PASCOAG
UTILITY DISTRICT

Pascoag Electric • Pascoag Water

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

RIPUC Docket 4297

Pascoag Utility District's Demand Side Management Program 2012

RIPUC DOCKET NO. 4297

Pascoag Utility District
Electric Department

In Re: Pascoag Utility District's
Demand Side Management Program-2012

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November 4, 2012

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

Re: RIPUC Docket No. 4297

Dear Ms. Massaro:

On behalf of Pascoag Utility District ("Pascoag" or the "District"), we herewith file an original and nine copies of Pascoag's proposed Demand Side Management Program for 2012. This submission includes Pascoag's Executive Summary, Program Details for 2012, reconciliation of 2011 DSM activities 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 J. Round
Customer Service Supervisor/DSM Coordinator

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

A

Pascoag Utility District
Demand Side Management Programs - 2012 Proposed

Estimated carry over from 2011	$	14,000
Estimated sales for 2012	$	104,000
Net 2012 budget	$	118,000

			2012 Proposed Budget	
	Residential Program			
DR1201	ENE Residential Conservation (ECHO)	$	2,400	12 months @ $200
DR1202	Home Energy Audits with Incentives	$	2,500	10 home Energy Audits @$200 & a $50 incentive
DR1203	Energy Star Appliance Rebates	$	10,000	up to a maximum of 86 appliance rebates
DR1204	Appliance Buy Back Refrigerators/Airconditioners	$	1,000	$50 for Refrigerators up to 16; $20 for A/C up to 20
DR1205	Energy Efficient Windows/Doors	$	3,000	up to 200 window at $15 or up to 75 doors at $40
DR1206	Heating System Incentive	$	4,000	16 Rebates at $250
DR1207	ENERGY STAR qualified Water Heaters	$	1,000	10 Rebates at $100
DR1208	Energy Star Thermostats/Lighting fixtures	$	1,000	up to 20 rebates at $50
DR1209	Home Office Equipment/Home Electronics	$	3,500	70 Rebates at $50
DR1210	Electric Heat Conversion/Geothermal System:	$	100	To keep the line item open
DR1211	New Construction	$	2,080	4 Rebates at $520 Maximum
DR1212	Central Air Conditioner Incentive	$	1,000	5 Rebates at $200
DR1213	Change a Light Campaign	$	500	10 Rebates at $50
DR1214	Energy Conservation Calendars	$	3,815	2012 Energy Savers Calendars- purchase 1000 calendars
DR1215	Smart Power Strips	$	500	25% rebate (average cost is between $27-$37)
DR1216	Committed for 2011 Programs	$	5,750	To be funded with carry over funds
	Net Residential	**$**	**42,145**	
	Industrial/Commercial			
DI1201	Energy Star Incentive - Office Equipment	$	500	10 Rebates at $50
DI1202	The Brothers of the Sacred Heart	$	5,000	
DI1203	Country Farm Project	$	4,975	Motors, Lighting, Cool Controls
DI1204	Committed Funds- Lighting Projects	$	10,000	Money to be available for Commerical & Industrial Energy Efficiency Projects.
DI1205	Consultation Fees	$	1,000	To consult with Rise, National Grid, & ENE
DI1206	Energy Star Commercial Appliance	$	700	2 Appliances up to a maximum of $350
	Net Industrial/Commercial	**$**	**22,175**	
	Administrative/Ad/Education			
DA1201	Administrative	$	20,500	Administrative Labor, Mileage, supplies, Training session/ luncheon for the CSR's
DA1202	Funds for Follow-up to Successful Programs	$	1,180	To be used on more successful programs
DA1203	Outreach/Education	$	14,000	Billing Inserts, Energy Saving Coloring books, Culver conservation items, puchase kill A watt meters, Echo Conservation Booklets
DA1204	BHS Project	$	3,500	To parner with one of the Schools on an Energy Efficiency project
DA1205	PUD 6th Annual Public Power Green Festival	$	9,000	To fund the open house in 2012
DA1206	Energy Efficiency Management continuing education	$	4,500	Tuition, Fight, Hotel, meals, books,
DA1207	Program Research and Development	$	1,000	Street light incentives
	Net Administrative/Ad/Education	**$**	**53,680**	
	Estimated DSM 2011 Budget/ Expenses/ Balance	**$**	**118,000**	

B

Pascoag's 2012 Demand Side Management Program
Executive Summary: Submitted by Harle J. Round

Residential Programs:

The Residential Programs proposed by Pascoag Utility District for 2012, will closely mirror our 2011 programs, with adjustments to some of the line items based on activity in the programs over the past year. The District will be adding three new programs under the residential category, a Refrigerator Buy-back, ENERGY STAR Hot Water incentive and a Smart Strip incentive.

Products that earn the ENERGY STAR trademark prevent gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. Most consumers today realize that by purchasing ENERGY STAR qualified products they can reduce their own energy consumption. It is the District's goal to encourage our customers to continue to buy ENERGY STAR compliant products to help control consumption, demand, and reduce greenhouse gas emissions that are contributing to global warming. 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.

However, The District will continue to monitor its programs and will seek permission to reallocate funds should certain programs not perform to expectations. The District has seen a decrease in activity in some of the programs in 2011. The District will be decreasing the line item according to this year's activity. We believe that some of these decreases are due to the economic conditions and believe that the programs will continue to be utilized by our customers.

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. The customer is also 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 will remain at $200 per month in 2012.

ENERGY STAR Audits are a very educational tool for homeowners. ENE performed eight audits as of November 2011. 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. Two customers have implemented some of the suggestions and received the incentives related to the upgrades in 2011.

The District would like to continue to offer the home energy audits in 2012. The District would like to keep the number of audits at ten at a cost of $200 each and have $500 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. The District submitted a request to reallocate funds to the appliance line item in October due to the depletion of funds by August of 2011. The District is proposing a budget of $10,000 in 2012.

The District would like to add a Refrigerator Buy-Back Program in 2012. This program would encourage our customers to reduce their power bills by giving up an old inefficient refrigerator, by offering them an incentive of $50. This will cut the demand of each refrigerator that is removed and save between 1,250 to 2,225 kWh. The District is proposing a budget of $1,000.

The ENERY STAR Window and Door incentive had an approved budget, of $6,000 in 2011. The activity for this line item decreased in 2011 therefore the District is proposing to reduce this line item, in 2012, to $3,000. The rebate would remain at $15 per window and $40 per door with a maximum of 10 windows and 1 door.

ENERGY STAR Heating Systems program had an approved budget of $6,000 in 2011. The activity for this line item also decreased in 2011. The District would like to fund this line item at $4,000 in 2012. The rebate of 10% up to $250 will remain the same.

New this year, the District would like to add an incentive for Energy Star qualified water heaters. Heating water accounts for approximately 15 % of a home's energy use. High efficiency water heaters use 10 to 50 percent less energy than standard models, saving homeowners money on their utility bills. The District is proposing a rebate of 5% up to a maximum rebate of $100, with a budget of $1,000.

ENERGY STAR Thermostats/Lighting Fixtures with a budget of $600 was depleted in July 2011. The District reallocate fund to this line item in October and expect more demand for rebates with the unset of winter. The District would like to add ENERGY STAR ceiling fans/light combination units and ventilation fans. The District would like to continue this line item again next year and increase the budget to $1,000.

ENERGY STAR Home Office/Electronic equipment with an approved budget of $3,000 has processed 49 rebates totaling $1,890. The District would like increase the funding for this program to $3,500 in 2012.

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 or we receive a request for a geothermal system.

New Construction rebates remains slow as a direct result of the economy. The District processed three rebates at the Mill Pond 2011. The District is requesting to fund this program at the same level in 2012. This line item continues to entice the contractors to install ENERGY STAR qualified equipment, which will result in more efficient homes. The $2,080 request will allow the District to process four rebates.

Central Air Conditioning had a budget of $1,000 in 2011. The District has processed three rebates in 2011. The temperatures this summer were above average and may have contributed the continued request for central air conditioning rebates. The District would like fund this program at $1,000, in 2012.

The District would like 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 $53 in rebates, and continues to promote this program. The District also purchased 14 & 19 watt CFL's that will be sold for half price to the Districts' customers. The District would like to fund this program next year at the same level of $500.

The digest size calendars called eco@home was not as popular with the customers because of their small size. In 2012, the District would like to purchase the Energy Conservation Calendars that we have purchased in the past. These calendars highlight an energy efficiency tip each month, and the District is able to customize the calendar with a page dedicated to promoting the DSM programs and incentives that are offered. This would increase the Calendar line item from $900 to $3,815 in 2012.

New in 2012, the District would like to introduce a "Smart" Power Strip incentive. Today's electronics continue to draw electricity that we pay for but do not use. The "Smart" power strip prevents this waste by plugging the main device (computer, TV, etc.) into the primary outlet and its peripherals (printer/scanner or VCR/cable box, etc.) into the other outlets. When the main device is shut down the high-tech sensors detect this and shut everything else down. The Smart power strips can save up to 72% of the energy a systems uses, eliminating 640 lbs. of CO2 per year and also offers state-of-the-art surge protection. The District would like to offer an incentive of 25% up to a maximum of $25 with a budget of $500.

The District is estimating a carryover of $14,000 from 2011; the District will use $8,250 of this carryover in the 2012 budget and would like to place $5,750 into a line item called Committed for 2011 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 2011 the District was able to satisfy $13,735 in rebates that qualified in 2010 but the funds were depleted. If the carry over funds placed in the Committed for 2011 Program exceeds the request for qualified rebates, the District proposes moving these funds to the Follow-up to Successful Programs and would then

seek permission from the Public Utility Commission and Division of Public Utilities and Carriers, to reallocate the funds as needed in 2012.

The Commercial and Industrial Programs

The ENERGY STAR Office Equipment and Electronics Program that was available to our Commercial and Industrial customers continued to be activity this year. We have processed two rebates totaling $100. The District would like to continue this program with the same level of funding for 2012, with $500.

Lighting Projects completed in 2011:

- The Berean Baptist Church Lighting Project qualified for a 50% rebate, totaling $1556.50, on a retrofit lighting project
- The St. Joseph Church Lighting Project qualified for a 50% rebate, totaling $295.25.
- Valliere Realty LLC has installed new outside lighting at the shopping plaza and received a 30% incentive totaling $990.

The District identified several lighting projects for 2011. The following businesses had energy audits completed with RISE Engineering but none of the businesses have moved forward with the recommendations; these businesses included: the Austin T Levy School, Knights of Columbus, Café at the Falls, Burrillville Motors, and Matrix.

Over the past several years the District has worked hard to create programs that are 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. The District would like to increase the incentives for the commercial and industrial lighting projects back to 60% for retrofit lighting and 40% for new lighting projects. The District is hoping that by offering more of an incentive this might encourage the businesses, which had audits in 2010 and 2011, to go forward with their respective projects in these tough economic times.

The District has only identified two projects for 2012:

The Brothers of the Sacred Heart is interested in doing a retrofit lighting project. The District would like to allocate $5,000 to this line item.

Country Farms has had an energy audit performed by National Resource Management Inc. They have submitted a refrigeration proposal and a lighting proposal. Both proposals would qualify for a 60% rebate with a total incentive of $4,975.

Committed Lighting Projects and Energy Efficiency Measures - In 2011, the District was able to accommodate St. Josephs Church. The District would like to continue to fund this line item with $10,000 to accommodate lighting projects and energy efficiency projects that have not been identified. 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 or other energy efficiency measure on a first come first serve basis.

If the requests for incentives for these measure do not pick up by mid-year in 2012, the District would like to use some of these funds to hold a business breakfast with the commercial and industrial customers to discuss the types of incentive that are available to help improve their energy efficiencies.

The Consultation fees line item is funded at $1,000 to provide assistance from National Grid, RISE Engineering, or Energy New England with the calculation of energy savings on commercial and industrial projects. In 2012, we would like to fund this line item at $1,000.

ENERGY STAR Commercial Appliances had no activity in 2011. The District visited the local business and made them aware of the commercial rebates. Most of the business in the area expressed the need for smaller residential appliances for their community and employee rooms. The District is requesting a budget of $700 and would like to add the same rebates that it offers for the residential appliances and make them available under this line item for the business.

The Administration/Ad/Education

The District is requesting an increase of $500 to the Administrative line item in 2012. The 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, and researching new programs. The budget for the Administration line item will increase to $20,500 to cover the time spent to oversee this most worthwhile endeavor. The District would also like to have a training session with the customer service representatives to insure they are able to discuss the criteria for the various programs with the customers; this training session would also include a luncheon.

In October of 2011 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 $1,180.

The District continued the Customer Outreach Program in 2011. The District worked with Soleil to update our conservation programs and rebate forms on the web site, advertise in the Bargin Buyer, fund a couple of billing inserts promoting the DSM

Programs. The District used some of the funds to purchase energy conservation coloring books and Energy Matter booklets for the C & I customers.

The District would like to continue the Outreach and Education line item in 2012 and fund it with 14,000. This will allow the District to update the website with the programs for 2012 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 programs in 2012, purchase energy efficient material to educate our customers which will include the Eco News Letter, booklets on energy efficiency, along with energy conservation materials purchased at Culver Company. The District would also like to purchase a couple of Kill-a-Watt meters and make them available to the customers with consumption questions. The District feels this would be a great educational tool.

The 5th Annual Public Power Green Festival was hosted on Saturday, September 17, 2011. The open house highlighted energy conservation flyers and conservation giveaways. There were activities for children which included a coloring contest, decorate a plastic helmet, bucket rides as well as face painting, a puppet show, and a coloring contest.

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 and local businesses to raise money for the Burrillville Farmers Market. For a donation of $2.00, the donor received a bracelet that entitled them to cotton candy, an ENERGY STAR cloth bag filled with energy conservation and fulfillment items. The Pascoag Fire District sold hotdogs, hamburgers and bottled water to raise funds for the community. 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 the benefits of being educated with the latest in energy efficiency products. We would like to fund the line item for Outreach/Education at $9,000 in 2012.

Burrillville School Project- the District would like to keep this line item open. The District is currently looking for a teacher to partner with. The District is proposing a reduced budget of $3,500 in 2012.

Energy Efficiency Management Certificate program was held in Austin, Texas in May of 2011. The classes were very informative and well worth the investment. The APPA Academy helps electric utility employees stay abreast of the latest technologies available in Demand Side Management and goes into great discussions on what programs are working with other utilities across America. APPA is offering two courses in energy efficiency: Residential Energy Services that Work and Commercial Energy Services that Work. The District feels this would be a beneficial educational opportunity for the DSM Coordinator to attend. The District would like to fund the Energy Efficiency Management

Education line item at $4,500 and attend one of the APPA Educational Conferences offering these courses in 2012.

The District would like to add a line item called "Program Research and Development". The District would like to fund this line item with $1,000 to give us the ability to research a Street Light Incentive program. The money would be used to do site visits with municipals that have implemented this new technology and would allow us to fully research and develop a plan for incorporating this into the Demand Side Management Program. The potential for savings would be great but the District would like to thoroughly research the available technology.

The funding for the 2011 Demand Side Management Program is based on the 2.0 mils per kilowatt-hour assessment established by the legislation. A residential customer using 500 kWh pays a $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 51,946,000 kWhr. The estimated budget is rounded up to $104,000 for 2011. The District anticipates a $14,000 carryover fund from 2011 which would bring the total budget to $118,000.

C

2012 Program Details- Residential, Commercial and Industrial, Administrative/Ad and Customer Education and Outreach

Residential Programs

In 2012 Pascoag plans to continue all of the current Residential Programs from 2011. The customer demand still continues and the District believes these programs will continue to be successful in 2012. The District will modify the budget amounts based on the activity in 2011 and will also add an appliance buyback on refrigerators and freezers, an incentive on ENERGY STAR Water Heater, along with an incentive on smart power strips. This Summary will detail the programs proposed for 2012 and will review the success of the 2011 programs.

Energy New England – Residential Conservation Services $2400:

Pascoag will continue its relationship with Energy New England ("ENE") in 2012. 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 over seventeen meters*[1] and sent letters to each customer referring these customers to the toll free energy hot line. ENE attended the 5th Annual Green Festival and answered energy related questions and handed out flyers on energy conservation.

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 will remain at $200 per month in 2012.

Audits with Follow-Up Incentives-$2500:

[1] * Meters were proven to be within acceptable accuracy limits

Pascoag would like to provide ten audits in 2012, along with a maximum rebate of $50 for incentive follow-up. This would allow the following:

10- Audits @ $200 each	$2000
Money available for Incentives	$500

ENE price remains the same in 2012 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. New this year the District will evaluate this program by performing a survey to see if the customers are utilizing the suggestion they are given in the comprehensive audits from ENE.

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

ENERGY STAR Appliance Rebates: $10,000

Pascoag would like to fund this line item at $10,000 in 2012. This program continues to be our most popular program. The District has depleted the approved budget of $6500, in August 2011. 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 37% 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 15% less energy than a standard model; a compliant dishwasher uses 10% less energy than a standard model; a compliant refrigerator or and freezer uses 50% less energy than one made before 1993 and 20% more efficient than the minimum federal standard; 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 residential 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. A customer purchasing an ENERGY STAR compliant dishwasher or air purifier will receive an incentive up to $50; an ENERGY STAR air conditioner will receive an incentive up to $25; an ENERGY STAR dehumidifier will receive incentive up to $20.

Refrigerator / Freezer Buyback Program: $1,000

The District would like to offer a refrigerator buyback program in 2012. This program will encourage our customers to reduce their power bills by giving up an old inefficient refrigerator. An average 14 year old spare refrigerator uses between 1,250 and 2,225 kWh per year and can amount to 25% of the annual electricity used in a typical household. A second refrigerator removal program will cut demand and reduce the residential energy consumption.

The customer must contact the District office so we verify the following requirements for a second refrigerator or freezers:

- They must be between 10 to 30 cubic feet using inside measurements.
- And the refrigerator or freezer must be in working order.
- The customer will fill out a form with the model and make of the refrigerator/freezer and give the approximate age

Once this criterion is verified the customer will be instructed to call Coastal Recycling at 1-800-266-3188 to schedule an appointment to pick up the appliance. Once the pickup is verified the customer will receive a $50 rebate that will be applied to their electric account.

The District would like to fund this line item at $1,000 with a rebate of $50 which will allow us to process 20 incentives.

ENERGY STAR Windows/Skylights and Doors Incentive: $3,000

The District would like to fund this line item at $3000 in 2012. The budget for 2011 was $6,000 and in September the District has processed $1,820 in rebate. The demand for this program is still there but not as strong as previous years, therefore the District would like to reduce the funding for this line item to $3,000.

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.

ENERGY STAR Heating System Incentives: $4,000

The District would like to fund this program for heating system replacement at $4,000, in 2012. The demand for this program continues but has decreased in 2011. The District issued 6 rebates totaling $1,500, as of October of 2011.

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 are 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 2012. This will allow sixteen customers to take advantage of this program.

ENERGY STAR Water Heaters

New this year, the District would like to offer an incentive on ENERGY STAR qualified water heaters. The following types of water heaters and their potential for savings are listed below:

ENERGY STAR Gas Condensing Water Heaters will save over a $100.00 per year over a standard model.

ENERGY STAR Whole-House Gas Tank-less Water Heaters cut the water heating expense by 30%, saving a typical family $100 per year by heating water only when it is needed.

ENERGY STAR High-Efficiency Gas Storage Water Heaters can reduce water heating bills by about 7% or $30 per year over a standard model.

ENERGY STAR Solar Water Heaters can be used in combination with another back-up system. By using the sunshine to heat or preheat the hot water and in combination with gas storage water heating will save $190 annually; or in combination with an electric tank water heater as backup will save $250 a year on the electric bill, and reduce the load on the electric water heater by 2,500 kWh per year.

ENERGY STAR Heat Pump Water Heaters can save the average household $300 per year compared to a standard electric hot water heater.

The District is proposing a rebate of 5% of the cost, not to exceed $100. This would allow us to process 10 rebates in 2012.

ENERGY STAR Thermostats/Lighting Fixtures/ Ceiling and Ventilation Fans: $1,000

The District would like to fund this program at a slightly higher level in 2012. We would like to continue the fifty percent rebate on lighting fixtures and programmable thermostats and add ENERGY STAR ceiling and ventilation fans. The District processed eighteen rebates totaling $637 depleting the funds. Additional funds were reallocated to this program in October.

A programmable thermostat automatically adjust a home's temperature setting and allows the customer to save energy while sleeping and while away from home. These units save energy by offering four convenient, pre-programmed temperature settings that allow the temperature to be scaled back on heating or cooling the home. Many homeowners work outside of the home during the day and have different schedules on the weekend, these programmable thermostats allow them 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 leaving for a weekend or on a vacation by pushing the hold button on an energy saving temperature they 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, dinning room, kitchen ceiling and under-cabinet, hallway ceiling and wall bathroom vanity fixtures and ceiling fan lighting fixtures. Many fixtures have convenient features such as dimming on some indoor models and automatic daylight shut-off and motion sensors on outdoor models. By replacing the five most used fixtures in a home with ENERGY STAR qualified models can save up to $70 each year in energy cost.

New this year the District would like to add ENERGY STAR ceiling fans/light combination units and ventilation fans. ENERGY STAR qualified ventilation fans are 60% more efficient than standard models operate with less noise, have high performance motors, an improved blade design that provide better performance. The ENERGY STAR qualified ceiling fan/light combination units are over 50% more efficient than standard models, use improved motors and also have a better blade design.

The incentive will remain at 50%, with a cap of $50.

Home Office Equipment/Home Electronics: $3,500

The District would like to fund this line item at $3,500 in 2012. The incentives for this line item will remain 15% of the cost, up to a maximum rebate of $50. The District has processed $1,860 in rebates through October. The District feels that the office and electronic rebates will continue to be strong especially in the month of December.

ENERGY STAR compliant office equipment such as computers, monitors and imaging equipment like printers and copies, help to eliminate waste though 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 60% less electricity than standard equipment. If every home office product purchased in the United States this year met ENERGY STAR requirements, we would save more than 100 million in annual energy cost, prevent 1.4 billion pounds of green house gases, equivalent to taking 125,000 cars off the road, and save more than 900 million kWh of electricity. The products that fall under office equipment are: computers, copiers, fax machines, digital duplicators, external power adapters, notebook computers/tablet PC's, mailing machines, computer monitors, digital picture frames, printers, scanners, all in ones units, water coolers, and computer servers.

ENERGY STAR compliant home electronics use as much as 60% 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 10% of a households 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. An average size ENERGY STAR qualified TV's use 40% less energy than a standard model, an ENERGY STAR qualified 60-inch television will be, on average, 60 % more efficient 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. Set-top boxes are getting more energy intensive. In fact, a home using two set-top boxes is using significantly more electricity than it takes to run a new refrigerator – roughly 500 kWh, every year. ENERGY STAR qualified set-top boxes are at least 40 % more efficient than conventional models.

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 $3,500 with a rebate of 15% not to exceed $50.

Incentives for Electric Heat Conversion/ Geothermal Systems or a Ground Source Heat Pump (GHP): $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 and one customer who installed a geothermal system in 2010. 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 30% less energy than a standard heat pump, they are quieter then a conventional system. ENERGY STAR certified heat pumps must meet the following specifications:

Closed Loop System:	14.1 EER[2]
Open Loop System:	16.2 EER
Direct Expansion (DX)	15.0 EER

[2] Energy Efficiency Ratio (EER) is the ratio of output cooling to the input of power.

Therefore the District would like to 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.

The incentive would be 5% of the cost with a maximum rebate of $350.

New Construction Rebates: $2,080

The District has processed three rebates in 2011.

