



Case No.: 10-1626-EL-EEC

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs implemented during the prior three calendar years.

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the electric utilities' energy efficiency rider option (Option 2) will not qualify for the 60-day automatic approval.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

If you consider some of the items requested in the application to be confidential or trade secret information, please file a copy of the application under seal, along with a motion for protective order pertaining to the material you believe to be confidential. Please also file a copy of the application in the public docket, with the information you believe to be confidential redacted.

Section 1: Company Information

Name: WAL-MART STORES EAST LP

Principal address: Sam Walton Dev. Complex 2001 S.E. 10th Street, Bentonville, AR 72716

Address of facility for which this energy efficiency program applies: 4004 Tuscarawas St, Canton, Oh 44708-5503

Name and telephone number for responses to questions:

Richard Mynatt, Wal-Mart Stores East Lp, (479) 277-9086

Electricity use by our company (at least one must apply to your company – check the box or boxes that apply):

- ☒ We use more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)

See Confidential and Proprietary Attachment 4 – Calculation of Rider Exemption and UCT which provides the facility consumption for the last three years, benchmark kWh, and the last 12 months usage.

- ☐ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.) When checked, see Attachment 6 – Supporting Documentation for a listing of the customer's name and service addresses of other accounts in the AEP Ohio service territory.

Section 2: Application Information

A) We are filing this application (choose which applies):

- ☐ Individually, on our own.
- ☒ Jointly with our electric utility.

B) Our electric utility is: Ohio Power Company

The application to participate in the electric utility energy efficiency program is
"Confidential and Proprietary Attachment 3 – Self Direct Program Project
Completed Application."

C) We are offering to commit (choose which applies):

- ☐ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Demand reduction from our demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ Both the energy savings and the demand reduction from our energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☒ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, 9/15/2008 and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you determined this future replacement date (or, if not known, please explain why this is not known)).

The remaining life of the equipment varies and is not known with certainty. The future replacement date is unknown and has historically been at the end of equipment life. Replacement was completed early to achieve energy savings and to reduce future maintenance costs.

- ☐ Installation of new equipment to replace equipment that needed to be replaced. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

B) Energy savings achieved/to be achieved by your energy efficiency program:

- a) If you checked the box indicating that your project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Unit Quantity (watts) = Existing (watts x units) - Installed (watts x units)

kWh Reduction (Annual Savings) = Unit Quantity x (Deemed kWh/Unit)

Annual savings: 179,091 kWh

See Confidential and Proprietary Attachment 5 - Self Direct Program Project Calculation for annual energy savings calculations Attachment 6 - Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.

- b) If you checked the box indicating that you installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

- c) If you checked the box indicating that your project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

Section 4: Demand Reduction/Demand Response Programs

A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
- ☐ Our peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) What is the date your peak demand reduction program was initiated?

The coincident peak-demand savings are permanent installations that reduce demand through energy efficiency and were installed on the date specified in Section 3 A above.

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

Unit Quantity (watts) = Existing (watts x units) – Installed (watts x units)

KW Demand Reduction = Unit Quantity (watts) x (Deemed KW/Unit (watts))

20.4 kW

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for peak demand reduction calculation, and Attachment 6 – Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☒ Option 1: A cash rebate reasonable arrangement.

OR

☐ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate, based on avoided generation cost, of \$_____. (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)

OR

☒ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ 12,278.76. (Attach documentation and calculations showing how this payment amount was determined.)

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for incentive calculations for this mercantile program.

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for ____ months (not to exceed 24 months). (Attach

calculations showing how this time period was determined.)

OR

- ☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of an ongoing efficiency program that is practiced by our organization. (Attach documentation that establishes your organization's ongoing efficiency program. In order to continue the exemption beyond the initial 24 month period your organization will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____
(Continue to Subsection 1, then skip Subsection 2)
- ☒ Utility Cost Test (UCT) . The calculated UCT value is: 5.3 (Skip to Subsection 2.)

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were \$ 59,267.80

The utility's administrative costs were \$ 1,074.54

The utility's incentive costs/rebate costs were \$ 12,278.76.

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment.

See Attachment 1 - Self Direct Project Overview and Commitment for a description of the project. See Attachment 6 - Supporting Documentation, for the specifications of the replacement equipment work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed. Due to the length of time since the equipment replacement, the make, model and year of the replaced equipment is not available.

- A copy of the formal declaration or agreement that commits your program to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;

See Attachment 2 - Self Direct Program Project Blank Application including Rules and Requirements. All confidentiality requirements are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 - Self Direct Program Project Completed Application.)

