewable in the sources of the power we provide to our members. This law will do a lot to move other utilities toward WEC’s accomplishments in that regard. That said, we think we can do more, and the new legislation will help us prepare programs to do just that: offer our member-owners more assistance and expertise to help them manage their total energy usage.

The structure of Act 56 includes three “tiers.” The first two tiers require Vermont electric utilities to increase the portions of their power portfolios that come from renewable sources, and to increase opportunities for “distributed generation” of renewable power within their territories. Being 100-percent renewable already, WEC largely satisfies the requirements of those two tiers.

The section of the bill that impacts WEC the most is Tier 3, which outlines what’s referred to as the “Energy Transformation” program.

In its introductory year, utilities will be required to have the equivalent of 2 percent of their retail electricity sales come from serving projects that improve energy efficiency – not just for electricity, but for other fuels as well, such as heating and transportation fuels. (Projects such as these could have the effect of increasing electricity sales, which is why the first tiers, enforcing a greater role for renewables, are important.) Like the other tiers, Tier 3 requirements are graduated, reaching 12 percent of retail sales by 2032.

While WEC will continue to offer a fair and sustainable net metering program, we will respond to Tier 3 by creating other programs to help Co-op members improve the weatherization of their homes through comprehensive home energy audits. We are also involved in a project to construct several electric vehicle charging stations in WEC’s service territory. And we will continue to offer solar hot water systems at a discount through our vendor/installer, RESOURCE YouthBuild, in Barre.

These are just a few of the new, innovative ideas that are in the works now right now, prompted by the Renewable Energy Standards Bill. This is a consumer-focused law, and we will strive to deliver fair and sustainable efforts that create real value for those who participate. As a not-for-profit entity, WEC exists to serve its members’ energy needs and we look forward to offering programs that move us away from fossil fuel sources and toward a cleaner and brighter low-carbon future.

**Staff Recognition – Safety First**

WEC continues to support and stress safety-first in the field and in all aspects of company and operations. Over the past decade Co-op employees have been diligent in maintaining a safe working environment and supporting each other to ensure safe working conditions. An example of this was the Perfect Safe Record awards given to all WEC employees in October of 2013, in recognition of 73,000 “employee hours” without an injury or mishap causing lost work time over the preceding year – quite an accomplishment for any company involved in outdoor physical labor, let alone an electric utility.

Scott Martino, WEC’s Safety & Environmental Coordinator, heads that effort. Scott is a 23-year employee with the Co-op, but his safety responsibilities are relatively new, as he was transferred to that position after his predecessor retired in 2010. Scott took his new duties seriously and has pursued further education and certification. We are proud of Scott for recently becoming certified as a Utility Safety Professional.

Under Scott’s leadership WEC, in the past few years, has received the following safety-recognition awards:
Climate As A System – And A Troubled One, At That

Guest Speaker Hill Addresses WEC’s Annual Meeting

There was a question mark after one of the early slides in meteorologist Roger Hill’s presentation at Washington Electric’s 76th Annual Membership Meeting on Wednesday, May 6. The slide, above an image of the blue earth in the black vacuum of space, with a green-yellow-and-blue Jetstream meandering across the Northern Hemisphere, asked: “A New Normal?”

According to Hill, and the many leading climatologists he cited during his half-hour talk, there’s really not much question about it. An era characterized by frequent extreme weather events has descended upon us; life on the planet has already become much more arduous, and will continue doing so as environmental changes stress and unsettle not only the earth but the societies endeavoring to live upon it.

On the screen behind him, Hill presented a graph showing “geophysical events” (such as earthquakes and volcanoes), “meteorological events” (tropical storms, winter storms like those that occur in Vermont, and thunderstorms), “hydrological events” (like flooding), and “climatological events” (extreme temperatures, droughts, forest fires) from 1980 to 2012. While the number of geophysical events in that 32-year period remained basically consistent, occurrences in the other three categories – tropical and winter storms, floods, heat waves and droughts – had all increased to the point of doubling or even tripling what had been their frequency in the early 1980s. In total, the graph displayed an almost relentless escalation that pretty convincingly answered the question, “A New Normal?”, in the affirmative.