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, central air conditioning, and water heaters. 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 to continue to fund this program at $2,080 in 2012. The budget of $2080 will allow us to process four rebates with a cap of $520 per unit /home in 2012:

ENERGY STAR Boiler/Furnace	$250
ENERGY STAR Windows/Sky Lights, limit of 10 @ $15	$150
ENERGY STAR Doors, limit of 1 @ $40	$40
ENERGY STAR Appliances at $50 each	$50
ENERGY STAR Thermostats/Lighting Fixtures	$20
ENERGY STAR Water Heater	$100
Central Air Conditioning, with an SEER of 14 or greater	$200

Central Air Conditioning: $1,000

The District has processed three rebates totaling $600 in 2011. The District would like to continue the funding for this line item at $1,000 in 2012.

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 14 % 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) or to purchase an ENERGY STAR qualified LED light strings for the holiday. The District collected 15 pledges at the 5Th Annual Green Festival. We will continue to ask our customers 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.

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. ENERGY STAR decorative light strings use 70% less energy than conventional incandescent light string, last ten times longer, and are cool to the touch. The ENERGY STAR qualified decorative light strings that feature LED technology are 90% more efficient. The electricity consumed by just one 7-watt incandescent bulb, can power 140 LEDs or enough to light a 25 foot string of LEDs.

The District purchased CFL's in 2011 with DSM funds and continues to sell the bulbs with an instant rebate of 50%. This continues to be very popular with our customers. The District would like to purchase more light bulbs in 2012 to sell for half price when our current supply is depleted.

The District proposes a rebate of 50% of the cost of the light bulbs with a cap of $50 per customer.

Energy Conservation Calendars: $3,815

Last year the District purchased a digest sized booklet style calendar that includes dozens of easy-to-do, low cost strategies for making your home more energy efficient. The covers promoted and displayed our name, web site, and phone number. The customers were disappointed in the size of the calendar but they did agree that the booklet sized calendars had very helpful suggestions on conserving energy.

This year, the District would like to purchase one-thousand energy conservation calendars. These calendars are 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 is a great way to advertise our programs, since the calendars will also feature our 2012 programs, and rebates amounts on the inside page. The calendars are much larger and were more popular with customers in previous years.

The total budget requested for this line $3,815 for on-thousand calendars which includes the cost of printing, shipping, and personalizing the calendars with our rebate information.

"Smart" Power Strips: $500

New this year, The District would like to offer an incentive on smart power strips. They are a way to reduce the amount of power being drawn by computers and electronic accessories when they are not in use. The smart power strips monitor power consumption and can sense the difference between when a device is on or off and can shut the power off, eliminating the idle current being drawn from the item. Most smart power strips have two always-on outlets, a master control outlet and 2-6 controlled outlets that automatically turn off or on as the master appliance is turned on or off. A study by the Department of Energy showed that 15% of the energy used in the average home is just for standby current. The smart power strips save on average $30 per year.

The District is proposing a 25% rebate up to a maximum rebate of $25.

Committed for 2010 Programs:

In 2010 the Public Utilities Commission allowed the District to create a line item called "Committed for 2011 Programs" and fund it with money that was carried over from the previous year. This allowed us to place a carryover of $13,735 from 2010 into this line item and rebate 163 customers who had submitted qualified rebates but the funds had been depleted.

The District is estimating a carryover of funds from 2011 at $14,000. The District will use $8,250 of these funds in the 2012 budget and use $5,750 to satisfy 2011 qualified rebates for customers who do not receive a rebate because the funds had been depleted in 2011. If the carry over funds exceed the request for qualified rebates, the District is proposing to move these funds to the Funds for Follow-up to Successful Programs line item.

Commercial and Industrial Programs

ENERGY STAR Incentive – Office Equipment/Electronics: $500

The District issued three incentives totaling $116 through October of 2011. The District continues to promote this program. The District would like to continue this program at the same level of funding in 2012.

The office equipment and electronics have the same savings are mentioned in the Home Office Equipment/Home Electronics program. The incentive will remain at 25% of the cost, with a cap not to exceed $50.

Industrial and Commercial Projects 2011:

2011 Berean Baptist Church Lighting Project

The Berean Baptist Church qualified for a 50% rebate on a retrofit lighting project totaling $1,556.50.

2011 St. Joseph Church Lighting Project

St Joseph's Church qualified for a 50% rebate totaling $295.25. The replaced their incandescent bulbs with 90 ES Globe Lamps that reduce the electric usage for each bulb to 19 watts.

2011 Valliere Realty LLC

Valliere Realty LLC has installed new outside lighting at the shopping plaza. The District has performed the final site visit and will rebate the project with a 30% incentive totaling $990.00

2011 Austin T Levy Lighting Project

An Audit was performed by RISE engineering in 2011 for a retrofit lighting project, but because of the lack of available funds, will not move forward on this lighting project in 2011.

The District identified four business that were interested in receiving energy audits for possible rebates in 2011; the Knights of Columbus, Café at the Falls, Burrillville Motors, and Matrix. The audits for these projects were performed by RISE Engineering and reviewed with the various businesses but none of the businesses have moved forward with their lighting projects.

2012 Lighting Projects:

The District reduced the incentive last year, but is finding it hard to persuade the C & I customers to implement the recommendations from their energy audits. The District would like to increase the rebates for lighting projects back to 60% on retrofit projects and 40% on new lighting projects in 2012. These incentives in the past have enticed customers to make the necessary changes to increase their energy efficiencies.

The District has identified the following projects for 2012:

The Brothers of the Sacred Heart – has approached the District to do a retrofit lighting project in 2012. The District has contacted RISE Engineering to schedule an audit. The District would like to allocate $5,000 to this project in 2012.

Country Farms- National Resource Management Inc. (NRM) has performed and audit at this location. The District would like to allocate $4,975 to this project in 2012. NRM has submitted a refrigeration proposal to install CoolTrol refrigeration controls to cycle temperature and evaporator fans, replace 4 existing shade-pole motors with 4 high efficiency EC motors in evaporators, install dew point –based pulse controls for anti-sweat heaters, and install night shutoff controls in vendor coolers to turn off during the store's closing hours. These measures would qualify for a 60% rebate of $3,230. They would also like to replace the florescent bulbs in their coolers with LED lighting which would also be rebated at 60% and qualify for a $1,745 rebate. The District would like to fund this line item at $4,975. *Please see Schedule G for the rebate proposal.*

Committed Funds 2011- Lighting Projects: $10,000

The District would like to allocate funds to 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 2011 The District was able to accommodate the St. Joseph Church. 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.

It has been several years since the District has held a seminar to encourage the businesses in our area to take measures that will make them more efficient. The District would like to have the option of holding a business breakfast for the commercial and industrial customers to discuss the types of incentives that are available to help these businesses use their power more efficiently. If the request for incentives do not pick up by midyear in 2012, holding a seminar would give us the opportunity to communicate the availability of incentives.

The District would like to allocate $10,000 to this line item and make the funds available on a first come first serve basis with the option to hold a seminar if there are no requests for rebates by midyear.

Consultation fees: $1,000

National Grid, RISE Engineering and Energy New England 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, discussions with the restaurant, nursing home, and small business owners has made them aware of the availability of commercial appliance rebates. They have expressed the need to buy appliance designed for residential use. Many of the small offices and nursing homes have employee and community rooms that require refrigerators, dishwasher and other appliance that are smaller than the commercial appliances. Therefore the District would like to offer these businesses the same rebate criteria as seen under the residential customers. The District has already received a request for an ENERGY STAR rebate on a dehumidifier 2011 from one of the small businesses.

The District will send out a bill insert to all the businesses to promote the availability of rebates on commercial appliances and the smaller residential appliances. The District would also like to add the following appliances to ENERGY STAR commercial appliances: commercial washing machines and vending machines. The following commercial appliances would qualify:

Commercial Dishwashers–ones that earn the ENERGY STAR on average are 25 % more energy efficient and twenty-five percent more water efficient than standard models.

Commercial Fryers- ones that earn the ENERGY STAR are up to 25% 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 15% percent more efficient and ten percent more water efficient than standard models.

Commercial Hot Food Holding Cabinets that have earned the ENERGY STAR are 60% 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 10% more energy-efficient than standard models. A qualified grill can save 2,270kWh annually.

Commercial Ovens- That earn the ENERGY STAR are 20% more energy-efficient than standard models. These ovens can save 1,870 kWh annually.

Commercial Refrigerators & Freezers- that meet the ENERGY STAR specifications will be 30% 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 to15% more energy-efficient than standard models. They can save 6,270 kWh annually.

Commercial Clothes Washers by choosing an ENERGY STAR qualified commercial washer for a laundry facility will save you a significant amount of money and provide the residents with the best laundry performance possible. On average facilities will realize a savings of $141.60 in electricity the first year and on average they will trim $1,000 per washer from their utility bills over a ten years period.

Energy Star Vending Machines-a typical vending machine that meet the ENERGY STAR criteria will save more than 1,500 kWh per year compared to non-qualified models. New and rebuilt Energy STAR refrigerated beverage vending machines are 50% more energy efficient than standard machines because they incorporate more efficient compressors, fan motors and lighting systems. They come with low power mode options that allow the machine to be placed in low-energy lighting and low-energy refrigeration state during times of inactivity.

The District proposes a rebate of 10% with a cap of $350 for commercial appliance or the following for the smaller Residential Appliances:

A commercial or industrial customer purchasing an ENERGY STAR compliant residential appliance will receive a rebate of up 10% not to exceed the following for each appliance; refrigerator, freezer, and clothes washer up to $75. A customer purchasing an ENERGY STAR compliant dishwasher or air purifier will receive an incentive up to $50; an ENERGY STAR air conditioner will receive an incentive up to $25; an ENERGY STAR dehumidifier will receive incentive up to $20. The same savings would apply as listed under ENERGY STAR Appliance rebates.

Administrative/Ad/ Education

Administrative Expenses: $20,500

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 DSM Coordinator 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 Assistant General Managers works with the commercial and industrial customers on various C & I projects and performs site visits.

The District would also like to perform a training session with the Customer Service Representatives and include a luncheon to train them on the lasted criteria regarding DSM rebates for 2012.

The District would like to fund this line item at $20,500.

Follow-Up to Successful Programs: $1,180

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: $14,000

The District worked with Soleil Communication in 2011 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 purchase Energy Savers coloring books; these were given to the children at the open house in September. The District also purchased 90 booklets of "Energy Matters for Small Business" from American Public Power Association as well as 500 copies of a news letter called "eco@home™"that was personalized with our name, website, and phone number. This news letter is released four times a year and deals with conserving energy in your home.

The District also paid for two flyers that were inserted in the bills one to promote the DSM Programs in both the Commercial/Industrial and the Residential programs. The District purchased the following fulfillment items from Culver which all had a conservation message on them: spatula, chip clips, CFL key chain with a light, refrigerator thermostat, and energy conservation paint sheet.

The District would like to use some of these funds to update the website in 2012, process bill inserts promoting the various program, and to run advertisements in the local paper, to purchase fulfillment materials, such as night lights, refrigerator thermostats, refrigerator brushes and other conservation materials which will be given away at the Annual Green Power Green Festival.

The District would like to purchase copies of a news letter called "eco@home™" that is released four times a year and deals with conserving energy in your home. The news letter will be personalized with the utilities name, website, and phone number.

The District would like to purchase a couple of Kill-A-Watt meters to use as an educational tool for our customers. The Kill- A-Watt is a plug-in watt hour / kWh meter designed to easily measure electricity used by plug in appliances and can add in running cost and projected cost. The District would make them available to the residential customers from the District office or from the local library.

The District would like to add the following links to the PUD web site in 2012:"Energy Hog" at www.energyhog.com, EPA Energy Star Kids at www.energystar.gov, and Do it yourself audits at: www.eere.energy.gov/consumerr/your_home/energy_audit/index.cfm/topic=1

1170 . These website allow the customers to learn how they can improve the energy efficiency of their homes, allowing them to save money, and improve the comfort of their homes.

Burrillville School Project: $3,500

The District reallocated the funds from this line item to the more popular programs in 2011. The project with Mr. Aldrich was not satisfactory this year and the District made the decision to end the relationship.

The District would like to keep this line item open, and hopes to find a teacher in one of the schools that we can partner with. The District would like to fund this line item at $3,500 in 2012.

6th Annual Public Power Green Festival: $9,000

In 2011, funds were used to rent equipment, purchase supplies, place an ad in the Bargin Buyer, pay a face painter, hire a puppeteer, hire a person to overlook the kids craft table, and for staff time at this event. Many hours were dedicated to the preparation of the event. This event continues to be very successful and this year we added the ENERGY STAR Booth to the event. The weather for this event was beautiful and the attendance was very high.

The District would like to fund this line item at a slightly higher level for the 2012, 6th Annual Public Power Green Festival. The event continues to grow and is a great tool in reaching out to the customer base. It allows us to show the customers what the latest conservation measures are and how they can benefit from the various rebates that are offered though the Demand Side Management Program.

The District would like to fund this line item at $9,000 in 2012.

Energy Efficiency Education funds: $4,500

The District feels that this program has been a wonderful educational opportunity for the DSM Coordinator. The classes for the Energy Efficiency Management Certificate were very informative and the ability to network with other utilities is invaluable.

There are opportunities for more education in this field, in 2012. APPA will be offering a couple of courses in the energy efficiency field listed as Commercial Energy Service that Work and Residential Energy Services that Work. The APPA Institution will be held in several locations in 2012.

The cost of the program is estimated at $4,500 which consists of $1,190 for the course, $350 for books and materials, $1,000 for the hotel, $400 for food, $1,060 for the flight, and $500 for a rental car/ taxi. *Please see Schedule G for information on the APPA Courses.*

Program Research and Development: Street Light Incentive: $1,000

One of the largest public-service loads for utilities is powering streetlights. The replacement of mercury vapor streetlights with more energy efficient high-pressure sodium lights can result in significant energy savings but replacing them with LED Lights can increase the saving by up to 90 percent. The District would like to allocate $1,000 to this line item to do a site visit to a municipal located in the state of Maine that has converted their street lights. The information they can provide by their own trials and errors would be invaluable information and allow us to develop a possible incentive to the villages of Harrisville and Pascoag to help them to convert to more efficient street lighting. This is new technology so the District would like to do a complete and thorough evaluation before investing in LED Street lights. The District is proposing a budget of $1,000.

D

Pascoag Utility District
Demand Side Management Programs - 2011 Approved

	Approved
Estimated carry over from 2010	$ 17,000
Estimated sales for 2011	$ 104,000
Net 2011 budget	$ 121,000

		2011 Approved	Expenses	Balance	
	Residential Program				
DR1101	ENE Residential Conservation (ECHO)	$ 2,400	$ 1,800	$ 600	9 months @ $200
DR1102	Home Energy Audits with Incentives	$ 3,000	$ 1,621	$ 1,379	8 Rebates @$200, 2 rebates
DR1103	Energy Star Appliance Rebates	11945	8620.3	3324.7	26 Air conditioners, 49 clothes washer, 27 Dishwasher, 51 Refrigerators, 2 Freezers, 8 dehumidifiers 1 air purifier
DR1104	Energy Efficient Windows/Doors	$ 6,000	$ 1,820	$ 4,180	14 Doors and 240 Windows
DR1105	Heating System Incentive	$ 6,000	$ 1,500	$ 4,500	6 boilers
DR1106	Energy Star Thermostats/Lighting fixtures	$ 1,100	$ 775	$ 325	28 Thermostats, 3 lighting fixtures
DR1107	Home Office Equipment/Home Electronics	3500	1890.08	1609.92	24 TV's, 6 printers, 1 monitor, 4 phones, 6 computers, 2 blue ray players, 1 hot water heater
DR1108	Electric Heat Conversion/Geothermal System:	$ 100	$ -	$ 100	No activity
DR1109	New Construction	$ 2,080	$ 1,560	$ 520	3 rebates @ $520
DR1110	Central Air Conditioner Incentive	$ 1,000	$ 600	$ 400	3 Rebates at $200
DR1111	Change a Light Campaign	$ 500	$ 405	$ 95	Purchase of light bulbs, 6 rebates, sale of 20 bulbs
DR1112	Energy Conservation Calendars	$ 850	$ 849	$ 1	purchase 1000 calendars
DR1113	Committed for 2010 Programs	$ 13,735	$ 13,735	$ -	satisfy 2010 qualified rebates
	Net Residential	**$ 52,210**	**$ 35,176**	**$ 17,034**	
	Industrial/Commercial				
DI1101	Energy Star Incentive - Office Equipment	$ 500	$ 116	$ 384	1 computer, 1 charger, 1 all in one unit, 1 printer
DI1102	AT Levy Lighting Project	$ 10,000		$ 10,000	No activity
DI1103	Valliere Realty LLC	$ 5,000	$ 990	$ 4,010	New outside lighting rebate
DI1104	Committed Funds- Lighting Projects	$ 13,000	$ 1,852	$ 11,148	Retrofit lighting for Berean Baptist Church, and St. Joseph Church CFL's
DI1105	Consultation Fees	$ 1,000		$ 1,000	No activity
DI1106	Energy Star Commercial Appliance	$ 700	$ 18	$ 682	1 dehumidifier
	Net Industrial/Commercial	**$ 30,200**	**$ 2,976**	**$ 26,542**	
	Administrative/Ad/Education				
DA1101	Administrative	$ 20,000	$ 12,814	$ 7,186	Administrative labor, mileage, and supplies
DA1102	Funds for Follow-up to Successful Programs	$ -	$ -	$ -	Funds were moved to more successful programs
DA1103	Outreach/Education	$ 8,000	$ 7,509	$ 491	
DA1104	BHS Project	$ 65	$ 64	$ 1	Smart Strip
DA1105	PUD 5th Annual Public Power Green Festival	$ 8,900	$ 8,876	$ 24	Labor, Ad in local paper, banner update, rentals, face painter, puppeteer, musician, supplies
DA1106	Energy Efficiency Management Certificate Program	$ 5,360	$ 4,599	$ 761	Tuition, flight, hotel, meals, books.
DA1107	DSM Office Equipment	$ 2,946	$ 2,946	$ -	Purchase a laptop, carrying case and encryption
	Net Administrative/Ad/Education	**$ 45,271**	**$ 36,809**	**$ 8,462**	
	Estimated DSM 2011 Budget/ Expenses/ Balance	**$ 127,681**	**$ 74,961**	**$ 52,038**	

E

Calculations of Energy Savings for Energy Star Incentives(1)

Appliance	Specifications	Monthly hours Operation	Monthly kwhr use	Annual kwhr use		Units w/ Incentives	Total annual
Air Conditioner							
	6000 BTU	165	83	990	Stamdard		
	500 watts		74	892	EnergyStar	26	2548
Clothes Washer	Large Capacity	23	12	144	Stamdard		
			11	132	EnergyStar	49	588
Dishwasher	13,000 Watts	24	31	372	Stamdard		
			25	300	EnergyStar	27	1944
Refrigerator	6-15 years old	245	147	1764	Stamdard	51	26928
	17CF, frost free		103	1236	EnergyStar		
Freezer	Upright 6-10 year	300	79.45	953.4	Stamdard		
	11 - 15.9 upright		61.2	734.4	EnergyStar	2	438
Dehumidifier	Large capacity	340	221	2652	Stamdard	8	5280
	650 Watts		166	1992	EnergyStar		
Total Average kwhrs Savings						163	37,726

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

2011 Appliance savings

Pascoag Utility District
Savings Associated with completed conservation Projects for 2011

Project	***Date Completed***	***Kw Savings***	***kWh Savings***	***Dollars ($0.16/kwhr)***
St Joseph's Church	*May 2011*		*5,212*	*$833.16*
Berean Baptist Church	*July 2011*	*1.2*	*2404*	*$384.64*
Valliere Realty LLC	*October 2011*		*5418*	*$866.68*

F

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

Schedule G

2012

Country Farms Proposal

NATIONAL RESOURCE MANAGEMENT, INC.

NRM

800-377-5439

CORPORATE HEADQUARTERS
480 Neponset St., Building 2
Canton, MA 02021

REGIONAL OFFICES
29572 Union City Blvd.
Union City, CA 94587

7313 Carroll Rd., Sui
San Diego, CA 92121

18340 Yorba Linda Blvd., Suite 107-325
Yorba Linda, CA 92886

CUSTOMER INFORMATION

Location: **Country Farms**
Address: **138 Main St., Pascoug, RI 02859**
Contact: **Peter Patel**
Phone: **508-226-5338**
Utility: **Municipal Utility**
Account # 0-000-0000-00

NRM OFFICE USE ONLY
Job #155-RM
Installation Code
1FC1FH4NS4ECM

REFRIGERATION PROPOSAL
Cost and Savings Summary

COST

Materials		$3,560.00
Sales Tax	**6.25%**	$222.50
Labor	including engineering, design, installation, setup and test	$1,570.00
	Installed Cost	$5,352.50

REBATES/INCENTIVES

Incentive	**0%**
Total kWh savings per year	9,454 kWh
Energy Efficiency Rebate	$0.00

Net Customer Cost **$5,352.50**

Simple Payback after rebate/incentive **44 Months**

Includes 2-year material & labor warranty on Cooltrol and 1-year material & labor warranty on ECM's and Smart Defrost Kit

SAVINGS*

Annual kWh Savings	9,454 kWh
Average **kW Reduction**	**0.664 kW**

***Savings figures do not affect your available rebates or incentives**

Annual Utility Bill Savings at $0.171/kWh **$1,616.70**

Average Monthly Savings **$134.72**

Prepared: ***10/5/2011***

NATIONAL RESOURCE MANAGEMENT, INC.

NRM

800-377-5439

CORPORATE HEADQUARTERS
480 Neponset St., Building 2
Canton, MA 02021

REGIONAL OFFICES

29572 Union City Blvd.
Union City, CA 94587

7313 Carroll Rd., Suite E
San Diego, CA 92121

18340 Yorba Linda Blvd , Suite 107-325
Yorba Linda, CA 92886

CUSTOMER INFORMATION

Location: **Country Farms**
Address: **138 Main St., Pascoug, RI 02859**
Contact: **Peter Patel**
Phone: **508-226-5338**
Utility: **Municipal Utility**
Account # 0-000-0000-00

NRM OFFICE USE ONLY
Job #155-RM
Installation Code
1FC1FH4NS4ECM

REFRIGERATION PROPOSAL
Scope of Work

Existing Conditions

Existing **Evaporator Fan Motors run continuously, 8,760 hours per year.**

Shaded **pole motors in existing evaporators.**

Anti-sweat **door heaters run continuously, 8,760 hours per year.**

Vendor **Coolers (e.g. Coke and Pepsi) run continuously, 8,760 hours per year.**

Proposed Conditions

1FC: **1 zone(s) of Energy-saving CoolTrol refrigeration controls to cycle temperature and evaporator fans.**

4ECM: **Replace 4 existing shaded-pole motors with 4 high-efficiency EC motors in evaporators.**

1FH: **Dewpoint-based pulse control for anti-sweat door heaters**

4NS: **4 Vendor Coolers (e.g. Coke and Pepsi) on night-shutoff control, to turn off during store closed hours.**

Installation

- Installation to be performed by NRM licensed electricians during normal business hours
- Some measures may be impossible or unsuitable for application depending on local or national safety codes, etc. NRM licensed electricians shall have final discretion over which measures may be installed.
- Customer to provide access to NRM installers. There is no need to empty the cooler, reschedule deliveries, or make any special arrangements, unless the cooler is so full that our installers are unable to work in it.

Prepared: *10/5/2011*

National Resource Management, Inc.

