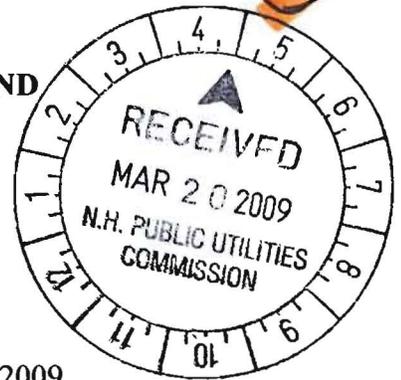


GREENHOUSE GAS EMISSIONS REDUCTION FUND

Jack Ruderman
Director, Sustainable Energy Division
Public Utilities Commission
21 Fruit Street, Suite 10
Concord, NH 03301



3/20/2009

- 1.1 SAU 46: Mechanical update and conversion to existing biomass heating plant
- 1.2 Other: to reduce electrical and natural gas consumption and provide a better environment
- 1.3 To link the SAU 46 office building to existing biomass heating plant and update aging inefficient air handling units, controls and lighting
- 1.4 Merrimack Valley School District has a free and reduced lunch plan for 616 students, which is 20 % of our 2,987 students. Thus 20 % of our support base is low income.
- 1.5 SAU 46, Merrimack Valley School District, 105 Community Dr. Penacook, NH 03303,
Neil Barry, 105 Community Dr., Penacook NH 03303, Cell: 603-848-1742, Office 603-753- 6422
- 1.6 Bow Plumbing and Heating, 3 Bow Bog Rd., Bow, NH 03304
Control Technologies, 70 Zachary Rd., Manchester, NH 03109
Atlantic Energy Solutions, 18 Central St., Suite 5, Foxboro, MA 02035
- 1.7 Neil Barry, 603-848-1742, nbarry@mv.k12.nh.us,
Fred Reagan, 603-848-1741, freagan@mv.k12.nh.us
- 1.8 The 3,940 sq. ft. building now uses 3,222 therms of natural gas. The biomass plant would replace about 3,000 therms of that use, with 37 tons of wood chips for heating. Electrical consumption would go down about 35 % with a lighting upgrade and replacement of aging compressors, air handlers and controls.

1.9 Last year used 3222 therms of natural gas

1,000 ft. nat gas = 1 million btu

1 million btu = 10 therms

used 322 million btu's of nat gas

1 ton of green hardwood (40% moisture content) = 8,528 million btu's

322 million btu's = 37 tons of wood chips

co2 EMISSIONS

117.1 lbs per million btu's (10 therms) natural gas

x 322 therms of natural gas

37,706 lbs co2 emissions from natural gas

x .21

7,918 lbs co2 emissions 37 tons woodchips

Savings of 29,788 lbs of co2 emissions for heating

Electricity

36,843 kwh = 36.843 megawatt hours

1,087 lbs of co2 emissions per megawatt hour

1,087 x 36.843 = 40,048 lbs of co2 emissions per year

40,048 x .35 (35% reduction) = 14,017 lbs of emissions saved

Total CO2 emissions saved per year 43,805 lbs

1.10 The project would take about two months to complete with 20 years of savings.
Would like to complete project before summer 2009

1.11 Program cost \$90,045

1.12 GHGER funds requested \$83,685

2. The 3,940 sq. ft. administrative office building of SAU 46 is located approximately 200 feet from Merrimack Valley High School, (the first high performance school building in NH) which is heated by a wood chip heating plant that was opened in Nov. 2006. This biomass plant has been a great source of pride, and educational tool for the school district, NH Department of Education, and the state. We have had groups from school districts, private schools and private industry from all over New England tour the plant.

Program cost of \$90,045.00 to link the SAU office building to the biomass heating plant, update aging inefficient air handlers, air conditioners and controls would further reduce our greenhouse gas emissions, save money, provide comfort and allow us to continue to be a leader and inspiration to others.

3. The installation of two air handlers, pumps and heating main from the high school would be done by Bow Plumbing and Heating, Bow NH. Controls by Control Technologies, Manchester, NH. Electrical by Nudd and Davis of Penacook, NH. All to be completed at the end of June when school is out for the summer.

Neil Barry, Plant Manager and Fred Reagan, Facilities Director of Merrimack Valley School District will handle project oversight, quality assurance and financial management.

