The “next generation” of solar power, for Vermont Electric Cooperative members, is almost here. The hallmark of the next generation of solar power is that it will be more accessible and more affordable for VEC members than solar power has been up until now.

Vermont Electric Co-op has kicked off a project to develop a total of 5 megawatts (MW) of solar-generating capability, probably at two 2.5-megawatt sites, which have yet to be determined, in the western half of VEC’s service territory. CEO Dave Hallquist announced, at a press conference in Montpelier on Monday, November 11, that phase one of the project is about to get underway; VEC will launch the site search immediately, followed by the permitting process once sites are identified. Construction at site one is planned for 2015 and the entire project is expected to reach completion in 2017.

“This schedule,” Hallquist said, “we’re going to meet Vermont’s goal of obtaining 20 percent of our energy from new renewable sources three years before the target date of 2020.”

Hallquist said VEC is budgeting $2 per watt for installation costs for Co-op Community Solar. At that rate, the ultimate purchase cost of power from the facility will be below the long-term market costs for other, “traditional,” sources of power.

“Today utilities like VEC are repeatedly urged to lower the costs of providing power on one hand, but also to increase their use of renewable energy on the other,” Hallquist said. “This doesn’t have to be an either/or proposition. We can have both, and with Co-op Community Solar, we will.”

For VEC members interested in supporting and enjoying the “next generation” of solar power is that it is running an efficient operation that uses the funds collected from ratepayers responsibly. VEC is running an efficient operation that uses the funds collected from ratepayers responsibly. VEC is running an efficient operation that uses the funds collected from ratepayers responsibly.
PROPOSED NOTICE OF RATE CHANGE

On November 14, 2013, Vermont Electric Cooperative, Inc. (VEC) filed with the Vermont Public Service Board (PSB) a request for an increase in the rate of $0.04 per kWh, effective on January 1, 2014. This represents a 2.93% increase over existing rates. VEC proposes that the increase be equally applied to all types of energy service. This is due to the expected increase in the cost of electricity.

If you have comments on the proposed rate change, you may submit them to the Vermont Public Service Board (PSB), 112 State Street, Montpelier, VT 05602-2701. Comments may also be emailed to psb.clerk@state.vt.us.

Vermont Electric Cooperative
Current and Proposed Rates

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Factors to Consider Before You Buy a Water Heater

Location
Must be installed in a space where the temperature stays above 50°F to see the savings.

Space
Provide at least 750 cubic feet of air space around the unit (about the size of a 10' x 10' room).

Condensation Drain
Installations requires water to be pumped outside or passively drained to a sink, washing machine drain, or floor drain lower than the heat pump condensate port.

Installation
We recommend that you hire a licensed plumber who has attended manufacturer training for the heat pump water heater service.

Maintenance
Many heat pump water heaters have air filters that should be cleaned regularly for best performance.

Size
A properly sized water heater will meet your household’s hot water needs while operating more efficiently. When selecting the proper water heater size and model, look at the First Hour Rating (FHR) on the yellow Energy Guide label. Talk to your contractor or refer to manufacturers to determine what FHR is appropriate for you.

Efficiency Vermont

- **Heat pump water heater**: $1,700 net installation cost
- **$1,000 efficiency Vermont**
- **$400 rebates (Vermont Efficiency Vermont)**
- **$300 federal tax credit**

For more information, please visit www.efficiencyvermont.com/hpwh.
When Vermont Electric Cooperative dispatched a team of engineers and technicians to towns in the remotest corners of the Northeast Kingdom to begin planning for a major upgrade of the electric system there, they were in for a surprise. In several areas they found poles and wires, which were still in use, dating back to the earliest days of electricity development in rural Vermont.

"The lines from Bloomfield to Canaan were originally built in the 1920s, and there are still poles there dating back to the 30s and 40s," says VEC’s Chief Operations Officer (COO) Jeffery Wright. "The line between Derby and Charleston was dated 1927, and it’s original material. That might have been built to connect the hydroelectric stations along the Clyde River to Newport. In Vermont, that’s how the electric grid developed in its earliest days a hydro plant here and a hydro plant there, with lines built to connect them."

