

H.446
Summary of Ways & Means Amendment to Energy Bill
Addendum for Drafts 2.1C and 2.1D
April 15, 2009

Draft 2.1C mirrors Draft 2.1A with respect to repeal of the credits at the end of 2009

Draft 2.1D mirrors Draft 2.1B with respect to repeal of the credits at the end of 2010

Both 2.C and 2.1D differ from their respective earlier drafts as follows:

Third instance of amendment (credit for individuals and pass-through entities):

- Subsection (d) (proviso in second-to-last sentence): clarified to state that an individual may use either a grant or similar funds or take the tax credit.

Fourth instance of amendment (credit for corporations):

- Subsection (a): clarified to state that an individual may use either a grant or similar funds or take the tax credit.

Old language

; provided, however, that the business solar energy tax credit shall be calculated by reducing such investment amount by the amount of any grants or similar funding received by the taxpayer from any public or private programs that assist in providing capital investment for renewable energy projects.

New language

; provided, however, that a taxpayer who receives any grants or similar funding from any public or private program that assists in providing capital investment for a renewable energy project is not eligible to claim the business solar energy tax credit for that project.

Project Name	Customer Type	City	Incentive Amount	Total Project Cost	
Town of Putney	Municipal	Putney	\$4,950	\$5,500	
Troy Hydroelectric License and Feasibility Study	Commercial	Troy	\$48,375	\$96,750	
Village of Bellows Falls	Municipal	Bellows Falls	\$4,500	\$5,000	Service
Small Wind & Solar Grant Incentive Program	Residential	Statewide	\$1,200,000	\$1,200,000	
Green Mountain Coffee Solar Project (no clause)	Commercial	Waterbury	\$250,000	\$754,582	2009
RSD Solar Project (no clause/may not happen)	Commercial	WRJ	\$210,000	\$723,082	?
Southern VT Recreation Center Solar Project	Nonprofit	Springfield	\$125,000	\$587,287	2010
Installation of Concentrated PV System	Commercial	Vergennes	\$250,000	\$573,659	2009
Solar PV at National Life	Commercial	Montpelier	\$200,000	\$502,615	2008
Solar Energy System at Farm-Way	Commercial	Bradford	\$226,000	\$438,672	Dec-08
51.24 kw/DC Photovoltaic Array	Commercial	Northfield	\$186,000	\$372,138	2010
Solar Energy System at GMP	Commercial	Westminster	\$234,360	\$468,720	2009
HCRS Solar Panel Project	Nonprofit	Springfield	\$158,362	\$399,746	2010
SVRH PV Project (Phase 2)	Nonprofit	Springfield	\$125,000	\$587,287	2010
Hildene Solar for Cheesemaking Facility	Nonprofit	Manchester	\$106,835	\$240,000	2009
CVPS Solar Generation Project	Commercial	Rutland	\$201,803	\$403,606	2009
Camel's Hump Middle School Solar PV Project	Nonprofit	Richmond	\$250,000	\$520,833	2009
St. Francis Xavier School Proposal for Photovoltaic Power System	Nonprofit	Winooski	\$250,000	\$648,249	2010
Shore Acres Farm 25 kW SunTech Pole Mount PV Tracking System for Net Zero Building at The Putney	Commercial	North Hero	\$20,000	\$199,519	2009
Heritage Aviation 25.2 kW Solar PV System	Nonprofit	Putney	\$221,000	\$443,727	2010
Shelburne Farms Solar PV Project	Commercial	S. Burlington	\$20,000	\$186,064	2009
GWR PV Colony	Nonprofit	Shelburne	\$250,000	\$518,359	2009
Williams Hill Community Renewable Energy Project	Commercial	Charlotte	\$31,920	\$170,000	2010
Barrett Green Business Building: and 18.72 kW Solar Electric Installation	Commercial	Charlotte	\$33,250	\$199,374	2010
Small-Scale Renewable Energy Incentive Program	Commercial	Montpelier	\$32,760	\$157,300	2010
GMP in Berlin (no grant application to CEDF)	Residential	Statewide	\$1,500,000	\$1,500,000	2009
				1,200,000	2009
			\$6,494,290	\$819,114	

Notes: Not all 2010 grants awarded. Unknown impact of contract language. Assumes all tax credit taken in first year of service (no carryforward).

Total Potential Tax Credits		HWM Language		Contract Language	
30%	30%	30%	30%	30%	30%
2009	2010	2009	2010	2009	2010
226,375		226,375		226,375	
216,925	(may not occur)	216,925		216,925	
	176,186		138,686		
172,098		97,098			
	111,641		55,841		
140,616		70,308			
	119,924		72,415		
	176,186		138,686		
72,000		39,950			
121,082		60,541			
156,250		81,250			
	194,475		119,475		
59,856		53,856			
	133,118		66,818		
55,819		49,819			
155,508		80,508			
	51,000		41,424		
	59,812		49,837		
	47,190		37,362		
150,000		150,000		150,000	
360,000		360,000		360,000	
1,886,527	1,069,532	1,486,628	720,545	953,299	0

4446

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H. 446

MEMORANDUM

TO: Representative Michael Obuchowski, Chair
Ways and Means Committee

FROM: Steve Kimbell on behalf of Green Mountain Power

DATE: April 16, 2009

SUBJECT: Financial data re Berlin solar project

In response to your request for detailed information to follow up on testimony provided last week to your committee by Tony Kvedar of Green Mountain Power, I have enclosed three spread sheets prepared by Mr. Kvedar.

If you or your committee members have further questions or would like to hear again from Mr. Kvedar about this subject, please contact me and I will make the necessary arrangements.

Thank you for your interest in this Green Mountain Power solar generation project.

Cc: Ways and Means Committee members

GREEN MOUNTAIN POWER CORPORATION
Valuation of Berlin Solar Project
Completed for Ways and Means Committee

Attached is the break down of costs and benefits requested.

Summary:

Cost of solar panels installed:	\$1,170,000
Cost of connection to the system:	\$31,000
Cost of replacing the inverter in year 15 of project:	<u>\$60,000</u>
Total investment:	\$1,261,000

As the inverter is replaced in year 2023,
the total cost adjusted for the time value
of money is: \$1,224,537

Total benefits received from income tax credits
grants and accelerated tax depreciation
adjusted for the time value of money (\$1,130,772)

Federal income tax law prohibits a utility from reducing the income tax expense collected from customers by the full value of the federal investment tax credit in the year incurred. The law requires this benefit to be passed through to the customer over the life of the project. This reduces the present value of the credit to the customer by approximately \$200,000.

The company will also incur approximately \$1,700 per year maintenance costs, depending on the amount of property tax paid.

Using accepted cost of service methodology to calculate the levelized costs of the project over its 25 year life, the levelized cost per kwh is 15.6 cents depending on when the project comes on line. This unit cost is used as comparative value when power procurement alternatives are considered.

Including this project in our portfolio will allow GMP to avoid purchasing energy and capacity in the power markets and also will generate renewable energy credits(RECs) that can be sold in the market. The levelized value of avoiding these purchases and the selling of the RECs is approximately 15.1cents over the life of the project depending on when the project comes on line.

Utilizing the tax benefits and Neil grant money lowers the cost of the project sufficiently so the levelized value of the power generated is very close to the cost of power in the market, avoiding the need for the customer a premium for the power from this project.

H.446

From: Daniel Paradis
To: Michael Obuchowski
CC: Aaron Adler; Rosalind Daniels
Date: 4/14/2009 8:12 AM
Subject: Fwd: RE: H.446 Energy Bill

FYI

Daniel P. Paradis
Legislative Counsel
State House
115 State Street, Drawer 33
Montpelier, VT 05633-5301
802.828.2231 (w)
802.828.2424 (f)
617.470.5049 (m)
dparadis@leg.state.vt.us

>>> "Smith, Richard" <richard.smith@state.vt.us> 4/13/2009 4:53 PM >>>

Hi, Daniel: I appreciate the amendment you have drafted. As we said in committee we support the sun-setting of the solar tax credit because of the potential hit to the general fund and clean energy development fund. My only reservation is that I would like to have Tony Klein and Margaret Cheney from House Natural Resources involved in the conversation because of the policy implications of this language. Thank you!

Richard S. Smith
Deputy Commissioner
Public Service Department

-----Original Message-----

From: Daniel Paradis [<mailto:dparadis@leg.state.vt.us>]
Sent: Monday, April 13, 2009 10:17 AM
To: Smith, Richard
Cc: Aaron Adler
Subject: H.446 Energy Bill

Mr. Smith,
I am the attorney in legislative council who staffs the Ways and Means committee. Chairman Obuchowski asked that I forward you a copy of this draft amendment to H.446 that his committee will be addressing tomorrow. I've also attached a short summary of each section and would appreciate your comments. I have solicited the tax department for their comments, as well.

Thank you,

Dan Paradis

Daniel P. Paradis
Legislative Counsel
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**State of Vermont
Grant Agreement**

Agreement # 02240-CEDF 0027

1. Parties: This is a Grant Agreement between the State of Vermont, Department of Public Service (DPS), and **Farm-Way, Inc.**, with principal place of business in Bradford, Vermont (hereinafter called "Grantee"). Grantee is/ is not required by law to have a Business Account Number from the Vermont Department of Taxes. The number is: [REDACTED].
2. Subject Matter: The subject matter of this Grant Agreement is purchase and installation of a 60.48 kW solar photovoltaic (PV) electricity generating system (installed as a ground-mounted array in an open hay field just north of the store buildings and parking lot) in Bradford, VT. Detailed tasks to be completed by the Grantee are described in Attachment A.
3. Maximum Amount: In consideration of the services to be performed by Grantee, the State agrees to pay Grantee, in accordance with the payment provisions specified in Attachment B, a sum not to exceed \$226,000.
4. Grant Term: The period of Grantee's performance shall begin 05/29/08 and end on 05/29/10.
5. Source of Funds: Vermont Clean Energy Development Fund
6. Amendment: No changes, modifications, or amendments in the terms and conditions of this Grant Agreement shall be effective unless reduced to writing, numbered, and signed by the duly authorized representative of the State and Grantee.
7. Cancellation: This Grant Agreement may be suspended or cancelled by either party by giving written notice at least 10 days in advance.
8. Contacts:

Grantee:
E.J. Metayer
Vice President
Farm-Way, Inc.
286 Waits River Road
Bradford, VT 05033
Phone: 802-222-9316

Grant Administrator: Clean Energy Development Fund Manager
Vermont Department of Public Service
112 State Street
Montpelier, VT 05620-2601
Phone: 802-828-4039
Email: kelly.laundry@state.vt.us

9. Attachments and Addendum: This Grant Agreement includes the following attachments and addendum that are incorporated herein:

Attachment A - Scope of Work to be Performed

Attachment B - Payment Provisions and Monitoring/Reporting Requirements
Attachment C - Customary State Grant Provisions
Attachment D - Other Provisions

Addendum I - Quarterly Progress Report Form
Addendum II - Budget
Addendum II - Grantee's CEDF Proposal

WE THE UNDERSIGNED PARTIES AGREE TO BE BOUND BY THIS GRANT AGREEMENT.

by the STATE OF VERMONT

Date: _____

Signature: _____

Name: David O'Brien

Title: Commissioner

Agency: Department of Public Service

by the GRANTEE

Date: _____

Signature: _____

Print Name: _____

Title: _____

Federal Identification Number: 

ATTACHMENT A
Scope of Work to be Performed

The Grantee agrees to undertake, perform, and complete a project that shall include the following:

- Apply for necessary permits
- Finalize system design
- Project management
- Order equipment
- Equipment delivery
- Procurement
- Construction
- Start-up testing and commissioning

The project tasks are more specifically described in the Grantee's Proposal (Addendum II), which is attached hereto and incorporated by reference herein.

The Grantee must obtain prior written approval for changes of substance in the project scope of work from the Grant Administrator.

ATTACHMENT B
Payment Provisions and Monitoring/Reporting Requirements

The State agrees to compensate the Grantee for services performed as defined in the budget (Addendum II) up to the maximum amounts stated below provided such services are within the scope of the grant and are authorized as provided for under the terms and conditions of this grant.

Maximum amount payable: \$226,000.00

The Grantee agrees that all funds shown in the budget, both State and match, are to be spent as detailed. If either State or match funds are not to be spent exactly as detailed in the budget, the Grantee must obtain written approval from the Grant Administrator prior to the expenditure of such funds as defined below.