Hill’s objective was not simply to provide statistics, but to help Washington Electric Co-op members understand how and why these phenomena occur. They unfold, he explained, in response to an increase in atmospheric carbon dioxide, primarily caused by human activities, that emit dramatically more CO₂ than natural processes would, (at least in this period of the planet’s lifecycle).

“The sun gives us short-wave radiation,” Hill said, “and incoming radiation should be relatively even with outgoing radiation.” However, the unnaturally high concentration of CO₂ allows solar radiation to penetrate but does not allow an equal amount to escape – trapping it within the atmospheric envelope: the well-known “greenhouse” effect. As the atmosphere warms it has the effect of melting the polar ice that would normally reflect the sunlight and radiation away from the surface. Since water is darker than ice, it absorbs the heat rather than reflecting it.

The combination of warmer water and warmer air puts the process in overdrive. Said Hill, “93.4 percent of the warming has gone into the oceans.”

That feeds into more melting of the arctic ice, an ominous scenario. “The last time the Arctic was this warm – around 125,000 years ago – sea level was 20 to 26 feet higher than it is now.” (Goodbye, Florida.) “Our oceans are on fire,” Hill said, figuratively if not literally. “This is a problem. Warmer oceans give off more moisture. More moisture causes more precipitation.”

That, said Hill, is a major contributor to the conditions that cause not only tropical storms but winter storms, too, such as “Damon,” the name given to the snowstorm that caused the worst damage in WEC’s history last December, due to its high moisture content and the resultant weight of the accumulated snow on trees and power lines.

“The snowflakes were enormous,” said Hill, a Worcester resident and Washington Electric Cooperative member who, in addition to consulting for WEC, also provides targeted weather information and advisories for other Vermont utilities and VELCO, which owns the statewide high-voltage electric transmission system. “The snowflakes were practically the size of hummingbirds,” he said colorfully. “That’ll do it to you.”

And yet... Vermonters last winter lived through a prolonged season that was colder and harsher than recent norms – seemingly in conflict with the notion of global warming.

With further images displaying weather patterns across the globe, Hill explained, “The cold air was actually cross-polar, from Siberia. We took the brunt of it this winter.” (One slide depicted the eastern half of the U.S., including the South from eastern Texas to the Atlantic, locked in cold weather, while the West was experiencing unusual heat and prolonged drought.) “We don’t know about next winter,” he said.

Another important part of the story of the life we are experiencing – the “new normal” – is weather patterns that get stuck. Hill cited the work of climate scientists Dr. Jennifer Francis of Rutgers University and Dr. Stephen Vavrus of the University of Wisconsin, related to "Arctic amplification" – the heightened impact of the greenhouse syndrome on the arctic specifically – and its effect upon the Jetstream (highvelocity air some 30,000 feet above the earth’s surface in the northern hemisphere), which has a major influence upon the weather.

“The last time the Arctic was this warm – around 125,000 years ago – sea level was 20 to 26 feet higher than it is now.” (Goodbye, Florida.)

The Jetstream traces a meandering, snake-like pattern aloft, but warming from the earth and seas below have broadened its ridges and troughs, causing it to move more slowly and sometimes lock weather patterns into place for extended periods of time.

(“The last time for Co-op Currents, Hill speculated that “We could see a pattern in the winter that would lock us into nor’easter after nor’easter, that would give us so much snow we wouldn’t know what to do with it.” It turned out to be an apt forecast of what happened this past winter to our neighbors in Boston.)

