ATTACHMENT A - PON No. 1259

PROPOSAL CHECKLIST (MANDATORY)

Proposal Title: New York Agricultural Energy Efficiency Program		Due Date: 8/7/08	
Primary Contact (Prime Contractor): Craig Metz		Title: Chief Executive Officer	
Company: EnSave, Inc.		Phone: 802-434-1822	Fax: 802-434-7011
		e-mail: craigm@ensave.com	
Address: 65 Millet St, Suite 105	City: Richmond	State or Province: VT	Zip: 05477
Secondary Contact: Amelia Gulkis		Title: Program Development Manager	
Company: EnSave, Inc.		Phone: 802-434-1826	Fax: 802-434-7011
		e-mail: ameliag@ensave.com	
Address: 65 Millet St, Suite 105	City: Richmond	State or Province: VT	Zip: 05477

THE PRIME CONTRACTOR MUST SIGN THIS FORM BELOW and ANSWER THE FOLLOWING QUESTIONS:

Do you accept all Terms & Conditions in the Sample Agreement? (if no, explain on separate pg) ✓ Yes __ No

Have you been indicted/convicted for a felony within the past 5 years? (if yes, explain on separate pg) __ Yes ✓ No

Are you a Minority or Women-Owned Business Enterprise? __ Yes ✓ No

Does your proposal contain Minority or Women-Owned Business enterprises as subcontractors? __ Yes ✓ No

Are you submitting the required number of copies? (See proposal instructions.) ✓ Yes __ No

Is other public funding pending/awarded on this and/or very similar topic (prior and/or competing proposals)? __ Yes ✓ No

(if yes, explain on separate page)

AUTHORIZED SIGNATURE & CERTIFICATION

I certify that the above information, and all information submitted in connection with State Finance Law §139-j and §139-k, is complete, true, and accurate, and that the proposal requirements noted have been completed and are enclosed. I affirm that I understand and will comply with NYSERDA's procedures under §139-j(3) and §139-j(6)(b) of the State Finance Law. I understand that this proposal may be disqualified if the solicitation requirements are not met. I the undersigned am authorized to commit my organization to this proposal.

Signature:	Name: Craig Metz
Title: Chief Executive Officer	Organization: EnSave, Inc.
Phone: 802-434-1822	

NOTE: This completed form **MUST** be signed and attached to the front of all copies of your proposal.

Disclosure of Prior Findings of Non-Responsibility Form

(Mandatory)

Name of Individual or Entity seeking to enter the procurement contract: EnSave, Inc.		
Address: 65 Millet Street, Suite 105, Richmond, VT 05477		
Date: August 6, 2008		
Solicitation or Agreement Number: PON 1259: Request for Independent Program Administrators Name and Title of Person Submitting this Form: Craig Metz, Chief Executive Officer		
Has any Governmental Entity made a finding of non-responsibility regarding the Individual or Entity seeking to enter the Procurement Contract in the last four years? (Please indicate with an "X")		Yes
	X	No
Was the basis for the finding of non-responsibility due to a violation of §139-j of the State Finance Law? (Please indicate with an "X")		Yes
	X	No
Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please indicate with an "X")		Yes
	X	No
If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.		
Government Agency or Authority:		
Date of Finding of Non-responsibility:		
Basis of Finding of Non-responsibility: (Add additional pages as necessary)		
Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named Individual or Entity due to the intentional provision of false or incomplete information? (Please indicate with an "X")		Yes
	X	No
If you answered yes, please provide details below.		
Government Agency or Authority:		
Date of Termination or Withholding of Contract:		

Offerer certifies that all information provided to NYSERDA with respect to State Finance Law §139-k is complete, true, and accurate.

By: _____ Date: 08-06-08
Signature

Name: Craig Metz Title: Chief Executive Officer

EnSave

Proposal for:

New York Agricultural Energy Efficiency Program

Submitted to:
New York State Energy Research & Development Authority
17 Columbia Circle
Albany, NY 12203-6399

Request for Independent Program Administrators
Energy Efficiency Portfolio Standard
Program Opportunity Notice 1259

August 7, 2008

Submitted by:
EnSave, Inc.
65 Millet Street, Suite 105
Richmond, VT 05477
(802) 434-3792
www.ensave.com

TABLE OF CONTENTS

1. PROGRAM DESCRIPTION

EXECUTIVE SUMMARY

EnSave, Inc. (EnSave) herein proposes the New York Agricultural Energy Efficiency Program ("Program"). This program will deliver energy savings to New York's agricultural sector, through the verified installation of energy efficiency measures on the farm site. We will promote the opportunity to 35,000 New York farms, and will enroll approximately 800 New York farms over the three year program period.

We will deliver energy savings to a key sector of New York's rural economy while leveraging additional opportunities for savings. We will maximize available technical assistance through NYSERDA's FlexTech, NYSEG, and National Grid's economic development, and federal funding such as the United States Department of Agriculture's Rural Energy for America Program.

EnSave will market the program, enroll participants, manage the installation process, and pay rebates. Through this process we will deliver approximately 16.5 million kWh, 2,900 kW, and 788,672 therms of gas savings. The net present value of the electric benefits is $9.3 million and the net present value of the gas benefit is $547,000.

EnSave will deliver this program by working closely with energy efficient equipment manufacturers (upstream market actors), equipment dealers who sell energy efficient equipment (midstream market actors), as well as the extended agricultural community. The agricultural community is comprised of organizations such as the New York Farm Bureau, New York Department of Agriculture, Cornell Cooperative Extension, Conservation Districts, Resource Conservation & Development Councils, and other organizations that advocate for farmers.

This work will utilize EnSave's successful track record of delivering farm energy efficiency programs to NYSERDA and other clients throughout the United Sates. EnSave delivered 10 million kWh to 572 New York farms in 1999-2003 through the New York Variable Speed Drive Farm Program[1]; supported NYSERDA's Smart Equipment Choices program in 2002-2003 by helping over 300 New York dairy farms install plate coolers, saving over 6 million kWh; and provided energy audits to 75 dairies in 2004-2005 through the Dairy Development Energy Program. This prior success shows that farms are eager participants in energy efficiency programs, if given the right opportunity.

New York is a leader among U.S. states in the production of several commodities, and within the top ten states in gross sales of milk, vegetables, and cotton. Agriculture is a $3 billion industry in New York in the sales of commodities alone.[2] Many other New York small businesses,

[1] Please see Attachment A for a case study of this program.
[2] United States Department of Agriculture Census of Agriculture, 2002.

including equipment dealers, electricians, feed sellers, and other supporting businesses are dependent upon the agricultural sector for their success. Thus, when farms are empowered to reduce energy consumption and become more sustainable, the beneficial effects are felt throughout the rural community.

PROGRAM DELIVERY

1. Planning and Development

This program utilizes a program design that EnSave has deployed successfully in the past; therefore, there will be minimal ramp-up time before we can begin capturing energy savings from the installation of energy efficient equipment. Anticipating a program start date of January 1, 2009, we anticipate overseeing the first equipment installations within 90 days from contract signing.

In the planning stage of the program, we will meet with NYSERDA and the DPS to agree to specific program timelines, incremental goals, and other metrics. EnSave will also create the program administration documents, including:

- Application form
- Introductory letters to manufacturers, equipment dealers, agricultural community
- Program Acceptance Letter
- "Sorry letter" for applicants who do not qualify
- Equipment Installation Form
- General program brochure/flyer
- Other marketing materials or program administration documents as necessary

We will also procure lists of equipment manufacturers, equipment dealers, the extended agricultural community, and farmers to be used for mailings and phone calls. EnSave has access to many of these lists already through its prior work in New York. These past program participants represent a group of progressive farmers who have already made an investment in energy efficiency. These farmers are good prospects to install additional measures because they are already familiar with EnSave and with participating in an energy efficiency program. Therefore, we will conduct a special "fast track" marketing campaign recognizing these farmers for their previous efforts.

EnSave will leverage the support of New York's agricultural community, comprised of organizations such as the Farm Bureau, Resource Conservation & Development Councils, Conservation Districts, and other organizations that support New York agriculture. EnSave will work closely with these groups to disseminate program information, ensuring all New York farmers are aware of the program and how to participate. These groups will help spread

information through newsletters, meetings, and networking with individual farms. This approach will ensure wise use of program funds by reaching potential participants in the state without conducting an expensive mailing campaign to all 35,000 New York farms.

EnSave has partnerships with both the National Association of Resource Conservation and Development Councils and the National Association of Conservation Districts. These partnerships allow EnSave to help these organizations bring energy efficiency into the array of conservation services they bring to the rural community. As part of our partnership with these organizations, EnSave will work with New York's resource conservation and development councils and conservation districts to involve them in the promotion of the program, and in supporting farms with applications to USDA Rural Development's Rural Energy for America Program (REAP).

REAP provides low interest loans and grants on a competitive basis for farms and rural small businesses who install energy efficiency or renewable energy systems. EnSave has completed over 20 energy audits as mandatory supporting documentation for applicants to this program. EnSave's familiarity with this program can help New York farms access more of these federal funds.

While the Agricultural Energy Efficiency Program does not cover all fuels used on the farm, EnSave will capture energy efficiency information on all fuel types for farms that go through the USDA's REAP. EnSave will also create a list of farms who are interested in renewable energy, and will refer them to renewable incentives available through NYSERDA or other sources.

Deliverable	Due Date
Program begins	January 1, 2009
All parties attend kick-off meeting	January 15, 2009
EnSave submits draft program documents for review	January 30, 2009
NYSERDA issues document approval	February 15, 2009
Obtain lists of agricultural producers	January 30, 2009

2. Marketing

We will design a clear, concise, engaging marketing piece (brochure) promoting the availability of rebates for energy efficient farm equipment. The brochure will explain the details of the program, and how farmers can participate. We will also create a press release to distribute to agricultural publications in order to promote the program.

EnSave's marketing strategy will leverage and work with three key stakeholders to reach the farmer: equipment manufacturers, equipment dealers, and the agricultural community. We plan

to leverage these other organizations by having them include program information in their newsletters and mailings; providing program information for dissemination at meetings and events; and having these partners encourage farmers to apply for the program. This enables EnSave to distribute program information to a wide section of New York's farms without relying on expensive mass mailings, and also builds local support for the program when local organizations have ownership of some program elements.

This marketing strategy has been implemented successfully in over a dozen of EnSave's other farm energy efficiency programs.

Equipment Manufacturers

The first group that will be contacted through marketing is the manufacturers of energy efficient equipment. These will be manufacturers of all the major measure categories used in the program, such as lighting, HVAC, motors, and dairy measures. EnSave will send them a letter followed by a phone call to inform them of the program and request contact information for their sales representatives and dealer network. We will also request their support through other means, such as offering an additional discount on energy efficient equipment in order to encourage more installations, or by sending a mailing to their distributors notifying them of the program.

Equipment Dealers

EnSave will then market the program to dealers, sending them a letter explaining the program and how it will benefit their customers as well as their business, followed by a phone call to further explain the program and ensure they understand how the program can benefit their farm customers. These dealers are critical partners in a program, because they are the first ones farmers will turn to when seeking advice about which equipment to purchase. Evaluations of EnSave's prior agricultural energy efficiency programs have shown that dealers are responsible for up to 70% of the applications farmer submit to the program.

EnSave will keep in continual contact with the dealers throughout the program in order to build relationships, track progress, and answer questions. A strong relationship with dealers helps ensure success of the program. EnSave has established strong working relationships with equipment dealers through its previous farm energy efficiency programs in New York, and we will continue to build these relationships.

Agricultural Community

Concurrent to dealer notification, EnSave will inform the agricultural community of the program by sending them a program announcement. EnSave will work with these groups to reach farmers by encouraging them to include program information in their mailings, newsletters, and meeting agendas. This will help bring the program message to farmers statewide, and will support the

mission of these organizations by saving their members money and making them more sustainable. As a side benefit to the program, as these organizations inform their members about energy efficiency, they will be learning about the wise use of energy themselves, thus helping to spread energy efficiency education throughout the rural community.

Farmers

EnSave has already worked with several hundred New York farmers through its previous NYSERDA programs. EnSave will contact these farms to promote new measures and other funding opportunities they can access (such as other NYSERDA programs, utility economic development funds and REAP).