- Any line item change or the accumulation of line item changes in the budget of more than 5% of the state share of the project budget.
- Any change in the hourly rate, indirect rate, or fringe rate.
- Changes of zero to 5% require no State approval as long as no new budget categories are created by the shift of funds. The addition of any new budget categories requires approval.

The Vermont Department of Public Service will reimburse the Grantee for expenses incurred by the Grantee upon submission of an invoice by the Grantee. Payments will be made on an as needed basis with submission of a brief progress report, which includes a description of the work accomplished. All invoices or other documentation (i.e., computer printout of accounts, ledger sheets, check copies, etc.) sufficient to reflect properly all costs claimed to have been incurred in performing this grant shall be submitted with the invoice.

Submit Invoices to:

Christine Dewyea
Administrative Assistant
Department of Public Service
112 State Street
Montpelier, VT 05620-2601

All invoices submitted by the Grantee to the Department of Public Service will make reference to the Grant Number appearing in the upper right corner of Page 1 of this Grant Agreement. Grant Numbers may not be handwritten, so invoices without the above will be returned to the Grantee. Only original invoices will be accepted, and we do not make payment from statements or facsimiles. Invoices may be emailed.

If a Certificate of Public Good (CPG) is required for the clean/renewable energy system to be installed with funding under this grant agreement, the Grantee will not receive reimbursement for any invoices or costs incurred until a CPG is issued from the Public Service Board.

Monitoring and Reporting Program Performance

Progress Reports are due no later than the fifteenth of the month following the quarter being reported (January 15, April 15, July 15, October 15).

1. The Grantee shall monitor performance to assure that time schedules are being met, projected work units by time period are being accomplished, and other performance goals are being achieved.
2. The Grantee shall submit a quarterly progress report (using the form attached in Addendum I) that briefly presents the following information:
 - a. An outline of the work accomplished by task during the reporting period and the work to be completed during the subsequent reporting period.
 - b. Brief description of problems or delays, real or anticipated, and actions taken or planned to resolve them.
 - c. Notification of any significant deviation from previously agreed-upon work plans.
 - d. Total CEDF grant funds spent during the quarter
 - e. Total grantee required cash match and/or in-kind match this quarter
3. A draft final project report will be submitted to the Grant Administrator within 30 days after the grant period expiration and if deemed necessary a final report will be submitted within 60 days after the grant period expiration. At a minimum, the final report shall contain the following:
 - a. A summary of the original goals and objectives of the overall project and a description of how the State funds were to contribute to the accomplishments of these goals and objectives.
 - b. A summary of the project activities accomplished with all project funds and specifically with State funds.
 - c. A discussion of anticipated and actual impacts of the project. Indicate specifically benefits attributable to State funding and more general impacts/benefits accruing as a result of the total project. If the project does not fully achieve the expected impacts, the Grantee shall provide an explanation of the reasons why the impact was less than expected.
 - d. The expenditure of State and Grantee/match funds shall be reported by line item and compared to the approved grant budget.
 - e. Copies of all materials produced as part of this grant.

ATTACHMENT C
Customary State Grant Provisions

1. **Entire Agreement:** This Grant Agreement represents the entire agreement between the parties on the subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect.
2. **Applicable Law:** This Grant Agreement will be governed by the laws of the State of Vermont.
3. **Appropriations:** If this Grant Agreement extends into more than one fiscal year of the State (July 1 to June 30), and if appropriations are insufficient to support this Grant, the State may suspend or cancel this Grant at the end of the fiscal year, or otherwise upon the expiration of existing appropriation authority.
4. **No Employee Benefits For Grantee:** The Grantee understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation and sick leave, workers' compensation or other benefits or services available to State employees, nor will the State withhold any state or federal taxes except as required under applicable tax laws, which shall be determined in advance of execution of the Grant Agreement. The Grantee understands that all tax returns required by the Internal Revenue Code and the State of Vermont, including, but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Grantee, and that information as to grant income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes, where required.
5. **Independence, Liability:** The Grantee will act in an independent capacity and not as officers or employees of the State. The Grantee shall indemnify, defend and hold harmless the State and its officers and employees from liability and any claims, suits, judgments, and damages arising as a result of the Grantee's acts and/or omissions in the performance of this Grant.
6. **Insurance:** Before commencing work on this Grant the Grantee must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Grantee to maintain current certificates of insurance on file with the State through the term of the Grant.

Workers' Compensation: With respect to all operations performed, the Grantee shall carry workers' compensation insurance in accordance with the laws of the State of Vermont.

General Liability and Property Damage: With respect to all operations performed under the grant, the Grantee shall carry general liability insurance having all major divisions of coverage including, but not limited to:

- Premises - Operations
- Products and completed Operations
- Personal Injury Liability
- Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

- \$1,000,000 Per Occurrence
- \$1,000,000 General Aggregate
- \$1,000,000 Products / completed products aggregate
- \$ 50,000 Fire Legal Liability

Automotive Liability: The Grantee shall carry automotive liability insurance covering all owned, non-owned and hired vehicles, used in connection with the Grant. Limits of coverage shall not be less than: \$1,000,000

Combined single limit

No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Grantee for the Grantee's operations. These are solely minimums that have been set to protect the interests of the State.

7. **Reliance By the State on Representations:** All payments by the State under this Grant Agreement will be made in reliance upon the accuracy of all prior representations by the Grantee, including but not limited to bills, invoices, progress reports and other proofs of work.
8. **Records Available for Audit:** The Grantee will maintain all books, documents, payroll papers, accounting records, and other evidence pertaining to costs incurred under this Grant Agreement and make them available at reasonable times during the period of the Grant and for three years thereafter for inspection by any authorized representatives of the State or Federal Government. If any litigation, claim, or audit is started before the expiration of the three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved. The State, by any authorized representative, shall have the right at all reasonable times to inspect or otherwise evaluate the work performed or being performed under this Grant Agreement.
9. **Fair Employment Practices and Americans with Disabilities Act:** Grantee agrees to comply with the requirement of Title 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Grantee shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990 that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Grantee under this Grant Agreement. Grantee further agrees to include this provision in all subgrants.
10. **Set Off:** The State may set off any sums which the Grantee owes the State against any sums due the Grantee under this Grant Agreement; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided hereinafter.
11. **Taxes Due To The State:**
 - a. Grantee understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
 - b. Grantee certifies under the pains and penalties of perjury that, as of the date the Grant Agreement is signed, the Grantee is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.
 - c. Grantee understands that any payment under this Grant Agreement may be withheld if the Commissioner of Taxes determines that the Grantee is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.
 - d. Grantee also understands the State may off-set taxes (and related penalties, interest, and fees) due to the State of Vermont, but only if the Grantee has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Grantee has no further legal recourse to contest the amounts due.

- 12. Child Support:** (Applicable if the Grantee is a natural person, not a corporation or partnership.) Grantee states that, as of the date the Grant Agreement is signed, he/she:
- a. is not under any obligation to pay child support; or
 - b. is under such an obligation and is in good standing with respect to that obligation; or
 - c. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Grantee makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Grantee is a resident of Vermont, Grantee makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

- 13. Subgranting:** Grantee shall not assign or subgrant the performance of this Grant or any portion thereof to any other Subgrantee without the prior written approval of the State. The Grantee must advise its sub-grantees of requirements imposed on them by state laws, regulations, and the provisions of contracts or grant agreements as well as any supplemental requirements imposed by the State Granting Agency. They must also set up a plan for monitoring their sub-grantees use of the funds.
- 14. No Gifts or Gratuities:** Grantee shall not give title or possession of any thing of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this Grant Agreement.
- 15. Copies:** All written reports prepared under this Grant Agreement will be printed using both sides of the paper.
- 16. Suspension and Debarment:** Non-federal entities are prohibited by Federal Executive Orders 12549 and 12689 from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement contracts for goods or services equal to or in excess of \$25,000 and non-procurement transactions such as grants or cooperative agreements. By signing this Grant Agreement current Grantee certifies that the Grantee organization and its principals are not suspended or debarred, proposed for disbarment, declared ineligible, or voluntarily excluded by any federal agency from federal procurement and non-procurement programs.

ATTACHMENT D
Other Provisions

1. **Cost of Materials:** Grantee will not buy materials and resell to the State at a profit.
2. **Work Product Ownership:** Upon full payment by the State, all products of the Grantee's work, including: outlines, reports, charts, sketches, drawings, art work, plans, photographs, specifications, estimates, computer programs, or similar documents, become the sole property of the State of Vermont and may not be copyrighted or resold by Grantee.
3. **Prior Approval of Press Releases/Credit for Funding:** Any notices, information pamphlets, press releases, research reports, or similar other publications prepared and released in written or oral form by the Grantee under this Grant Agreement shall be approved/reviewed by the State prior to release. The Grantee will credit funding for the project to the "Vermont Clean Energy Development Fund" in any of the aforementioned materials.
4. **Right to Reclaim Funds:** If any fixed asset purchased in whole or in part with grant funds is not used for its intended purpose as detailed in the grant agreement's Scope of Work, the State of Vermont has the right to require repayment of all or part of the grant funds provided.
5. **Taxability of Grants:** In most instances, the grant payments made under this program will be treated as taxable income by the IRS and the State of Vermont. It is the responsibility of the recipient of this incentive payment to consult with their tax advisor to determine the correct treatment of these payments for Federal and State tax purposes.
6. **Confidential Information.** During the course of the work contemplated in this grant agreement, the Grantee shall not on its own enter into any agreements which pertain to information to be used in performing such work and which restrict access to information or denominate information as confidential, allegedly confidential, or protected from disclosure.

During the course of the work contemplated in this Grant Agreement, the Grantee may be asked by the Department of Public Service to use information which has been denominated as allegedly confidential information and protected from disclosure under a protective agreement entered into by the Department. Any and all personnel of the Grantee, including sub-grantees, who are to use such information shall sign the appropriate schedule to the protective agreement and shall protect the information from disclosure to persons who have not agreed to be bound by that agreement. The Grantee shall ensure that its personnel and sub-grantees comply with the protective agreement and shall return all copies of the allegedly confidential information within twenty-one (21) days of completion of its use or promptly upon request of the Department.

This paragraph concerns a breach of an agreement which restricts access to information or denominates information as confidential, allegedly confidential, or protected from disclosure ("a breach of protective agreement"). The Grantee shall be solely responsible for any costs, liabilities, or obligations incurred by the Grantee because of the Grantee's breach of a protective agreement. Also with respect to the Grantee's breach of a protective agreement, the Grantee shall be solely responsible for any liabilities or obligations, including but not limited to judgments and legal costs, of the Department of Public Service to a party who signed or is the beneficiary of such an agreement. In the event that an action is brought against the Department of Public Service arising out of the Grantee's breach of a protective agreement, the Grantee shall be responsible for the legal costs of the Department of Public Service.

7. Vermont Corporate Solar Tax Credits. If the Grantee receives a solar energy tax credit, pursuant to 32 V.S.A. § 5930z, from the State of Vermont for the project that is the subject of this grant agreement, the Grantee shall remit the equivalent dollar amount of the tax credit to the State of Vermont for use by the Clean Energy Development Fund. Further, the Grantee, hereby, allows the Department of Taxes to inform the Clean Energy Development Fund through its administrator of such tax credit claimed by the Grantee and the amount of the credit granted.

Quarterly Progress Report Form

Grantee:

Grant Agreement Number:

Period covered in report: month, date, year – month, date, year

Work completed during reporting period:

(The Grantee may include a list of work plan tasks from their proposal and simply check off which tasks were completed during the reporting period)

Work to be completed next quarter:

Problems or Delays:

Deviation from work-plan:

Total CEDF grant funds spent:

Total grantee required cash match and/or in-kind match:

From: Sara Teachout
To: Daniels, Rosalind; Mesner, Susan
Date: 4/15/2009 9:50 AM
Subject: Fwd: FW: CEDF Solar Language

>>> "Margolis, Anne" <Anne.Margolis@state.vt.us> 4/15/2009 9:48 AM >>>

Hi Sara - here's the language we use in our solar grant agreements for Clean Energy Development Fund:

7. Vermont Corporate Solar Tax Credits. If the Grantee receives a solar energy tax credit, pursuant to 32 V.S.A. § 5930z, from the State of Vermont for the project that is the subject of this grant agreement, the Grantee shall remit the equivalent dollar amount of the tax credit to the State of Vermont for use by the Clean Energy Development Fund. Further, the Grantee, hereby, allows the Department of Taxes to inform the Clean Energy Development Fund through its administrator of such tax credit claimed by the Grantee and the amount of the credit granted.

