



PASCOAG
UTILITY DISTRICT

Pascoag Electric • Pascoag Water

253 Pascoag Main Street
P.O. Box 107
Pascoag, R.I. 02859
Phone: 401-568-6222
Fax: 401-568-0066
www.pud-ri.org

PASCOAG UTILITY DISTRICT'S DEMAND SIDE MANAGEMENT PROGRAM – 2011

RIPUC DOCKET NO. 4208



This institution is an equal opportunity provider and employer.

**PASCOAG UTILITY DISTRICT
ELECTRIC DEPARTMENT**

**PASCOAG UTILITY DISTRICT'S
DEMAND SIDE MANAGEMENT PROGRAM – 2011**

Table Of Contents

	Letter of transmittal
Schedule A 2011	Proposed Budget for Demand Side Management Program –
Schedule B	Executive Summary – 2011
Schedule C	Program Details – 2011 Programs
Schedule D	Reconciliation of Demand Side Management Budget – 2010
Schedule E	Summary of Energy Savings for 2010 Programs
Schedule F	Demand Side Management Tariff
Schedule G	2011 Program Information
Schedule H	Highlights of Pascoag's 2010 Programs (photos, news articles)
Schedule I	Customer Information
Schedule J	2010 Lighting Projects Documentation



November 4, 2010

Ms. Luly Massaro
Clerk of the Commission
Rhode Island Public Utilities Commission
89 Jefferson Boulevard.
Warwick, RI 02888

Re: RIPUC DOCKET NO. 4208

Dear Ms. Massaro:

On behalf of the Pascoag Utility District ("Pascoag" or the "District"), we herewith file an original and nine copies of Pascoag's proposed Demand Side Management Program for 2011. This submission includes Pascoag's Executive Summary, Program Details for 2011, reconciliation of 2010 DSM activity and budget, and other schedules that support this docket.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

Harle Round

Harle Round
Customer Service Supervisor

Cc: Mr. Jon Hagopian, Esquire
Cc: Mr. William Bernstein, Esquire

**Pascoag Utility District
Demand Side Management Programs - 2011 Proposed**

	<u>Proposed</u>
Estimated carry over from 2010	\$ 17,000
Estimated sales for 2011	\$ 104,000
Net 2011 budget	\$ 121,000

2011 Proposed

Residential Program		
DR1101 ENE Residential Conservation (ECHO)	2,400	\$200 per month
DR1102 Home Energy Audits with Incentives	2,400	\$200 per Audit \$50 incentives
DR1103 Energy Star Appliance Rebates	6,500	up to a max of 86 appliance rebates
DR1104 Energy Efficient Windows/Doors	6,000	up to 400 windows at \$15 or 150 doors @\$40
DR1105 Heating System Incentive	6,000	24 rebates at \$250
DR1106 Energy Star Thermostats/Lighting fixtures	600	12 rebates up to \$50
DR1107 Home Office Equipment/Home Electronics	3,000	60 rebates up to \$50
DR1108 Electric Heat Conversion/Geothermal System:	100	\$100 to keep the line item available
DR1109 New Construction	2,080	4 Rebates at \$520
DR1110 Central Air Conditioner Incentive	1,000	5 rebates at @\$200
DR1111 Change a Light Campaign	500	10 rebates up to \$50
DR1112 Energy Conservation Calendars	900	1000 X.75 & shipping
DR1113 Committed for 2010 Programs	10,000	Qualified rebates from 2010
Net Residential	\$ 41,480	
Industrial/Commercial		
DI1101 Energy Star Incentive - Office Equipment	500	10 rebates @\$50
DI1102 AT Levy Lighting Project	10,000	Retrofit lighting project @ 50%
DI1103 Valliere Realty LLC	5,000	Retrofit lighting project @50%
DI1104 Committed Funds- Lighting Projects	13,000	Knights of Columbus, Café at the falls, Burrillville Motors, Matrix Properties LLC, Berean Baptist Church
DI1105 Consultation Fees	1,000	To consult with RISE and National Grid
DI1106 Energy Star Commercial Appliance	700	2 Appliance at @\$350
Net Industrial/Commercial	\$ 30,200	
Administrative/Ad/Education		
DA1101 Administrative	20,000	Staff hours to administer the program, mileage, supplies.
DA1102 Funds for Follow-up to Successful Programs	1,660	To be used on more successful programs
DA1103 Outreach/Education	8,000	Eco News letters \$600, Energy Matters Sm Buss \$225, Culver conservation items \$6000, 2 inserts \$850, \$325 MISC
DA1104 BHS Project	6,300	To partner with the High School in 2011 and include a cookout.
DA1105 PUD 5th Annual Public Power Green Festival	8,000	To fund the open house in 2011
DA1106 Energy Efficiency Management Certificate Program	5,360	Course \$2350, \$350 books and materials, Hotel \$760, Food \$400, flight \$700, Rental Car \$800
Net Administrative/Ad/Education	\$ 49,320	
Total suggested DSM 2011 Budget	\$ 121,000	

Pascoag's 2011 Demand Side Management Program
Executive Summary: Submitted by Harle J. Round

The Residential Programs proposed by Pascoag Utility District for 2011, closely mirror our very successful 2010 programs.

Products that earn the ENERGY STAR trademark reduce gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. ENERGY STAR is the trusted, government-backed symbol for energy efficiency, helping us all to save money and protect the environment through energy efficient products and practices. THE ENERGY STAR label was established to reduce greenhouse gas emission and other pollutants caused by the inefficient use of energy and to make it easier for consumers to identify and purchase energy efficient products that offer savings on energy bills. ENERGY STAR compliant appliances and electronics are being positioned as part of the solution to rising energy costs, and the need for energy efficiency to reduce greenhouse gas emissions. The ENERGY STAR programs that we have in place continue to experience a high customer demand.

The District will continue to monitor its programs and will seek permission to reallocate funds should certain programs not perform to expectations.

The District proposes to make the residential programs available to its full time residential customers only. The District has many summer residents that only consume in the summer months and therefore do not contribute substantially to the demand side management program. If allowed to receive demand side management funds they take away from residents that pay the DSM charges year round. The District would like to apply this rule to all its residential programs

Energy New England ('ENE') - The energy hot line continues to be a very good resource for the residential customer. Customers with questions about high energy demand can call the toll free number for assistance. Many questions can be answered over the phone. A customer with high consumption questions is offered a home energy audit. Pascoag Utility District is a member of the Energy Advisory committee that meets three to four times a year and discusses the latest information on energy conservation issues. ENE also attended our Green Public Power Festival to discuss energy conservation and home energy audits with interested customers. The fee for this line item will increase to \$200 per month in 2011.

ENERGY STAR Audits are a very educational tool for homeowners. ENE has performed four such audits as of October of 2010. Each home owner was given a report on ways to save energy. Many of the upgrades that are suggested in the audits correspond with programs set up for rebates by the District. It is our finding that the customers will take the report and over several years replace things like the boiler, windows, doors, appliances, programmable thermostats, light fixtures, and light bulb, thereby taking advantage of the applicable rebates.

The District would like to continue to offer the home energy audits in 2011. The District would like to keep the number of audits at ten at a cost of \$200 each and have \$400 available for audit recommendations that are not covered by the rebate programs.

Rebates for ENERGY STAR Appliances continue to be one of our most popular programs. Funds were reallocated to the appliance line item in April 2010, increasing the line item to \$7,283, which was depleted in May. The District has an additional 75 rebates totaling \$4,875 that qualify, but are awaiting funds for 2010 applications. The District is proposing a budget of \$6500 in 2011.

The ENERGY STAR Window and Door incentive had an approved budget, of \$6,000 in 2010. The District is proposing to keep the same level of funding in 2011 with a rebate of \$15 per window and \$40 per door. The limits would also remain the same at 10 windows and 1 door maximum. The federal tax credit will end in December of 2010 so customers replacing their windows and door will not be able to take advantage of the 30 % tax credit for these energy saving measures in 2011.

ENERGY STAR Heating Systems program with an approved budget of \$6,000 was depleted in September of 2010, the District has five rebates totaling \$1250 that qualify but are awaiting funds. The rebate of 10% up to \$250 will remain the same. The District would like to keep the funding of this line item at \$6,000 in 2011.

ENERGY STAR Thermostats/Lighting Fixtures with a budget of \$1,000 had eleven rebates as of October 2010 totaling \$321. We expect more requests for programmable thermostats with the onset of winter. The District would like to continue this line item again but reduce the funding to \$600, which would allow us to process up to 12 rebates at fifty percent of the cost up to \$50.

ENERGY STAR Home Office/Electronic Equipment with a budget of \$2,400 had 51 rebates totaling \$2,400 that depleted the funding in July of 2010. The District has an additional seventeen rebates totaling \$644. The District would like increase the funding for this program to \$3,000 in 2011.

The District seeks to retain the line item for Incentives for Electric Heat Conversion /Geothermal Systems at a budget of \$100. This will continue to leave the line item open should we have a request to convert from electric heat to another source. The District had one inquiry from a customer with electric heat in 2010.

New Construction rebates remains slow as a direct result of the economy. The District processed four rebates at the Harrisville Village in September 2010. The District would like reduce the funds for the New Construction rebates in 2011. The rationale behind this decision being, that all the other residential programs continue to perform well and deplete their allocated budgets. New construction has been very slow with no rebates made to this program in 2009 and only four rebates being issued in 2010. The District does not want to do away with this program because the state and local building

codes still do not mandate that the buildings be ENERGY STAR compliant. The District is requesting to decrease the funding for this program from \$3120 to \$2080 in 2011 because new construction still remains very slow while the other programs continues to be very strong. This will allow the District to process four rebates.

Central Air Conditioning received a lot of activity in 2010; funds were reallocated to this line item, increasing the budget from \$400 to \$1,000 in of April 2010. The total budget was depleted by May. The District processed five rebates in 2010 and has six rebates totaling \$1200 that qualify for a rebate but are awaiting funds. The temperatures this summer were above average and contributed to the increased interest in this program. The District would like to fund this program at \$1,000 in 2011. This will allow us to process five rebates in 2011.

The District proposes to continue the "Change a Light, Change the World Campaign." Our customers were asked to take a pledge to help change the world one light, one energy-saving step at a time. The District has processed \$111 in rebates, and continues to promote this program. The District would like to fund this program next year at the same level of \$500.

The Energy Conservation Calendars were a big hit with our customers last year. Each month there are tips on conserving energy, and the District was able to customize the calendar with a page dedicated to the Demand Side Management Program and the available rebates for 2010. This year the District would like to purchase a 1000 calendars from APPA called eco@home. The costs of the calendars are estimated at \$900, including delivery charges. This would decrease the Calendar line item from \$3,680 to \$900 in 2011.

The District is estimating a carryover of \$17,000, and would like to place \$10,000 of these funds in a line item called Committed for 2010 rebates. This would allow us to use these funds to satisfy any outstanding qualified applications in the various residential programs, where the funds have been depleted. In 2010 the District was able to satisfy \$7183 in rebates that qualified in 2009 but the funds were depleted.

The Commercial and Industrial Programs

The ENERGY STAR incentive for office equipment and electronics that are available to our Commercial and Industrial customers remains active. We have processed two rebates totaling \$100. The District would like to continue this program with the same level of funding for 2011 with \$500.

Lighting & HVAC Projects completed in 2010:

- GS Inc. completed a HVAC project and received a rebate of \$525.

- The Burrillville High School completed a retrofit lighting project in the gym and received a rebate of \$7,203.

Lighting represents the greatest opportunity to save energy and improve the working environments for our commercial and industrial customers. The District has identified several lighting projects for 2011. The following business have contacted the District to receive audits for retrofit lighting projects, the Austin T Levy, Valliere Realty LLC, Knights of Columbus, Café at the Falls, Burrillville Motors, Matrix Properties LLC and Berean Baptist Church.

The District continues to work hard to promote programs to be utilized by our customers. The outreach and educational programs that have been undertaken have resulted in a greater awareness of the importance of conserving energy; this is reflected in the fact that we only carried over \$7,193 last year. This year the carry over is expected to be \$17,000 because some of the lighting projects identified in 2010 did not get done due to budgetary constraints. The District is proposing keep the rebates for the commercial and industrial lighting projects constant at 50% for retrofit lighting and 30% for new lighting projects. This would continue to allow us to accommodate more commercial and industrial customers while still offering them generous rebates on their conservation measures.

Austin T Levy Lighting Project- the District has identified this as one of the projects for 2011. RISE Engineering has been contacted and will be completing an energy audit in the near future. The District would like to allocate \$10,000 to this line item.

Valliere Realty LLC has several commercial rental units and is interested in doing a retrofit lighting project. RISE Engineering has been contacted to complete an audit at these locations. The District would like to allocate \$5,000 to this line item.

Committed Lighting fund- In 2010 the District funded this line item with \$12,325 to accommodate lighting projects that had been identified. The District identified the following business that received audits from RISE; Tanner Hill Inc, Wallum Lake Rod and Gun Club, and GLS Auto. Unfortunately none of these customers followed through with the conservation measures. The Burrillville High school was the only project to complete a retrofit lighting project and they received a rebate of \$7,203.

The District has identified several lighting projects for this line item in 2011; Knights of Columbus, Café at the Fall, Burrillville Motors, Matrix Properties LLC, and Berean Baptist Church. The District would like to fund this line item at \$13,000. This would allow us to have funds available and give us some flexibility should a commercial or industrial customer want to go forward with a new or retrofit lighting project. The District proposes to accommodate them on a first come first serve basis. Customers have been advised that funding is limited.

Consultation fees- This line item is funded at \$1,000 to provide assistance from National Grid or RISE Engineering with the calculation of energy savings on commercial and industrial projects. In 2011 we would like to continue to fund this line item at \$1,000.

ENERGY STAR Commercial Appliances had no activity in 2010. The District recommends continuing with this program for one more year. The District has several restaurants and nursing homes that might take advantage of this line item. The District is requesting a budget of \$700 and plans to contact the restaurants and nursing homes directly to make them aware of the rebate.

The Administration line item calls for funding at the same level as last year. District Staff spends many hours reconciling the budgets, processing rebates, working with potential rebate customers, reporting to the State of Rhode Island Public Utility Commission, as well as researching new programs. The budget will remain at \$20,000.00 to cover the time spent to oversee this most worthwhile endeavor.

In April of 2010 the District moved the Funds for Follow-Up to Successful Programs to our more successful residential programs. The District would like to keep this line item open in 2011 with \$1,660.

The District continued the customer outreach program in 2010. The District worked with Soleil to update our conservation programs and rebate forms on the web site. The 4th Annual Public Power Green Festival and Open House was hosted on September 18, 2010. There were numerous activities that highlighted energy saving ideas.

Over forty Green Vendors attended this year along with the Burrillville Farmers market. The District hosted a table on energy conservation along with raffle items that were donated by the vendors to raise money for the Good Neighbor Energy (GNEF).

This event continues to grow each year both in attendance and vendor participation. By hosting this event at our office it ensures that our customers are receiving updates on the latest in energy efficient products. We would like to create a new separate line for this project in 2011.

In 2011, the District would like to fund the Outreach and Education line item with \$8,000. This will allow the District to update the website with the programs for 2011 at www.pud-ri.org. The District would also use some of these funds for advertisements in the Bargain Buyer; utilize bill inserts with our 2011 DSM program information, purchase energy efficient material to educate our customers, including an Eco News Letter, a booklet on Energy Matters for our Small Business customers, along with other energy conservation materials.

Pascoag continued to be very active in maintaining a presence at community events. In 2010 we participated in the Burrillville Family Fair. At the Family Fair, we

handed out materials on conservation which included brochures, energy wheels, nightlights, refrigerator thermostats, and refrigerator brushes. The attendance was down this year but the feedback was positive from our customers. Since these events are labor intensive the District would like to concentrate its efforts on the 5th Annual Green Public Power Green Festive and Open House and will not participate in the Burrillville Family Fair in 2011. This will allow us to concentrate all our efforts and resources on this one event that we host on the Districts grounds. In 2011 we would like to replace the Community Projects with the 5th Annual Public Power Green Festival.

Burrillville High School Project- As always this partnership continues to be very rewarding. Pascoag Utility District was able to work very closely with the Burrillville High School students this year. The students attended a field trip to the District to give them a better understanding of the process in providing power to the customers of Pascoag Utility District. They viewed a film on "The Crumbling of America" and received a tour of the substation. Each student received background information on the smart grid which included the Department of Energy's book "Smart Grid: Introduction."

Mr. Aldrich's classes worked on two projects this year. The Video Production group created several videos that explained the concept of the Smart Grid to Pascoag Utility District customers. Two of the smart grid videos were chosen and were embedded into the PUD's Website.

The graphic design class produced an animated clip detailing how the smart grid works by showing how the grid would transmit electricity to your home. They also worked on a new green Pascoag Utility District logo which incorporated renewable energy into the design.

The District will continue this relationship and plans to meet with Mr. Aldrich and his students early in 2011. Plans this year include energy efficiency "101" and design of a new LEED home plan. The curriculum is currently under development.

New this year is a line item for An Energy Efficiency Management Certificate Program. This program is being offered by American Public Power Association (APPA) through their Education Institute. The program will give each participant a firm grounding in all aspects of energy efficiency program development, implementation, budgeting, marketing and management. To earn the certificate each participant must complete six courses and then within a year of the completion of the coursework, pass a written exam and submit an energy efficient business plan. To maintain certification, the participant must complete 20 hours of additional approved continuing education training every two years. The District feels this would be a great educational opportunity in the development of the staff. It will also provide an employee on site with a certificate in energy efficiency. The funding for this line item would be \$5,360. *Please see the course summary in exhibit G.*

The funding for the 2011 Demand Side Management Program is based on the 2.0 mils per kilowatt-hour assessment established by legislation. A residential customer using 500 kWh pays \$1.00 on their monthly electric bill for these conservation programs or about \$12.00 per year. The customer has seen the DSM assessment since its inception, and there is a separate line item on the monthly unbundled electric bill identifying this conservation cost.

Pascoag's proposed budget is based on a forecast of Sales for 2011 of 51,904,000 kWh. The estimated budget is rounded up to \$104,000 for 2011. The District anticipates a \$17,000 carryover fund from 2010, bringing the total budget to \$121,000 in 2011.

2011 Program Details- Residential, Commercial and Industrial,
Administrative/Ad and Customer Education and Outreach

Residential Programs

In 2011 Pascoag plans to continue all of the Residential Programs from 2010. Owing to continued high customer demand, Pascoag believes these programs will continue to be successful in 2011. This Summary will detail the programs proposed for 2011 and will review the success of the 2010 programs. Since the funding is limited, the District would like the rebates to be applicable to full time residential customers only.

Energy New England – Residential Conservation Services \$2,400:

Pascoag will continue its relationship with Energy New England (“ENE”) in 2011. The Residential Conservation Service (“RCS”) provides invaluable technical support to the District staff as well as its customers.

In addition to this support, ENE supplies fulfillment materials to the customers of the District. The materials include energy smart CD’s, conservation booklets, and reference materials and resources. ENE sponsors a toll free energy hot line that is available to customers during normal business hours. Pascoag refers customers with high consumption complaints to this hot line after performing a meter test to rule out a faulty meter. If the customers’ questions can not be resolved over the phone, ENE schedules a home energy audit which goes into greater detail as to how the customer can conserve energy. This year Pascoag tested fifteen meters* and sent letters to each customer referring these customers to the toll free energy hot line.

ENE also sponsors an Advisory Group. The Advisory Group includes people from several municipal utilities from the entire New England area. This group meets quarterly to share ideas on all aspects of energy conservation. Pascoag is a member of the Advisory Group.

The cost for this service has increased from \$175 to \$200 per month in 2011.

Audits with Follow-Up Incentives-\$2,400:

Pascoag would like to maintain the same number of audits in 2011, and maintain the same level of funding available for incentive follow-up. This would allow the following:

10- Audits @ \$200 each	\$2,000
Money available for Incentives	\$400

* Meters were proven to be within acceptable accuracy limits

ENE's price remains the same in 2011 at \$200 for each home energy audit. The District has a small number of customers that have taken advantage of the incentives on suggested measures including insulation, weather stripping, electrical outlet insulators, and attic door insulation, etc. Therefore the District proposes to keep that incentive at ten percent (not to exceed \$50). The suggested measures must be implemented in the same calendar year as the audit to qualify for the incentive and can not be a duplicate of a program already established for rebates.

Pascoag has no auditors on staff, and it is more cost effective to use ENE's certified auditors.

ENERGY STAR Appliance Rebates: \$6,500

Pascoag would like to fund this line item at \$6,500 in 2011. This program continues to be very popular. The District reallocated funds to this line item in April 2010 increasing the budget to \$7,283. These funds were depleted in May.

When a customer purchases an appliance they have to remember that it has two price tags: what you pay to take it home and what you pay for the energy and the water it uses. ENERGY STAR compliant models use 10-50% less energy and water compared to the standard models. A compliant washer uses 33% less energy and 50% less water over the life of the washer saving enough money to pay for the matching dryer. A compliant dehumidifier uses 10-20% less energy than a standard model; a compliant dishwasher uses 33% less energy than a standard model; a compliant refrigerator or and freezer uses 50% less energy than one made before 1993; a compliant air conditioner uses 10% less energy than a standard model; and a room air cleaner uses 35% less than the standard models. By reducing energy consumption with ENERGY STAR qualified appliances customers save money by using less, helping to reduce greenhouse gas emissions and help in the fight against climate change.

Many of the District customers now call before making an appliance purchase to make sure the models they are interested in qualify for rebates.

A customer purchasing an ENERGY STAR compliant appliance will receive a rebate of up 10% not to exceed the following for each appliance; refrigerator, freezer, and clothes washer up to \$75; dishwasher or air purifier up to \$50; air conditioner up to \$25; and dehumidifier up to \$20.

ENERGY STAR Windows/Skylights and Doors Incentive: \$6,000

The District would like to fund this line item at \$6,000 in 2011. The District still has funds available in this program. The District has processed \$4,055 in rebates and has \$1,985 available for rebates.

When a customer purchases ENERGY STAR compliant windows and doors and sky lights for the northern area, they will realize energy savings in lower energy use. These windows and doors also help reduce heat loss in winter and offer protection from the summer sun, and reduce condensation and interior fading. ENERGY STAR qualified windows, doors and skylights keep your home cooler in the summer and warmer in the winter.

The District will keep the incentive at \$15 per window, up to a maximum of ten windows per customer and \$40 per door, allowing one door per customer. To qualify all windows and doors must meet energy efficiency standards of a U-factor of .35 or lower. The Federal income tax incentives for windows and doors will end in December of 2010.

ENERGY STAR Heating System Incentives: \$6,000

The District proposes to fund this program for heating system replacement at \$6000 in 2011. The demand for this program continues to be very strong. The District issued 24 rebates totaling \$6,000, depleting the funds in September of 2010.

With the price of fuel to heat a home today, many homeowners are replacing their older systems with ENERGY STAR compliant gas and oil boilers/furnaces and making every drop of fuel count. Although these products are expensive to purchase up front, the cost difference is paid back over time through lower energy bills.

The ENERGY STAR compliant oil and gas furnaces have annual fuel utilization efficiency (AFUE) ratings of 83% and 90%, or higher, making them up to 15% more efficient than standard models.

