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

February 2013

The New Williamstown Solar Farm:

A Sizable Presence on WEC's Power Lines

By creating a more

robust market

for renewable

power, SPEED

helps these

technologies invest

in development,

eventually realizing

innovations that

will enable them

to become more

price-competitive

on their own.

n clear, sunny mornings, a gradual change will take place on the distribution system that serves Washington Electric Cooperative's members around Williamstown, Northfield, and parts of Barre Town. As the dawn's sunlight

begins to strike some 9,000 new photovoltaic solar panels installed at the 16-acre Williamstown Solar Farm on Route 64, just east of I-89, the panels will start generating electricity; the inverters housed in a trailer at the site will convert the direct current (DC) to alternating current (AC), and send the power generated by the sun through the Co-op's lines toward WEC's Jackson Corner

substation some seven miles away.

Members between those locations

– the substation and the solar farm

– will start their day by plugging in their coffee makers, turning on their radios, and taking a warm shower, using electricity coming to them over the Co-op's lines.

As the morning proceeds and the sun climbs in the sky, the solar power will begin to stem the flow of WEC power from the substation. On a good, robust, sunny day, there will come a point when the panels are providing enough electricity that electricity will be flowing through the substation out onto the larger grid, rather than the other way around.

"Under ideal circumstances, it can offset the complete load of

the Jackson Corner substation," said WEC Operations Director Dan Weston.

But the relationship of Washington
Electric Co-op to the Williamstown Solar
Farm is actually quite complex. WEC does not own the solar farm, nor does it buy its power. Yet the project, which was three years in the making and began producing energy for the

grid on December 10, 2012, does provide renewable energy to other Vermont utilities. Even though from an electrical engineering perspective, the electricity being generated gets used first on the Co-op's line, from a contractual perspective the power is being delivered to and used by others. (Regulators cast a discerning eye on what are called "the renewable characteristics" of energy sources. WEC does not generate the

continued on page 4



The 2-MW Williamstown Solar Farm began generating power in December. The Solar Farm was developed under Vermont's SPEED program, which supports renewable energy projects. WEC transports the power generated by the privately owned facility to the state's transmission grid.

2012 Community Fund Report

After 10 Years, Patterns of Giving Emerge

o big flood; no big hurricane (at least in Vermont). So things returned to normal for Washington Electric Cooperative's Community Fund in 2012.

The fund, which is financed by Co-op members' voluntary contributions of their capital credit returns, contributes to organizations that perform beneficial services in the WEC community.

There are guidelines for how the money is disbursed, among them that WEC doesn't go looking for organizations it wants to favor with a contribution; rather, the Community Fund fields requests from groups seeking support (entering its eleventh year, the Washington Electric Community Fund has been around long enough to be a known entity for groups that tap into such

community-based resources). Another practice, in normal times, is that WEC keeps its donations local so that, to the maximum extent possible, they will benefit Washington Electric members and their communities.

2011, however, was different – and the difference's name was Tropical Storm Irene. It struck on August 28 of that year and created needs so great and widespread that the committee of Co-op Directors that oversees the Community Fund (consisting of Marion Milne, Richard Rubin, and Barry Bernstein) waived the customary provisions that WEC wait to be approached with requests for help, and that the activities supported by the Fund be specifically local.

Within a few weeks after Irene the continued on page 2

Washington Electric Cooperative

East Montpelier, VT 05651

Inside

Three candidates for your Board of Directors. The Co-op's Annual Meeting is approaching in early May, and that means an election for three positions on the Board. There will be three candidates this year, and they are introduced on page 3.

The A list. With this issue's annual report on the activities of WEC's Community Fund, you might be interested in seeing the breadth of community-focused organizations the Co-op supported in 2012. The entire list is published on page 8.

Getting its ducks in a row. The Mad River Valley Rotary Club has a lot of energy for giving. One of its annual fundraising events for local causes is a toy duck race in the Mad River, while another involves an outhouse. Story on page 6.



"Thinking Out of the Box" is an exhibit featured at Studio Place Arts for several weeks in January and February. The medium for the artistic creations is cardboard. The images shown above are included in a series created by Jane Van Fleet, "The Fierce Urgency of Now," with text from Dr. Martin Luther King, Jr. SPA received a WEC Community Fund donation in 2012. Page 6.

2012 Community Fund

continued from page 1

Committee and its facilitator on the staff, WEC General Manager Avram Patt, had identified three target areas for assistance: organizations in a position to assist 1) small businesses, 2) farms, and 3) individual people whose lives were battered by the storm. Town lines and the borders of utility service territories were disregarded. The Co-op gave \$1,500 to the Vermont Disaster Relief Fund for its efforts with United Way to assist individuals and families; \$750 to the Vermont Irene Flood Relief Fund, administered by the Central Vermont Community Action Council to provide assistance to small businesses harmed by the storm; and \$750 to the Vermont Farm Disaster Relief Fund, a joint operation of the Vermont Community Foundation and the state Agency of Agriculture, Food & Markets.

Thankfully, in 2012 there were no comparable catastrophes. Routine was reestablished, the committee fielding applications, and targeting its donations close to home. But 2011 provided a lesson for the Co-op: WEC and local communities are part of something larger – the state of Vermont, and conceivably an area even broader. The Community Fund is, first and foremost, for the WEC community, but with widespread disasters becoming more commonplace – that's you, Hurricane Sandy – we may find that we all have a stake in recovery.