For perspective, consider that the rural electric co-op movement in the U.S. didn’t start until 1935, with passage by Congress of the Rural Electrification Act. Then it took a few more years for cooperatives to organize, to take advantage of REA financing VEC was chartered in 1938 – which means that the equipment found around Derby and Charleston predated the rural electrification movement by fully a decade.

That’s not exactly an archaelogical find, but it does point to a significant fact: While many Vermonters are now enjoying the 21st-century benefits of the “smart grid” – increased reliability, shortened outage times, digital metering – there are still areas with their electric utilities that enabled them to improve on their efficiency and lower their power bills – there are still areas where none of those advantages are available. And some are right here in VEC’s service territory, most notably in Essex County.

There’s another holdover from an earlier time, that has posed problems for the Co-op in trying to service its Essex County members. “They’ve never been connected, electrically, to Vermont,” Wright explains. “It’s always been from Canada, a subset of the Hydro-Quebec distribution network. It’s been really challenging for our control room to manage a grid they have no control over.”

Not surprisingly – especially when you throw in line extensions and take to heart the work crews to the scene of outages and necessary repairs – we’re talking about one of the worst-performing areas in VEC’s large territory.

But not for much longer.

Sometime within the first few months of 2014, crews will begin setting poles for one of the largest electric-system rebuilding the Co-op has ever undertaken, a project called the NEK Connector. The final design includes building 23 miles of 345 kV (kilovolt) electric distribution lines along Essex County’s power lines that directly serve VEC members, as opposed to transmission lines – there are still areas where none of those advantages are available. And some are right here in VEC’s service territory, most notably in Essex County.

"Basically, we spent $3 million on the Derby-Charleston project and turned it into $15 million," says Wright, who credits the Economic Development Fund of Northern Vermont, Inc., for alerting Vermont Electric Cooperative to the project and turning it into $15 million, “Vermont Electric Co-op to the grant opportunity. There’s an economic-development interest at work here; the road infrastructure, the electric infrastructure, and telecommunications are not business-friendly up there. What we can control is the electric infrastructure. Hopefully, some businesses will see the improvements and want to locate there.”

As for VEC members in Essex County, they’ll begin seeing those improvements within a matter of months.

Transmission line that runs between Derby and West Charleston during construction. Original line is on the right and upgraded line is on the left.

Their electric rates are equal to every other VEC members,” says Wright. "And we feel strongly that their level of service should be the same.

That said, at first blush, the economics seem wildly out of whack. There are only around 1,500 VEC members in the target area, and the system upgrades to serve them will amount to a $15 million expenditure. The beauty for VEC, however, is that the overall project (electricity and telecommunications) will be funded by a grant from the federal Economic Development Administration. Partners in the project must put up 20 percent in matching funds, but to cover that obligation VEC secured permission to apply money it had already invested in upgrading the transmission lines between Derby and Charleston in neighboring Orleans County.

"We had tapped out the infrastructure in the area," Wright explains. "The coincidental timing of the Kings Community Wind project was perfect for us. We’ll be able to accommodate continued growth at Jay well into the next three decades. That was the biggest reliability project VEC had ever done, and we accomplished it with other interests providing the majority of the funding.”

While the GMP/VELCO partnership helped fund major improvements targeted in and around Lowell and Jay, and the EDA grant will cover the modernization of services in Essex County, another grant – this one from the U.S. Department of Energy (DOE) – helped fund improvements beneficial to all Co-op members.

"The DOE grant was probably the most important of all," says Wright. "It allowed us to leverage existing funds that resulted in a $10-million upgrade system-wide.”

Vermont’s electric utilities, working together, had obtained federal funding through the 2009 American Recovery and Reinvestment Act (known as the “stimulus bill”) to implement a statewide smart grid.