WALK-IN COOLER ENERGY CONSERVATION BENEFIT ANALYSIS

1) *Customer:* Country Farms #155-RM
2) *Address:* 138 Main St., Pascoag, RI 02859
3) *Telephone:* 508-226-5338
Contact: Peter Patel
4) *Utility Company:* Municipal Utility
5) *Account Number:* 0000-000-0000 Install Code: 1FC1FH4NS4ECM

5) Cooler ID:	Cooler temperature set point. Degrees F	ft. length X	ft. width X	ft. height =	Walk-in Volume affected by Economizer	Total Walk-in Volume in Cu Ft
F/S Freezer	-5.0	0.00	0.00	0.00	0	0
Milk/Soda/Juice Cooler A	38.0	19.00	11.50	7.40	0	1,617
N/A	38.0	0.00	0.00	0.00	0	0
N/A	38.0	0.00	0.00	0.00	0	0
N/A	38.0	0.00	0.00	0.00	0	0
N/A	38.0	0.00	0.00	0.00	0	0
Average Weighted Temp - Economizer Application:	38.0			Total Volume:	0	1,617

PART I

REFRIGERATION COMPRESSOR(S) AND CONDENSER FAN(S):

6) [Compr motor (amps FLA) X (voltage) X (.85 PF) X sqrt(of ph)+Cond fan (amps FLA) X (voltage) X (.85 PF) X sqrt(of ph)]/1,000

	Comp V:	Comp A:	Comp Ph	Fan V:	Fan A:	Fan Ph:	KW Load
F/S Freezer	0	0.0	0	0	0.0	0	0.00
Milk/Soda/Juice Cooler A	208	12.0	3	230	3.2	1	4.30
N/A	0	0.0	0	0	0.0	0	0.00
N/A	0	0.0	0	0	0.0	0	0.00
N/A	0	0.0	0	0	0.0	0	0.00
N/A	0	0.0	0	0	0.0	0	0.00
TOTAL KW Load:							4.30
TOTAL KW Load Affected by Economizers:							0.00

6a) Percent of total Compressor Load Employed by Coolers Listed above:		100%	100%
7) Total compressor load affected by Economizers in KW	KW	0.00	4.30
8) Compressor duty cycle during winter months:		35%	35%
9) Compressor duty cycle during non-winter months: Many variables affect the compressor duty cycle		55%	55%
9a) such as box design, temperature, age, etc.	Avg. Adjusted Winter KW	0.00	1.51
9b)	Avg. Adjusted Summer KW	0.00	2.37
10) Bin hours = ECONOMIZER potential use per year (ref. chart)	Hours	2,195	2,195
11) ECONOMIZER off hours per year. 8,760 - (line10)	Hours	6,565	6,565
12) Compressor energy use per year. (line 7) x ((line 8) x (line 10) + (line 9) x (line 11))	KWH/yr	0	18,831
13a) No. of wall mounted ECONOMIZER units proposed for installation.		0	NRM-500
13b) No. of large roof/wall mounted ECONOMIZER units proposed for installation. (up to 2000CFM)		0	NRM-2000
14a) ECONOMIZER load: .285KW / .75KW x (line 13a / 13b)		0.000	KW
14b) ECONOMIZER energy use based on 75% duty cycle: 75% x (line 10) x (line 13) x (line 14a)		0	KWH/yr
15) Reduced compressor energy use. (line 7) x (line 8) x (line 10)		0	KWH/yr
16) Net compressor energy savings from ECONOMIZER. (line 15) - (line 14)		0	KWH/yr
Percent savings from ECONOMIZER of the affected load: Annual & Winter months		0.00%	

National Resource Management, Inc.

WALK-IN COOLER ENERGY CONSERVATION BENEFIT ANALYSIS

1)	*Customer:*	Country Farms	#155-RM
2)	*Address:*	138 Main St., Pascoag, RI 02859	
3)	*Telephone:*	508-226-5338	
	Contact:	Peter Patel	
4)	*Utility Company:*	Municipal Utility	
5)	*Account Number:*	0000-000-0000	Install Code: 1FC1FH4NS4ECM

PART II

ANALYSIS OF CYCLING EVAPORATOR FAN SET(S):

Evaporator fan sets shall be cycled off when refrigeration supply line temperature rises above set point

1) Current annual operating hours of evaporator fans	8,760	8,760
2) Compressor average run time.	41%	50%
3) Projected annual operating hours of compressor. W/Econ Part I (line9)x(line11) and W/No Econ Part I (line8)x(line10) + Part I (line9)x(line11)	3,611	4,379
4) Evap fan off-hours incl off-delay affected by economizer: (line 1) - (line 3) X 1.25 - 175 Hrs defrost	4,072	3,111

Evaporator fan off-hours including off-delay not affected by Economizer: (line 1) - (line 3) X 1.1 - 175 Hrs defrost

Cooler ID:	Number of Fans	Amps X	Volts X	Phase X	Power Factor	Wattage Load	
F/S Freezer	0	0.00	0	0.00	0.55 PF	0	Watts
Milk/Soda/Juice Cooler A	4	1.00	230	1.00	0.55 PF	506	Watts
N/A	0	0.00	0	0.00	0.55 PF	0	Watts
N/A	0	0.00	0	0.00	0.55 PF	0	Watts
N/A	0	0.00	0	0.00	0.55 PF	0	Watts
N/A	0	0.00	0	0.00	0.55 PF	0	Watts
5) Total KW demand of all evaporator fan sets:						0.5060	KW

		a) Economizer	b) Non Economizer	
6) Total KW demand of all evaporator fan sets with and without economizer		0.0000	0.5060	
7) Load and No. of installed destratifying fans: (each fan represents 30 Watts)	0.030 KW	0	0	
8) Total load of installed fans:		0.0000	0.0000	
9) Savings due to cycling of evaporator fans (line 4) X (line 6)		0	1,574	KWH/yr
10) Savings due to reduced cooling load from evaporator fans. (line 9) X .28 X 1.6		0	705	KWH/yr
11) Energy used by new recirculating fans: (line 1) X (line 8)		0	0	
12) Energy use due to increased cooling load from recirc. fans (line 11) X .28 X 1.6		0	0	
13) Net energy saved by cycling evaporator fans: (line 9)+(line 10)-(line 11)-(line 12)		0	2,280	KWH/yr
a) Percent total reduction of evaporator fan run time.		46.48%	35.52%	
14) Projected Demand Savings average for year (line 5) x (line 13a)		0.0000	0.1797	KW

ANALYSIS OF SAVINGS FROM DIRECT DIGITAL TEMP CONTROLS:

15) Annual energy use by compressor. Part I (line 12) - Part I (line 16)			18,831	KWH/yr
16) Compressor savings: compressor kwh(line 15) X controller reduce run time (%)		5.0%	942	KWH/yr
17) Resulting evaporator savings: (evap load Part II line5) X (evap hours 8,760 Hr/Yr - Part II line4) X controller reduced time			143	KWH/yr
18) Total savings from Direct Digital Controller: (line 16) + (line 17)			1,084	KWH/yr
19) Demand Reduction: Estimated 70% / 10% compressor loads only	Winter	0.000	0.075	KW
(Part I (line 9a)-(line 14a)) x 10% + (Part I (line 9b)) x 10%	Summer	0.000	0.118	KW

SAVINGS SUMMARY: Economizer and Digital Evaporator Fan and Temperature Control

Projected Energy Savings = PART I (line 16) + PART II [(line 13) +(line 17)] 3,364 KWH/yr

National Resource Management, Inc.

WALK-IN COOLER ENERGY CONSERVATION BENEFIT ANALYSIS

1)	*Customer:*	Country Farms	#155-RM
2)	*Address:*	138 Main St., Pascoug, RI 02859	
3)	*Telephone:*	508-226-5338	
	Contact:	Peter Patel	
4)	*Utility Company:*	Municipal Utility	
5)	*Account Number:*	0000-000-0000	Install Code: 1FC1FH4NS4ECM

PART III

ANALYSIS OF REPLACING EVAPORATOR MOTORS WITH ECM MOTORS

ECM Motors are designed to reduced the motor and refrigeration load when the fans are on.

1) Does Cooler Currently utilize CoolTrol?	Yes	
2) Estimated on time of Evaporator Fans (if system uses CoolTrol, estimated on time = 5,600 otherwise estimated on time of Evaporator Fans is 8,760)	5,600	Hours
3) KW Load of Evaporator Fans	0.506	KW
4) Estimated Percentage Reduction in Motor Load	65%	KWH/yr
5) KWH Motor Savings (line 2 * line 3 * line 4)	1,842	KWH/yr
6) Savings due to reduced cooling load from evaporator fans. (line 5) X .28 X 1.6	825	KWH/yr
7) Projected Energy Savings from Installing ECM Motors	2,667	KWH/yr
8) Projected KW Savings from Installing ECM Motors	0.329	KW

WALK-IN COOLER ENERGY CONSERVATION BENEFIT ANALYSIS

1)	*Customer*	Country Farms	#155-RM
2)	*Address*	138 Main St. Pascoag RI 02859	
3)	*Telephone*	508-226-5338	
	Contact	Peter Patel	
4)	*Utility Company*	Municipal Utility	
5)	*Account Number*	0000-000-0000	Install Code 1FC1FH4NS4ECM

PART V

ANALYSIS OF CONTROLLING REACH-IN GLASS DOOR HEATERS

By installing humidity sensors to control door heaters operating hours of door heaters can be reduced by 5,000 hours

Cooler ID	No of doors	volts	amps	Watts
F/S Freezer	0	120	0.000	0
Milk/Soda/Juice Cooler A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0

1) Total load of Medium Temp Door Heaters	Total	0.000	KW
2) Door heaters annual energy use (line 1) X 8,760 hours		0	KWH/yr
3) Estimated run hours of door heaters by operating heaters to maintain 5 deg above dew point		3,760	hours
4) Estimated average power level of door heaters when operated to maintain 5 deg above DP		50%	
5) Demand reduction of door heater load (heaters never operate above 70% power level)		0.000	KW
6) Door heaters annual energy use with humidity control (line 1 x line 3 x line 4)		0	KWH/yr
7) Annual energy savings from door heater controls (line 2 - line 6)		0	KWH/yr
8) Total OFF hours of Cooler Door Heaters (line 7) / (line 1)	#DIV/0!	#DIV/0!	hours

PART VI

ANALYSIS OF CONTROLLING REACH-IN GLASS DOOR HEATERS ON FROZEN FOOD COOLERS

By controlling door heaters based on dew point operating power level of door heaters can be reduced to 40% for 4,000 hours

Cooler ID	No of doors	volts	amps	Watts
F/S Freezer	1	120	1.500	180
Milk/Soda/Juice Cooler A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0

1) Total load of Frozen Food Door Heaters		0.180	KW
2) Door heaters annual energy use (line 1) X 8,760 hours		1,577	KWH/yr
3) Estimated run hours of door heaters by operating heaters to maintain 5 deg above dew point		8,760	hours
4) Estimated average power level of door heaters when operated to maintain 5 deg above DP		65%	
5) Demand reduction of door heater load (heaters never operate above 80% power level)		0.036	KW
6) Door heaters annual energy use with dew point control (40% x line 1 x 4000 + line 1 x 4760 x line 4)		845	KWH/yr
7) Annual energy savings from door heater controls (line 2 - line 6)		732	KWH/yr
8) Total OFF hours of Freezer Door Heaters (line 7) / (line 1)	46%	4,066	hours
Total Door Heater Control Savings	732	KWH/yr	

PART VII

ANALYSIS OF CONTROLLING DRAIN PAN HEATER

By Controlling Drain Pan Heater for freestanding Freezers unit can be shut off approximately 65% of time

Cooler ID	No of Pan Heaters	volts	amps	Watts
F/S Freezer	0	120	0.000	0
Milk/Soda/Juice Cooler A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0
N/A	0	120	0.000	0

1) Total Load from Drain Pans	0.000	KW
2) Drain Pan annual energy use (line 1) X 8,760 hours	0	KWH/yr
3) Estimated Number of hours that Drain Pan Heater can be shut off (8760 hours * 65)	5,694	Hours
4) Estimated Savings from Drain Pan Heater Shut off (line 3 * line 1)	0	KWH/yr

National Resource Management, Inc.

PEPSI/COKE VENDOR'S COOLER ENERGY CONSERVATION BENEFIT ANALYSIS

1) *Customer:* **Country Farms** **#155RM**
2) *Address:* **138 Main St., Pascoug, RI 02859**
3) *Telephone.* **508-226-5338**
Contact **Peter Patel**
4) *Utility Company.* **Municipal Utility**
5) *Account Number.* **0000-000-0000** Install: **EMS**

PART VIII

VENDOR'S COOLER TOTAL LOAD(S):

6) [Unit total (amps FLA) X (voltage) X (.85 PF) X sqrt(of ph)]/1,000

	Qty:	Volts:	Amps:	Phase:	KW Load
Vendor Cooler(s)	4	120	35.7	1	3.641
Vendor Cooler(s)	0	120	0.0	1	0.000
Vendor Cooler(s)	0	120	0.0	1	0.000
Vendor Cooler(s)	0	120	0.0	1	0.000
Vendor Cooler(s)	0	120	0.0	1	0.000
Vendor Cooler(s)	0	120	0.0	1	0.000
TOTALS:	4		35.70		3.641

7) Total of novelty cooler loads affected by Night Set-back in KW	3.641	KW
8) Estimated compressor duty cycle during winter month nights:	45%	
9) Estimated compressor duty cycle during non-winter month nights:	50%	
10) Bin hours = potential off hours/night	5	
11) Cooler off hours per year 365 x (line10)	1,643	
12) Novelty Coooler energy savings per year. (line 7) x ((line 8) x (line 11)	2,691	KWH/yr

Customer.	**Country Farms**	**#155-RM**
Address.	**138 Main St., Pascoug, RI 02859**	
Telephone.	**508-226-5338**	
Contact.	**Peter Patel**	
Utility Company.	**Municipal Utility**	
Account Number	**0000-000-0000**	Install: **1FC1FH4NS4ECM**

PAYBACK ANALYSIS

Economizer & Walk-In Cooler/Freezer Evaporator Fan and Door Heater Controls

Material Code	Quantity	Description	Unit Cost	Total Cost
E NRM-500	0	NRM-500 Economizers Wall Mount	$1,910.00	$0.00
E NRM-1000	0	NRM-1000 Economizers Roof/Wall Mount	$6,190.48	$0.00
CCS-1EV	1	Controls for Temp, Evap Fan, Defrost	$1,450.00	$1,450.00
CCS-2+EV	0	Controls per Additional Cooler/Freezer	$840.00	$0.00
A DESTR-1000	0	Destratifier fan units	$129.00	$0.00
CCS-1DH	0	Cooler Door Heater Control Option	$730.00	$0.00
CCS-1FH	1	Freezer Door Heater Control Option	$730.00	$730.00
CCS-2+DH	0	Additional Cooler Door Heater Circuits	$555.00	$0.00
CCS-2+FH	0	Additional Freezer Door Heater Circuits	$555.00	$0.00
DOOR CLOSER	0	Walk through Door Closer Cooler/Freezer	$185.00	$0.00
DPH CONTROL	0	Freezer Drain Pan Heater Control	$215.00	$0.00
EVAP FAN ECM	4	ECM Evaporator Fan Motor Replacement	$165.00	$660.00
C VCOOL SETB	4	NRM-Switched Receptacle Control System	$180.00	$720.00
		MATERIAL SUBTOTAL		$3,560.00
		SALES TAX		$222.50
		TOTAL MATERIAL COSTS		$3,782.50
		Cooler Retrofit Labor Cost		$545.00
		Economizer Installation Labor Cost		$0.00
		Destratifier Fan Installation Labor Cost		$0.00
		Cooler Door Heater Retrofit Labor Cost		$0.00
		Freezer Door Heater Retrofit Labor Cost		$445.00
		Walk through Door Closer Labor Cost		$0.00
		Freezer Drain Pan Heater Control Labor Cost		$0.00
		ECM Evaporator Fan Motor Replacement Labor Cost		$580.00
		Novelty Cooler Control Labor Cost		$580.00
	2 YR	Warranty on CoolTrol Products		
	1 YR	Warranty on Door Closer, Drain Pan Heater Control and ECM's		
Total PROJECT COST				**$5,932.50**

PROJECT ECONOMIC SUMMARY

Estimated KWH Savings/yr		9,454
Energy savings/yr @ $0.171/KWH	**$0.171**	**$1,616.70**
Net cost to customer		**$5,932.50**
Simple Payback **Period With Incentive**		**3.67 YRS**

Municipal Utility

REFRIGERATION LED ENERGY CONSERVATION BENEFIT ANALYSIS

1) *Customer* Country Farm — #112-RM
2) *Address* 138 Main St , Pascoag, RI 2859
3) *Telephone* 508-226-5338
Contact Peter Patel
4) *Utility Company* Municipal Utility
5) *Account Number* 0000-000-0000 — Install Code 7DOOR-LED

PART I - Existing Load of Refrigeration Lighting

6) Cooler ID	Lamp Type	Existing Watts/ Lamp	Number of Lamps	Total KW Load of Lamps	Hours Existing Lamps On	Total KwH Usage of Existing Lamps
7 Door Cooler	F60T12HO	90	10	0 90	6,734	6,061
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
N/A	N/A	0	0	0 00	0	0
			Total	0 90		6,061

PART II - New LED Load of Refrigeration Lighting

7) Cooler ID	Lamp Type	Number of Left Pieces	Number of Right Pieces	Watts Per End	Number of Center Pieces	Watts Per Center	Total KW Load of LEDs	Hours LEDs Running	Total KwH Usage of LEDs
7 Door Cooler	6160 Crossfire	3	3	9 00	4	18 00	0 13	6,734	848
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0 00	0	0 00	0 00	0	0
N/A	N/A	0	0	0	0	0 00	0 00	0	0
						Total	0 13		848

Part III - Savings

8) KwH Usage of Existing Refrigeration Lamps (From Part I)	KWH/yr	6,061
9) KW Usage of Existing Refrigeration Lamps (From Part I)	KW	0 90
10) KwH Usage of New Refrigeration LEDs (From Part II)	KWH/yr	848
11) KW Usage of New Refrigeration LEDs (From Part II)	KW	0 13
12) Lighting KwH Savings (line 8 - line 10)	KWH/yr	5,212
13) Savings due to reduced cooling load from new LEDs (line 12) X (3413/12000) X 1 3	KWH/yr	1,927
14) Total KwH Savings from installing Refrigeration LEDs (line 12 + line 13)	KWH/yr	7,139
15) Total KW Savings from installing Refrigeration LEDs (line 9 - line 11)	KW	1 03

Municipal Utility

Customer:	**Country Farm**	**#112-RM**
Address:	**138 Main St., Pascoag, RI 2859**	
Telephone	**508-226-5338**	
Contact	**Peter Patel**	
Utility Company:	**Municipal Utility**	
Account Number:	**0000-000-0000**	Install: 7DOOR-LED

PAYBACK ANALYSIS

REFRIGERATION LED

Material Code	Quantity	Description	Unit Cost	Total Cost
Mot Sensors	0	Motion Sensors	$108.00	$0.00
60" LED Ends	0	60" LED Ends	$123.50	$0.00
60" LED Centers	0	60" LED Centers	$247.00	$0.00
72" LED Ends	6	72" LED Ends	$145.00	$870.00
72" LED Centers	4	72" LED Centers	$290.00	$1,160.00
48" LED Ends	0	48" LED Ends	$110.00	$0.00
48" LED Centers	0	48" LED Centers	$220.00	$0.00
		MATERIAL SUBTOTAL		$2,030.00
		SALES TAX		$126.88
				$2,156.88
		Motion Sensor Labor Cost		$0.00
		LED Installation		$750.00
	1 YR	Warranty on LED's		
Total PROJECT COST				**$2,906.88**

PROJECT ECONOMIC SUMMARY

Estimated KWH Savings/yr		7,139
Estimated KW Savings/yr		1.03
Energy savings/yr @ $0.19/KWH	**$0.1900**	**$1,356.46**

PAYBACK ANALYSIS

Net cost to customer	**$2,906.88**
Simple Payback Period With Incentive	**2.14 YRS**
Monthly Savings	**$113.04**

Municipal Utility

Customer: **Country Farm** **#112-RM**
Address: **138 Main St., Pascoag, RI 2859**
Telephone: **508-226-5338**
Contact: **Peter Patel**
Utility Company: **Municipal Utility** *Account Number:* **0000-000-0000**

Monthly Savings and Cost Summary

Measures	Labor Including Engineering Design, Installation & Setup and Test	Material	Total Installed Project Cost	Net Customer Cost	Payback in Years
Refrigeration LED	$750.00	$2,156.88	**$2,906.88**	**$2,906.88**	**2.14 YRS**

Savings Source	Present Demand	Avg. kW Reduction	Savings in kWh	Annual Savings
Refrigeration LED	0.900	1.032	7,139	**$1,356**
Total/Avg**	**0.900**	**1.032**	**7,139**	

National Resource Management
DATA SHEET

NRM Model Numbers

Length	Model	Watts
48"	4160-120-LP/RP	6
48"	4160-120-CP	12
60"	5160-120-LP/RP	7.5
60"	5160-120-CP	15
72"	6160-120-LP/RP	9
72"	6160-120-CP	18

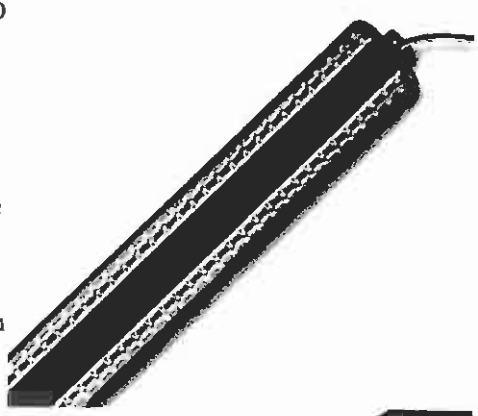
Note: LP/RP and CP numbers denote left, right and center-mounted applications. Product stocked is 4100°K. CCT's of 3500°K and 5000°K are available for special order in 100 or more door quantities.

Features

- 1300 lux to the center of the shelf
- 4-, 5- & 6-foot lengths in stock; other lengths special order
- Higher lumen output
- Reduced energy design
- On board power supply
- Low THD <5%, power factor .979
- ULTRA low profile
- Mounting hardware included
- UL / NSF approved

Quanta CrossFire™ SMD LED Lighting Systems for Retrofit Commercial Applications

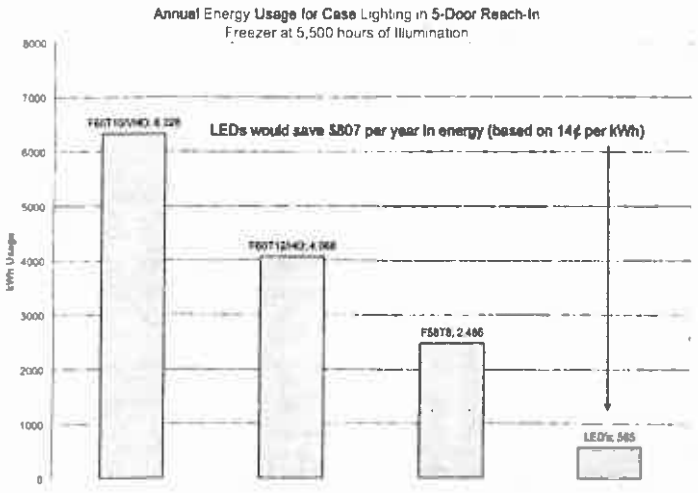
NRM presents the new Quanta CrossFire™ SMD light bar manufactured by Q-Technology. The SMD offers a very low profile while providing higher light output than earlier generations of CrossFire. The ULTRA LOW profile is ideal for retrofitting existing frames in the marketplace. Most frames sold to the commercial refrigeration industry in the last 20 years have had to use a thicker mullion to house the ballast. Q-Technology has taken this into account when designing this product to assure even light distribution across the front of the shelf.