"We were glad we had the Community Fund to draw on at a time like that,"

Washington Electric Cooperative's Community Fund is capitalized by members and former members voluntarily donating their annual capital credit refunds, rather than taking those amounts as deductions from their November electric bills – or, in the case of former members, waiving the checks that would come to them as refunds. It's a way we can all make small contributions that add up to support worthy causes in central Vermont. You can make the choice on an annual basis or sign up to have your capital credit refunds diverted automatically to the Community Fund. Contact the Co-op to learn how.

said General Manager Patt, in 2011, referring to the statewide destruction wreaked by Tropical Storm Irene.

It may not be the last time such words are spoken.

2012 profile

Each year in January, Patt prepares a report for the WEC Board of Directors on the Community Fund's activities during the previous year. His January 21, 2013, report covered the Fund's donations in 2012.

In total last year, the Community Fund approved \$18,234.60 in donations to organizations and activities, for a reduction of \$5,139.33 from the \$23,373.93 it had donated in 2011.

"This is a decline in total dollars," Patt reported, but he added, "the number of donations has remained approximately the same for the last few years."

The 2012 donations went to 42 different applicants and projects, compared to 49 recipients in 2011 and 44 in 2010. But because the Fund was started in 2003 we now have 10 years of operational data to review, and a scan of that history reveals a striking consistency.

It took a couple years for the funding mechanism – the voluntary contributions by WEC members of their annual capital credit refunds – to become known by members and to produce a sustainable financial stream. Also, in those early years, the Fund spent a little on outreach and advertising to make the community aware of its existence. As a result, in its first couple of years the Community Fund's activity was comparatively light. In 2003, it contributed to 28 different organizations or efforts, with donations totaling \$9,280. The numbers were

By 2006, the Community Fund was making a bigger splash. That year it contributed \$19,464.75, split among 47 organizations. From then until now (2012), the number of donations has remained in that general area – from a low of 37 organizations assisted in 2009 to a high of 49 organizations, which happened in both 2007 and 2011.

similar in 2004.

The total dollars donated usually hovers in the low 20 thousands. Although last year's sum of \$18,234.60 was the smallest since those first, formative years, records from both 2006 and 2009 show total donations in the low-to-mid 19-thousand dollar range. The greatest amount given was in 2007, when the Community Fund dispersed \$26,214.03 to local organizations, causes, and events.

In context, then, last year's (2012) Community Fund activity was fairly standard.

"The Community Fund was established so that the Co-op could contribute to worthwhile local organizations and projects like many other businesses do," says Patt. "Since we cannot pass this cost to our members in rates, the Board established the process whereby members can voluntarily donate the capital credit refunds we would otherwise pay them. It has worked very well, and it's gratifying that so many members participate.

A core group of organizations has developed that know of the Community Fund, have met the criteria for approval, and turn to the Co-op for assistance on a yearly or almost-yearly basis. There are others each year that are first-time applicants, and some that apply for assistance for a single, one-time

continued on page 8

Co-op Currents

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

Board of Directors

	-		
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Editorial Committee

Avram Patt Donald Douglas David Magida Anne Reed Will Lindner

The Board of Directors' regularly scheduled meetings are on the last Wednesday of each month, in the evening. Members are welcome to attend. Members who wish to discuss a matter with the Board should contact the president through WEC's office. Meeting dates and times are subject to change. For information about times and/or agenda, or to receive a copy of the minutes of past meetings, contact Administrative Assistant Deborah Brown, 802-223-5245.

Right of Way Reclearing Projects 2013

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

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

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

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

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

Berlin and Moretown: Jones Brook, Herring Brook and Ward Brook Roads

Calais: Kent Hill and Calais Road

Corinth: Chelsea, Cross, Tullar, Abe Jacobs and Cookeville Roads

Danville: Route 2, Edgewood and Birchbound Lane south side of Joe's Pond **Groton**: Hi Goodwin Road and lines surrounding Ricker and Groton Ponds

Middlesex: East Bear Swamp Road

Orange: Fish Pond Road

Tunbridge, Chelsea, and Vershire: 3 phase line Holt Hill, Jenkins Brook,

Densmore Road and Route 113

Vershire: Goose Green Road

Walden and Cabot: Channel Drive

Walden and Cabot: Walden sub to East Cabot 3 phase Route 15, Bricketts

Crossing and West Shore Road

Williamstown: Tripp Road and Route 14 Line extending to The Brookfield Gulf

House

Williamstown, Washington and Chelsea: Jackson Corners to Chelsea 3 phase line along Chelsea and Williamstown Road and Route 110

2013 Annual Meeting Set for May 2 at Barre Elks Club

Three Candidates for WEC's Board of Directors

forward as candidates for the Co-op's Board of Directors in 2013. If elected, each will serve for three years, their terms ending in 2015. Every year three seats on WEC's nine-member board expire, providing the membership an opportunity to elect one-third of the board that makes leadership decisions for the customer-owned electric utility, and oversees management and staff. This year the directors whose terms will expire at the time of the Annual Membership Meeting (they remain board members until that

hree member/owners of Washington Electric Cooperative have come

event) are Barre Bernstein of East Calais, Annie Reed of Marshfield, and Roy Folsom of Cabot. All three of the incumbents are seeking re-election to the Board, and are the only WEC members seeking election to the Board this The election of directors is performed by ballots sent to each Washington Electric Cooperative member by mail in the weeks prior to the Annual

Voters who choose to do so can write in the names of other Co-op members who are not official candidates on their ballot. Board candidates run at-large because Washington Electric Cooperative is not divided into districts. Printed below are brief biographical sketches submitted by the candidates,

in which they introduce themselves and provide information on their background and involvement with the Cooperative and other avenues of community service. The March "Annual Meeting" issue of Co-op Currents will feature their responses to questions about issues related to board service. It will provide readers a broader sense of the interests, viewpoints, and

mail. The meeting, which includes dinner, will be held at the Barre Elks Club.