EnSave will also obtain lists of other farmers by name, address, phone, and type of production. We will lease these lists from an agricultural list broker firm such as FarmMarketID.

Our direct marketing to farmers will focus on targeted subsets of farmers (such as dairies, large energy users, and past EnSave program participants). In order to reach as many of the 35,000 farmers in the state as possible, we will work with and leverage manufacturers, dealers, and the agricultural community to distribute information.

Our program representatives will be responsible for making phone calls to farmers and informing them of the program. These representatives will enroll farmers, and work with them through their entire installation process to ensure they are able to navigate the process.

Marketing Strategies

Our direct mail, outreach, event attendance, and web site will take the following forms:

- Direct mail to manufacturers, dealers, agricultural community (four per year)
- Ongoing outreach calls (phone and personal visits) to manufacturers, dealers, agricultural community, and farmers (ongoing)
- Attend farm shows, state fairs, and other appropriate events with a farm audience (four per year)
- Program web site updated regularly with news, press releases, and success stories

Deliverable	Due Date
Conduct fast track marketing campaign to past participant	February 28, 2009
Introductory mailings to manufacturers, dealers, agricultural community	February 28, 2009
Phone outreach to manufacturers, dealers, agricultural community	February 28, 2009; ongoing throughout program
Update EnSave web site with program information	January 31, 2009
Attend events	4 times per year

3. Customer enrollment

The program application form will be available both in paper and electronic form. It can be downloaded and printed from EnSave's web site, filled out as an interactive PDF online, or filled out in paper form. The application form will record the farmer's name, address, farm type, utility company, and other identifying information. The application will also require the farmer to fill out the type of equipment to be replaced and other information about electricity usage (such as pounds of milk sold per year, for dairies) that enable EnSave to determine energy savings. The application will also include all eligibility rules of the program and require the farmer to agree that he/or she is eligible for the program. Applicants will indicate an estimated installation date, which must be within120 days of the application signature date. The application will clearly state that funds will be held for 120 days following the application date, and if an installation is not completed they must reapply.

Upon EnSave's receipt of the farmer's signed application form, we will review the application and follow up by phone with any questions.

In order to be eligible for the program, farmers must:

- Be a farmer in New York state, as defined by NAICS codes 111 (crop production), and 112 (animal production).
- Not have received a rebate through system benefit charge funds for the same measure (to prevent double-dipping)
- Pay in to the system benefit charge
- Meet the equipment specifications of the program (to be supplied to NYSERDA during contract negotiation)

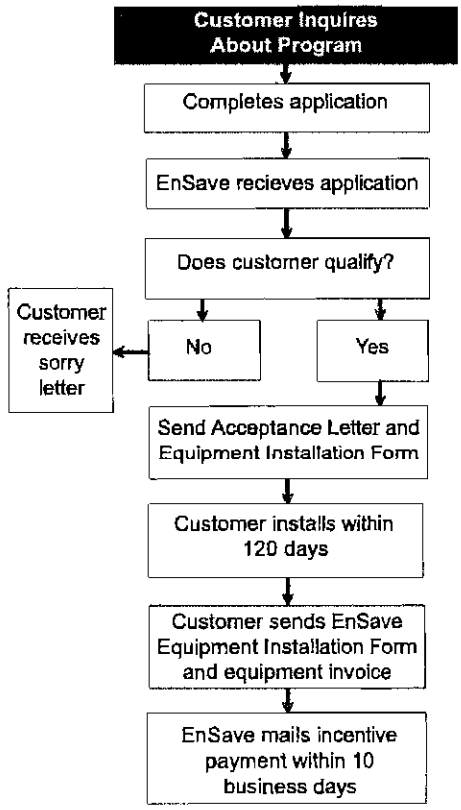
Farmers will be encouraged to call EnSave prior to applying to discuss their potential project, and allow EnSave to determine energy savings and the rebate amount over the phone. This

allows the farmer to ask questions about the program and receive the support needed to enroll them.

After EnSave receives a successful application, we will send the farmer a Program Acceptance Letter stating they will receive a rebate provided they install the equipment within 120 days from the application date, and submit the equipment invoice and equipment installation form. This Acceptance Letter will serve as proof that the participant has been accepted. The farmer will not receive an Acceptance Letter until everything in their application has been checked.

When farmers install, they will send EnSave an equipment installation form attesting that the equipment is installed, as well as a copy of the equipment invoice. After EnSave receives these documents, we will send the farmer a rebate check. All rebates will be based upon the calculated energy savings of the project(s).

For any projects selected for measurement and verification (M&V), EnSave will work with the M&V contractor to provide contact information for farms as well as any supporting program information needed for them to complete their evaluation.



Deliverable	Due Date
EnSave receives application, reviews application and answers any farmer questions	March 1, 2009 and ongoing
EnSave sends program acceptance letter detailing next steps to receive rebate, include copy of equipment installation form	March 5, 2009 and ongoing
Farmer installs	March 10, 2009 and ongoing
Farmer submits equipment installation form and copy of equipment invoice	March 20, 2009 and ongoing
EnSave issues rebate check	March 31, 2009 and ongoing

4. Installation documentation and tracking

EnSave will maintain an internal tracking system to track various metrics. Fields will likely include:

1. Contact information (name, title, full address, phone, email, fax, cell phone)
2. Type of agriculture
3. Number of livestock/acres/square footage
4. Date of contract/agreement to install measure (information verification form received)
5. Date of beginning of installation process
6. Installation completion date (installation verification form received)
7. Installation contractor
8. Installation location: street location, town, zip code, building (milking parlor, barn, shed)
9. Project or work order #
10. Energy delivery utility
11. Measure type (lighting, HVAC, motor drive, etc.
12. Annualized energy savings
13. Measure life (years)
14. Total measure installed cost
15. Incremental measure cost
16. Rebate payment amount
17. Project completion date

This tracking system will allow EnSave to manage program metrics and adjust the program schedule or activities in response to the pace, size, and location of installations. We will use this data to generate reports to NYSERDA and will also provide it to the M&V contractor who will be evaluating the program.

Deliverable	Due Date
EnSave tracks pertinent data	March 1, 2009 and ongoing
EnSave submits data to M&V contractor	As requested by M&V contractor
EnSave submits data to NYSERDA	Quarterly

5. Rebate payment

EnSave will issue rebate payments to farmers within ten business days of receiving all completed paperwork. EnSave will invoice NYSERDA monthly for reimbursement of rebate costs. Rebate payments will be

- $0.08 per kWh saved for all electric measures except lighting
- $0.05 per kWh saved for lighting
- $0.14 per therm saved for gas measures

These rebates are higher than NYSERDA's general

Deliverable	Due Date
EnSave issues rebate check	March 31, 2009 and ongoing

6. Reporting & Invoicing

EnSave will provide NYSERDA with quarterly reports, year-end annual reports, and a final program report. We will maintain a tracking system, which will track the number and status of applicants, cost of installations, energy and demand savings, and rebate payments. We will include a public version of each report, removing farmer names and identifying information. NYSERDA and/or the DPS can then post this public version.

The quarterly reports will contain the following elements, plus any additional metrics desired by either NYSERDA or the DPS.

1. Overview of marketing and outreach activities
2. Tally of total applicants for the quarter
3. Tally of accepted applicants
3. Summary of information verification forms received (pending installations)
4. Summary of installations completed
5. Summary of installations verified
6. Rebates paid
7. Planned activities in next quarter
8. Budget summary

EnSave will also invoice NYSERDA monthly for funds spent in the previous month.

Deliverable	Due Date
EnSave submits invoices to NYSERDA	By 10th of each month for activities completed in previous month
EnSave submits quarterly reports to NYSERDA	Quarterly
EnSave submits year-end annual reports	January 2010; January 2011; January 2012
EnSave submits final program report	February, 2012

7. Ramp Down and Shut Down

EnSave will ensure that all upstream and midstream stakeholders (manufacturers, dealers, agricultural community) as well as farmers are aware of the December 1, 2011 application deadline, and the December 15, 2011 installation deadline. We will do this by featuring this date on the application form and equipment installation form.

On November 1, 2011, we will send a mailing to all dealers, and post information on our web site that the application deadline is December 1, 2011. Also on November 1, we will send certified letters to all dealers and all farmers with pending installations (have been accepted but have not yet installed) that they will need to install and submit installation paperwork by December 15, 2011 in order to receive a rebate payment.

Deliverable	Due Date
Notify manufacturers, dealers, and agricultural community of December 1, 2011 application deadline	November 1, 2011
Post program application deadline notice on EnSave web site	November 1, 2011
Send certified letter to all farmers who have been approved to install but have not yet installed of need to submit installation documentation by December 15, 2011	November 1, 2011
Program closes for applications	December 1, 2011
Program closes for installations	December 15, 2011
EnSave sends final rebate checks to farmers	December 31, 2011
Program closes	December 31, 2011

PROGRAM MEASURES

Measures to be included in this program will encompass ventilation, lighting, dairy, irrigation, and motors. Below, we have provided a list of all measures. We will provide equipment

specifications for all measures during the contract negotiations with NYSERDA. More detail is provided in the Selection Criteria section on page 23.

Measure Name
20" - 26" energy efficient Low Volume High Speed Exhaust or Circulation Fans - RETROFIT
36" energy efficient Low Volume High Speed Exhaust or Circulation Fans - RETROFIT
48" energy efficient Low Volume High Speed Exhaust or Circulation Fans - RETROFIT
50" - 60" energy efficient Low Volume High Speed Exhaust or Circulation Fans - RETROFIT
20" - 26" energy efficient Low Volume High Speed Exhaust or Circulation Fans - NEW
36" energy efficient Low Volume High Speed Exhaust or Circulation Fans - NEW
48" energy efficient Low Volume High Speed Exhaust or Circulation Fans - NEW
50" - 60" energy efficient Low Volume High Speed Exhaust or Circulation Fans - NEW
4 High Volume Low Speed Fans 16 Ft Diameter*
Well Pump Variable Speed Drive (VSD)**
Sprinkler to Drip-Irrigation
Low Pressure Impact Sprinkler Nozzles (permanent)
Low Pressure Impact Sprinkler Nozzles (portable)
Screw-in Compact Fluoreseent Lamp, 5 - 13 watts
Screw-in Compact Fluorescent Lamp, 14-26 watts
Screw-in Compact Fluorescent Lamp, >=27watts
T-8 or T-5 Lamp and Electronic Ballast - 4 foot (T12 replacement only)
HID Fixture, Interior Pulse Start 251 - 400 watts mercury vapor basecase
HID Fixture, Exterior Pulse Start > 176 watts incandescent basecase
Photocell
TimecIock
Milk Precoolers
Milk Transfer Pump Variable Speed Drive
Milking Vacuum Pump Variable Speed Drive
Compressor Heat Recovery Units (electric water heaters only)
Scroll Compressors for Bulk Tanks
Premium Efficiency Motor 1 HP
Premium Efficiency Motor 1.5 HP
Premium Efficiency Motor 2 HP
Premium Efficiency Motor 3 HP
Premium Efficiency Motor 5 HP
Premium Efficiency Motor - 7.5 HP
Premium Efficiency Motor - 10 HP
Premium Efficiency Motor - 15 HP
Premium Efficiency Motor - 20 HP
Premium Efficiency Motor - 25 HP
Premium Efficiency Motor - 30 HP
Premium Efficiency Motor - 40 HP

Premium Efficiency Motor - 50 HP
Premium Efficiency Motor - 60 HP
Premium Efficiency Motor - 75 HP
Premium Efficiency Motor - 100 HP
Premium Efficiency Motor - 125 HP
Premium Efficiency Motor - 150 HP
Premium Efficiency Motor - 200 HP
Custom - Lighting
Custom - Motors, Other Equip.
Custom - Irrigation
Custom - AC&R Controls
Custom - AC & Refrigeration, Compressors
Storage Water Heaters (LRG >75 MBTUH)
Storage Water Heaters (SML <= 75 MBTUH)
Tank Insulation - Low Temperature Applic. (SF) 2 in
Tank Insulation - Low Temperature Applic. (SF) 1 in
Tank Insulation - High Temperature Applic. (SF) 2 in
Tank Insulation - High Temperature Applic. (SF) 1 in
Pipe Insulation - Hot Water Applic. (LF) 2 in
Pipe Insulation - Hot Water Applic. (LF) 1 in
Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in
Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in
Greenhouse Heat Curtain

2. COMPANY BACKGROUND

Since 1991, EnSave has supported the American agricultural sector with innovative energy efficiency and pollution prevention solutions. EnSave provides agricultural producers and food processors with cost-effective ways to reduce operating costs while saving energy and reducing pollution.