The patent pending on-board power supply provides the flexibility of mounting the light bar anywhere on the back of the frame to optimize your light output while only using 1.5 watts of energy per foot of light.

Fast installation helps reduce up front costs, assuring a fast payback.

LEDs reduce lighting wattage by up to 85% compared to fluorescent fixtures. They also generate substantially less heat than fluorescents — your compressor will run less to cool the case and you'll save even more. Optional Occupancy Sensor controls offer additional savings with no warm-up time for full brightness. With a life expectancy of nearly three times that of fluorescent lamps, maintenance costs are practically eliminated for years to come.



Quanta CrossFire 160 Series LEDs optimize your light output while only using 1.5 watts of energy per foot.

Visit ■ www.nrminc.com Call: ■ 800.377.5439 Email: ■ sales@nrminc.com
Address: ■ 480 Neponset St., Building 2, Canton, MA 02021

NRM
National Resource Management, Inc.

CoolTrol®
Cooler Control Systems

The energy efficient,
cost-saving solution
for your walk-in
coolers and freezers.

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CoolTrol® systems are in more than 6,000 stores, restaurants and wholesale distribution centers throughout the country.

With skyrocketing fuel and energy costs, many owners and managers are turning to National Resource Management's smart and innovative system to help them reduce operational costs and improve their bottom line:

"The NRM System controls our walk-in coolers and freezers in over 20 of our restaurants. We are very pleased with our savings. We estimate we have **reduced our annual electricity and maintenance costs by $15,000** and prevented possible equipment and product loss with the system's alarm features."

— Phil Gagne, Director HVAC Department
99 Restaurant and Pub

"We have installed the CoolTrol solution in over 170 Cumberland Farms locations. Since installing the first system in 1995, our refrigeration technicians have been most **impressed with its reliability, ease in diagnosing compressor and cooler problems, and seamless integration with the refrigeration equipment.**"

— Scott Amerault, Manager of Maintenance Services
Cumberland Farms

"We have installed CoolTrol in over 75 XtraMart stores since 2002. We estimate that CoolTrol has helped us **reduce our electric bills as much as $2,000 per store per year.** Additionally, the Freezer and Cooler Alarms have saved us thousands of dollars in product loss and spoilage. We are very pleased with our return on investment."

— Tom Sancoucy, Operations Manager
Kenyon Oil

What can CoolTrol do for YOUR business? Read on and find out...

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Evaporator fans use 25% to 80% less, saving electricity and reducing compressor run time.

Door and frame heaters are controlled based on store dew point, reducing run time by up to 95% in coolers and 60% in freezers.

In areas with winter temperatures, cool outside air is used so that the compressor and fans run less often.

Cooler Load/Shutdown Button

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- Lessens the risk of damage to your refrigeration systems.
- Reduces cooling costs during loading.

Novelty Cooler Shutoff

- Automatically shuts off your novelty Coke/Pepsi and non-perishable product "visi" coolers when the store is closed.

Smarter Defrost System

- Defrost cycles are based on coil temperature and run time for greater energy efficiency.

Optional Freezer/Cooler Monitoring

- Monitor and alarm equipment not controlled by CoolTrol.

Built-In Intelligence

- Tracks temperatures and equipment run time for statistical analysis of performance and energy use.
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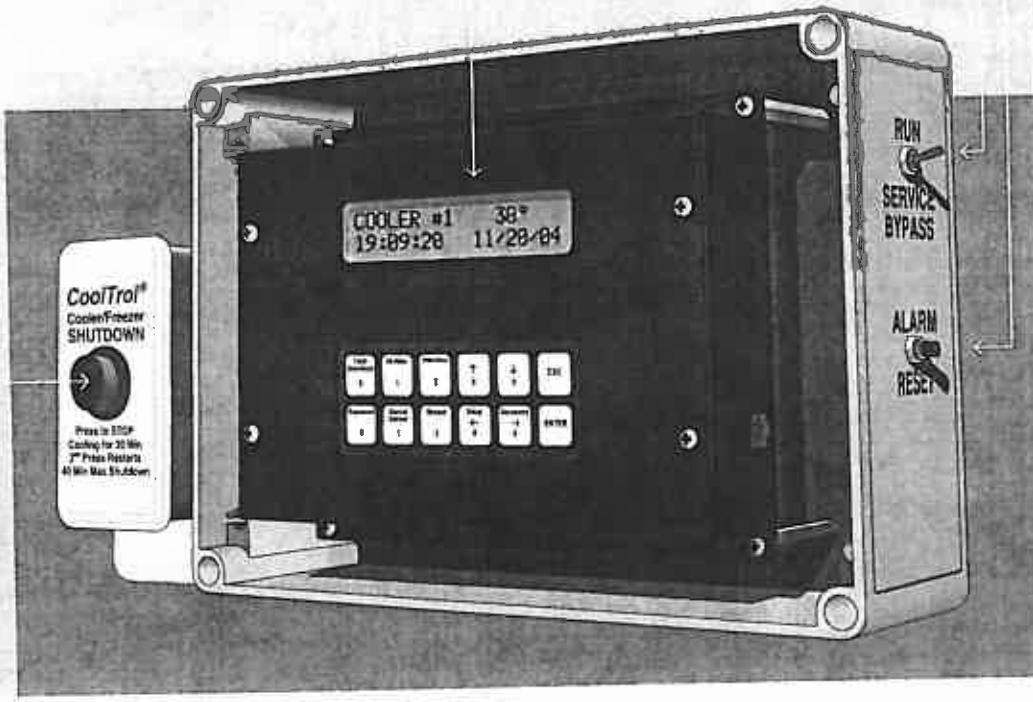
Service Bypass Switch

- Allows users and technicians to bypass the system to service the cooler and then reset it when finished.



Utility Rebate Programs

For an even faster return on your investment

NRM participates in several state- and utility-sponsored rebate programs, including:

California
- Kema's BEST Program
- Kema's Cool Biz Program
- Pacific Gas and Electric
- Right Lights
- Sacramento Municipal Utilities District
- San Diego Gas & Electric
- San Francisco Energy Watch
- Smart Lights
- Southern California Edison

Connecticut
- Connecticut Light and Power
- United Illuminating

Delaware
- Delaware Energy Office

Idaho
- Idaho Power

Iowa
- MidAmerican Energy

Maine
- Efficiency Maine

Maryland
- BGE

Massachusetts
- NSTAR
- National Grid
- Unitil
- Western Mass Electric

Minnesota
- Xcel Energy

Nevada
- Sierra Pacific Power

New Hampshire
- National Grid
- Public Service New Hampshire
- Unitil

New Jersey
- New Jersey's Clean Energy Program
- PSE&G

New York
- Long Island Power Authority
- National Grid
- NYSERDA

Oregon
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Texas
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Utah
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Vermont
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Wisconsin
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Contact us for an energy audit today!

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About NRM

Privately held, National Resource Management (NRM) was founded in 1991, primarily as a lighting conservation company. Since 1995, NRM has been a leading provider of cost-effective energy management solutions for walk-in coolers and freezers. The CoolTrol Cooler Control System enables stores, restaurants, wholesale distributors and other users to maximize the efficiency of their walk-in coolers and freezers, while reducing overall operational costs.

In addition to CoolTrol, NRM offers high-efficiency ECM replacement motors for cooler evaporator fans, remote site and fuel management solutions and complete lighting and refrigeration design services.

Corporate Headquarters:
480 Neponset St., Building 2
Canton, MA 02021
- **www.nrminc.com**
- **800.377.5439**
- **sales@nrminc.com**

Ph: 781.828.8877
Fax: 781.828.8895

Regional Offices:
7313 Carroll Rd., Suite E
San Diego, CA 92121
Ph: 858.693.8877
Fax: 877.866.8177

29572 Union City Blvd.
Union City, CA 94587
Ph: 510.471.2000
Fax: 877.866.8177

NRM
National Resource Management, Inc.

National Resource Management
DATA SHEET

NRM ARKTIC 59 Evaporator Fan Replacement Motor

NRM Model Numbers

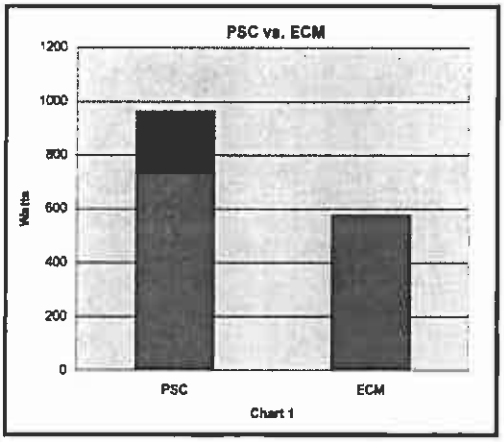
ME59-1CWSE1U
100-120 Volt CW-SE

ME59-1CCSE1U
100-120 Volt CCW-SE

ME59-2CWSE1U
200-240 Volt CW-SE

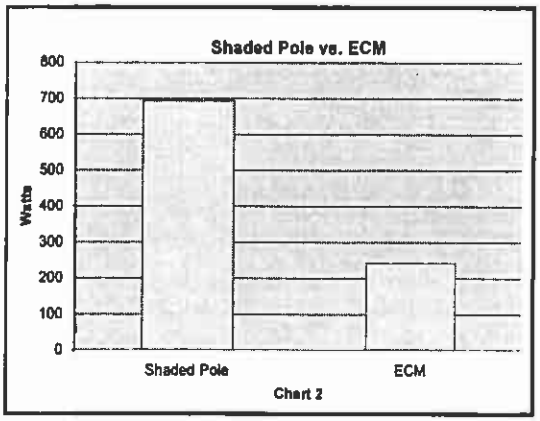
ME59-2CCSE1U
200-240 Volt CCW-SE

NRM's evaporator fan replacement motor, the ARKTIC 59, is a high-efficient commercial refrigeration motor manufactured by Regal-Beloit. The ARKTIC 59 offers up to 65% greater efficiency than a shaded-pole motor, and up to 40% greater efficiency than a PSC motor. Designed specifically for evaporator fan use in walk-in coolers and freezers, the 1/15 HP motor is a form-fitting, drop-in replacement for typical 3.3-inch motors. The ARKTIC 59 offers many features that ensure reliability, both within the motor and in the refrigeration system as a whole. For example, the motor's ability to contribute less heat into the refrigeration cycle means better long-term equipment reliability because there is less stress on all of the system components. The ARKTIC 59 is single phase and available in two voltages, 200-240V and 100-120V and is UL approved.



The ECM's power consumption is significantly lower than comparable PSC and shaded pole motors. Chart 1 compares the performance of 7 PSC motors and 7 ECM's in an evaporator coil of a walk-in cooler. Chart 2 compares 6 Shaded Pole motors to 6 ECM's in an evaporator coil of a walk-in cooler. As each graph shows, the ECM's use 43% less energy than a PSC motor and 67% less than a Shaded Pole motor.

The overall savings from the ECM are further amplified since there is less heat from the motor introduced into the refrigerated space. In the application from Chart 1, each ECM saved 630 kWh per year more than a PSC motor. The annual savings for each ECM in Chart 2 is 1,072 kWh compared to a Shaded Pole motor.



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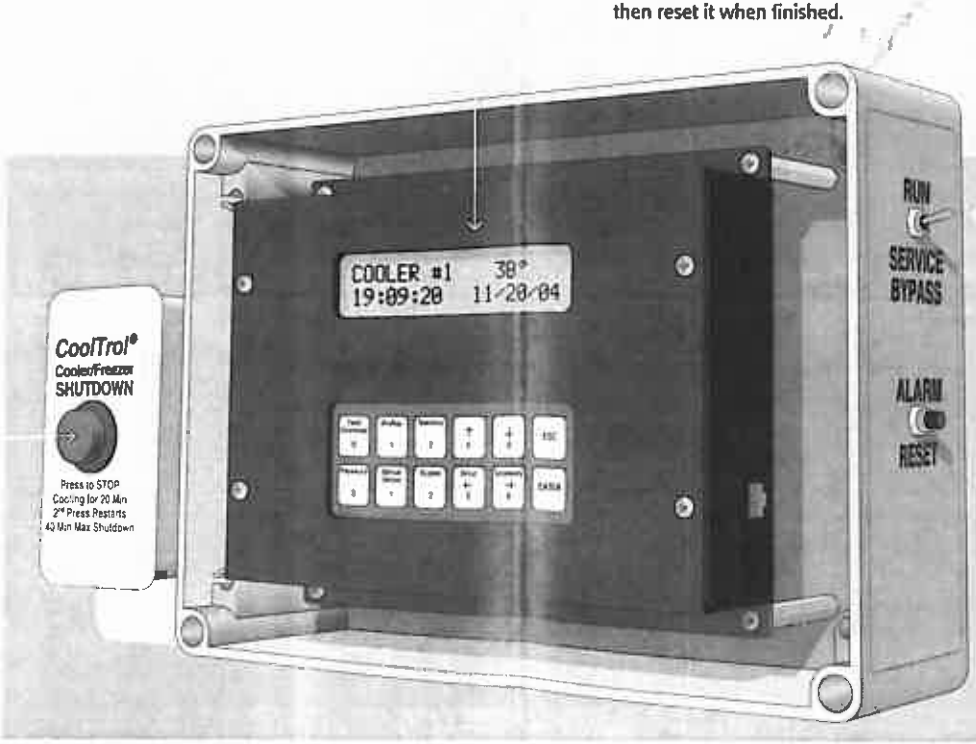

Utility Rebate Programs

For an even faster return on your investment

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California
- Kema's BEST Program
- Kema's Cool Biz Program
- Pacific Gas and Electric
- Right Lights
- Sacramento Municipal Utilities District
- San Diego Gas & Electric
- San Francisco Energy Watch
- Smart Lights
- Southern California Edison

Connecticut
- Connecticut Light and Power
- United Illuminating

Delaware
- Delaware Energy Office

Idaho
- Idaho Power

Iowa
- MidAmerican Energy

Maine
- Efficiency Maine

Maryland
- BGE

Massachusetts
- NSTAR
- National Grid
- Unitil
- Western Mass Electric

Minnesota
- Xcel Energy

Nevada
- Sierra Pacific Power

New Hampshire
- National Grid
- Public Service New Hampshire
- Unitil

New Jersey
- New Jersey's Clean Energy Program
- PSE&G

New York
- Long Island Power Authority
- National Grid
- NYSERDA

Oregon
- Energy Trust of Oregon

Rhode Island
- National Grid

Texas
- Austin Energy

Utah
- Rocky Mountain Power

Vermont
- Efficiency Vermont

Wisconsin
- Wisconsin's Focus on Energy

Contact us for an energy audit today!

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- **800.377.5439**
- **sales@nrminc.com**

NRM
Evaporator Fan
Replacement Motors

Save 40% - 70% in energy use with our turnkey retrofit solutions for your walk-in and reach-in refrigerator and freezer cases.

NRM

National Resource Management, Inc.

National Resource Management's Turnkey Retrofit Solutions Deliver Maximum Energy Savings with Minimal Disruption to Store Operations

Our brushless, DC evaporator fan replacement motors reduce your energy costs up to 70% over conventional motors.

Since 1995, NRM has been at the forefront of energy saving technologies for commercial refrigeration. Our current offering has been expanded to include the highest efficiency replacement fan motor (electronically commutated or EC motor) that can easily be retrofitted into existing walk-in and reach-in coolers and freezers.

Our engineers, project managers and fully licensed technicians are ready to manage your evaporator fan/motor retrofit project from start to finish. As part of our complete turnkey solution, we will:

- perform an energy audit,
- process all rebate applications (where applicable),
- engineer, specify and supply all EC motors, and
- design and fabricate any custom parts to ensure proper fit and performance of the motors upon installation into your existing walk-in and reach-in coolers and freezers.

In most cases, all of your existing motors can be replaced in 1 - 3 days.

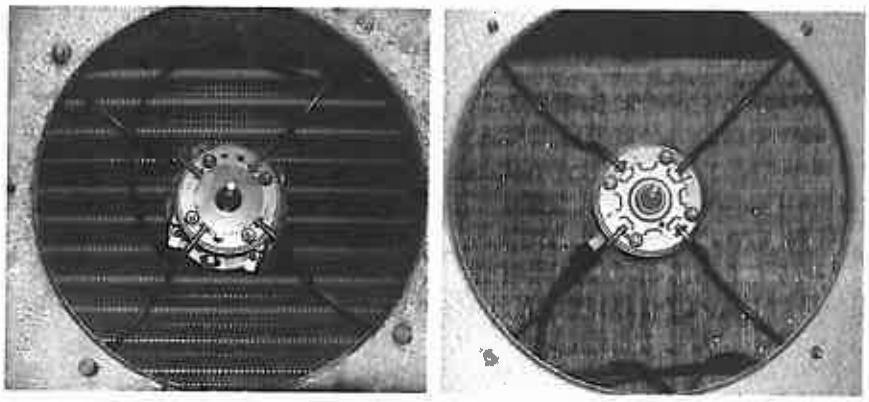
You'll save significant money, energy and time – so much so that you may even consider expanding your refrigerator/freezer departments – giving your customers more products to choose from and your store increased opportunities for profit.

Out with the old … in with the new.

NRM's EC motors are designed as a drop-in replacement for shaded pole and PSC evaporator fan motors

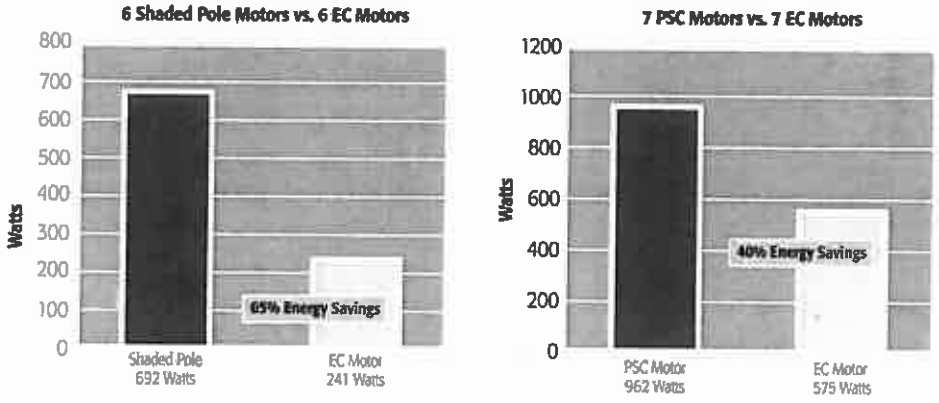
New EC Motor Installation for Walk-ins

Our EC motors are up to 70% more efficient, providing continuous airflow at constant speed, thanks to an onboard microprocessor controller



On average, each motor replaced should save around 900 kWh annually, providing grocery retailers with a quick payback on their installation. Utility rebates, where available, further enhance the payback period.

Performance Comparisons of Motors in an Evaporator Coil of a Walk-in Cooler



New EC Motor Installation for Reach-ins

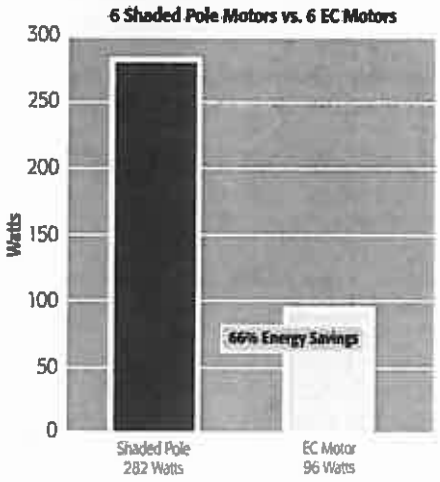
NRM works with equipment manufacturers to provide you with the most up-to-date technology for your particular application

15-year motor life rating

Because EC motors use significantly less electricity, they introduce less heat into the cooled space – resulting in lower refrigeration load and an added energy saving bonus

Motors available in 120V and 240V

Performance Comparison of Evaporator Fan/Motors in a Reach-in Case



Utility Rebate Programs

We do the paperwork, you get an even faster return on your investment

NRM participates in a variety of state- and utility-sponsored rebate programs around the country. Our turnkey service includes processing your application for the following areas:

Contact us for your free energy audit today!

California
- Kema's BEST Program (Bay Area)
- Kema's Cool Biz Program (Bay Area)
- Pacific Gas and Electric
- Right Lights (Bay Area)
- Sacramento Municipal Utilities District
- San Diego Gas & Electric
- San Francisco Energy Watch (Bay Area)
- Smart Lights (Bay Area)
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- Connecticut Light and Power
- United Illuminating

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Maryland
- BGE

Massachusetts
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- Unitil
- Western Mass Electric

Minnesota
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Nevada
- Sierra Pacific Power

New Hampshire
- National Grid
- Public Service New Hampshire
- Unitil

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- PSE&G

New York
- ConEd
- Long Island Power Authority
- National Grid
- NYSEG/RGE
- NYSERDA
- Orange & Rockland

Oregon
- Energy Trust of Oregon

Rhode Island
- National Grid

Texas
- Austin Energy

Utah
- Rocky Mountain Power

Vermont
- Efficiency Vermont

Wisconsin
- Wisconsin's Focus on Energy

If you don't see your utility listed here, ask. New utility programs are being added monthly.

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Ph: 909.287.6654
Fax: 877.866.8177

American Public Power Courses

American Public Power Association
PublicPower.org

Residential Energy Services that Work

Tuesday, **Jan. 24 - Wednesday, Jan. 25**
Seattle Renaissance
Seattle, WA

Tuesday: 8:30 a.m. - 4:30 p.m.
Wednesday: 8:30 a.m. - Noon

Recommended CEUs 1/PDHs 10.3
Field of Study: Specialized Knowledge and Applications

Course Overview
Residential energy efficiency and demand-side management programs span a wide range of types. They may involve use of certain types of equipment for direct load control or be centered on time-based pricing of electricity. This course covers residential energy audits, which are the first step to boosting efficiency. It will also address efficiency measures for new homes, heating and air conditioning systems, building envelopes and water heating. The Energy Star program and its impact on promoting efficient appliances is also covered. This course ties strongly to the Energy Services That Work publication produced through APPA's Demonstration of Energy-Efficient Developments (DEED) program.

Course Topics

- Energy Efficient Mortgages (EEM)
- Energy Star home certification
- The Energy Star mortgage pilot (Maine and Colorado)
- National standards LEED home certification programs
- Residential energy efficiency programs that utilize pricing and rate designs, as well as direct load control
- Real-world programs implemented by public power utilities
- Examples of how utilities are working with new customers to educate and establish relationships

Course Level
Basic. This course does not have prerequisites nor does it require advance preparation.

Who Should Attend
This course is designed for utility personnel who work or have interest in the multiple aspects of energy efficiency. This course will also count towards the continuing education course requirement for those who have graduated from APPA's **Energy Efficiency Management Certification Program (EEMCP).**

Instructor
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.

Travel Arrangements
Travel arrangements and costs are the responsibility of the participants. Make your flight arrangements only after you have verified with **APPA's Education Department** (202/467-2919) that the course(s) you registered for will be held. APPA will not reimburse for changes in travel expenditures regardless of the cause, including the cancellation of a course, meeting or workshop.