Reservations are required for dinner, but not for the meeting itself. A dinner-

registration coupon can be found on page 8 of this issue of Co-op Currents,

and will be included in the next (March) edition as well. The date of the 74th

Annual Washington Electric Cooperative Membership Meeting is Thursday

evening, May 2. A schedule of events will appear on page one of the next

issue, which is the official Annual Meeting issue, of Co-op Currents.

experience of the candidates.

and Conservation Board by Governor

Meeting. When your ballot arrives, check the accompanying materials to determine when the deadline is for posting your votes by mail. Members who attend the Annual Meeting can vote there if they wish, rather than by

Barry Bernstein

Residence: I live on Bliss Road in East Calais, and have owned a home there since 1976. I have been an ownermember of WEC for 42 years, since 1971. WEC



members should feel free to call me at 456-8843 or e-mail me at bbearvt@myfairpoint.net, if they have any questions.

Education: I graduated from the University of Southern California, Los Angeles, with a B.S. in Government and a minor in Business Administration. I attended Northwestern University, Graduate School of Business, Chicago, Illinois.

Profession: I am a founding partner in Better World Energy LLC., the Northeast representative for Messersmith Mfg. Inc., a leading manufacturer of automated woodchip heating plants for schools and commercial/industrial use. I have been involved in consulting and management for profit and nonprofit organizations over the past 48 years.

Community Involvement/WEC: |

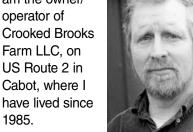
have served on the WEC Board of Directors since 1997 and have been the president of the Board since November 1998. I also serve on the Board of ILR Inc., Northampton, Massachusetts, disability-rights organization specializing in ADA technical assistance and training I have served on: the Board and Finance Committee of Woodbury College, Montpelier; the Board and as Treasurer of the Hunger Mountain Co-op, Montpelier; and the Buffalo Mountain Co-op, Hardwick. I was a cofounder of the Vermont Center For Independent Living (VCIL),

Montpelier, and served as its executive director (1978 -1982, 1992-1993). I was a co-incorporator, and served on the Board and as an officer of the former CVTA, a nonprofit organization providing transportation services to central Vermont elders. people with disabilities, and others.

Roy Folsom

Residence: | am the owner/ operator of **Crooked Brooks** Farm LLC, on US Route 2 in Cabot, where I

1985.



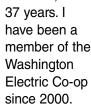
Education/Profession: I graduated from high school in 1970, in Solon, Ohio. I attended Kent State University for one year, then formed a construction company with my brother. In 1974 I moved to Vermont, I am now a dairy farmer – although my philosophy has always been that I am a businessman first, a farmer second. Our farm is run as any other business, with an aim for being profitable. Four years ago we downsized our herd and I took on a second career. I am a Master Certified Farm Agent for Nationwide Agribusiness. The past four years I have been the top-selling agent in Vermont and in the top 1 percent of all Nationwide Agribusiness agents (over 8,000) in the United States. I give the credit for my success to my over 35 years of farming experience.

Community Service/WEC: I served on the Cabot Planning Commission, 1991-1996. From 1992 to 2011 I was a member of the Cabot Zoning Board of Adjustment, being chairman for 11 years. I am a member of the Washington County Farm Bureau, and have served as president and I am currently vice-president. I was appointed to the Vermont Housing

Douglas in 2005, and am currently the longest-serving farmer on the Board. I was elected to the WEC Board of Directors in 2004. I have served WEC on the Members and Markets Committee, and presently serve on the Policy Committee and as chairman of the Power and Operations Committee.

Annie Reed

Residence: | have lived in Marshfield, Vermont, for 37 years. I have been a



You can contact me by mail at 3941 Hollister Hill, Marshfield 05658, by phone at 454-1324, or by email at annereed48@gmail.com.

Education/Profession: I graduated from Beloit College in 1970 with a B.A. in Anthropology, and in 1997 I received a Master of Science degree in Environmental Studies with a concentration in conservation biology from Antioch University New England. Since 1996 I have been a freelance ecologist. For the past 15 years I have been teaching handson courses in college science, most recently at the Community College of Vermont in Montpelier. A selection of the courses I have taught include: Introduction to Environmental Science, Wildlife Ecology, Wetlands Ecology, Fundamentals of Earth Science, and The Natural History of Vermont.

Community Service/WEC: I was first elected to the WEC Board of Directors three years ago and have had a steep learning curve trying to bring myself up to a level where I can begin to understand the scope of relationships our Co-op manages. I never knew there were so many acronyms! I am a member of the Members and Markets Committee, the Editorial Committee, and the Executive Succession Committee.