EnSave's clients include state and federal energy and environmental agencies, investor-owned utilities, and rural electric cooperatives. EnSave implements its programs by developing relationships with equipment manufacturers, local equipment dealers and the local agricultural community. Ultimately, these programs promote economic investment in the rural economy and improve the quality of America's land, air, and water.

Company Contact Information:
EnSave, Inc.
65 Millet Street, Suite 105
Richmond, VT 05477
(802) 434-3792

Main Contact:
Craig Metz, Chief Executive Officer
Phone: (802) 434-1822
Fax: (802) 434-7011
craigm@ensave.com

Federal Employer Identification Number: 03-0358926

3. Company Experience and Qualifications

EnSave has delivered programs on behalf of several public clients including NYSERDA, the California Public Utilities Commission, Maryland Energy Administration, Michigan Public Service Commission, and the Texas State Energy Conservation Office. Additionally, we have worked with several agencies within the United States Department of Agriculture and the United States Environmental Protection Agency.

We design, implement, and administer energy efficiency and pollution prevention programs. Our tasks encompass designing program documents, marketing a program, enrolling participants, tracking participation, verifying installations, and reporting results. We work with equipment manufacturers, equipment dealers, and customers in order to successfully complete installations. We also work with the "extended agricultural community" in our agricultural programs- encompassing organizations such as the Farm Bureau, University Extension, and Conservation Districts. These stakeholders are trusted advisors to farmers. EnSave works with them to bring program information to their members. In order for an agricultural program to be successful, it must have grassroots support.

Our demonstrated experience will deliver a clear message to all New York farmers, and will ensure installation of energy efficiency measures. We will build upon the success of the program to enroll additional partners and leverage more funding. In particular, our familiarity with the United States Department of Agriculture's Rural Energy For America Program (REAP) will leverage state funds with competitive federal dollars available for energy efficiency installations on farms and rural small businesses.

EnSave has worked in eighteen states, and has delivered over a dozen incentive programs. Most of our programs are a "turnkey" design, where EnSave has designed the program and its eligibility requirements, developed and implemented a marketing plan, enrolled customers, enrolled trade allies, tracked and reported program results, and delivered rebate payments. Recent experience includes:

California Dairy Energy Efficiency Program (multiple similar programs), 2002-Present

This series of programs began in 2002-2003 by offering rebates on one technology to dairy farm customers of Pacific Gas & Electric and Southern California Edison. In 2004-2005, the program expanded to include multiple technologies. In 2006-2008, the program expanded the technologies further still and focused its efforts on Pacific Gas & Electric dairy customers. EnSave has exceeded the program goal for the current program and is negotiating a continuation of its contract for 2009-2011.

EnSave designed the program marketing campaign, provided program information to equipment manufacturers, equipment dealers, members of the extended agricultural community, and over 1,500 dairy customers. EnSave oversaw installation of energy efficiency measures, performed initial verification of installation, and reported results to the client. Since 2002, the program has saved over 12.5 million kilowatt hours for these customers.

Reference:
Tim Drew, Energy Division Representative
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703- 5618
zap@cpuc.ca.gov

New York Variable Speed Drive Farm Program, 1999-2003

EnSave worked with NYSERDA to deliver the Variable Speed Drive Farm Program to 572 dairy farmers in New York State. EnSave designed the program marketing campaign, provided program information to equipment manufacturers, equipment dealers, members of the extended agricultural community, and over 6,500 dairy farmers. EnSave oversaw installation of the energy efficiency measure, performed initial verification of installation, and reported results to the client.

Reference:
Jessica Zweig, Project Manager
NYSERDA
17 Columbia Circle
Albany, NY 12203
(866) 697-3732, ext. 3346
jlz@nyserda.org

Maryland Farm Energy Site Assessment Program, 2006-Present

EnSave designed this program to deliver energy audits and rebates to agricultural producers in Maryland. The first phase completed 25 audits; the second phase will complete 50 audits. EnSave also designed the rebate program to distribute $50,000 worth of rebates for customers. EnSave partnered with Maryland Natural Resources Conservation Service, the Maryland Energy Administration, the Maryland Department of Agriculture, Maryland Eastern Shore and Western Maryland Resource Conservation and Development Councils, USDA Rural Development, Washington County Soil Conservation District, and the Maryland Agriculture and Resource Based Industry Development Corporation (MARBIDCO), an economic development organization. This partnership enabled program participants to receive additional financial assistance to facilitate installations. EnSave also actively promoted USDA Rural Development's Renewable Energy & Energy Efficiency program, which offers additional financial assistance to program participants.

Reference:
Chris Rice, Program Manager
Maryland Energy Administration
1623 Forest Drive, Suite 300
Annapolis, MD 21403
(410) 260-7207
Crice@energy.state.md.us

4. RESUMES OF KEY PROJECT PERSONNEL

For quick reference, we have provided a table of all personnel to be involved in this program. We have provided a brief description of key staff experience, and have attached full resumes for key staff as Attachment B.

EnSave has secured office space at the Plaza Office Center in Albany, NY. Upon proposal approval, EnSave will activate the lease. The New York office will be fully staffed with one or more EnSave employees in order to facilitate communication with NYSERDA, DPS, and New York program partners. Other staff will be based in EnSave's Richmond, Vermont office and will be available for travel to New York.

Name/Title	Role
Key Staff	
Edward Sengle, Program Manager	Mr. Sengle will manage day-to-day operations of the program and will be NYSERDA's primary contact person.
Illari Vihinen, Energy Engineer	Mr. Vihinen will be in charge of all engineering and technical services. He will be the liaison

	with NYSERDA and DPS staff regarding measure cost savings, calculations, and total resource cost.
Kyle Clark, Program Representative	Mr. Clark will contact farmers to encourage them to participate in the program. Once enrolled, he will work closely with farmers and equipment dealers to ensure installations are completed.
Corey Conant, Program Representative	Mr. Conant will contact farmers to encourage them to participate in the program. Once enrolled, he will work closely with farmers and equipment dealers to ensure installations are completed.
Katherine Williams, Marketing Coordinator	Ms. Williams will produce all marketing materials and coordinate with NYSERDA's marketing and public affairs staff on media releases, and other joint marketing activities.
Bruce Jones, Finance Manager	Mr. Jones will handle tracking all program finances including accounts receivable, accounts payable, and payment of rebates. He will monthly provide invoices to NYSERDA.
Other Program Staff	
Amelia Gulkis, Program Development Manager	Ms. Gulkis will oversee the start-up phase of this project and will transition the project to full implementation.
Craig Metz, CEO	Mr. Metz will oversee overall implementation of the contract and supervision of all staff.
Lynn Knight, Government and Special Projects Coordinator	Ms. Knight will work closely with the extended agricultural community and government entities to gather support and additional funds to support the program.

Edward Sengle, Program Manager

Mr. Sengle will oversee day-to-day program activities and will act as liaison to NYSERDA and DPS staff. He will be responsible for overall program implementation, tracking, reporting, and managing EnSave's assigned program staff. He has managed comprehensive energy efficiency programs, including EnSave's Ag Efficiency Plus and Dairy Energy Efficiency Program for California customers, and the Texas Agricultural Technical Assistance Program.

Mr. Sengle's career focus has been energy conservation, renewable generation, and green technologies. He is experienced in wind energy system production, assembly and servicing; bio-aerosol testing and filtration; semiconductor manufacturing and characterization, and HVAC design.

Most recently, Mr. Sengle was a project manager for Northern Power Systems, responsible for overseeing wind generation projects. He has over twenty five years' experience as a mechanical engineer, including fourteen years as an engineer for IBM. He holds a B.S. in Mechanical Engineering from Lehigh University and has completed graduate coursework in mechanical engineering.

Illari Vihinen, PE, Energy Engineer

Mr. Vihinen will provide documentation of all measure energy savings for the program, including providing work papers and engineering calculations as needed. He will work with NYSERDA, DPS, and the utilities as necessary to provide cost/benefit analyses, technical documentation, and other materials.

Before coming to EnSave, Mr. Vihinen was a Hydroelectric Operator at Spruce Mountain Design, operating and maintaining two hydroelectric plants. Mr. Vihinen has managed several multi-million dollar R&D and product development programs involving wind and power electronics, directed resource planning and budgeting, and served as an ISO 9001-2000 auditor. He has prior engineering and management experience with GE Industrial Systems and as a Captain and Combustion Research Engineer in the United States Air Force.

Mr. Vihinen holds a B.S. in Mechanical Engineering from Cornell University and a M.S. in Mechanical Engineering from Clarkson University. He was awarded Professional Engineering License for Mechanical Engineering in 2000.

Corey Conant and Kyle Clark, Program Administrators

The administrators will field customer queries, represent the program at events, and be the primary contact people from the customer perspective.

Program administrators are customer service experts, able to guide participants through the steps needed to complete projects. They will file and track all program paperwork for each customer, and submit continually follow up with farmers to ensure installations take place. They will also conduct outreach calls to equipment manufacturers, equipment dealers, and the extended agricultural community.

Mr. Conant has been a program representative and energy auditor for EnSave since 2005. He has delivered program information and enrolled customers in incentive programs for six different

incentive programs with very different rules and eligibility guidelines. He has extensive sales and customer support experience. Mr. Conant attended the University of Vermont and currently attends Bridgewater State College.

Mr. Clark has been a program representative for EnSave since 2007. He has also assisted with the design and use of EnSave's energy auditing tool. In his role as program administrator, he has worked on two large energy efficiency incentive programs, responsible for maintaining an active account base of about 200 customers and twenty five equipment dealers. He holds a B.S. in Natural Resources Planning from the University of Vermont and is a Certified Agricultural Irrigation Specialist.

Katherine Williams, Marketing Coordinator

Ms. Williams will design all program marketing materials and application materials using Adobe Creative Suite, and will oversee the printing and distribution of all pieces. She will also be the webmaster of the program web site, and will implement program advertising. She will produce press releases in collaboration with NYSERDA, and coordinate media coverage of the program.

Ms. Williams has produced advertisements, marketing mailings, brochures, and press releases for numerous energy efficiency incentive programs, and has a successful track record of securing press attention. Prior to EnSave, Ms. Williams held positions of increasing responsibility in the marketing field, including seven years with a major trade publisher. She holds a B.A. from the College of New Rochelle.

Bruce Jones, Finance Manager

Mr. Jones will produce invoices and track program finances using QuickBooks accounting software. He will work closely with EnSave's program manager to produce quarterly financial reports and monthly invoices. As EnSave's finance manager, Mr. Jones is responsible for all company financial functions including budgeting, forecasting, cash flow analysis, accounts payable, and accounts receivable. Mr. Jones has twenty six years' experience in accounting and financial management. He holds a B.A. from Johnson State College and an M.B.A. from Babson College.

5. BUDGET

EnSave's budget for this three-year program is $2,972,940, with the majority to be paid on a performance basis. We propose a hybrid payment structure, where we are paid 25% of total non-incentive costs on time and materials and the remaining 75% based on kWh and therms saved. We request a performance payment of $0.16 per kWh saved and $0.30 per therm saved.

This payment structure will reimburse EnSave on a time and materials basis for funds expended prior to capturing energy savings, and will also pay for fixed costs such as travel, printing, and other materials. Once the first customer has installed equipment and documented the installation, we will invoice based on the performance payment, so we are paid only on documented energy savings. In this model, NYSERDA and DPS will ensure judicious use of public funds by only paying for documented energy savings.