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Course Brochure


Winter Institute Main

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Understanding EPA's BACT Greenhouse Gases and Anti Decisions for Electric Utilitie

Rating Agency Outlook for P

The American Public Power Association
1875 Connecticut Ave. NW, Suite 1200
Washington, DC 20009-5715

Tel: 202.467.2900 or 800.515.2772
Fax: 202.467.2910

American Public Power Association
PublicPower.org

Commercial Energy Services that Work

Wednesday, Jan. 25 - Thursday, Jan. 26
Seattle Renaissance
Seattle, WA

Wednesday: 1 - 4:30 p.m.
Thursday: 8:30 a.m. - 4:30 p.m.

Recommended CEUs 1/PDHs 10.3
Field of Study: Specialized Knowledge and Applications

Course Overview
Commercial energy efficiency and demand-side management programs often focus on different requirements than residential programs. Commercial customers are driven by cash flow requirements and constraints and require a faster payback. They respond well to rebate programs, which reduce the up-front capita investment.

This course examines the most cost-effective commercial energy efficiency and DSM activities implemented by public power utilities. The instructor will cover commercial energy audit programs, audit activities, and evaluation, measurement and verification of program results. Participants will learn about new building design assistance programs, commercial lighting, HVAC and refrigeration systems. This course ties strongly to the Energy Services That Work publication produced through APPA's Demonstration of Energy-Efficient Developments (DEED) program.

Course Topics

- Case studies on how utilities are working with commercial customers to implement DSM programs
- The different requirements for commercial energy efficiency and DSM programs vs. residential programs
- The importance of commercial Energy Star equipment programs and their impact on promoting the selection and utilization of efficient commercial equipment
- How commercial customers respond to rebate programs
- Commercial DSM programs implemented by public power utilities

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- Public Utility Accounting – Jan. 23-24
- Work Order and Asset Management Accounting – Jan. 25
- Advanced Public Utility Accounting – Jan. 26-27

Cost of Service & Rate Design

- Basic Utility Cost of Service & Retail Rate Design – Jan. 23-24
- Advanced Utility Cost of Service & Retail Rate Design – Jan. 25-26
- Financial Planning for Municipal Utilities – Jan. 26-27

Customer Service Management Certificate Program

Learn more about the Customer Service Management Certificate Program.

- Power Supply and Integrated Resource Planning: An Introduction – Jan. 23
- The Management of Successful Customer Service Operations – Jan. 24
- The Leadership Development Process – Jan. 25
- Technology: From Meter Reading to Customer Information Systems – Jan. 26
- Utility Collections: The Complete Process – Jan. 27

Energy Efficiency

- Residential Energy Services that Work – Jan. 24 - 25
- Commercial Energy Services that Work – Jan. 25 - 26

Technical Training

Tailored to engineers, designers, technicians and field personnel
View the Technical Courses Brochure

- 2012 National Electrical Safety Code (NESC) Overview – Jan. 23
- Overhead Distribution Systems – Jan. 24-27

Course Schedules

Save $100 when you attend more than one course or attend with a colleague!

Registration Information


Registration Form


Register Online


Hotel Information


Registration Informat


Course Brochure


Winter Institute Main

WEBINARS | LISTSERVS

	Monday 1/23	Tuesday 1/24	Wednesday 1/25	Thursday 1/26
Accounting	**Public Utility Accounting**		**Work Order & Asset Management**	**Advanced Publi Accountir**
Cost of Service & Rate Design	**Basic Utility Cost of Service & Retail Rate Design**		**Intermediate Utility Cost of Service & Retail Rate Design**	**Advanced Utility Cost of Service & Retail Rate Design** *(1/2 day)* **Financial Planning for Municipal Utilities** *(1/2 day)*
Customer Service Management Certificate Program	**Power Supply Integrated Resource Planning:** An Introduction	**The Management of Successful Customer Service Operations**	**The Leadership Development Process**	**Technology: From Meter Reading to Customer Information Systems**
Energy Efficiency		**Residential Energy Services That Work**	**Residential Energy Services That Work** *(1/2 day)* **Commercial Energy Services That Work** *(1/2 day)*	**Commercial Energy Services That Work**
Technical Training (For engineers, designers, technicians and field personnel)	**The New 2012 National Electric Safety Code (NESC) Overview**	**Overhead Distribution Systems**	**Overhead Distribution Systems (**	

The American Public Power Association
1875 Connecticut Ave. NW, Suite 1200
Washington, DC 20009-5715

Tel: 202.467.2900 or 800.515.2772
Fax: 202.467.2910

Registration Form

APPA Winter Education Institute

Jan. 23–27, 2012 ■ Renaissance Hotel ■ Seattle, WA

Attendee Information

Please print and reproduce for additional registrants. Phone registrations will not be accepted.

Name

Title

Organization

Address

City State Zip

Phone Fax E-mail

Authorizing Official

Emergency Contact Phone

☐ Check here if you have a disability and require accommodations to fully participate.

Registration Fees

Beverage breaks are included in the registration fee. All meals are on your own.

	Registration Received On/Before Jan. 3		Registration Received After Jan. 3	
	APPA Members	Nonmembers	APPA Members	Nonmembers
Accounting				
☐ Public Utility Accounting 3834, Jan. 23–24	$675	$875	$725	$925
☐ Work Order & Asset Management 3840, Jan. 25	$395	$595	$445	$645
☐ Advanced Public Utility Accounting 3842, Jan. 26–27	$675	$875	$725	$925
Cost of Service & Retail Rate Design				
☐ Basic Cost of Service & Retail Rate Design 3845, Jan. 23–24	$675	$875	$725	$925
☐ Advanced Cost of Service & Retail Rate Design 3846, Jan 25–26	$595	$795	$645	$845
☐ Financial Planning for Municipal Utilities 3847, Jan. 26–27	$595	$795	$645	$845
Customer Service Management Certificate Program				
☐ Customer Service Management Certificate Program* 3850, Jan. 23–27	$2100	$3100	$2350	$3350
☐ Power Supply and IRP: An Intro 3851, Jan. 23	$395	$595	$445	$645
☐ The Management of Successful Customer Service Operations 3852, Jan. 24	$395	$595	$445	$645
☐ The Leadership Development Process 3853, Jan. 25	$395	$595	$445	$645
☐ Technology: From Meter Reading to CIS 3854, Jan. 26	$395	$595	$445	$645
☐ Utility Collections: The Complete Process 3855, Jan. 27	$395	$595	$445	$645
☐ Customer Service Management Certificate Program Enrollment Fee** 3858	$350	$350	$350	$350
Energy Efficiency				
☐ Residential Energy Services That Work 3856, Jan. 24–25	$595	$795	$645	$845
☑ Commercial Energy Services That Work 3857, Jan. 25–26	$595	$795	$645	$845
Technical Courses				
☐ 2012 National Electrical Safety Code Overview 3848, Jan. 23	$525	$725	$575	$775
☐ Overhead Distribution Systems 3849, Jan. 24–27	$895	$1095	$945	$1145

* Includes the 5 courses and the program enrollment fee.

**The program enrollment fee covers the cost of study material, exam grading, and review of the service department assessment/business plan.

Registration Form

APPA Winter Education Institute

Jan. 23–27, 2012 ■ Renaissance Hotel ■ Seattle, WA

Meals
Beverage breaks are included in the registration fee. All meals are on your own.

Name Badges
Name badges can be picked up at the APPA registration desk at the hotel from 8 to 8:30 a.m. on the first day of each course and must be worn by all Institute attendees.

Cancellations/No-Shows/ Refunds/Substitutions
Registrants who cancel in writing on or before Jan. 16, 2012, are entitled to a refund of their registration fee, minus a $50 cancellation fee. Registrants who cancel after Jan. 16, will not receive a refund, but attendee substitutions will be allowed for this event only. Registrants and no-shows who do not cancel by Jan. 16 are responsible for the full registration fee and are not entitled to a refund.

Cancellations must be made in writing and mailed, faxed, or e-mailed to:

Janaya Ramdat
Meetings Coordinator
American Public Power Association
1875 Connecticut Ave, NW, Suite 1200
Washington, DC 20009-5715
Fax: 202/465-7484
E-mail: JRamdat@PublicPower.org

Travel Arrangements
Travel arrangements and costs are the responsibility of the participants. APPA will not reimburse for changes in travel expenditures regardless of the cause, including the cancellation of a course, meeting, or workshop.

Before booking your airfare, please verify with Meghan Riley (202/467-2919 or education@PublicPower.org) that the course(s) you are registering for will be held.

Questions?
If you have questions, please contact Heidi Lambert at 202/467-2921 or HLambert@PublicPower.org.

Mail or Fax Completed Form To:
American Public Power Association
P.O. Box 418617
Boston, MA 02241
Phone: 202/467-2919
Fax: 202/467-7484

APPA maintains the right to designate any APPA meeting or session as open only to APPA Regular Members (public power systems, rural electric cooperatives, joint action agencies, state/regional associations).

Registration Fee Discounts
Only one discount may be taken, when applicable.

☐ Participants who take more than one course at the Institute may subtract $100 from their registration fee total.
Please note: This discount does not apply to the Customer Service Management Certificate Program as it is already discounted.

OR

☐ Utilities that send more than one participant to the Institute may subtract $100 for each additional person.

Registration Fee Total: $ _____

Payment Method
All fees payable in U.S. currency. Nonmembers are required to include registration payment or provide credit card information when registering.

☐ Enclosed is my check made payable to: American Public Power Association

☐ Bill me (Members only). Purchase order number is: _____

☐ Please charge the following: ☐ MasterCard ☐ VISA ☐ American Express ☐ Discover

_____
Name As It Appears on Card — Cardholder Signature

_____
$ Amount to Charge to Card — Credit Card Number — Exp. Date

Confirmations
Please send my confirmation via e-mail to:

_____

American Public Power Association
PublicPower.org

Hotel Information

Renaissance Seattle
515 Madison St.
Seattle, WA 98104

Reservations

Online Reservations
Make your hotel reservations online.

APPA Room Rates
$159 single/double

Room Rate Cut-off Date
January 3, 2012

Please note: It is possible for APPA's block of rooms to sell out prior to September, so please make your hotel reservations early.

Location
The hotel is located 15 miles from the Seattle-Tacoma Airport. Taxi fare is roughly $35 each way. The hotel does not provide shuttle service.

Hotel Reservation & Cancellation Policy
All reservations require a non-refundable room deposit equal to one night room and tax that will be charged to your credit card at the time your reservation is made. Note: In the event that APPA cancels a course, this deposit will be waived.

Travel Arrangements
Travel arrangements and costs are the responsibility of the participants. APPA will not reimburse for changes in travel expenditures regardless of the cause, including the cancellation of a course, meeting, or workshop. Before booking your airfare, please verify with Meghan Riley (202/467-2919 or Education@PublicPower.org) that the workshop will be held.

Cancellations/No-Shows/Refunds/Substitutions
Registrants who cancel in writing on or before Oct. 19, 2011, are entitled to a refund of their registration fee, minus a $50 cancellation fee. Registrants who cancel after Oct. 19, 2011, will not receive a refund, but attendee substitutions will be allowed for this event only. Registrants and no-shows who do not cancel by Oct. 19, 2011 are responsible for the full registration fee and are not entitled to a refund.

Cancellations must be made in writing and mailed, faxed, or e-mailed to:

Janaya Ramdat
Meetings Coordinator
American Public Power Association
1875 Connecticut Ave, NW, Suite 1200
Washington, DC 20009-5715
Fax: 202/465-7484
E-mail: JRamdat@PublicPower.org

Confirmations
Confirmations will be sent via e-mail.

Name Badges
Name badges can be picked up at the APPA registration desk at the hotel from 8 to 8:30 a.m. on the first day of the workshop.

Questions?
Please contact Heidi Lambert at HLambert@PublicPower.org or 202/467-2921.

Registration Information


Registration Form


Register Online


Registration Informat


Courses


Course Brochure


Winter Institute Main

WEBINARS | LISTSERVS

The American Public Power Association
1875 Connecticut Ave. NW, Suite 1200
Washington, DC 20009-5715

Tel: 202.467.2900 or 800.515.2772
Fax: 202.467.2910

Schedule H

PUD's 5th Annual Public Power Green Festival A Big Success!

PUD is so appreciative of all our friends, sponsors, employees and vendors, who made the Green Festival – 2011, held on Saturday, September 17, such a successful event. The weather was picture perfect, and this truly was a great day to bring our wonderful community together to celebrate energy efficiency, sustainable products, practices and services. We would like to thank the Pascoag Fire Department, which brought over several pieces of their firefighting apparatus, and who ran the food booth. Special thanks goes to Desarae Downs of PUD, who spent countless hours planning and coordinating this great event.

To everyone who attended... thanks for helping make this a meaningful and fun day! Pictures have been posted to our photo gallery.

Mike Kirkwood
General Manager

STORY BEHIND OUR SOLAR PANELS
PICTURES OF THE PROJECT
REALTIME ENERGY PRODUCTION

WATER AMR PROJECT TIMELINE

UNDERSTANDING OUTAGES
PREPARING FOR A STORM
EMERGENCY KIT PREPARATION
CRISIS PLANNING & EVACUATION

CHANGE A LIGHT PLEDGE
FAQ'S ABOUT CFL LIGHTBULBS
PASCOAG UTILITY'S PLEDGE

CFL RECYCLING PROGRAM


Altec
Altec
PASCOAG - ELECTRIC


SPECIAL HAZARDS

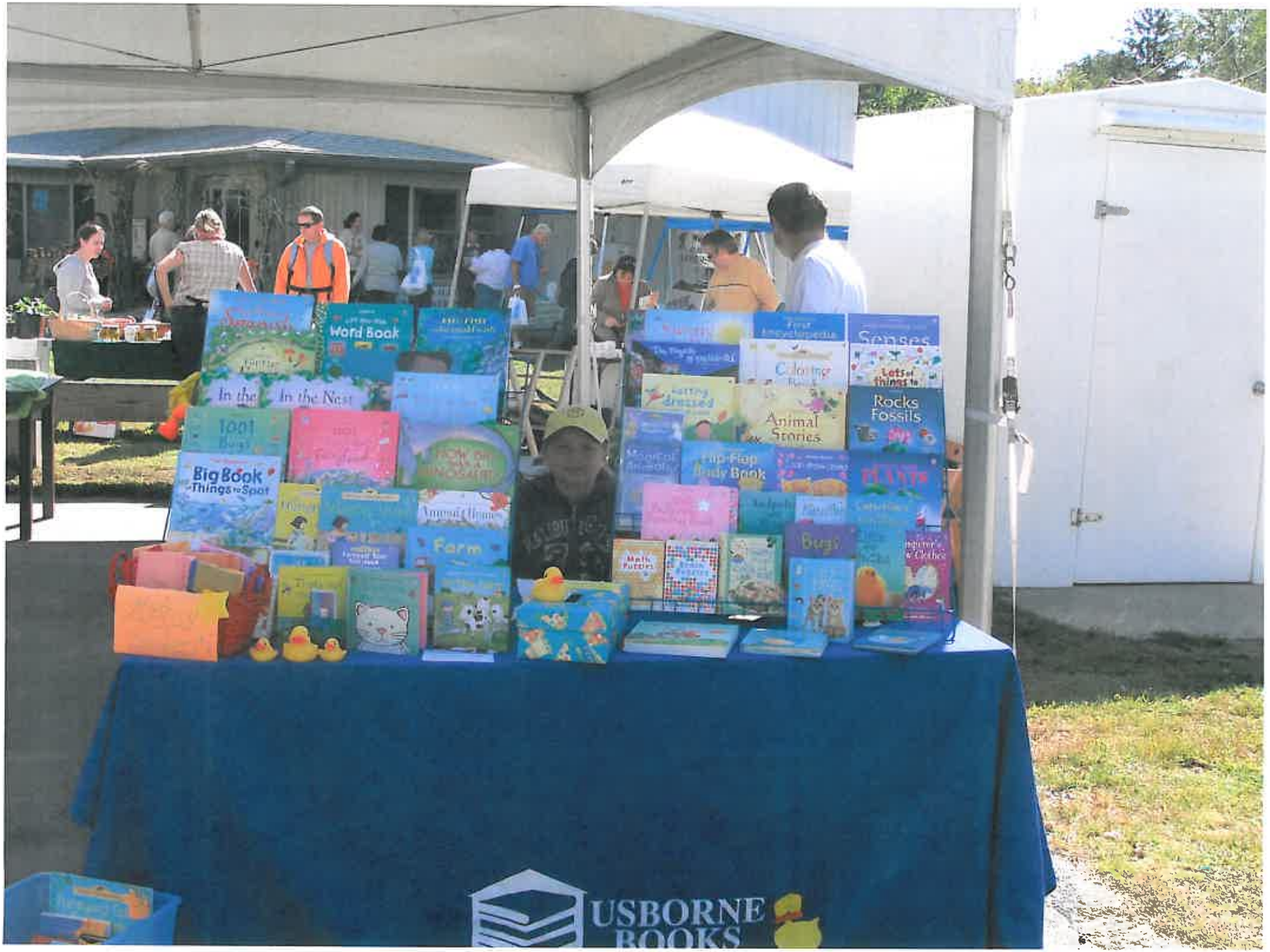

SPEED LIMIT
25
Raffle Tickets
5 for $1.00
Raffle Items:


SPEED LIMIT 25
FIRE DEPT. No 3


Pasco Electric
A Pasco Utility District Company


CHANGE THE WORLD,
START WITH ENERGY STAR
NO
Identify the
Asian Longhorned Beetle


E THE WORLD,
TH ENERGY STAR
TOXICS
INFORMATION
PROJECT
(TIP)


Word Book
In the Nest
Big Book Things to Spot
Farm
Animal Stories
Rocks Fossils
Flip-Flap Body Book
Bugs
USBORNE BOOKS


ABOUT THE PLEDGE
lights out
11 A.M. - 1 P.M.
IV
III
II
I
lights out


Light Switch
5020.404


OINTLY ADMINISTERED BY THE
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And Preserving Our S
Battoni's Poultry
Farm


RHODE ISLAND RESOURCE RECOVERY CORPORATION
Conserving Resources and Managing Wa
Recycling
Source Reduct
Composting
Landfilling


HONEY
SWEET
AND


5


DISABLED
PERSONS
PARKING
ONLY
Chili Cook-Off


- SWEET


Altec


JOINTLY ADMINISTERED BY THE


PULL
PINS


Altec

Schedule I

PASCOAG
UTILITY DISTRICT

253 Pascoag Main Street
P.O. Box 107
Pascoag, R.I. 02859
Phone: (401) 568-6222
Fax: (401) 568-0066

Pascoag Utility District Residential Incentives 2011

Product:	Rebate:
ENERGY STAR refrigerator/ clothes washer:	10% of the cost, $75 maximum
ENERGY STAR dishwasher / air purifier:	10% of the cost, $50 maximum
ENERGY STAR air conditioner:	10% of the cost, $25 maximum
ENERGY STAR dehumidifier:	10% of the cost, $20 maximum
ENERGY STAR compliant window, up to 10 windows:	$15 per window, 10 windows maximum
ENERGY STAR compliant door, up to 1 door:	$40 per door, 1door maximum
ENERGY STAR heating system replacement:	10% of the cost, $250 maximum
ENERGY STAR thermostat/ lighting fixtures:	50% of the cost, $50 maximum
ENERGY STAR electronics and office equipment:	15% of total cost, $50 maximum
ENERGY STAR central air conditioners:	10% of total cost, $200 maximum
Free Home Energy Audits with incentives:	10% of cost, up to $50
New Construction Rebates:	$520 maximum
Change a Light Campaign Energy Star Light bulbs:	50% of the cost, $50 maximum
ENERGY STAR Geothermal System	5% of the cost, $300 maximum
Electric Heat Conversion:	Please contact the District office for more details.

In 2011 the District will continue with 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 ***

All rebates will be applied to your active electric account.

You can down load the applications from our website @ www.pud-ri.org.com 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, R.I. 02859
Phone: (401) 568-6222
Fax: (401) 568-0066

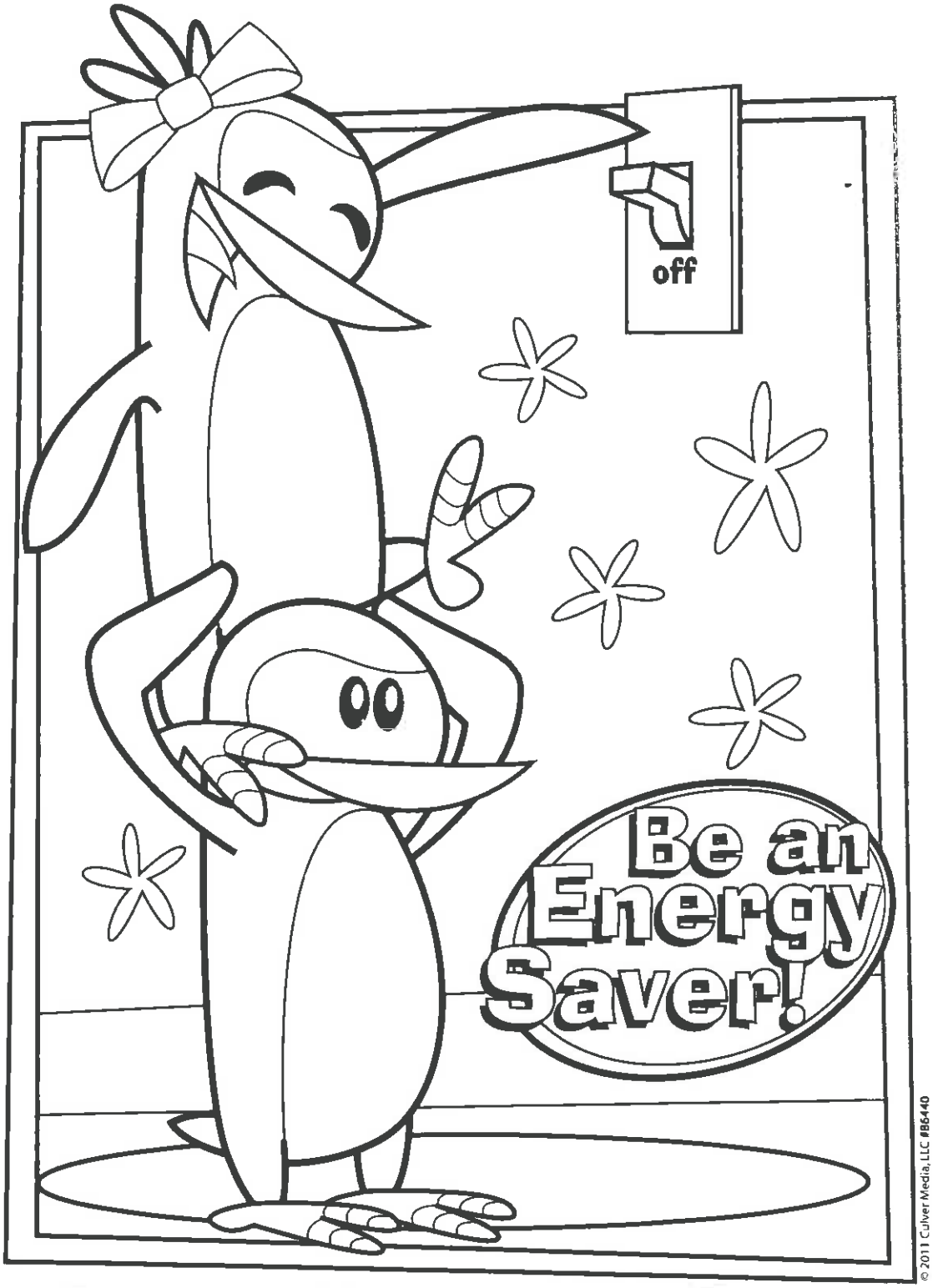
Pascoag Utility District Commercial Incentives 2011

Product:	Rebate:
ENERGY STAR office equipment:	15 %, 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

Lighting rebates are available on commercial and industrial accounts – please call the District office for approval and to check on the availability of funds before starting a lighting project. The rebates are 50% on a retrofit lighting project and 30% on a new lighting project.