I am a member of the Marshfield Conservation Commission, a former member of the Marshfield Planning Commission, former president of the Friends of the Jaquith Public Library, and am now serving on the Jaquith Board of Trustees. For three years I served on the Goddard College Board of Trustees. I am a former chair and current member of the Advisory Group on Vascular Plants, for the Vermont Endangered Species Committee. For nine years I volunteered as an emergency medical technician with the Cabot Ambulance Service and the Plainfield Fire and Rescue Squad. I am a member of two food co-ops and the NorthCountry Federal Credit Union. I continue to be impressed with our Co-op's vision for the future of energy, the economy, and the environment. In this issue's article on the Williamstown Solar Farm, Dan Weston commented about our relationship with the project, which basically allows the solar farm to use our lines to send power into the "grid" (transmission system) that serves the state. He said, "We worked with [the developer] to provide guidance, from an operations perspective.... and one of the biggest things we did was we didn't oppose it. We supported it, and that is half the battle..." To me this is clear evidence of the quality of service and leadership we are bringing to the 21st century. As Erika Mitchell said in a recent Co-op Currents, "How many people do you know that can wholeheartedly say 'I love my electric company'?" I am one of those!

Williamstown Solar Farm

continued from page 1

solar power at Williamstown - it merely transports it - so the Co-op cannot claim renewable credits for that power.)

It's a pretty complex relationship, and not just from a regulatory standpoint.

"The Williamstown facility isn't near a power-distribution hub - meaning, for example, a substation," explained Weston. "When it provides power it's doing that on the way to the substation. That's different from our Coventry plant, where we generate renewable energy using landfill methane. There, the power goes through an adjacent substation and into the statewide grid. What we're entitled to do in that situation is to take an equal amount of power out of the grid and call it ours."

Those distinctions, in the intricate world of energy supply and energy regulations, are important. Nevertheless, it is a notable development that Washington Electric now hosts a renewable energy project rated to produce up to 2 megawatts (MW) of power, approximately what it takes to provide electricity to 409 homes. Originally conceived by Massachusetts real estate developer Tom Garden, and now owned by a Spanish multinational corporation called GESTAMP, the Williamstown Solar Farm is one of the first projects developed under Vermont's SPEED program.

SPEED (the Sustainably Priced **Energy Enterprise Development** program) was created

by the Vermont Legislature in 2008 to encourage the development of commercial-scale renewable energy generation. Bill Powell, WEC's Director of Products & Services, thinks of it as a "Vermont-centric" version of the 1978 federal program known

as PURPA (the Public Utility Regulatory Policies Act), which was designed to promote greater generation and use of renewable energy, and which helped spur the construction of a number of small-scale hydroelectric and one biomass project that are still producing and contributing power in Vermont. By creating a more robust market for renewable power, PURPA and SPEED theoretically help these technologies become more mature and invest in research and development, eventually realizing innovations that will lower their costs and enable them to become more price-competitive on their own.

SPEED set a statewide target of 50 MW, and encouraged proposals up to 2.2 MW to apply. Qualifying projects could use solar, wind, hydro, or biomass resources, and would be guaranteed a "standard offer" for the electricity they produced. For solar power, the standard offer is 27 cents per kilowatt-hour (kWh), well above market rates for electricity. It's a subsidy, in other words -

which is nothing new in the energy



There are approximately 9,000 solar panels at the Williamstown Solar Farm, occupying 14 acres on what was formerly a dairy farm - which is itself an indication of Vermont's changing economy, culture, and landscape in recent years.

business; all forms of energy are underwritten in some manner by federal or state government entities. Besides the guaranteed price, there's a guaranteed market: Vermont's electric utilities are required to purchase SPEED-generated power. The costs are apportioned according to each utility's share of Vermont's statewide energy consumption.

"One of the biggest

things we did was we

didn't oppose it. We

supported it. That's half

the battle, because if

in a lot of trouble."

Dan Weston

Yet another complication in this story, and an important consideration for Washington Electric Cooperative, is that the WEC members in the Williamstown/ your utility doesn't want Northfield/Barre Town to have to deal with one area physically receiving of these projects you're those solar-generated kilowatts are not, and will not be, paying any part of the 27-cents/

> kWh statewide premium. Nor are the rest of WEC's members. Because of the extensive and voluntary investments that Washington Electric Co-op already had made in renewable energy, the Co-op's rates are not

affected by the SPEED tariff.

"We account for 3 percent of the state's energy profile. Therefore, that would have been our share of the statewide program costs," explained Powell, who was one of the Co-op's staff members who helped Garden, the original developer, negotiate the permit process and integration into WEC's electric system.

"But we made the case to the Legislature that WEC is already 100-percent renewable as defined by Vermont law. All of our power comes from landfill methane, our Wrightsville hydro facility and out-of-state hydro, and in-state wind. The Legislature agreed that Vermont law exempts utilities in WEC's situation from having to purchase Standard Offer Power, So we're not purchasing the Solar Farm's power. We're wheeling it through our system."

Nevertheless, in the process of "wheeling it through the system" some of those electrons are diverted to members' homes and businesses (otherwise, a nasty web of power lines would be required to keep energy sources and end users separate, which would be a vast waste of money and defile the Williamstown hillsides). When the solar power offsets a portion of WEC's power, the Co-op accounts for it and compensates the energy grid from its own power sources.

Obviously, there's more to Vermont's electric transmission and distribution system than meets the eye. But the basic story here is that a major solar generation facility has come on line with WEC's assistance, and it represents a further step toward Vermont's energy independence.

And sometimes, on a sunny day, if you live in certain areas in Co-op Country, it might be powering your favorite appliance.

'You feel like you've earned it.'

What Tom Garden did, essentially, was win the lottery. Triland Partners, Garden's firm, is based in Boston, but its embarkation into commercial solar energy began when Garden attended his son's graduation from the University of Vermont in 2008, and heard for the first time, in a conversation with one of his son's friends, about Vermont's new SPEED program. He did further research on the web, and in September 2009 he took the leap.

"I applied to develop several solar projects in Vermont," said Garden, "but so many projects had applied that they held a computerized lottery."