4. The retrofitting of Merrimack Valley's SAU 46 office building will produce savings of money, greenhouse gases and peak load.

The lighting retrofit, air handlers and controls will allow us to schedule and shut off air conditioning during peak load times, still providing a comfortable environment while using much more efficient equipment.

The connection of the heating main to the existing biomass plant, which promotes regional economic development, innovative technologies, energy savings, is cost effective, reduces greenhouse gases and will continue to do so for many years to come.

The completed project would be consistent with public interest and RSA 125-0:19.

5. The project will be easily verifiable with decreased electric consumption and minimal gas use.

6. Budget for the project;

\$1,000.00 Salaries and wages, supervision of project, in kind, Merrimack Valley School District.

\$2,680.13 Lighting retrofit

6. Cont.

\$2,680.13 in kind, UNITIL Corporation

\$2,800.00 Nudd and Davis, electrical work

\$16,045.00 Control Technologies, controls and valves

\$64,840.00 Bow Plumbing and Heating, will provide and install all mechanical equipment, including excavation and installation of heating main.

7. Fred Reagan and Neil Barry of Merrimack Valley School District (applicant) are both experienced, Project Administrators and clerk of works; having overseen district projects, totaling over \$30 million dollars over the last 8 years.

Bow Plumbing and Heating, Bow NH, Bob Ives, 603-225-6929

Nudd and Davis, Electrical, Penacook, NH, Dave Nudd, 603-753-4348

Control Technologies, Greg Seaver, Manchester, NH, 603-626-6070

Atlantic Energy Solutions, Foxboro, MA, Jerry Giusti, 508-543-4470

8. ----

9. ----

Respectfully submitted for Merrimack Valley School District, 3/20/2009


Fred Reagan, Facilities Director


Neil Barry, Plant Manager

MERRIMACK VALLEY SCHOOL DISTRICT
105 COMMUNITY DR.
PENACOOK, NH 03303
603-753-6561

Requested

NH PUC Greenhouse Gas Emissions Reduction Fund		2/23/09 RFP Proposed Budget Worksheet						REQUESTED AMOUNTS FOR TARGETED PROGRAM SIZE					
Program Title:		CONVERSION OF SAU 46 ADMIN BUILDING TO BIOMASS											
Applicant Name:		MERRIMACK VALLEY SCHOOL DISTRICT											
USE OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
EXPENSES													
Salaries & Wages				\$1,000			\$1,000	\$1	\$2	\$3	\$4	\$10	
Benefits/Fringe				\$0			\$0					\$0	
Contracted Labor & Services				\$89,045			\$89,045					\$0	
Rent & Utilities				\$0			\$0					\$0	
Advertising & Marketing				\$0			\$0					\$0	
Travel & Mileage Reimbursement				\$0			\$0					\$0	
Tools, Supplies, Subscriptions				\$0			\$0					\$0	
Other Current Expenses (such as office expense, insurance, maintenance, repairs, taxes, legal, etc.)				\$0			\$0					\$0	
Cost of Goods Installed				\$0			\$0					\$0	
General Overhead & Profit*				\$0			\$0					\$0	
TOTAL EXPENSES	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$1	\$2	\$3	\$4	\$10	\$0
Capital Invested in Building Improvements							\$0					\$0	
Funds used for Loan Fund capital							\$0					\$0	
Loan Fund credit enhancement (such as interest rate buy-down)							\$0					\$0	
TOTAL USE OF FUNDS	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$1	\$2	\$3	\$4	\$10	\$0
SOURCES OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
Applicant Cash Contribution				\$2,680			\$2,680					\$0	
Applicant In-kind Contribution				\$1,000			\$1,000					\$0	
Program Participant Contribution				\$0			\$0					\$0	
Loans & Other Financing				\$0			\$0					\$0	
Forward Capacity Market Payments				\$0			\$0					\$0	
Other Grants				\$2,680			\$2,680					\$0	
GHGER Fund (this proposal)				\$83,685			\$83,685					\$0	
TOTAL SOURCES OF FUNDS	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$0	\$0	\$0	\$0	\$0	\$0
GHGER Funds as a % of TOTAL							93%					#DIV/0!	#DIV/0!

Note: for General Overhead & Profit, please indicate to what extent any amounts are proposed to be contingent on program performance.