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

Compliments of
Pascoag Utility District
www.pud-ri.org

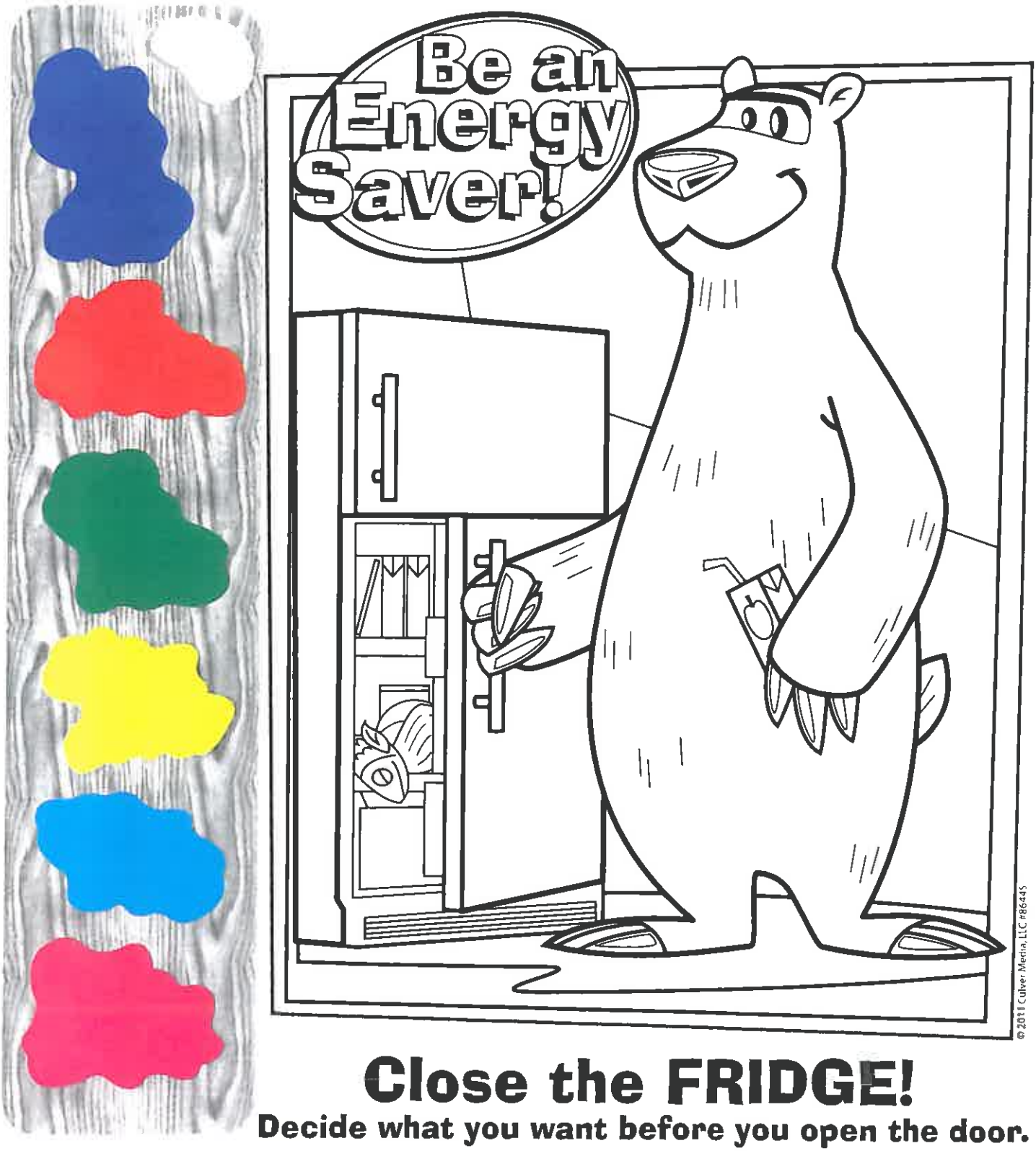


Turn off the LIGHTS!

Keep the lights off when nobody is using them.

To color, use cotton swab or brush. Moisten slightly with water, and paint.

Compliments of
Pascoag Utility District
www.pud-ri.org



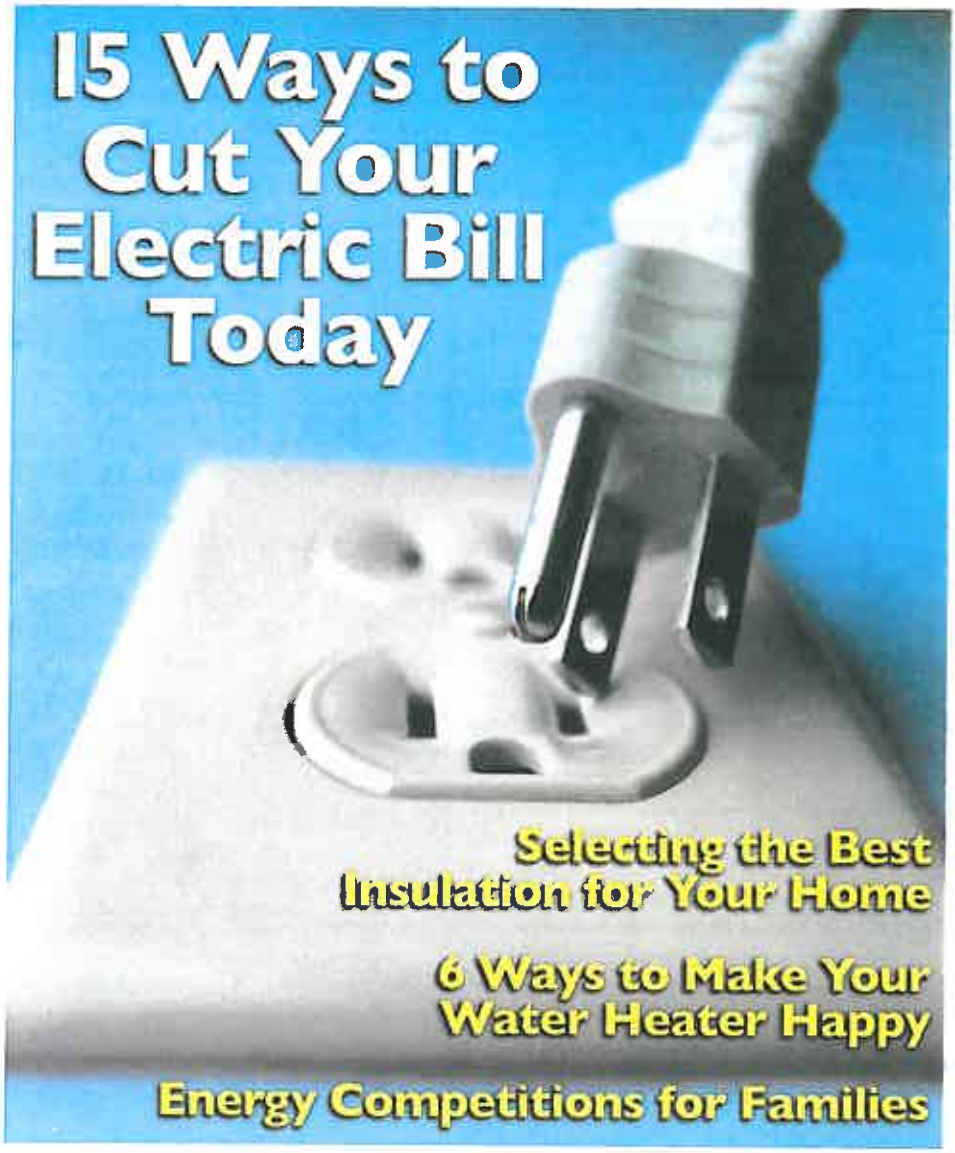
Close the FRIDGE!

Decide what you want before you open the door.

To color, use cotton swab or brush. Moisten slightly with water, and paint.

eco@home™

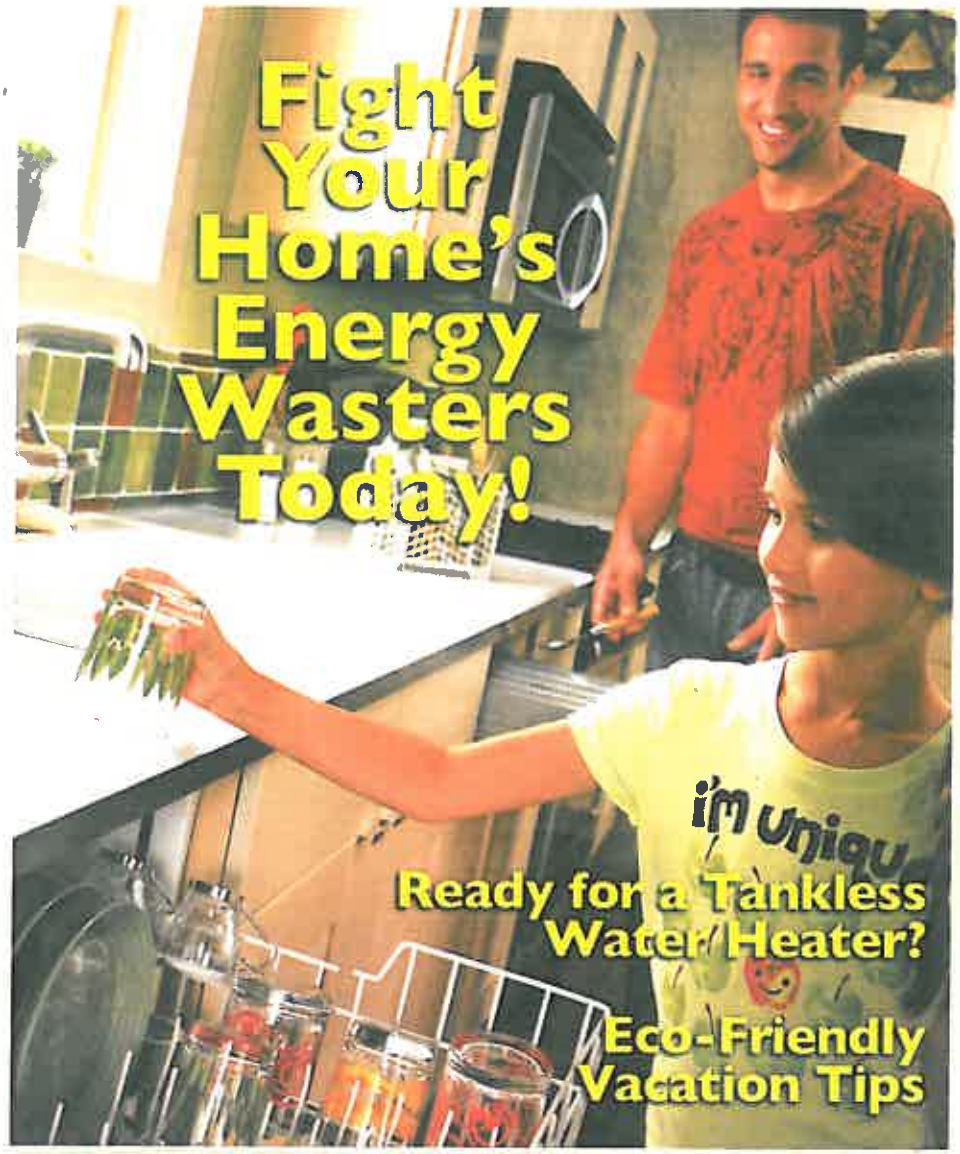
You and PASCOAG UTILITY DISTRICT
Saving Energy, Saving Money Together



www.pud-ri.org **401-568-6222**

eco@home™

You and PASCOAG UTILITY DISTRICT
Saving Energy, Saving Money Together



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401-568-6222

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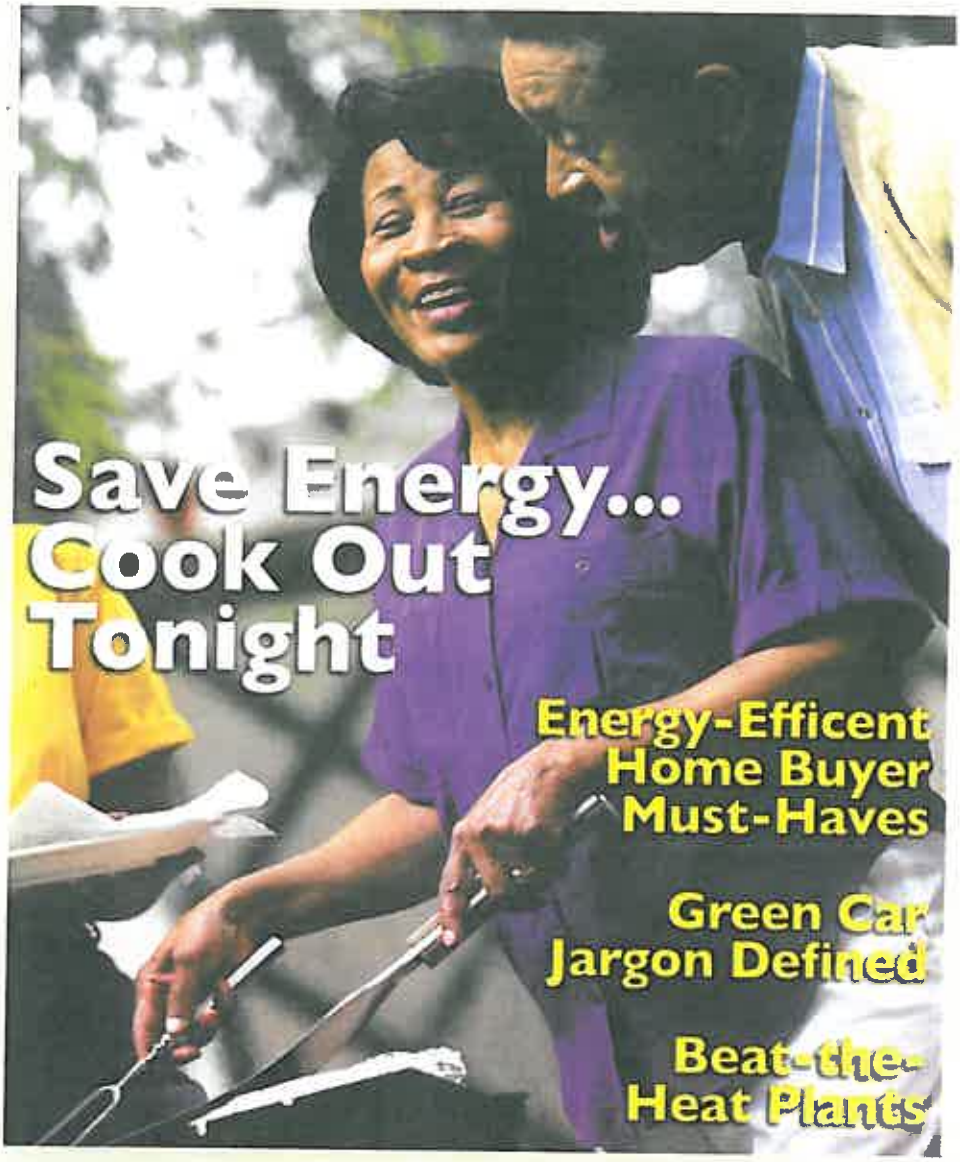
You and PASCOAG UTILITY DISTRICT
Saving Energy, Saving Money Together



www.pud-ri.org **401-568-6222**

eco@home

You and PASCOAG UTILITY DISTRICT
Saving Energy, Saving Money Together

www.pud-ri.org **401-568-6222**

Schedule J

2011

Valliere Realty

New lighting Rebate

RETROFIT

2011 Lighting – Systems & Controls

Customer Information

COMPANY NAME Vallere Realty Assoc APPLICATION DATE 6-14-11

INSTALLATION SITE 100 North Main St. PHONE NUMBER 868-4376

CONTACT PERSON Cara Carter FAX NUMBER

E-MAIL ADDRESS SQ. FT. (covered by this application)

STREET ADDRESS CITY STATE ZIP

MAILING ADDRESS (if different) CITY STATE ZIP

ELECTRIC COMPANY NAME Pascoag Utility Dist ELECTRIC ACCOUNT # (or copy of electric bill) 2293-2358

GAS COMPANY NAME GAS ACCOUNT # (or 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 Strip mall		
☐ Dormitory	☐ Hospital	☐ Motel			

Payment Method

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

TAX ID# COMPANY TYPE: Check one: ○ Incorporated, ○ Not Incorporated, ○ Exempt

Vendor Information

VENDOR/INSTALLER Metro Electric STREET ADDRESS 10 Essex St.

CONTACT PERSON Mike Smith CITY Douglas STATE MA ZIP 01516

PHONE NUMBER 508-476-9719 E-MAIL

Customer Acknowledgement

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

For Program Administrators Only

Required Inspections	Date	Inspector	Project Costs:	$ 3300
Pre-Inspection:	12/7/10	Rise		
Post Inspection:			Labor $:	$1700
Approval	**Date**	**Program Manager**		
Pre-approved Incentive:			Material $:	$1600
Final Incentive:				

30% Pud $990

Lighting Systems and Controls – Eligibility Requirements and Incentive Details

Please refer to the LIGHTING REFERENCE GUIDE for additional details on technical requirements. Facility lighting must average a minimum of 2,000 hours per year, except for Municipal Facilities who must contact their Program Administrator for more information on eligibility requirements. All Fluorescent Fixtures must have new T-8 or T5 lamps and new electronic ballasts. All Fluorescent Fixtures with High Performance (HP) T-8 lamps and ballasts must meet or exceed the Consortium for Energy Efficiency's (CEE) High Performance T-8 or Reduced Wattage T-8 specification. For detailed eligibility requirements and a list of qualifying lamps and ballasts, please log onto CEE's web site at www.cee1.org.

If equipment has received an incentive through a residential offering, it is not eligible for commercial incentives.

Table 1A: Lighting Systems Eligibility and Incentives

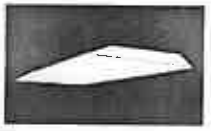
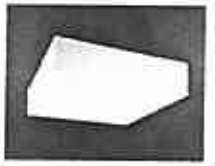
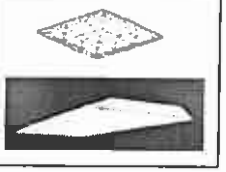
Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
10 *	Re-lamp/re-ballast of existing fixtures with new High Performance /Reduced Wattage (HP/RW) T-8 or T-5 lamps and HP/RW T-8 Electronic Ballasts	$15	Re-lamp/re-ballast of existing fixtures with T-8 or 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 25 and 28 T-8 CEE qualified lamps/ ballasts.	11	
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	$25	Re-lamp/re-ballast of existing fixtures with **opportunity for increased savings for Measure Code 12 with increased watts saved of more than 23 watts.** Consider using reduced wattage 25 & 28 T-8 CEE qualified lamps/ballasts.	23	
30A *	High Efficiency 2 lamp Prismatic Lensed Fluorescent Fixtures – 2x2 or 2x4	$40	Overall fixture efficiency must be ≥ : – 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 (reduced wattage biax lamps are eligible- 28 watts).	27	
30B *	High Efficiency 2 lamp Parabolic Fluorescent Fixtures – 2x2 or 2x4	$45	Overall fixture efficiency must be ≥ : – 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 (reduced wattage biax lamps are eligible- 28 watts).	27	
30C *	High Efficiency up to 2 lamp Recessed Indirect/Direct Fluorescent Fixtures – 2x2 or 2x4	$45	Overall fixture efficiency must be ≥ : – 75% for 2x4 recessed indirect/direct fixture with two T-8 or T-5 lamps; – 70% for 2x2 recessed indirect/direct fixture with two T-8, T-5, or T5HO lamps (reduced wattage biax lamps are eligible- 28 watts).	27	
31 *	High Efficiency 3 lamp Fluorescent Fixtures – 2x4	$35	Overall fixture efficiency must be ≥ : – 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

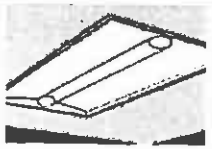
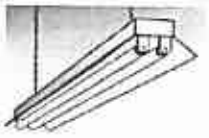
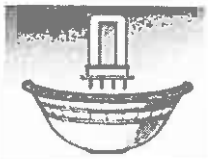
Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
32 *	High Efficiency Recessed Fluorescent 2 lamp Retrofit Kits – 2x2 and 2x4	$45	Overall fixture efficiency must be ≥ : – 80% for 2x4 parabolic retrofit kit and advanced glare reducing diffuser retrofit 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 T5HO lamps (reduced wattage biax lamps are eligible- 28 watts).	27	
34 *	Advanced Recessed Fluorescent Fixtures 2x2, 1x4 or 2x4	$50	Overall fixture efficiency must be ≥ : – 85% for 2x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T5HO lamp; – 80% for 1x4 advanced glare reducing diffuser fixture with one or two T-8 or T-5 lamps, or one T5HO lamp. – 80% for 2x2 advanced glare reducing diffuser fixture with one or two T-8, T-5, T5HO lamps (reduced wattage biax lamps are eligible- 28 watts)	33	
41 *	Industrial/Commercial Fluorescent Fixtures – 4 ft. and 8 ft. Fixtures	$45	Overall fixture efficiency must be ≥ : – 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	$75	Overall fixture efficiency must be ≥ : –70% for Vapor Tight fluorescent fixture with one or two T-8, T-5, T8HO, T5HO or 3-T-8 lamps. Typically installed in garage, warehouse, food prep and other industrial applications.	45	
44 *	Clean Room Rated Fluorescent Fixtures – 1x4 or 2x4	$60	Overall fixture efficiency must be ≥ : –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	$20	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with <33% THD. (Retrofit kits and screw-in adapters not eligible)	35	
23	Dimmable Compact Fluorescent Fixture	$40	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

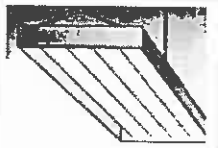
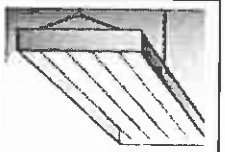
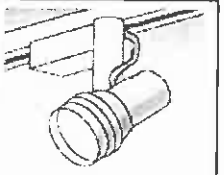
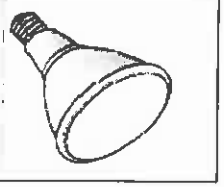
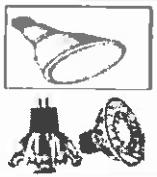
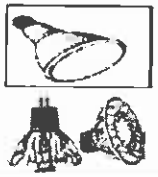
Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	Image
25	LED or LEC (Electroluminescence) Exit Fixtures	$20	All materials and assembled units shall comply with all applicable codes and standards including (but not limited to) Federal/State/Local building, fire, 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	$70	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	$85	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 207W)	$90	Minimum wattage is 104 Watts and Maximum wattage is 207 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, T5HO and compact fluorescent. **Low power ballasts are not eligible.**	70	
57 *	High Intensity Fluorescent Fixtures (HIF) for High and Low Bay Applications (greater than 207W)	$150	Minimum wattage is greater than 207 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, T5HO and compact fluorescent. **Low power ballasts are not eligible.**	95	
70	Metal Halide Specialty Lighting Hard Wired Fixtures with Electronic Ballast	$75	Metal Halide Specialty Fixtures maybe 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	$20	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 or GU-24 base	$60	This incentive only applies to hardwired or GU-24 base LED fixtures rated as a Commercial LED product by Energy Star. (for more information see www.energystar.gov).	25	
81A	Integral LED Directional Replacement Lamps – MR16, PAR16 and PAR20	$20	Eligible LED Directional Integral replacement lamps for these reflector styles: MR16, PAR16 and PAR20. Eligible lamps are required to be listed by Energy Star or Mass Save Interim LED **Pre-Qualified** list (for more information see www.energystar.gov or www.masssave.com/business).	12	
81B	Integral LED Directional Replacement Lamps – PAR30, PAR38 & Screw Base LED Down Light Retrofit Kits.	$40	Eligible LED Directional Integral replacement lamps for these reflector styles: PAR30S, PAR30L and PAR38. **Also Eligible Screw Base LED Down Light Retrofit Kits.** Eligible lamps are required to be listed by Energy Star or Mass Save Interim LED Pre-Qualified list (for more information see www.energystar.gov or www.masssave.com/business).	25	
82A	LED Cooler , Freezer Case or Refrigerated Shelving Fixtures – 3' & 4' Fixture	$40	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Mass Save Interim LED Pre-Qualified list or Design Lights Consortium (for more information see www.masssave.com/business or www.designlights.org). **Please specify quantity of end and/or center mount fixtures.**	14	
82B	LED Cooler , Freezer Case or Refrigerated Shelving Fixtures – 5' & 6' Fixture	$60	Eligible LED Cooler and Freezer Case fixtures are required to be listed by Mass Save Interim LED Pre-Qualified list or Design Lights Consortium (for more information see www.masssave.com/business or www.designlights.org). **Please specify quantity of end and/or center mount fixtures.**	23	
83	LED Low Bay Fixtures – Garage and Canopy Fixtures	$200	Eligible LED Low Bay fixtures are required to be installed in **8,760 hour** applications and be listed by Mass Save Interim LED Pre-Qualified list or Design Lights Consortium (for more information see www.masssave.com/business or www.designlights.org).	60	

*** Note: 4ft straight tube T-8 lamps and ballasts must meet the Consortium for Energy Efficiency's High Performance / Reduced Wattage (HP/RW) T-8 specifications. For eligibility requirements and a list of eligible lamps and ballasts, log onto CEE's web site at www.cee1.org.**

Note: 2ft and 3ft, T-8 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.