Garden lucked out, and was assigned a Standard Offer Contract with the guarantee that all the power he generated would be sold through the Vermont Electric Power Producers, Inc. (VEPPI), which the PSB created as the purchasing agent for in-state renewable resources.

Then the clock started ticking.

"Your contract to sell the power is contingent upon permitting, financing, and construction all getting done within three years," said Garden. "You have to put up a deposit and get to the point of injecting power into the grid within three years of signing the contract."

Garden was working on all aspects at once. A statewide search for suitable property - "Optimally, an open field within a mile of a three-phase power line" - had led him to the 16-acre parcel in Williamstown, which had been part of a dairy farm but was lying fallow and slowly collecting discarded farm machinery. It was in Washington Electric's service territory, and though only a single-phase Co-op power line extended to the property WEC's three-phase "feeder" came within threequarters of a mile of the site.

Aside from property acquisition, two major hurdles were arranging financing and, crucially, obtaining a Certificate of Public Good (CPG) under Act 248 from the Public Service Board.

"It's a very onerous process," said Garden, referring to the CPG permitting. "Vermont is very protective of its views, its wildlife and aesthetics, and its historic places. The process ensures that you're not going to have adverse impact on wetlands, and in our case, although the majority of the property is upland, there is a part that's a Class 3

"By the time you get the CPG you feel like you've earned it because you've demonstrated that you're in compliance with everything under the

WEC was instrumental in helping Garden obtain the CPG. In 2010 Garden attended a seminar sponsored by REV (Renewable Energy Vermont), and saw two fellows with WEC nametags. Knowing WEC would be the utility he'd be dealing with, he introduced himself, and that's how he met Powell and WEC General Manager Avram Patt.



The solar panels roll and undulate across the contours of the land at the Williamstown Solar Farm.

"They said, 'Oh, you're the one," Garden recalled. "I thought, 'Uh-oh.' But this was followed by a meeting I'll never forget, with Bill Powell and Dan Weston. They quickly realized I knew nothing about electricity and I left with a long list of books they recommended that I read."

"What we did was represent the interests of the Co-op," said Weston. "We worked with Tom to provide guidance from an operations perspective for his CPG permit application. And honestly, one of the biggest things we did was we didn't oppose it. We supported it. And that's half the battle, because if your utility doesn't want to have to deal with one of these projects you're in a lot of trouble."

The Williamstown Solar Farm was awarded its CPG in October 2010.

For Garden, the financing aspect was a moving target. There were federal and state programs in place to support renewable energy development (SPEED, with its guaranteed rates and market, helps only after the project comes on line), but the incentives shifted, and essentially weakened, under economic pressures brought to bear on government programs. This led to Garden's partnering with GESTAMP, a Spanish steel company that first became involved with solar energy by making the steel-and-aluminum racks that hold solar panels. GESTAMP has become a major player in solar energy development (and has also constructed another SPEED project at the former dog-racing track in Pownal, Vermont).

GESTAMP became the lead developer for the Williamstown Solar Farm, with Garden taking a secondary and facilitating role.

However, Garden had spent significant time interacting with the Williamstown community and Washington Electric Co-op, and felt an obligation to "give back as much as I could to help the local community and the state." Real Goods Solar, a Colorado company now with an office

in Montpelier, was contracted for construction, which Garden said was key because it agreed to subcontract to Vermont companies. According to Garden, the Vermont firms that worked on the Williamstown project included:

American Consulting Engineers & Surveyors (Williamstown); Gilman & Briggs Environmental, Inc. (Barre); Hebert Excavating (Williamstown); Mike's Boring & Coring (East Barre); Downs Rachlin & Martin PLLC (legal firm based in St. Johnsbury and Burlington); Middlebury Fencing (Middlebury); and E&S Electric (Colchester). The Williamstown companies are both Washington Electric Co-op members.

"The construction took about five months" said Garden. "The components are just short of nine thousand 280-watt solar panels; about 1,500 steel posts, some of them pile-driven into the ground; an aluminum framing system that attaches to the panes; and a big metal trailer that houses four 500-kilowatt inverters that alter the power from DC to AC. There's

a weather station, and cameras to monitor the site 24 hours a day."

Those generating facilities occupy 14 acres of the 16-acre site that Garden purchased. GESTAMP controls that portion of the property, which is fenced off from the remaining two acres that Garden still controls. On that smaller parcel he has erected a visitor's area with displays about solar energy and Williamstown's surprising history with electric technology. In that portion, too, Garden has provided VAST (the Vermont Association of Snow Travelers) an access across his property.

In the end, the project made it to completion just 10 days under the three-year deadline. Far from discouraged by such an ambitious undertaking, Garden has his sights set on another solar-development project in Hartford, Vermont.

Integrating the load

It's a new experience for WEC, having a power-generation project of this size on its system. The Co-op has approximately 140 net-metering systems on its lines and some of those systems inject their excess power (the electricity not used by the home or business where it's generated) into the power lines. But those are tiny compared to the Williamstown Solar Farm.

The size of the Solar Farm necessitated special steps by the Co-op. First was a System Impact Study, early in the process, to determine whether there might be negative consequences for the Co-op as a whole and particularly for local members in the Williamstown/Northfield area. It was determined that the Co-op could integrate the power without harm.

Another consideration, however, was potential danger for WEC's line workers.

"We had to purchase specialized protective equipment because the project was going to generate power at the end of the line," said Weston. "Normally the load is at the substation, and goes out from there."