Caused for the greatest concern for our future – or more accurately, the future of today’s children and their children – is that heating, whether it’s water in a pot or air trapped below a greenhouse ceiling, is a gradual process. Human activity has been adding to atmospheric CO₂ since the Industrial Age, at ever-increasing rates, but climatologists say we have hardly begun to feel its full effects. That, said Hill, will change.

“Scientists are saying that the temperature is beginning to catch up to the high CO₂ level in the atmosphere.”

His discussion of climate change and its gathering impacts ended with a brief question-and-answer period, in which one WEC member garnered applause when she simply asked him, “Can you please go down to the U.S. Congress and give this presentation?”

Extreme weather and climate-related events on the rise...

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Annual Meeting continued from page 1

Part of the business undertaken by WEC’s officers and senior management at the membership meeting, held this year at the Canadian Club in Barre Town, was to inform people about the outcome of that, not only historic but very costly, snowstorm. Perhaps because winter storms are beginning to rival summer hurricanes in their frequency and impact, they’re now getting names. Ours was “Damon,” and Damon caused $23 million in damages and repair costs for Vermont’s electric utilities. The largest utility, Green Mountain Power, which serves 255,000 customers, had the largest bill: $18 million. Vermont Electric Cooperative (with 32,000 members, about three times as large as WEC) came in at $3.9 million.


State officials and the leadership of the two co-ops collaborated, even while the restoration effort was at a fever pitch, to document Damon’s impacts for the Federal Emergency Management Agency. As a result, President Obama declared it a disaster, which qualified the co-ops for significant financial assistance. WEC will be reimbursed for 75 percent of its storm-recovery costs (chiefly labor) in Orange and Washington counties. WEC’s costs in Caledonia County were comparatively small, and that county was not covered in the federal designation.

Regarding some of the other unim- bursed costs, Richards said, “The state Public Service Board will allow WEC to stretch those dollars out into the future so we can make small, incremental payments on our obligations over time, which will minimize the impact upon our rates in any single year.”

It’s not like getting off Scot-free, but it’s as good an outcome as rate-paying Co-op members could hope for after a storm like Damon. And it bears emphasizing that the reason this could happen is Washington Electric’s not-for-profit, cooperative structure. (Private, for-profit utilities are not eligible for FEMA reimbursements.)

Election results

The 2015 Annual Meeting was, as always, a festive and very sociable affair, starting with a dinner catered by the Canadian Club. This year, Cabot Cooperative Creamery — one of WEC’s corporate members, with an administrative building on Washington Electric’s lines in Waitsfield — provided cheese appetizers from platters in the central room. For the first time, WEC departed from past practice of charging a nominal fee for the meal, hosting the dinner entirely.

“It seemed like a good idea,” said General Manager Richards during planning for the meeting, “to make members feel welcome and a part of the Co-op, and to encourage more people to come.”

Whatever the factors were, they attracted a sizeable turnout of 226 people, including members, guests, and staff. And that was a good sign for the future of the Co-op, which depends for its vibrancy on the involvement of the membership. Several younger families attended, too, contributing to a spread in ages from 16 months to 95 years among the people in the room.

Part of the business of the Annual Meeting was to conclude the voting for candidates running for four seats on WEC’s nine-member Board of Directors. The voting started by mail in April and concluded when the ballot boxes at the meeting were closed at 6:30 p.m. In contrast to the favorable factors attesting to member involvement, however, this was not a year of contested elections; there were four seats available and only four candidates, all of them incumbents (although one of the candidates, Stephen Knowlton, of East Montpelier, was just appointed in December to fill the seat left vacant by the death of Director Marion Milne). The voting counts were close for all the candidates. Knowlton and Vice President Roger Fox, of Walden, each received 711 votes. Richard Rubin, of Plainfield (699 votes), and Mary Just Skinner, of Middlesex (686), also were returned to the Board. Knowlton, Fox, and Rubin will serve for three years. Skinner will complete the final two years of Marion Milne’s unexpired term.