ENERGY STAR qualified boilers have annual utilization efficiency (AFUE) rating of 85% or greater. Whether the fuel is gas or oil, they use about 6% less energy than a standard boiler, they achieve greater efficiency with improved features like electronic ignition that eliminates the need to have a pilot light burning all the time; new combustion technologies that extract more heat from the same amount of fuel; and sealed combustion that uses outside air to fuel the burner, reducing drafts and improving safety.

The District would like to keep the incentive at \$250 in 2011. This will allow twenty-four customers to take advantage of this program. The Federal income tax credits will end in December of 2010, but there are Stimulus funds available up to 25% or \$2,250 of the cost through February 28, 2011. The District included this rebate form as a mail insert with all the residential customers bills in September of 2010.

The incentive will remain at ten percent, with a cap of \$250.

ENERGY STAR Thermostats/Lighting Fixtures: \$600

The District is recommending a reduction in funding to this program from \$1000 to \$600 in 2011. We would like to continue the fifty percent rebate on lighting fixtures and programmable thermostats. The District has processed eight rebates totaling \$200 in 2010.

Programmable thermostats automatically adjust your home's temperature settings, which allow you to save energy while you sleep and when you are away from your home. These units save energy by offering four convenient, pre-programmed temperature settings that allow you to scale back on heating or cooling of your home. Many homeowners work outside of the home during the day and have different schedules on the weekend, these programmable thermostats allow you to scale back on the heat and cooling during these periods of time and save up to an average of \$150 per year. The return on the investment is usually within one year. When you leave for a weekend or on a vacation by pushing the hold button on an energy saving temperature you can realize even more savings.

ENERGY STAR qualified lighting fixtures use one-quarter less energy than traditional lighting. They distribute light more efficiently and more evenly than the standard fixture. They come in hundreds of decorative styles including portable fixtures, like table, desk and floor lamps, and hard-wired fixtures options like front porch, dining room, kitchen ceiling and under-cabinet, hallway ceiling and wall bathroom vanity fixtures and ceiling fan lighting fixtures. If a customer replaced five of their most frequently used light fixtures in their home with ENERGY STAR qualified models, they could save up to \$65 each year in energy cost.

This incentive will remain at fifty percent, with a cap of \$50.

Home Office Equipment/Home Electronics: \$3,000

This program has had an increase in activity again this year, so the District would like increase the funding. The incentives for this line item will remain at a maximum of \$50 but the percentage of the cost will decrease from 25% to 15%. The District has processed \$2,400 in rebates, depleting the funds for

this line item in July of 2010. The District would like to increase this line item from \$2,400 to \$3,000 which will allow us to process up to sixty rebates.

ENERGY STAR compliant office equipment such as computers, monitors and imaging equipment like printers and copiers, help to eliminate waste through special energy efficient designs. They use less electricity and when they are not in use enter into a low-power mode. The specifications for many office products continue to change making it more difficult to earn the ENERGY STAR label. The products now use as much as sixty percent less electricity than standard equipment which will reduce the greenhouse gas emission equal to about seven million cars. The products that fall under office equipment are: computers, copiers, fax machines, digital duplicators, external power adapters, notebook computers/tablet PC's, mailing machines, monitors, printers, scanners, all in ones, water coolers, and computer servers.

ENERGY STAR compliant home electronics use as much as sixty percent less energy. Even when these electronics are off they use power for features like clock displays and remote controls. The average home has roughly two TVs, three telephones and a DVD player. Approximately ten percent of a household's power use is devoted to TV-related activities. There are about 275 million TV's currently in use in the U.S., consuming over 50 billion kWh of energy each year. ENERGY STAR qualified TV's use thirty percent less energy than a standard model. ENERGY STAR qualified TV's are viewed with an on mode power consumption levels that allow a consumer to realize a savings by curbing the energy associated with downloading program guide data.

The products that fall under home electronics are audio/ video, battery charging systems, digital-to-analog converter boxes, cordless phones, and combination units, external power adapters, televisions and set-top boxes imaging equipment.

The District would like to fund this line item at \$3,000 with a rebate of 15% of the cost, not to exceed \$50.

Incentives for Electric Heat Conversion/ Geothermal Systems: \$100

Although the District has no firm commitments for this line item, we would like to continue to keep the line item open because of the potential savings. Pascoag had several customers that converted from electric heat to oil heat in the past. The District has many other electric heat customers that may decide at a future date to convert.

The geothermal heat pumps are similar to ordinary heat pumps, but they use the ground instead of the outside air to provide heating, air conditioning and hot water. By using the earth's natural heat they are among the most efficient

and comfortable heating and cooling technologies currently available. They use about thirty percent less energy than a standard heat pump, they are quieter than a conventional system. Therefore the District would keep this line open should there be any future request. Geothermal heat pumps also qualify for tax credits of 30% of the cost with no upper limits through December 3, 2016.

New Construction Rebates: \$2,080

The District has processed four rebates in 2010.

This line item is an excellent way to encourage the contractors to upgrade to ENERGY STAR compliant windows, doors, skylights, heating systems, appliances, programmable thermostats, lighting fixtures, and central air conditioning. Since the current building code in the town of Burrillville does not require the contractors to install Energy Star compliant products, the District feels this program is a great way to encourage energy efficiency in the construction process and to reduce the demand for electricity from these new housing developments.

The District would like decrease the funding for New Construction rebates in 2011. The activity for this line item has been slow over the past two years and rather than have funds that are not utilized, the District would rather allocate the funds to more successful programs and see if the activity increase for this line item in 2011.

The budget of \$2,080 will allow us to process four rebates with a cap of \$520 per unit /home in 2011:

ENERGY STAR Boiler/Furnace	\$250
ENERGY STAR Windows/Sky Lights, limit of 10 @ \$15	\$150
ENERGY STAR Doors, limit of 2 @ \$40	\$80
ENERGY STAR Appliances at \$50 each	\$50
ENERGY STAR Thermostats/Lighting Fixtures	\$20
Central Air Conditioning with a SEER of 14 or greater	\$200

Central Air Conditioning: \$1,000

The District reallocated money in April 2010 to increase the budget to \$1,000. The funds were depleted by May, and the District currently has six customers who qualify and are awaiting rebates. This summer was much warmer than

normal which may have accounted for the increase in request for central air conditioning rebates. The District would like to keep the funding for this line item at \$1,000 in 2011.

About one-seventh of all the electricity in the US is used to air condition buildings. ENERGY STAR qualified central air conditioners have a higher seasonal efficiency rating (SEER) than standard models, which makes them fourteen percent more efficient than standard models. For a customer to qualify for this program they must purchase a central air conditioner with a SEER of 14 or greater, EER of 11.5.

The incentive will remain at ten percent, not to exceed \$200.

Change a Light Campaign: \$500

The ENERGY STAR Light Campaign is a national challenge to encourage every American to help change the world, one light – one energy saving step – at a time. The District became a pledge driver in 2008 and has invited our residential electric customers to take a pledge to do their part to save energy and help reduce the risk of global climate change by replacing at least one light in their homes with an ENERGY STAR qualified one (CFL). In 2010 Pascoag Utility District residential customers have taken the challenge, and replaced all of their incandescent bulbs with CFL light bulbs, helping to reduce the greenhouse by 101,759 pounds. This small change will save 60,147 kWh over the life time of the bulbs, an estimated savings of \$7508. *Please see Schedule G for Pascoag Utility District's 2010-2011 participating pledges.*

The District purchased CFL's in 2010 with DSM funds and continues to sell the bulbs with an instant rebate of 50%. This continues to be very popular with our customers, who purchased ninety-three CFL's from the District office in 2010. The District would like to purchase more light bulbs in 2011 to sell for half price when our current supply is depleted.

The ENERGY STAR label on lighting means you are getting a product that is superior in energy efficiency. ENERGY STAR qualified compact fluorescent light bulbs (CFLs) use seventy-five percent less energy than incandescent bulbs and last six to ten times longer.

The District proposes a rebate of fifty percent of the cost of the light bulbs with a cap of \$50 per customer. They will then be asked to take the pledge on line at:

http://www.energystar.gov/index.cfm?fuseaction=globalwarming.showPledge&cpd_id=1809, so we can continue to track the total pledges for Pascoag Utility District.

Energy Conservation Calendars: \$900

Last year the District purchased one-thousand energy conservation calendars. These calendars were produced by Energy Savers and features energy saving tips each month. It shows the customer what to look for when purchasing ENERGY STAR compliant products, and was a great way to advertise our programs, since the calendars also featured our 2010 programs, and rebates amounts on the inside page.

This year the District would like to purchase a digest sized booklet style calendar that includes dozens of easy-to-do, low cost strategies for making your home more energy efficient. The cover will promote and display our name, web site, and phone number. The District would like to order 1,000 copies at \$0.75 each plus the cost of shipping the calendars to the District office. *A page from the Calendar can be seen in Appendix G.*

The total budget requested for this line will decrease from \$3,680 in 2010 to \$900 in 2011.

Committed for 2010 Programs: \$10,000

In 2010 the Public Utilities Commission allowed the District to create a line item called "Committed for 2010 Programs" and fund it with money that was carried over from the previous year. This allowed us to place a carryover of \$7,193 from 2009 into this line item and rebate 30 customers who had submitted qualified rebates but the funds had been depleted.

The District is estimating a carryover of funds from 2010 at \$17,000. The District would like to use \$10,000 of these funds to satisfy qualified rebates for customers who did not receive a rebate in 2010 because the funds had been depleted.

Please see Appendix G for a list of qualifying rebates.

Commercial and Industrial Programs

ENERGY STAR Incentive – Office Equipment/Electronics: \$500

The District issued two incentive totaling \$100 through October of 2010. The District continues to promote this program. The District would like to continue this program at the same level of funding in 2011 but decrease the rebate percentage from twenty-five percent to fifteen percent to match the residential program .

The office equipment and electronics have the same savings that are mentioned in the Home Office Equipment/Home Electronics program. The

incentive will change to fifteen percent of the cost, with a cap not to exceed \$50.

Industrial and Commercial Lighting and HVAC Projects 2010:

2010 Burrillville High School PE Gym Lighting Project: \$7,203

The Burrillville High School Gym lighting retrofit lighting project was completed by Eastland Electric in September of 2010. The school department qualified for a 50% rebate totaling \$7,203.

2010 GS Inc Incentive: \$525

GS Incorporated installed two wall mount inverter heat pumps. These heat pumps qualified for a rebate of \$525.

2011 Lighting Projects:

The rebates for lighting projects rebate are 50% on retrofit projects and 30% on new lighting projects will remain the same in 2011. This will continue to allow the District to rebate more projects.

The District has identified the following projects for 2011:

Austin T Levy School Project – has approached the District to do a retrofit lighting project in 2011. The District has contacted RISE Engineering to schedule an audit. The District would like to allocate \$10,000 to this project in 2011.

Valliere Realty LLC Project- has approached the District for an audit. They are interested in replacing the lighting in several of the existing rental units. RISE Engineering has been contacted to schedule an audit. The District would like to allocate \$5,000 to these units in 2011.

Committed Funds 2011- Lighting Projects: \$13,000

The District would like to allocate funds this line item in order to accommodate unidentified and identified projects. Often, businesses will approach the District after the file date, and ask to be considered for a rebate on a project. This line item gives the District a source of funds to work from, so we do not miss out on an opportunity to work with our business customers on energy efficiency projects.

In 2010 The District was able to accommodate the Burrillville High School PE Gym. This allows us to be proactive and have the ability to work with our customers when they are ready to go forward with a project.

The District has identified five business that are interested in receiving energy audits for possible rebates in 2011; the Knights of Columbus, Café at the Falls, Burrillville Motors, Matrix Properties LLC and Berean Baptist Church. The audits for these projects will be performed by RISE Engineering.

The District would like to fund this line item with \$13,000 and make the funds available on a first come first serve basis.

Consultation fees: \$1,000

National Grid and RISE continue to provide verification of savings on the commercial and industrial projects on an as needed basis. This line item will remain at \$1,000.

ENERGY STAR Commercial Appliances: \$700

Although the District has not had any request for ENERGY STAR commercial appliance, we are very hopeful that our commercial customers will take advantage of this program in the future. The District sent a bill insert to all the business to promote this rebate in 2010. The District plans to meet with the nursing home owners as well as the owners of the local restaurants to make them aware of this rebate in 2011. The District would like to keep the line item open for ENERGY STAR commercial appliances. The following commercial appliances would qualify:

Commercial Dishwashers—ones that earn the ENERGY STAR on average are twenty-five percent more energy efficient and twenty-five percent more water efficient than standard models.

Commercial Fryers- ones that earn the ENERGY STAR are up to twenty-five percent more energy efficient than standard models. They also offer shorter cook times and higher production rates through advanced burner and heat exchanger designs.

Commercial Ice Machines that earn the ENERGY STAR are on average fifteen percent more efficient and ten percent more water efficient than standard models.

Commercial Hot Food Holding Cabinets that have earned the ENERGY STAR are sixty percent more efficient than standard models. Models that meet the requirements incorporate better insulation, reducing heat loss, and - may also offer additional energy saving devices such as magnetic door gaskets, auto-door closures, or Dutch doors.

Commercial Griddles- that earn the ENERGY STAR are about ten percent more energy-efficient than standard models. A qualified grill can save 2270kWh annually.

Commercial Ovens- That earn the ENERGY STAR are twenty percent more energy-efficient than standard models. These ovens can save 1870 kWh annually.

Commercial Refrigerators & Freezers- that meet the ENERGY STAR specifications will be thirty percent more energy efficient than a standard option because they are designed with components such as ECM evaporator and condenser fan motors, hot gas anti-sweat heaters, or high-efficiency compressors that will reduce energy consumption.

Commercial Steam Cookers also known as compartment steamers that meet the ENERGY STAR qualifications are up to fifty percent more energy-efficient than standard models. They can save 6,270 kWh annually.

The District proposes a rebate of ten percent with a cap of \$350 per appliance; this will allow a maximum of two rebates in 2011.

Administrative/Ad/ Education

Administrative Expenses: \$20,000

The District would like to fund this line item at the same level as last year, which is \$20,000.

The funds will be used to pay for staff time, schools and seminars related to DSM, and reimbursement of mileage when employees use their private vehicles for DSM related activities.

Pascoag has two Customer Service Representatives who devote many hours to the DSM programs by working with the customers, taking the application for rebates on the various programs and answering questions over the phone and in person. The Customer Service Supervisor spends many hours researching the compliance of the various rebates that are submitted, reconciling the DSM programs, and updating existing programs as well as creating new programs for next year and requesting reallocation of funds. In addition, the General Manager, and the Assistant General Managers, work with the commercial and industrial customers on various C & I projects and perform site visits.

Follow-Up to Successful Programs: \$1,660

The District is requesting a line item to allow some flexibility in transferring funds up to ten percent to other program with a high customer demand. Any transfer would only be done with the Divisions approval.

Education/Outreach Program: \$8,000

The District worked with Soleil Communication in 2010 to update its website (www.pud-ri.org) with the current DSM programs and rebate application. The web site allows customers to go on line and view the available DSM programs, it also allows them to down load rebate forms. The fed back has been very positive from the customers who have used the site. Many of the rebate forms that we have processed this year have been downloaded from the internet.

Some funds were used to print additional copies of the activity book on safety and conservation; these were given to the children at the open house in September. Funds were also used to rent equipment, purchase food, supplies, and for staff time at the Districts 4th Annual Public Power Green Festival and Open House. This event is so successful the District would like to replace the Community Projects with a line item called the 5th Annual Public Power Green Festival line item and concentrate all of our efforts on that one event.

Funds were used to promote and advertise the Public Power Green Festival and Open House in the local papers. Billing inserts were used to promote the Commercial, Industrial and Residential Programs, as well as notice customers about the availability of stimulus funds for various conservation measures.

The District would like to use some of these funds to update the website in 2011, process bill inserts promoting the various program, run advertisements in the local paper, and to purchase fulfillment materials.

The District would like to purchase 500 copies of a newsletter called "eco@home™" that is released four times a year and deals with conserving energy in your home, at a cost of \$600. The newsletter can be personalized like the calendars with the utility's name, website, and phone number. The District would also like to purchase 100 booklets at a cost \$225 called "Energy Matters for Small Business", as well as 100 books of "Your Home Energy Savers Book" at a cost of \$366.

The District is requesting a budget of \$8,000 for 2011.

BHS Project: \$6,300

The District is requesting a budget of \$6,300 for the 2011 conservation project with the Burrillville High School. The Partnership is now in its tenth year and continues to be very educational for the students, our customers, and the District staff. In 2010 Mr. Aldrich worked with video production students on a film that addressed the Smart Grid and Smart meters.

The District hosted a field trip with the students that worked on the project, and provided them with materials on the subject. They also viewed a movie on the "Crumbling of America" and they received a tour of the substation to see the inner workings of providing electric to the utility customers.

The video created by the video production class was presented to the staff at Pascoag Utility and several members of the RIPUC, at the BHS cookout held in May.

The District did not need to purchase equipment for the 2010 project, so some of the funds were reallocated to the Education and Outreach to fund the 4th Annual Public Power Green Festival.

The District would like to continue this relationship in 2011, with the video production students and the engineering class. The students challenge this year is to create a film on simple steps people can take to conserve energy in their homes. The engineering students will be challenged to come up with plans for a new home that will utilize the most efficiency and be LEED certified. The District would like to continue the outreach program to the customer base by stressing the importance of energy efficiency and energy awareness.

5th Annual Public Power Green Festival: \$8,000

In 2010 the line item was called Community Projects- The District participated in the Family Fair to promote conservation and energy efficiently. Funds from this line item were used to purchase fulfillment items such as night lights, refrigerator thermostats, reusable bags with a conservation message on them and energy conservation coloring books. Banners were purchased to promote the Districts Green Festival in September.

In 2011, the District would like to dedicate the funds from this line item to host the 5th Annual Public Power Green Festival and Open House. The event continues to grow and is a great tool in reaching out to the customer base. It allows us to show our customers the latest conservation measures and how they can benefit from the various rebates that are offered through the Demand Side Management Program.

The District would like to fund this line item in 2011 at \$8,000.

Energy Efficiency Management Certificate Program: \$5,360

The District feels that this program would be a great investment in the current staff. This program is designed for utility personnel interested in enhancing an energy efficiency program. The course consists of six courses: Power and Integrated Resource Planning, Overview of Energy Efficiency Programs, Identifying Your Utility's Energy Efficiency Goals and Developing a Portfolio Strategy, Implementing an Energy Efficiency Portfolio: Part 1 Planning and Budgeting and Part 2-Strategies for Encouraging Customer Participation, Measurement and Evaluation of Program Effectiveness.

To earn the Energy Efficiency Management Certificate, each participant must complete the six required courses and within a year, pass a written exam and submit an energy efficiency program business plan. To maintain certification, the participant must complete 20 hours of additional approved continuing education training (not limited to APPA offerings) every two years. The courses are offered through the American Public Power Association Education Institute and held at different location each year. The courses are offered over a five day period.

This program will allow the District to have an employee on site that is certified in energy efficiently. This will improve the service to our customers by helping them to manage their electric usage more efficiently and effectively. It will also help us to evaluate our current programs and implement new programs going forward. This training will help us to continue to provide our customers with outstanding customer service by having a well educated and knowledgeable employee who has a certificate in all aspects of energy efficiently program development, implementation, budgeting, marketing, and management.

Please see Schedule G for a course brochure.

The cost of the program is estimated at \$5,360 which consists of \$2,350 for the course, \$350 for books and materials, \$760 for the hotel, \$400 for food, \$700 for the flight, and \$800 for a rental car.

Pascoag Utility District
Demand Side Management Programs - 2010

	<u>Approved 9-10</u>
Estimated carry over from 2009	\$ 7,193
Estimated sales for 2010	\$ 104,500
Net 2010 budget	\$ 111,693

	<u>Approved</u>	<u>Expenses</u>	<u>Balance</u>
	<u>Apr-10</u>		
Residential Program			
DR1001 ENE Residential Conservation (ENE)	\$ 2,100	\$ 1,750	\$ 350
DR1002 Home Energy Audits with Incentives	\$ 2,400	\$ 760	\$ 1,640
DR1003 Energy Star Appliance Rebates	\$ 7,283	\$ 7,275	\$ 8
DR1004 Energy Efficient Windows/Doors	\$ 6,000	\$ 4,075	\$ 1,925
DR1005 Heating System Incentive	\$ 6,000	\$ 6,000	\$ -
DR1006 Energy Star Thermostats/Lighting fixtures	\$ 1,000	\$ 321	\$ 679
DR1007 Home Office Equipment/Home Electronics	\$ 2,400	\$ 2,400	\$ -
DR1008 Electric Heat Conversion/Geothermal System:	\$ 100	\$ -	\$ 100
DR1009 New Construction	\$ 3,120	\$ 1,920	\$ 1,200
DR1010 Central Air Conditioner Incentive	\$ 1,000	\$ 1,000	\$ -
DR1011 Change a Light Campaign	\$ 500	\$ 111	\$ 389
DR1012 Energy Conservation Calendars	\$ 3,680	\$ 3,680	\$ -
DR1013 Committed for 2009 Programs	\$ 7,193	\$ 7,193	\$ -
Net Residential	\$ 42,776	\$ 36,485	\$ 6,291
Industrial/Commercial			
DI1001 Energy Star Incentive - Office Equipment	\$ 500	\$ 100	\$ 400
DI1002 Bridido's IGA	\$ 10,367	\$ -	\$ 10,367
DI1003 GS Inc	\$ 525	\$ 525	\$ -
DI1004 Committed Funds- Lighting Projects	\$ 12,325	\$ 7,203	\$ 5,122
DI1005 Consultation Fees	\$ 1,000	\$ -	\$ 1,000
DI1006 Energy Star Commercial Appliance	\$ 700	\$ -	\$ 700
Net Industrial/Commercial	\$ 25,417	\$ 7,828	\$ 17,589
Administrative/Ad/Education			
DA1001 Administrative	\$ 20,000	\$ 12,458	\$ 7,542
DA1002 Funds for Follow-up to Successful Programs	\$ -	\$ -	\$ -
DA1003 Outreach/Education	\$ 10,800	\$ 6,122	\$ 4,678
DA1004 BHS Project	\$ 4,700	\$ 4,700	\$ (0)
DA1005 Community Projects	\$ 8,000	\$ 8,000	\$ -
Net Administrative/Ad/Education	\$ 43,500	\$ 31,281	\$ 12,219
Total suggested DSM 2010 Budget	\$ 111,692	\$ 75,594	\$ 36,099

**Pascoag Utility District
Demand Side Management Programs - 2010**

	Approved 9-10
Estimated carry over from 2009	\$ 7,193
Estimated sales for 2010	\$ 104,500
Net 2010 budget	\$ 111,693