Best,
Anne

Anne Margolis
Clean Energy Development Fund Manager
VT Dept. of Public Service
802-828-4017
802-828-2342
anne.margolis@state.vt.us<<mailto:anne.margolis@state.vt.us>>

**CLEAN ENERGY DEVELOPMENT FUND
ONE-PAGE FUND SUMMARY**

CEDF Current Fund Balance (on 4/14/09)		\$12,324,646.43
CEDF Amount Encumbered Thru 4-14-09		\$10,812,974.39
CEDF Unencumbered Balance Thru 4-14-09		\$1,511,672.04
CEDF FUNDED PROJECT INFORMATION		
Funds Awarded	Amount Paid on Award	Amount Remaining (Encumbrances)
\$15,770,147.39	\$4,798,103.72	\$10,812,974.39
PROJECTED CASH FLOW THROUGH JULY 1, 2009		
Revenues		
Fund balance on 4/14/09	\$12,324,646.43	
Interest	\$74,284.34	
Total Projected Revenues	\$12,398,930.77	
Expenditures		
Carried Forward Grant/Contract Liabilities	\$10,812,974.39	
Municipal TA Grant Awards	\$13,050.00	
Loans	\$2,479,741.00	
DPS Administrative Costs	\$201,224.94	
Economic Stimulus Program Costs-Tax Credit	\$20,000.00	
Total Potential Expenditures	\$13,526,990.33	

48. Energy credit

(a) Energy credit

(1) In general

For purposes of section 46, except as provided in paragraphs (1)(B) and (2)(B) of subsection (c), the energy credit for any taxable year is the energy percentage of the basis of each energy property placed in service during such taxable year.

(2) Energy percentage

(A) In general

The energy percentage is—

(i) 30 percent in the case of—

(I) qualified fuel cell property,

(II) energy property described in paragraph (3)(A)(i) but only with respect to periods ending before January 1, 2009, and

(III) energy property described in paragraph (3)(A)(ii), and

(ii) in the case of any energy property to which clause (i) does not apply, 10 percent.

(B) Coordination with rehabilitation credit

The energy percentage shall not apply to that portion of the basis of any property which is attributable to qualified rehabilitation expenditures.

(3) Energy property

For purposes of this subpart, the term “energy property” means any property—

(A) which is—

(i) equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool,

(ii) equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight but only with respect to periods ending before January 1, 2009,

(iii) equipment used to produce, distribute, or use energy derived from a geothermal deposit (within the meaning of section 613 (e)(2)), but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage, or

(iv) qualified fuel cell property or qualified microturbine property,

(B)

(i) the construction, reconstruction, or erection of which is completed by the taxpayer, or

(ii) which is acquired by the taxpayer if the original use of such property commences with the taxpayer,

C) with respect to which depreciation (or amortization in lieu of depreciation) is allowable, and

(D) which meets the performance and quality standards (if any) which—

(i) have been prescribed by the Secretary by regulations (after consultation with the Secretary of Energy), and

(ii) are in effect at the time of the acquisition of the property.

The term “energy property” shall not include any property which is public utility property (as defined in section 46 (f)(5) as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990). Such term shall not include any property which is part of a facility the production from which is allowed as a credit under section 45 for the taxable year or any prior taxable year.

(4) Special rule for property financed by subsidized energy financing or industrial development bonds

(A) Reduction of basis

For purposes of applying the energy percentage to any property, if such property is financed in whole or in part by—

- (i) subsidized energy financing, or
 - (ii) the proceeds of a private activity bond (within the meaning of section 141) the interest on which is exempt from tax under section 103,
- the amount taken into account as the basis of such property shall not exceed the amount which (but for this subparagraph) would be so taken into account multiplied by the fraction determined under subparagraph (B).

(B) Determination of fraction

For purposes of subparagraph (A), the fraction determined under this subparagraph is 1 reduced by a fraction—

- (i) the numerator of which is that portion of the basis of the property which is allocable to such financing or proceeds, and
- (ii) the denominator of which is the basis of the property.

(C) Subsidized energy financing

For purposes of subparagraph (A), the term “subsidized energy financing” means financing provided under a Federal, State, or local program a principal purpose of which is to provide subsidized financing for projects designed to conserve or produce energy.

(b) Certain progress expenditure rules made applicable

Rules similar to the rules of subsections (c)(4) and (d) of section 46 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990) shall apply for purposes of subsection (a).

(c) Qualified fuel cell property; qualified microturbine property

For purposes of this subsection—

(1) Qualified fuel cell property

(A) In general

The term “qualified fuel cell property” means a fuel cell power plant which—

- (i) has a nameplate capacity of at least 0.5 kilowatt of electricity using an electrochemical process, and
- (ii) has an electricity-only generation efficiency greater than 30 percent.

(B) Limitation

In the case of qualified fuel cell property placed in service during the taxable year, the credit otherwise determined under paragraph (1) for such year with respect to such property shall not exceed an amount equal to \$500 for each 0.5 kilowatt of capacity of such property.

(C) Fuel cell power plant

The term "fuel cell power plant" means an integrated system comprised of a fuel cell stack assembly and associated balance of plant components which converts a fuel into electricity using electrochemical means.

(D) Special rule

The first sentence of the matter in subsection (a)(3) which follows subparagraph (D) thereof shall not apply to qualified fuel cell property which is used predominantly in the trade or business of the furnishing or sale of telephone service, telegraph service by means of domestic telegraph operations, or other telegraph services (other than international telegraph services).

(E) Termination

The term "qualified fuel cell property" shall not include any property for any period after December 31, 2008.

(2) Qualified microturbine property...

11-446

Form **5695**

Residential Energy Efficient Property Credit

OMB No. 1545-0074

Department of the Treasury
Internal Revenue Service

▶ See instructions.
▶ Attach to Form 1040 or Form 1040NR.

2008
Attachment
Sequence No. **158**

Name(s) shown on return

Your social security number

Before you begin: Figure the amount of any District of Columbia first-time homebuyer credit you are claiming.

Note. Skip lines 1 through 21 if you only have a **credit carryforward from 2007.**

1	Qualified solar electric property costs	1				
2	Multiply line 1 by 30% (.30)	2				
3	Maximum credit amount	3	\$2,000			
4	Enter the smaller of line 2 or line 3	4				
5	Qualified solar water heating property costs	5				
6	Multiply line 5 by 30% (.30)	6				
7	Maximum credit amount	7	\$2,000			
8	Enter the smaller of line 6 or line 7	8				
9	Qualified fuel cell property costs	9				
10	Multiply line 9 by 30% (.30)	10				
11	Kilowatt capacity of property on line 9 above ▶ X \$1,000	11				
12	Enter the smaller of line 10 or line 11	12				
13	Qualified small wind energy property costs	13				
14	Multiply line 13 by 30% (.30)	14				
15	Kilowatt capacity of property on line 13 above ▶ X \$1,000	15				
16	Maximum credit amount	16	\$4,000			
17	Enter the smallest of lines 14, 15, or 16	17				
18	Qualified geothermal heat pump property costs	18				
19	Multiply line 18 by 30% (.30)	19				
20	Maximum credit amount	20	\$2,000			
21	Enter the smaller of line 19 or line 20	21				
22	Credit carryforward from 2007. Enter the amount, if any, from your 2007 Form 5695, line 34	22				
23	Add lines 4, 8, 12, 17, 21, and 22	23				
24	Enter the amount from Form 1040, line 46, or Form 1040NR, line 43	24				
25	1040 filers: Enter the total, if any, of your credits from Form 1040, lines 47 through 51; line 12 of the Line 11 worksheet in Pub. 972 (see instructions); Form 8396, line 11; Form 8839, line 18; and Form 8859, line 11. 1040NR filers: Enter the amount, if any, from Form 1040NR, lines 44 through 46; line 12 of the Line 11 worksheet in Pub. 972 (see instructions); Form 8396, line 11; Form 8839, line 18; and Form 8859, line 11.	25				
26	Subtract line 25 from line 24. If zero or less, enter -0- here and on line 27	26				
27	Residential energy efficient property credit. Enter the smaller of line 23 or line 26 here and on Form 1040, line 53, or Form 1040NR, line 48, and check box c on that line	27				
28	Credit carryforward to 2009. If line 27 is less than line 23, subtract line 27 from line 23	28				

For Paperwork Reduction Act Notice, see instructions.

Cat. No. 13540P

Form **5695** (2008)

General Instructions

Section references are to the Internal Revenue Code.

What's New for 2008

Nonbusiness energy property credit expired. You cannot take the nonbusiness energy property credit for property placed in service in 2008.

Credit expanded. You can now include costs for qualified small wind energy property and qualified geothermal heat pump property in figuring the residential energy efficient property credit.

What's New for 2009

Nonbusiness energy property credit available. The nonbusiness energy property credit will be available for property placed in service in 2009. The credit is available for items such as high-efficiency heating and cooling systems, water heaters, windows, doors, and insulation. The amount of the credit will be limited by the amount of any nonbusiness energy property credit you took in 2006 or 2007.

Qualified solar electric property. There is no limit on the amount of qualified solar electric property costs when figuring the residential energy efficient property credit.

Purpose of Form

Use Form 5695 to figure and take your residential energy efficient property credit, including any credit carryforward from 2007.

Who Can Take the Credit

You may be able to take the credit if you made energy saving improvements to your home located in the United States in 2008. For credit purposes, costs are treated as being paid when the original installation of the item is completed, or in the case of costs connected with the construction or reconstruction of your home, when your original use of the constructed or reconstructed home begins. If less than 80% of the use of an item is for nonbusiness purposes, only that portion of the costs that are allocable to the nonbusiness use can be used to determine the credit.

Home. A home is where you lived in 2008 and can include a house, houseboat, mobile home, cooperative apartment, condominium, and a manufactured home that conforms to Federal Manufactured Home Construction and Safety Standards.

You must reduce the basis of your home by the amount of any credits allowed.

Main home. Your main home is generally the home where you live most of the time. A temporary absence due to special circumstances, such as illness, education, business, military service, or vacation, will not change your main home.

Special rules. If you are a member of a condominium management association for a condominium you own or a tenant-stockholder in a cooperative housing corporation, you are treated as having paid your proportionate share of any costs of such association or corporation.

Subsidized energy financing. Any amounts provided for by subsidized energy financing cannot be used to figure the credit. This is financing provided under a

federal, state, or local program, the principal purpose of which is to provide subsidized financing for projects designed to conserve or produce energy.

Residential Energy Efficient Property Credit

You may be able to take a credit of 30% of your costs of qualified solar electric property, solar water heating property, fuel cell property, small wind energy property, and geothermal heat pump property. This includes labor costs properly allocable to the onsite preparation, assembly, or original installation of the property and for piping or wiring to interconnect such property to the home. This credit is limited to:

- \$2,000 for qualified solar electric property costs,
- \$2,000 for qualified solar water heating property costs,
- \$500 for each one-half kilowatt of capacity of qualified fuel cell property for which qualified fuel cell property costs are paid.
- \$500 for each one-half kilowatt of capacity of qualified small wind energy property for which qualified small wind energy property costs are paid (not to exceed \$4,000), and
- \$2,000 for qualified geothermal heat pump property costs.

Qualified solar electric property costs. Qualified solar electric property costs are costs for property that uses solar energy to generate electricity for use in your home located in the United States. This includes costs relating to a solar panel or other property installed as a roof or a portion of a roof. The home does not have to be your main home.

Qualified solar water heating property costs.

Qualified solar water heating property costs are costs for property to heat water for use in your home located in the United States if at least half of the energy used by the solar water heating property for such purpose is derived from the sun. This includes costs relating to a solar panel or other property installed as a roof or a portion of a roof. To qualify for the credit, the property must be certified for performance by the nonprofit Solar Rating Certification Corporation or a comparable entity endorsed by the government of the state in which the property is installed. The home does not have to be your main home.

Qualified fuel cell property costs. Qualified fuel cell property costs are costs for qualified fuel cell property installed on or in connection with your main home located in the United States. Qualified fuel cell property is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel into electricity using electrochemical means. To qualify for the credit, the fuel cell property must have a nameplate capacity of at least one-half kilowatt of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%.