4ft – 30 watt U-bent T-8 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.

2ft, 3ft and 4ft 30 watt U-bent T-8 ballasts must meet the CEE's High Performance T-8 Ballast Specifications.

2ft – reduced wattage biax lamps must have a minimum efficacy of 94 mean lumens per watt, a CRI greater than 80 and an average rated life of 20,000 hours at 3 hours per start. Ballasts must meet the CEE's High Performance T-8 Ballast Specifications.

Table 1B: Lighting Controls Eligibility and Incentives

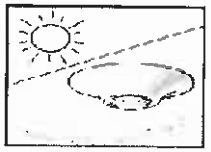
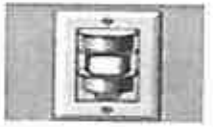
Measure Code	Measure Description	Per Control Incentive	Eligibility Criteria	Min Controlled Wattage	Image
61	Remote Mounted Occupancy Sensor	$85	Comply with manufacturer's coverage recommendations. Ceiling mounted control. No manual "ON" overrides	110	
62	Daylight Dimming System (DDS-FL)	$30 (per fixture)	Must have continuous dimming or adjust to a minimum of 4 levels. Typical lamping is either a 30 watt or 32 watt T-8 lamp.	53 (per fixture)	
63	Occupancy Controlled Step-Dimming System	$30 (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	$35	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 Occupancy Sensors	$40	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)	$70	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	$40 (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)	

Table 1C: 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	—	3F40SEE	90	—	—		8		
		Proposed	12	2F32EEE	53	3100	37		8	$25	$200
	under Canopy	Existing	— A1	2F96HES	227	2500			11		
		Proposed	21	1C00135	30	2500	5418000	5418	11		
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
		Existing	—								
		Proposed									
									Total Requested Incentive (this page) $		

4.26 kW Saved

* Facility lighting must average a minimum of 2,000 hours per year, except for Municipal Facilities who must contact their Program Administrator for more information on eligibility requirements.

Table 1D: Retrofit Lighting Control Inventory Worksheet

Building and Room Identification (Installation Site): ____________________

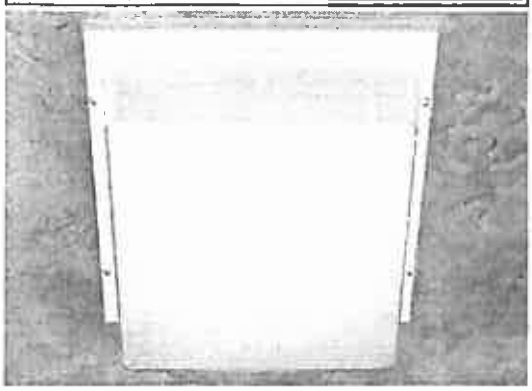
Line Item	Measure Code (Table 1B)	Device Description/Location	Quantity of Controls (or ballast for Codes 62, 63 & 68) (A)	Minimum Required Connected Watts per Control (B)	Device Code	Quantity of Devices Controlled (C)	Watts Per Device (D)	Annual Hours of Reduction	Minimum Connected Watts Verification		Wattage Test (Actual > Required, Y or N)	Unit Incentive $ (E)	Total Incentive $ (A) x (E)
									Required (A x B)	Actual (C x D)			
Ex.	61	Remote-Mounted Occ Sens (OS) Building 6, Room 201	2	110	2F32EEE	10	53	1200	220	530	Y	$85	$170
											Total Requested Incentive (this page) $		

Teron Lighting

ARCHITECTURAL OUTDOOR

PROJECT:
TYPE:
ORDERING # :
COMMENTS:

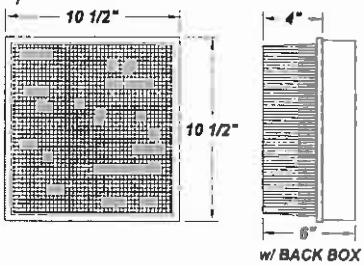
MAXFLI



COMPACT FLUORESCENT 2 Bulbs per Fixture

FEATURES

- Steel Mounting Pan w/ Hi-Reflectance White Powder Coat Finish
- Clear Ribbed Polycarbonate Diffuser
- Mounts Directly to 4" Junction Box (By Others)
- Mounting Hardware Included
- Lamps Included
- Integral EM Battery Available (Back Box Required)
- ADA Compliant
- ETL Listed Wet Location
- Wattages With a **(ES)** Are Available @ 120V With Energy Star Compliant Lamps and Ballasts



ORDERING INFORMATION

Example : **(Mi226Q - 120E - 41K)** **White is Standard Finish**

	Mi226Q				
PRODUCT	**SOURCE/WATTAGE**	**VOLTAGE**	**DIFFUSER**	**FINISH**	**OPTIONS**
Maxfli —	**MI113** - (1) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi213** - (2) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi313** - (3) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi113Q** - (1) 13W QE **(ES)** **Mi213Q** - (2) 13W QE **Mi118Q** - (1) 18W QE **Mi218Q** - (2) 18W QE **Mi126Q** - (1) 26W QE **Mi226Q** - (2) 26W QE **MI132X** - (1) 32W TBX **Mi142X** - (1) 42W TBX	**120N** - 120V NPF Magnetic **120E** - Electronic 120V **277E** - Electronic 277V	**Not Applicable**	**Not Applicable**	**41K** - 4100K Color Temp. **35K** - 3500K Color Temp. **27K** - 2700K Color Temp. (Standard) **TP** - Tamper Resistant Screws **EBR** - Remote Mount Battery (Field Installed)* **EBW/BB** - Integral Emergency Battery** (Back Box Required) **BB** - Back Box **WPL** - White Polycarbonate Diffuser **W2L** - Wire 2 Lamps to Integral Emergency Battery **ES** - Energy Star Listed Fixture w/ Compliant Ballasts & Lamps

REPLACEMENT PARTS	PART NO.
Clear Polycarbonate Diffuser	34191
White Polycarbonate Diffuser	3419160

NOTES

**Emergency Battery Options (Back Box Required)
Initial light output in Emergency mode will last for a minimum of 90 minutes
1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet

EBW:
Bodine's B213 (Magnetic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's BDL940 (Electronic) - Temperature Rating (Ambient) 32° F - 131° F

EBR:
Bodine's BDL94C (Electronic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's B413 (Magnetic) - Temperature Rating (Ambient) 32° F - 122 °F

ARRA 2009
BUY AMERICA ACT
ADA Compliant
VANDAL RESISTANT

We reserve the right to revise the design or components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

33 DONALD DRIVE FAIRFIELD, OH 45014 PH:(513)858-6004 FAX:(513)858-6038 EMAIL:SALES@TERONLIGHT.COM WEB:TERONLIGHT.COM

EXISTING LIGHTING SYSTEMS		
Device Code	**Device Description**	**Rated Watts**
Three Foot T8 / T12 Systems (cont.)		
3F30SES	3L3' 30W T12 EE/STD	127
3F25SSE	3L3' 25W T8/ELIG	68
4F25SSE	4L3' 25W T8/ELIG	88

Four Foot F48 T12 Systems		
1F48SES	1L4'F48T12EE/STD	50
1F48SSS	1L4'F48T12/STD	60
2F48SES	2L4'F48T12EE/STD	82
2F48SSS	2L4'F48T12/STD	102
3F48SES	3L4'F48T12EE/STD	132
3F48SSS	3L4'F48T12/STD	162
4F48SES	4L4'F48T12EE/STD	164
4F48SSS	4L4'F48T12/STD	204

Four Foot F48HO T12 Systems		
1F48HES	1L4'F48HO/EE/STD	80
1F48HSS	1L4'F48H0/STD/STD	85
2F48HES	2L4'F48HO/EE/STD	135
2F48HSS	2L4'F48H0/STD/STD	145
3F48HES	3L4'F48HO/EE/STD	215
3F48HSS	3L4'F48H0/STD/STD	230
4F48HES	4L4'F48HO/EE/STD	270
4F48HSS	4L4'F48H0/STD/STD	290

Four Foot F48VHO T12 Systems		
1F48VES	1L4'F48VHO/EE/STD	123
1F48VSS	1L4'F48VHO/STD/STD	138
2F48VES	2L4'F48VHO/EE/STD	210
2F48VSS	2L4'F48VHO/STD/STD	240
3F48VES	3L4'F48VHO/EE/STD	333
3F48VSS	3L4'F48VHO/STD/STD	378
4F48VES	4L4'F48VHO/EE/STD	420
4F48VSS	4L4'F48VHO/STD/STD	480

Four Foot T12 Systems		
1F40SEE	1L4'EE/ELIG	38
1F40SEM	1L4'EE/EEMAG	40
1F40SES	1L4'EE/STD	50
1F40SSE	1L4'STD/ELIG	46
1F40SSM	1L4'STD/EEMAG	50
1F40SSS	1L4'STD/STD	57
2F40SEE	2L4'EE/ELIG	60
2F40SEM	2L4'EE/EEMAG	70
2F40SES	2L4'EE/STD	80
2F40SSE	2L4'STD/ELIG	72
2F40SSM	2L4'STD/EEMAG	86
2F40SSS	2L4'STD/STD	94
3F40SEE	3L4'EE/ELIG	90
3F40SEM	3L4'EE/EEMAG	110
3F40SES	3L4'EE/STD	130
3F40SSE	3L4'STD/ELIG	110
3F40SSM	3L4'STD/EEMAG	136
3F40SSS	3L4'STD/STD	151
4F40SEE	4L4'EE/ELIG	120
4F40SEM	4L4'EE/EEMAG	140
4F40SES	4L4'EE/STD	160

EXISTING LIGHTING SYSTEMS		
Device Code	**Device Description**	**Rated Watts**
Four Foot T12 Systems (cont.)		
4F40SSE	4L4'STD/ELIG	144
4F40SSM	4L4'STD/EEMAG	172
4F40SSS	4L4'STD/STD	188
6F40SSS	6L4'STD/STD	282

Four Foot T8 Systems		
1F32SSE	1L4'T8/ELIG	30
1F32SSL	1L4 T8/ELIG LOW POWER	26
1F32SSM	1L4'T8/EEMAG	37
2F32SSE	2L4'T8/ELIG	60
2F32SSH	2L4'T8/ELIG HIGH LMN	78
2F32SSL	2L4 T8/ELIG LOW PWR	52
2F32SSM	2L4'T8/EEMAG	70
3F32SSE	3L4'T8/ELIG	88
3F32SSH	3L4'T8/ELIG HIGH LMN	112
3F32SSL	3L4 T8/ELIG LOW POWER	76
3F32SSM	3L4'T8/EEMAG	107
4F32SSE	4L4'T8/ELIG	112
4F32SSH	4L4'T8/ELIG HIGH LMN	156
4F32SSL	4L4 T8/ELIG LOW PWR	98
4F32SSM	4L4'T8/EEMAG	140
5F32SSE	5L4'T8/ELIG	148
5F32SSH	5L4' T8/ELIG HIGH LMN	190
6F32SSE	6L4'T8/ELIG	174
8F32SSH	8L4'T8/ELIG HIGH LMN	312

Five Foot T8 / T12 Systems		
1F40HSE	1L5'HO/STD/ELIG	59
1F60HSM	1L5'HO/STD/EEMAG	90
1F60SSM	1L5'/STD/EEMAG	73
1F60TSM	1L5'T10HO/STD/EEMAG	135
2F40HSE	2L5'HO/STD/ELIG	123
2F40TSE	2L5'T8/ELIG	68
2F60HSM	2L5'HO/STD/EEMAG	178
2F60SSM	2L5'/STD/EEMAG	122
3F40TSE	3L5'T8/ELIG	106

Six Foot T12 & T12HO Systems		
1F72HSE	1L6'T8HO/ELIG	80
1F72HSS	1L6'F72HO/STD/STD	113
1F72SSM	1L6'STD/EEMAG	80
1F72SSS	1L6'STD/STD	95
2F72HSE	2L6'T8 HO/ELIG	160
2F72HSM	2L6'F72HO/STD/EEMAG	193
2F72HSS	2L6'F72HO/STD	195
2F72SSM	2L6'STD/EEMAG	135
2F72SSS	2L6'STD/STD	173

Eight Foot T12HO Systems		
1F96HES	1L8'HO/EE/STD	125
1F96HSS	1L8'HO/STD/STD	135
2F96HEE	2L8'HO/EE/ELIG	170
2F96HEM	2L8'HO/EE/EEMAG	207
2F96HES	2L8'HO/EE/STD	227
2F96HSE	2L8'HO/STD/ELIG	195
2F96HSM	2L8'HO/STD/EEMAG	237

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)		
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
1C0032E	32W COMPACT HW ELIG	34
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 COMP.HW ELIG	36
1C3240S	32/40W CIRCLINE HW	80
2C0005S	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		
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	32
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		
1F17ESL	1L2' 17W T8EE/ELEE LOW PWR	14
1F17ESN	1L2' 17W T8EE/ELEE	17
1F17ESH	1L2' 17W T8EE/ELEE HIGH PWR	20
1F28BXE	1L2' F28BX/ELIG	32
2F17ESL	2L2' 17W T8EE/ELEE LOW PWR	27
2F17ESN	2L2' 17W T8EE/ELEE	32
2F17ESH	2L2' 17W T8EE/ELEE HIGH PWR	40
2F28BXE	2L2' F28BX/ELIG	63
3F17ESL	3L2' 17W T8EE/ELEE LOW PWR	39
3F17ESN	3L2' 17W T8EE/ELEE	46
3F17ESH	3L2' 17W T8EE/ELEE HIGH PWR	61
3F28BXE	3L2' F28BX/ELIG	94

Three Foot High Efficient T8 Systems		
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

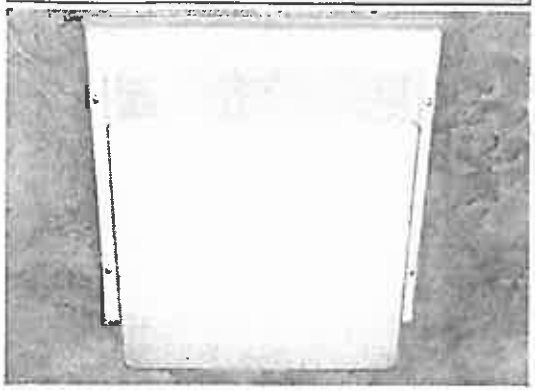
Four Foot T8 High Efficient / Reduce Wattage Systems		
1F25EEH	1L4' 25W T8EE/ELEE HIGH PWR	30
1F25EEE	1L4' 25W T8EE/ELEE	22
1F25EEL	1L4' 25W T8EE/ELEE LOW PWR	19
2F25EEH	2L4' 25W T8EE/ELEE HIGH PWR	57

Teron Lighting

ARCHITECTURAL OUTDOOR

PROJECT:	
TYPE:	
ORDERING # :	
COMMENTS:	

MAXFLI

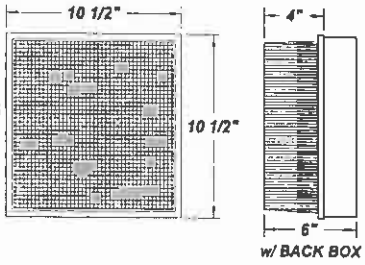


COMPACT FLUORESCENT

2-Bulb 32 Watts

FEATURES

- Steel Mounting Pan w/ Hi-Reflectance White Powder Coat Finish
- Clear Ribbed Polycarbonate Diffuser
- Mounts Directly to 4" Junction Box (By Others)
- Mounting Hardware Included
- Lamps Included
- Integral EM Battery Available (Back Box Required)
- ADA Compliant
- ETL Listed Wet Location
- Wattages With a (ES) Are Available @ 120V With Energy Star Compliant Lamps and Ballasts



ORDERING INFORMATION

Example : (Mi226Q - 120E - 41K) — **White is Standard Finish**

	Mi226Q				
PRODUCT	**SOURCE/WATTAGE**	**VOLTAGE**	**DIFFUSER**	**FINISH**	**OPTIONS**
Maxfil	**Mi113** - (1) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi213** - (2) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi313** - (3) 13W PL 2-Pin Biax Magnetic (120V Only) **Mi113Q** - (1) 13W QE **(ES)** **Mi213Q** - (2) 13W QE **Mi118Q** - (1) 18W QE **Mi218Q** - (2) 18W QE **Mi126Q** - (1) 26W QE **Mi226Q** - (2) 26W QE **Mi132X** - (1) 32W TBX **Mi142X** - (1) 42W TBX	**120N** - 120V NPF Magnetic **120E** - Electronic 120V **277E** - Electronic 277V	**Not Applicable**	**Not Applicable**	**41K** - 4100K Color Temp. **35K** - 3500K Color Temp. **27K** - 2700K Color Temp. (Standard) **TP** - Tamper Resistant Screws **EBR** - Remote Mount Battery (Field Installed)* **EBW/BB** - Integral Emergency Battery** (Back Box Required) **BB** - Back Box **WPL** - White Polycarbonate Diffuser **W2L** - Wire 2 Lamps to Integral Emergency Battery **ES** - Energy Star Listed Fixture w/ Compliant Ballasts & Lamps

REPLACEMENT PARTS	PART NO.
Clear Polycarbonate Diffuser	34191
White Polycarbonate Diffuser	3419160

NOTES

****Emergency Battery Options (Back Box Required)**

Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet

EBW:

Bodine's B213 (Magnetic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's BDL940 (Electronic) - Temperature Rating (Ambient) 32° F - 131° F

EBR:

Bodine's BDL94C (Electronic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's B413 (Magnetic) - Temperature Rating (Ambient) 32° F - 122 °F

ARRA 2009 BUY AMERICA ACT

ADA Compliant

VANDAL RESISTANT

We reserve the right to revise the design or components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

33 DONALD DRIVE FAIRFIELD, OH 45014 PH:(513)858-6004 FAX:(513)858-6038 EMAIL:SALES@TERONLIGHT.COM WEB:TERONLIGHT.COM

Metro Electric
10 Essex Street
Douglas, MA 01516

Voice: 508-476-9719
Fax: 508-476-9719

INVOICE

Invoice Number: 3106
Invoice Date: Aug 4, 2011
Page: 1
Duplicate

Bill To:	Ship to:
VALLIERE REALTY ASSOC c/o Marcia Y Lord 23 BLAKE AVE SACO, ME 04072	

Customer ID	Customer PO	Payment Terms	
VALLIERE REALTY ASSO		Net Due	
Sales Rep ID	Shipping Method	Ship Date	Due Date
	Airborne		8/4/11

Quantity	Item	Description	Unit Price	Amount
		RE: N. MAIN ST PLAZA PASCOAG RI		
		SUPPLY AND INSTALL THE FOLLOWING:		
		11 ENERGY STAR COMPLIANT LIGHT FIXTURES (CUT SHEET		
		PROVIDED) FIXTURE USES (@) 13 WATT FLUORESCENT 2 PIN LAMPS		
		WIRING TO BE SNAKED IN FROM ABOVE USING EXISTING CIRCUITS		
		MATERIAL		1,700.00
		LABOR		1,600.00

PAID MS.
CHK #3617

Post Inspection
10-18-11

Subtotal	3,300.00
Sales Tax	
Total Invoice Amount	3,300.00
Payment/Credit Applied	
TOTAL	**3,300.00**

Check/Credit Memo No:

INVOICE

Metro Electric
10 Essex Street
Douglas, MA 01516

Voice: 508-476-9719
Fax: 508-476-9719

Invoice Number: 3133
Invoice Date: Sep 9, 2011
Page: 1
Duplicate

VALLIERE REALTY ASSOC
23 BLAKE AVE
SACO, ME 04072

VALLIERE REALTY ASSO		Net Due	
	Airborne		9/9/11

	N. MAIN ST.PASCOAG PLAZA	
	ADDT'L WORK TO JOB	
	SUPPLY AND INSTALL 2 ENERGY STAR COMPLIANT LIGHT FIXTURES	
	LABOR AND MATERIAL	600.00

PD FULL

Subtotal	600.00
Sales Tax	
Total Invoice Amount	600.00
Payment/Credit Applied	600.00

Check/Credit Memo No: 3639

ELECTRICAL PERMIT

MUNICIPALITY _____ NUMERICAL CODE _____ PERMIT NO. 11-147

APPLICATION DATE _____ CENSUS TRACT _____ FEE RECEIVED: $ _____ BY _____

1. STREET LOCATION _____ POLE NO. or UNDERGROUND NO. _____

2. PLAT/MAP 15 3. LOT/BLOCK 12 4. FILE/PARCEL _____ 5. FLOOR LOCATION _____

6. USE OF STRUCTURE: PREVIOUS _____ PROPOSED _____

7. _____ Temporary _____ New Installation _____ Change of Service Starting Date _____

8. OWNER _____ ADDRESS _____ TEL. NO. _____

9. ELECTRICAL CONTRACTOR _____ ADDRESS _____ TEL. NO. 521-9240

10. ARCH. OR ENG. _____ ADDRESS _____ TEL. NO. _____

11. STAMPED PRINTS (Circle one) YES NO 12. RHODE ISLAND REG. NO. _____ 13. ELECTRICIAN'S LIC. NO. 3277

14. DESCRIPTION OF WORK TO BE PERFORMED _____ 1-3-12

(13)

15. Service entrance voltage _____ Amperage _____ Phase _____ No. of Meters _____

16. Wire size (cu. or al.) _____ Conductor Per Phase _____

17. Estimated load: Electrical Heat _____ k.w. Lights _____ k.w. Range _____ Dryer _____ Motors, H.P., Phase _____

18. ESTIMATED COST OF COMPLETED INSTALLATION: $ _____

MUNICIPAL ELECTRICAL PERMIT FEE: = $ 25.00

CE & ADA FEE: $\frac{\text{COST OF INSTALLATION} \times .001}{\text{COST OF INSTALLATION} \times .001}$ = $ _____

(1 & 2 FAMILY DWELLINGS LIMITED TO CE & ADA FEE OF $50.00)

TOTAL PERMIT FEE = $ 25.00

I hereby certify that I have the authority to make the foregoing application, that the application is correct and that the owner of this building and the undersigned agree to conform to all applicable codes and ordinance of the state and this jurisdiction.