"But in order to have a smart grid you need to have smart equipment, so you need to get the ‘dumb’ equipment out. That’s where the DOE grant came in. VEC benefited from the replacement of older equipment allowing one to keep the lines up and running and responsiveness for our members, and safety for everyone.”

Where?

The DOE and ARRA funding ended last April, so that work is in the review mirror, as is the substation/transmission project at Lowell and Jay. Now it’s back to the rest of the Co-op’s 10-year plan. Plus, of course, the Essex County project that gets underway in 2014.

"It’s been an extremely busy time," says COO

Continued on page 6
“Co-op Community Solar”

Vermont Electric Co-op has adapted their business model to accommodate sunny Vermont rooftops, which are suitable for rooftop PV [photovoltaic] systems,” said Hallquist. “Many in the country’s solar-generating potential.

Governor Peter Shumlin and other officials were on hand at the November 11 press conference where Hallquist announced the startup of VEC’s Co-op Community Solar program. Citing Vermont’s experience with Tropical Storm Irene in 2011, and the devastating typhoon sweeping the Philippines that very day, Shumlin said such storms are “a warning shot for what lies ahead” due to climate change.

“It’s projects like this,” he said, “that can ensure a planet that will be livable for our kids and grandkids.”

The governor also touted the job-creating promise of solar-power development, and the economic importance of reduced energy costs. He praised VEC for its participation in the Sunshot program. Vermont Public Service Commissioner Chris Recchia noted that the addition of large-scale solar generating capacity in Vermont will become even more important as sectors such as transportation and thermal heating (through the use of heat pumps) turn more to electricity.

Doug Danley, representing NRECA’s Cooperative Research Network, explained that projects like VEC’s Co-op Community Solar will address limitations in the country’s solar-generating potential.

“The Department of Energy has calculated that only 15 percent of U.S. households are suitable for rooftop PV [photovoltaic] systems,” said Danley. “Many roofs are shaded; there are these things you have in Vermont called mountains that get in the way of sunlight; a huge percentage of people live in multi-family homes; and some can’t afford or manage PV systems.

“There needs to be other pathways for solar power,” he pointed out. “A community, cooperatively owned system, with the added benefit of efficiencies of scale that aren’t possible for single-home rooftop installations, can be one of those pathways.”

This leads to another important component of this affordable solar energy project which is that a portion of the project could be available for net metering. As VEC members know, the Co-op reached the mandatory 4-percent cap for net metering last summer. (Under Vermont’s net metering law, utilities are required to accept Public Service Board-approved net metering projects – which are mostly rooftop-type solar generating systems at people’s homes – until their cumulative generating capacity reaches 4 percent of the utility’s peak demand.) He popularity of net metering, as prices for solar systems have dropped, meant VEC and some other utilities reached the 4-percent cap more quickly than expected; it also turned up problems that had not been fully anticipated – for example, cross-subsidizing, where members without net metering defray more of the Co-op’s operational costs than members who own and use net metering systems.

“We’ll be working with the Legislature to address these issues,” said Hallquist. “What is great about Vermont is that we can all work together towards a common vision, and VEC has a good working relationship with the legislature. The first thing we need to do is get rid of the 4-percent cap; then we can resume our net metering program with an added option for VEC members to participate through group net metering in our Co-op Community Solar project. Many VEC members cannot participate in net metering today as they may live in condos, rentals, or do not have the right roof for an installation. VEC’s new program will provide additional avenues for this type of small-scale net metering generation.

“But I also want to emphasize,” Hallquist continued, “that because of its low costs, Co-op Community Solar will be a viable project with or without net metering.”

Stay Safe When Winter Storms Make the Lights Go Out

As the days get shorter and the nights get colder, we know that whether we like it or not, winter is coming. We also know that heavy, wet snow and ice storms are an inevitable part of winter in Vermont and can lead to downed power lines and outages.

As we prepare our homes and cars, it’s also important to plan for the possibility of a power outage should you find yourself in the dark after a severe winter event.