Costs allocable to a swimming pool, hot tub, or any other energy storage medium which has a function other than the function of such storage do not qualify for the residential energy efficiency credit.

Qualified small wind energy property costs.

Qualified small wind energy property costs are costs for property that uses a wind turbine to generate electricity for use in connection with your home located in the United States. The home does not have to be your main home.

Qualified geothermal heat pump property costs.

Qualified geothermal heat pump property costs are costs for qualified geothermal heat pump property installed on or in connection with your home located in the United States. Qualified geothermal heat pump property is any equipment that uses the ground or ground water as a thermal energy source to heat your home or as a thermal energy sink to cool your home. To qualify for the credit, the geothermal heat pump property must meet the requirements of the Energy Star program that are in effect at the time of purchase. The home does not have to be your main home.

Married taxpayers with more than one home. If you or your spouse lived in more than one home, the credit limits would apply to each of you separately. For qualified fuel cell property, the homes must be your main homes. If you are filing separate returns, both of you must complete a separate Form 5695. If you are filing a joint return, figure your nonbusiness energy property credit as follows.

1. Complete a separate Form 5695 for each home through line 21.
2. On one of the forms, complete line 22. Then, figure the amount to be entered on line 23 of both forms and enter the combined amount on line 23 of this form.
3. On the dotted line to the left of the entry space for line 23, enter "More than one home". Then, complete the rest of this form.
4. Attach both forms to your return.

Joint occupancy. If you occupied your home jointly, each occupant must complete his or her own Form 5695. To figure the credit, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is \$6,667 for qualified solar electric, solar water heating, or geothermal heat pump property; and \$1,667 for each one-half kilowatt of capacity of qualified fuel cell or small wind energy property (not to exceed \$13,333 for qualified small wind energy property). The amount allocable to you is the lesser of:

1. The amount you paid, or
2. The maximum qualifying cost of the property multiplied by a fraction. The numerator is the amount you paid and the denominator is the total amount paid by you and all other occupants.

These rules do not apply to married individuals filing a joint return.

Example. Taxpayer A owns a house with Taxpayer B where they both reside. In 2008, they installed qualified solar water heating property at a cost of \$8,000. Taxpayer A paid \$6,000 towards the cost of the property and Taxpayer B paid the remaining \$2,000. The amount of cost allocable to Taxpayer A is \$5,000 ($\$6,667 \times \$6,000 / \$8,000$). The amount of cost allocable to Taxpayer B is \$1,667 ($\$6,667 \times \$2,000 / \$8,000$).

Specific Instructions

Also include on lines 1, 5, 9, 13, or 18, any labor costs properly allocable to the onsite preparation, assembly, or original installation of the property and for piping or wiring to interconnect such property to the home.

Line 1

Enter the amounts you paid for qualified solar electric property. See *Qualified solar electric property costs* on page 3.

Line 5

Enter the amounts you paid for qualified solar water heating property. See *Qualified solar water heating property costs* on page 3.

Line 9

Enter the amounts you paid for qualified fuel cell property. See *Qualified fuel cell property costs* on page 3.

Line 13

Enter the amounts you paid for qualified small wind energy property. See *Qualified small wind energy property costs* on this page.

Line 18

Enter the amounts you paid for qualified geothermal heat pump property. See *Qualified geothermal heat pump property costs* on this page.

Line 25

If you are claiming the child tax credit for 2008, include on this line the amount from line 12 of the Line 11 Worksheet in Pub. 972.



If you are not claiming the child tax credit for 2008, you do not need Pub. 972.

Line 28

If you cannot use all of the credit because of the tax liability limit (line 26 is less than line 23), you can carry the unused portion of the credit to 2009.

Paperwork Reduction Act Notice. We ask for the information on this form to carry out the Internal Revenue laws of the United States. You are required to give us the information. We need it to ensure that you are complying with these laws and to allow us to figure and collect the right amount of tax.

You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. Books or records relating to a form or its instructions must be retained as long as their contents may become material in the administration of any Internal Revenue law. Generally, tax returns and return information are confidential, as required by section 6103.

The average time and expenses required to complete and file this form will vary depending on individual circumstances. For the estimated averages, see the instructions for your income tax return.

If you have suggestions for making this form simpler, we would be happy to hear from you. See the instructions for your income tax return.

TITLE 26 > Subtitle A > CHAPTER 1 > Subchapter

§ 25D. Residential energy efficient property

(a) Allowance of credit

In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

- (1)** 30 percent of the qualified solar electric property expenditures made by the taxpayer during such year,
- (2)** 30 percent of the qualified solar water heating property expenditures made by the taxpayer during such year, and
- (3)** 30 percent of the qualified fuel cell property expenditures made by the taxpayer during such year.

(b) Limitations

(1) Maximum credit

The credit allowed under subsection (a) (determined without regard to subsection (c)) for any taxable year shall not exceed—

- (A)** \$2,000 with respect to any qualified solar electric property expenditures,
- (B)** \$2,000 with respect to any qualified solar water heating property expenditures, and
- (C)** \$500 with respect to each half kilowatt of capacity of qualified fuel cell property (as defined in section 48 (c)(1)) for which qualified fuel cell property expenditures are made.

(2) Certification of solar water heating property

No credit shall be allowed under this section for an item of property described in subsection (d)(1) unless such property is certified for performance by the non-profit Solar Rating Certification Corporation or a comparable entity endorsed by the government of the State in which such property is installed.

(c) Carryforward of unused credit

(1) Rule for years in which all personal credits allowed against regular and alternative minimum tax

In the case of a taxable year to which section 26 (a)(2) applies, if the credit allowable under subsection (a) exceeds the limitation imposed by section 26 (a)(2) for such taxable year reduced by the sum of the credits allowable under this subpart (other than this section), such excess shall be carried to the succeeding taxable year and added to the credit allowable under subsection (a) for such succeeding taxable year.

(2) Rule for other years

In the case of a taxable year to which section 26 (a)(2) does not apply, if the credit allowable under subsection (a) exceeds the limitation imposed by section 26 (a)(1) for such taxable year reduced by the sum of the credits allowable under this subpart (other than this section and sections 23, 24, and 25B), such excess shall be carried to the succeeding taxable year and added to the credit allowable under subsection (a) for such succeeding taxable year.

(d) Definitions

For purposes of this section—

(1) Qualified solar water heating property expenditure

The term "qualified solar water heating property expenditure" means an expenditure for property to heat water for use in a dwelling unit located in the United States and used as a residence by the taxpayer if at least half of the energy used by such property for such purpose is derived from the sun.

(2) Qualified solar electric property expenditure

The term "qualified solar electric property expenditure" means an expenditure for property which uses solar energy to generate electricity for use in a dwelling unit located in the United States and used as a residence by the taxpayer.

(3) Qualified fuel cell property expenditure

The term "qualified fuel cell property expenditure" means an expenditure for qualified fuel cell property (as defined in section 48 (c)(1)) installed on or in connection with a dwelling unit located in the United States and used as a principal residence (within the meaning of section 121) by the taxpayer.

(e) Special rules

For purposes of this section—

(1) Labor costs

Expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property described in subsection (d) and for piping or wiring to interconnect such property to the dwelling unit shall be taken into account for purposes of this section.

(2) Solar panels

No expenditure relating to a solar panel or other property installed as a roof (or portion thereof) shall fail to be treated as property described in paragraph (1) or (2) of subsection (d) solely because it constitutes a structural component of the structure on which it is installed.

(3) Swimming pools, etc., used as storage medium

Expenditures which are properly allocable to a swimming pool, hot tub, or any other energy storage medium which has a function other than the function of such storage shall not be taken into account for purposes of this section.

(4) Dollar amounts in case of joint occupancy

In the case of any dwelling unit which is jointly occupied and used during any calendar year as a residence by two or more individuals the following rules shall apply:

(A) Maximum expenditures.— The maximum amount of expenditures which may be taken into account under subsection (a) by all such individuals with respect to such dwelling unit during such calendar year shall be—

- (i) \$6,667 in the case of any qualified solar electric property expenditures,
- (ii) \$6,667 in the case of any qualified solar water heating property expenditures, and
- (iii) \$1,667 in the case of each half kilowatt of capacity of qualified fuel cell property (as defined in section 48 (c)(1)) for which qualified fuel cell property expenditures are made.

(B) Allocation of expenditures.— The expenditures allocated to any individual for the taxable year in which such calendar year ends shall be an amount equal to the lesser of—

- (i) the amount of expenditures made by such individual with respect to such dwelling during such calendar year, or
- (ii) the maximum amount of such expenditures set forth in subparagraph (A) multiplied by a fraction—
 - (I) the numerator of which is the amount of such expenditures with respect to such dwelling made by such individual during such calendar year, and
 - (II) the denominator of which is the total expenditures made by all such individuals with respect to such dwelling during such calendar year.

(C) Subparagraphs (A) and (B) shall be applied separately with respect to expenditures described in paragraphs (1), (2), and (3) of subsection (d).

(5) Tenant-stockholder in cooperative housing corporation

In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having made his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation.

(6) Condominiums

(A) In general

In the case of an individual who is a member of a condominium management association with respect to a condominium which the individual owns, such individual shall be treated as having made the individual's proportionate share of any expenditures of such association.

(B) Condominium management association

For purposes of this paragraph, the term "condominium management association" means an organization which meets the requirements of paragraph (1) of section 528 (c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

(7) Allocation in certain cases

If less than 80 percent of the use of an item is for nonbusiness purposes, only that portion of the expenditures for such item which is properly allocable to use for nonbusiness purposes shall be taken into account.

(8) When expenditure made; amount of expenditure

(A) In general

Except as provided in subparagraph (B), an expenditure with respect to an item shall be treated as made when the original installation of the item is completed.

(B) Expenditures part of building construction

In the case of an expenditure in connection with the construction or reconstruction of a structure, such expenditure shall be treated as made when the original use of the constructed or reconstructed structure by the taxpayer begins.

(9) Property financed by subsidized energy financing

For purposes of determining the amount of expenditures made by any individual with respect to any dwelling unit, there shall not be taken into account expenditures which are made from subsidized energy financing (as defined in section 48 (a)(4)(C)).

(f) Basis adjustments

For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

(g) Termination

The credit allowed under this section shall not apply to property placed in service after December 31, 2008.

From PL 110-443 (October 10, 2009)

(e) Public Utility Property Taken Into Account.--

(1) In general.--Paragraph (3) of section 48(a) is amended by striking the second sentence thereof.

The term "energy property" shall not include any property which is public utility property (as defined in section 46 (f)(5) as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

(2) Conforming amendments.--

(A) Paragraph (1) of section 48(c) is amended by striking subparagraph (D) and redesignating subparagraph (E) as subparagraph (D).

Regarding fuel cells.

(B) Paragraph (2) of section 48(c) is amended by striking subparagraph (D) and redesignating subparagraph (E) as subparagraph (D).

Regarding microturbines.

(a) **General rule**

For purposes of section 38, the renewable electricity production credit for any taxable year is an amount equal to the product of—

(1) 1.5 cents, multiplied by

(2) the kilowatt hours of electricity—

(A) produced by the taxpayer—

(i) from qualified energy resources, and

(ii) at a qualified facility during the 10-year period beginning on the date the facility was originally placed in service, and

(B) sold by the taxpayer to an unrelated person during the taxable year.



Federal Incentives for Renewable Energy

[Printable Version](#)

Residential Renewable Energy Tax Credit

Last DSIRE Review: 02/19/2009

Incentives

[Incentives List](#)

[DSIRE Home](#)

Incentive Type: Personal Tax Credit

Eligible Renewable/Other Technologies: Solar Water Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Other Solar Electric Technologies

Applicable Sectors: Residential

Amount: 30%

Maximum Incentive: Solar-electric systems placed in service before 2009: \$2,000
Solar-electric systems placed in service after 2008: no maximum
Solar water heaters placed in service before 2009: \$2,000
Solar water heaters placed in service after 2008: no maximum
Wind turbines placed in service in 2008: \$4,000
Wind turbines placed in service after 2008: no maximum
Geothermal heat pumps placed in service in 2008: \$2,000
Geothermal heat pumps placed in service after 2008: no maximum
Fuel cells: \$500 per 0.5 kW

Carryover Provisions: Excess credit may be carried forward to succeeding tax year

Eligible System Size: Fuel cells: 0.5 kW minimum

Equipment/Installation Requirements: Solar water heating property must be certified by SRCC or by comparable entity endorsed by the state in which the system is installed. At least half the energy used to heat the dwelling's water must be from solar. Geothermal heat pumps must meet federal Energy Star requirements. Fuel cells must have electricity-only generation efficiency greater than 30%.