An Energy Conservation Project

Penacook SAU 46 Administration Building

Account # 1005345-1004016

ECM	Location	Existing Fixture	Existing Count	Fixture Watts	Existing Hour	Proposed Fixture	Proposed Count	Sensor	Fixture Watts	Proposed Hours	Energy \$ Costs		Annual Savings
											Existing	Proposed	
1	Conference Room	120W INC	12	120	3120	23W CFL R40	12	WALL	23	1560	\$741.31	\$71.04	\$670.27
2	Front Entry	65W INC	1	65	3120	15W CFL FROSTED BR30	1		15	3120	\$33.46	\$7.72	\$25.74
3	Reception	120W INC	17	120	3120	23W CFL R40	17		23	3120	\$1,050.19	\$201.29	\$848.91
4	Front Copy	65W INC	2	65	1040	15W CFL FROSTED BR30	2		15	1040	\$22.31	\$5.15	\$17.16
5	Kitchen	2L4' EE/EEMAG	3	70	3120	2L4' HP T8 LP SYSTEM	3		47	3120	\$108.11	\$72.59	\$35.52
6	Main Hallway	2L4' EE/EEMAG	9	70	3120	2L4' HP T8 LP SYSTEM	9		47	3120	\$324.32	\$217.76	\$106.56
7	Superintendent's Office	2L4' EE/EEMAG	6	70	3120	4L4' HP T8 LP SYSTEM	3		89	3120	\$216.22	\$137.45	\$78.76
8	Assistant Superintendents	2L4' EE/EEMAG	6	70	3120	4L4' HP T8 LP SYSTEM	3		89	3120	\$216.22	\$137.45	\$78.76
9	Kathleen Boucher	2L4' EE/EEMAG	4	70	3120	2L4' HP T8 LP SYSTEM	4		47	3120	\$144.14	\$96.78	\$47.36
10	Hinds	2L4' EE/EEMAG	6	70	3120	2L4' HP T8 LP SYSTEM	6		47	3120	\$216.22	\$145.17	\$71.04
11	Book keeping	2L4' EE/EEMAG	12	70	3120	2L4' HP T8 LP SYSTEM	12		47	3120	\$432.43	\$290.35	\$142.08
12	Small Conference	2L4' EE/EEMAG	4	70	3120	2L4' HP T8 LP SYSTEM	4	WALL	47	3120	\$144.14	\$96.78	\$47.36
13	Main Hallway	(2) 9W EXIT SIGN	3	18	8760	NEW LED SIGN W/BATTERY	3		4	8760	\$78.05	\$17.34	\$60.71
14	Record Room	2L4' EE/EEMAG	2	70	1040	2L4' HP T8 LP SYSTEM	2		47	1040	\$24.02	\$16.13	\$7.89
15	Men's Room	100WINC	2	100	1040	22W CFL MINI TWIST	2		22	1040	\$34.32	\$7.55	\$26.77
16	Unisex Bath	100WINC	2	100	1040	22W CFL MINI TWIST	2		22	1040	\$34.32	\$7.55	\$26.77
17	Women's Room	100WINC	2	100	1040	22W CFL MINI TWIST	2		22	1040	\$34.32	\$7.55	\$26.77
18	File Cabinet Room	2L4' EE/EEMAG	2	70	1040	2L4' HP T8 LP SYSTEM	2		47	1040	\$24.02	\$16.13	\$7.89