With the potential of a large load coming back toward the substation, WEC installed a "recloser" that "opens" (disconnects) the circuit if there's fault anywhere on the line. This prevents current generated at the Solar Farm from reaching line workers who may be repairing the system. There's also an automatic function: using radio telemetry, the recloser can put the circuit back into operation if it detects that the proper voltage has been restored, up to 10 minutes after a fault.

"I like technology that works," said Weston

All of these investments, required to protect and upgrade the Co-op's system to accommodate the project, were paid for by the developer.

The Co-op does provide fairly minor electrical services to the Solar Farm: some lighting when there's no solar output, and power for heating and air conditioning to protect the indoor equipment from temperature extremes.

"It's a minimal load for us," said WEC's Bill Powell. "Our main function is to host the facility. And the fact that we could step in and help this project provide a sizable amount of renewable energy for the state's grid, at no expense to our members, is a pretty neat thing."



Most of the property at the Williamstown Solar Farm is fenced off to protect the solar panels and electrical equipment. On the remaining two acres, project developer Tom Garden has erected a three-section educational display (two are pictured above) on solar energy and Williamstown's surprising history with electrical invention.

STUDIO PLACE ARTS

A Vision Coming True... At Last

he artists who founded Studio
Place Arts, at 201 North Main
Street in Barre, in the millennial
year 2000, had the right idea. Their only
problem was that they were about a
decade too early.

"There are a lot of great examples of how the arts have had a positive influence in struggling neighborhoods with depressed real estate values and social problems," says Sue Higby, who is now in her thirteenth year as the executive director of the nonprofit arts-and-education center. Her tenure corresponds with the organization's existence, as she was its first director and helped nurture SPA, as Studio Place Arts is called, from concept to reality. Higby points to SEABA, the South End Arts and Business Association, in Burlington, as an example. Under the slogan, "A place where culture meets commerce," SEABA was created in 1986 to help resurrect the Queen City's Pine Street Corridor, which had been a warehouse and manufacturing area but was approaching dilapidation until the artists and entrepreneurs of SEABA breathed new life and character into the neighborhood.

"The Pine Street Corridor is now an arts district, and has seen significant real estate-value increases," said Higby. "It's an inspiration for us."

In the late 1990s, the founding members of SPA had the same vision for downtown Barre. The artists had been looking for a mutual home and workspace, and were encouraged by the Barre Historical Society to consider the Nichols Block, a three-story brick building across from Depot Square that was one of the city's oldest buildings. It suffered a fire in 1993 and had been a vacant, blackened eyesore for half a dozen years.

As Higby relates it, around 1998 the Barre City Council entertained three proposals for dealing with the Nichols Block: tear it down (meaning, finish the job the fire had started) and create a parking lot; create low-income housing there; or create a visual arts center. The artists group had no business competition for the property.

"Who would put that much money into a building that was falling apart, in a city with low real estate values?" Higby asks rhetorically. "That's not a commercially viable project – but it does make sense for a nonprofit that can qualify for grants and funding. Artists are often the first group of people who will move into an area and bring a new heartbeat to it."

Unfortunately, though, in Barre at that time, as opposed to Pine Street in Burlington, Manayunk in Philadelphia, Ellicott City outside Baltimore, and countless other U.S. urban neighborhoods, it didn't work out. The renovations began in 1998 and SPA opened its doors in late 2000, bringing one of the region's foremost visual arts



is going to take more time than in a highly populated area with manufacturing and industry, where you'd see a quicker pace," Higby believes. When the Great Recession hit, it just made the challenge harder. "A number of small businesses started here on Main Street but were unable to survive," she says.

Suddenly, though, it's February 2013, and what SPA hoped to ignite at the turn of the century seems to be catching on. The Central Vermont Community Action Council is building a new complex of offices and services in the northern part of the small city;

the historic but long-vacant Blanchard Block next to City Hall is being restored top to bottom; the Cornerstone Pub & Kitchen opened last fall on the ground floor of a burned-out former bank building at 41 North Main ("Our ultimate goal is to . . . help rebuild this city 'One Pint At A Time," its web site says) while additional renovations proceed upstairs. And ground was broken in January for an entirely new four-story building called City Place right next to SPA, with the state's Department of Education signed

up to be a tenant, which will bring some 200 employees to town. Additionally, a multi-year project rebuilding Main Street above ground (sidewalks, curbs, lighting, and the road surface) and below ground (replacing century-old water and sewer infrastructure) is substantially complete.

And now, WEC is coming to town. That's not going to be a game-changing event for Barre; Washington Electric Cooperative has held its Annual Membership Meeting at the Barre Elks Club many times over the years (the Barre Elks and the Montpelier Elks are usually the venues of choice for the Co-op). But WEC General Manager Avram Patt has said one reason the Co-op's Board of Directors selected the Barre club this year was to lend its support to the spirit of activity and revitalization bursting forth in the Granite City.

"What's happening in Barre is important for the whole region of central Vermont," said Patt. "It will bring jobs and economic development to a community that has needed it. And even though we're a rural electric utility, many of our members live near there and will benefit from the improvements taking place. We are very happy for the city."

It's far from the first support WEC has shown for Barre. The People's Health & Wellness Clinic, and the Granite City Co-op Harvest Festival are regular recipients of donations from WEC's Community Fund. As is SPA, which is sitting right in the center of all this hubbub. Washington Electric has donated Community Fund money to the arts center's exhibition program for the

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MAD RIVER VALLEY ROTARY CLUB

Making A Splash For Good Causes

ervice above self." That's the motto of the Mad River Valley Rotary Club, and it's one of the many things that attracted WEC General Manager Avram Patt to the club when it first applied for a donation from the Co-op's Community Fund several years ago. It's a little unusual for the Community Fund to give to a social service club instead of a social service organization (for example, one that deals directly with issues such as aging, mental health, food security, etc.).