Authority 1: [26 USC § 25D](#)

Date Enacted: 8/8/2005 (subsequently amended)

Effective Date: 1/1/2006

Expiration Date: 12/31/2016

Authority 2: [IRS Form 5695 & Instructions: Residential Energy Credits](#)

Summary:

Note: *The American Recovery and Reinvestment Act of 2009 does not allow taxpayers eligible for the residential renewable energy tax credit to receive a U.S. Treasury Department grant instead of taking this credit.*

Established by the federal *Energy Policy Act of 2005*, the federal tax credit for residential energy property initially applied to solar-electric systems, solar water heating systems and fuel cells. The *Energy Improvement and Extension Act of 2008* (H.R. 1424) extended the tax credit to small wind-energy systems and geothermal heat pumps, effective January 1, 2008. Other key revisions included an eight year extension of the credit to December 31, 2016, the ability to take the credit against the alternative minimum tax, and the removal of the \$2,000 credit limit for solar-electric systems beginning in 2009. The credit was further enhanced in February 2009 by *The American Recovery and Reinvestment Act of 2009* (H.R. 1: Div. B, Sec 1112), which removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008.

A taxpayer may claim a credit of 30% of qualified expenditures for a system that serves a dwelling unit located in the United States and used as a residence by the taxpayer. Expenditures with respect to the equipment are treated as made when the installation is completed. If the installation is on a new home the "placed in service" date is the date of occupancy by the homeowner. Expenditures include labor cost for onsite preparation, assembly or original system installation, and for piping or wiring to interconnect system to the home. If the federal tax credit exceeds tax liability, the excess amount may be carried

forward to the succeeding taxable year. The maximum allowable credit, equipment requirements and other details vary by technology, as outlined below.

Solar-electric property

- There is no maximum credit for systems placed in service after 2008. The maximum credit is \$2,000 for systems placed in service before January 1, 2009.
- Systems must be placed in service on or after January 1, 2006, and on or before December 31 2016.
- The home served by the system does *not* have to be the taxpayer's principal residence.

Solar water-heating property

- There is no maximum credit for systems placed in service after 2008. The maximum credit is \$2,000 for systems placed in service before January 1, 2009.
- Systems must be placed in service on or after January 1, 2006, and on or before December 31 2016.
- Equipment must be certified for performance by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the government of the state in which the property installed.
- At least half the energy used to heat the dwelling's water must be from solar in order for the so water-heating property expenditures to be eligible.
- The tax credit does not apply to solar water-heating property for swimming pools or hot tubs.
- The home served by the system does *not* have to be the taxpayer's principal residence.

Fuel cell property

- The maximum credit is \$500 per half kilowatt (kW).
- Systems must be placed in service on or after January 1, 2006, and on or before December 31 2016.
- The fuel cell must have a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process and an electricity-only generation efficiency greater than 30%.
- In case of joint occupancy, the maximum qualifying costs that can be taken into account by all occupants for figuring the credit is \$1,667 per half kilowatt. This does not apply to married individuals filing a joint return. The credit that may be claimed by each individual is proportiona the costs he or she paid.
- The home served by the system *must* be the taxpayer's principal residence.

Small wind-energy property

- There is no maximum credit for systems placed in service after 2008. The maximum credit is \$500 per half kilowatt, not to exceed \$4,000, for systems placed in service in 2008.
- Systems must be placed in service on or after January 1, 2008, and on or before December 31 2016.
- The home served by the system does *not* have to be the taxpayer's principal residence.

Geothermal heat pumps

- There is no maximum credit for systems placed in service after 2008. The maximum credit is \$2,000 for systems placed in service in 2008.
- Systems must be placed in service on or after January 1, 2008, and on or before December 31 2016.
- The geothermal heat pump must meet federal Energy Star program requirements in effect at t time the installation is completed.
- The home served by the system does *not* have to be the taxpayer's principal residence.

Significantly, *The American Recovery and Reinvestment Act of 2009* repealed a previous limitation on use of the credit for eligible projects also supported by "subsidized energy financing." For projects plac in service after December 31, 2008, this limitation no longer applies.

History

The federal [Energy Policy Act of 2005](#) established a 30% tax credit (up to \$2,000) for the purchase and installation of residential solar electric and solar water heating property and a 30% tax credit (up to \$500 per 0.5 kilowatt) for fuel cells. Initially scheduled to expire at the end of 2007, the tax credits were extended through December 31, 2008, by the [Tax Relief and Health Care Act of 2006](#).

In October 2008, the [Energy Improvement and Extension Act of 2008](#) extended the tax credits once again (until December 31, 2016), and a new tax credit for small wind-energy systems and geothermal heat pump systems was created. In February 2009, [The American Recovery and Reinvestment Act of 2009](#) removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008.

Contact:

Public Information - IRS
Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web site: <http://www.irs.gov>



DSIRE
Database of State Incentives for Renewables & Efficiency

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House Committee on Ways and Means

April 10, 2009

Presentation by

Anne Margolis, Manager

**Vermont Clean Energy
Development Fund**

H. 446

Background

- Signed into Law 2005
 - Established in 2005 through ACT 74
- Purpose
 - Promote the development of cost-effective and environmentally sustainable power resources
 - Promote renewable energy and CHP technologies
- Payments ~ \$4 to \$6 million annually from Entergy through 2012
- Programs Created in 2007

Advisory Committee

- Commissioner of Public Service
- Senate and House Committees on Natural Resources and Energy Chairs
- Review
 - Strategic Plan
 - Annual Program Plan
 - Operating Budget
 - Investment Committee Appointments

Investment Committee

- 7 Members Appointed by Advisory Committee
 - Patty Richards, Chair
 - Robert Dostis, Vice-Chair
 - Jo Bradley
 - Rich Sedano
 - Mark Sinclair
 - Jeb Spaulding
 - Sam Swanson
- Oversees
 - Development of Strategic Plan, Annual Program Plan, Operating Budget
 - Review grant and loan application
 - Meet monthly to oversee business of CEDF
 - Work with Fund Manager

Fund Manager

- Anne Margolis
- DPS staff
- Oversee Program and Grant Implementation
- Report to Investment Committee

Proposal Process

- Twice a Year Grant Solicitation
- Scored Based on Selection Criteria
- All grants reviewed by Investment Committee and DPS staff
- Top Scoring Proposals Awarded Grants
- Cut off Based on Available Funds

Results

- June 2007 – Competitive Grant Solicitation
 - 34 Proposals Requested \$4.7 M
 - 17 Proposals Received Awards for \$2.1M
- Nov 2007 -- Loan Program Created
- Feb 2008 -- Competitive Grant Solicitation
 - 29 Proposals Requested \$3.5 M
 - 18 Projects Received Awards of \$2.3M

Results

- Aug 2008 – Competitive Grant Solicitation
 - 29 Proposals Requested \$3.8 M
 - 17 Proposals Received Awards for \$2.65 M
- Jan 2009 -- Competitive Grant Solicitation
 - 39 Proposals Requested \$5.3 M
 - 22 Proposals Received Awards for \$2.57 M
- August 2008 – Municipal Technical Assistance Grant Program
 - 6 Grants awarded \$36,950 to date

Results

- Small Scale Renewable Energy Program Funding
 - Administered by VT Energy Investment Corporation (VEIC)
 - Funding for < 15 kw Projects (residential scale)
 - Solar PV, Solar H2O, Wind, and Hydro
 - CEDF allocated \$2.7 M to this program
 - CEDF funded >850 Projects thus far
 - CEDF funding brought 1.3 MW of installed capacity online

Result Summary

- CEDF Awarded \$13.2 M
- Leveraged an Additional \$48 M in Investments
- Created 8.3 MW Renewable Energy Installed Electric Capacity
- Diverse Base of Resources
 - Wind, Solar, Hydro, CHP, Farm Methane

Conclusion

- CEDF Programs Just Getting Started
 - 2 Years of Implementation
- Creating Significant Sources of New Renewable Energy
- Program and Process Improvements Continual
- With two-thirds of Vermont's sources of power beginning to expire in 2012, now is the time for the CEDF to invest in renewable energy projects
- Potential diversion of tax credits consuming all CEDF funds very concerning
- Project requests on the rise
- Need full funding and ability to use regular and stimulus funds now more than ever for project deployment

Questions

Additional Materials and Information

CEDF Grant Awards since 2007

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Hydro Potential Study	Commercial	Statewide	Hydro	\$19,000	\$19,000	N/A	N/A
Green Mountain Dairy Line Extension	Commercial	Highgate	Digester	\$182,800	\$260,255	225	1,576,800
St. Pierre Line Extension	Commercial	Richford	Digester	\$127,000	\$185,020	600	4,204,800
Montagne Line Extension	Commercial	St. Albans	Digester	\$140,000	\$182,095	240	1,681,920
Ag Economic Development Special Account	Government/Commercial	Statewide	N/A	\$100,000	\$100,000	N/A	N/A
Barre Hydro	Municipal	Barre City	Hydro	\$3,300	\$3,300	N/A	N/A
Small Wind & Solar Grant Incentive Program	Residential	Statewide	Solar & Wind	\$1,200,000	\$1,200,000	N/A	N/A
Small-Scale Renewable Energy Incentive Program	Residential	Statewide	Solar, Wind, Hydro	\$1,500,000	\$1,500,000	N/A	N/A
Town of Middlebury Hydro	Municipal/Commercial	Middlebury	Hydro	\$20,000	\$20,000	N/A	N/A
Valley Cares Biomass	Nonprofit	Townshend	Boiler	\$100,000	\$148,821	N/A	N/A
South Burlington WWTF CHP Study	Municipal	S. Burlington	Biogas CHP	\$19,350	\$21,500	N/A	N/A
Gervais Farm Digester	Commercial	Bakersfield	Digester	\$250,000	\$792,000	200	1,401,600
Boucher BioPower	Commercial	Highgate Ctr	Digester	\$250,000	\$2,586,369	633	5,102,400
Westminster Farms Anaerobic Digester	Commercial	Westminster	Digester	\$250,000	\$1,393,975	200	1,401,600
Neighborhood Energy LLC	Commercial	Coventry	Digester	\$250,000	\$1,510,000	200	1,401,600

CEDF Grant Awards since 2007---continued

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
AgNorth BioPower LLC	Commercial	Alburgh	Digester	\$250,000	\$6,802,000	1900	13,315,200
Georgia Mountain Community Wind	Municipal/Commercial	Georgia	Wind	\$24,877	\$29,852	N/A	N/A
Otter Creek Brewing CHP Study	Commercial	Middlebury	Biomass CHP	\$19,985	\$43,108	N/A	N/A
Green Mountain Coffee Solar Project	Commercial	Waterbury	Solar PV	\$250,000	\$754,582	99.11	111,526
RSD Solar Project	Commercial	WRJ	Solar PV	\$210,000	\$723,082	99.11	116,455
Williston LFGTE project	Municipal	Williston	Landfill Gas	\$15,000	\$119,451	90	748,980
Lyndon State College CHP Study	Nonprofit	Lyndonville	Biomass CHP	\$18,456	\$27,500	N/A	N/A
Bennington Hydro Project	Municipal	Bennington	Hydro	\$63,000	\$135,200	17	140,000
Southern VT Recreation Center Solar Project	Nonprofit	Springfield	Solar PV	\$125,000	\$587,287	36.3	42,761
Champlain College micro-CHP project	Nonprofit	Burlington	MicroCHP	\$7,500	\$15,000	1.2	4,500
Montpelier District Energy System Project	Municipal	Montpelier	Biomass CHP	\$25,000	\$649,620	N/A	N/A
Greensboro Hydro Feasibility Study	Municipal	Greensboro	Hydro	\$21,000	\$25,200	N/A	N/A
Ag Economic Development Special Account	Government/Commercial	Statewide	N/A	\$300,000	\$300,000	N/A	N/A
Micro-Hydro Energy & Educ. in the NE Kingdom	Nonprofit	E. Charleston	Hydro	\$27,336	\$55,051	N/A	3,843
Co-Gen System Impl. @ WW Trtmt Facility	Municipal	South Burlington	Co Gen	\$250,000	\$539,900	65	569,400
Installation of Concentrated PV System	Commercial	Vergennes	Solar PV	\$250,000	\$573,659	1.67	11,400