Updates on capital credits and Coventry

2015 is the tenth anniversary for Washington Electric’s generating facility in Coventry, Vermont, which uses methane gas produced by biological decay within the state’s largest solid-waste landfill to generate electricity. Certainly it’s one of the best uses that can be made of methane, a potent greenhouse gas that otherwise would have to be flared (burned) to prevent it from escaping into the atmosphere.

WEC’s Coventry station came on line in July 2005; though it was briefly sidelined by a fire, it has otherwise been a reliable and economical source of power for a decade, and has been expanded twice in that time to increase its power production. (The methane fuels five large engines that generate the electricity.) In 2014, Coventry contributed 53 percent of WEC’s power mix.

"In December 2014 we recorded our highest output on record," Bernstein reported, "and we had another high point in March [2015]. Our sustained production at Coventry is a major reason we're able to keep our electric rates relatively stable.”

Besides rate stability, another benefit of a financially secure electric co-op is its ability to return capital credit earnings to its members. The Co-op had to meet certain financial thresholds to do that. WEC has been returning capital credits — which are members’ proportional shares of annual “margins” (revenues exceeding expenses) — since 1999.

In his report, Treasurer Donald Douglas summarized the value of capital credit distributions over time. “The Co-op has returned $4.5 million to you, the members, since we started the program;” he said. WEC has now paid off all its capital credit obligations to members from its first 53 years of operations: 1939 to 1992.

The capital credit process is a two-step procedure. First, the Co-op allocates its margins (dollars not needed to pay expenses) to member accounts. This happens each year — but it is strictly a bookkeeping procedure; members’ accounts do not actually receive money from the Co-op. (Think of it, instead, as a credit to an account — a tracking mechanism — set up for you called capital credits, with a promise to pay you in the future if circumstances — WEC’s financial stability — permit.)

The second step is the “retirement” of dollars — actually returning a portion of their capital credits to members, in the form of credits on their electric bills, or, if they are former members no longer purchasing power from the
From the floor

Before turning the floor over to guest speaker Roger Hill, Bernstein asked the Annual Meeting audience what was on their minds.

As always, members had questions, and opinions to express. One person asked if WEC could create a reserve fund for defraying increased expenses, instead of petitioning the Vermont Public Service Board for rate hikes.

"The regulators are not generally supportive of utilities having rainy day funds," Richards replied. Its regulatory approach, she explained, is to establish rates for each utility that closely match its expected costs; that way, current members are paying the company's costs in real time, whereas creating reserve accounts would in effect shift dollars from one set of members to another. The regulators have historically frowned on that.

The most discussion occurred when Plainfield WEC member Alexandra Thayer expressed her objection to a policy in Washington Electric's recently revised net metering program that requires some members to have an energy audit performed on their homes before WEC will accept connection to their small (usually solar) generating systems.

"It's a barrier," Thayer protested. "I would rather not see barriers for people who want to help the planet."

Richards explained WEC's rationale. "We want people to look at energy efficiency as well as renewable energy. You don't have to complete the recommendations you receive from the audit, but you are armed with information on how to save money for all your energy needs, including home heating," The requirement is designed to ensure that people have information to reduce their carbon footprint and are fully informed on what they can do to save energy dollars; it also helps them size their net metering systems as cost-effectively as possible.

Thayer called this a "nanny approach." Paul Sipple, from Fayston, also expressed concern about the expense, but felt that if there was to be an audit requirement its recommendations should be enforced.

It came to light, however, that since WEC places the energy-audit requirement only on "high-use" net metering applicants — people consuming 750 kilowatt-hours or more per month — only two applicants in WEC's new program have been subject to it.

Board President Bernstein thanked the members for their input, and reiterated that WEC's program is a pilot project that will be refined and revised when Vermont creates new rules for net metering, to take effect in 2017.