	Approved	Expenses	Balance
	Apr-10		
Residential Program			
DR1001 ENE Residential Conservation (ENE)	\$ 2,100	\$ 1,750	10 months @ \$175
DR1002 Home Energy Audits with Incentives	\$ 2,400	\$ 760	4 Audits @ 190
DR1003 Energy Star Appliance Rebates	\$ 7,283	\$ 7,275	37 dishwashers, 37 refrigerators, 32 clothes washers, 4 freezers, 5 dehumidifiers
DR1004 Energy Efficient Windows/Doors	\$ 6,000	\$ 4,075	232 windows and 15 doors
DR1005 Heating System Incentive	\$ 6,000	\$ 6,000	24 boilers
DR1006 Energy Star Thermostats/Lighting fixtures	\$ 1,000	\$ 321	6 light fixtures, 6 thermostats
DR1007 Home Office Equipment/Home Electronics	\$ 2,400	\$ 2,400	22 TVs, 8 computers, 2 phones, 6 disc players, 1 scanner, 2 printers, 1 home theater, 1 receiver, 2 propane hot water heaters
DR1008 Electric Heat Conversion/Geothermal System:	\$ 100	\$ -	no activity
DR1009 New Construction	\$ 3,120	\$ 1,920	4 units at Harrisville Village
DR1010 Central Air Conditioner Incentive	\$ 1,000	\$ 1,000	5 rebates @ \$200
DR1011 Change a Light Campaign	\$ 500	\$ 111	21 light bulb purchases
DR1012 Energy Conservation Calendars	\$ 3,680	\$ 3,680	1000 calendars
DR1013 Committed for 2009 Programs	\$ 7,193	\$ 7,193	55 rebates from 2009
Net Residential	\$ 42,776	\$ 36,485	
Industrial/Commercial			
DI1001 Energy Star Incentive - Office Equipment	\$ 500	\$ 100	2 laptops
DI1002 Briddo's IGA	\$ 10,367	\$ -	no activity
DI1003 GS Inc	\$ 525	\$ 525	HVAC rebate
DI1004 Committed Funds- Lighting Projects	\$ 12,325	\$ 7,203	BHS PE Gym retrofit lighting project
DI1005 Consultation Fees	\$ 1,000	\$ -	no activity
DI1006 Energy Star Commercial Appliance	\$ 700	\$ -	no activity
Net Industrial/Commercial	\$ 25,417	\$ 7,828	
Administrative/Ad/Education			
DA1001 Administrative	\$ 20,000	\$ 12,458	Labor
DA1002 Funds for Follow-up to Successful Programs	\$ -	\$ -	
DA1003 Outreach/Education	\$ 10,800	\$ 6,122	Conservation handout, coloring books, bill inserts, supplies for the open house.
DA1004 BHS Project	\$ 4,700	\$ 4,700	bus rental labor, cookout
DA1005 Community Projects	\$ 8,000	\$ 8,000	Conservation handout, coloring books, bill inserts, supplies for the open house.
Net Administrative/Ad/Education	\$ 43,500	\$ 31,281	
Total suggested DSM 2010 Budget	\$ 111,692	\$ 75,594	

Calculations of Energy Savings for Energy Star Incentives(1)

<u>Appliance</u>	<u>Specifications</u>	<u>Monthly hours Operation</u>	<u>Monthly kwhr use</u>	<u>Annual kwhr use</u>	<u>Units w/ Incentives</u>	<u>Total annual</u>
Air Conditioner	6000 BTU 500 watts	165	83 74	990 892	Standard EnergyStar	1 98
Clothes Washer	Large Capacity	23	12 11	144 132	Standard EnergyStar	8 96
Dish washer	13,000 Watts	24	31 25	372 300	Standard EnergyStar	8 576
Refrigerator	6-15 years old 17CF, frost free	245	147 103	1764 1236	Standard EnergyStar	5 0
Dehumidifer	Large capacity 650 Watts	340	221 166	2652 1992	Standard EnergyStar	1 660
Total Average kwhrs Savings						1,430

2009 Qualified rebates processed in 2010

(1) From www.pud-ri.org "Energy Calculator".

Calculations of Energy Savings for Energy Star Incentives(1)

<u>Appliance</u>	<u>Specifications</u>	<u>Monthly hours Operation</u>	<u>Monthly kwhr use</u>	<u>Annual kwhr use</u>	<u>Units w/ Incentives</u>	<u>Total annual</u>
Air Conditioner	6000 BTU 500 watts	165	83 74	990 892	Standard EnergyStar	0
Clothes Washer	Large Capacity	23	12 11	144 132	Standard EnergyStar	32
Dish washer	13,000 Watts	24	31 25	372 300	Standard EnergyStar	37
Refrigerator	6-15 years old 17CF, frost free	245	147 103	1764 1236	Standard EnergyStar	37
Dehumidifer	Large capacity 650 Watts	340	221 166	2652 1992	Standard EnergyStar	5
Total Average kwhrs Savings						25,884

(1) From www.pud-ri.org "Energy Calculator"

2010 Appliance savings

**Pascoag Utility District- Electric Department ("Department")
Demand Side Management Charge**

The following provisions will be apply to reflect charges collected under the Demand Side Management Program, pursuant to "An Act Relating to the Utility Restructuring Act of 1996", #96-H 8124 Substitute B, Section 39-2-1.2(b).

The District proposes to include a charge of 2.3 mills per kilowatt-hour delivered to fund a demand side management program and renewable energy resources. The allocation of this revenue between demand side management programs and renewable energy resources shall be determined by the Commission.

The District will submit semi-annual reports to the Commission documenting funds collected and expended. In the event that revenue collected over or under anticipated revenue, the Department shall apply to the Commission for an annual "true-up".

Approval Issued:

Requested Effective Date: January 1, 1998

Approval Date: March 20, 1998

Introducing the **eco@home** 2011 calendar

Launch your 2011 residential energy efficiency program with this attractive, 12-month calendar. Each spread includes seasonally appropriate, actionable tips and ideas for using energy more wisely and eliminating waste. Customers will welcome this money saving information. In fact, in a recent survey over 90% of **eco@home** readers indicated it is important their local utility provide this type of information.

- **LOW COST**

The 2011 edition is designed for production and postal efficiency. You can purchase and mail each copy from printer to residential customers for only \$.75 (plus postage, if applicable).

- **LOCALIZATION**

The cover prominently displays the name, web address and telephone number of the sponsoring local utility.

- **ENERGY SAVING IDEAS**

The digest sized, booklet style calendar includes dozens of easy-to-do, low-cost strategies for making any home more energy efficient.

- **USER FRIENDLY FORMAT**

Each monthly spread includes space for appointments, reminders, birthdays, and more.

- **ENVIRONMENTALLY SENSITIVE**

The calendar is printed on paper that is SFI (Sustainable Forest Initiative) approved with soy inks. In addition, **eco@home** purchases carbon offsets through CNPP (Carbon Neutral Print Productions) to eliminate environmental impact of the manufacturing process.

- **LOCAL PROMOTION**

A press release announcing the program in your community is supplied to each participating utility.

- **DISTRIBUTION OPTIONS**

The **eco@home** calendar can be mail directly to customers by the printer or shipped in bulk to your office in December 2010.



- **ORDER NOW**

The deadline for ordering is **November 1, 2010**. Simply complete the attached order form, visit the APPA Product Store online, email **Products@APPAnet.org**, or call **(202) 467-2926**.

G.



Campaign Resources

[Return to Get Your Organization Involved](#)

- [Getting Started](#)
 - [Event Toolkit](#)
 - [Change the World Booth](#)
 - [Youth Partnerships](#)
 - [Top Pledge Drivers](#)
- All Organizations**



A non-profit electric company.

2010-2011 Participation Highlights

Goal for the Year: **356,000 lbs of ghgs**
 Current Total: **101,759 lbs of ghgs**
 Percent to Goal: **29%**

2010-2011 Savings Breakdown

Greenhouse Gas Emissions: **101,759 lbs**
 Individuals: **8**
 Dollars: **\$7,508**
 kWh: **60,147**
 BTUs: **79,650,060**

Questions about your Goal?
 If you have questions about setting or changing your goal, please email changetheworld@energy.dan.gov.

[See Pledges by Action Item](#)

Archived Campaign Success

2010-2011	2008-2009	2007-2008	2006-2007
Greenhouse Gas Emissions (lbs.)			136,015
Dollars			\$10,415
kWh			78,665
BTUs			129,169,503

[Email This Page](#)

- [Products](#) [Home Improvement](#) [New Homes](#) [Buildings & Plants](#) [Partner Resources](#) [Kids](#)
- [Publications](#) [News Room](#) [FAQs](#) [Contact Us](#) [Privacy](#) [Site Index](#) [Recursos en Español](#)
- [PDF Viewer](#) [Flash Viewer](#) [PowerPoint Viewer](#) [Excel Viewer](#)



[DOE Home
EAF
Search](#)



[EPA Home
EPA Search](#)

2010 Qualified Rebates

Office Equipment & Electronics Account number	Equipment/ Electronic	2010 Rebate Amount
1 2001-1572	Dust Buster	\$ 11.75
2 8915-6972	TV	\$ 22.60
3 10489-8206	Answering Machine	\$ 15.00
4 1501-1230	Printer	\$ 32.50
5 9093-7106	Computer Monitor	\$ 50.00
6 8711-6840	Phone	\$ 25.00
7 3047-2378	TV	\$ 50.00
8 9399-7338	TV	\$ 50.00
9 9399-7338	Blue Ray Disc Player	\$ 42.00
10 9399-7338	Laptop	\$ 50.00
11 6217-4798	Cordless Phone System	\$ 20.00
12 3579-2748	Computer Monitor	\$ 27.50
13 3449-2670	Home Audio System	\$ 50.00
14 3449-2670	HDTV	\$ 50.00
15 3449-2670	Blue Ray Disc Player	\$ 47.50
16 1845-1476	Computer Monitor	\$ 50.00
17 15773-8256	TV	\$ 50.00
Total Office & Electronic rebates		\$ 643.85

Appliance Rebates

Account number	Appliance	2010 Rebate Amount
1 4841-9168	Refrigerator	\$ 75.00
2 14567-6376	Air Conditioner	\$ 25.00
3 5593-4318	Air Conditioner	\$ 25.00
4 4989-3818	Air Conditioner	\$ 25.00
5 7945-6058	Clothes Washer	\$ 75.00
6 2649-2080	Dishwasher & Refrigerator	\$ 125.00
7 2003-1574	Refrigerator & Clothes washer	\$ 150.00
8 2463-1938	Refrigerator	\$ 75.00
9 1741-1404	Refrigerator	\$ 75.00
10 3013-6120	Clothes Washer	\$ 75.00
11 13637-740	Clothes Washer	\$ 75.00
12 3091-2410	Refrigerator	\$ 75.00
13 879-788	Clothes Washer	\$ 75.00
14 7421-5686	Dishwasher	\$ 50.00
15 10213-7980	Clothes Washer	\$ 75.00
16 15559-9492	Clothes Washer	\$ 75.00
17 13459-9718	Air Conditioner	\$ 25.00

2010 Qualified Rebates

18 15297-8688	Refrigerator	\$ 75.00
19 15485-6960	Dishwasher	\$ 50.00
20 5221-4206	Refrigerator	\$ 75.00
21 13647-7700	Air Conditioner	\$ 25.00
22 525-1546	dishwasher	\$ 50.00
23 1539-1252	Air Conditioner	\$ 25.00
24 9275-7234	Refrigerator	\$ 75.00
25 2141-1682	Refrigerator	\$ 75.00
26 10807-8448	Refrigerator	\$ 75.00
27 9657-6024	Air Conditioner	\$ 25.00
28 15527-1478	Air Conditioner	\$ 25.00
29 15439-8782	Clothes Washer	\$ 75.00
30 6229-4806	Air Conditioner	\$ 25.00
31 6011-4646	Air Conditioner	\$ 25.00
32 7747-5918	Air Conditioner	\$ 25.00
33 14121-9000	Clothes Washer	\$ 75.00
34 717-674	Air Conditioner	\$ 25.00
35 2707-2124	Refrigerator	\$ 75.00
36 3141-2454	Dishwasher & Refrigerator	\$ 125.00
37 14617-1080	Refrigerator	\$ 75.00
38 899-4966	Refrigerator	\$ 75.00
39 10489-8206	Dehumidifier	\$ 20.00
40 9173-7176	Air Conditioner	\$ 25.00
41 4249-3262	Refrigerator	\$ 75.00
42 14289-4314	Refrigerator	\$ 75.00
43 10663-8322	Refrigerator	\$ 75.00
44 15735-810	Clothes Washer	\$ 75.00
45 15541-10154	Clothes Washer	\$ 75.00
46 15541-10154	Refrigerator & Dishwasher	\$ 125.00
47 12981-1196	Dehumidifier	\$ 20.00
48 7023-5368	Clothes Washer	\$ 75.00
49 6099-4702	Refrigerator	\$ 75.00
50 8477-6650	Dishwasher & Refrigerator	\$ 125.00
51 10011-7828	Dehumidifier	\$ 20.00
52 5129-3948	Refrigerator	\$ 75.00
53 12639-7330	Clothes Washer	\$ 50.00
54 655-638	Clothes Washer	\$ 75.00
55 5193-4000	Clothes Washer	\$ 75.00
56 12085-7856	Dishwasher	\$ 50.00
57 15745-9988	Dishwasher & Refrigerator	\$ 125.00
58 15745-9988	Clothes Washer	\$ 75.00
59 4217-3236	Refrigerator	\$ 75.00
60 15775-1752	Refrigerator	\$ 75.00
61 11673-9142	Refrigerator	\$ 75.00
62 5649-4364	Clothes Washer	\$ 75.00
63 4689-3572	Clothes Washer	\$ 75.00
64 9399-7338	Dishwasher	\$ 50.00

2010 Qualified Rebates

65	10897-8510	Dishwasher & Refrigerator	\$ 125.00
66	8477-6650	Clothes Washer	\$ 75.00
67	10775-8420	Refrigerator	\$ 60.00
68	14061-1430	Clothes Washer	\$ 50.00
69	581-576	Refrigerator	\$ 75.00
70	1831-1462	Dishwasher	\$ 50.00
71	9685-7578	Clothes Washer	\$ 50.00
72	12343-3660	Refrigerator	\$ 50.00
73	2303-1810	Dishwasher	\$ 50.00
74	2303-1810	Refrigerator	\$ 70.00
75	15799-8440	Refrigerator	\$ 60.00

Total Appliance Rebates			\$ 4,875.00
--------------------------------	--	--	--------------------

Boiler Rebates

Account Number	Boiler/Furnace	2010 Rebate Amount
1 5745-4448	Boiler	\$ 250.00
2 9121-7132	Boiler	\$ 250.00
3 9115-1362	Boiler	\$ 250.00
4 4755-3626	Boiler	\$ 250.00
5 6939-7540	Boiler	\$ 250.00
Total Boiler Rebates		\$ 1,250.00

Central Air Conditioner Rebates

Account Number		2010 Rebate Amount
1 6929-5292	Central Air Conditioner	\$ 200.00
2 7505-5742	Central Air Conditioner	\$ 200.00
3 14085-6628	Central Air Conditioner	\$ 200.00
4 4529-3454	Central Air Conditioner	\$ 200.00
5 5943-4596	Central Air Conditioner	\$ 200.00
6 1023-4842	Central Air Conditioner	\$ 200.00
		\$ 1,200.00

Grand total:	\$ 7,968.85
---------------------	--------------------

Energy Efficiency Management

CERTIFICATE PROGRAM

Invest in Your Work Force Today... Reap the Benefits Tomorrow



APPA American
Public Power
Association

Visit us at www.APPAnet.org



Program Requirements

To earn this certificate, participants must complete the following requirements within one year:

Complete the six required courses

- Power Supply and Integrated Resource Planning: An Introduction
- Overview of Energy Efficiency Programs
- Identifying Your Utility's Energy Efficiency Goals and Developing a Portfolio Strategy
- Implementing an Energy Efficiency Portfolio
 - Part 1–Planning and Budgeting
 - Part 2–Strategies for Encouraging Customer Participation
- Measurement and Evaluation of Program Effectiveness

Pass an online exam

Submit an energy efficiency program business plan

2010 Schedule

The Energy Efficiency Management Certificate Program courses will be held twice a year.

August 2–6, 2010

As part of the Summer Education Institute

Hilton Walt Disney World
1751 Hotel Plaza Blvd.
Lake Buena Vista, FL 32830
Reservations: 407/827-4000

APPA room rate:
\$109 single/double

Room rate cut-off date:
July 8

November 1–5, 2010

As part of the Fall Education Institute

Hilton Portland and Executive Tower
921 SW Sixth Avenue
Portland, OR 97209
Reservations: 503/226-1611

APPA room rate:
\$119 single/double

Room rate cut-off date:
October 11

To register, visit www.APPAnet.org and click on "Events."



Program Description

Have you ever wondered why certain utility programs succeed while others fail? Is it funding, insufficient research, over-estimation of internal resources or lack of customer awareness? Successful programs do not happen by accident—success requires an understanding of the industry, marketplace, customers and many other elements.

The Energy Efficiency Management Certificate Program (EEMCP) will give participants a firm grounding in all aspects of energy efficiency program development, implementation, budgeting, marketing and management.

To earn an Energy Efficiency Management Certificate, each participant must complete the six required courses and then, within a year of completing the coursework, pass a written exam and submit an energy efficiency program business plan. To maintain certification, participants must complete 20 hours of additional approved continuing education training (not limited to APPA offerings) every two years.

Who Should Participate

This program is designed for utility personnel interested in starting or enhancing an energy efficiency program. Utility staff and other individuals who work or have interest in the multiple aspects of energy efficiency, or those who would benefit from a credential for professional development, may also find this program worthwhile.

Coursework

Courses can be taken individually or as part of the certificate program.

Power Supply and Integrated Resource Planning: An Introduction

Monday: 8:30 a.m.–4:30 p.m.

Recommended CEUs .7/PDHs 6

Course Overview

When an electric utility examines options for meeting growing demand for electricity, potential resources include not just a new power plant, but also opportunities for using existing supplies more efficiently. A megawatt saved is far less costly than a new power plant. Learn how utilities apply a comprehensive “big picture” approach to meeting future power needs by developing plans that include building new generating capacity and using existing supplies more efficiently.

Course Topics

- Comprehensive overview of the electric utility system
- The relationship between traditional supply resources and DSM resources
- The integrated resource planning process
- Generation sources, including fossil fuels and renewable energy sources, and their strengths, weaknesses, and environmental considerations
- Utility-owned and operated generation, purchased power agreements, and how joint action agencies supply power for their member distribution systems
- How real-time supply and demand are unique to the electric utility industry
- Components of the transmission system, the importance of system reliability, and how RTOs and ISOs function in this market
- The elements of an electric distribution system (substations, transformers, meters and smart grid technologies)
- Introduction to how utilities can help customers manage their energy usage
- Glossary of industry terms and acronyms

Instructor

Wallace Barron

Overview of Energy Efficiency Programs

Tuesday: 8:30 a.m.–4:30 p.m.

Recommended CEUs .7/PDHs 6

Course Overview

Get an introduction to energy efficiency and demand reduction programs, from the traditional weatherization and water-saving devices to more advanced smart grid technologies. Learn how to help customers use their energy more efficiently and effectively. Position your utility to provide a high level of customer service and reliability. This course will include an overview of the various technologies available to achieve energy efficiency in a variety of settings.

Course Topics

- Review of energy efficiency programs and strategies
- The pros and cons of industrial, commercial, and residential energy efficiency applications and how each application is used most effectively
- The components of a smart grid and how they can help customers and the utility manage usage
- Emerging technologies for commercial use in 5–10 years
- Other energy-efficiency technology benefits for utilities and your community

Instructor

Wallace Barron

Identifying Your Utility's Energy Efficiency Goals and Developing a Portfolio Strategy

Wednesday: 8:30 a.m.–4:30 p.m.

Recommended CEUs .7/PDHs 6

Course Overview

Identifying the goals, potential, costs and benefits of implementing an energy efficiency program is an important step toward building a successful plan. Learn how to establish these components in order to create a program that aligns with your utility's strategic plan and your customers' needs. The instructor will also discuss how to use measurement tools to develop a program implementation strategy.

Course Topics

- Assessing utility needs, opportunities and technical, economic and achievable savings through energy efficiency potential, baseline and load factor studies
- Goal setting (saving kWhs, reducing kWhs, customer satisfaction, market transformation, etc.)
- Aligning energy efficiency programs with the utility's strategic plan and goals
- Establishing qualitative program evaluation criteria
- Identifying customer needs and expectations through demographic research and market assessments
- Developing a short list of programs for cost/benefit screening
- Evaluating programs through cost effectiveness tests
- Gathering data, interpreting results and setting priorities for your programs
- Building a program portfolio
- Best practices from other utilities

Instructor

Bill Jackson

Implementing an Energy Efficiency Portfolio: Part 1–Planning and Budgeting

Thursday: 8:30 a.m.–Noon

Recommended CEUs .3/PDHs 3

Course Overview

To promote energy efficiency to customers, utilities need a portfolio of programs targeted at various segments of customers. Learn how to develop and implement an energy efficiency portfolio suited to your unique customer base.

Course Topics

- Identifying energy efficiency programs that are appropriate for the utility's customer base, geography, strategic goals and system characteristics
- Developing portfolio and program goals
- Conducting market research
- Program planning and design
- Program implementation and tracking

Instructor

Bill Jackson

Implementing an Energy Efficiency Portfolio: Part 2–Strategies for Encouraging Customer Participation

Thursday: 1:30–5 p.m.

Recommended CEUs .3/PDHs 3

Course Overview

One of the most important aspects of a successful energy efficiency program is building participation from the targeted customers. Too often, customers indicate their willingness to participate early on, then don't support the program once it's launched. Learn strategies for building customer buy-in early and keeping them involved through market outreach, a high level of customer service, and branding initiatives.

Course Topics

- Evaluating customer motivation
- Elements of a marketing and communications plan
- Successful marketing and customer outreach strategies
- Reaching the residential, low-income, commercial and industrial audiences
- Building your utility brand and community good will through your energy efficiency program
- Tracking program results
- Integrating your energy efficiency programs into community services

Instructor

Bill Jackson

Measurement and Evaluation of Program Effectiveness

Friday: 8:30 a.m.–4:30 p.m.
Recommended CEUs .7/PDHs 6

Course Overview

Learn how to develop an evaluation plan that aligns with your energy efficiency program goals, reporting requirements, budget, and staff capabilities. The instructor will provide an overview of different program evaluation approaches, terminology and processes. Hear about valuable evaluation strategies and best practices in the utility industry.

Course Topics

- Overview of the measurement and evaluation process
- Defining program goals and selecting approaches
- Program evaluation
 - Why evaluation is needed
 - Impact evaluation
 - Process evaluation
- Understanding evaluation parameters
- Determining what can be accomplished in-house and what should be outsourced
- Data collection and tracking
- Interpreting results and adjusting programs and approaches as needed
- Participate in exercises to solidify concept understanding

Instructor

Mike Koszalka

Instructors

Wallace Barron has 40 years of experience in the electric energy industry. He is president of the Atlanta-based consulting firm, Barron & Associates, Inc., which serves the energy industry in the areas of strategic planning, marketing, customer service, key accounts and competitive issues. He previously worked as the vice president of marketing, customer service and distribution technology at Florida Power Corp. His responsibilities have included key accounts, competitive marketing, market research, customer service, economic development, demand-side management, load management, load research and distribution engineering.



Bill Jackson is a senior consultant for Paragon Consulting Services in Portland, Ore. He has over 32 years of utility experience in marketing, communications, demand response and strategic management. Bill has developed, implemented and managed key account executive programs in Cleveland, Las Vegas and Long Island.