CEDF Grant Awards since 2007---continued

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Solar PV at National Life	Commercial	Montpelier	Solar PV	\$200,000	\$502,615	72	77,767
Solar Energy System at Farm-Way	Commercial	Bradford	Solar PV	\$226,000	\$438,672	60.48	76,941
Power Generation from a Small Farm Digester	Commercial	Charlotte	Digester	\$24,626	\$60,826	17	96,500
Industrial Park Sustainable Energy	Nonprofit	St. Johnsbury/Lyndon	Biomass CHP	\$25,000	\$387,800	50000	N/A
Randolph BioFiber CHP Project	Nonprofit	Randolph	Biomass CHP	\$25,000	\$50,016	215	N/A
51.24 kw/DC Photovoltaic Array	Commercial	Northfield	Solar PV	\$186,000	\$372,138	51.24	55,351
Solar Energy System at GMP	Commercial	Westminster	Solar PV	\$234,360	\$468,720	60.48	76,941
CHP Feas. at ReNew Bldg. Materials & Slvg.	Nonprofit	Brattleboro	Biomass CHP	\$17,396	\$25,400	N/A	3,745
Goddard College Woodchip CHP System Feas.	Nonprofit	Plainfield	Biomass CHP	\$23,000	\$34,400	N/A	N/A
Biomass Fired Cogeneration Facility	Commercial	Newport	Co Gen	\$100,000	\$1,301,950	500	501,020
Kelly River Hydroelectric Project Feasibility	Municipal	Waterville	Hydro	\$4,995	\$5,550	N/A	N/A
HCRS Solar Panel Project	Nonprofit	Springfield	Solar PV	\$158,362	\$399,746	39	49,053
Hydropower Generation to Middlebury Upper	Commercial	Middlebury	Hydro	\$250,000	\$4,000,000	N/A	N/A
Chaput Farm Anaerobic Digester	Commercial	North Troy	Biogas CHP	\$250,000	\$1,736,717	300	2,496,000
Griffin Hill Wind Resource Report	Residential/Commercial	Charlotte	Wind	\$8,400	\$10,354	15	36,960
Evaluation of Biomass CHP at NVRH	Nonprofit	St. Johnsbury	Biomass CHP	\$22,990	\$22,990	N/A	N/A
CHP Feasibility for the WSWMD Office Bldg.	Municipal	Brattleboro	Biogas CHP	\$20,000	\$30,950	N/A	N/A

CEDF Grant Awards since 2007---

continued

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Hydro Feasibility @ Airport Pkwy WW Treatment	Commercial	S. Burlington	Hydro	\$12,000	\$16,000	N/A	N/A
Digester Feasibility @ Brattleboro WW Treatment Facility	Commercial	Brattleboro	Biogas CHP	\$25,000	\$49,278	N/A	N/A
Ball Mountain Hydroelectric Project	Commercial	Jamaica	Hydro	\$25,000	\$202,000	N/A	N/A
Central VT Recovered Biomass Energy Facility	Nonprofit	Randolph	Biomass CHP	\$20,000	\$605,591	N/A	N/A
SVRH PV Project (Phase 2)	Nonprofit	Springfield	Solar PV	\$125,000	\$587,287	37	43,586
Co-Gen System @ Green Mountain College	Nonprofit	Poultney	Biomass CHP	\$250,000	\$3,600,000	150	427,000
Putney District Energy Project	Commercial	Putney	Biomass CHP	\$250,000	\$5,746,000	530.5	4,414,821
Hildene Solar for Cheesemaking Facility	Nonprofit	Manchester	Solar PV	\$106,835	\$240,000	19.1	28,830
Plainfield Batchelder Mill Dam	Municipal	Plainfield	Hydro	\$250,000	\$534,210	85	400,000
CVPS Solar Generation Project	Commercial	Rutland	Solar PV	\$201,803	\$403,606	50	73,000
Fillmore Farms, LLC Anaerobic Digester	Commercial	Bennington	Digester	\$250,000	\$1,240,000	154	1,239,000
Gebbies' Maplehurst Farm Anaerobic Digester	Commercial	Greensboro	Digester	\$250,000	\$919,500	90	723,047
Dubois Farm, Inc. Anaerobic Digester	Commercial	Vergennes	Digester	\$250,000	\$2,645,750	335	2,703,066
Bolton Valley Resort Northwind 100 Project	Commercial	Richmond	Wind	\$250,000	\$613,705	100	1,250,000
City of Barre Energy Recovery Project	Municipal	Barre	Hydro	\$100,000	\$340,000	25	120,000
Neighborly Farms Digester	Commercial	Randolph Ctr.	Digester	\$250,000	\$569,500	20	132,008
Seth Hill Brook Hydroelectric Feasibility Study	Municipal	Bristol	Hydro	\$2,700	\$3,000	N/A	N/A
Jacksonville Pond Use in Dvlpg. a Micro-Scale Project	Municipal	Jacksonville	Hydro	\$5,000	\$7,500	N/A	N/A
Alternative Energy Momentum for School Addition	Municipal	So. Royalton	Hydro	\$4,997.99	\$6,012.99	N/A	N/A

CEDF Grant Awards since 2007---continued

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Village of Bellows Falls	Municipal	Bellows Falls	Hydro/Solar	\$4,500		N/A	N/A
Town of Putney	Municipal	Putney	Hydro	\$4,950		N/A	N/A
District Energy Generating System in Brattleboro	Municipal	Brattleboro	Biomass CHP	\$20,000	\$33,000	N/A	N/A
Georgia Mountain Community Wind Project	Commercial	Milton/Georgia	Wind	\$75,123	\$469,542	N/A	N/A
Troy Hydroelectric Feasibility Study Project	Commercial	Troy	Hydro	\$48,375	\$96,750	N/A	N/A
Montpelier Community Energy System	Municipal	Montpelier	Biomass CHP	\$75,000	\$465,000	N/A	N/A
Bolton Wind Power Project	Commercial	Bolton	Wind	\$82,700	\$167,740	N/A	N/A
Vermont Pellet Works Biomass Cogeneration Feasibility Study	Commercial	Lyndonville	Biomass CHP	\$25,000	\$50,000	N/A	N/A
Rutland WWTF Digester Cogen Project	Municipal	Rutland	Biogas CHP	\$25,000	\$35,400	N/A	N/A
Sunrise Village Northwind 100 Project	Commercial	Killington	Wind	\$25,000	\$35,000	N/A	N/A
Camel's Hump Middle School Solar PV Project	Nonprofit	Richmond	Solar PV	\$250,000	\$520,833	57	82,551
St. Francis Xavier School Photovoltaic System	Nonprofit	Winooski	Solar PV	\$250,000	\$648,249	62	86931
Monument Farms Anaerobic Digester	Commercial	Weybridge	Biogas CHP	\$250,000	\$1,111,000	91	744,359
Shore Acres Farm 25 kW SunTech Pole Mount PV System	Commercial	North Hero	Solar PV	\$20,000	\$199,519	19	29410
Tracking PV System at The Putney School	Nonprofit	Putney	Solar PV	\$221,000	\$443,727	29	52,311
Rock of Ages Wind Turbine Replacement	Commercial	Barre	Wind	\$130,000	\$530,000	100	120,000
Heritage Aviation 25.2 kW Solar PV System	Commercial	S. Burlington	Solar PV	\$20,000	\$186,064	19	18 29,594

CEDF Grant Awards since 2007---continued

Project Name	Customer Type	City	Technology	Incentive Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Shelburne Farms Solar PV Project	Nonprofit	Shelburne	Solar PV	\$250,000	\$518,359	47	65,450
Joneslan Farms Small Digester	Commercial	Hyde Park	Biogas CHP	\$250,000	\$784,500	30	223,380
GWR PV Colony	Commercial	Charlotte	Solar PV	\$31,920	\$170,000	14	26,000
Williams Hill Community Renewable Energy Project	Commercial	Charlotte	Solar PV	\$33,250	\$199,374	14	27,132
Barrett Green Business Building: and 18.72 kW Solar Electric Installation	Commercial	Montpelier	Solar PV	\$32,760	\$157,300	14	21644
Carbon Harvest Energy - Randolph Gas-to-CHP w/Agricultural Integrations	Commercial	Randolph	Biogas CHP	\$200,000	\$1,189,800	125	1098500
Riverside Industrial Center Biomass Cogeneration	Commercial	Brattleboro	Biomass CHP	\$250,000	\$3,050,000	375	2788100
			Totals	\$13,247,647	\$47,579,933	8,315	52,247,195

CEDF Loan Awards since 2008

Project Name	Customer Type	City	Technology	Loan Amount	Total Cost	System Size (kW AC)	Estimated Annual KWH Production
Co-Gen System @ Green Mountain College	Nonprofit	Poultney	Biomass CHP	\$750,000	\$3,600,000	150	427,000
Gervais Farm Digester	Commercial	Bakersfield	Digester	\$700,000	\$792,000	200	1,401,600
Purpose Energy Spent Grain Digester at Magic Hat	Commercial	S. Burlington	Digester	\$750,000	\$3,147,000	330	2,848,500
			Totals	\$2,200,000	\$7,539,000	680	4,677,100

Funding Opportunities

- **Grants**

- For grid-connected renewables over 15 kW in size
- Grant categories: feasibility studies, small-scale systems, large-scale systems, special demonstration projects
- Max grant award \$250K; 50% match required (20% for feasibility studies); funding distributed only after CPG obtained
- Approx. \$2 million available each grant round (2/yr)
- Current RFP on CEDF website; applications due in late February
- Over \$7 million in grants awarded since 2007

Funding Opportunities

- **Municipal Technical Assistance Grants**

- Planning grants for grid-connected renewables

- \$50,000 available in FY '09

- Maximum grant award is \$5,000

- Funding is for up to 90% of project's cost (10% match required from grantee)

- Six projects currently funded, totaling \$27,500, for renewable energy investigations in Waterville, Bristol, Putney, Bellows Falls, Jacksonville, and South Royalton

- Deadline is first Thursday of each month

Funding Opportunities

- **Loans**

- For grid-connected renewables over 15 kW in size
- Minimum loan amount \$50K; max \$1 million
- For up to 90% of a project's cost (loans are not available for feasibility studies)
- 2% interest rate & flexible terms depending on nature of project, grantee, and need
- Applications due by first Thursday of each month; full decision cycle is approx. 60 days
- Two loans awarded in 2008, for a co-generation system and a hydropower system, totaling \$1,450,000

For more information

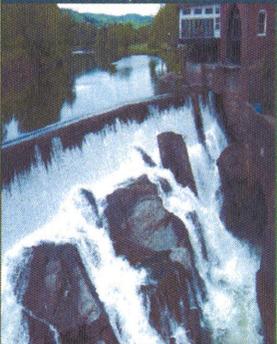
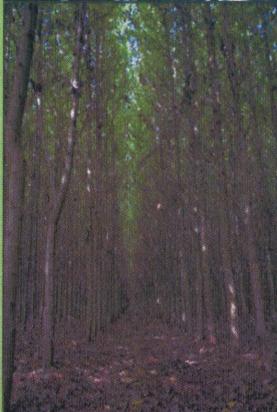
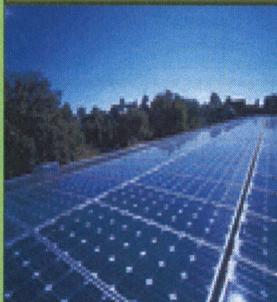
- CEDF:
http://publicservice.vermont.gov/energy/ee_cleanenergyfund.html

Anne Margolis

(802) 828-4017

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- Small-Scale Renewable Energy Incentive Program (solar PV, solar thermal, wind, or hydro under 15 kW): www.nerc-vt.org or 877-888-7372



Vermont Clean Energy Development Fund

2008
Annual Report

January 2009

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■ Purpose of this Report

The purpose of this annual report is to provide an account of the activities of the Vermont Clean Energy Development Fund (CEDF), including how the funds were managed and distributed to meet the goals of the Fund. This report covers the period between January 2008 and December 2008.