An Energy Conservation Project

Penacook SAU 46 Administration Building

Account # 1005345-1004016

ECM	Location	Existing Fixture	Existing Fixture			Proposed Fixture	Proposed Count	Sensor	Proposed Fixture		Energy \$ Costs		Annual Savings
			Count	Watts	Hour				Watts	Hours	Existing	Proposed	
19	Margie	2L4' EE/EEMAG	5	70	3120	2L4' HP T8 LP SYSTEM	5		47	3120	\$180.18	\$120.98	\$59.20
20	Basement-Right Side	2L4' EE/EEMAG	2	70	1560	NEW 8' 4L4' HP T8 LP WRAP	1		89	1560	\$36.04	\$22.91	\$13.13
21	Basement-Open Area	2L4' EE/EEMAG	3	70	1560	2L4' HP T8 LP SYSTEM	3		47	1560	\$54.05	\$36.29	\$17.76
22	Basement-Front of Stairs	2L4' EE/EEMAG	1	70	1560	NEW 2L4' HP T8 LP WRAP	1		47	1560	\$18.02	\$12.10	\$5.92
23	Basement-Open Area	4L4' EE/EEMAG	2	140	1560	4L4' HP T8 LP SYSTEM	2		89	1560	\$72.07	\$45.82	\$26.25
24	Basement-Open Area	1L4' EE/EEMAG	2	40	1560	1L4' HP T8 LP SYSTEM	2		22	1560	\$20.59	\$11.33	\$9.27
25	Left File Storage Area	2L4' EE/EEMAG	1	70	1560	2L4' HP T8 LP SYSTEM	1		47	1560	\$18.02	\$12.10	\$5.92
26	Office	4L4' EE/EEMAG	2	140	1560	4L4' HP T8 LP SYSTEM	2		89	1560	\$72.07	\$45.82	\$26.25
27	Vault	52W INC	1	52	1560	26W CFL	1		26	1560	\$13.38	\$6.69	\$6.69
28	Vault	65W INC	1	65	1560	26W CFL	1		26	1560	\$16.73	\$6.69	\$10.04
29	Vault	2L4' EE/EEMAG	2	70	1560	NEW 2L4' HP T8 LP WRAP	2		47	1560	\$36.04	\$24.20	\$11.84
30	Over Front Door	250W METAL HALIDE WALL PACK	1	288	4368	200W MH WALL PACK	1	PHOTO	232	4368	\$207.57	\$167.21	\$40.36
31	Rear Entrance	250W METAL HALIDE WALL PACK	1	288	4368	200W MH WALL PACK	1	PHOTO	232	4368	\$207.57	\$167.21	\$40.36
32	Parking Lot	250W METAL HALIDE WALL PACK	1	288	4368	200W MH WALL PACK	1	PHOTO	232	4368	\$207.57	\$167.21	\$40.36
			120				113		Totals		\$5,038.03	\$2,398.33	\$2,639.70

Total Job Cost	\$5,360.25
Electric Rebate	\$2,680.13
Cost After Rebate	\$2,680.13
Annual Electrical Savings	\$2,639.70
ROI (years)	1.0



Control Technologies, Inc.
70 Zachary Rd
Manchester, NH 03109
Phone: (603)626-6070
FAX: (603)626-0352

Re: SAU Office DDC Conversion

Quote To: Neil Barry (Company: Merrimack Valley School District)
FAX:

Date: 2/11/2009
Quote Number: 2167 2-3142
Quote From: Greg Seaver

Neil,

Control Technologies Inc. is pleased to provide this quote to furnish and install TAC direct digital controls into the SAU office HVAC equipment.

A new UNC will be needed for this building. Currently there are two air handlers to control. Each ahu will have the following points:

1. Supply air temperature
2. Outside air temperature (supplied and installed on one controller only)
3. Fan status
4. Freezestat status
5. 3-way valve and actuator (supplied by CTI and installed by mechanical contractor)
6. Room temperature and setpoint
7. Supply fan start/stop
8. DX cooling start/stop

The hot water from the woodchip plant will be tapped in the high school. A new pump package will be installed by mechanical contractor. A separate DDC controller will be necessary at the location of the new pumps. This controller will be tied into the UNC at the high school and will have the following control points:

1. Pump 1 status
2. Pump 2 status
3. Loop temperature
4. Pump 1 start/stop
5. Pump 2 start/stop

\$16,045.00 Total Price

Clarifications:

1. Line voltage wiring for a control transformers are excluded.
2. Duct coils provided by the mechanical contractor.
3. The 3-way valves and temperature tap to be installed by mechanical contractor.
4. A static IP address will be needed for the UNC.
5. If there are any networking issues they are excluded.

PLEASE CALL IF INCOMPLETE

NOTE: Quote is valid for 30 days unless otherwise noted.

Price is for work to be performed during normal business hours unless otherwise noted.