Bill served on the New York State Governor's Committee on Demand Reduction, which planned and executed demand response protocols. He has also provided expert testimony on utility demand response, marketing, and communications to regulatory commissions.

Mike Koszalka is a senior consultant for Paragon Consulting Services in Portland, Ore. He has over 28 years of experience in demand side management and utility services marketing. His experience includes integrated resource planning and integrating demand side management with energy trading and utility operations. Mike also developed new products and services for utilities, initiated new DSM programs and led successful marketing programs. He has appeared before regulatory commissions and is a Certified Measurement and Verification Professional and a Certified Energy Procurement Professional.



Certificate Completion Requirements

Pass an online exam

- The online exam, made up of 100 multiple choice questions, will assess the participant's comprehension of the six required courses.
- Participants can take the exam at their convenience, after finishing the coursework requirement.

Submit an energy efficiency program business plan

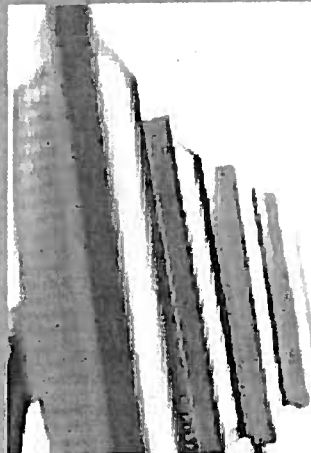
- The plan will be a model for any energy efficiency program the utility undertakes. It will include all of the topics, actions, and issues that a project manager must address while managing an energy efficiency project.
- The plan is graded on nine different components: executive summary, program description, goals, budget, contract management, organizational analysis, program reporting, marketing and exit strategy.
- Participants will receive plan guidelines that outline what is expected in each section.

Timing

Participants must complete the program requirements within one year of attending their first course in the certificate program curriculum.

Bring This Program To Your Utility

Offering the Energy Efficiency Management Certificate Program as an in-house training course is an efficient and cost-effective way for your employees to complete a number of the program's requirements in just five days. For more information, please contact Heidi Lambert at 202/467-2921 or hlambert@APPAnet.org.



Continuing Education Requirement

Those who wish to maintain their designation must complete 20 hours of additional approved continuing education training (not limited to APPA offerings) every two years.

APPA will accept hours earned through participation in conferences and live or online courses that participants have attended or instructed. Candidates should submit via e-mail (hlambert@APPAnet.org) the following information for each event by Dec. 31 in the year that their 20 hours are due:

- Sponsoring organization
- Name of the event
- Where it was held
- Dates it took place
- Number of contact hours

Enrollment Fee

APPA Members

Online Registration	\$2,100
Faxed and Mailed Registration	\$2,350

Nonmembers

Online Registration	\$3,100
Faxed and Mailed Registration	\$3,350

The enrollment fee includes the six courses, cost of study material, exam grading and review of the energy efficiency program business plan.





The American Public Power Association
1975 Connecticut Ave. NW
Suite 1200
Washington, DC 20009-5715

First-Class Mail
Permitted
U.S. Postage Paid
Washington, DC
Permit No. 605

">



Search: [Topics A - Z](#) [Contact Us](#)

[About APPA](#) [Join APPA](#) [About Public Power](#) [APPA Product Store](#) [Hometown Connections](#)

Representing the nation's more than 2,000 electric utilities

LOGIN: PASSWORD: [Forgot Password](#)

[Public Power Directory](#) [Online Suppliers Guide](#)

[Legislative/Regulatory](#) [Utility Operations](#) [Events](#) [Discussion Forums](#) [Newsroom](#) [Careers in Public Power](#) [Research & Development \(DEED\)](#) [Newsletters & Magazines](#) [Special Utility Programs](#)

In This Section

[Home](#)

[Print](#) | [Share](#)

- [Events Calendar](#)
- [Education Courses & Workshops](#)
- [Webinar Series](#)
- [In-House Training](#)
- [Online Training](#)
- [Certificate Programs](#)
- [Accreditation and Continuing Education](#)

Energy Efficiency Management Certificate Program New!



PROGRAM DESCRIPTION

Have you ever wondered why certain utility programs succeed while others fail? Is it funding, insufficient research, over-estimation of internal resources or lack of customer awareness? Successful programs do not happen by accident—success requires an understanding of the industry, marketplace, customers and many other elements.

- [Registration Form](#)
- [Course Brochure](#)

2010 Schedule
The Energy Efficiency Management Certificate Program will be held twice a year.

November 1-5, 2010
 As part of the [Fall Education Institute](#) in Portland, OR

STRATEGIC POWER PLACEMENTS

MANAGEMENT SOLUTIONS

Your source for temporary workforce solutions, project management and mentoring.

[Hometown Connections](#)

The Energy Efficiency Management Certificate Program (EEMCP) will give participants a firm grounding in all aspects of energy efficiency program development, implementation, budgeting, marketing and management.

To earn an Energy Efficiency Management Certificate, each participant must complete the six required courses and then, within a year of completing the course work, pass a written exam and submit an energy efficiency program business plan. To maintain certification, participants must complete 20 hours of additional approved continuing education training (not limited to APPA offerings) every two years.

WHO SHOULD PARTICIPATE

This program is designed for utility personnel interested in starting or enhancing an energy efficiency program. Utility staff who work or have interest in the multiple aspects of energy efficiency, or those who would benefit from a credential for professional development, may also find this program worthwhile.

PROGRAM REQUIREMENTS

To earn this certificate, participants must complete the following requirements within one year:

Complete the six required courses

- Power Supply and Integrated Resource Planning: An Intro
- Overview of Energy Efficiency Programs
- Identifying Your Utility's Energy Efficiency Goals and Developing a Portfolio Strategy
- Implementing an Energy Efficiency Portfolio
 - Part 1 – Planning and Budgeting

**Utilities OnCall
Customer
Service
Improvement**

**Experience
the
efficiencies
of Utilities
OnCall™**

a voice response system that can reduce call centre volume by 66% and overdue accounts by 300%.

OCENTAS
Voice Solutions That

- o Part 2 – Strategies for Encouraging Customer Participation
- Measurement and Evaluation of Program Effectiveness

Pass an online exam

Submit an energy efficiency program business plan

INSTRUCTORS

Wallace Barron has 40 years of experience in the electric energy industry. He is president of the Atlanta-based consulting firm, Barron & Associates, Inc., which serves the energy industry in the areas of strategic planning, marketing, customer service, key accounts and competitive issues. He previously worked as the vice president of marketing, customer service and distribution technology at Florida Power Corp. His responsibilities have included key accounts, competitive marketing, market research, customer service, economic development, demand-side management, load management, load research and distribution engineering.

Bill Jackson is a senior consultant for Paragon Consulting Services in Portland, Ore. He has over 32 years of utility experience in marketing, communication, demand response and strategic management. Bill has been recognized for innovative and strategic management in unique energy environments. He developed, implemented and managed key account executive programs in Cleveland, Las Vegas and Long Island. He received the Emerald Award, from the Consortium for Solar Technology & Renewable Resources, for his work in the renewable energy field. He has also received awards from Global Energy and the Energy Provider Network for his sales and marketing program development skills.

Bill served on the New York State Governor's Committee on Demand Reduction, which planned and executed demand response protocols. He has also provided expert testimony on utility demand response, marketing, and communications to regulatory commissions. He is a frequent speaker on utility customer service and marketing.

COURSEWORK

Courses can be taken individually or as part of the certificate program.

1. Power Supply and Integrated Resource Planning: An Intro

Monday: 8:30 a.m. – 4:30 p.m.
Recommended CEUs: .7/PDHs 6

Course Overview

When an electric utility examines options for meeting growing demand for electricity, potential resources include not just a new power plant, but also opportunities for using existing supplies more efficiently. A megawatt saved is far less costly than a new power plant. Learn how utilities apply a comprehensive "big picture" approach to meeting future power needs by developing plans that include building new generating capacity and using existing supplies more efficiently.

Course Topics

- Comprehensive overview of the electric utility system
- The relationship between traditional supply resources and DSM resources
- The integrated resource planning process
- Generation sources, including fossil fuels and renewable energy sources, and their strengths, weaknesses, and environmental considerations
- Utility-owned and operated generation, purchased power agreements, and how joint action agencies supply power for their member distribution systems
- How real-time supply and demand are unique to the electric utility industry
- Components of the transmission system, the importance of system reliability, and how RTOs and ISOs function in this market
- The elements of an electric distribution system (substations, transformers, meters and smart grid technologies)
- Introduction to how utilities can help customers manage their energy usage
- Glossary of industry terms and acronyms

Instructor
Wallace Barron

2. Overview of Energy Efficiency Programs

Tuesday: 8:30 a.m. – 4:30 p.m.
Recommended CEUs: .7/PDHs 6

Course Overview

Get an introduction to energy efficiency programs, from the traditional weatherization and water-saving devices to more

advanced smart grid technologies. Learn how to help customers reduce their energy usage. Position your utility to provide a high level of customer service and reliability. This course will include an overview of the various technologies available to achieve energy savings in a variety of settings.

Course Topics

- Review of energy saving programs and strategies
- The pros and cons of industrial, commercial, and residential energy efficiency applications and how each application is used most effectively
- The components of a smart grid and how they can help customers and the utility manage usage
- Emerging technologies for commercial use in 5 - 10 years
- Other energy-efficiency technology benefits for utilities and your community

Instructor
Wallace Barron

3. Identifying Your Utility's Energy Efficiency Goals and Developing a Portfolio Strategy

Wednesday: 8:30 a.m. – 4:30 p.m.
Recommended CEUs .7/PDHs 6

Course Overview

Identifying the goals, potential, costs and benefits of implementing an energy-efficiency program is an important step toward building a successful plan. Learn how to establish these components in order to create a program that aligns with your utility's strategic plan and your customers' needs. The instructor will also discuss how to use measurement tools to develop a program implementation strategy.

Course Topics

- Assessing utility needs, opportunities and technical, economic and achievable savings through energy efficiency potential, baseline and load factor studies.
- Goal setting (saving kWhs, reducing kW, customer satisfaction, market transformation, etc.)
- Aligning energy-efficiency programs with the utility's strategic plan and goals
- Establishing qualitative program evaluation criteria
- Identifying customer needs and expectations through demographic research and market assessments
- Developing a short list of programs for cost/benefit screening
- Evaluating programs through cost effectiveness tests
- Gathering data, interpreting results and setting priorities for your programs
- Building a program portfolio
- Best practices from other utilities

Instructor
Bill Jackson

4. Implementing an Energy Efficiency Portfolio: Part 1 – Planning and Budgeting

Thursday: 8:30 a.m. – Noon
Recommended CEUs .3/PDHs 3

Course Overview

To promote energy efficiency to customers, utilities need a portfolio of programs targeted at various segments of customers. Learn how to develop and implement an energy efficiency portfolio suited to your unique customer base.

Course Topics

- Identifying energy efficiency programs that are appropriate for the utility's customer base, geography, strategic goals and system characteristics
- Developing portfolio and program goals
- Conducting market research
- Program planning and design
- Program implementation and tracking

Instructor
Bill Jackson

5. Implementing an Energy Efficiency Portfolio: Part 2 – Strategies for Encouraging Customer Participation

Thursday: 1:30 – 5 p.m.
Recommended CEUs: 3/PDHs 3

Course Overview

One of the most important aspects of a successful energy efficiency program is building participation from the targeted customers. Too often, customers indicate their willingness to participate early on, then don't support the program once it's launched. Learn strategies for building customer buy-in early and keeping them involved through market outreach, a high level of customer service, and branding initiatives.

Course Topics

- Evaluating customer motivation
- Elements of a marketing and communications plan
- Successful marketing and customer outreach strategies
- Reaching the residential, low-income, commercial and industrial audiences
- Building your utility brand and community good will through your energy efficiency program
- Tracking program results
- Integrating your energy efficiency programs into community services

Instructor
Bill Jackson

6. Measurement and Evaluation of Program Effectiveness

Friday: 8:30 a.m. – 4:30 p.m.
Recommended CEUs: 7/PDHs 6

Course Overview

Learn how to develop an evaluation plan that aligns with your energy efficiency program goals, reporting requirements, budget, and staff capabilities. The instructor will provide an overview of different program evaluation approaches, terminology and processes. Hear about valuable evaluation strategies and best practices in the utility industry.

Course Topics

- Overview of the measurement and evaluation process
- Defining program goals and selecting approaches
- Program evaluation
 - Why evaluation is needed
 - Impact evaluation
 - Process evaluation
- Understanding evaluation parameters
- Determining what can be accomplished in-house and what should be outsourced
- Data collection and tracking
- Interpreting results and adjusting programs and approaches as needed
- Participate in exercises to solidify concept understanding

Instructor
Mike Koszalka

CERTIFICATE COMPLETION REQUIREMENTS

- Pass online exam
 - The online exam, made up of 100 multiple choice questions, will assess the participant's comprehension of the six required courses.
 - Participants can take the exam at their convenience, after finishing the coursework requirement.
- Submit an energy efficiency program business plan with APPA.
 - The plan will be a model for any energy efficiency program the utility undertakes. It will include all of the topics, actions, and issues that a project manager must address while managing an energy efficiency project.
 - The plan is graded on nine different components: executive summary, program description, goals, budget, contract management, organizational analysis, program reporting, marketing and exit strategy.
 - Participants will receive plan guidelines that outline what is expected in each section.

TIMING

Participants must complete the program requirements within one year of attending their first course in the certificate program curriculum.

CONTINUING EDUCATION REQUIREMENT

Those who wish to maintain their designation must complete 20 hours of additional approved continuing education training (not limited to APPA offerings) every two years.

APPA will accept hours earned through participation in conferences and live or online courses that participants have attended or instructed. Candidates should submit via e-mail (hlambert@APPAnet.org) the following information for each event by Dec. 31 in the year that their 20 hours are due:

- Sponsoring organization
- Name of the event
- Where it was held
- Dates it took place
- Number of contact hours

ENROLLMENT FEES

	Online Registration	Faxed and Mailed Registration
APPA Members	\$2,100	\$2,350
Nonmembers	\$3,100	\$3,350

The enrollment fee includes the six courses, cost of study material, exam grading and review of the energy efficiency business plan.

BRING THIS PROGRAM TO YOUR UTILITY

Offering the Energy Efficiency Management Certificate Program as an in-house training course is an efficient and cost-effective way for your employees to complete a number of the program's requirements in just five days. For more information, please contact Heidi Lambert, APPA's Education Manager, at 202/467-2921 or hlambert@APPAnet.org.



Pascoag Utility District's 4th Annual Public Power Green Festival!!!



253 Pascoag Main Street Pascoag, RI
Saturday, September 18, 2010
10:00-2:00PM

The Pascoag Utility District Office will be holding its' 4th Annual Green Festival in honor of Public Power Week!!! Donate \$2.00 to the RI Good Neighbor Energy Fund and receive a bracelet that will allow you to get an ice-cream sundae, cotton candy and popcorn! The Rhode Island Good Neighbor Energy Fund provides energy assistance to Rhode Islanders in temporary crisis who cannot pay their energy bills and do not qualify for state or federal funds. To date, the RIGNEF has helped over 36,000 RI families.

There are free activities for children and conservation information for adults! There will be over 40 Green Vendors in attendance! Come see our office solar project! Purchase products from the hardworking farmers of the Burrillville Farmer's Market! Enter our raffle to win a \$50, \$25 or \$15 credit toward your electric bill!

Don't miss out! Save the date!

Children's Activities Include:

- ◆ Face Painting!
- ◆ Balloon Animals!
- ◆ Decorate your own construction hat!!
- ◆ Coloring Books and Crayons!
- ◆ Games!
- ◆ Coloring contest!
- ◆ Bucket Truck Rides and much more!

Adults can:

- ◆ Find out how to save on the high cost of energy.
- ◆ Get energy saving tips and free conservation material.
- ◆ Visit our onsite green vendors!
- ◆ Enter a raffle to win credit toward your electric bill!
- ◆ Buy locally grown fruits, vegetables & much more from hard-working farmers and green vendors!



Pascoag Electric
A Pascoag Utility District Company

Danville Farmers Market

Recycling
Raff

Family Fair 2010

Energy Efficiency
Energy Assessment
Program





Rea
Ran

Smile
Families

Pascoag Electric
Pascoag Utility District Company

Science Museum &
Science Activities
Center





4th Annual Public Power Green Festival





NO
SKATEBOARDS
BICYCLES
ROLLERBLADES

SPRING
CASH ONLY





SAVE FREE ENERGY AUDIT SAVE \$\$\$
SAVE 25% TO 40% OFF HEATING & A/C BILLS FOREVER

Free In-Home
Energy Audit
ThinkSmartInsulationRI.com
401-524-6361



LATE CIG
AUTOMATIC









Welcome to
BURRILLVILLE
FARMERS' MARKET





















On Site. On Time. On the Money.

603

GEM

887 GemOnTime
434 4344
887-5555

Line Drive



2013





WHERE TO FIND
MILK IN PROGRESS
 IN RHODE ISLAND



WITH THE ENERGY OF MILK
 and the comfort of...

PROGRESS MILK
 11.2oz 1% FLAVORED

The only milk with a...
 The only milk with a...
 The only milk with a...

P









JOINTLY ADM

Clean Water
Agency

Hagerly
man
Simsone
Director



Pascoag Electric

Utility District Company

And Preserving Our State

source... Clean Water

METER REPL

JECT

001775



PASCOAG
UTILITY DISTRICT

Register
For
Raffles
Here!















PASCOAG UTILITY DISTRICT

253 Pascoag Main Street
P.O. Box 107
Pascoag, R.I. 02859
Phone: (401) 568-6222
Fax: (401) 568-6064

Pascoag Utility District Residential Incentives 2010

Product:

ENERGY STAR refrigerator/ clothes washer:
ENERGY STAR dishwasher / air purifier:
ENERGY STAR air conditioner:
ENERGY STAR dehumidifier:
ENERGY STAR compliant window, up to 10 windows:
maximum

ENERGY STAR compliant door, up to 1 door:
ENERGY STAR heating system replacement:
ENERGY STAR thermostat/ lighting fixtures:
ENERGY STAR electronics and office equipment:
ENERGY STAR central air conditioners:

Free Home Energy Audits with incentives:

New Construction Rebates:

Change a Light Campaign Energy Star Light bulbs:

Electric Heat Conversion:

Please contact the District office for more details.

Rebate:

\$75
\$50
\$25
\$20
\$15 per window, 10 windows
\$40 per door, 1door maximum
10% of the cost, \$250 maximum
50% of the cost, \$50 maximum
25% of total cost, \$50 maximum
10% of total cost, \$200 maximum
10% of cost, up to \$50
\$520 maximum

In 2010 the District will join the ENERGY STAR Change a Light Campaign! The ENERGY STAR Change a Light Campaign is a national challenge to encourage every American to help change the world, one light -one energy-saving step - at a time. You can show your commitment by pledging to replace at least one light in your home with one that has earned the ENERGY STAR rating. The Pascoag Utility District has become a pledge driver and would like to invite at least one hundred electric customers to take the pledge. Customers who purchase ENERGY STAR light bulbs can bring in the receipt and receive a 50% incentive not to exceed \$50.00.

*** All rebates are subject to funds availability and you must be a full time resident of the District. ***

All rebates will be applied to your active electric account.

You can download the applications from our website @ www.pud-ri.org or you can come into the office to pick them up. Please bring in proof that the products are ENERGY STAR compliant and the sales receipts.



PASCOAG
UTILITY DISTRICT

Pascoag Electric
253 Pascoag Main Street
P.O. Box 107
Pascoag, RI 02859
Phone: (401) 568-6222
Fax: (401) 568-6262

Pascoag Utility District Commercial Incentives 2010

<u>Product:</u>	<u>Rebate:</u>
ENERGY STAR office equipment:	25 %, up to a maximum \$50
ENERGY STAR commercial dishwasher:	10 %, up to a max rebate of \$350
ENERGY STAR commercial fryer:	10 %, up to a max rebate of \$350
ENERGY STAR commercial ice machine:	10 %, up to a max rebate of \$350
ENERGY STAR commercial hot food holding cabinet:	10 %, up to a max rebate of \$350

*** All rebates are subject to funds availability. All rebates will be applied to your active electric account.

ENERGY SAVING TIPS FOR USING HUMIDIFIERS AND DEHUMIDIFIERS

Typically humidifiers are run during colder months when various types of heating systems have a tendency to dry out the air in a home.

Dehumidifiers remove excess moisture from the air and are usually run during the warmer, more humid months. Basements are prime areas for dehumidifiers.

Here are a few ways to save energy and stay comfortable when using these appliances:

- Purchase a low wattage unit. If your comparing dehumidifiers with the same capacity, check the wattages on the nameplates. A lower wattage unit that does the same job is a better value.**
- Look for a humidifier with adjustable humidistat to maintain desired humidity and set so the appliance does not run continuously.**
- It's estimated that a 175-watt humidifier running 240 hrs. per month (approx. 8 hrs. per day) uses 42 Kwh per month. At a rate of .14 cents per Kwh, that equates to roughly \$5.88 per month to run the appliance.**
- When using a dehumidifier adjust to lowest setting that still provides adequate dehumidification.**
- Clean the unit. Dust or vacuum the dehumidifier at least once a year before you plug it in. If the unit is difficult to clean, check the owner's manual. Most portable humidifiers on the other hand, require cleaning or sanitizing on a very frequent and regular basis. Check owner's manual.**
- Keep in mind that a 700-watt dehumidifier running 240 hrs. per month (approx. 8 hrs. per day) uses 168 Kwh per month. Based on .14 cents per Kwh, it costs approximately \$23.50 per month to run this appliance.**
- Both humidifiers and dehumidifiers work best when air can circulate freely through the appliance. Place away from walls and bulky furniture.**
- When shopping for appliances look for the Energy Star label. Energy Star appliances have been identified as being significantly more energy efficient than average comparable models.**

Brought to you by PASCOAG UTILITY DISTRICT



For more information call the Energy New England Hotline at: 1-888-772-4242

Rhode Island Deliverable Fuels Efficiency Program Terms & Conditions

Incentives: Subject to these Terms & Conditions, the RI Office of Energy Resources ("RI OER"), through the EnergyWise Program (the "Program"), will pay incentives to eligible Rhode Island homeowners for the installation of Energy Efficiency Improvements (EEIs) described in this Program information.