Table 1: Program Budget

Category	2009	2010	2011	Total Program Cost
Administration	$203,315	$158,147	$158,147	$519,608
Marketing	$191,094	$143,789	$142,839	$477,721
Direct Implementation	$173,842	$173,842	$173,842	$521,526
EM&V	$53,312	$48,689	$48,641	$150,643
Rebates (based on kWh savings)	$397,676	$397,676	$397,656	$1,193,029
Rebates (based on therm savings)	$36,474	$36,474	$37,466	$110,414
Total program cost 2009-2011	$1,055,713	$958,616	$958,611	$2,972,940

Table 2: kWh/kW Savings

Total Electric Program Cost	$2,729,787
Total Gross kWh Savings	16,545,827
Total Net kWh	11,582,583
Total Gross kW Savings	2,900
Total Net kW	2,031
Payment per kWh Saved	$0.16
Rebate (per kWh) paid to participant at:	
Lighting	$0.05
Other	$0.08

Table 3: Therm Savings

Total Gas Program Cost	$243,153
Total Gross Therm Savings	788,672
Payment per Therm Saved	$0.31

Rebate (per Therm) paid to participant at:	$0.14

Table 4: Hybrid Payment

Total Program Cost	$2,972,940
Minus Rebates	$1,303,443
Program Costs: includes administration, marketing, direct implementation, EM&V	**$1,669,497**
Time and material payment based on EnSave's Labor Rates (25% of program cost) (See Table 3. EnSave Labor Rates)	$417,374
Subtotal	$1,252,123
Performance Payment to EnSave: EnSave will be paid $0.16 per kWh saved (See Table 1. kWh) and $0.30 per Therm saved (See Table 2. Therm)	**$1,252,123**

Table 3. EnSave Labor Rates

Labor Category	**2009**	**2010**	**2011**
Senior Associate I	$182	$191	$201
Senior Associate II	$155	$163	$171
Associate I	$105	$110	$116
Associate II	$90	$95	$99
Program Administrator	$80	$84	$88

SELECTION CRITERIA (APPENDIX A, SECTION A OF PON 1259)

The DPS order stipulates that independent program administrators "should use best efforts to include the information required in Appendix 3 (Narrative Considerations section of this proposal).[3]" In the narrative documentation section below, EnSave has answered the questions based on information provided by the NYSERDA and the DPS. As acknowledged in the DPS order, independent program administrators may update the proposal within the 90-day period applicable to NYSERDA and the utilities, and can update the proposal with information required in Appendix 3 "to the extent the proponent is capable of developing the information.[4]"

[3] New York Department of Public Service, Case 07-M-0548- Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard; Order Establishing Energy Efficiency Portfolio Standard and Approving Programs, June 23, 2008, page 59.
[4] Ibid.

EnSave plans to update the Narrative Considerations section if DPS, NYSERDA, and/or the utilities provide us with information that enables us to complete the analysis.

We have provided Attachment C: DPS Tool, which addresses all of the questions below. We have also provided, in electronic format only, a Weighted Average Calculations Workbook spreadsheet. This is a spreadsheet of individual measures used to create the weighted average measure for gas, and the weighted average measure for electric.

1. Total Resource Cost Benefit-Cost Ratio
We have calculated TRC B/C ratio for electricity, gas, shown in Attachment C: DPS Tool. Peggie Neville from NYSERDA said we do not need to provide TRCs for each measure.

2. Electric Rate Impact
Electric rate impact can be calculated from GWh, MW saved, as shown in the tool based on Long Run Avoided Costs (LRACs) we were provided with by Harvey Tress from the DPS. We do not have the specific DPS and utility information required to calculate the exact change in $/kWh or $/kW for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

3. Electric Rate Impact per MWh Saved
See response 2.

4. Electric Rate Impact per MW Saved
See response 2.

5. MWh Saved in 2015
We have calculated MWhs saved up through 2015.

6. MW of Coincident NYISO Peak Saved in 2015
We have calculated MW of coincident NYISO peak saved in 2015.

7. Peak Coincidence Factor of MWh Saved in 2015
We do not have the specific DPS and utility information required to calculate the peak coincidence factor of MWh saved in 2015 for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

8. Total Resource Cost Test's Benefit-Cost Ratio, with Carbon Externality Added, Assuming a Carbon Value of $15 per ton (TRC +C)
We have calculated the TRC with Carbon Externality Added.

9. Number of Participants as a Percentage of the Number of Customers in the Class as of 2015

We can calculate this assuming the weighted average of end use life for all measures to estimate how many are still in effect in 2015.

10. GAS RATE IMPACT

We do not have the specific DPS and utility information required to calculate the Gas Rate Impact for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

11. GAS RATE IMPACT PER MBTU SAVED, LEVELIZED OVER THE YEARS THROUGH 2015

We do not have the specific DPS and utility information required to calculate the Gas Rate Impact per MBTU for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

SELECTION CRITERIA (APPENDIX A, SECTION B OF PON 1259)

1. ELECTRIC RATE IMPACT AS OF YEAR 2015

We do not have the specific DPS and utility information required to calculate the Electric Rate Impact as of year 2015 for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

2. GAS RATE IMPACT AS OF THE YEAR 2015

We do not have the specific DPS and utility information required to calculate the Gas Rate Impact as of year 2015 for utilities. This could be provided between August 7 and September 23 by NYSERDA or utilities.

3. NARRATIVE CONSIDERATIONS

Demand Reduction and System Benefits

EnSave does not have access to data on peak load and system load factor, and the impact on T&D system needs. EnSave looks forward to working with NYSERDA and DPS to supply these metrics during the negotiation phase of the project, if EnSave is able to obtain the information.

Evaluation

On July 31, 2008, EnSave obtained a draft guidance document from the Office of Energy Efficiency and Environment. The guidance document provided a general recommendation for how programs overall will be evaluated.[5]

[5] "Evaluation Plan Guidance for EEPS program administrators", July 30, 2008, received by EnSave from Karen Tuczinski, Energy Efficiency Program Implementation Section, Office of Energy Efficiency and Environment, July 31, 2008.

EnSave has calculated 5% of the total program cost to be used for M&V. We recommend that NYSERDA or DPS develop an RFP to select a third-party, independent evaluator following the guidelines suggested by the DPS on page 2 of the guidance document:

Components of the Evaluation Plan

- Program summary, including goals and objectives.
- Evaluation goals and priorities (program theory and logic model, if appropriate).
- Process evaluation methodology -- Process evaluation assesses program design, delivery, and implementation. It is also used to identify opportunities for program improvement and tracking program progress
- Impact evaluation methodology -- Impact evaluation quantifies energy and demand savings and identifies of other potential impacts, as appropriate (e.g., environmental benefits). This component should delineate the information to be reported including energy savings (e.g., MWh, kW, therms), the appropriate measurement and verification approach, and how various attribution factors, such a free rider and spillover measurement, will be a addressed.[6]
- Net to gross analysis -- Net to gross analysis is represented as a ratio designed to compare the gross savings of a program to the energy savings actually attributable to the program. Energy savings are estimated after adjusting for factors such as measurement error, measure installation quality, user behavior, and the actions program participants and non-participants would have taken absent the program (e.g., free ridership and spillover). The path proposed to arrive at net savings should be discussed.
- Benefit cost analysis -- establishes the ratio of the value of the program benefits and program costs. At a minimum, the results should be reported using the total resource cost test. To facilitate accurate benefit cost tests, impact results should be estimated for the time periods the savings occurred. For example, residential lighting use tends to peak on weekday evenings and not on system peak, which tends to be weekday afternoons.

---

[6] "Spillover" refers to the energy savings associated with energy efficient equipment installed by consumers who were influenced by an energy efficiency program, but without direct financial or technical assistance from the program. Spillover includes additional actions taken by a program participant as well as actions undertaken by non-participants who have been influenced by the program. Sometimes spillover is referred to as "free-drivership" or as "market effects." These market effects may be current or may occur after a program ends. When market effects occur after a program ends, they are referred to as "momentum" effects or as "post-program market effects."

[6] "Free-ridership" refers to the percentage of savings attributed to customers who participate in an energy efficiency program but would have, at least to some degree, installed the same measure(s) on their own if the program had not been available.

- Sampling strategies and sample design.
- Data reliability standards (e.g., precision and confidence level for customer surveys, measurement and verification).
- Steps to identify and mitigate threats to data reliability (e.g., systematic error, random error) and uncertainty (e.g., assumptions, adjustments to data).
- Data collection and management process (e.g., what data will be collected and in what format?)
- Timeline for major evaluation milestones.
- Evaluation report format.
- Evaluation budget. The budget established by the EEPS Order is for evaluation funding of up to 5 percent of a program administrator's total program budget. The budgets for individual programs may be more or less than 5 percent.
- Roles and responsibilities (i.e., who does what?).
- Format and timing of periodic program progress reports (both evaluation results and routine program data (e.g., measures, installed, dollars spent).
- Policy describing how the program administration function will be organizationally separated from the evaluation function.
- Other relevant issues (This will vary depending on the program.).

We recommend the RFP be sent to qualified M&V contractors for responses. EnSave will make all program data (all farmer installation information and savings calculations) available to the M&V contractor to ensure program integrity.

The DPS also forwarded EnSave the comments of TecMarket Works's memo *Review of the Evaluation Plan Guidance for EEPS Program Administrators.* TecMarket Works has been hired by DPS to assist in the development of the evaluation plan. The memo states: "The plan as it is now structured requires that the utilities, NYSERDA, and the implementation contractor construct a 'detailed plan' for evaluating their program. *This places the same organizations that are offering the programs in the position of developing the detailed plans for how their performance will be assessed. This approach can establish a conflict between having an approach that provides objective unbiased results vs. an approach that may not be as unbiased.*

If this aspect of the plan remains, it will be important for the evaluation plans to be carefully reviewed by evaluation experts to make sure they are unbiased (italics added)."

EnSave does not consult on program evaluation, and its understanding of program evaluation is that of a participant in the evaluation process rather than an evaluator. Our understanding is that of an educated member of the energy efficiency industry, of which there are many subject matter experts. Because it appears DPS is considering the separation of the administration and evaluation functions, we believe that the full development of an M&V plan is best left to a discussion between the Office of Energy Efficiency and Environment, NYSERDA, and/or independent program evaluation contractors.

Market Segment Need

New York's agricultural sector (made up of about 37,500 farms) has a strong demand for more agriculture-specific energy efficiency programs. After the end of our Dairy Development Energy Program, we heard numerous requests from equipment dealers and farmers who wanted the program to continue. Since 2004, New York farmers have not had an agriculture-specific rebate program, but the need remains. Today, as fuel prices continue to rise, the pressure has only increased for farmers. While they are eligible to participate in NYSERDA's Enhanced Commercial/ Industrial Performance Program and other programs offered through NYSERDA and the utilities, few actually complete this process. This is because farms are not likely to know about energy efficiency programs unless the information is brought directly to them.

Existing energy efficiency programs are well suited to commercial and industrial businesses that have staff people devoted to facilities management and process improvement. Even if commercial or industrial businesses do not investigate these programs in house, they are courted by energy services companies (ESCOs) that specialize in commercial and industrial projects.

In contrast, most of New York's farms are family owned operations with limited time and hired help. Farmers are business people and acutely aware of the need to manage operating costs, but most of their concern lies with managing the traditional inputs of feed, fertilizer, and large equipment. Farmers need to be educated about energy efficiency opportunities in order to incorporate the wise use of energy into their decision making.

NYSERDA, National Grid, and NYSEG all offer some form of energy efficiency assistance to farmers. As described in greater detail in the Coordination section below, farmers have a potential to save energy that extends beyond their historically low participation in these programs.

Tables 1 and 2 below estimate the number of predominant farm types and the number of farms to participate in the program within NYSEG or National Grid's service territories. EnSave used USDA National Agricultural Statistical Service (NASS)[7] data and adjusted the expected participation rate based on the following assumptions:

- Equal geographic distribution of farms in each county;
- Percent of the county covered by NYSEG or National Grid service[8]; and
- EnSave's previous success enrolling various farm types in energy efficiency programs.

Table 1 provides the total number of farms estimated to be within the service areas.

Table 1. Number of Farms in NYSEG or National Grid Service Areas (2002 NASS)

NY NYSEG and Nat. Grid Service Area	Beef	Milk	Hogs and pigs	Sheep and lambs	Layers	Broilers	Green-houses	Other	Total Farms
Total:	6,140	6,958	1,448	2,288	2,522	417	2,374	12,536	**34,700**

There are a total of about 35,000 farms in the respective service areas.

Table 2 provides an estimate of the number of farms that could be expected to enroll in an agricultural energy efficiency program within the service territories.