Submitted By: Greg Seaver

Accepted for: Merrimack Valley School District

By: _____



Proposal

Page No. of Pages

NUDD & DAVIS ELECTRICAL CONTRACTORS

159 Village Street
PENACOOK, NH 03303-1951
(603) 753-4348

PROPOSAL SUBMITTED TO School Administrative Unit No. 46	DATE 3-12-09
ADDRESS 105 Community Dr. Penacook, N.H. 03303	PHONE 753-6561
JOB NAME AND LOCATION SAME	DATE OF PLANS
	ARCHITECT DLD
	JOB PHONE

We hereby submit specifications and estimates, subject to all terms and conditions as set forth on both sides, as follows:

labor and material required to supply and install
wiring for circulation pump and control relays to
provide BioMas hot water heat SAU office

(Read Reverse Side)

We Propose hereby to furnish material and labor — complete in accordance with above specifications,
for the sum of: Twenty Eight Hundred & 00/100 dollars (\$ 2,800.00.)
Payment terms to be determined

NOTE: This proposal may be withdrawn by us if
not accepted within _____ days.

Authorized
Signature

Accepted: The above prices, specifications and
conditions are satisfactory and are hereby accepted. You
are authorized to do the work as specified. Payment will be
made as outlined above.

Signature _____

Date _____

Signature _____

BOW PLUMBING AND HEATING CORP.

Estimate

3 BOW BOG ROAD
BOW, NH 03304

(603) 225-6929

DATE	ESTIMATE NO.
2/5/2009	0205091B

PREPARED FOR:

MERRIMACK VALLEY SCHOOL DISTRICT
SAU 46 105 COMMUNITY DR
PENACOOK, NH 03303
ATTN: NEAL BARRY

P.O. NO.	TERMS	EXPIRATION DATE	PROJECT
	AS NOTED BELOW	3/5/2009	MVHS SAU HEAT

DESCRIPTION	TOTAL
<p>THE ECO-FLEX WILL BE CONNECTED TO THE NEW HOT WATER COILS IN THE SAU BUILDING WITH INSULATED HE-PEX.</p> <p>EACH HOT WATER COIL WILL BE INSTALLED WITH A THREE WAY VALVE TO CONTROL HOT WATER FLOW TO THE COIL.</p> <p>ALL CONTROLS AND CONTROL WTRING WILL BE DONE BY OTHERS EXCEPT FOR THE FACTORY CONTROLS SUPPLIED WITH THE FURNACES AND CONDENSERS.</p> <p>UPON COMPLETION OF UNDERGROUND INSTALLATION THE EXCAVATED AREAS WILL BE LOAMED AND HYDRO-SEEDED. ANY SHRUBS FENCES OR LANDSCAPING REMOVED WILL BE REINSTALLED.</p> <p>COST INCLUDING PERMIT AND INSPECTION FEES</p> <p>SHOULD WE ENCOUNTER ANY UNFORESEEN HAZARDOUS MATERIALS OR CONDITIONS DURING INSTALLATION THAT WILL CAUSE ADDITIONAL COST, WORK WILL BE SUSPENDED UNTIL OWNER IS NOTIFIED AND AN AGREEMENT ON ADDITIONAL COST IS REACHED.</p> <p>THE OWNER IS TO PROVIDE ADEQUATE PARKING, ACCESS AND WORKING SPACE IN AREA OF INSTALLATION.</p> <p>TERMS: A SIGNED CONTRACT AND 50% DEPOSIT ARE REQUIRED TO ORDER MATERIAL AND SCHEDULE WORK. BALANCE WILL BE DUE UPON COMPLETION.</p> <p>FINANCE CHARGE OF 2% PER MONTH (24% PER ANNUM) ASSESSED ON ALL OUTSTANDING BALANCES OVER 30 DAYS.</p>	64,840.00
THANK YOU FOR THE OPPORTUNITY TO BID ON YOUR PROJECT.	TOTAL \$64,840.00

A DEPOSIT WILL BE REQUIRED UPON ACCEPTANCE.
THE DEPOSIT MUST BE RECEIVED TO SCHEDULE WORK.