■ Establishment of the Fund

In 2005, the Vermont General Assembly established the Vermont Clean Energy Development Fund through Act 74 (10 V.S.A. § 6523). The Act specifies that the Vermont Clean Energy Development Fund will be established and funded through proceeds due to the state under the terms of two Memoranda of Understanding between the Vermont Department of Public Service (DPS) and Entergy Nuclear VT and Entergy Nuclear Operations, Inc., and by any other monies that may be appropriated to or deposited into the Fund. The CEDF will receive payments from Entergy through 2012.

■ Management & Governance

DEPARTMENT OF PUBLIC SERVICE (DPS) ADMINISTRATION

In accordance with 10 V.S.A. § 6523, the CEDF is administered by the DPS. The DPS has extensive experience with issuing proposal solicitations and administering contracts and grants. The DPS also works with Vermont's ratepayers, power suppliers, and other stakeholders and interested parties on a regular basis. DPS staff

fulfilled this function until a permanent Fund Manager was hired in August 2008 to manage day-to-day operation of the Fund.

The Fund Manager is responsible for:

- Updating the strategic plan
- Preparing the annual program plan and budget
- Maintaining a loan and credit policy that details underwriting criteria for all loans, grants, and investments made by the Fund
- Distributing information on the Fund, including maintaining a page on the DPS website and creating brochures
- Writing and issuing proposal solicitations, reviewing proposals, and awarding funding
- Monitoring and managing all financial assistance
- Making recommendations for loans and investments, in consultation with Vermont Economic Development Authority (VEDA) management and the DPS Commissioner, to the Investment Committee
- Preparing program and financial reports

ADVISORY COMMITTEE

The role of the Advisory Committee is to review the strategic plan and the annual program plan and operating budget. The Advisory Committee also appoints the Investment Committee members. As defined in 10 V.S.A § 6523, the Advisory Committee consists of the Commissioner of

Public Service or a designee, and the Chairs of the House and Senate Committees on Natural Resources and Energy or their designees.

INVESTMENT COMMITTEE

The Investment Committee reviews and approves the CEDF plans, budget and program designs. The Investment Committee also assists the Fund Manager and the DPS Commissioner in the review of grants and investments; determining the viability of a project, company, product or service; and evaluating marketing and business plans. The Investment Committee consists of seven persons appointed by the Advisory Committee. The Investment Committee members are as follows:

- * Patty Richards, VPPSA Director of Power Supply and Transmission (Chair)
- * Robert Dostis, Green Mountain Power Director of Consumer Service and External Affairs (Vice-Chair)
- * Jo Bradley, VEDA Chief Executive Officer
- * Richard Sedano, Regulatory Assistance Project Director
- * Mark Sinclair, Clean Energy Group Vice President
- * Jeb Spaulding, VT State Treasurer
- * Sam Swanson, Pace Law School Energy Project

Lawrence Miller resigned from the Committee in October 2008. Robert Dostis, of Green Mountain Power, was appointed to the Committee as his replacement in October 2008.

MANAGEMENT OF THE FUNDS

The Fund Manager and the Investment Committee work together to determine the amount of funds to be used for grants, loans, equity and/or subordinated debt investments. Since these types of financial support are markedly different in nature, the processing of requests for these types of funds are handled as described below:

- 1) When a request for a grant is approved by the Investment Committee and Fund Manager, funds will be dispersed by DPS based on specific requisitions by the grantee, which is subject to approval by the Fund Manager.
- 2) If a loan is requested and approved by the Investment Committee and Fund Manager based in part on a due diligence write-up prepared by VEDA, VEDA will prepare the loan documents, close the loan, monitor it and manage the relationship with the borrower. VEDA will handle the accounting for the loan and apply payments as they are received, and manage any loan collection activity that may become necessary with the approval of the Fund Manager and Investment Committee. VEDA charges a modest fee for its services that was negotiated between VEDA and DPS.
- 3) The Investment Committee decides on a case-by-case basis whether to allocate funds for equity/subordinated debt investments and will identify resources to participate in due diligence and negotiate on the

Fund's behalf. The preference would likely be to co-invest with other established investment firms.

Funds that accumulate in the CEDF will be temporarily managed by the State Treasurer's office prior to their being granted, loaned, or invested as outlined above.

Every attempt will be made to fully obligate all CEDF funds each year with the exception of setting aside a small portion that can be used for equity investments should the opportunity arise.

■ Goals and Objectives

GOALS

The goal of the Fund is to increase the development and deployment of cost-effective and environmentally sustainable electric power resources – primarily with respect to renewable energy resources, and the use of combined heat and power technologies - in Vermont. The Fund is managed to promote:

- The increased use of renewably produced electrical and combined heat and power technologies in the state;
- The growth of the renewable energy-provider and combined heat and power industries in the state;
- The creation of additional employment opportunities and other economic development benefits in the state through the

increased use of renewable energy and combined heat and power technologies;

- The stimulation of increased public and private sector investment in renewable energy and combined heat and power related enterprises, institutions, and projects in the state.

RATIONALE

The further development of clean energy generation in Vermont will provide environmental benefits, increased energy diversity, price stability, and a thriving clean energy market to enable clean energy businesses to develop and expand.

The promotion of clean energy businesses and industry in the state will create additional employment opportunities. Creation and retention of quality jobs is important for current and future generations of Vermonters.

Fulfillment of the Fund goals will also support Vermont's greenhouse gas emission reduction targets as well as supporting the objectives set forth in 30 V.S.A. § 8004 to meet all incremental energy growth in Vermont between 2005 and 2012 through renewable energy generation.

SCOPE

The CEDF funds a wide variety of clean electric energy technologies and programs. 10 V.S.A. § 6523 specifies that "clean energy resources" means electric power

supply and demand-side resources that are combined heat and power facilities, cost-effective energy efficiency resources, or renewable energy resources.

The definition of renewable energy for the purposes of the Clean Energy Development Fund includes the following:

- solar photovoltaic energy;
- wind energy;
- hydroelectric energy
- farm, landfill, and sewer methane recovery;
- low emission, advanced biomass power, and combined heat and power technologies, using biomass fuels such as wood, agricultural or food wastes, energy crops, and organic refuse-derived waste, but not municipal solid waste.

OBJECTIVES

- Increase the installation of renewable energy systems for homes, businesses, farms, and public buildings.
- Increase the amount of combined heat and power (CHP) in the state.
- Facilitate clean energy distributed generation that enhances grid stability.
- Facilitate and support efforts by Vermont communities to develop small-scale renewable energy projects.
- Help developers secure project financing for construction of eligible renewable energy generating facilities and support pre-development activity.
- Continued growth of clean energy related businesses and industry in Vermont.
- Provide financial and technical assistance for the design, development,

and commercialization of clean energy technologies and products.

■ Guiding Principles

1. Support diversified portfolio of clean energy technologies that will benefit ratepayers and municipalities; leverage private and public investment; and have positive impacts in terms of economic development, additional employment opportunities, and environmental attributes.
2. Allow for sufficient risk taking in fund use to stimulate development of clean energy products, businesses, and market initiatives by investing the funds through grants, loans, and equity investments in the most appropriate fashion for each project to maximize the mission related public benefit return over the life of the Fund.
3. Seek to remove market barriers related to the development and deployment of renewable energy and combined heat and power technologies in Vermont through the support of transformational technology, market and cultural developments.
4. Ensure maximum value from the CEDF by supporting initiatives and activities that are reliable, cost effective (or reasonably likely to become cost effective), and utilize commercialized or nearly commercialized technologies.
5. Pursue geographic distribution of projects throughout the state consistent

with system needs, while providing citizens the maximum exposure to alternative generation opportunities.

6. Pursue organizational development that results in the least administrative cost to maximize funds for direct investment.
7. Participate in projects in which the funds will make a meaningful difference.

■ Funding

The CEDF offers a portfolio of funding opportunities to accelerate the development, commercialization, and production of clean energy in Vermont, including: grants and contracts; loans; equity investments; and direct incentive payments to individuals, businesses, state and local government, and non-profit organizations.

SMALL-SCALE RENEWABLE ENERGY INCENTIVES

The CEDF has provided funding for the *Vermont Small-Scale Renewable Energy Incentive Program*. The program currently provides an incentive to individuals, businesses, and multi-family low-income housing projects for solar electric, solar hot water, small hydropower, and small wind grid-connected systems.

Additional CEDF funding of \$200,000, in addition to the \$1,000,000 allocated for 2006-2008, was provided in July 2008. In

August 2008, a \$1,500,000 contract to the program was approved, which is to cover 2008-2010.

Between January 1, 2008 and December 31, 2008, a total of 84 systems were installed, with another 168 reserved in that time frame. The table below shows the number of wind, solar PV, and solar hot water systems installed in 2008 as well as the capacity of the systems.

	Wind	Solar PV	Solar Hot Water
Systems Installed	5	69	10
Installed Capacity	21.7 kW	255 kW	8,130 kBtu/d
Systems w/ Incentive Reservations	15	26	127
Proposed Capacity of Systems	56.3 kW	68.9 kW	10,181 kBtu/d

The current incentive levels are as follows:

Solar Electric

- \$1.75/Watt for individuals and businesses
- \$3.50/Watt incentive for multi-family low-income housing projects

Solar Hot Water

- \$1.75/100 Btu/day for individuals and businesses
- \$3.50/100 Btu/day incentive for multi-family low-income housing projects

Wind

- \$2.50/Watt for individuals and businesses (\$4.00/Watt for Vermont-made components)

- \$4.50/Watt for schools, farms, and local/state governments

Hydro

- \$1.75 per 3 head-foot gallons per minute (head*flow/3)

The Vermont Small-Scale Renewable Energy Incentive Program is currently administrated by the Renewable Energy Resource Center.

GRANTS

Two competitive requests for proposals were issued in 2008, one in February and the other in August, for projects in the following categories:

Pre-Project Financial Assistance

This category includes feasibility studies and pre-development activities to develop new renewable energy generation facilities and combined heat and power systems, which may require high-risk, early-stage activities and for those projects that do not have the resources to finance pre-project activities. Projects under this category may include: renewable energy resource assessments; site assessments; environmental impact and regulatory analysis; permitting activities; technical and engineering feasibility studies; engineering designs; and economic and financial feasibility studies. Other similar projects not specifically listed above will also be considered.

In 2008, the maximum grant award for this category was \$25,000 and required a 20% cash match. Projects were to be completed within 1 year of award.

Small-Scale Systems

This category includes the installation of micro-CHP systems, micro-turbines, or fuel cells at residential or small commercial buildings. Renewable energy systems totaling no more than 15 kW of capacity per installation such as micro-hydroelectric were also eligible in 2008 (micro-hydro became ineligible in the August 2008 grant round, when it became part of the Vermont Small-Scale Renewable Energy Incentive Program). Solar electric, solar hot water, and small-scale wind systems were also ineligible for the same reason. All projects were required to be grid-connected.

The maximum grant award for this category in 2008 was \$60,000 and required a 50% match, no more than 25% of which could be in-kind match. Projects were to be completed within 2 years of award.

Large-Scale Systems

This category includes renewable energy and combined heat and power projects greater than 15 kW in capacity located at commercial, industrial, institutional, and public facilities. Renewable energy projects may include, but are not limited to: solar electric; hydroelectric; farm, landfill, and sewer methane recovery; low emission, advanced biomass power; and wind. This may include utility-scale installations. All projects must be grid-connected. The installation of micro-turbines and fuel cells at large commercial or industrial buildings is also eligible.

The maximum grant award for this category in 2008 was \$250,000 and required a 50% match, no more than 25% of which could be

in-kind match. Projects were required to be completed within 2 years of award.

Special Demonstration Projects

This category includes projects that demonstrate and facilitate the development and commercialization of innovative renewable energy products, technologies, technology applications, and processes. All electric generation projects must be grid-connected. These projects must be designed to focus on market building and technology deployment strategies as opposed to traditional research and development activities. Projects should also include the following: a technical and economic analysis of the technology application or demonstration; expected project impact on the near-term commercialization of this technology; and dissemination of project information to potential users of the technology.

The maximum grant award for this category in 2008 was \$250,000 and required a 50% match, no more than 25% of which could be in-kind match. Projects were to be completed within 2 years of award.

Grant Awards

In the February 2008 grant round, the DPS received 29 proposals requesting over \$3.5 million in funding, in response to the CEDF grant solicitation. Eighteen projects were awarded funding totaling \$2,284,484.