Table 2. Estimated Number of Farms Serviced (adjusted by assumed participation rate)

NY NYSEG and Nat. Grid Service Area	Beef	Milk	Hogs and pigs	Sheep and lambs	Layers	Broilers	Green-houses	Other	Total Farms
Total:	123	397	56	16	45	17	27	119	**800**

EnSave estimates that a total of 800 farms will be served through this program. About half of these operations will be dairies.

Table 3 illustrates the projected kWh and Therm savings for the program. EnSave estimates a total savings of 16.5 million kWh of electricity and 788,672 Therms of natural gas. This is based

[7] NASS state and county level farm data can be found at: http://www.nass.usda.gov/
[8] National Grid service area map was located at:
http://www.nationalgridus.com/niagaramohawk/about_us/serviceterr_map.asp
NYSEG service area map was located at: http://www.nyseg.com/OurCompany/servicearea.html

upon EnSave's experience and expected average savings of about 20,625 kWh per farm and 25,000 Therms per greenhouse.

The majority of energy savings are expected to be found on dairy operations.

Table 3. Estimated Program annual kWh Savings (expressed in Therms for Greenhouses)

NY NYSEG and Nat. Grid Service Area	Beef (kWh)	Milk (kWh)	Hogs and pigs (kWh)	Sheep and lambs (kWh)	Layers (kWh)	Broiler (kWh)s	Other Farms (kWh)	Total Farms[1] (kWh)	Green-houses (Therms)[2]
Total:	155,360	12,571,802	1,778,008	19,962	576,567	1,039,527	358,794	**16,500,000**	*7,892,382*

[1] Total Farms expressed in kWh. Does not include Therms savings due to estimated savings in Greenhouse natural gas use

[2] Greenhouse energy savings expressed in Therms due to estimated natural gas savings

Coordination

Coordination with Utilities

EnSave has spoken with Economic Development representatives of both NYSEG and National Grid. We have reviewed each utility's economic development offerings. NYSEG offers "up to $100,000 per project for smaller farms toward electric related infrastructure improvements on either NYSEG-owned or customer-owned (as directed by NYSEG) equipment. Each project must involve capital investment of at least $50,000 and have a monthly incremental electric demand after capital investment of at least 25 kilowatts." As applicable, we are prepared to work with NYSEG's program for those farms who meet those requirements.

National Grid has a Dairy Industry Productivity Program for their dairy customers, which offers grants of up to $5,000 in concert with incentives available through NYSERDA or other entities, not to exceed 75% of the total project cost. EnSave worked with this program in its 2004-2005 Dairy Development Energy Program, which provided energy audits, measure rebates, and integration with National Grid's economic development incentives. EnSave helped 49 farmers fill access $231,790 in incentives from National Grid's program in 2004-2005.

Currently, National Grid's and NYSEG's programs offer incentives after the installation has occurred. EnSave will inform farmers of the opportunity to receive additional incentives, and will provide National Grid and NYSEG contact information and applications to those farmers

who are interested in applying. EnSave will report the number of referrals to the utility programs in its quarterly reports to NYSERDA.

EnSave requested farm customer participation from both NYSEG and National Grid's economic development staff. As of August 7, 2008 EnSave has not heard from either utility so we can only assume that farm participation is low.

Coordination with NYSERDA

EnSave has a long history of working successfully with NYSERDA to deliver energy efficiency to New York's agricultural sector. EnSave delivered 10 million kWh to 572 New York farms in 1999-2003 through the New York Variable Speed Drive Farm Program; supported NYSERDA's Smart Equipment Choices program in 2002-2003 by helping over 300 New York dairy farms install plate coolers, saving over 6 million kWh; and provided energy audits to 75 dairies in 2004-2005 through the Dairy Development Energy Program.

Currently, New York's farmers are able to receive free energy audits through NYSERDA's FlexTech program. EnSave will coordinate with FlexTech contractors to provide energy audits to those farmers who could benefit from them. We will encourage applicants to our program to consider an energy audit if:

a) They are a particularly large or complex operation that would likely benefit from uncovering additional energy savings opportunities through an audit

b) They are hesitant to move forward with installing a project without knowing more about other opportunities, which an audit would describe

Conversely, EnSave will work with FlexTech contractors serving agriculture to encourage their customers to apply for the Agricultural Energy Efficiency Program's rebates.

NYSERDA also offers incentives for farm renewable energy generation, such as small wind, solar, and methane digesters. EnSave will inform program participants of these NYSERDA opportunities and refer participants to the appropriate contact person at NYSERDA. We also plan to meet regularly with NYSERDA to discuss the status of agricultural participation in programs. These meetings will also identify ways to further integrate our respective efforts in order to provide the best possible assistance to the farmer.

Co-Benefits

Environmental Justice

Within the NYSEG and National Grid service area, EnSave will work with the appropriate agricultural service organizations to ensure that all customers are provided the opportunity for service, regardless of race, gender, ethnicity, or racial characteristics.

Environmental Benefits

This program's reduction in overall energy use will result in air quality benefits. The following estimates were developed with use of EPA's Power Profiler web tool[9], which estimates air quality benefits based on utility fuel mix. Table 4 illustrates the total expected SOx, NOx, and CO_2 impacts that would be expected to be avoided through the program's participating farms energy savings.

Table 4. Estimated Program Environmental Impacts (tons/year)

NY NYSEG and Nat. Grid Service Area	SOx (Tons)	NOx (Tons)	CO_2 (Tons)
Total:	34.41	8.19	6,718.27

Overall, we expect that the reductions in agricultural electricity use would achieve reduced power plant emissions of over 34 tons of SO_x, 8 tons of NO_x, and over 6.7 thousand tons of CO_2.

Expected Program Impact on the New York Economy

EnSave used IMPLAN®[10] to estimate the impact of the collective agricultural reduction in energy use (savings in $) upon New York's economy. IMPLAN® is an economic impact modeling system used to create Social Accounting Matrices and account for multiplier effects of the program on New York's economy. The common use of IMPLAN® is to estimate the magnitude and distribution of economic impacts for a project.

The 16.5 million kWh and 788,672 thousand therms of estimated energy savings will amount to $3.4 million in savings to agricultural producers. It is assumed that 30% of these savings will go towards taxes and increased savings, resulting in the remaining 70% (about $2.4 million) that will be directly spent in the New York economy. The $2.4 million in increased spending will

[9] EPA's Power Profiler can be found at: http://www.epa.gov/cleanenergy/energy-and-you/how-clean.html

[10] IMPLAN® is developed and maintained by the Minnesota IMPLAN Group and is recognized as the leader in economic impact modeling. More information on IMPLAN and its use can be found at: http://www.implan.com/

result in both indirect (business to business) and induced (household to the economy) multiplier effects amounting to a total of $3.1 million.

As a result of this program, the savings in energy would result in increased farm household spending. Increased spending in other economic sectors would likely result in over 15 new jobs in New York state.

Portfolio Benefits

This program design is complementary to EnSave's other programs that it administers. As of August 7, 2008, EnSave operates the following agricultural energy efficiency programs, all of which share some elements with the proposed Agricultural Energy Efficiency Program.

- California Dairy Energy Efficiency Program: Measure incentive program for Pacific Gas & Electric Company's dairy customers
- Maryland Farm Energy Audit Program: Energy audit and incentive program for agricultural producers in Maryland
- Texas Agricultural Technical Assistance Program: Energy audit and technical assistance program for all agricultural producers in Texas

As stated above in the Coordination section, EnSave is prepared to work with NYSERDA's technical assistance programs for agriculture, as well as the utilities' economic development programs.

Depth of Savings

We will continually follow up with customers enrolled in the program in order to identify lost opportunities for energy savings. Our marketing approach also individually targets each potential participant, ensuring they are given every opportunity to understand the program's offerings and take advantage of them.

Our experience has shown that most farmers install energy efficiency projects piecemeal rather than taking a whole-farm approach to energy efficiency. This is due to cash flow concerns, seasonality of equipment purchases, and the need to prioritize projects. We will revisit all measure installers throughout the program to maximize the number of measures implemented per customer contact.

Underserved Markets

Agricultural customers have not traditionally participated in energy efficiency programs, largely due to their lack of awareness of such programs. Through a comprehensive marketing campaign that engages manufacturers, dealers, and the agricultural community, we will ensure farmers understand the available opportunities.

Commitment

This program will require a brief ramp-up time in order to prepare the program. Assuming a January 1, 2009 start date for the contract, we anticipate capturing our first customer kWh savings within 90 days. Due to our prior experience delivering similar programs to NYSERDA, we already have relationships with key New York equipment manufacturers, equipment dealers, and members of the extended agricultural community. This network will ensure we will be able to "hit the ground running" with a high level of trust and commitment from program stakeholders.

Our time-tested marketing and outreach approach (described in further detail in the "Customer Outreach" section below) will keep EnSave staff in regular contact with farmers, their equipment dealers, and opinion leaders for the farm. This regular contact will continually encourage the installation of as many cost-effective measures as possible for each farm site.

Customer Outreach

We will identify customers in several ways:

- Using EnSave's list of past program participants (approximately 650 farms).
- Obtaining publicly available lists of farms (such as the list of New York dairy farms maintained by the New York Department of Health).
- Leasing lists of farmers through a list broker such as FarmMarket ID.

Once we obtain these lists, we will provide them to NYSEG and National Grid for comparison with their own customer lists. For those farms that are also customers, we will obtain annual electric and gas usage. This will enable EnSave to determine the largest energy users among New York farms, and prioritize these ones that have a potential for significant energy savings. In obtaining information about NYSEG and National Grid customers, we will ensure that data will be kept confidential, and will only be used for this program.

We will encourage customer participation through the manufacturers, equipment dealers, and agricultural community, who will augment EnSave's efforts working directly with farmers.

Below, we discuss the role each of these organizations will play in the customer outreach process.

Equipment Manufacturers

The first group that will be contacted through marketing is the manufacturers of energy efficient equipment. These will be manufacturers of all the major measure categories used in the program, such as lighting, HVAC, motors, and dairy measures. EnSave will send them a letter followed by a phone call to inform them of the program and request contact information for their sales representatives and dealer network. We will also request their support through other means, such as offering an additional discount on energy efficient equipment in order to encourage more installations, or by sending a mailing to their distributors notifying them of the program.

Equipment Dealers

EnSave will then market the program to dealers, sending them a letter explaining the program and how it will benefit their customers as well as their business, followed by a phone call to further explain the program and ensure they understand how the program can benefit their farm customers. These dealers are critical partners in a program, because they are the first ones farmers will turn to when seeking advice about which equipment to purchase. Evaluations of EnSave's prior agricultural energy efficiency programs have shown that dealers are responsible for up to 70% of the applications farmer submit to the program.

EnSave will keep in continual contact with the dealers throughout the program in order to build relationships, track progress, and answer questions. A strong relationship with dealers helps ensure success of the program. EnSave has established strong working relationships with equipment dealers through its previous farm energy efficiency programs in New York, and we will continue to build these relationships.

Agricultural Community

Concurrent to dealer notification, EnSave will inform the agricultural community of the program by sending them a program announcement. EnSave will work with these groups to reach farmers by encouraging them to include program information in their mailings, newsletters, and meeting agendas. This will help bring the program message to farmers statewide, and will support the mission of these organizations by saving their members money and making them more sustainable. As a side benefit to the program, as these organizations inform their members about energy efficiency, they will be learning about the wise use of energy themselves, thus helping to spread energy efficiency education throughout the rural community.

Farmers

EnSave has already worked with several hundred New York farmers through its previous NYSERDA programs. EnSave will contact these farms to promote new measures and other funding opportunities they can access (such as other NYSERDA programs, utility economic development funds and REAP).

EnSave will also obtain lists of other farmers by name, address, phone, and type of production. We will lease these lists from an agricultural list broker firm such as FarmMarketID.

Our direct marketing to farmers will focus on targeted subsets of farmers (such as dairies, large energy users, and past EnSave program participants). In order to reach as many of the 37,500 farmers in the state as possible, we will work with and leverage manufacturers, dealers, and the agricultural community to distribute information.

Our program representatives will be responsible for making phone calls to farmers and informing them of the program. These representatives will enroll farmers, and work with them through their entire installation process to ensure they are able to navigate the process.