SIGNATURE _____

Requested

NH PUC Greenhouse Gas Emissions Reduction Fund		2/23/09 RFP Proposed Budget Worksheet						REQUESTED AMOUNTS FOR TARGETED PROGRAM SIZE					
Program Title:		COVERSION OF SAU 46 ADMIN BUILDING TO BIOMASS											
Applicant Name:		MERRIMACK VALLEY SCHOOL DISTRICT											
USE OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
EXPENSES													
Salaries & Wages				\$1,000			\$1,000	\$1	\$2	\$3	\$4	\$10	
Benefits/Fringe				\$0			\$0					\$0	
Contracted Labor & Services				\$89,045			\$89,045					\$0	
Rent & Utilities				\$0			\$0					\$0	
Advertising & Marketing				\$0			\$0					\$0	
Travel & Mileage Reimbursement				\$0			\$0					\$0	
Tools, Supplies, Subscriptions				\$0			\$0					\$0	
Other Current Expenses (such as office expense, insurance, maintenance, repairs, taxes, legal, etc.)				\$0			\$0					\$0	
Cost of Goods Installed				\$0			\$0					\$0	
General Overhead & Profit*				\$0			\$0					\$0	
TOTAL EXPENSES	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$1	\$2	\$3	\$4	\$10	\$0
Capital Invested in Building Improvements							\$0					\$0	
Funds used for Loan Fund capital							\$0					\$0	
Loan Fund credit enhancement (such as interest rate buy-down)							\$0					\$0	
TOTAL USE OF FUNDS	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$1	\$2	\$3	\$4	\$10	\$0
SOURCES OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
Applicant Cash Contribution				\$2,680			\$2,680					\$0	
Applicant In-kind Contribution				\$1,000			\$1,000					\$0	
Program Participant Contribution				\$0			\$0					\$0	
Loans & Other Financing				\$0			\$0					\$0	
Forward Capacity Market Payments				\$0			\$0					\$0	
Other Grants				\$2,680			\$2,680					\$0	
GHGER Fund (this proposal)				\$83,685			\$83,685					\$0	
TOTAL SOURCES OF FUNDS	\$0	\$0	\$0	\$90,045	\$0	\$0	\$90,045	\$0	\$0	\$0	\$0	\$0	\$0
GHGER Funds as a % of TOTAL							93%					#DIV/0!	#DIV/0!

Note: for General Overhead & Profit, please indicate to what extent any amounts are proposed to be contingent on program performance.

Minimum

NH PUC Greenhouse Gas Emissions Reduction Fund		2/23/09 RFP Proposed Budget Worksheet						MINIMUM FEASIBLE PROGRAM SIZE					
Program Title:		COVERSION OF SAU 46 ADMIN BUILDING TO BIOMASS											
Applicant Name:		MERRIMACK VALLEY SCHOOL DISTRICT											
USE OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
EXPENSES													
Salaries & Wages				\$0			\$0	\$1	\$2	\$3	\$4	\$10	
Benefits/Fringe				\$0			\$0					\$0	
Contracted Labor & Services				\$0			\$0					\$0	
Rent & Utilities				\$0			\$0					\$0	
Advertising & Marketing				\$0			\$0					\$0	
Travel & Mileage Reimbursement				\$0			\$0					\$0	
Tools, Supplies, Subscriptions				\$0			\$0					\$0	
Other Current Expenses (such as office expense, insurance, maintenance, repairs, taxes, legal, etc.)				\$0			\$0					\$0	
Cost of Goods Installed				\$0			\$0					\$0	
General Overhead & Profit*				\$0			\$0					\$0	
TOTAL EXPENSES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$3	\$4	\$10	\$0
Capital Invested in Building Improvements							\$0					\$0	
Funds used for Loan Fund capital							\$0					\$0	
Loan Fund credit enhancement (such as interest rate buy-down)							\$0					\$0	
TOTAL USE OF FUNDS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$3	\$4	\$10	\$0
SOURCES OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
Applicant Cash Contribution				\$0			\$0					\$0	
Applicant In-kind Contribution				\$0			\$0					\$0	
Program Participant Contribution				\$0			\$0					\$0	
Loans & Other Financing				\$0			\$0					\$0	
Forward Capacity Market Payments				\$0			\$0					\$0	
Other Grants				\$0			\$0					\$0	
GHGER Fund (this proposal)				\$0			\$0					\$0	
TOTAL SOURCES OF FUNDS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GHGER Funds as a % of TOTAL							#DIV/0!					#DIV/0!	#DIV/0!

Note: for General Overhead & Profit, please indicate to what extent any amounts are proposed to be contingent on program performance.