Most of your storm preparation can happen now, before a winter storm warning is even announced. Put together an outage kit with these common, durable items and store it in an easily accessible location:

- battery-powered flashlights;
- portable radio;
- battery-powered alarm clock;
- extra batteries;
- dry and warm clothing;
- sleeping bags and/ or warm blankets;
- bottled water;
- foods that can be consumed with little to no preparation; and
- a phone that does not require electricity.

If a member of your household depends on electricity for life support, be sure to notify VEC at 1-800-832-2667. Also make sure you have portable oxygen tanks on hand, a backup power source, and/or a temporary relocation plan.

Once the lights go out, follow these steps. First, check to see if your neighbor’s lights are on. If they are, the problem could be in your home. Locate your fuse box or breaker panel to be sure that all fuses are intact and that the breakers are in the on position. If everything looks good, try turning on and off both the main power switch on the fuse box and the main breaker switch on the breaker box. If you still don’t have power, call VEC at 1-800-832-2667 to report the outage.

While the power is out, the most important thing is to stay safe. Always stay clear of downed power lines, debris resting on a power line, and any water close to a downed power line. Turn off or unplug appliances such as DVD players, TVs, microwaves, stereos, and laundry machines. This will help reduce initial demand for electricity when the power comes back on, which, if too great, will overload the system and cause the power to go off again. It also helps protect your equipment from possible voltage fluctuation. You may want to leave one or two lights on to let you know when the power is restored. While heating sources such as a wood stove, fireplace, or propane space heater can be used with normal caution, you should never use a gas-powered oven for heating or a gas or charcoal grill inside the home.

Now when winter storms take your power out, you’ll know what to do to stay safe and warm while we work hard to get your lights back on.

Get Energy Smart with wattWATCHERS

VEC offers an online tool called wattWATCHERS to help you keep track of your electric usage. It can be especially useful this time of year as you transition from summer’s dehumidifiers and air conditioners to winter’s heaters, humidifiers, and increased lighting needs. If you’ve ever wondered how much each of your appliance impacts your monthly bill, wattWATCHERS can help you figure it out and identify opportunities for energy savings. Log on today at www.vermontelectric.coop/vec-watt-watchers.
One thing Ken Tripp has learned from his job at Vermont Electric Cooperative is that no one loves a substation. Certainly they're ungainly things to look at. The older ones, with their heavy wooden posts and platforms supporting regulators and fuses and other electrical equipment, look archaic in this day and age, even if they're decked out with sophisticated equipment. And the newer ones, built of steel, look like they were made out of an Erector Set. Every VEC member is dependent on a substation for his or her electric power, whether they know it or not.

"Substations are one of those things where people don't want to hear it or see it, but they want what it does," says Tripp, who is the supervisor of Vermont Electric Cooperative's five-man substation team. Siting a substation can be a tricky business. "You want to build them near a high density of meters [people's homes and businesses], and you have to be near an existing transmission line. But nobody wants it near their house," he says. "We end up putting them in places where they're kind of hidden." Utilities, VEC included, love their substations. In a way, they are the heart of the system – pumping distribution-voltage electric power out to their customers the way the heart pumps blood to every part of the body. But as the Co-op's distribution system changes, and as advanced technology like SCADA (Supervisory Command and Data Acquisition) and AMI (Advanced Metering Infrastructure) bring new purposes and capabilities to substations, a constant reevaluation takes place.

In October VEC held an opening ceremony at a new substation, called Derby 45. Replacing an old facility that stood in one corner of the new substation's footprint, this was the first substation designed and built almost entirely by VEC's own employees (excavation work was performed by a contractor). It has state-of-the-art SCADA equipment, enabling remote operation and system-analysis, a catchment moat around the transformer to protect the groundwater and soil should an oil leak occur, and other technological and environmental attributes. It will also be safer for employees, providing more space for them to work in under sometimes tense circumstances. Derby 45 was an impressive achievement for VEC, and the first of more company-built substations sure to come.