Collaborative Approach

EnSave is well aware of the need to bring community groups into the initial discussions of the program. EnSave has spoken with the New York Farm Bureau, the New York State Federation of Resource Conservation and Development Councils, New York Department of Agriculture and Markets, and representatives from NYSEG and National Grid's economic development staff.

Given the time constraints of the proposal period, not all organizations are able to secure board approval for a support letter. EnSave has spoken with the following entities about the program and hopes to secure formal letters of support from all of them within the next 45 days:

- New York State Department of Agriculture and Markets
- NYSEG
- National Grid
- Assemblyman David Koon, 135th Assembly District
- Assemblyman William Magee, 111th Assembly District

As Attachment D, please see the attached letters of support from:

- New York Federation of Resource Conservation & Development Area Councils
- Dairy Farmers of America
- National Association of Conservation Districts

The New York Farm Bureau will mail a letter of support directly to NYSERDA shortly.

Fuel Integration

This program will focus on both electric and natural gas measures. Most farm energy savings will be electric. However, farmers whose measures use both fuels will find the process seamless. Our application will include a place to record both electric and gas measures, and there will be no programmatic distinction between electric and gas measures except for the different calculations used to determine savings.

We anticipate a relatively small amount of gas savings (788,672 therms) because many rural areas do not yet have natural gas service, and because there are relatively few instances of gas equipment used on the farm.

Transparency

EnSave requests that its proposal and proposal documents remain confidential except for NYSERDA and DPS review, and for excerpts to be included in NYSERDA's comprehensive proposal to DPS.

Our quarterly reports will be available online for viewing by the general public as well as other program administrators.

Procurement

EnSave does not intend to have any subcontractors in this program. It will be responsible for all major functions of the program except for evaluation, measurement, and verification. This function will be handled by an independent third party, selected by the DPS.

EnSave New York State Variable Speed Drive Farm Program Case Study

Funding Source: New York State Energy Research and Development Authority (NYSERDA)

Program Duration: 1999 - 2003

Contact Amounts: $1,500,000

Geographical Location: Statewide

Program Type: Equipment replacement and new construction

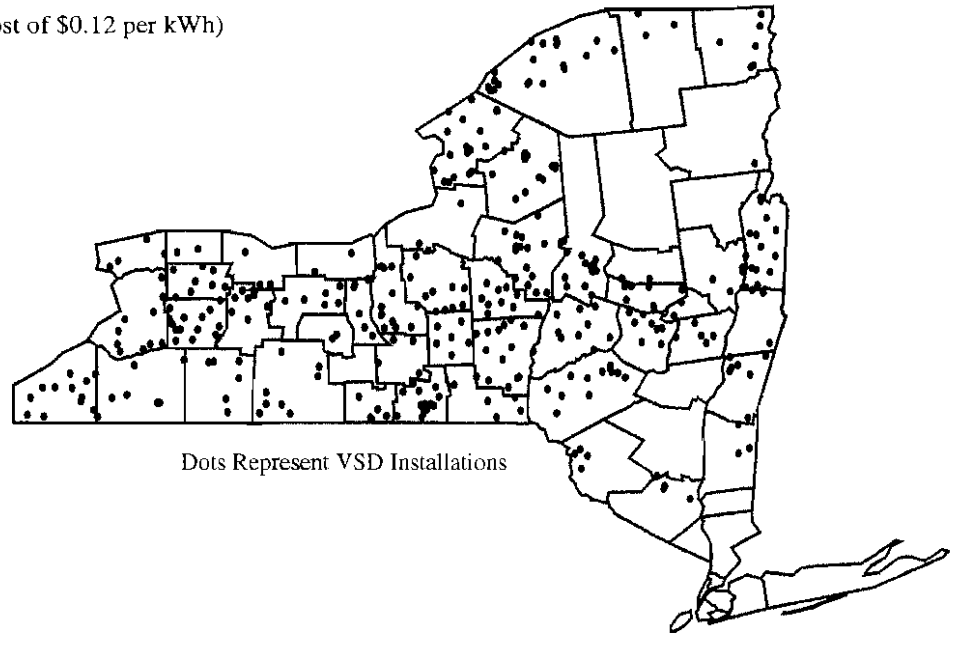
The objectives of this multi-year program were to save energy, reduce dairy producers' energy costs, and lower NO_x emissions. Through NYSERDA's Standard Performance Contract, EnSave offered cash incentives to dairy producers to install milking vacuum pump variable speed drives (VSDs), and encourage producers to work with their local equipment dealers to install the equipment.

EnSave developed the program and educated 6,500 New York dairy producers about the benefits of a VSD and its energy use on the farm. EnSave marketed the program in conjunction with the local agricultural community including the Cornell Cooperative Extension, the New York Department of Agriculture, and the New York Farm Bureau to ensure that farmers learned about the program from familiar sources.

Five hundred and seventy-two producers participated in the program. Measurement and verification of the energy savings was conducted by Science Applications International Corporation (SAIC) of New York.

The Program saved 10 million kWh, avoided 2.92 tons of NO_x emissions, and delivered $1.2 million first year energy savings to participating dairy producers. Over the 15-year measure life of the VSD, these 572 dairy producers will save $18,000,000 in energy costs.

(Savings based on an average electricity cost of $0.12 per kWh)



Dots Represent VSD Installations

65 Millet Street, Suite 105 • Richmond, Vermont 05477 • Phone 800.732.1399 • Fax 802.434.7011 • www.ensave.com

EDWARD W. SENGLE

65 Millet Street, Suite 105, Richmond, VT 05477
eds@ensave.com, (800) 732-1399

SUMMARY

Engineer/Project Manager with proven ability to deliver quality products and projects on time and under budget. Career focus on energy conservation, renewable generation, and green technologies. Experienced in wind energy system production, assembly and servicing; bio-aerosol testing and filtration; semiconductor manufacturing and characterization; and HVAC design.

PROFESSIONAL EXPERIENCE

EnSave, Inc., Richmond, VT
Program Manager, 2007–current
- Manage energy efficiency programs for agricultural customers on behalf of electric utilities.
- Implement rebate and audit programs to achieve energy savings targets.
- Comply with extensive regulatory and reporting requirements.
- Implement multi-tiered marketing campaign.
- Manage staff, including the oversight of staff time allocation.
- Act as primary contact for client program manager.
- Manage workflow to comply with timelines and budget.

Energy Engineer, 2007
- Use manufacturer specifications, technical literature, and available research to assess and calculate energy usage and cost and other performance characteristics of agricultural and food processing equipment intended to benefit the respective sectors.
- Develop savings calculations for energy efficient equipment.
- Identify pollution prevention measures that create value for agricultural producers and food processors.
- Develop, maintain, and improve spreadsheet tools that calculate energy and cost savings, including AutoAudit™ and other internal tools.

Northern Power Systems, Waitsfield, VT
Project Manager, 2005–2007
Alaska Village Electric Cooperative Project ($4M):
- Managed the procurement, production, and shipment of 13-100 kW wind turbines to four remote Alaskan Villages; controlling revenue, margin, and cash-flow to corporate targets.
- Coordinated and scheduled the installation, commissioning, troubleshooting and service of turbines with partner construction firm in Alaska.

Distributed, Low Wind Speed Turbine Project ($3M):
- Directed a team of engineers, contractors, production technicians, and DOE scientists in the design, assembly, testing, and installation of a next-generation, permanent magnet wind turbine.
- On target to meet aggressive schedule and cost-of-energy objectives.

Triosyn Corp, Williston, VT
Engineering Manager, 2002–2005
- Led the development of a biocidal filter cartridge using a proprietary iodine-activated resin, for use in a personal air-purifying respirator, resulting in NIOSH and CE certification.
- Managed engineering group in development of novel processes to imbed resin in filtration media, including measurement of microbiological performance and quality control metrics.
- Designed Biosafety Laboratory and Testing Facility for the Air Force Research Laboratory, including HVAC, filtration, compressed air, and high purity water systems.

~continued ~

IBM Microelectronics Division, Essex Junction, VT

Program Manager, 2000–2002

- Managed multiple concurrent semiconductor wafer manufacturing programs representing $300M in yearly revenue.
- Directed teams from engineering, production, and quality assurance to enhance yield, meet supply requirements, guarantee product quality, and reduce costs.
- Led team of manufacturing and electrical test engineers in identifying primary defect types, designing and evaluating experiments, and implementing process changes to reduce defects by 65%.
- Identified root causes of potentially significant reliability problems, qualified and implemented process changes, minimized quality risk and shipment delays to customer.
- As recognized technical expert, expanded and taught 16-hour course on Semiconductor Fabrication Techniques to employees from engineering, manufacturing, sales, and marketing.

Lead Process Integrator, 1997–2000

- Led team of engineers and technicians in development of new wafer manufacturing process creating strategic new business opportunity representing $200M in global yearly revenue.
- Delivered process to manufacturing on schedule and under budget while incorporating numerous customer-driven specification changes and nonstandard product enhancements.
- Reduced manufacturing cycle time 35% by scrutinizing process flow, eliminating redundant operations, combining compatible operations, and implementing novel process improvements.
- Collaborated with engineering teams from production sites in France, Japan, and Taiwan to successfully install new manufacturing process in their facilities.

Process Team Leader, 1993–1997

- Directed engineering team to increase yield and reduce defects, cost, and cycle time within a group of process operations that formed initial transistor isolation.
- Developed, patented, and implemented a novel manufacturing process resulting in $1M in yearly savings and a 40% reduction in module cycle time.
- Led company wide team representing research, development, manufacturing, and design to foster innovation, resulting in numerous patent ideas and improved coordination of engineering resources.

Photolithography Engineer, 1988–1993

- Designed and implemented first electric monitor for measuring within-field linewidth variation in production; implemented tool/process changes reducing variability by 50%.
- Demonstrated manufacturing feasibility of novel optical process enhancement, resulting in process capabilities far exceeding state-of-the-art technology.

Eastman Kodak Company, Rochester, NY

Facilities Engineer, 1982–1986

- Designed and installed process support systems (air filtration and conditioning, high purity gases, corrosive exhaust, cooling water, drainage, fire safety, energy conservation) for photographic film, biological, and microelectronics research facilities.
- Implemented monitoring system for power plant including steam/refrigeration cogeneration cycle.

EDUCATION

BS Mechanical Engineering, Lehigh University, 1982

Graduate Studies in Controls Engineering, Rensselaer Polytechnic Institute, 1986–1987

PATENTS & PUBLICATIONS

Hold 4 US Patents in various areas of semiconductor manufacturing and design.

Authored numerous papers for internal publications, including *IBM Journal of Research and Development.*

ILLARI VIHINEN, PE

65 Millet Street, Suite 105, Richmond, VT 05477
illariv@ensave.com (800) 732-1399

Summary

Professional Engineer with a diverse background, bringing dedication, attention to detail and proven managerial experience to energy efficiency. Possesses proven leadership skills with a Six Sigma Black Belt, with experience in hydroelectrics, quality engineering and combustion engineering.