But, says Patt, "The Mad River Valley Rotary Club does a lot of very active and community-focused fundraising for a variety of local causes. By contributing to the Rotary we are supporting those activities and we feel we're hitting a number of good targets all at once.

"Besides that," he adds, "this donation from our Fund underscores the fact that we have a significant presence in the Valley despite its being at the western end of our service territory. We serve a lot of members in that area through our Moretown substation, including more than 100 homes and businesses in Fayston and a handful in Waitsfield. Harwood Union High School in Duxbury is our largest electric customer."

Speaking to MRV Rotary Board member Joe Goldstein, who is one of those WEC members, it sounds like the Rotary Club is plenty busy ("It seems like we're selling tickets all the time").

But it also sounds like they have fun, because there's a lot of humor in their fundraising activities. One annual event is an ice-out competition on the pond between Route 100 and the Big Picture Theater. Rather than betting on when a concrete block will fall through the thawed ice, denoting the arrival of spring, the MRV Rotary drags an outhouse onto the frozen pond on Martin Luther King, Jr., Day and somewhat irreverently calls the event, "You Bet Your Ice." (A photo on the club's web site sports the caption, "The outhouse is open for business.") Mixing today's technology with yesterday's waste-management, the club uses an electronic device to precisely record the date and time of the outhouse's inevitable plunge.

Another annual event, also watercentered, is the Labor Day Duck Race.

"We put plastic ducks on the Mad River, let them go a couple hundred yards downstream, and award first-, second-, and third-place prizes," says

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Studio Place Arts

continued from page 6

past seven years.

"They've been a consistent supporter," said Higby, "and our exhibition program seems like a good fit for a cooperative, so that's what I've asked for in our applications. Our exhibitions are educational and we provide them free to the public."

SPA didn't kick off the Barre renaissance (unless you take the very long view, perhaps), but it conscientiously provides benefits and services that remain unique and make the city, the town around it, and the central Vermont community more vibrant, creative, and interesting.

Janet Van Fleet, a painter and sculptor from Cabot who was one the artists who created SPA, noted the organizations' similarities. "I'm tremendously grateful for WEC's support for SPA, which started with sponsorship of a gallery show I curated many years ago called 'Plugged In,' showing art with electrical components," said Van Fleet. "SPA and WEC have a lot in common (beyond our cool three-letter

acronyms!). We're both organizations that have been diligent in operating efficiently, creatively, and with a deep commitment to education and public service. We appreciate the Co-op's support, and that WEC understands the importance of the arts in supporting healthy communities."

Walk right in

Studio Place Arts is aptly named, because it provides work spaces on the second and third floors for (presently) eight visual artists - ceramicists, painters, fiber arts, and specialists in other media. Their studios are not off-limits to the public; in fact, they are decidedly on-limits. That's part of SPA's mission.

"If you go to a private retail gallery, their goal is to mystify art and make you feel like, 'Oh no, you can't do that; but you can buy that," says Higby.

"Our role is the opposite. We demystify art, and we're always trying to tell people, 'You can do it, too." The studio offers arts classes and instruction to help people learn how.

Of particular importance to Higby is channeling this demystification to young

people. SPA hosts tours for school groups, among others, and Higby receives feedback from the students by card, e-mail, and spontaneous in-person exclamation. She recalls one recent visitor - a boy, no less telling her, with astonishment, "There's emotion everywhere in this building!" After a tour, not by a high school arts class but by students at the Barre Technical Center, a student wrote to her, "I actually got to explore a part of my mind that I didn't know I had. I felt a little overwhelmed. My mind can't run that fast. I hope we can visit again."

Such is the power, and the potential, of art to expand people's worlds.

The exhibition program that WEC's Community Fund helps support has featured a tremendous variety of displays over the years, from fabric to photography to watercolors, pastels, and oils, and that doesn't even scratch the surface. Not neglected, of course, is Barre's historical connection to stone and granite sculpture. Many exhibits center on themes, from "Puttin' On the Dog" (art about man's best buddy) to "Women's Sacred Places" to agriculture, and far, far beyond. A history of the

exhibits can be found on SPA's web site, www.studioplacearts.com. Not uncommonly, SPA features three exhibitions concurrently, one on each floor of the building.

Through most of February (ending on Saturday the 23rd), SPA has hosted an exhibit on the first floor title "Thinking Out Of The Box." The medium is actually cardboard. Another exhibit features the shape of the sky above Barre, created by a Dartmouth professor of architecture from a topographical map of the city (something like an inverted skyline). Clearly, imagination is not in short supply at Studio Place Arts.

As many people see it, the sky is the limit for Barre as the city positions itself to reclaim its historical status as an artistic, cultural, and economic engine in central Vermont.

SPA is on board with that, and ready not just to sell but to serve. Says Higby, "We're really excited to have more people coming to Barre and making use of our arts center and our resources, and having exposure to a broad range of visual arts."

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2012 Community Fund

continued from page 2

funding need. (An example of this was the request WEC received in 2011 from the East Montpelier Select Board, which was raising money for a fee so that the town could start its own Front Porch Forum web site.)