ELECTRICAL CONTRACTOR'S SIGNATURE _____

DO NOT WRITE BELOW THIS LINE

ELECTRICAL WIRING PERMIT

Inspections **Date**

Temporary Service _____ _____

Roughing In _____ _____

Service & Meter _____ _____

Off Peak Meter _____ _____

Final Approval _____ _____

Disapproved* _____ _____

PERMIT GRANTED

DATE _____

BY _____ ELECTRICAL INSPECTOR

*For the following reasons _____

CERTIFICATE OF INSPECTION

DATE _____

To the Electric Utility Company: The installation described above has been completed and has been inspected and approval is granted for connection to your service.

_____ ELECTRICAL INSPECTOR

PLEASE POST AT PANEL BOARD

Electrical Inspector to be notified when work is ready for inspection. Permit will become

Attn Heidi
from Carol Carter (568-4376)
Re: Valliere Realty Plaza

mike Smith

Metro Electric
10 Essex Street
Douglas, MA 01516
508-476-9719

Quotation

Quote Number: 1256

Quote Date: May 27, 2011

Page: 1

Quoted to:
VALLIERE REALTY ASSOC
23 BLAKE AVE
SACO, ME ~~04072~~ 04072

Customer ID	Good Thru	Payment Terms	Sales Rep
VALLIERE REALTY ASSO	6/26/11	Net Due	

Quantity	Description	Unit Price	Price
	RE: N. MAIN ST PLAZA PASCOAG RI		
	SUPPLY AND INSTALL THE FOLLOWING:		
	11 ENERGY STAR COMPLIANT LIGHT FIXTURES (CUT SHEET PROVIDED) FIXTURE		
	USES (@) 13 WATT FLUORESCENT 2 PIN LAMPS		
	WIRING TO BE SNAKED IN FROM ABOVE USING EXISTING CIRCUITS		
	MATERIAL		1,700.00
	LABOR		1,600.00

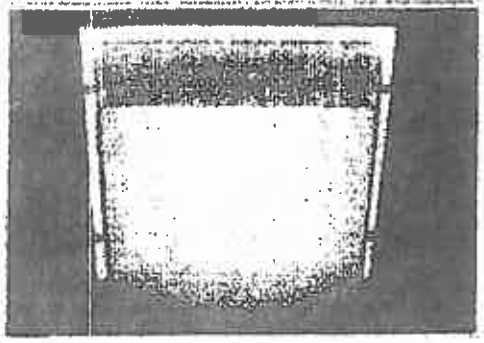
PWD = $990
Valliere = $2310

Subtotal	3,300.00
Sales Tax	
Total	3,300.00

TLI
Teron Lighting
ARCHITECTURAL OUTDOOR

PROJECT:	
TYPE:	
ORDERING # :	
COMMENTS:	

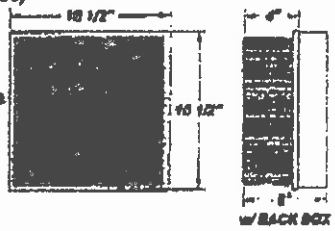
MAXFLI



COMPACT FLUORESCENT

FEATURES

- Steel Mounting Pan w/ Hi-Reflectance White Powder Coat Finish
- Clear Ribbed Polycarbonate Diffuser
- Mounts Directly to 4" Junction Box (By Others)
- Mounting Hardware Included
- Lamps Included
- Integral EM Battery Available (Back Box Required)
- ADA Compliant
- ETL Listed Wet Location
- Wattages With a (ES) Are Available @ 120V With Energy Star Compliant Lamps and Ballasts



ORDERING INFORMATION

Example : (MI226Q - 120E - 41K) — White is Standard Finish

	MI226Q				
Maxfli	MI113 - (1) 13W PL 2-Pin Biax Magnetic (120V Only) MI213 - (2) 13W PL 2-Pin Biax Magnetic (120V Only) MI313 - (3) 13W PL 2-Pin Biax Magnetic (120V Only) MI113Q - (1) 13W QE (ES) MI213Q - (2) 13W QE MI118Q - (1) 18W QE MI218Q - (2) 18W QE MI126Q - (1) 26W QE MI226Q - (2) 26W QE MH32X - (1) 32W TBX MH42X - (1) 42W TBX	120M - 120V NPF Magnetic 120E - Electronic 120V 277E - Electronic 277V	Not Applicable	Not Applicable	41K - 4100K Color Temp. 35K - 3500K Color Temp. 27K - 2700K Color Temp. (Standard) TP - Tamper Resistant Screws EMR - Remote Mount Battery (Field Installed)* EBW/EBR - Integral Emergency Battery** (Back Box Required) BB - Back Box WPL - White Polycarbonate Diffuser W2L - Wire 2 Lamps to Integral Emergency Battery ES - Energy Star Listed Fixture w/ Compliant Ballasts & Lamps

REPLACEMENT PARTS	PART NO.
Clear Polycarbonate Diffuser	34191
White Polycarbonate Diffuser	3419180

NOTES

**Emergency Battery Options (Back Box Required)
Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet

EBW:
Bodine's B213 (Magnetic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's BDL940 (Electronic) - Temperature Rating (Ambient) 32° F - 131° F

EBR:
Bodine's BDL94C (Electronic) - Temperature Rating (Ambient) 32° F - 122° F
Bodine's B413 (Magnetic) - Temperature Rating (Ambient) 32° F - 122 °F

ARRA 2009
BUY AMERICA ACT

ADA Compliant

We reserve the right to revise the design or components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

39 DONALD DRIVE FAIRFIELD, OH 45014 PH (513)858-6080 FAX:(513)858-8038 EMAIL:SALES@TERONLIGHT.COM WEB:TERONLIGHT.COM

Harle Round

From: Mike Kolb <MKolb@thielsch.com>
Sent: Tuesday, June 14, 2011 11:05 PM
To: Harle Round
Subject: RE: Lighting for the Plazza
Attachments: Mass save0001.pdf

Harle,

This is the "Eligibility Criteria" we use for code 21 which I believe is the measure being proposed for the plaza.

Mike

From: Harle Round [mailto:hround@pud-ri.org]
Sent: Tuesday, June 14, 2011 11:05 AM
To: Mike Kolb
Subject: Lighting for the Plazza

Hi Mike,

Bill asked if you could give us something that shows these lights , please see attached specs, would qualify for a lighting rebate.

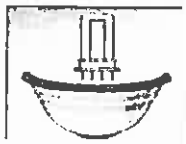
Thank you,
Harle

From: bizhub@pud-ri.org [mailto:bizhub@pud-ri.org]
Sent: Tuesday, June 14, 2011 5:06 AM
To: Harle Round
Subject: Message from KMBT_C353

Hardwired yes

Lighting: Retrofit 2011

Measure Codes 43, 44, 21 and 23

Product Code	Measure Description	Per Fixture Incentive	Eligibility Criteria	Min Watts Saved	
43 *	Vapor Tight Fluorescent Fixtures- 4 ft. and 8ft. Fixtures	$75	Overall fixture efficiency must be ≥ : -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 – 1x4or 2x4	$60	Overall fixture efficiency must be ≥ : -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	$20	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with <33% THD. (Retrofit kits and screw-in adapters not eligible)	35	
23	Dimmable Compact Fluorescent Fixture	$40	To be eligible for incentives, all fixtures must be hard-wired and have electronic ballasts with <33% THD. (Retrofit kits and screw-in adapters not eligible)	35	

Outside Lighting

RISE ENGINEERING
Division of Thielsch Engineering, Inc
1341 Elmwood Avenue
Cranston, Rhode Island 02910

Vallierer's Plaza
60-76 North Main St.
Pascoag, RI
Cara Carter
(401) 692-1083

Proposal Summary

12/7/2010

Estimated Current Lighting Load (Wattage)			2,497	Watts
Estimated Proposed Lighting Load (Wattage)			1,078	Watts
Estimated Lighting Load Savings (Wattage)			**1,419**	Watts
Estimated Current Lighting Usage (kWh)			6,243	kWh
Estimated Proposed Lighting Usage (kWh)			2,695	kWh
Estimated Lighting Usage Savings (kWh)			**3,548**	kWh
Estimated Current Annual Lighting Bill:	kWh * 0.16	$	999	
Estimated Proposed Annual Lighting Bill:	kWh * 0.16	$	431	
Estimated Proposed Annual Lighting Bill Savings:		**$**	**568**	
Estimated Total Job Cost		**$**	**3,048.40**	
Estimated Utility Incentive		$	(914.17)	
Estimated Customer Net Cost		**$**	**2,134.23**	
Maintenance Savings		**$**	**33**	
Net Heating and AC Savings		**$**	-	
Simple Payback (Customer Share/Bill Savings):		Years =	**3.6**	

RISE

Vallierer's Plaza
60-76 North Main St.
Pascoag, RI
Cara Carter

Line Item	Room Name	Fixture Type	Existing Fixture Type	Fixt. Qty	Existing Hours	Watts	Load	kW	kWh	Proposed Fixture Type	Fixt Qty	Proposed Hours	Watts	kW	kWh	kW Saved	kWh Saved
1	UNDER CANOPY	A1	2L8' HO/EE/STD	11	2,500	227	2.497	2.497	6,243	4L4 32W T8/ELIG LOW PWR	11	2,500	98	1.078	2695	1.42	3,548
TOTALS				11			2.497	2.497	6,243		11		98	1.078	2695	1.42	3,548

30 825kwh

6243
- 825
5118 kWh saved

2011

ST. Joseph's

Light Bulb

Rebate

Vendor #452

INVOICE

ENERGY FEDERATION INCORPORATED

CUSTOMER P.O: DSM Project DI 1104

CUSTOMER NAME: Pascoag Utility District
CUSTOMER NO: 12-PASUTI
SHIP VIA 00 WHSE 000
F.O.B: OURDOCK/AT

INVOICE NUMBER: 0612630-IN
DATE: 4/20/2011
PAYMENT TERMS: Net 30
SALES ORDER NUMBER: 0341269
ORDER DATE: 4/20/2011

BILL TO :
Pascoag Utility District
253 Pascoag Main Street
PO Box 107
PASCOAG, RI 02859

SHIP TO:
Pascoag Utility District
253 Pascoag Main Street
PO Box 107
PASCOAG, RI 02859

ITEM NO	DESCRIPTION	ORDERED	SHIPPED	BACK ORD	PRICE	AMOUNT
1100 767	19w TCP Globe Lamp 1G3019-27K	90	90	0	6 45	580 50

Pascoag Electric Utility
*** CUSTOMER RECEIPT ***
Oper: PROGRESS Type: CC Drawer: 1
Date: 4/27/11 11 Receipt no: 15224

Description Quantity Amount
I.R DSM - LITE REBATE
1.00 $295.25
Trans number: 332165
ST JOSEPH'S I.R PAYMENT

PAYMENT FROM ST JOSEPHS
FOR 90- 19W TCP GLOBE LAMPS
1G3019-27K /RE

Tender detail
CK CHECK 17821 $295.25
Total tendered $295.25
Total payment $295.25

Trans date: 4/27/11 Time: 11:31:09

*** THANK YOU FOR YOUR PAYMENT ***

COMMENTS:

Net Invoice	580 50
Less Discount	0 00
Freight	10 00
Sales Tax	0 00
Invoice Total:	590 50

ST. JOSEPH'S ROMAN CATHOLIC CHURCH
OF PASCOAG, R.I.
183 SAYLES AVENUE
P.O. BOX 188
PASCOAG, RHODE ISLAND 02859

CITIZENS BANK
RHODE ISLAND

57-12
115

17821

April 25, 2011

PAY TO THE
ORDER OF PASCOAG ELECTRIC $ 295.25

Two hundred ninety-five and 25/100---------- DOLLARS

Energy Saver Bulbs
MEMO

AUTHORIZED SIGNATURE

⑈017821⑈ ⑆011500120⑆ 2128 476 8⑈

Annual Savings

Make the Switch...--Old Technology	New Technology
Electric Demand:-75 watts	19.0 watts
Utilization:-5 hours per day	5 hours per day
Annual Use:-136 kilowatt hours	34 kilowatt hours

ANNUAL SAVINGS*

(savings will vary based upon actual use and source of electricity)

Electricity:-102 kilowatt hours

Carbon Dioxide:-136 pounds

Dollars:-$11.57

**based on CO2 emissions estimate of 1.34 pounds per kWh and electric rate of 11.3 cents per kWh*

Annual Impact Assumptions

The assumptions used include the following:

Wattages
The product wattages used in these calculations are intended to represent the actual consumption. In the case of fluorescent light fixtures, this may slightly differ from the advertised wattage.

Average light bulb use per day: 5 hours
To the extent that your actual use is more or less than 5 hours per day the annual kilowatt hour savings will be different, but this provides a common time frame to facilitate the comparison between a compact fluoresent light and incandescent light. The formula for calculating your actual kilowatt hour usage is below:

Annual kWh = watts x (hours per day x 365) / 1000

Electric Rate
The electric rate is used is based on data reported by the US Energy Information Administration. Your current local electric rate may be higher or lower than this rate. (more info - pdf)

Carbon Dioxide (CO2) Conversion Factor
Carbon dioxide is one of a number of gases emitted into the atmosphere from fossil fuel-fired electric power plants. Carbon dioxide is a greenhouse gas (GHG), contributing to global warming. The CO2 emissions associated with electricity use will vary depending on the type of fuel used to generate the electricity. Coal, oil, and natural gas power plants all result in increased atmospheric carbon dioxide, though to different degrees. (more info)

energyfederation.org/store

· get carbon-neutral shipping
· energyfederation.org/blog

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TCP G30 Globe

TCP

This G30 globe draws just 19 watts of electricity, producing about 950 lumens of light, which is equivalent to the amount of light produced by a 60 to 75 watt incandescent light bulb.

- **Light Output:** 950 Lumens
- **Dimensions:** Width 3.7", Length 4.9"
- **Color Rendering:** 84 CRI
- **Color Temperature:** 2,700 K
- **Minimum Starting Temperature:** -20 degrees F
- **Maximum Operating Temperature:** 160 degrees F
- **Rated Lifetime:** 8,000 hours
- **Power Requirements:** 120 Volts AC, 60 HZ
- **Certifications:** UL, UL(c)
- **Manufacturer Warranty:** 1 Year

+ Click to Enlarge

Note: This bulb may have reduced rated life in enclosed fixtures or emergency exit lights, and is not suitable in outdoor locations where it would be exposed to the elements, or in conjunction with dimmers, photocells, or electronic timers. This lamp contains mercury. Please recycle at the end of its life.

Other Recommended Products:

Veolia ES Mixed CFL RecyclePak

CFL Recycling Bucket

Displaying 1 to 1 (of 1 products) Result Pages 1

PART #+	MANUFACTURER	ITEM NAME	PRICE	AVAILABLE		SAVINGS*
1100767 (2037)	TCP	TCP 19w G30 Globe 1G3019	$9.50	1176	1 ADD TO CART	102 kWh (more info)

Displaying 1 to 1 (of 1 products) Result Pages 1

* Estimated annual energy savings (click for economic and environmental savings information)

Available shipping options for this product include:

- ✓ UPS Ground
- ✓ UPS Air
- ✓ USPS Parcel
- ✓ USPS Priority

PRINTABLE VIEW

REVIEWS

Shopping Cart
0 items

Reviews

Write a review on this product for use by other customers.

Wednesday 25 May, 2011

EFI Consumer Division
Westborough Massachusetts USA
www.efi.org

St. Joseph's Church

	Electric demand in Watts	Run Time hrs per day	Annual Kwh per bulb	number of bulbs	total Kwh per year
Incandescent Bulbs	75	3	82.13	85	6981.05
Energy Star TCP G30 Globes	19	3	20.81	85	1768.85
					5212.2 Kwh per year

***Annual savings**	**$**	**833.95**
Annual Kwh per year		**5212.2**

* based on Co2 emissions estimte of 1.34 pounds per kWh and electric rates of 16 cents per kWh.

Annual kWh = watts x (hours per day x 365)/1000

2011

Berean Baptist Church

Retro-fit Lighting Project

8411-6602

DI1104
Entered 7-6-11

RISE
ENGINEERING

Invoice #
June 29, 2011
Page Number 1
Net 30

Berean Baptist Church
474 Chapel St.
Harrisville, RI 02859

Attn: Don Waterman

Project # RIS 88-11-8665

Energy efficient lighting installed pursuant to contract dated March 25, 2011.

Contract Amount	$	3,113
Less Depsoit Check #2488	$	2,097
Invoice Total	**$**	**1,016**

$3113 x 50% = $1556.50

Final Inspection done by Haven Round 4-6-11

Okay Will pick up

RISE

Berean Baptist Church
474 Chapel St.
Harrisville, RI 02859
Don Waterman

Line Item	Room Name	Fixture Type	Existing Fixture Type	Fixt. Qty	Existing Hours	Watts	Load	kW	kWh	Proposed Future Type	Fixt Qty	Proposed Hours	Watts	kW	kWh	kW Saved	kWh Saved
1	HALLWAY	B1	2L4' T8/ELIG	6	2 000	60	360	0 36	720	RL/RB 2L4' 28W T8/LP 4' WRAP	6	2 000	42	0 252	504	0 11	216
2	BOYS & GIRLS ROOM	B1	2L4' T8/ELIG	2	2 000	60	120	0 12	240	RL/RB 2L4' 28W T8/LP 4' WRAP	2	2 000	42	0 084	168	0 04	72
3	KITCHEN	D1	2L4' T8/ELIG	7	2 000	60	420	0 42	840	RL/RB 2L4 T8/LP 4' U	7	2 000	52	0 364	728	0 06	112
4	ABOVE STOVE	I1	75W INC	1	2 000	75	75	0 075	150	23W CFL S/I	1	2 000	25	0 025	50	0 05	100
5	BIG ROOM	A1	2L8' T8/ELIG 8' SOFFIT	10	2 000	109	1 090	1 09	2 180	NO REC	10	2 000					0
6	BIG ROOM	I2	40W INC	12	2 000	40	480	0 48	960	NO REC	12	2 000					0
7	BACK STAIRWAY	B1	2L4' T8/ELIG	2	2,000	60	120	0 12	240	RL/RB 2L4' 28W T8/LP 4' WRAP	2	2,000	42	0 084	168	0 04	72
8	FOOD PANTRY	A2	4L4' T8/ELIG	1	2,000	112	112	0 112	224	RL/RB 4L4' 28W T8/LP 8' WRAP	1	2 000	83	0 083	166	0 03	58
9	CLASSROOM #1	B2	4L4' T8/ELIG	1	2,000	112	112	0 112	224	RL/RB 4L4' 28W T8/LP 4' WRAP	1	2 000	83	0 083	166	0 03	58
10	CLASSROOM #1	B1	2L4' T8/ELIG	1	2 000	60	60	0 06	120	RL/RB 2L4' 28W T8/LP 4' WRAP	1	2,000	42	0 042	84	0 02	36
11	COAT ROOM	B3	2L4' T8/ELIG	3	1 000	60	180	0 18	180	NO REC	3	1 000					0
12	CLASSROOM #2	A2	4L4' T8/ELIG	2	2,000	112	224	0.224	448	RL/RB 4L4' 28W T8/LP 8' WRAP	2	2,000	83	0 166	332	0 06	116
13	CLASSROOM #2	A3	2L4' T8/ELIG	1	2 000	60	60	0 06	120	RL/RB 2L4' 28W T8/LP 8' WRAP	1	2,000	42	0 042	84	0 02	36
14	PASTOR'S STUDY	A2	4L4' T8/ELIG	2	2 000	112	224	0 224	448	RL/RB 4L4' 28W T8/LP 8' WRAP	2	2 000	83	0 166	332	0 06	116
15	HALLWAY	B1	2L4' T8/ELIG	13	2,000	60	780	0 78	1 560	RL/RB 2L4' 28W T8/LP 4' WRAP	13	2,000	42	0 546	1,092	0 23	468
16	SECRETARY OFFICE	A2	4L4' T8/ELIG	5	2 000	112	560	0 56	1 120	RL/RB 4L4' 28W T8/LP 8' WRAP	5	2,000	83	0 415	830	0 15	290
17	MEETING ROOM	A2	4L4' T8/ELIG	6	2 000	112	672	0 672	1 344	RL/RB 4L4' 28W T8/LP 8' WRAP	6	2,000	83	0 498	996	0 17	348
18	FRONT STAIRWAY	B1	2L4' T8/ELIG	1	2 000	60	60	0 06	120	RL/RB 2L4' 28W T8/LP 4' WRAP	1	2 000	42	0 042	84	0 02	36
19	FRONT STAIRWAY	I3	60W INC	1	2,000	60	60	0 06	120	13W CFL S/I	1	2 000	15	0 015	30	0 05	90
20	EXTERIOR FRONT	I2	40W INC	2	2 000	40	80	0 08	160	NO REC	2	2 000					0
21	EXTERIOR SIDE	I3	60W INC	1	2 000	60	60	0 06	120	13W CFL S/I	1	2 000	15	0 015	30	0 05	90
22	EXTERIOR REAR	I3	60W INC	1	2 000	60	60	0 06	120	13W CFL S/I	1	2,000	15	0 015	30	0 05	90
TOTALS				81			5 969	5.969	11,756		81		814	2,937	5874	1,20	2,404

GROUP NUMBER: 867 DSM Rebate
GROUP TYPE : AP ACCOUNT PAYABLE TRANSACTIONS
FUND . . . . 1 ELECTRIC FUND

ACCOUNT	TRANS DATE	BANK CODE	N A M E	VCH/PO/CHK NUMBER	TRANSACTION AMOUNT	
001-0000-214.24-20	7/06/2011	00		VR 000778	1,556.50	ACCOUNTS PAYABLE AMOUNT

OFFSETS:

ACCOUNT	D E S C R I P T I O N	DEBIT	CREDIT
FUND . . . . : 001	ELECTRIC FUND		
001-0000-210.23-20	ACCOUNTS PAYABLE / ACCOUNTS PAYABLE	.00	1,556.50

PASCOAG UTILITY DISTRICT, ELECTRIC DEPT
ACCOUNTS PAYABLE UPDATE LIST

GROUP NUMBER : 00867 DSM Rebate
ACCOUNTING PERIOD: 07/2011
GROUP USER ID : PSCGHJR
GROUP CREATED BY : PSCGHJR
GROUP UPDATED BY : PSCGHJR

TRANS#	TRANS DATE	VOUCHER	BK	ACCOUNT NUMBER	PROJ	P.O.	VENDOR	SEQ	VENDOR NAME	INVOICE NUMBER	AMOUNT
DESCRIPTION 1				DESCRIPTION 2		DUE DATE	CHECK#		CHECK DATE	TYPE LAST TRANS	DISC/RETAINAGE
	COM	SUB									
100	07/06/2011	000778	00	001-0000-214.24-20	DI1104		0000048	00	PASCOAG UTILITY DIST	BEREAN BAPT	1,556.50
8411-6600				LIGHTING PROJECT		07/29/2011	0000000		00/00/0000	N	

GROUP TOTALS

COUNT: 1
AMOUNT: 1,556.50