In the August 2008 grant round, the DPS received 29 proposals requesting \$3.8 million in funding. Seventeen projects were awarded funding totaling \$2,648,803.

The table below contains a list of the projects that were selected for grant awards and the estimated kWh generated per year as well as the projected avoided CO2 emissions for each project.

Project	Location	kWh/year (Estimated)	Avoided CO₂ emissions (in short tons)
Pre-Project Financial Assistance:			
<i>Goddard College Woodchip CHP System Feasibility Study</i> Goddard College	Plainfield	N/A	N/A
<i>Evaluation of Biomass CHP at Northeastern VT Regional Hospital</i> Northeastern VT Regional Hospital	St. Johnsbury	N/A	N/A
<i>Industrial Park Sustainable Energy</i> Northeastern VT Development Association	St. Johnsbury	N/A	N/A
<i>CHP Feasibility at ReNew Bldg. Materials & Salvage</i> Renew Bldg. Materials & Salvage	Manchester	N/A	N/A
<i>Anemometer & Wind Resource Report</i> Peter Schneider & Jessica Donavan	Charlotte	N/A	N/A

Randolph BioFiber CHP Project Randolph Area Community Development Co.	Randolph	N/A	N/A
CHP Feasibility for the WSWMD Office Building Windham Solid Waste Mgmt	Brattleboro	N/A	N/A
Hydroelectric System Feasibility @ Airport Pkwy WW Treatment Facility City of South Burlington	South Burlington	N/A	N/A
Digester Optimization & Cogen Feasibility @ Brattleboro WW Treatment Facility Town of Brattleboro	Brattleboro	N/A	N/A
Ball Mountain Hydroelectric Project Blue Heron Hydro, LLC	Jamaica	N/A	N/A
Central VT Recovered Biomass Energy Facility Vermont Sustainable Jobs Fund	Randolph	N/A	N/A
Small-Scale Systems:			
Micro-hydro Energy & Education in the Northeast Kingdom NorthWoods Stewardship Center	East Charleston	3,843	43
Large-Scale Systems:			
Proposal to Restore Hydroelectric Power Generation to the Middlebury Upper Anders Holm	Middlebury	5,800,000	64,206
Biomass Fired Cogeneration Facility Columbia Forest Products	Newport	2,729,935	N/A
HCRS Solar Panel Project Health Care & Rehabilitation Service of SE VT	Springfield	49,053	537
Chaput Farm Anaerobic Digester Chaput Family Farms	North Troy	2,496,600	8,492
Solar PV at National Life National Life Group	Montpelier	77,767	852
Co-Generation System Implementation at Wastewater Treatment Facility City of South Burlington	South Burlington	492,000	N/A
51.24 kW PV Array WallGoldfinger, Inc.	Northfield	55,351	606
Solar Energy System at Farm-Way Farm-Way, Inc.	Bradford	76,941	843
Solar Energy System at GMP Green Mountain Power	Westminster	76,941	843
Southern Vermont Health & Recreation Center PV Project (Phase II) SVHRC	Springfield	86,583	1,185

<i>Co-Gen System Implementation at Green Mountain College</i> Green Mountain College	Poultney	427,000	N/A
<i>Putney District Energy Project</i> Economic Development Group	Putney	4,414,821	N/A
<i>Hildene's Renewable Energy Project for Cheesemaking Facility</i> Friends of Hildene, Inc.	Manchester	28,830	316
<i>Plainfield Batchelder Mill Dam</i> Town of Plainfield	Plainfield	400,000	4,428
<i>CVPS Solar Generation Project</i> CVPS	Rutland	73,000	800
<i>Fillmore Farms, LLC Anaerobic Digester</i> Fillmore Farms, LLC	Bennington	1,239,000	3,190
<i>Gebbies' Maplehurst Farm Anaerobic Digester</i> The Gebbies' Maplehurst Farm	Greensboro	723,047	2,667
<i>Dubois Farm, Inc. Anaerobic Digester</i> Dubois Farm, Inc.	Vergennes	2,703,066	12,870
<i>Bolton Valley Resort Northwind 100 Project</i> Bolton Valley Resort	Richmond	330,250	3,656
<i>City of Barre Energy Recovery Project</i> City of Barre	Barre	120,000	1,328
Special Demonstration Projects:			
<i>Installation of a Concentrated PV System</i> Nathaniel Group, Inc.	Vergennes	11,400	125
<i>Power Generation from a Small Farm Digester</i> Avatar Energy, LLC	Charlotte	96,500	409
<i>Neighborly Farms Digester</i> Neighborly Farms/Dimmick	Randolph Ctr.	132,008	517

LOAN PROGRAM

The CEDF loan program was launched in November 2007. The program funds a wide variety of clean and/or renewable electric energy technologies, including but is not limited to the following: solar photovoltaic, wind energy, farm, landfill and sewer methane recovery, CHP, and hydroelectric. All projects must be grid-connected. CEDF will make loans that meet the Fund's objectives and advance

the overall goals of the Fund as more specifically set forth in 10 V.S.A § 6523 and the

CEDF Strategic Plan in the section entitled "Potential Funding Areas."

Eligible Borrowers

Individuals, sole proprietorships, partnerships, limited liability companies, corporations, non-profit corporations, Subchapter S corporations, municipalities, and foreign

Case Study: Power from Cows at the Maxwell Neighborhood Farm

The Maxwell Neighborhood Farm in Newport was started in 1957 by Maurice and Lois Maxwell. The farm has 850 milking cows and has won several farm management awards, including the 2003 Vermont Dairy Farm of the Year.

In 2008 – with support from the Clean Energy Development Fund, USDA, and CVPS's Cow Power™ program – the farm installed an anaerobic methane digester. The system operates by diverting manure waste from the existing lagoon (where it would otherwise release methane into the atmosphere) into a concrete digester. The resulting biogas fuels a generator that creates electricity that is then supplied to the grid.

The generator began producing electricity in early December, 2008 and is expected to produce about 1,750,000 kilowatt-hours annually. The Vermont Electric Cooperative purchases the electricity and CVPS purchases the renewable energy credits produced by the system.

In addition to renewable electricity, the system produces liquid effluent that is applied as a readily absorbed fertilizer on nearby fields, and solids are used as an ideal cow bedding material.



Photo Credits: Vermont Department of Public Service

corporations, municipalities, and foreign corporations with Vermont subsidiaries/affiliates.

Borrowing Limitations

- Loans cannot be used for more than 90% of the cost of a project.
- Minimum loan: \$50,000
- Maximum loan: \$1,000,000

Use of Funds

Funds can be used for the following:

- Purchasing land and buildings (when specific to project)
- Purchasing and installing machinery and equipment

- Working capital

All financing must be used for activities or assets directly related to the project.

Loan Rates & Terms

- Interest rate fixed at 2%
- Term for real estate loans is 10 years, amortized on a 15-year basis
- Term for machinery and equipment loans is a maximum of 7 years
- Term for working capital loans is 3 years, although there may be flexibility, depending on the nature of the project and the assets being financed

Fees

- Borrowers must pay an application fee of 1% on the loan amount, which is capped at \$1,500, once the loan is approved.
- Borrowers are responsible for paying all closing costs.

Application Process

1. Contact DPS for application form
2. Applications are due by the first Thursday of every month
3. Investment Committee reviews applications and will either send applications on for underwriting or will reject application
4. Underwriting is performed by VEDA
5. Final approval or denial of loans by the Investment Committee

The typical review period will be 60 days for complete applications. If applications are incomplete or unforeseen circumstances arise, the review period could be longer.

Loan Awards

Two loan applications were received in November and December, 2008. The following two loans were approved:

- Green Mountain College - \$750,000
- Gervais Family Farm, Inc. - \$700,000

Funding Criteria

Before committing to any expenditure, the Fund Manager and the Investment Committee ensure that all potential programs and projects are rigorously evaluated to insure that

the resources are allocated in a fair and cost-effective manner. Selection also takes GHG emission reductions, Sustainably Priced Energy Enterprise Development (SPEED) Program, and other related goals into consideration. A general description of the funding criteria that may be considered when making funding decisions is included below. Actual funding criteria for grant and loan solicitations may differ from the descriptions below and/or may change over time.

PROGRAM AND PROJECT EVALUATION CRITERIA

Experience and Qualifications

Applicant's knowledge and experience in the relevant project area; adequate staffing; previous experience with state or federal grants/contracts.

Work Plan

Clarity and reasonableness of work plan; timeframe relative to similar projects; viability and strength of strategy to implement project; project control and financial management plan.

Project Characteristics

Suitability of project site; project risk similar to proposed projects; potential for replicability; potential for public visibility; number of kWh generated and cost/kWh.

Environmental, Economic, and Societal Impact

How much the project will contribute to a reduction in fossil fuel use and other

greenhouse gas and other air pollutants; the extent of additional economic value created by a project, including job creation; benefits to society including the amount the project will contribute to an increase in renewable energy generation or CHP capacity available to ratepayers.

Budget

Description and justification for each line item; costs are reasonable and competitive; degree of financial leverage; justification of need for financial assistance.

Case Study: Going Solar at National Life Group

Gov. Jim Douglas and National Life CEO Thomas H. MacLeay stood together in November of 2008 in a rooftop ceremony to commission the company's new solar photovoltaic system and to praise the public-private financial partnership that made the project possible.

A \$200,000 state grant helped finance the \$500,000, 73 kW system. MacLeay said the combination of the state grant, federal and state tax credits, and a solar incentive program from Green Mountain Power Company (GMP) all made the project feasible. The SolarGMP program, which works with existing "net-metering" programs, pays customers for all solar energy generated at a rate of six cents per kWh above and beyond any net-metering payments.

The system is expected to produce about 10% of National Life's electrical needs – or about 75,000 kilowatt-hours a year – enough to power 10 to 15 typical Vermont homes.



Photo Credits: Solar Daily, National Life Group, Barre-Montpelier Times Argus

■ Accomplishments

Below is a summary of the CEDF accomplishments from January 2008 through December 2008.

- A competitive grant solicitation was issued in February, 2008. Twenty-nine proposals

were received and eighteen projects were awarded funding totaling \$2.28 million.

- In July 2008, \$1.5 million in CEDF funds were awarded for the Vermont Small-Scale Renewable Energy Program to support photovoltaic, solar hot water, micro-hydroelectric, and small-scale wind installations. Since its inception in 2003, the program has provided \$3,006,950 in

incentives to support the installation of 874 renewable energy systems with a total cost of just under \$15 million. The CEDF has provided \$2.7 million of that funding. The new incentive funding is expected to support the installation of approximately 250 new renewable energy systems throughout the state, which could generate an estimated 540 MWh of electricity annually.

- In July 2008, the CEDF Investment Committee approved its first equity investment, \$100,000 to Draker Laboratories, Inc., to develop renewable energy system performance monitoring equipment.
- In late July 2008, the position of CEDF Manager was filled.
- In August 2008, the CEDF launched a Municipal Technical Assistance Grant Program. The Program offers grants to Municipalities, Public Schools, and Vermont State Colleges to investigate the installation of a wide variety of clean and/or renewable electric energy technologies, including but not limited to the following: solar photovoltaic; wind energy; farm, landfill, and sewer methane recovery; combined heat & power (CHP) systems; and hydroelectric systems. Four municipal technical assistance grants have been awarded:

-Seth Hill Brook Hydroelectric Feasibility Study, Town of Bristol Water Department (\$2,700)

-Jacksonville Pond Use in Developing a Micro-Scale Hydro Project, Village of Jacksonville Electric Co. (\$5,000)

-Kelly River Hydroelectric Project, Town of Waterville (\$4,995)

-Alternative Energy Momentum for School Addition, South Royalton School (\$4,997.99)

- In August 2008, a third grant solicitation was issued. The DPS received 29 proposals for a total funding request of \$3,842,837 and awarded \$2.65 million for 17 projects. The RFP for the next grant round will be issued in mid-January, with grant proposals due March 1 and funding announced April 1. Since its inception, the large-scale, competitive grants program has funded \$7 million in projects, leveraging over \$45 million in project investment.
- In August 2008, the CEDF lowered its loan interest rate to 2% and raised the cap on loan amounts to \$1,000,000. By the end of 2008, two loans had been approved, totaling \$1,450,000.
- In November 2008, the CEDF Investment Committee held a public comment meeting. Comments were solicited in person and in writing, and suggestions are currently under consideration by the Investment Committee.