- 1. Eligibility:** For an applicant to be eligible, a property must: (a) be served by a heating fuel other than natural gas or electricity; (b) have had, since January 1, 2010, a Program energy audit in which EEIs were recommended, (c) consist of a one to four unit building, and (d) be owned and occupied by the applicant, who must be ineligible for assistance from the Low Income Weatherization Assistance Program.
- 2. Contractor Eligibility:** Installation of weatherization improvements must be performed by a Contractor that is Building Performance Institute (BPI) certified. Do-it-yourself projects and weatherization work performed by non-approved Contractors are not eligible for Program incentives. Heating and water heating improvements must be installed by licensed RI contractors.
- 3. Post-Installation Work Verification:** The Program reserves the right to withhold payment of any incentive until it has performed a verification that the specified installation has been performed. If the Program determines that the EEIs were not installed in a manner that is consistent with program guidelines and applicable state and local code requirements, the Program may require that the installation be modified by the installing Contractor before making any incentive payments.
- 4. Energy Efficiency Improvements:** (a) The Program will only pay incentives for the pre-approved EEIs identified by a Program audit and specified on the front of this Application. (b) All EEI installations must be installed in conformance with state and local code requirements. (c) All weatherization EEIs must be installed by a Building Performance Institute (BPI) Certified Contractor in accordance with BPI protocols in order to qualify for incentives. Do-it-yourself installs will not qualify for incentive.
- 5. Incentive Amount:** The program will provide incentives for approved EEIs in the amount of 25% of the total eligible improvement cost, up to a maximum of \$2,250 per dwelling unit.
- 6. Contractor Requirements:** Contractor is responsible for completing this rebate form and providing it to the customer for rebate submission/verification along with all supporting documentation including signed invoice(s) or dated sales receipt(s), as well as documentation that all installers have been paid in accordance with applicable Davis-Bacon wage regulations. For more information on wage regulations, please visit the Rhode Island Office of Energy Resources website at www.energy.ri.gov
- 7. Instant Rebate Processing:** In order for the customer to receive an instant rebate from the contractor, the customer must sign this rebate form over to the contractor. The contractor will then apply to Pascoag Utility District for the rebate. The customer agrees to pay the contractor any applicable installation costs, minus the anticipated rebate.
- 8. Proof-of-Cost of Installation:** Depending on the method of rebate, the customer or installing Contractor must submit a legible copy of the itemized Contractor invoice(s) which document(s) the scope and cost of the EEIs. In addition, the Program may request any other reasonable documentation to verify the date of installation or the cost to the Customer of purchasing and installing the EEIs. The documentation shall be provided with submission of this application.
- 9. Installation Service Cost:** The Program will recognize material and installation costs only to the extent that they are reasonable and actually incurred by the Customer and fall within the guidelines of the Program.
- 10. No Warranties:** (a) The Program does not endorse, guarantee, or warrant any particular Contractor, manufacturer or product. (b) The Program does not make any representation of any kind regarding the results to be achieved by the EEIs or the adequacy or safety of such EEIs.
- 11. Limited Scope Review:** The scope of review by the Program and its Program Inspector of the installation of EEIs is limited solely to determining whether incentives are payable. It does not include any kind of safety or code review and should not be relied upon as one.
- 12. Changes in the Program:** The Program and these Terms & Conditions may be changed at any time without notice.
- 13. Tax Liability:** The Program is not responsible for any tax liability that may be imposed as a result of the incentive by Customer.
- 14. Contractor Insurance:** The Program is not responsible for any damage that may be caused as a result of an installation of any EEI by the Contractor. Approved Contractors shall maintain insurance in accordance with the Pascoag Utility District residential Contractor participation guidelines.
- 15. Program Length:** Program period is July 15, 2010 through February 28, 2011. All rebate forms must be completed and received by March 31, 2011. However changes to or discontinuation of the program may occur without prior notice.
- 16. Payment:** The Program expects to make incentive payments to eligible rebate recipients within 30 days of satisfactory work verification.

Mail completed applications to:

**EnergyWise Program c/o RISE Engineering
1341 Elmwood Avenue, Cranston, RI 02910**

Be sure to include a copy of the invoice from your contractor that includes a description of the work performed in your home, along with the required wage documentation.

Deliverable Fuels Program — Rhode Island

For eligible energy efficiency improvements recommended by an EnergyWise program audit and made to a 1-4 unit home heated by fuels other than gas or electricity. Improvements must be installed between 7/15/10 and 2/28/11. Application form and documentation must be received by 3/31/11.

Customer Name: _____ Phone Number: (_____) _____ # of Units: _____
Address: _____ Unit: _____ City/Town: _____ State: _____ Zip: _____

EnergyWise client number (must be filled in): _____ E-Mail Address: _____
Address: _____ (where rebate is to be mailed, if different from above) City/Town: _____ State: _____ Zip: _____

Name of Contractor: _____ License Number: _____
Address: _____ Unit: _____ City/Town: _____ State: _____ Zip: _____

Energy Efficiency Improvements Installed

DESCRIPTION OF MEASURE	TYPE OF INSULATION	BEGINNING R-VALUE	ADDED R-VALUE	QUANTITY INSTALLED	COST OF MEASURE
Attic Insulation	<input type="checkbox"/> Batt <input type="checkbox"/> Blown-in <input type="checkbox"/> Other _____			FT ²	
Wall Insulation	<input type="checkbox"/> Batt <input type="checkbox"/> Blown-in <input type="checkbox"/> Other _____			FT ²	
Basement Insulation	<input type="checkbox"/> Batt <input type="checkbox"/> Blown-in <input type="checkbox"/> Other _____			FT ²	
Duct Insulation	<input type="checkbox"/> Batt <input type="checkbox"/> Other _____			Lin. Ft.	
Heating Pipe Insulation	<input type="checkbox"/> Foam <input type="checkbox"/> Other _____			Lin. Ft.	
DESCRIPTION OF MEASURE	QUALIFYING CRITERIA				COST OF MEASURE
Air Infiltration Sealing ¹	Starting cfmso _____ Ending cfmso _____ Target cfmso _____				
Heating System Replacement <i>(must be replacing a unit that is 15+ years old)</i>	Boiler: <input type="checkbox"/> Oil ≥ 85% AFUE* <input type="checkbox"/> Propane ≥ 85% AFUE*				
	Furnace: <input type="checkbox"/> Oil ≥ 83% AFUE* <input type="checkbox"/> Propane ≥ 90% AFUE*				
	Steam: <input type="checkbox"/> Oil ≥ 82% AFUE* <input type="checkbox"/> Propane ≥ 82% AFUE*				
Water Heating System Replacement <i>(must be replacing a unit that is 10+ years old)</i>	<input type="checkbox"/> On-Demand Water Heater ≥ 82% Efficiency Factor				
	<input type="checkbox"/> Indirect Fired Water Heater				
	<input type="checkbox"/> Condensing Water Heater ≥ 80% Efficiency Factor				
TOTAL COST OF MEASURES					
REQUESTED INCENTIVE = 25% of the Total Cost of Measures <i>(not to exceed \$2,250 total incentive per dwelling unit improved)</i>					

¹ Installing BPI certified contractor must provide these values based on blower door testing of your home.
 * Annual Fuel Utilization Efficiency

Work Completion and Rebate Validation — Customer to choose whether the customer or contractor will receive the rebate.
 Rebate Recipient — Customer: I hereby affirm and certify that the above mentioned energy efficiency improvements have been installed. I agree to the Terms and Conditions stated on the reverse side of this application. I have attached a copy of all paid invoices for the work that was performed at my residence.

Customer (print name): _____ Customer (signature): _____ Date: _____
 or

Rebate Recipient — Contractor: My signature here attests that I agree that the rebate will go directly to the Contractor. I hereby affirm and certify that the above mentioned energy efficiency improvements have been installed. I agree to the Terms and Conditions stated on the reverse side of this application. I agree that in order to qualify for the instant rebate under the Program, I must sign over the rebate to the Contractor. I agree to pay any additional installation costs minus the anticipated rebate to the Contractor.

Customer (print name): _____ Customer (signature): _____ Date: _____

Mail completed applications to:
EnergyWise Program c/o RISE Engineering
1341 Elmwood Avenue, Cranston, RI 02910

Be sure to include a copy of the invoice from your contractor that includes a description of the work performed in your home, along with required wage documents.



Why Electric Heaters Won't Slash Bills -- just some facts.....

With the prices of natural gas, heating oil, and propane ... how folks are going to afford to heat their homes during the winter season is of real concern for everyone.

Winter is also the time when companies run full page ads promising that their "special heaters" will help save big bucks on energy bills. No matter what the catchy name is (*and there are many*), basically these are all just glorified electric space heaters ... and they work the same way. They plug into an outlet and shoot hot air in one direction. And with the claims they make, those heaters can cost hundreds of dollars yet give off as much heat as ceramic heaters which can be purchased at hardware stores ... usually for a lot less. The real deal is that many companies are charging hundreds of dollars for something that can be purchased for much less.

There is *no magic* to Electric Space Heaters. If they plug into a house electrical circuit, they all have several things in common:

- They are all 100 - percent efficient at turning electricity into heat
- They all convert one watt of electricity into 3.413 British thermal units of heat
- Higher wattage heaters produce more heat
- Plug-in space heaters are limited to 1,500 watts, or 5,120 BTUs

Regardless of the claims a manufacturer makes about their plug-in electric space heater, they are all limited to the facts above.

Try to avoid using supplemental space heaters, including, electric, kerosene or propane models. Not only are they expensive to operate, they can also be very dangerous.

Electric space heaters are generally inexpensive to buy but can increase your electric bill dramatically if you don't watch it. Nearly all electric space heaters produce the same amount of heat, so the differences lie in safety features, convenience features, reliability, and the way the heat is directed. Space heaters are a fairly inefficient way to convert electricity to heat, and they can also run up the electric bill.

Basically, they're good for keeping one room warm at a time, but that means you still have to keep the heat up for the rest of the house...and don't forget to factor in the cost of electricity to run the heater.

It does not matter whether the heater uses electric resistance coils or quartz lights shining on a "cured copper element" or "ceramic quartz tubes" to produce the heat. The wattage consumed by an electric space heater determines how much heat it can produce.

A 1,500 watt heater will produce the same amount of heat regardless of its cost or other features. A \$40 heater will be as efficient and effective as a \$400 heater. Some ideas seem to stretch the amount of heat an electric heater can produce -- like including a high mass ceramic disk or tubes filled with water or oil in the heater. Some of the electricity consumed by the heater is used to heat this higher mass so that after the heating element shuts off, heat from the now heated mass continues to radiate from the heater. This does not make the heater more efficient, since electricity was used initially to heat the mass, but it does make the heat feel like it lasts longer.

Some heaters bury the heating element deep in the heater and include a fan that blows air across the element so that heated air comes out one part of the heater while the rest of the heater remains cool to the touch. Others place the heating elements behind a metal screen for more direct transfer of the heat. In this last case, the metal screen can get quite hot.

All new plug-in electric space heaters are equipped with a sensor that shuts off the heating element in the event the heater is tipped over onto its back or side. The bottom line with any electric heater is that the less wattage the heater consumes, the less it will cost to operate. But also keep in mind, the less wattage it consumes, the less heat it will produce as well.

A pretty good rule of thumb is - if the manufacturer's advertising claim sounds just too good to be true, *it probably is!*

Finally, and most importantly ... be safe if using a space heater. Electric space heaters cause an average of 3,000 fires each year in the U.S., often because of improper use, according to the National Fire Protection Association.

If using an electric space heater, please remember the following:

Operate heater away from combustible materials. Do not place heaters where towels or the like could fall on the appliance and trigger a fire.

Avoid using extension cords unless absolutely necessary. If you must use an extension cord with your electric heater, make sure it is marked with a power rating at least as high as that of the heater itself. Keep the cord stretched out.

Do not permit the cord to become buried under carpeting or rugs. Do not place anything on top of the cord.

Never place heaters on cabinets, tables, furniture or other like objects. Never use heaters to dry wearing apparel or shoes.

Brought to you by Pascoag Utility District



PASCOAG
UTILITY DISTRICT

For more information call the Energy New England Hotline at: 1-888-772-4242

GREENING YOUR LIFESTYLE

Here are some useful steps that may help you take a more proactive approach to going Green. And that means protecting our environment and sustaining its natural resources for current and future generations. The time is now and.....*Everyone Can Help Out!*

Reducing, Reusing and Recycling

- Recycling is important, but first and foremost: **USE LESS**....
- Set aside bins in your home to separate and collect recyclable materials, including newspapers, white paper, clear and colored glass, plastic water and milk bottles, aluminum, cardboard, batteries and fluorescent light bulbs. Check with your local trash-collection company, municipal government or business directory to find out what recycling services are available.
- Packing peanuts and other loose fill will sit in a landfill for centuries, but there are lots of places you can bring them for recycling. Check with your local trash-collection company, municipal government or business directory to find out what recycling services are available.
- Many computers, monitors, cell phones and other electronics include toxic materials that should not sit in landfills, and you'd be surprised how many retailers and other companies will take your old gadgets for recycling. Check with your local trash-collection company, municipal government or business directory to find out what recycling services are available.
- Use a composter; it can reduce the volume of your garbage by 20% or more.

Cleaning

- Use non-toxic, environmentally safe, biodegradable cleaning products, including laundry products, which you can find at any natural grocery and even many mainstream stores. Just read the labels carefully.
- Don't pollute your indoor air or mask odors that could alert you to a problem. Choose fragrance-free products.
- Consider using "old-fashioned" cleaning products like vinegar, baking soda, borax and lemon juice.

Lawn Care and Gardening

- Use nontoxic gardening techniques. Many gardeners over-apply or improperly apply pesticides, putting themselves, their families and pets at increased health risk. Nearly half of all households have pesticides stored within reach of children. About 230,000 people each year are treated in hospital emergency rooms for injuries related to various lawn and garden tools. Our clean air and drinking water are affected by pesticides and garden equipment emissions.
- Set your mower to cut the grass no shorter than 3 inches. Leave the clippings where they fall; their nutrient payload equals the best fertilizer. A mulching mower helps.
- Water early in the day and only when needed. If you use a timed sprinkler system, consider using a rain or soil moisture meter that interrupts the watering cycle when it is raining or when the soil is wet enough.

- Put up a bird feeder to reduce pests.
- Grow the right type of grass for your region.

Transportation

- When replacing your automobile, consider a high-efficiency car if you can afford one. Check the U.S. Department of Energy's list of most fuel-efficient cars to find the one that's right for you.
- Rather than driving your car to work every day, try other ways, even if only one or two days a week. You can walk, ride your bike, take the bus or the train or join a car. You'll be cutting down on air pollution, greenhouse gas emissions, oil consumption and your costs of fueling and maintaining your vehicle. And mixing up your commuting routine helps you avoid falling into the workday rut.
- Urge your workplace to have a van-pool, environmentally responsible purchasing policies and an improved indoor environment. Rid your workplace of secret energy addicts. They are everywhere.

Personal practices

- Buy locally produced items, including produce and other goods. It reduces the amount of fossil fuels required to transport the things you buy from other parts of the country or the world. It also reduces the amount of plastic and paper products consumed in the packaging of such far-traveling products. Buying local reduces the consumption of valuable natural resources.
- Instead of using grocery stores' disposable plastic or paper bags, bring your own reusable tote bags, which are available for sale at many grocers and other retailers. The bags are sturdier than disposable bags, making the trip home easier, and they don't waste resources or end up in landfills. If you must use disposable bags, ask your bagger to avoid double-bagging whenever possible.
- Advocate for green building codes and regulations in your community.
- Switch to socially responsible investing.
- Switch to a more plant-based diet; one of the largest sources of GHGs is the livestock sector, ruminants alone are responsible for 18% of the world's methane emissions. Grow your own food, not only will you be saving on transportation and energy but you could (provided you do not use fertilizers and pesticides) also be eating organic!
- Eat organic, on average organic farms use 37% less energy than conventional farms.

Water:

- To conserve water, choose showers over baths. A 5-minute shower uses approximately half the water of average bath.
- Go low flow to reduce water consumption. Switch to water-efficient products such as a low-flow toilets and showerheads.
- Fix leaky faucets to reduce wasted water.

Energy

- Unplug the "secret energy addicts" in your home: TVs, VCRs, DVD players, cable TV boxes, computers and printers, video game consoles, microwave ovens and AC adapters for cell phones, digital cameras and other electronics. Most electronic equipment, including anything that uses a remote control, is designed to consume energy when it is turned off. That "off" setting is actually a "standby" or "idling" mode.
- Switch to energy efficient appliances - Energy Star - and "green" electricity providers at home and at work.
- Regularly clean your furnace filter. It can make your furnace up to 50% more efficient.
- Switch to energy-efficient compact fluorescent light (CFL) bulbs and save up to 78% on energy costs. CFLs have the added advantage of lasting ten times longer than traditional bulbs and, because you won't have to replace them as often, you'll create less landfill.
- Install dimmer switches in your home, they can reduce energy consumption by up to 20%. Similarly, motion sensor lights the exterior of your home can provide energy savings by switching lights off automatically when not detecting movement. Timers are also an effective way to reduce energy consumption. They can be programmed to use electricity only when it's needed.
- Turn down your thermostat in the winter by 2 degrees and up by 2 degrees in the summer.
- Ceiling fans use far less energy than the air conditioner
- Run dishwasher only when full and on its energy-saver mode
- Clean your refrigerator's coils and defrost it regularly
- Wash your clothes in cool rather than hot water. Dry half your clothes on the clothes line or drying rack.

Heat:

- Insulate your home. Good quality insulation can save you up to 20% of your energy bill
- Pipe wraps reduce heat loss and help save on your water heating costs. Shrink film, thresholds, weather stripping and sealants provide quick and easy solutions to help prevent escaping heat.
- Maximize passive solar power by opening and closing the blinds in order to heat and cool your home
- Install a programmable thermostat, it can allow you to save on energy costs by adjusting the temperature so the furnace and air-conditioning don't come on as often when you are sleeping or away from home.
- Insulate your water heater
- Caulk and weather-strip your home

FOR MORE INFORMATION CALL THE ECHO//ENERGY NEW ENGLAND HOTLINE AT 1-888-772-4242

Beware of Vampire Power!!!

Vampire power is created by any appliance that continues to draw power when not in use, which, in the typical home, includes dozens of appliances ranging from the clock radio on your night stand to the computer in your home office. A couple of watts here, a couple of watts there are sucked away 24 hours a day, 365 days a year. Seem scary?**it could be!!!**

Some household appliances are sneaky and draw power even when they are shut off. The source of that drain has been given any number of derogatory names, from vampire power to wall wart to phantom load. And like all vampires, this villain goes without notice --until the electricity bill arrives at the end of the month.

Vampire power can best be spotted at night. Turn off all the lights and look around your home. Every appliance marked by an LED light, or anything else that glows, is drawing electricity. Not everything that leads to vampire power can be seen in the dark, however. Some must be felt. Cell phone chargers, for example, draw electricity when they are plugged in, whether they are connected to the phone or not.

Uncertain whether an appliance is drawing electricity? Try laying your hands on it. If it's an electrical item that's warm to the touch, it's using energy. Anything that must be reset after a power failure, or anything that operates by remote control (e.g., televisions, VCRs, etc.) draws electricity even when they are turned off. Even your doorbell is indirectly nickel-and-diming your electric bill.

Not all vampire power can be eliminated. For starters, smoke and carbon monoxide detectors draw vampire power but provide life-saving service. And although not a matter of life or death, unplugging other phantoms is not very practical. Most of us wouldn't think of cutting the power to our alarm clocks and then resetting them before bed each night. So even though not all vampire power is bad, we tend to forget about it and the energy/\$\$...it consumes.

The good news is that there are ways to stop being haunted by vampire power.

First, identify which electronic devices drain power when not in use, then unplug those that are turned off. And a very easy way to cut all power to multiple appliances at one time with one flip of the switch is use a surge protector or power strip. Finally when it is time to replace an electronic device, look for energy efficient models that waste less energy.

So get ready to pick up your stake and take a stab at saving energyand \$\$.

Brought to you by Pascoag Utility District



PASCOAG
UTILITY DISTRICT

ENERGY SAVING TIPS FOR AIR CONDITIONING

Did you know.....

Air conditioners work on the same operating principles and basic components as your refrigerator?

Cooling your home with central air conditioning can use almost as much energy as heating your home?

Here are a few suggestions that can help you reduce the amount of energy used by your air conditioner, control your cooling costs and help the environment.

- ☑ When running the central air, set the thermostat as high as is comfortable. The minimum recommended temperature for energy efficiency is 78 degrees F. Each degree setting below 78 degrees F will increase energy consumption by approximately 8%.
- ☑ Shade windows that get direct sunlight in order to reduce radiant heat in the room while using air conditioning.
- ☑ Help to reduce the cooling load by deferring heat generating activities such as clothes washing, running the dishwasher, cooking on the stove or in the oven during the hottest part of the day.
- ☑ When cooling the home, keep the house closed tight during the daytime. Don't let in unwanted heat and humidity. If practical, ventilate at night either naturally or with fans.
- ☑ Professionally inspect, clean and tune central air conditioning unit in order to save energy and to help it last longer. Inquire about the proper maintenance schedule with a service technician.
- ☑ When shopping for a new central air conditioning unit, buy the correct size. A properly sized unit cools air and removes humidity more effectively, and costs less to operate.
- ☑ We hope you will consider Energy Star label central air conditioning when purchasing a new unit. Energy Star appliances have been identified as being significantly more energy efficient than average comparable models.

For more information call the Energy New England Hotline at: 1-888-772-4242



Brought to you by Pascoag Utility District

CONSERVING ENERGY AND ENERGY DOLLARS - 2010

To put it simply, carbon footprints are the negative impacts our daily life has on the environment. It is measured in units of carbon dioxide (CO2), a greenhouse gas. Increasing levels of greenhouse gases in the atmosphere are responsible for global warming and climate change. The amount of carbon dioxide emissions from an individual during a specific time results in a carbon footprint. Some of the most effective ways to reduce carbon footprints start at home, don't cost a penny, and in fact, can save you money this summer.

Here are just a few examples. When trying to reduce your carbon footprint you need to be able to quantify it. Remember.... "what gets measured gets done."

Unplug

- Unplug seldom-used appliances, like an extra refrigerator in the basement or garage that contains just a few items. You may save around \$10 every month on your utility bill.
- Unplug your chargers when you're not charging. Every house is full of little plastic power supplies to charge cell phones, PDA's, digital cameras, cordless tools and other personal gadgets. Keep them unplugged until you need them.

Take Control.....of your energy use

- A programmable thermostat is a smart *and effective* way to control the temperature.
- Set the thermostat to 78 degrees when the house is occupied and turn the cooling system off when you are away.

Set Computers to Sleep and Hibernate

- Enable the "sleep mode" feature on your computer, allowing it to use less power during periods of inactivity. In Windows, the power management settings are found on your control panel. Mac users, look for energy saving settings under system preferences in the apple menu.
- Configure your computer to "hibernate" automatically after 30 minutes or so of inactivity. The "hibernate mode" turns the computer off in a way that doesn't require you to reload everything when you switch it back on. Allowing your computer to hibernate saves energy and is more time-efficient than shutting down and restarting your computer from scratch. When you're done for the day, shut down.



PASCOAG
UTILITY DISTRICT

Brought to you by Pascoag Utility District

For more information call the Energy New England Hotline at: 1-888-772-4242

Tips on Weatherstripping

Warmed or air-conditioned air mixes with outside air through gaps in your home's thermal envelope—exterior walls, windows, doors, the roof, and the floors. These kinds of air leaks can waste large amounts of energy. Weatherstripping and caulking is an effective way to rid your home of costly drafts, saving you energy and money.

Most experts agree that the time and money invested in weatherstripping and caulking windows and doors can pay off faster than almost any other home improvement you can make, even when your home is well insulated. This tip sheet will focus on weatherstripping in particular.

Besides keeping out moisture, wind, and hot or cold air, weatherstripping will block entry of dust and noise, resulting in a cleaner, quieter home. Both weatherstripping and caulking are economical and, usually do-it-yourself jobs.