Maximum

NH PUC Greenhouse Gas Emissions Reduction Fund		2/23/09 RFP Proposed Budget Worksheet						MAXIMUM FEASIBLE PROGRAM SIZE					
Program Title:		CONVERSION OF SAU 46 ADMIN BUILDING TO BIOMASS											
Applicant Name:		MERRIMACK VALLEY SCHOOL DISTRICT											
USE OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
EXPENSES													
Salaries & Wages				\$0			\$0	\$1	\$2	\$3	\$4	\$10	
Benefits/Fringe				\$0			\$0					\$0	
Contracted Labor & Services				\$0			\$0					\$0	
Rent & Utilities				\$0			\$0					\$0	
Advertising & Marketing				\$0			\$0					\$0	
Travel & Mileage Reimbursement				\$0			\$0					\$0	
Tools, Supplies, Subscriptions				\$0			\$0					\$0	
Other Current Expenses (such as office expense, insurance, maintenance, repairs, taxes, legal, etc.)				\$0			\$0					\$0	
Cost of Goods Installed				\$0			\$0					\$0	
General Overhead & Profit*				\$0			\$0					\$0	
TOTAL EXPENSES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$3	\$4	\$10	\$0
Capital Invested in Building Improvements							\$0					\$0	
Funds used for Loan Fund capital							\$0					\$0	
Loan Fund credit enhancement (such as interest rate buy-down)							\$0					\$0	
TOTAL USE OF FUNDS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$3	\$4	\$10	\$0
SOURCES OF FUNDS	2009							2010					2011
	April	May	June	Q2	Q3	Q4	Total CY09	Q1	Q2	Q3	Q4	Total CY10	Total CY11
Applicant Cash Contribution				\$0			\$0					\$0	
Applicant In-kind Contribution				\$0			\$0					\$0	
Program Participant Contribution				\$0			\$0					\$0	
Loans & Other Financing				\$0			\$0					\$0	
Forward Capacity Market Payments				\$0			\$0					\$0	
Other Grants				\$0			\$0					\$0	
GHGER Fund (this proposal)				\$0			\$0					\$0	
TOTAL SOURCES OF FUNDS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GHGER Funds as a % of TOTAL							#DIV/0!					#DIV/0!	#DIV/0!

Note: for General Overhead & Profit, please indicate to what extent any amounts are proposed to be contingent on program performance.

NH PUC Greenhouse Gas Emissions Reduction Fund 2/23/09 RFP Proposed Budget Worksheet

DEFAULT VALUES FOR ESTIMATING GHG EMISSIONS REDUCTIONS BASED ON ENERGY SAVINGS

Program Title: COVERSION OF SAU 46 ADMIN BUILDING TO BIOMASS
 Applicant Name: MERRIMACK VALLEY SCHOOL DISTRICT

Method # 1, using MWH (Megawatt Hours), Cubic Feet (natural gas), & Gallons of fuel					
Reductions from	Enter Reductions in Units shown in next Column	Units	CO ₂ Emission Factors in lbs/unit	Estimated CO ₂ Emission Reductions in pounds (lbs.)	Estimated CO ₂ Emission Reductions in Metric Tons
Electricity		MWH	1,087	0	0.00
Natural Gas		Cubic Feet	120.6	0	0.00
Distillate Fuel Oil (#1, 2 & 4)		Gallons	22.4	0	0.00
Residual Fuel Oil (#5 & 6)		Gallons	26	0	0.00
Kerosene		Gallons	21.5	0	0.00
LPG		Gallons	12.8	0	0.00
Propane		Gallons	12.7	0	0.00
TOTAL					0.00

Method # 2, using MWH & MMBtu (million Btus)					
Reductions from	Enter Reductions in Units shown in next Column	Units	CO ₂ Emission Factors in lbs/unit	Estimated CO ₂ Emission Reductions in pounds (lbs.)	Estimated CO ₂ Emission Reductions in Metric Tons
Electricity		MWH	1,087	0	0.00
Natural Gas		MMBtu	117.1	0	0.00
Distillate Fuel Oil (#1, 2 & 4)		MMBtu	161.4	0	0.00
Residual Fuel Oil (#5 & 6)		MMBtu	173	0	0.00
Kerosene		MMBtu	159.5	0	0.00
LPG		MMBtu	139	0	0.00
Propane		MMBtu	139.2	0	0.00
TOTAL					0.00