Before the discussion concluded, former WEC President Michael Duane had praise for the effectiveness of the Co-op's web site during the December storm. In particular, the steady updates on the "blog" helped him keep his son informed on WEC's efforts — its successes and setbacks, as well — in power restoration. WEC had also made great strides improving members' ability to communicate by phone with the Co-op during those difficult nine days in early winter.

Next on the agenda was climate change, a subject addressed by well-known local meteorologist — and Washington Electric Co-op member — Roger Hill. (See "Climate As A System," page 3). People actively engaged in the conversation, until adjournment at 8 p.m. It being spring, there was still soft light in the air as WEC members spilled into the parking lot.
President's Report
continued from page 2

- The Vermont Governor's Award for Safety for companies with under 50 employees;
- The Occupational Excellence Award for 2013 (we had no injuries, while the state average was 2.2 injuries per hundred employees);
- The National Safety Council Award for two perfect years.

When you consider the work our employees do in the field nearly every day – and that includes not only the line workers, but the engineers and other personnel who assist in restorations when large numbers of Co-op members lose their power in storms, in all kinds of weather and in difficult terrain – this is a significant and special accomplishment. Our respect and appreciation go out to all the WEC staff. JOB WELL DONE!

I hope all of our members and employees have a great summer, and that the weather is kind to us.

Co-op President Bernstein Receives Prestigious Aiken Award

Governor, and later Senator, George D. Aiken was an ardent supporter of the rural electric cooperative movement when it needed every ounce of support it could get to overcome political opposition and scant finances in the years of the Great Depression and World War II. Several decades later, when Washington Electric Co-op needed people who were equally dedicated to the cooperative cause, WEC member Barry Bernstein was one of those who rose to accept the challenge, and his dedication has never faltered. Bernstein's effective and progressive leadership was recognized at the May 2015 meeting of the Northeast Association of Electric Cooperatives, in Maine, where he was presented with the George Aiken Award, which recognizes exceptional service to electric co-ops.

Bernstein has served as the Co-op’s president since 1998. In nominating him for the award, his colleagues cited his leadership on many of the day's cutting-edge energy issues. A partial list includes WEC’s transition to 100-percent renewable power, including the development of the Coventry landfill-gas generating plant, purchase-power contracts for electricity generated at the Sheffield wind farm, and a new block of power from Hydro Quebec; dedication early on to energy efficiency; a rate structure providing an affordable first block of power for all Co-op members; and WEC’s statewide leadership in energy issues – all hallmarks of Barry Bernstein’s tenure.

Previous WEC winners of the Aiken Award have included former Manager Avram Patt and Director Wendell Cilley (posthumously).

WEC President Barry Bernstein receives the George Aiken Award, honoring his decades of service and leadership at Washington Electric Cooperative. Pictured with him is WEC General Manager Patty Richards.

Solar Hot Water Made Simple
WEC DISCOUNTS AVAILABLE

Now: Efficiency Vermont Incentives Available for Solar Hot Water!

$950 off from Efficiency Vermont and manufacturer rebates
$1,700 off installation by ReSOURCE
$1,002 in incentives from the Vermont Small Scale Renewable Energy Incentive Program
= $3,652 in Savings!

There has never been a better time to install a solar hot water system!

To sign up for a FREE analysis and system quotation, take the first step NOW by visiting www.washingtonelectric.coop, or call 802-224-2329 to speak with WEC’s Energy Coach about solar hot water or other energy questions.

Call the Co-op at 800-932-5245
or visit us on the web at:
www.washingtonelectric.coop/pages/prod.htm

To call the Co-op, dial: weekdays 7:30 a.m. – 5 p.m., 223-5245; toll-free for reporting outages & emergencies, 1-800-WEC-5245.
Green Thumbs Sprouting at Washington Electric

Washington Electric Cooperative was one of nine small companies (defined as companies with fewer than 50 employees) to receive grants and technical assistance this spring so that the employees could build, tend, and enjoy vegetable gardens in the fresh air and sunshine outside their workplaces. The $500 grant came through the Green Thumbs at Work program, sponsored by the Vermont Department of Health and the Vermont Community Garden Network. Other supporters include Gardener's Supply (a $250 gift certificate) and Charlie Nardozzi, a well-known horticulturist and expert on organic gardening, known for his writings and guest appearances on Vermont Public Radio; Nardozzi provides consultation, advice, and support for the workplace gardeners.