Loose fitting windows should be weatherstripped to keep warm air from escaping and make you feel more comfortable. The most vulnerable windows are swinging windows, and double hung windows. Some effective types of weatherstripping are spring-plastic, metal-backed vinyl and adhesive-backed foam.

Weatherstripping around exterior doors can be checked with a flashlight. From outside the closed door, move the flashlight slowly around the door edge. A “helper” inside the house can see the light shining in where weatherstripping is needed.

To determine how much weatherstripping is needed, add the perimeters of all windows and doors to be weatherstripped. Then add about 5-10 percent to accommodate any waste. Also take into consideration that weatherstripping comes in varying depths and widths.

Weatherstripping supplies and techniques range from simple to the technical. Consult the instructions on the weatherstripping package. Here are a few basic guidelines:

- ✓ *Weatherstripping should be applied to clean, dry surfaces in temperatures above 20 degrees F.*
- ✓ *Measure the area to be weatherstripped twice before you cut anything.*
- ✓ *Apply weatherstripping snugly against both surfaces. The material should compress when the window or door is shut.*

Brought to you by Pascoag Utility District



For more information on Energy Conservation, please call the Energy Hotline at: 1-888-772-424

U.S. Environmental Protection Agency



Home Electronics



United States
Environmental
Protection Agency
6202J
Washington DC 20460

Official Business
Penalty for Private Use \$300

Recycled/Recyclable—Printed
with Vegetable Oil Based Inks
on Recycled Paper (Minimum
50% Post-consumer Content)

ENERGY STAR QUALIFIED HOME ELECTRONICS

Home electronics products are responsible for approximately 15 percent of household electricity use. Although they may have earned all many of these products still use electricity when they aren't "standby" (power) mode or monitor digital clocks, displays, and other smart features.

ENERGY STAR qualified home electronics help lower electricity bills and energy use—saving energy, money, and the environment.

HELP FIGHT GLOBAL WARMING

Electricity used in our homes increasingly comes from the burning of fossil fuels at power plants. When combined with global warming, heavy air, heat, and energy efficiency standards to reduce greenhouse gas emissions.

If every TV, DVD, and home theater system purchased in the United States one year were ENERGY STAR qualified, Americans could prevent more than 1 billion pounds of greenhouse gases equivalent to the emissions of 200,000 cars.

E-CYCLING

Recycling is another smart way you can help protect the environment by reducing the amount of hazardous waste in the landfill. When upgrading to new ENERGY STAR qualified home electronics, take your old electronics to a store or local collection point, or recycle at a government recycling program that accepts your electronics. For more information on how to safely recycle your electronics products, visit EPA's Recycling page at www.epa.gov/e-cycling.



Appliances

U.S. Environmental Protection Agency
ENERGY STAR

EPA 4306-00-011 (09/01/2007)

EPA
 United States
 Environmental
 Protection Agency
 6202J
 Washington DC 20460

**Official Business
 Penalty for Private Use \$300**

Recycled/Recyclable — Printed
 with Vegetable Oil Based Inks
 on Recycled Paper (Minimum
 50% Post-consumer Content)

**ENERGY STAR
 QUALIFIED APPLIANCES**

Appliances that have earned the ENERGY STAR label were either energy efficient choices or made with advanced technologies that help save energy.

Design. Look for refrigerators, freezers, and air conditioners. Dishwashers, clothes washers, and furnaces that carry the ENERGY STAR. They're made with advanced technologies that help save energy.

Help the environment. Made to the level of your home — green saving energy, saving.

**HELP FIGHT
 GLOBAL WARMING**

Electricity used in our homes is produced from the burning of fossil fuels at power plants, which contribute to global warming. Simply put, every energy efficient product will reduce the amount of electricity used in our homes, helping to reduce global warming. Reducing electricity use in our homes helps reduce global warming. Reducing electricity use in our homes helps reduce global warming. Reducing electricity use in our homes helps reduce global warming.

If every refrigerator, freezer, and air conditioner purchased in the United States this year were ENERGY STAR qualified, Americans would save 5 billion pounds of greenhouse gas emissions every year. That's equal to the consumption of 200,000 cars.



WHAT IS ENERGY STAR®?

ENERGY STAR is a label that identifies energy efficient products, such as appliances, which meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Products that have earned the ENERGY STAR help

You save energy and money without sacrificing

performance. By using less energy, these products

also help reduce greenhouse gas emissions—

caused by the burning of fossil fuels at power

plants—that contribute to global warming.

More than 50 types of products, including

appliances, lighting, home office equipment, and

heating and cooling equipment can qualify for

the ENERGY STAR

The ENERGY STAR program helps businesses

and individuals fight global warming through

energy-efficient products and practices

Learn more at www.energystar.gov

CHOOSE ENERGY STAR QUALIFIED APPLIANCES

When buying appliances, remember that not every checkmark on the package and the energy and water labels you see monthly is better than the next. By choosing the right technologies and features, ENERGY STAR qualified appliances may help offset utility costs through energy savings that the life of the unit.

Many qualified appliances earn because the government's ENERGY STAR database in the year's energy guide label. The EnergyGuide indicates how much energy is used to operate each appliance and provides an energy star for the year to compare products. It also has a separate annual energy cost table that will help you estimate how much you'll pay for the life of the unit.

REFRIGERATORS

Refrigerators are one of the largest energy-consuming products in your home. A new ENERGY STAR qualified refrigerator is 20 percent more energy efficient than the average model. Additionally, higher the amount of insulation in the unit and the better the quality of the insulation, the better the refrigerator will perform. Additionally, the ENERGY STAR qualified refrigerator can save refrigerator more than \$250 over the life of the unit.

ROOM AIR CONDITIONERS

ENERGY STAR qualified room air conditioners use 10 percent more energy than the average model. It may require an additional 10 percent more energy to run. The ENERGY STAR qualified room air conditioner will have a SEER rating of at least 13.0 and an EER of at least 10.0. Additionally, higher the amount of insulation in the unit and the better the quality of the insulation, the better the room air conditioner will perform.

DISHWASHERS

New ENERGY STAR qualified dishwashers use at least 50 percent more energy efficient than the average model. They use less water and have a higher water use and demand in the wash cycle. Additionally, higher the quality of the water and the better the quality of the water, the better the dishwasher will perform.

CLOTHES WASHERS

ENERGY STAR qualified clothes washers come in front loading and top loading models. Both use over 50 percent less water and use less energy than the average model. Additionally, higher the quality of the water and the better the quality of the water, the better the clothes washer will perform.

CHANGE THE WORLD START WITH ENERGY STAR QUALIFIED APPLIANCES



ENERGY STAR qualified appliances are designed to help you save energy and money without sacrificing performance. By choosing the right technologies and features, ENERGY STAR qualified appliances may help offset utility costs through energy savings that the life of the unit.

Many qualified appliances earn because the government's ENERGY STAR database in the year's energy guide label. The EnergyGuide indicates how much energy is used to operate each appliance and provides an energy star for the year to compare products. It also has a separate annual energy cost table that will help you estimate how much you'll pay for the life of the unit.

When buying appliances, remember that not every checkmark on the package and the energy and water labels you see monthly is better than the next. By choosing the right technologies and features, ENERGY STAR qualified appliances may help offset utility costs through energy savings that the life of the unit.



ENERGY STAR qualified appliances are designed to help you save energy and money without sacrificing performance. By choosing the right technologies and features, ENERGY STAR qualified appliances may help offset utility costs through energy savings that the life of the unit.

Many qualified appliances earn because the government's ENERGY STAR database in the year's energy guide label. The EnergyGuide indicates how much energy is used to operate each appliance and provides an energy star for the year to compare products. It also has a separate annual energy cost table that will help you estimate how much you'll pay for the life of the unit.

When buying appliances, remember that not every checkmark on the package and the energy and water labels you see monthly is better than the next. By choosing the right technologies and features, ENERGY STAR qualified appliances may help offset utility costs through energy savings that the life of the unit.

RETROFIT

Lighting - Systems & Controls

Customer Information

COMPANY NAME BURRILLVILLE HIGH SCHOOL APPLICATION DATE _____
 INSTALLATION SITE GYM PHONE NUMBER (401) 568-1353
 CONTACT PERSON JIM WOODWARD FAX NUMBER _____
 E-MAIL ADDRESS woodwardj@bsd-rinet SQ. FT. (covered by this application) _____
 STREET ADDRESS 425 EAST AVE. CITY HARRISVILLE STATE RI ZIP 028830
 MAILING ADDRESS (if different) 2300 GEORGE HWY CITY HARRISVILLE STATE RI ZIP 02830
 ELECTRIC COMPANY NAME _____ ELECTRIC ACCOUNT # (for copy of elec. bill) _____
 GAS COMPANY NAME _____ GAS ACCOUNT # (for copy of gas bill) _____

BUILDING TYPE: (select one) TOTAL FACILITY SQ. FT. _____
 Assembly Fast food Hotel Multi Story Retail Religious Small Retail
 Automobile Full Service Restaurant Large Refrigerated Space Multifamily high-rise K-12 Schools University
 Big Box Grocery Large Office Multifamily low-rise Small Office Warehouse
 Community College Heavy Industrial Light Industrial Other _____
 Dormitory Hospital Motel

CHECK PAYABLE TO: Customer Vendor/Installer
 Fill in data below

TAX ID# _____ COMPANY TYPE: Check one: Incorporated, Not Incorporated, Exempt
 Vendor Information
 VENDOR/INSTALLER EASTLAND ELECTRIC, INC. STREET ADDRESS 35 MOSHASSUCK RD.
 CONTACT PERSON TOM MILLER CITY LINCOLN STATE RI ZIP 02865
 PHONE NUMBER 401-334-1931 E-MAIL ESTLNDELEC@AOL.COM

Pre-Installation — I certify that all statements made in this application are correct to the best of my knowledge and that I have read and agree to the Terms and Conditions on the back of this form. ANTICIPATED COMPLETION DATE: _____

AUTHORIZED SIGNATURE _____ NAME (print) _____ DATE _____

Post-Installation — I certify that I have seen the Energy Efficiency Measures that have been installed and I am satisfied with their installation.

AUTHORIZED SIGNATURE _____ NAME (print) _____ DATE _____

Required Inspections	Date	Inspector	Project Costs:
	Pre-Inspection: <u>8/10/10</u>	<u>[Signature]</u>	
Approval	Date	Program Manager	Material \$:
	Post-Inspection: <u>9/17/10</u>	<u>[Signature]</u>	
Pre-approved Incentive:	<u>\$7203.00</u>		
Final Incentive:			

The following table lists the incentives available for energy efficient lighting improvements. Facility lighting must average a minimum of 2,000 hours per year, except Municipal Facilities which must average a minimum of 1,000 hours. * All Fluorescent Fixtures must have new T8 or T5 lamps and new electronic ballasts. All Fluorescent Fixtures with High Performance (HP) T8 lamps and ballasts must meet or exceed the Consortium for Energy Efficiency's (CEE) High Performance T8 or Reduced Wattage T8 specification. For detailed eligibility requirements and a list of qualifying lamps and ballasts, please log onto CEE's web site at www.cee1.org.

Table 1A: Lighting Systems Eligibility and Incentives

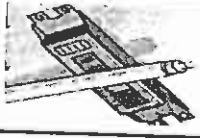
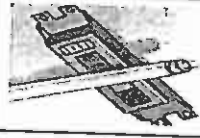
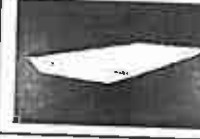
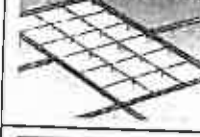


Product Code	Measure Description	Fixture Incentive Per	Eligibility Criteria	Min Watts Saved	Image
10 *	Re-lamp/re-ballast of existing fixtures with new High Performance/Reduced Wattage (HP/RW) T-8 or T-5 lamps and HP/RW T-8 Electronic Ballasts	\$10	Re-lamp/re-ballast of existing fixtures with T-8 or T-5 lamps, each fixture is composed of a ballast and 1, 2, 3 or 4 lamps. Only one incentive may be counted per fixture. Multiple fixtures served by a single ballast are only eligible for one incentive. Consider using reduced wattage T5 and T8 CEE qualified lamps/ballasts.		
12 *	Re-lamp/re-ballast of existing fixtures with new High Performance/Reduced Wattage (HP/RW) T-8 or T-5 lamps and HP/RW T-8 Electronic Ballasts	\$15	Re-lamp/re-ballast of existing fixtures with opportunity for increased savings for Measure Code 12 with increased watts saved of 23 watts or greater. Recommend using reduced wattage T5 and T8 CEE qualified lamps/ballasts.	23	
30A *	High Efficiency 2 lamp Prismatic Lensed Fluorescent Fixtures - 2x2 or 2x4	\$25	Overall fixture efficiency must be \geq : - 83% for 2x4 prismatic lensed fixture with two T-8 or T-5 lamps; - 75% for 2x2 prismatic lensed fixture with two T-8 or T-5 lamps (Biax lamps are not eligible).	27	
30B *	High Efficiency 2 lamp Parabolic Fluorescent Fixtures - 2x2 or 2x4	\$40	Overall fixture efficiency must be \geq : - 80% for 2x4 fixture with parabolic louver (2" to 3" deep cells) with two T-8 or T5 lamps; - 80% for 2x2 fixture with parabolic louver (2" to 3" deep cells) with two T-8 or T5 lamps (Biax lamps are not eligible).	27	
30C *	High Efficiency up to 2 lamp Recessed Indirect/Direct Fluorescent Fixtures - 2x2 or 2x4	\$40	Overall fixture efficiency must be \geq : - 75% for 2x4 recessed indirect/direct fixture with two T-8 or T-5 lamps; - 75% for 2x2 recessed indirect/direct fixture with two T-8, T-5, or T5HO lamps (Biax lamps are not eligible); - 80% for 2x2 advanced glare reducing diffuser fixture with one or two T-8, T-5, T-5HO lamps (Biax lamps are not eligible).	27	
31 *	High Efficiency 3 lamp Fluorescent Fixtures - 2x4	\$25	Overall fixture efficiency must be \geq : - 83% for 2x4 prismatic lensed fixture with three T-8 or T-5 lamps; - 75% for 2x4 fixture with parabolic louver (2" to 3" deep cells) with three T-8 or T5 lamps; - 70% for 2x4 recessed indirect fixture with three T-8 or T-5 lamps; Eligible fixtures are limited to 3 lamps with a low power ballast factor < 0.80.	31	

Table 1A: Lighting Systems Eligibility and Incentives


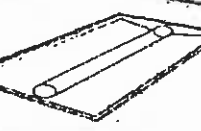
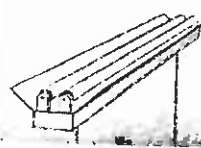

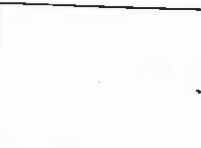

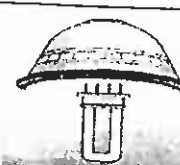
Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
32 *	High Efficiency Recessed Fluorescent 2 lamp Retrofit Kits - 2x2 and 2x4	\$45	Overall fixture efficiency must be \geq : - 85% for 2x4 parabolic retrofit kit and advanced glare reducing diffuser retrofit kit with two T-8 or T-5 lamps; - 80% for 2x2 parabolic retrofit kit and advanced glare reducing diffuser retrofit kit with two T-8, T-5, or T-5HO lamps (bias lamps and reflector kits are not eligible).	27	
34 *	Advanced Recessed Fluorescent Fixtures 1x4 or 2x4	\$50	Overall fixture efficiency must be \geq : - 85% for 2x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T-5HO lamp; - 80% for 1x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T-5HO lamp.	33	
41 *	Industrial/Commercial Fluorescent Fixtures - 4 ft. and 8 ft. Fixtures	\$30	Overall fixture efficiency must be \geq : - 85% for Industrial Reflector fixture with T-8 or T-5 lamps (up to 20% up-light); - 83% for Commercial Grade Wraparound fixture with one or two T-8 or T-5 lamps; - 85% for reflector kits with specular or semi-specular reflectors Reflector Kits for Existing Fixtures includes 2'x2' and 2'x4' reflector troffer kits, 4' and 8' strip channel, and industrial reflector kits. Applies to fixtures installed at or less than 16 feet above the floor. Only one incentive may be counted per fixture. Eight foot and multiple fixtures served by a single ballast are only eligible for one incentive.	23	
43 *	Vapor Tight, Fluorescent Fixtures - 4 ft. and 8 ft. Fixtures	\$50	Overall fixture efficiency must be \geq : - 70% for Vapor Tight fluorescent fixture with one or two T-8, T-5, T-8HO, T-5HO or 3-T8 lamps. Typically installed in garage, warehouse, food prep and other industrial applications.	45	
44 *	Clean Room Rated Fluorescent Fixtures - 1x4 or 2x4	\$50	Overall fixture efficiency must be \geq : - 75% for Clean Room fluorescent fixture with up to three T-8 or T-5 lamps. To be eligible for incentives, fixtures must be installed in a clean room rated environment.	27	
21	Compact Fluorescent Fixture (long tube CFL or Bi-x fixtures eligible)	\$15	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with $<33\%$ THD. All long tube CFL or Bi-x fixtures are eligible under this measure category. (Retrofit kits and screw-in adapters not eligible)	35	
23	Dimmable Compact Fluorescent Fixture	\$30	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with $<33\%$ THD. (Retrofit kits and screw-in adapters are not eligible)	35	

Table 1A: Lighting Systems Eligibility and Incentives




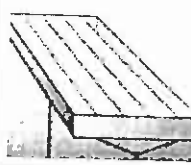
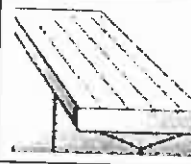
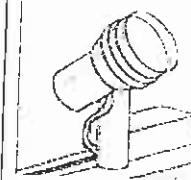
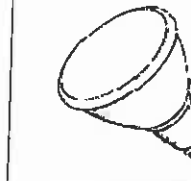
Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
25	LED or LEC (Electroluminescence) Exit Fixtures	\$10	All materials and assembled units shall comply with all applicable codes and standards including (but not limited to) Federal/State/Local building, fire, and electrical codes, and may require designated egress lighting to comply with such codes. Exit sign retrofit kits are not eligible.	15	
51	Pulse Start Metal Halide Lamp and Electronic Ballast Kits	\$50	All kits must include a new matched Pulse Start Metal Halide Lamp and Electronic Ballast installed per manufacturer's specifications and applicable codes. Indoor and Outdoor fixtures are eligible.	50	
52	Pulse Start Metal Halide Fixture with Electronic Ballast	\$70	Only New Metal Halide Pulse Start fixtures with Electronic Ballasts are eligible. Retrofit of existing metal halide fixture of less than 200 watts with new fixture is not eligible. Indoor and Outdoor fixtures are eligible.	64	
56 *	High Intensity Fluorescent Fixtures (HIF) for High and Low Bay Applications (less than or equal to 210W)	\$70	Minimum wattage is 111 Watts and Maximum wattage is 210 Watts. Minimum fixture efficiency must exceed 80%. Recommended mounting height > 16 feet above the floor. High Intensity Fluorescent fixtures incorporate a number of lamp technologies that include T-8, T-5, T-5HO and compact fluorescent. Low power ballasts are not eligible.	55	
57 *	High Intensity Fluorescent Fixtures (HIF) for High and Low Bay Applications (greater than 210W)	\$100	Minimum wattage is greater than 210 Watts. Minimum fixture efficiency must exceed 80%. Recommended mounting height > 20 feet above the floor. High Intensity Fluorescent fixtures incorporate a number of lamp technologies that include T-8, T-5, T-5HO and compact fluorescent. Low power ballasts are not eligible.	85	
70	Metal Halide Specialty Lighting Hard Wired Fixtures with Electronic Ballast	\$50	Metal Halide Specialty Fixtures may be track, recessed or surface mounted and used for high quality display type lighting. Must be approved by UL or similar agency.	55	
71	Integral Metal Halide PAR Replacement Lamp	\$12	Install an Integral Metal Halide PAR replacement lamps, not to exceed 25W PAR38 lamp or similar.	27	

Table 1A: Lighting Systems Eligibility and Incentives






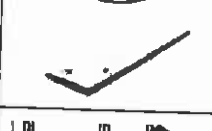
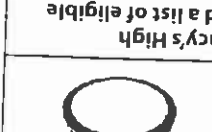

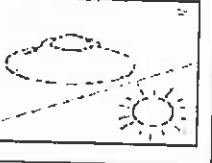
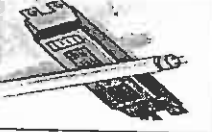




Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
80	LED Downlight Fixtures- Hard Wired	\$50	This incentive only applies to hardwired LED fixtures on Energy Star's list (for more information see www.energystar.gov)	25	
81A	Integral LED Directional Replacement Lamps- MR16 & PAR16	\$15	Eligible LED Directional Integral replacement lamps for these reflector styles: MR16 and PAR16. Eligible lamps are required to be listed by Energy Star. (for more information see www.energystar.gov)	12	
81B	Integral LED Directional Replacement Lamps - PAR20, PAR30 AND PAR38	\$35	Eligible LED Directional Integral replacement lamps for these reflector styles: PAR20, PAR30, PAR38, and PAR38. Eligible lamps are required to be listed by Energy Star (for more information see www.energystar.gov)	25	
82A	LED Cooler or Freezer Case Fixtures - 5' Fixture	\$50	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Energy Star or DesignLights Consortium (for more information see www.energystar.gov and www.designlights.org)	30	
82B	LED Cooler Freezer Case Fixtures - 6' fixture	\$65	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Energy Star or DesignLights Consortium (for more information see www.energystar.gov and www.designlights.org)	40	
83	LED Low Bay Fixtures- Garage and Canopy Fixtures	\$150	Eligible LED Low Bay fixtures are required to be installed in 8,760 hour applications and be listed by Energy Star or DesignLights Consortium (for more information see www.energystar.gov and www.designlights.org)	60	
*			<p>Note: 4ft straight tube T8 lamps and ballasts must meet the Consortium for Energy Efficiency's High Performance / Reduced Wattage (HP/RW) T8 specifications. For eligibility requirements and a list of eligible lamps and ballasts, log onto CEE's web site at www.cee1.org.</p> <p>Note: 2ft and 3ft T8 lamps must have a minimum efficacy of 75 mean lumens per watt, a CRI greater than 80 and an average rated life of 24,000 hours at 3 hours per start</p> <p>4ft - 30 watt U-bent T8 lamps must have a minimum efficacy of 79 mean lumens per watt, a CRI greater than 80 and an average rated life of 18,000 hours at 3 hours per start.</p> <p>2ft, 3ft and 4ft 30 watt U bent T8 ballasts must meet the CEE's High Performance T8 Ballast Specifications</p>		