Then there's Derby Substation 25. "That one's an eyesore, down by the river, and we're working toward getting it out of there," says Tripp. "Getting rid of a substation is a great thing; there's less potential of environmental impact, and less equipment for us to maintain."

But before you can get rid of a substation you need to make sure that the remaining substations can carry its load, or replace it with a more modern, better equipped, and safer plant like Derby 45. Increasingly, VEC is also designing "redundancy" into its substation network, so that if transmission lines are damaged in a storm or accident, if there's an equipment malfunction within a substation – either of which can result in the substation "going dark" – Co-op members can be supplied temporarily with electricity from a different substation, with only a brief power interruption (or none at all).

Vermont Electric Co-op presently has 36 substations. They're all over the place: Fairfax, Eden, Montgomery, Hinesburg, South Alburgh, South Hero, Island Pond, Norton, Jericho… And they aren't, as the saying goes, "your grandfather's substations anymore." In addition to the transformers that do the substation's main job of changing voltage, they house SCADA equipment and relays for transmitting the data that enable VEC to bill members accurately and to determine, remotely, where outages have occurred so they can be repaired more quickly. Substations also employ regulators to maintain steady voltage in the distribution lines, which ensures consistent power quality for members; and reclosers and breakers that can actually avoid outages by giving the circuits a chance to clear a fault before shutting the power down, in many circumstances, if outages do occur.

Keeping Up with the Times: Substation Crew takes an Ever-Growing Role at VEC

Substation technicians (from left to right) George Jacobs, Matt Anderson, Victor Carter, and Group Leader Chris Rodgers in front of VEC's newly constructed Derby 45 Substation.
As we near the close of 2013, VEC can proudly state that we serve our membership with 1,435 years of service experience! Below is the list of VEC employees recognized in October.

YEARS OF SERVICE MILESTONES

30 years
Sally Lumbra, Human Resources Manager
David Young, Safety Technician

25 years
Donald Gates, 1st Class Line Worker & Group Leader
Gerald Gates, 1st Class Line Worker
Kevin Podd, Systems Administrator

20 years
Craig Kieny, Senior Power Resource Planner
Kathy Thompson, Call Center Representative
Larry Hall, Mechanic

15 years
Michael Bursell, Chief Financial Officer

10 years
Dean Denis, Senior Systems Engineer
Codie Bryce, 1st Class Line Worker
Christopher Comelleit, 1st Class Line Worker
Elizabeth Gamache, Manager of Corporate Services
Thom Curley, System Operator
Chris Rodger, Substation Group Leader
Ken Tripp, Substation Manager
Nicole Thomas, Payroll and Risk Insurance Administrator

5 years
Jeffrey Wright, Chief Operating Officer

operations update

Wright. “First there’s the rollout of a very aggressive 10-year rebuilding plan, and then in the middle of that the federal grant for the smart grid, and the Kingdom Community Wind opportunity. And then you inject another $14 million for work in Essex County.

The staff here has been what I would call enthusiastically tired out. We love the work and the improvements it brings to our members, but it’s been a Herculean effort.”

And this time they’re not likely to leave outdated equipment around for 90 years from now.

What's in the winter

Meanwhile, some of Vermont's Community Action Agencies are kicking off their winter campaigns for funding.

WARMTH, the state wide fuel assistance program, is working to ensure people can keep warm this winter.

The program aims to help Vermonters who are facing heating emergencies in the middle of Vermont’s cold winter. An additional $5,000 households received essential information and counseling that helped them avoid heating crises.

VEC members are important contributors to the WARMTH fund; last year more than $6,800 was collected in VEC’s service territory.

WARMTH’s success in helping those in need has been matched by program growth. From its beginning with one Community Action Agency and three utilities in 1986, WARMTH has grown to include eight utilities, a fuel supplier, and all five of Vermont’s Community Action Agencies for the upcoming heating season.

How WARMTH Works

All funds collected are given to the participating Community Action Agencies. The agencies providing energy help through other channels.

Funds are available only when an individual has not been able to find sufficient help through other channels.