Experience

EnSave, Inc., Richmond, VT
Energy Engineer, 2007–Present
- Research and analyze end-use agricultural and food processing technologies
- Develop, verify and manage energy efficiency tools
- Manage EnSave's Evaluation, Measurement and Verification (EM&V) functions
- Determine energy savings from energy efficiency technologies
- Provide technical review of farm energy audits

Spruce Mountain Design, Montpelier and Winooski, VT
Hydroelectric Operator, 2007
- Responsible for operating & maintaining 2 hydroelectric plants (800 kW and 7.4MW)

Northern Power Systems, Waitsfield, VT
Program Manager, 2003–2007
- Managed $1M program to design/build/test drives; delivered 1st within 10 days of baseline
- Managed $1M program to design/build/test prototype converter; done within 5% of budget
- Managed $2M next-generation NW100 wind turbine program with GE, DOE, NREL
- Managed $1.4M of power electronic development programs (Microgrid, DER Switch)
- Directed resource planning, budgeting, and monthly status reports for $6M R&D portfolio
- Developed Resource Planning, Task Management Tools, Business Process Improvements
- Completed ISO 9001-2000 Training; 1/20 Internal Auditors for certification, improvement

GE Industrial Systems, Plainville, CT
Six Sigma Black Belt/Quality Engineer, 2000–2003
- Mentored 80+ GE Engineers worldwide to Six Sigma Green Belt Certifications
- Developed Maturity Index Metric for Measuring/Tracking Key Project Risks
- Designed Next-Generation Project Quality Scorecards with Flexible Hierarchy
- Created Kano Visualization Tool to Drive Sales, Market Share Growth in NPIs
- Launched web-based eQFD Tool to conduct QFDs anywhere, anytime online
- Instructor/Editor for Scorecards, GE DFSS Book of Knowledge, for MBBs
- Completed Six Sigma DMAIC, DFSS, and Design for Reliability Training

Air Force Research Laboratory, Dayton, OH
Combustion Research Engineer, Captain, USAF, 1996–2000
- Led AFRL/GEAE Trapped-Vortex Combustor Single-Cavity Team in testing revolutionary high performance, low emissions combustor concept
- Designed and built a counterflow burner based on a French design for studying flame-vortex interactions and turbulent combustion phenomena
- Initiated spray characterization studies of new fuel injector concepts with laser sheet visualization, PDPA, and photographic techniques
- Responsible for management of a $10M, 30-person R&D contract

Education

Master of Science, Mechanical Engineering, Clarkson University, Potsdam, NY, 1996

KYLE CLARK

65 Millet Street, Suite 105, Richmond, VT 05477
kylec@ensave.com (800) 732-1399

Summary

Highly motivated, organized and creative, with diverse background and life experience. Proven ability to motivate and work effectively, with a talent for analyzing problems and finding innovative solutions. Naturally gifted at computer science and information technology. Committed to personal and professional excellence. Extremely fast learner, always seeking new intellectual and leadership challenges.

Experience

EnSave, Inc.,
Program Representative, 2007–Present
- Perform energy audits for large agricultural operations
- Develop and streamline energy auditing tools
- Assist in the development of proposals
- Manage a large volumes of customer, dealer, and manufacturer accounts
- Research and present technical data for proposals and reports
- Conducts outgoing phone calls to enroll producers in an energy efficiency program
- Fields incoming phone calls from customers and clients about programs
- Uses energy efficiency calculators and other criteria to evaluate a producer's eligibility for a program

Chittenden County Regional Planning Commission
Geographic Information Systems (GIS) Intern, 2006
- Perform extensive database updates using Microsoft Access, Excel and SQL
- GPS data collection and data analysis
- Develop a more efficient strategy for annual database update

University of Vermont, Department of Natural Resources
Computer Lab Assistant, 2005–2006
- General software and hardware troubleshooting for university students
- Monitored and maintained functionality of computer lab

National Wildlife Federation
Volunteer Project Coordinator and GIS Consultant, 2006

Smartech and Associates, LP
Contracted Computer Technician, 2006

Dirtworks Organic Farming Supply
Shipping Manager and Customer Support, Summers of 2004 and 2005

University of Vermont, Center for Sustainable Agriculture
Data entry and Office Assistant, 2004

University of Vermont, National Park Studies Laboratory
Database Manager and Webmaster, 2003–2004

EDUCATION AND TRAINING

- Bachelor of Science in Natural Resource Planning, University of Vermont, 2006
- Certified Agricultural Irrigation Specialist, 2007

COREY J. CONANT

65 Millet Street, Suite 105, Richmond, VT 05477
coreyc@ensave.com (800) 732-1399

SUMMARY OF SKILLS

Possesses strong farm energy technical skills with experience in marketing, sales, and customer service as well as experience working on dairy farms, with a focus on customer enrollment for energy efficiency programs. Grasps nuances of complex programs and engage producer to move forward with a project, and has an extensive familiarity with farm operations and farm needs.

PROFESSIONAL EXPERIENCE

EnSave, Inc., Richmond, VT
Energy Auditor, 2006–Present

- Uses *AutoAudit*™ and other internal tools to develop narrative farm energy audit reports
- Works closely with engineering technical staff to ensure accuracy and consistency of written reports
- Liaises between technical staff and farmer in order to deliver information about energy efficiency
- Provides information and answers queries regarding program eligibility and rules
- Provides marketing and outreach services as needed for special projects

Program Administrator, 2005–2006

- Conducts outgoing phone calls to enroll producers in an energy efficiency program
- Fields incoming phone calls from customers and clients about programs
- Uses energy efficiency calculators and other criteria to evaluate a producer's eligibility for a program
- Provides program data for use in reports

The Cape Cod Winery, Falmouth, MA, 2005

- Maintain vineyard and equipment
- Sell wines and maintain distribution system with licensed liquor outlets

Paul Marquis Concrete / Kevin Youngman Construction, 2003–2004

- Flat work, decorative concrete stamping
- Framing, roofing, siding

Phish Dry Goods, Burlington, VT, 2001–2003

- Conduct outside phone sales
- Provide phone customer service to anyone with questions about products
- Process orders
- Provide support for shipping and receiving department

Conant's Riverside Farms, Richmond, VT

- Dairy farm laborer

EDUCATION

Environmental Studies, University of Vermont, 1999–2001

KATHERINE WILLIAMS

65 Millet Street, Suite 105, Richmond, VT 05477
katew@ensave.com (800) 732-1399

Summary

Highly experienced direct marketer, with expertise in design, implementation, management, and execution of promotions. Exceptionally organized, and has a proven ability to compose publishable press releases and articles.

Experience

EnSave, Inc.,
Marketing Coordinator, 2007–Present

- Provide marketing strategy and execution for two California energy efficiency incentive programs, including direct mail promotions, press releases, and advertising
- Complete marketing deliverable for Texas Agriculatural Technical Assistance Program, including brochure design and execution, mailing list collation, training materials, and forms and flyers
- Provide initial and on-going marketing support for Oregon pilot project
- Maintain EnSave, Inc. website
- Design and execute promotions, maintain company branding standards on all promotional and technical pieces
- Compose and disseminate press releases and articles for EnSave, Inc.
- Requires expertise in MicroSoft Office Suite, and Adobe Creative Suite, including InDesign, Photoshop, and Illustrator

Ashgate Publishing
Senior Marketing Coordinator, 2005–2007

- Prepare annual, quarterly, and monthly marketing plans
- Provide monthly, quarterly, and annual analysis of sales and marketing budgets
- Track and report on success rate of past promotions
- Advise commissioning editors on marketing and sales potential for forthcoming titles
- Provide feedback and input on subject line development for four lines

Marketing Coordinator, 2001–2005

- Drive marketing initiatives from campaign creation to execution
- Create catalogs and flyers for direct marketing campaigns, responsible for design, copy-editing, and vendor management
- Acquire pertinent mailing lists for direct mail promotions
- Represent company at academic trade shows and conferences
- Act as liaison to authors and editors
- Determine marketing placement strategies for new titles

Conference Coordinator/Marketing Assistant, 2000-2001

- Coordinate company's presence at academic trade shows and conference, responsible for arranging registration, travel, and shipping
- Create advertisements for placement in conference programs, and flyers for display at the conference
- Communicated Advanced Book Information (ABI) to customers, including library buyers and retailers
- Act as liaison to Library of Congress

State of Vermont Department of Social and Rehabilitation Services (SRS)
Project Assistant, Rural Domestic Violence and Child Abuse Project, 1997–2000

- Control, update, and insure accuracy of resource, personnel, budgetary, statistical and contractual records
- Design, review, and refine Project-related brochures, flyers, conference material, and information packets
- Provide administrative support for a team of four, including Project Director
- Liaise with statewide domestic violence and SRS offices

Administrative Assistant, 1999–2000

- Process foster parent applications, including the running of State background checks
- Enter information into departmental databases
- Provide temporary office support for Commissioner's Office and Residential Licensing Department

Jim Henson Productions

Public Relations Intern, 2006

- Provide adminstrative support for a staff of three
- Retrieve, distribute, and catalog press clippings
- Collate and distribute press and business packets

EDUCATION AND TRAINING

College of New Rochelle, NY

Bachelor of Arts, 2006

- Major: Psychology
- Minor: Communication Arts, specializing in Advertising
- Graduated *cum laude*, Honors Program degree, and member of Psychology Honors Society (*Psi Chi)*

BRUCE JONES

65 Millet Street, Suite 105, Richmond, VT 05477
brucej@ensave.com (800) 732-1399

Summary

Professional accountant and auditor with 26 years' experience in the private sector. Experienced manager, comfortable in both a Controller and Human Resources position.

Experience

EnSave, Inc.,
Finance Manager, 2007–Present

- Direct financial activities for EnSave, including:
  - Prepare and analyze monthly financial statements
  - Prepare and analyze EnSave's annual budget
  - Prepare and analyze EnSave's cash flow
  - Prepare and analyze project budgets
- Invoice and collection of Accounts Recievable
- Coordinate activies of EnSave's bookkeeper
- Coordinate quarterly and annual tax review and preparation with external accounting firm
- Oversee payroll and employee benefit administration
- Manage distribution and tracking of rebate payments to incentive program participants

Strategy Plus, Inc., and Chips & Bits, Inc
Controller/General Manager, 1995–2007

- Directed financial activities for both Strategy Plus, a magazine publisher, and Chips & Bits, an e-commerce retailer
- Intrumental in the evaluation, selection, and implementation of new accounting/e-commerce system
- Manage day-to-day coperations of accounting, purchasing, customer servicc, and shipping departments
- Prepare budgets and all financial reports needed by senior management
- Analyze financial records to forecast future financial position and budget requirements
- Reconcile and balance accounts
- Coordinate internal and external audits of company records
- Responsible for staff of 4

Mount Mansfield Resort
Accounting Manager, 1994–1995

- Apply principles of accounting to analyze financial information and prepare financial reports
- Prepare balance sheet, profit and loss statement and other reports to summarize current and projected company financial position
- Coordinate daily audit of all revenue areas
- Allocate and post details of business transactions to ledger accounts
- Compile and analyze financial information to prepare entries to accounts, such as general ledger accounts, documenting business transactions
- Reconcile and balance accounts
- Coordinate internal and external audits of company records
- Responsible for hiring and supervising seasonal staff of 5

Sugarbush Ski Resort
Assistant Accounting Manager, 1988–1994

- Please see previous position for description

~continued ~

Shawmut Bank Holding Company
Manager, Financial Analysis, 1987–1988

- Apply principles of accounting to analyze past and present financial operations
- Document revenues and expenditures expected and submit to management
- Serve as liaison between senior management and operating division managers
- Advise management on matters such as effective use of resources and assumptions underlying budget forecasts related to interest margin, service income and controllable expense

Shawmut Bank, N.A.
Assistant Controller, 1983–1986

- Manage accounting department for the Shawmut Bank of Boston
- Direct supervisory responsibility for staff of 5
- Manage montly closing procedure to assure timely and accurate reporting of revenue
- Prepare and review senior management financial reporting package
- Prepare and review reports required by external regulatory agencies
- Coordinate internal and external audits of company records

Shawmut Corporation
Senior Auditor, 1981–1983

- Examine and analyze accounting records to determine financial status of establishment
- Prepare reports for management concerning scope of audit, financial conditions found
- Prepare financial reports concerning operating procedures
- Identify problems, diagnose causes and determine corrective actions
- Deliver oral and written presentations for management regarding audit findings and recommendations
- Supervise and coordinate activities of 2–3 staff auditors specializing in specific operations of both banking and non-banking subsidiaries undergoing audit

EDUCATION

Babson College, Wellesley MA
Master of Business Administration, 1987

Johnson State College, Johnson VT
Bachelor of Arts–Social Science, 1974

Attachment C

New York Agricultural Energy Efficiency Program
Benefit / Cost Summary

Electric

Present-Valued Benefits	9,291
Electricity	9,291
Natural Gas	0
Present-Valued Costs	2,347
Net Present Value (thousands 2007$)	6,945
Benefit/Cost Ratio	3.96

Gas

Present-Valued Benefits	547
Electricity	0
Natural Gas	547
Present-Valued Costs	201
Net Present Value (thousands 2007$)	346
Benefit/Cost Ratio	2.72

Electric & Gas

Present-Valued Benefits	9,839
Electricity	9,291
Natural Gas	547
Present-Valued Costs	2,548
Net Present Value (thousands 2007$)	7,290
Benefit/Cost Ratio	3.86