In his report, Patt separates the recipients into four categories: environmental organizations or projects; social services; arts and performances; and community organizations (with "others" lumped into the final group). In 2012, as in most years, social services received the largest portion of donations (47.5 percent), with \$8,669.60 going to 18 recipients. Among these was the Mad River Valley Rotary Club, which conducts fundraising events throughout the year for social service groups operating in that area. By contrast, "Arts" is usually the category receiving the fewest donations, and was again in 2012. Still, those four donations totaled \$2,850, or 15.6 percent of the Fund's total giving. One recipient was Studio Place Arts (SPA) in downtown Barre. SPA and the Mad River Valley Rotary Club, are this year's featured Community Fund recipients; see their profiles on page 6.

The Community Fund is administered according to rules that were carefully devised at the outset. Causes approved for donations are ones the committee believes most people would endorse. The fund does not contribute to religious or political groups, and organizations must be judged to be financially viable so that WEC's members' money is not wasted. Applicants must be able to demonstrate broad support in their communities.

Fund status at the dawn of 2013

In November 2012, WEC members contributed \$20,331.87 to the Community Fund's coffers for the coming year by choosing not to take their capital credit refunds. There was a carryover of \$1,094.15 of unspent money from 2012, yielding a total of \$21,426.02 to capitalize the Community Fund through 2013. (Small amounts trickle in during the course of a year, as people contribute to the Fund outside of the capital credit cash stream.) At that level, the Fund's purse should prove more than adequate. In 2011 and

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2007 the Fund donated a few thousand dollars more than the \$21,426 now on hand, but in most years donations are total slightly less.

Your support is always needed. Capital credit refunds are relatively small – generally in the \$5-\$40 range – and are customarily applied by the Co-op toward a member's November electric bill, so it's rare that people actually receive them in hand. That makes giving them up less noticeable. And yet those small amounts accumulate to the point that WEC's Community Fund can make meaningful contributions to causes in our state

and neighborhoods.

Please consider chipping in, and remember that you can also make a contribution aside from your capital credit refund if you wish.

A list of the organizations receiving Community Fund contributions in 2012 is below.

Mad River Rotary Club

continued from page 6

Goldstein.

Sound simple?

"Usually three thousand to four thousand ducks go into the river," he says. Not only is there the challenge of spotting and snatching the first ducks in this Mad yellow swarm to cross the line, but their owners (so to speak) must be quickly and correctly identified. "No missing ducks or duplicate ducks," says Goldstein. "We'd have egg on our face if a duck doesn't correspond to a ticket."

The cash awards are substantial for such a giddy event: \$1,000 for the winner, \$500 for the runner-up, and \$250 for third place.

"The prizes are an incentive," says Goldstein. "All the money we raise beyond that goes to the charities."

The third fundraising event the club holds annually is a raffle for dinner tickets for two at participating restaurants, and there are many of

them (good ones, too) in this tourismbased community that draws a substantial number of second-home owners.

Despite the fun, Goldstein says the MRV Rotary doesn't lose sight of the causes it's fundraising for, and its priorities almost exclusively are for local organizations.

"We tend to 'shop at home,' if you will," he says. "From the beginning we felt that there are needs in the Valley that aren't met by other organizations. Our main focus is philanthropic service to the nonprofits of the valley."

Exceptions are entertained for organizations that are based outside the valley but provide – for example – crisis support for residents of the valley. Also, some of the Rotary Club's events focus on education, including student exchanges between Harwood Union School and schools in foreign countries. This year the program brought three visiting high school students to the

Valley and sent three local youngsters abroad – definitely a life-changing experience for all six of them.

The Rotary Club's fundraising events preceded Joe Goldstein's becoming a Board member, but it was Goldstein who suggested approaching the WEC Community Fund. It was in keeping with a change in procedure, from appealing to businesses for support one event at a time (and trying to keep track so as not to approach the same donor too often) to instead soliciting annual contributions for the whole range of serious and zany Rotary Club events.

"Service above self" is a philosophy consistent with the values and practices of a member-owned, not-for-profit company like Washington Electric Cooperative. The Mad River Valley Rotary Club enables the WEC Community Fund to spread its assistance to a number of worthy organizations with one efficient donation.

2012 WEC Community Fund Contributions

Contribution Recipients

Green Mountain Performing Arts

Kingdom County Productions Highfields Center for Composting Vershare VT State Science & Mathematics Fair Calef Memorial Library Mad River Valley Rotary Club Topsham Historical Society Studio Place Arts Central VT Home Health & Hospice Bruce Lamb Memorial Fund Friends of the Winooski River Washington County Youth Services Bureau Montpelier Alive Upper Valley Services Inc Central VT Council on Aging Home Share Now

Washington County 4-H Foundation

Friends of the Mad River

Central VT Basic Education

Plainfield Historical Society

Food Works at Two Rivers Jaquith Public Library The Groton Community Club Town of East Montpelier - Rally Days People's Health & Wellness Clinic Cabot Connects Mentor Program Town of Worcester BYSA Hockey Program Granite City Co-op Harvest Festival Kellogg-Hubbard Library Sugar Maple Preschool Vermont Land Trust Green Mountain Film Festival Miller's Run School Playground Stuff-A-Truck Adopt-A-Family Hardwick Area Food Pantry Central VT Community Action Council Community Capital of Vermont North Branch Nature Center Chelsea Public Library



Gathered around the famed outhouse, used by the Mad River Valley Rotary Club in an annual program to raise money for programs of assistance for Valley residents, are Rotary members and officers (from left) Gene Scarpato, Dave Koepele, Joe Klimek, Gary Plewak, and Manny Apigian.