Community Action makes a payment directly to the individual's fuel dealer or utility, often as a part of a repayment agreement. The individual receiving the assistance is responsible for the remainder of the payments.

Here’s how you can help

Remember, every dollar you donate helps a Vermonter in need. By making a contribution of $5, $10, $25, or more, you’ll be adding to the fund. Please do not send cash. All donations are tax deductible.

Simply:

1. Make checks payable to: WARMTH, c/o CVOEO, P.O. Box 1603, Burlington, VT 05402
2. Call 802-883-6248 to make a credit card donation.
3. Donate online at CVOEO.org

We hope you will “share the WARMTH” with someone this winter.

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CEO Update

Every winter, many Vermonters face the possibility of having cold homes because they cannot pay for their fuel or utility bills. The WARMTH Support Program, using funds donated by concerned Vermonters, will be an important resource for them.

VEC is committed to delivering affordable, safe, and reliable electricity to our members. It is an important part of our mission to help ensure that everyone has access to affordable heating this winter.

To support the WARMTH program, VEC encourage Vermonters to donate to the fund. Contributions can be made through online donations at CVOEO.org or by mailing a check to WARMTH Support Program, P.O. Box 1603, Burlington, VT 05402.

Through the WARMTH Support Program, VEC is working to ensure that Vermonters who are facing heating emergencies in the middle of Vermont’s cold winter have access to the assistance they need. With your support, we can make a difference in the lives of Vermonters who are struggling to stay warm this winter.
cur, they can isolate the affected areas so that fewer members are inconvenienced.

The functions of substations have grown so advanced and central to VEC's mission of improving reliability that in 2008 the Co-op decided it would be advantageous to form its own specialized substation crew, rather than continuing to use line workers and outside contractors to maintain them.

“Our 10-year plan focused heavily on the substations,” Jeff Wright, the Co-op’s Chief Operating Officer, explains, “and it was clear that highly skilled resources needed to be developed for us to be successful.”

So Ken Tripp was appointed supervisor of a team that at first included himself and Chris Rodger, but over the next few years grew to include Vic Carter, Matt Anderson, and George Jacobs. These five have jelled into a team—field workers Rodger, Carter, Anderson, and Jacobs, particularly, with Supervisor Tripp scheduling their assignments and coordinating the substation projects with the IT department, the metering department, and VEC’s central control center.

“There’s been an evolution with this team that’s been fun to watch,” Tripp says of the quartet of Rodger, Carter, Anderson, and Jacobs. “These guys are excellent together. They’re at the point where they ask each other, ‘What can I do now to help you?’ and they’re not far from saying ‘Here is the wrench that you need.’

“They’re an extension of each other,” says Tripp. “And they keep getting better all the time.”

Bringing it back home

One at a time, the members of the substation team came back home to work for Vermont Electric Co-op. Chris Rodger, a Jeffersonville native, was working in New Hampshire as a lineman for Unitil, a private contractor hired by electric utilities, when he heard that there might be an opening at VEC. He called Wright about the job, and was hired. This was in 2008. He was teamed with Tripp, to form the nucleus of what would become a larger crew. It surely helped that Rodger’s duties at Unitil involved working in substations.

Vic Carter, who had grown up in Coventry, was also working in New Hampshire when he learned that his skills might land him a job back home. Carter worked for nine years for Public Service of New Hampshire (PSNH), the state’s largest utility, as an electrician. He was one of a crew of 20 specializing in substation work, but Carter says there’s a big difference between the PSNH substations where he gained his initial experience, and VEC’s substations since the recent deployment of SCADA and AMI communications equipment. Carter joined the team at VEC in September, 2012.

Matt Anderson, originally from Morrisville, came home all the way from Florida, where he had a job with the National Aeronautics and Space Administration (NASA). That was three years ago.