Table 18: Lighting Controls Eligibility and Incentives

Measure Code	Measure Description	Per Incentive	Eligibility Criteria	Min Controlled Wattage	Image
61	Remote Mounted Occupancy Sensor	\$60	Comply with manufacturer's coverage recommendations. Ceiling mounted control. No manual "ON" overrides	110	
62	Daylight Dimming System (DDS-FL)	\$25 (per fixture)	Must have continuous dimming or adjust to a minimum of 4 levels. Typical lamping is either a 30 watt or 32 watt T-8 lamps.	53 (per fixture)	
63	Occupancy Controlled Step-Dimming System	\$20 (per fixture)	Ballast must be automatically controlled based on occupancy. Power consumption in low mode must not exceed 60%.	53 (per fixture)	
64A	Wall Mounted Occupancy Sensors	\$25	Occupancy Sensors must operate as Automatic ON and OFF . Sensors are wall mounted devices only. Not eligible if installed in restrooms, locker rooms, stairwells or rooms of greater than 250 square feet	51	
64B	Wall Mounted Vacancy Sensors	\$30	Vacancy Sensors must operate as Manual ON, Automatic OFF . Sensors are wall mounted devices only. Not eligible if installed in restrooms, locker rooms, stairwells or rooms of greater than 250 square feet	51	
65	Photocell Sensors (lighting systems on 24/7)	\$50	Photocell control for lighting systems that operate on 24 hours a day, 7 days a week (8,760 hours annually)	70	
68	High Bay Fluorescent (HIF) Occupancy Control Systems	\$25 (per fixture)	Ballasts must be automatically controlled based on occupancy. Systems with manual "ON" or override switches are not eligible. Sensors may be remote mounted or mounted on individual fixtures	110 (per fixture)	

Tab. C: Retrofit Lighting Systems Inventory Worksheet

Building and Room Identification (Installation Site):

Line Item	Location	Existing/Proposed	Measure Code (Table 1A)	Device Code	Watts per Fixture (Watts per Device)*	Annual Hours of Operation*	Minimum Watts Saved	kWh Savings	Device Quantity (a)	Unit Incentive \$ (b)	Total Incentive \$ (a) x (b)
Ex	Room 202, first floor	Existing	—	3F0SEE	90	—	—	—	8		
		Proposed	10	2F3ZSSE	60	3100	30		8	\$ 10	\$ 80
1	BURRILLVILLE HIGH SCHOOL PE GYM	Existing	—	1M0400S	455	7200	—		28		
		Proposed	57	4F54HSD	234	7200	221		28		
		Existing	—								
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									
		Proposed									
		Existing									

PROPOSED LIGHTING SYSTEMS		
Device Code	Device Description	Rated Watts
LED Exit Signs		
1E0002	2.0 WATT LED	2
1E0003	3.0 WATT LED	3
1E0005	5.0 WLED	5
1E0005C	0.5 WATT LEC	0.5
1E0008	8.0 WLED	8
1E0015	1.5 WATT LED	1.5
1E0105	10.5 WATT LED	10.5

Compact Fluorescents (CFL's)		
Device Code	Device Description	Rated Watts
2C0007S	2/7W COMPACT HW	18
1C0005S	5W COMPACT HW	7
1C0007S	7W COMPACT HW	9
1C0009S	9W COMPACT HW	11
1C0011S	11W COMPACT HW	13
1C0013S	13W COMPACT HW	15
1C0018E	18W COMPACT HW ELIG	20
1C0018S	18W COMPACT HW	20
1C0022S	22W COMPACT HW	24
1C0023E	1/23W COMPACT HW ELIG	25
1C0026E	26W COMPACT HW ELIG	28
1C0026S	26W COMPACT HW	28
1C0028S	28W COMPACT HW	30
1C0032S	32W CIRCLINE HW	34
1C0042E	1/42W COMPACT HW ELIG	48
1C0044S	44W CIRCLINE HW	46
1C0057E	1/57W COMPACT HW ELIG	65
1C2232S	22/32W CIRCLINE HW	58
1C2D10E	10W 2D COMPACT HW ELIG	12
1C2D16E	16W 2D COMPACT HW ELIG	18
1C2D21E	21W 2D COMPACT HW ELIG	22
1C2D28E	28W 2D COMPACT HW ELIG	28
1C2D38E	38W 2D COMPHW ELIG	36
1C3240S	32/40W CIRCLINE HW	80
2C0003S	2/5W COMPACT HW	14
2C0009S	2/9W COMPACT HW	22
2C0011S	2/11W COMPACT HW	26
2C0013E	2/13W COMPACT HW ELIG	28
2C0013S	2/13W COMPACT HW	30
2C0018E	2/18W COMP. HW ELIG	40
2C0026E	2/26W COMP. HW ELIG	54
2C0032E	2/32W COMPACT HW ELIG	68
2C0042E	2/42W COMPACT HW ELIG	100
3C0009S	3/9W COMPACT HW	33
3C0013S	3/13W COMPACT HW	45
3C0018E	3/18W COMPACT HW ELIG	60
3C0026E	3/26W COMPACT HW ELIG	82
3C0032E	3/32W COMPACT HW ELIG	114
3C0042E	3/42W COMPACT HW ELIG	141
4C0018E	4/18W COMPACT HW ELIG	80
4C0026E	4/26W COMPACT HW ELIG	108
4C0032E	4/32W COMPACT HW ELIG	152
4C0042E	4/42W COMPACT HW ELIG	188
6C0026E	6/26W COMPACT HW ELIG	162
6C0032E	6/32W COMPACT HW ELIG	228

PROPOSED LIGHTING SYSTEMS		
Device Code	Device Description	Rated Watts
Compact Fluorescents (CFL's) (cont)		
6C0042E	6/42W COMPACT HW ELIG	282
8C0026E	8/26W COMPACT HW ELIG	216
8C0032E	8/32W COMPACT HW ELIG	304
8C0042E	8/42W COMPACT HW ELIG	376

T5 Systems		
Device Code	Device Description	Rated Watts
1F21SSE	1L3' 21W T5/ELIG	24
1F28SSE	1L4' 28W T5/ELIG	32
1F39HSE	1L3' 39W T5HO/ELIG	42
1F54HSE	1L4' 54W T5HO/ELIG	59
1F14SSE	1L2' 14W T5/ELIG	16
2F14SSE	2L2' 14W T5/ELIG	34
1F24HSE	1L2' 24W T5HO/ELIG	29
2F24HSE	2L2' 24W T5HO/ELIG	52
3F24HSE	3L4' T5HO/ELIG	80
2F21SSE	2L3' 21W T5/ELIG	47
2F28SSE	2L4' 28W T5/ELIG	63
2F39HSE	2L3' 39W T5HO/ELIG	85
2F54HSE	2L4' 54W T5HO/ELIG	117
3F54HSE	3L4' 54W T5HO/ELIG	177
4F54HSE	4L4' 54W T5HO/ELIG	234
5F54HSE	5L4' 54W T5HO/ELIG	294
6F54HSE	6L4' 54W T5HO/ELIG	351
8F54HSE	8L4' 54W T5HO/ELIG	468
10F54HSE	10L4' 54W T5HO/ELIG	585

Two Foot High Efficient T8 Systems		
Device Code	Device Description	Rated Watts
1F17ESL	1L2' 17W T8EE/ELEE LOW PWR	14
1F17ESN	1L2' 17W T8EE/ELEE	17
1F17ESH	1L2' 17W T8EE/ELEE HIGH PWR	20
2F17ESL	2L2' 17W T8EE/ELEE LOW PWR	27
2F17ESN	2L2' 17W T8EE/ELEE	32
2F17ESH	2L2' 17W T8EE/ELEE HIGH PWR	40
3F17ESL	3L2' 17W T8EE/ELEE LOW PWR	39
3F17ESN	3L2' 17W T8EE/ELEE	46
3F17ESH	3L2' 17W T8EE/ELEE HIGH PWR	61

Three Foot High Efficient T8 Systems		
Device Code	Device Description	Rated Watts
1F25ESL	1L3' 25W T8EE/ELEE LOW PWR	21
1F25ESN	1L3' 25W T8EE/ELEE	24
1F25ESH	1L3' 25W T8EE/ELEE HIGH PWR	30
2F25ESL	2L3' 25W T8EE/ELEE LOW PWR	40
2F25ESN	2L3' 25W T8EE/ELEE	45
2F25ESH	2L3' 25W T8EE/ELEE HIGH PWR	60
3F25ESL	3L3' 25W T8EE/ELEE LOW PWR	58
3F25ESN	3L3' 25W T8EE/ELEE	67
3F25ESH	3L3' 25W T8EE/ELEE HIGH PWR	90

Four Foot T8 High Efficient / Reduce Wattage Systems		
Device Code	Device Description	Rated Watts
1F25EEH	1L4' 25W T8EE/ELEE HIGH PWR	30
1F25EEE	1L4' 25W T8EE/ELEE	22
1F25EEL	1L4' 25W T8EE/ELEE LOW PWR	19
2F25EEH	2L4' 25W T8EE/ELEE HIGH PWR	57
2F25EEE	2L4' 25W T8EE/ELEE	43
2F25EEL	2L4' 25W T8EE/ELEE LOW PWR	37
3F25EEH	3L4' 25W T8EE/ELEE HIGH PWR	86

EXISTING LIGHTING SYSTEMS		
Device Code	Device Description	Rated Watts
High Pressure Sodium (HPS)		
1H0035S	35W HPS	45
1H0050S	50W HPS	65
1H0070S	70W HPS	90
1H0100S	100W HPS	130
1H0150S	150W HPS	190
1H0200S	200W HPS	240
1H0225S	225W HPS	275
1H0250S	250W HPS	295
1H0310S	310W HPS	350
1H0360S	360W HPS	435
1H0400S	400W HPS	460
1H0600S	600W HPS	675
1H0750S	750W HPS	835
1H1000S	1000W HPS	1085

Metal Halide (MH)		
1M0032S	32W METAL HALIDE	40
1M0050S	50W METAL HALIDE	65
1M0070S	70W METAL HALIDE	95
1M0100S	100W METAL HALIDE	120
1M0150S	150W METAL HALIDE	190
1M0175S	175W METAL HALIDE	205
1M0250S	250W METAL HALIDE	295
1M0360S	360W METAL HALIDE	430
1M0400S	400W METAL HALIDE	455
1M0750S	750W METAL HALIDE	825
1M1000S	1000W METAL HALIDE	1075
1M1500S	1500W METAL HALIDE	1615
1M1800S	1800W METAL HALIDE	1875

Pulse Start Metal Halide Lamp/Ballast		
1M0100P	100W MH CWA	128
1M0100R	100W MH LINEAR	118
1M0150P	150W MH CWA	190
1M0150R	150W MH LINEAR	172
1M0175P	175W MH CWA	208
1M0175R	175W MH Linear	190
1M0200P	200W MH CWA	232
1M0200R	200W MH LINEAR	218
1M0250P	250W MH CWA	288
1M0250R	250W MH LINEAR	265
1M0300P	300W MH CWA	342
1M0300R	300W MH LINEAR	324
1M0320P	320W MH CWA	365
1M0320R	320W MH LINEAR	345
1M0350P	350W MH CWA	400
1M0350R	350W MH LINEAR	375
1M0400P	400W MH CWA	455
1M0400R	400W MH LINEAR	430
1M0450P	450W MH CWA	508
1M0450R	450W MH LINEAR	480
1M0750P	750W MH CWA	815
1M0750R	750W MH LINEAR	805
1M1000P	1000W MH CWA	1080

EXISTING LIGHTING SYSTEMS		
Device Code	Device Description	Rated Watts
Two Foot T8 / T12 Systems		
1F2055S	F20T12/HPF(1)	
1F80BXE	1L2' F80BXE/ELIG	32
1F55BXE	1L2' F55BXE/ELIG	90
2F175SE	2L2' 17W T8/ELIG	56
2F175SL	2L2' 17W T8/ELIG LOW POWER	37
2F175SM	2L2' 17W T8/EE/MAG	27
2F2055S	F20T12/HPF(2)	45
2F24HSS	2L2' 24 T12 HO/STD/STD	56
2F40BXE	2L2' F40BXE/ELIG	85
2F50BXE	2L2' F50BXE/ELIG	72
2F55BXE	2L2' F55BXE/ELIG	108
3F175SE	3L2' 17W T8/ELIG	112
3F175SL	3L2' 17W T8/ELIG LOW POWER	53
3F2055S	F20T12/HPF(3)	39
3F40BXE	3L2' F40BXE/ELIG	78
3F50BXE	3L2' F50BXE/ELIG	102
3F55BXE	3L2' F55BXE/ELIG	162
4F175SE	4L2' 17W T8/ELIG	168
4F36BXE	4L2' F36BXE/ELIG	62
4F40BXE	4L2' F40BXE/ELIG	148
4F40BXH	4L 40W T5 (STD) HIGH LUMEN	144
4F50BXE	4L2' F50BXE/ELIG	170
4F55BXE	4L2' F55BXE/ELIG	216
5F40BXE	5L2' F40BXE/ELIG	224
5F50BXE	5L2' F50BXE/ELIG	190
5F55BXE	5L2' F55BXE/ELIG	270
6F36BXE	6L2' F36BXE/ELIG	280
6F40BXE	6L2' F40BXE/ELIG	212
6F50BXE	6L2' F50BXE/ELIG	204
6F55BXE	6L2' F55BXE/ELIG	324
8F36BXE	8L2' F36BXE/ELIG	336
8F40BXE	8L2' F40BXE/ELIG	296
8F50BXE	8L2' F50BXE/ELIG	288
8F55BXE	8L2' F55BXE/ELIG	432
9F36BXE	9L2' F36BXE/ELIG	448
9F40BXE	9L2' F40BXE/ELIG	318
9F50BXE	9L2' F50BXE/ELIG	306
9F55BXE	9L2' F55BXE/ELIG	486
12F40BE	12L2' F40BXE/ELIG	504
12F50BE	12L2' F50BXE/ELIG	408
12F55BE	12L2' F55BXE/ELIG	648
	12L2' F55BXE/ELIG	672

Three Foot T8 / T12 Systems		
1F30SEM	1L3' 30W T12 EE/EE/MAG	38
1F30SES	1L3' 30W T12 EE/STD	42
1F30SSS	1L3' 30W T12 STD/STD	46
1F25SSE	1L3' 25W T8/ELIG	24
2F30SEE	2L3' 30W T12 EE/ELIG	49
2F30SEM	2L3' 30W T12 EE/EE/MAG	66
2F30SES	2L3' 30W T12 EE/STD	73
2F30SSS	2L3' 30W T12 STD/STD	80
2F25SSE	2L3' 25W T8/ELIG	47
2F25SSM	2L3' 25W T8/EE/MAG	65
3F30SSS	3L3' 30W T12 STD/STD	140



2009 Unitary HVAC and Controls

FOR OFFICE USE ONLY:

Application #: _____
Application Date: _____

CUSTOMER INFORMATION

Company Name: GS Inc Phone: 568-1110
Contact Person: Burt Mountford Phone: 568-1110
Facility Address: 11351-8884
Mailing Address: 855 South Main Street City: PASADENA RI Zip: 02884
Acct. No. (or copy of Electric Bill) _____
Email Address: _____ Federal ID#: _____

Incorporated Not Incorporated Exempt

APPLICATION INSTRUCTIONS

Complete all 6 steps below. Applications **CANNOT** be processed unless all items are complete!

- 1) Read Initiative Requirements on the reverse side of this application. 2) Fill out all applicable spaces on this side of the application. 3) Sign all areas requiring signatures.
- 4) Attach invoice and manufacturer's specification sheet with equipment make, model, size and ARI efficiency rating. 5) Verify that rebateable controls are reflected on the manufacturer's or contractor's invoice. 6) Send all documentation and this rebate application to the customer's Energy Efficiency Program Provider address on the back.

For rebate totals greater than \$5,000.00, approval by the applicable Energy Efficiency Program Provider (EPP) will be required prior to installation.

PAYMENT METHOD

Please check one: Check to Customer Customer Account Credit Check to Contractor (Please assign payment to contractor (indicated below))
Customer Signature: _____

PRIMARY USE

- Restaurant Hotel/Motel Elementary/High School Grocery Warehouse Multi-family Retail Office
- University/College Health Facility Industrial/Manufacturing Data Center/Process Load Other: _____

CONTRACTOR INFORMATION

Contractor Name: _____ Phone: _____
Address: _____ City: _____ State: _____ Zip: _____
Federal ID#: _____ Incorporated Not Incorporated Exempt

HVAC EQUIPMENT INFORMATION

(Read "Eligibility Requirements" on reverse side of this form)

Installation Type	Equipment	Manufacturer and Model Number	Unit Size (Tons)	Unit Efficiency (EER or SEER)	Incentive \$/Ton (See table)	Quantity	Requested Incentive	Control Type (See table below for code)
N	Split Unitary H-Heat Pump	MASZ AIRNA	1 1/2 ton	16	3	(2)	\$75	
							\$0	
							\$0	
							\$0	

HVAC UNITARY CONTROLS & ECM MOTORS

Controls/Motors	Code	Remember to attach Inventory Sheets (Required)	Quantity	Incentive	Quantity X Incentive	Totals
Dual Enthelphy Controls	D	One Control per Unit		\$250	\$0	\$0
ECM Motors*	E	Fan Powered Boxes & Fan Coils or HVAC Supply Fans only		\$150	\$0	\$0
Demand Control Ventilation	V	One Control per Unit		\$200	\$0	\$0

Use additional worksheets to add more units)

For ECM Motors on Fan Powered Boxes & Fan Coils, provide list detailing the associated HVAC equipment or systems.

Total Incentive: \$525
(Add Requested Incentives from table above + Totals from this table)

CUSTOMER ACKNOWLEDGEMENT

Expected completion date: _____

Re-Installation - I certify that all statements made in this application are correct to the best of my knowledge and that I have read and agree to the Terms and Conditions on the back of the form.

Customer Signature: _____ Name (print): _____ Date: _____

Installation - I certify that I have seen the conservation measures that have been installed, and I am satisfied with their installation.

Customer Signature: _____ Name (print): _____ Date: _____

Office Use only. Approved Incentive: \$ \$525.00 Approving Program Manager: [Signature] Approval Date: 7/15/10

Project ID#: _____

INITIATIVE REQUIREMENTS

Application Offer: This initiative covers products purchased on or after January 1, 2009. Details of this initiative, including incentive levels, are subject to change or cancellation without prior notice. This application form with required documentation must be received by December 31, 2009.
Completed and signed applications or a letter of intent must be submitted within 30 days of the equipment installation to be eligible for incentives.

Eligibility: Incentives are available to industrial, commercial, institutional, and agricultural electric service customers. Equipment must be installed in the service territory of Your Energy Efficiency Program Provider or sponsor. Eligible systems are electric heat pumps, single packaged units, split system, dual enthalpy economizer controls, demand control ventilation and ECM motors when installed with new, qualifying equipment. Qualifying split systems must have both a new condenser and a new coil that meets ARI specifications and where the matched system performance (condenser and coil) meets or exceeds the minimum SEER/EER outlined in the table below.

Proof of Purchase: An invoice itemizing the purchased equipment must accompany each incentive application form. The invoice copy must indicate the equipment type, size, make and model, serial number of the system, and rebateable controls or ECM motors and date of purchase.

Application Form: This application must be filled out completely, truthfully and accurately. An authorized representative of the customer must sign, date, and submit the completed application along with the invoice, and manufacturer's equipment performance sheet stating the ARI certified efficiency rating and nominal capacity.
Payment: Please allow 30 days for payment. Payment process may take longer if information is missing on application.

Approval and Verification: Pre-approval from your Energy Efficiency Program Provider or sponsor will be required if the rebate total is greater than \$5,000. Your Energy Efficiency Program Provider or sponsor reserves the right to verify sales transaction and to have reasonable access to your facility, to inspect the HVAC system installed under this initiative, prior to issuing incentives, or at a later time.

Tax Liability: Your Energy Efficiency Program Provider or sponsor will not be responsible for any tax liability that may be imposed on the customer as a result of the payment of incentives. All customers must supply their Federal Tax Identification Number in order to receive an incentive.

Endorsement: Your Energy Efficiency Program Provider or sponsor does not endorse any particular manufacturer product or system design in promoting this initiative.
Warranties: YOUR ENERGY EFFICIENCY PROGRAM PROVIDER OR SPONSOR DOES NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, EXPRESSLY OR IMPLICITLY. Your Energy Efficiency Program Provider or sponsor makes no warranties or representations of any kind, whether statutory, expressed or implied, including, without limitations, warranties of merchantability or fitness for a particular purpose regarding the unitary HVAC equipment or services provided by a manufacturer or contractor. Contact your contractor for details regarding equipment performance and warranties.
Limitation of Liability: The liability of your Energy Efficiency Program Provider or sponsor is limited to paying the incentive specified. Your Energy Efficiency Program Provider or sponsor is not liable for any consequential or incidental damages or for any damages in tort connected with or resulting from participation in this initiative.

Assignment: The customer may assign the incentive payment to a qualified contractor (if allowed).

Specific Requirements: Some Energy Efficiency Program Providers and sponsors have specific requirements. These include, but are not limited to, payment options, rebate restrictions for facilities using self-generation for non-emergency purposes, for payment options, contact your Energy Efficiency Program Provider or sponsor listed below.

The Energy Efficiency Program Provider (EPPP) is entitled to 100% of the energy benefits associated with the ECMs, excluding the value of energy cost savings realized by the customer, but including all rights to all associated ISO-NE Energy Capacity and Reserves Products, and the customer agrees to provide the EPPP with such further documentation as the EPPP may request to confirm the EPPP's ownership of such benefits and Products.

Owner's Certification: Owner certifies that he/she has purchased and installed the equipment listed above at the defined location. Owner agrees that all information is true and that he/she has conformed to all Initiative and equipment requirements listed.

Owner has verified that the units listed above have been installed correctly. There are no unusual noises or vibrations and all controls have been calibrated. Owner or owner's representative has been instructed on how to operate and maintain this equipment and has received all necessary operation and maintenance manuals. Owner has verified that any applicable air-system and water balancing has been performed.

MINIMUM EFFICIENCY LEVELS/INCENTIVE LEVELS

HVAC UNIT SIZE		LEVEL 1		LEVEL 2	
Tons	Btuh	Minimum SEER/EER for Incentive	Incentive \$/Ton	Minimum SEER/EER for Incentive	Incentive \$/Ton
Air-Cooled Unitary AC and Split Systems (new condenser and new coil)					
< 5.4	< 65,000	Split	\$125	15.0 SEER & 12.5 EER	\$175
	< 65,000	Packaged	\$125	15.0 SEER & 12.0 EER	\$175
≥ 5.4 to < 11.25	≥ 65,000 to < 135,000		\$80	12.0 EER	\$95
	≥ 11.25 to < 20		\$80	12.0 EER	\$95
≥ 20 to < 63	≥ 240,000 to < 760,000		\$50	10.8 EER	\$70
	> 760,000		\$50	10.2 EER	\$70
Air-to-Air Heat Pump Systems					
< 5.4	< 65,000	Split	\$125	15.0 SEER & 12.5 EER & 9.0 HSPF	\$175
	< 65,000	Packaged	\$125	15.0 SEER & 12.0 EER & 8.5 HSPF	\$175
≥ 5.4 to < 11.25	≥ 65,000 to < 135,000		\$80	12.0 EER & 3.4 COP	\$95
	≥ 11.25 to < 20		\$80	12.0 EER & 3.2 COP	\$95
> 20	> 240,000		\$50	10.8 EER & 3.2 COP	\$70
Water Source Heat Pumps					
< 11.25	< 135,000		\$80	N/A	N/A
Ground Water - Water Source Heat Pump Equipment (Open Loop)					
< 11.25	< 135,000		\$150	N/A	N/A
Ground Loop - Water Source Heat Pump Equipment (Closed Loop)					
< 11.25	< 135,000		\$150	N/A	N/A
ENERGY SAVING CONTROL AND FAN MOTOR OPTIONS (when installed with new qualifying equipment)					
Dual Enthalpy Economizer					
Outside air economizer utilizing 2 enthalpy sensors (1 for outdoor and 1 for return air)					
Demand Control Ventilation					
Outside air intake controlled based on CO ₂ sensor					
ECM Fan Motors					
ECM motors installed on fan powered terminal boxes, fan coils or HVAC supply fans on small unitary equipment					
\$250/Unit					
\$200/Unit					
\$150/Motor					

ELIGIBLE SERVICE TERRITORY

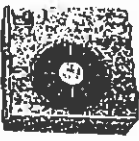
nationalgrid

Attn: Dana Hayes
52 Second Avenue • Waltham, MA 02451
Phone: 781-907-1633 • Fax: 781-907-1647
www.nationalgrid.com

SEND TO

Send applications to address indicated above for customer's Energy Efficiency Program Provider.