Dawn Johnson, a member services representative at WEC who is strongly committed to the Co-op’s Wellness Program, took the initiative of applying for a Green Thumbs at Work grant last fall. WEC was one of 29 applicants in this grant cycle; companies had to demonstrate their preparedness and commitment to developing a workplace garden, be able to provide in-kind services to supplement the grant, and make an articulate case for a garden’s contribution to the goals and spirit of their wellness programs. Johnson expresses that connection with confidence. “When you can articulate case for a garden’s contribution to the goals and spirit of their wellness programs. Johnson expresses that connection with confidence. “When you can

The Co-op will continue working to improve service reliability by reclearing power-line rights of way in the areas described below. Right-of-way reclearing normally involves removing trees and pruning vegetation for 15 feet on either side of a single-phase distribution line, and for 25 feet on either side of a three-phase main distribution line. All of these projects involve single-phase lines, those carried by poles without cross-bars. Reclearing projects often involve a tap. That’s where a single-phase line takes power from another line. We don’t use herbicides or other chemicals. Throughout the year, post cards are mailed to members notifying them that right-of-way maintenance is to take place. Also, WEC’s automated message-delivery system will place a phone call (if a phone number is on file) to all households affected by such maintenance projects, up to two or three weeks before work on the property is to begin. Calls will be placed in the evening, when most members are likely to be home. If no one answers, Co-op staff will attempt to reach that member during the day. Because the evening calls are automated, they cannot hold the line if, for example, a child answers. If you believe you may have received a call from WEC, please call during office hours to check. If you are notified that a portion of your property is to be recleared and you especially hope to save any particular trees that are within the right-of-way, call the Co-op.

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

Brookfield: Parker, Ferris and Woods Roads, Chelsea, Eagle Peak and East Hill Roads, Cemetery Street

Chelsea: East Randolph, Hook and Klonike Roads, Bobbinshop, Edwards and Williams town Road, Bradshaw Crossroad

Grono: Lakeside and Sunset Drives, Stillwater and Ricker campgrounds, Boulder Beach Road

Moretown: Carrigan, Hathaway & Howes Roads, South Hill, Bradley & Goves Roads

Orange: Clement, Cramp and Helgesen Road

Randolph: Chelsea Mountain Road

Roxbury: Steele Hill and Drown Roads

Tunbridge: Dickerman Hill, Mary White and Angel Roads

Vershire: McVeer Road

Walden: Route 15 between Rowell and Noystead Roads

By the end of June, WEC’s green thumbs had something to show for their labors (above, and inset). Radishes had been harvested, there was lots of lettuce, and other plantings were making headway. Besides a bit of exercise, the gardens provide staff members fresh and healthy ways to supplement their lunches.

It’s not just the office staff who enjoy a break from their work routines. Above, Apprentice Lineman Mike Bent (left) and Right-of-Way Coordinator Mike Myers help get the soil shoveled in and leveled before planting can begin.

Charlie Nardozzi (center) helps WEC employees launch the Co-op’s new vegetable garden. Celebrating with Nardozzi are (from left) WEC Operations Director Dan Weston, Member Services Supervisor Susan Golden, Member Service Representative (and Wellness Program leader) Dawn Johnson, and IT Manager Kevin Stevens. (Those are Susan’s pugs, Gordon and Caramel, that she and Nardozzi are holding.)
In Craftsbury, WEC Staffers Discuss Energy Issues
With Tomorrow’s Decision Makers