“I had a young daughter, and I wanted to raise her here,” says Anderson. His first job for VEC was in the control room, monitoring the equipment that automates the day-to-day flow of electricity over VEC’s 2,500 miles of power line and through its 36 substations, switching stations, and metering tie points (which are other interfaces with the transmission and distribution network). Last May, Anderson transferred to the substation crew.

Rodger, Carter, and Anderson have something quite notable in common. Says Chris Rodger, “We all graduated from VTC – Vermont Technical College – within two years of each other, with associate’s degrees in electrical engineering technology.

Then we went in different directions.”

The three are all in their early 30s. Ken Tripp, their supervisor, is somewhat older, and values the facility with technology that seems to come more easily to his crew members.

“I think our age has something to do with it,” Rodger suggests. “We all grew up in the computer age.”

Vic Carter notes that, with the evolution in technologies, it makes sense to develop a crew with specialties in substation equipment. Traditionally, many companies used their linemen to maintain and repair the substations – as VEC also has done – or hired contractors for the more advanced work at those facilities. (VEC still calls in contractors for some projects.)

But the line workers have enough on their plate without the substations, says Carter, “and they tend to be mechanically oriented, which is a different kind of expertise.”

The substation techs, on the other hand, aren’t qualified to work with energized equipment, so when “gloving” is required for one of their projects they need the linemen’s assistance.

George Jacobs’ background is somewhat different from his teammates’. Jacobs, who lives in Richford, got his early electrical training with the Air National Guard during the 1990s. “I was 19 years old and working in the same paper mill as my dad, who had been there for a long time,” he says. “I wanted to learn a trade.”

The Guard gave him that opportunity. He describes his training as “climbing poles and doing some line work, along with airfield lighting and interior work.”

In 2001, back in Vermont, he undertook an electrical apprenticeship through VTC, and later formed a business partnership with a friend. However, seeking better benefits for his family by working for a company rather than for himself, Jacobs applied for work with VEC when he heard about a job opening. He joined the substation crew in 2010.

“We started installing SCADA around that time,” says Jacobs. “I came on board at a good time to learn how automation of the substations works.”

“George is a huge asset for us,” says Chris Rodger. “The others of use come from a technical background; George is from a wiring background, and you really need those skills, too.”

Even though VEC has developed an in-house substation team, the Co-op is not as specialized as some much-larger utilities.

“A lot of the big IOUs [inverter-owned utilities] have relay techs, substation electricians, construction guys, people for changing out the equipment in substations...” says Ken Tripp. “They’ll have three or four departments. We’ve got four guys who are all the departments.”

“Sometimes it seems like we’re jacks of all trades but masters of none,” Rodger admits.

“But the intent is to get as much of our work done in-house as we can,” Tripp points out. “These guys are becoming very knowledgeable and skilled with a lot of important things. And my standing advice is, there’s always somebody smarter... always a phone call you can make.”

VEC’s substation crew is making far fewer of those calls as time goes by.

**VEC seeks former members to claim Patronage Capital refunds**

This year, the VEC Board of Directors authorized the return of $850,000 of Patronage Capital funds to members of record during the years of 1997 and 2012. Current VEC members received their Patronage Capital refund as a credit on their electric bill. Former VEC members were sent a notice to their last known address on file and were asked to claim their Patronage Capital refund by completing a Refund Request Application.

VEC has published a list of former members who are eligible to receive a Patronage Capital refund but have not yet claimed it. This list is located on VEC’s website at www.vermontelectric.coop/patronage-capital. You can also use your smart phone to scan the QR code to the right of this page.

If you have knowledge of anyone listed, please contact VEC’s member services department at 1-800-832-2667 or email us at support@vermontelectric.coop. **Anyone who wishes to claim a refund should be prepared to provide personal identification information.**

Please remember to keep VEC informed of your current address to help us deliver future Patronage Capital refunds.
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On November 12, 2013, a team of VEC employees visited the Eden
Elementary School to present information about electricity to
kindergarten and 4th grade students. Pictured above, Manager of
Member Service Sue Bernier and Communications Specialist
Amanda Zay discuss where electricity comes from.