Attachment C

New York Agricultural Electric Efficiency Program

#	Item	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Number of farms eligible	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500
2	Participation rate	0.007	0.007	0.007	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Program participation - annual	0	263	263	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Annual number of electric upgrades per participant	21	21	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Annual number of electric upgrades	0	5,513	5,513	5,513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	kWh saved/electric upgrade, net	0.0	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9	696.9
7	Net to Gross Ratio, electric	0.7																						
8	kWh saved total		3,841,751	3,841,751	3,841,751																			
9	Ratio of kW/kWh savings	Not needed for this program																						
10	Peak diversity factor	0.75																						
11	kW saved/electric upgrade (summer peak) net	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916
12	therms saved/electric upgrade	N/A - not considering possible reduced cooking costs related to lighting upgrades																						
13	Direct program incremental operation costs/program year		$912,189	$912,189	$912,189																			
14	Direct program operation costs/electric upgrade		$165.48	$165.48	$165.48																			
15	Direct program operation costs/participant		$3,475.01	$3,475.01	$3,475.01																			
16	Cost per upgrade (weighted)		$260	$260	$260																			
17	Cost per participant		$5,460	$5,460	$5,460																			
18	Direct program operator costs / kWh		$0.24	$0.24	$0.24																			
19	Participant cost / kWh		$0.0014	$0.0014	$0.0014																			
20	Total program operator budget (thousands)		$912	$912	$912																			
21	Total program operator and participant budget (thousands)		$918	$918	$918																			
22	Incremental GWh saved from current year installations	0.000	3.842	3.842	3.842	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	Incremental MW saved from current year installations	0.000	0.505	0.505	0.505	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Billion Btu saved from current year installations	N/A																						
25	Incremental GWh saved from current & prior year installat	0.000	3.842	7.684	11.525	11.525	11.525	11.525	11.525	11.525	11.525	11.525	11.525	11.525	11.525	11.525	7.684	3.842	0.000	0.000	0.000	0.000	0.000	0.000
26	Incremental MW saved from current & prior year installatio	0.000	0.505	1.010	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.515	1.010	0.505	0.000	0.000	0.000	0.000	0.000	0.000
27	Incre. Billion Btu saved from current & prior year installati	N/A																						
28	MWh Saved in 2015	11,525																						
29	MW of Coincident NYISO Peak Saved in 2015	1.515																						
30	Weighted average measure life (years - electric)	17																						
31	Total Avoided Cost (thousands 2007$)	0.0	383.7	748.0	1101.0	1082.4	1099.8	1118.8	1121.9	1132.3	1143.0	1153.7	1164.5	1175.5	1186.6	798.5	403.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	Electricity	0.0	383.7	748.0	1101.0	1082.4	1099.8	1118.8	1121.9	1132.3	1143.0	1153.7	1164.5	1175.5	1186.6	798.5	403.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	Natural Gas																							
34	Discounted Benefits (thousands 2007$)	0.0	342.9	637.6	858.7	828.1	797.7	769.1	731.0	699.3	669.2	640.2	612.5	586.1	560.7	357.7	171.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	Electricity	0.0	342.9	637.6	858.7	828.1	797.7	769.1	731.0	699.3	669.2	640.2	612.5	586.1	560.7	357.7	171.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	Discounted Costs (thousands 2007$)	0.0	824.5	781.5	740.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	Present-Valued Benefits	9291.5																						
39	Electricity	9291.5																						
40	Natural Gas	0.0																						
41	Present-Valued Costs	2346.7																						
42	Net Present Value (thousands 2007$)	6944.8																						
43	Benefit/Cost Ratio	3.96																						

 # Notes (tied to row numbers in left column)

1 Number of NYS farms

4 Derived from weighted average of electric measure installations (Eg. 21 individual lights per farm)

5 Total of all individual measures installed annually

6 Derived from weighted average of electric measure savings from electric measure workbook

10 Standard load factor assumption

13 Electric portion of total budget = 92%

16 Derived from weighted average of measure participant cost from measure workbook

30 Derived from weighted average of measure Equipment Useful Life from measure workbook

Attachment C

New York Agricultural Energy Efficiency Program

#	Item		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
1	Number of eligible farms			2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	2,374	
2	Participation rate (% eligible who participate)			0.47%	0.47%	0.47%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
3	Program participation - annual			11	11	11																				
4	Annual number of gas upgrades per participant		-	1,253	1,253	1,253																				
5	Annual number of gas upgrades			13,921	13,921	13,921																				
6	Net therms saved / upgrade			18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
7	Net therms saved/year		0	251,861	251,861	251,861	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	755,583
8	Direct program incremental operator costs / program year		0	$78,791	$78,791	$78,791	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	Direct program operator costs / gas upgrade		0	$5.66	$5.66	$5.66	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
10	Direct program operator costs / participant			$7,092	$7,092	$7,092																				
11	Cost per upgrade		0.0	$8.92	$8.92	$8.92																				
12	Cost per participant		0.0	$1,175	$1,175	$1,175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	Direct program operator costs / Therm			$0.31	$0.31	$0.31																				
14	Participant cost / Therm			$0.04	$0.04	$0.04																				
15	Total program operator budget (thousands)			$79	$79	$79																				
16	Total program operator and participant budget (thousands)			$90	$90	$90																				
17	GWh saved from current year installations	N/A																								
18	MW saved from current year installations	N/A																								
19	Billion Btu saved from current year installations		0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	GWh saved from current & prior year installations	N/A																								
21	MW saved from current & prior year installations	N/A																								
22	Billion Btu saved from current & prior year installations		0	2	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	2	0	0	0	0	
23	Weighted average measure life (years per MBtu - electric)	N/A																								
24	Weighted average measure life (years per MBtu - gas)		16																							
25	Total Avoided Cost (thousands 2007$)		0.0	22.0	41.4	59.4	58.4	58.6	57.4	56.3	56.2	56.1	56.2	56.7	56.2	55.7	57.0	58.8	60.4	41.1	20.8	0.0	0.0	0.0	0.0	
26	Electricity																									
27	Natural Gas		0.0	22.0	41.4	59.4	58.4	58.6	57.4	56.3	56.2	56.1	56.2	56.7	56.2	55.7	57.0	58.8	60.4	41.1	20.8	0.0	0.0	0.0	0.0	
28	Discounted Benefits (thousands 2007$)		0.0	19.8	35.3	47.9	44.7	42.5	39.5	36.7	34.7	32.8	31.2	29.8	28.0	26.3	25.6	24.9	24.3	15.7	7.5	0.0	0.0	0.0	0.0	
29	Electricity																									
30	Natural Gas		0.0	19.8	35.3	47.9	44.7	42.5	39.5	36.7	34.7	32.8	31.2	29.8	28.0	26.3	25.6	24.9	24.3	15.7	7.5	0.0	0.0	0.0	0.0	
31	Discounted Costs (thousands 2007$)		0.0	70.8	67.1	63.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
32	Present-Valued Benefits		547.2																							
33	Electricity		0.0																							
34	Natural Gas		547.2																							
35	Present-Valued Costs		201.5																							
36	Net Present Value (thousands 2007$)		345.7																							
37	Benefit/Cost Ratio		2.7																							

 # Notes (tied to row numbers in left column)

1 Number of NYS farms utilizing natural gas

4 Derived from weighted average of electric measure installations (Eg. 21 individual lights per farm)

5 Total # of all individual measures installed annually

6 Derived from weighted average of gas measure savings from electric measure workbook

8 Gas portion of total budget = 8%

13 Derived from weighted average of measure participant cost from measure workbook

24 Derived from weighted average of measure Equipment Useful Life from measure workbook

NEW YORK FEDERATION

Of Resource Conservation and Development Councils

Black River / St. Lawrence - Central New York - Finger Lakes - Greater Adirondack
Hudson Mohawk - Lake Plains - Lower Hudson-Long Island - Seneca Trail

Federation Officers
President: Judy L. Wendt Vice President: Ken Bush Secretary: Tom Goodwin
Treasurer: Sheelagh Baily

August 6, 2008

Craig Metz, CEO
EnSave, Inc.
65 Millet St. Suite 105
Richmond, VT 05477

RE: New York Agricultural Energy Efficiency Program

Dear Mr. Metz:

The New York Federation of Resource Conservation & Development Councils (NY RC&D) supports the proposal for the New York Agricultural Energy Efficiency Program (AEEP) proposal currently being submitted to NYSERDA by EnSave, Inc. The program would work with all agricultural customers who pay a system benefit charge to bring energy efficiency to local farms.

NY RC&D's role in the program will be to help support USDA's Rural Energy for America Program (REAP) by assisting in the packaging of grants. NY RC&D will also help to leverage the greater agricultural community by disseminating AEEP information to local producers and encouraging them to participate in the program.

The National Association of Resource Conservation and Development Councils has a national partnership with EnSave and has had the opportunity to work with them in other states. We look forward to developing a comprehensive program within New York State to assist its agricultural community with energy efficiency solutions.

This program will help with economic development, and bring both environmental and societal benefits to the New York State agricultural community. We look forward to being a part of this important program.

Sincerely,

Judy L. Wendt
President
New York Federation of Resource Conservation and Development Councils

Please address all questions regarding this support letter to:
Sharon Ruggi
93 Leavy Hallow Ln.
Hudson Falls, NY 12839
Telephone: 518-747-7384
E-mail: eandsruggi@verizon.net

Visit our Web Site: www.nyrcd.org

The mission of the NYRC&D Federation is to coordinate and support local, state, regional and national priorities for resource, conservation and development. All programs and assistance of the NYRC&D Federation are available without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status.

Dairy Farmers of America

August 4, 2008

Craig Metz, CEO
EnSave, Inc.
65 Millet Street, Suite 105
Richmond, VT 05477

RE: New York Agricultural Energy Efficiency Program

Dear Mr. Metz:

Dairy Farmers of America is pleased to support EnSave's proposal for the development of the New York Agricultural Energy Efficiency Program.

Dairy Farmers of America (DFA) is a dairy marketing cooperative that serves and is owned by more than 18,000 dairy farmers in 48 states. Our Northeast area Council (which includes New York) has 1,563 members and produces over 2.8 billion pounds of milk per year. DFA is one of the country's most diversified manufacturers of dairy products, food components and ingredients.

This program will help our New York members become more sustainable by reducing their energy costs. The program's cash incentives will also help make the initial investment in new equipment more affordable. We look forward to having this opportunity available to further support New York's dairy farmers.

Again, DFA supports EnSave's proposal. For questions please contact me at (816) 801-6698.

Sincerely,

Bruce Brinkmeyer

Bruce Brinkmeyer
Vice President, Member Services
Dairy Farmers of America

conserving natural resources *for our future*

National Association of Conservation Districts

Partnership Letter

The purpose of this letter is to define the terms of a partnership between the National Association of Conservation Districts (NACD) and EnSave, Inc. (EnSave). This partnership will be considered effective upon the signing of this letter by authorized representatives of both organizations.

The focus of the partnership is to develop programs that advance the conservation mission of each organization, with a focus on agricultural energy issues. The partnership will provide a framework for cooperation between EnSave and Conservation Districts throughout the United States. EnSave and NACD will encourage the exchange of information between the two national organizations through their respective delivery and outreach mechanisms.

Examples of activities developed could include:

- Provide energy audit services to agricultural producers within Conservation Districts
- Train and certify Conservation District staff or their designees to become on-farm energy audit data collection specialists
- Design and implement energy efficiency and other natural resource conservation projects
- Provide energy or natural resource-related technical assistance

The partnership between EnSave, NACD and individual Conservation Districts will support the organizations' common goals through the development and promotion of energy conservation, energy efficiency and resource conservation activities. Through these activities, both organizations will grow and continue to serve agricultural communities throughout the United States.

This partnership helps support each organization's involvement in the local agricultural community by working nationwide while recognizing the need for local, grassroots support for conservation activities.

The partnership does not restrict NACD or EnSave from participating in similar activities with other public or private agencies, organizations, and individuals.

This partnership shall not commit either NACD or EnSave to obligate or transfer any funds. Specific work projects or activities that involve the transfer of funds, services, or property among the organizations will require execution of separate agreements and will be contingent upon the availability of funds.

NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Authorized Representative Date

Krysta Harden 02/08/2008

ENSAVE, INC.

Authorized Representative Date

Craig Metz 02/08/2008

National Headquarters
509 Capitol Court, NE, Washington, DC 20002
Phone: 202-547-6223 Fax: 202-547-6450
www.nacdnet.org