On Monday morning, June 1st, Washington Electric Cooperative staff members Bill Powell and Dan Weston traveled to Craftsbury Academy to discuss some challenging questions with the ninth- through-twelfth-graders whose generation, even more than their parents’ generation, will have to try to solve them. These questions are what is the best source of energy? And, how much energy do we really need? is renewable energy really renewable? Basically, these questions came down to the central issue of how to harvest energy from our earth and environment while doing the least harm to our natural resources that we possibly can. Doing no harm, Weston, (WEC’s director of operations and engineering) told the students, is pretty much out of the question. No matter whether it’s coal mining, gas exploration, hydro impoundments, or solar fields, “There’s a huge impact with everything we do.”

This said science teacher Carly Brown after the event, was part of the educational value of Powell and Weston’s visit. She had arranged for them to come shortly before the students would take field trips to Green Mountain Power Inc.’s Kingdom Community Wind installation in Lowell, and Washington Electric’s facility in Coventry, which generates electric power using landfill methane for fuel. The students also got a look at the privately developed, 2.2-megawatt solar array across the road from the Coventry plant, where more than 9,000 solar panels are clustered on a hillside sloping toward Lake Memphremagog in the distance.

“Energy is something they are going to be faced with more and more in the future,” said Brown, “but it’s something they could easily ignore. Where they are in their life right now, mostly they’re not thinking much about it.”

“From the science classroom perspective, what I love about this subject is that there isn’t one right answer,” she continued. “Each [energy source] has drawbacks, so it’s a question of looking at which ones have the benefits that outweigh the negatives, and just to get them thinking more deeply on where energy comes from.”

The students had had some exposure to renewable energy. Powell and Weston addressed two groups of students – juniors and seniors first, followed by the freshmen and sophomores – and they asked both groups if anyone had solar panels at their homes. (Powell, WEC’s director of products and services, showed a slide picturing his house, with a solar array mounted in the yard.) A small number of students raised their hands. A girl in the junior/senior group expressed concerns about “blasting mountain tops” to erect wind turbines, and “interrupting the bats and birds.”

Weston reiterated the sacrifices we make in the pursuit of energy. But he then framed the issue in another way, hoping to strike a chord with the youngsters in front of him. “We want, want, want,” he said. “We want power for our TVs and our game boxes.”

As long as we “want” extravagantly, he pointed out, we will consume extravagantly, and as a result, waste extravagantly.

Powell and Weston also discussed technical issues about the Coventry facility the students were about to visit. They explained briefly how the methane is produced by decomposition of the waste within the landfill, is captured by pipes intertwined below the surface, and then transported, through the creation of a vacuum, to the cleansing and generating equipment at WEC’s adjoining building. They also explained that the waste stream entering the landfill has changed over the years, and will continue doing so, partly due to meandering trends in consumer products and also to evolving regulatory policies.

“Changes in the waste stream changes the chemical content of the gases that are produced,” Powell explained. That requires a response from the technicians who manage and maintain WEC’s production equipment. Of the four renewable-energy technologies discussed with the students (wind and solar power, hydroelectricity produced at WEC’s 1-megawatt facility in Wrightsville, and the Co-op’s methane plant in Coventry), it was the last of these that provided the greatest insight about the relationship between human activity, the constant demands it creates for energy, and the effects of those demands upon the earth.

“There’s a huge impact with everything we do,” said Powell. “It’s a matter of personal responsibility. We need to be literate in our energy uses, and that’s what we’re doing here today.”

Carly Brown said that the sessions with Weston and Powell, and the subsequent visits to the renewable energy sites, provided food for thought for Craftsbury’s teachers, as well as the students.

“It became more clear to me,” she said, “that there’s a lot we can do with it, and that I, as a science teacher, can make a stronger study of energy part of our curriculum. A couple of teachers whispered that we should have them come very year.”

Today’s students and their peers will have lots of important decisions to make during their lifetimes, about energy generation and its impact upon their environment. One message from Powell and Weston: There will be no easy answers.