SPECIFICATIONS FOR MSZ HEAT PUMP M-SERIES (R410A)



Model Name	Indoor Unit		MSZ-A09NA		MSZ-A12NA		MSZ-A15NA		MSZ-A17NA		MSZ-A24NA	
	Outdoor Unit		MUZ-A09NA		MUZ-A12NA		MUZ-A15NA		MUZ-A17NA		MUZ-A24NA	
Cooling *1	Rated Capacity	Btu/h	9,600	12,000	15,000	18,200	22,900					
	Capacity Range	Btu/h	5,500-9,000	5,700-12,000	3,100-15,000	3,100-18,200	4,400-22,000					
	Total Input	W	690 (E90-F50)	1,175 (E15-F170)	1,690 (E10-1,690)	2,070 (E10-2,070)	2,640 (E20-2,640)					
	Energy Efficiency	SEER	17									
Heating at 47° *2	Modular Removal	Parts/h	2.3	3.2	4.7	5.1	7.3					
	Sensible Heat Factor		0.71	0.70	0.65	0.63						
	Rated Capacity	Btu/h	10,800	13,600	18,000	20,100	23,200					
	Capacity Range	Btu/h	5,200-12,600	5,200-13,600	3,400-20,900	3,400-20,900	3,600-24,400					
Heating at 17° *3	Total Input	W	860 (350-1,100)	1,100 (350-1,100)	1,790 (250-2,330)	2,150 (250-2,330)	2,350 (260-2,570)					
	Capacity	Btu/h	7,700	8,300	13,000	13,000	15,200					
Power supply	Total Input	W	640	930	1,740	1,740	1,960					
	Phase, Cycle, Voltage		1 Phase, 60Hz, 208/230V									
Voltage	Indoor - Outdoor S1-S2		AC 208/230V									
	Indoor - Outdoor S2-S3		DC12-24V									
Indoor Unit	Indoor - Remote Controller		Wireless Type (Optional Wired Controller: RC129)									
	MCA	A	1.2									
Outdoor Unit	Max. Fuse Size		15									
	Fan Motor	F.L.A.	0.78									
	Airflow (Cool)	DRY (CFM)	152-228-307		152-240-353		268-326-381		296-431-568			
	(Lo-Med-Hi) *1	WET (CFM)	134-205-275		134-215-318		240-293-342		283-385-508			
	Airflow (Heat)	(Lo-Med-Hi) *2	159-222-307		159-240-353		254-314-381		290-488-560			
	Sound Level (Cooling)	dB(A)	22-33-38		22-34-40		34-40-45		34-40-46			
	Sound Level (Heating)	dB(A)	22-33-38		22-34-42		34-38-44		34-40-49			
	(Lo-Med-Hi) *2											
	External Finish Color		Munsell 1.0Y 5.2/0.2									
	Dimension Unit		30-11/16									
	Weight Unit		B-1/4									
	Field Drain Pipe Size O.D.		11-3/4									
MCA	A	12		15		14		17				
Max. Fuse Size (Time Delay) A	F.L.A.	0.52										
Fan Motor	Model (Type)	XNB092FFAH										
Compressor	R.L.A.	7.8		7.8		10.1		10.1				
Airflow	L.R.A.	5.2		5.2		12		12				
Refrigerant Charge	CFM	1,249		1,054		1,249		1,249				
Defrost Method		Linear Expansion Valve										
Sound Level	dB(A) *1	48		51		53		55				
External Finish Color		Munsell 3Y 7.8/1.1										
Dimensions	W, inch	31-1/2										
	D, inch	11-1/4										
	H, inch	21-5/8										
Weight	lbs.	82		88		88		128				
Remote Controller	Type	Wireless Remote (Optional Wired Controller)										
Refrigerant	Charge	2.5		2.5		2.7		2.7				
	Oil	R410A										
Refrigerant Pipe	Gas Side O.D.	3/8		3/8		1/2		1/2				
	Liquid Side O.D.	1/4										
	Height (Max.)	50										
	Length (Max.)	100										
Connection Method	Indoor/Outdoor	Flare/Flare										

NOTES: Test conditions are based on ARI 210/240

*1 Rating conditions (cooling) - Indoor 80° FDB, 67° FWB, Outdoor: 95° FDB, (75° FWB).

*2 Rating conditions (heating) - Indoor 70° FDB, 60° FWB, Outdoor: 47° FDB, (43° FWB).

*3 Rating conditions (heating) - Indoor 70° FDB, 60° FWB, Outdoor: 17° FDB, (15° FWB). Specifications are subject to change without notice.

TED WARRANTY | Six-year warranty on compressor. One-year warranty on parts.

1200 BTU = 1 Ton
= 1 1/2 ton \$260/brand

Size (TONS) 1.5 ton x 2 units
3 ton total

Cost of Unit
Popper 1800
Cost of 1800

115
x 2
230

Split on Packaged
UHAU Unitary Controls
Emc Motoco

~~115~~

Section 15700 – Mechanical HVAC

Capacity Range: 0.75 to 3 Ton Nominal

Mitsubishi Model Number: MSZ-A/D (wall-mount) inverter heat pump series.

Part 1 – General

1.01 System Description

A. The heat pump air conditioning system shall be a Mitsubishi Electric MSZ-A split system series. The system shall consist of a slim silhouette, compact, wall mounted indoor fan coil section with wireless remote controller and a slim silhouette horizontal discharge outdoor unit which shall be of an inverter driven heat pump design.

B. Indoor unit model numbers may be MSZA09NA, MSZA12NA, MSZA15NA, MSZA17NA, MSZA24NA, MSZD30NA, and MSZD36NA. Outdoor unit model numbers may be MUZA09NA, MUZA12NA, MUZA15NA, MUZA17NA, MUZA24NA, MUZD30NA, and MUZD36NA for single-zone (1:1) systems

1.02 Quality Assurance

- A. The units shall be tested by a Nationally Recognized Testing Laboratory (NRTL) and shall bear the ETL label.
- B. All wiring shall be in accordance with the National Electrical Code (N.E.C.).
- C. The units shall be rated in accordance with Air-conditioning, Heating, and Refrigeration Institute's (AHRI) Standard 240 and bear the AHRI Certification label.
- D. The units shall be manufactured in a facility registered to ISO 9001 and ISO 14001, which is a set of standards applying to environmental protection set by the International Standard Organization (ISO).
- E. A dry air holding charge shall be provided in the indoor section.
- F. System efficiency shall meet or exceed 14.5 SEER when part of a 1:1 (indoor/outdoor) system.
- G. Delivery, Storage and Handling
 1. Unit shall be stored and handled according to the manufacturer's recommendations.
 2. The wireless controller shall be shipped inside the carton with the indoor unit and able to withstand 105°F storage temperatures and 95% relative humidity without adverse effect.

Part 2 – Warranty

- 2.01 The units shall have a manufacturer's parts and defects warranty for a period one (1) year from date of installation. The compressor shall have a warranty of 6 years from date of installation. If, during this period, any part should fail to function properly due to defects in workmanship or material, it shall be replaced or repaired at the discretion of the manufacturer. This warranty does not include labor.
- 2.02 Manufacturer shall have over 25 years of continuous experience in the U.S. market.

Part 3 – Performance

- 3.01 Each system shall perform in accordance with the ratings shown in the table below.
- 3.02 Cooling performance shall be based on 80°F DB, 67°F WB (26.7°C DB, 19.4°C WB) for the indoor unit and 95°F DB, 75°F WB (35°C DB, 23.9°C WB) for the outdoor unit at rated frequency: A09-50Hz, A12-76Hz, A15-77Hz, A17-89Hz, A24-110Hz, D30 – 89Hz, D36 – 92Hz
- 3.03 Heating performance shall be based on 70°F DB, 60 °F WB (21.1°C DB, 15.6°C WB) for the indoor unit and 47 ° F DB, 43° F WB (8.3 ° C DB, 6.1° C WB) for the outdoor unit at rated frequency: A09-61Hz, A12-76Hz, A15-78Hz, A17-88Hz, A24-101Hz, D30 – 84Hz, D36 – 91Hz

3.04 Single-Zone One-to-One Product Table – Heat Pump

Outdoor / Indoor Model Numbers	TC Cooling*	TC Heating*	TPW Cooling*	TPW Heating*	SEER	HSPF
MUZ-A09NA / MSZ-A09NA	9,000	10,900	690	860	17	8.2
MUZ-A12NA / MSZ-A12NA	12,000	13,600	1170	1160	17	8.2
MUZ-A15NA / MSZ-A15NA	15,000	18,000	1690	1790	16	8.2
MUZ-A17NA / MSZ-A17NA	16,200	20,100	2070	2150	16	8.2
MUZ-A24NA / MSZ-A24NA	22,000	23,200	2880	2350	16	8.2
MUZ-D30NA / MSZ-D30NA	30,700	32,600	3,850	3,360	14.5	8.2
MUZ-D36NA / MSZ-D36NA	33,200	35,200	4,360	3,840	14.5	8.2

*TC = Total Capacity, TPW = Total Power Watts *AHR1 210/240 testing conditions

Part 4 – Products

4.01: Indoor Unit

A. General:

The indoor unit shall be factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, piping, control circuit board, fan and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, and an auto restart function. Indoor unit shall be charged with dry air before shipment from factory.

B. Unit Cabinet:

1. The casing shall have a white finish – Munsell 1.0Y 9.2/0.2.
2. Multi directional drain connection and refrigerant piping, offering three (3) direction pipe alignments for all refrigerant piping and two (2) direction pipe alignments for condensate draining shall be standard.
3. There shall be a separate, metal back-plate that secures the indoor unit firmly to the wall. The back plate shall be securely attached to the wall.

C. Fan:

1. The indoor unit fan shall be an assembly with a line-flow fan direct driven by a single motor.
2. The fan shall be statically and dynamically balanced and be powered by a motor with permanently lubricated bearing.
3. A manual adjustable guide vane shall be provided with the ability to change the airflow from side to side (left to right).

3.1 Units having capacity greater than 18,000 BTU/h shall have a “Wide Vane” feature to distribute airflow over a wide – 150 degree – angle from right to left to provide comfort over a wider area.

4. An integral, motorized, multi-position, horizontal air sweep flow louver shall provide for uniform air distribution, up and down.
5. The indoor fan shall operate at of three (3) selectable speeds: High, Medium and Low.

D. Filter:

1. Return air shall be filtered by means of easily removed, washable, Catechin, Antioxidant Pre-filter and an Anti-allergy enzyme filter – blue, pleated type.

E. Coil:

1. The indoor unit coil shall be of nonferrous construction with smooth plate fins on copper tubing.
2. The tubing shall have inner grooves for high efficiency heat exchange.
3. All tube joints shall be brazed with phosphor or silver alloy.
4. The coils shall be pressure tested at the factory.
5. A sloped, corrosion resistant condensate pan with drain shall be provided under the coil.

F. Electrical:

1. The unit electrical power shall be 208-230 volts, 1-phase, 60 hertz.
2. The system shall be equipped with A-Control – a system directing that the indoor unit be powered directly from the outdoor unit using a 3-wire connection plus ground.
3. The indoor unit shall not have any supplemental electrical heat elements.
4. The outdoor unit shall be equipped with Pulse Amplitude Modulation (PAM) compressor motor control for maximum efficiency.

4.02: Control

A. General:

1. The unit shall have a wireless controller to perform input functions necessary to operate the system.
2. The wireless controller shall have a Power On/Off switch, Mode Selector – Cool, Dry, Heat, Auto Modes - Temperature Setting, Timer Control, Fan Speed Select and Auto Vane selector.
3. The indoor unit shall perform Self-diagnostic Function and Check Mode switching.
4. Temperature changes shall be by 1°F increments with a range of 59 - 89°F.
5. The microprocessor located in the indoor unit shall have the capability of sensing return air temperature and indoor coil temperature, receiving and processing commands from the wireless or a wired controller, providing emergency operation and controlling the outdoor unit.
6. The indoor units shall be capable of working with single-zone or multi-zone outdoor units
7. The system shall be capable of automatically restarting and operating at the previously selected conditions when the power is restored after power interruption.

8. Control system shall control the continued operation of the air sweep louvers, as well as provide On/Off, System/Mode function.
9. The indoor unit shall have the option of a field installed, multi-function, hard-wired, wall mounted remote controller. Controller shall be a PAR-21MAA Deluxe MA type remote controller

9.1. Hard-wired, wall mounted remote controller shall require a MAC-397IF-E MA Series Terminal Interface for communications. Interface will be mounted at the indoor unit.

4.03: Outdoor Units

General:

The MUZ Series outdoor units are specifically designed to work with the MSZ indoor units. The outdoor units must have a thermally fused powder coated finish. The outdoor unit shall be completely factory assembled, piped and wired. Each unit shall be run tested at the factory.

A. Unit Cabinet:

1. The casing shall be fabricated of galvanized steel, bonderized, finished with an electrostatically applied, thermally fused acrylic or polyester powder coating for corrosion protection.

B. Fan:

1. The unit shall be furnished with a direct drive propeller type fan.
2. The outdoor unit fan motor shall be a direct current (DC) motor and have permanently lubricated bearings.
3. The fan motor shall be mounted for quiet operation.
4. The fan shall be provided with a raised guard to prevent contact with moving parts.
5. The outdoor unit shall have horizontal discharge airflow.

C. Coil:

1. The outdoor unit coil shall be of nonferrous construction with lanced or corrugated plate fins on copper tubing.
2. The coil shall be protected with an integral metal guard.
3. Refrigerant flow from the outdoor unit shall be regulated by means of an electronically controlled, precision, leaner expansion valve.

D. Compressor:

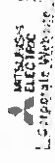
1. The compressor motor shall be direct current (DC).
2. The compressor shall be of a high performance hermetic; inverter driven, variable speed, rotary type.
3. The outdoor unit shall have an accumulator.
4. The compressor will be equipped with an internal thermal overload.
5. The outdoor unit must have the ability to operate over the full range with a maximum height difference of 40 feet and have refrigerant tubing length of 65 feet for capacities up to 18,000 BTU/h and a maximum height difference of 50 feet and have refrigerant tubing length of 100 feet for capacities above 18,000 BTU/h between indoor and outdoor units.
6. There shall be no need for line size changes, traps shall not be used, and no additional refrigerant oil shall be required.
7. The compressor shall be mounted so as to avoid the transmission of vibration.

E. Electrical:

1. The unit electrical power shall be 208/230 volts, 1-phase, 60 hertz.
2. The unit shall be capable of satisfactory operation within voltage limits of 198 volts to 253 volts.
3. The outdoor unit shall be controlled by the microprocessor located in the indoor unit and outdoor unit.

Copyright © 2004 GE Mitsubishi Electric & Electronics USA Inc. HVAC Advanced Products Division

Home | About Us | Press Room | Case Studies | Training | Customer Care | Where To Buy | Products Search | Privacy Policy | Terms of Use | Contact Us | Log In



(V, PH, Hz)	
Indoor Dimensions: (In HxWxD)	11-3/4 x 30-11/16 x 8-1/4
Indoor Weight: (Lbs)	23
Airflow Dry: (CFM)	268-328-381
Airflow Wet: (CFM)	240-293-342
Indoor Sound Level: (dBA)	34/38/44
Outdoor Unit:	MUZ-A17NA
Outdoor Input Power: (V, PH, Hz)	208/230, 1 Phase, 60 Hz
Outdoor Dimensions: (In HxWxD)	21-5/8 x 31-1/2 x 11-1/4
Outdoor Weight: (Lbs)	88
Pipe Size (Liquid): (In)	1/4
Pipe Size (Gas): (In)	1/2
Indoor Connection Method:	FLARE
Outdoor Connection Method:	FLARE
<p>Limited Warranty: 6-year on compressor, 1-year on parts. Specifications are subject to change without notice.</p>	



CARJON
A/A CONDITIONING & HEATING, INC.
4 Enterprise Lane
SMITHFIELD, RHODE ISLAND 02917
(401) 232-9400

PROPOSAL SUBMITTED TO

G.S. INCORPORATED

STREET

885 SOUTH MAIN STREET

CITY, STATE and ZIP CODE

PASCOAG, RI 02859

ARCHITECT

DATE OF PLANS

PHONE

568-1110

JOB NAME

DATE

2/19/09

JOB LOCATION

JOB PHONE

We hereby submit specifications and estimates for:

HEAT & AIR CONDITIONING

- TWO(2) MITSUBISHI 17,000 BTU HIGH EFFICIENCY CONDENSERS LOCATED ON PRECAST CEMENT SLAB.
- TWO(2) MITSUBISHI 17,000 BTU EVAPORATOR BLOWER UNIT LOCATED ON WALL AREA.
- ALL FREON AND CONDENSATE PIPING.
- ALL CONTROLS AND CONTROL WIRING.

WARRANTY: ONE(1) YEAR PARTS AND LABOR.
SIX(6) YEAR LIMITED WARRANTY ON COMPRESSOR.

WORK BY OTHERS: ALL ELECTRICAL WIRING.
ALL CARPENTRY IF NEEDED.

We Propose hereby to furnish material and labor — complete in accordance with above specifications, for the sum of:
SEVEN THOUSAND EIGHT HUNDRED dollars (\$ 7,800.00).
Payment to be made as follows:

1/3 DOWN BALANCE UPON INVOICING.

JOB SUBJECT TO FURTHER INSPECTION PRIOR TO COMMITMENT OF CONTRACT.
All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

Authorized Signature *[Signature]*

Note: This proposal may be withdrawn by us if not accepted within THIRTY(30) days.

Acceptance of Proposal — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to accept the work as specified. Payment will be made as outlined above.

Signature *[Signature]*

Date of Acceptance: _____ Signature _____

Invoice #: J16733	Invoice Date: 03/05/09	Cust PO#:	GC Job #:	Terms	Reg #
----------------------	---------------------------	-----------	-----------	-------	-------

Sold To: 1552 G. S. INCORPORATED
 Serviced At: G. S. INCORPORATED
 Job #: 09-0053
 Reg #: 1 C

JOB DESCRIPTIONS

Two mitsubishi units.

CONTRACT AMOUNT:

100 % BILLED (INCLUDING THIS INVOICE) 7554.50
 7554.50

PREVIOUSLY INVOICED

.00
 .00

SUB-TOTAL 7554.50

TAX 245.50

TOTAL DUE THIS INVOICE 7800.00

PA. 3/09/09
 ck. 9590
 \$ 7800

CARJON AIR CONDITIONING & HEATING, INC

PASCOAG UTILITY DISTRICT, ELECTRIC DEPT.
 ACCOUNTS PAYABLE EDIT LIST BY TRANSACTION NUMBER

PROGRAM 112V
 GROUP NUMBER : 00914
 GROUP USER : PSCGHR
 DSM Rebate 7-15-10
 ROUND, HARLE

TRANSACTION 1
 TRANSDATE VOUCHER BK
 ACCOUNT NUMBER
 DESCRIPTION 2
 PROJ P.O. VENDOR NAME
 DUE DATE CHECK# CHECK DATE TYPE LAST TRANS
 INVOICE NUMBER
 AMOUNT
 DISC/RETAIN

0000100	07/15/2010	000643	00	001-0000-214.24-20	D11003	HVAC Rebate	07/30/2010	46	PASCOAG UTILITY DIST	00/00/0000	GS INC	N	525.00
0000200	07/15/2010	000644	00	001-0000-214.24-20	DR1004	1-Door	07/30/2010	46	PASCOAG UTILITY DIST	00/00/0000	D MINCHILLO -2	N	40.00
8469-6642													
0000300	07/15/2010	000645	00	001-0000-214.24-20	DR1011	2-light bulbs	07/30/2010	46	PASCOAG UTILITY DIST	00/00/0000	R LACROIX	N	2.00
7885-6014													
0000400	07/15/2010	000646	00	001-0000-214.24-20	DR1007	TV	07/30/2010	46	PASCOAG UTILITY DIST	00/00/0000	C SERVICE	N	27.40
8915-6972													

TOTALS:

AMOUNT CALCULATED

COUNT: 4

AMOUNT: 594.40

PREPARED 7/15/2010, 10:30:01

PROGRAM 112V

GROUP NUMBER

GROUP USER : 00914

INVOICE NUMBER

PSGCHJR

DSM Rebate 7-15-10

ROUND, HARLE

INVOICE AMOUNT

TAX AMOUNT

VENDOR

VENDOR NAME

PASCOAG UTILITY DISTRICT, ELECTRIC DEPT

ACCOUNTS PAYABLE EDIT LIST

ACCOUNTING PERIOD 07/2010

PAGE 2

GS INC
D MINCHILLO - 2
R LACROIX
C SERVIZI
TOTAL

525.00
40.00
2.00
27.40
594.40

46
46
46
46
46

PASCOAG UTILITY DISTRICT - ELECTRIC
PASCOAG UTILITY DISTRICT - ELECTRIC
PASCOAG UTILITY DISTRICT - ELECTRIC
PASCOAG UTILITY DISTRICT - ELECTRIC
PASCOAG UTILITY DISTRICT - ELECTRIC

VENDOR # 46 PASCOAG UTILITY DISTRICT - ELECTRIC CHECK # 417978
INVOICE # DESCRIPTION DATE AMOUNT
GS INC 11351-8884 07/15/2010 525.00

PASCOAG UTILITY DISTRICT
ELECTRIC DEPARTMENT
P.O. BOX 107
PASCOAG, RI 02859

FREEDOM BANK
GREENVILLE OFFICE
GREENVILLE, RI

417978

DATE	CHECK NUMBER	AMOUNT
09/02/2010	417978	\$*****525.00
FIVE HUNDRED TWENTY FIVE AND 00/100 DOLLARS *****		

AY PASCOAG UTILITY DISTRICT - ELECTRIC
THE PO BOX 107
IDEP 253 PASCOAG MAIN STREET
PASCOAG RI 02859

NOT VALID AFTER 90 DAYS
Helen T. Moroney

⑈ 4 6 7 9 7 8 ⑈ ⑆ 0 1 1 5 0 1 7 0 5 ⑆ 0 0 0 0 1 0 1 9 6 6 ⑈