- 2) a description of any consequences of noncompliance with the terms of the commitment;

See Attachment 2 - Self Direct Program Project Blank Application including Rules and Requirements. All consequences of noncompliance are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 - Self Direct Program Project Completed Application.

- 3) a description of coordination requirements between you and the electric utility with regard to peak demand reduction;

None required because the resources committed are permanent installations that reduce demand through increased efficiency during the Company's peak summer demand period generally defined as May through September and do not require specific coordination and communication to provide demand reduction capabilities to the Company.

- 4) permission by you to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,

See Attachment 2 - Self Direct Program Blank Application including Rules and Requirements granting such permission pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 - Self Direct Program Project Completed Application.

- 5) a commitment by you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

See Attachment 1 - Self Direct Project Overview and Commitment for the commitment to comply with any information and compliance reporting requirements imposed by rule or as part of the approval of this arrangement by the Public Utilities Commission of Ohio.

- A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.

The Company applies the same methodologies, protocols, and practices to Self Direct Program retrospective projects that are screened and submitted for approval as it does to prospective projects submitted through its Prescriptive and Custom Programs. The Commission has not published a technical reference manual for use by the Company so deviations can not be identified. The project submitted is a custom project and energy savings are determined as described in Confidential and Proprietary Attachment 5 - Self Direct Program Project Calculation, Attachment 6 - Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.



Public Utilities Commission

Application to Commit
Energy Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only)

Case No.: 10-1626-EL-EEC

State of Nevada :

JOO CHINEE YONG, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

KEMA Services, Inc agent of Ohio Power
2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
3. I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

Yong Chinee Yong CEM, LEED AP
Signature of Affiant & Title

Sworn and subscribed before me this 29 day of November, 2010 Month/Year

Jeanne McConnell
Signature of official administering oath

Jeanne McConnell
Print Name and Title

My commission expires on May 23, 2014





Self Direct Project Overview & Commitment

The Public Utility Commission of Ohio (PUCO) will soon review your application for participation in AEP Ohio's Energy Efficiency/Peak Demand Response program. Based on your submitted project, please select by initialing one of the two options below, sign and fax to 877-607-0740.

Customer Name	WAL-MART STORES EAST LP	
Project Number	AEP-10-01184	
Customer Premise Address	4004 TUSCARAWAS ST, CANTON, OH 44708-5503	
Customer Mailing Address	Sam Walton Dev. Complex 2001 S.E. 10th Street, Bentonville, AR 72716	
Date Received	12/15/2009	
Project Installation Date	9/15/2008	
Annual kWh Reduction	179,091	
Total Project Cost	\$34,612.00	
Unadjusted Energy Efficiency Credit (EEC) Calculation	\$16,371.67	
Simple Payback (yrs)	3.0	
Utility Cost Test (UCT)	5.3	
Please Choose One Option Below and Initial		
Option 1 - Self Direct EEC: 75%	\$12,278.76	☒ Initial: <i>[Signature]</i>
Option 2 - EE/PDR Rider Exemption	10 Months (After PUCO Approval)	☐ Initial: _____

Note: This is a one time selection. By selecting Option 1, the customer will receive payment in the amount stated above. Selection of Option 2: EE/PDR rider exemption, will result in the customer not being eligible to participate in any other energy efficiency programs offered by AEP Ohio during the period of exemption. In addition, the term of Option 2: EE/PDR rider exemption is subject to ongoing review for compliance and could be changed by the PUCO.

If Option 1 has been selected, will the Energy Efficiency Funds selected help you move forward with other energy efficiency projects?

___ YES ___ NO

Project Overview:

The Self Direct (Custom) project that the above has completed and applied is as follows.

Retrofit of (15) 5-door (with 6 lamps each), (21) 4-door (with 5 lamps each), (4) 3-door (with 4 lamps each) and (4) 2-door (with 3 lamps each) refrigerated cases fluorescent lighting with LED lighting. 15 cases* 6 lamps/ case = 90 lamps

21 cases* 5 lamps/case = 105 lamps

4 cases* 4 lamps/case = 16 lamps

4 cases * 3 lamps/case = 12 lamps

Total = 223 lamps (sticks)

The documentation that was included with the application proved that the energy measures applied for were purchased and installed.

By signing this document, the Mercantile customer affirms its intention to commit and integrate the above listed energy efficiency resources into the utility's peak demand reduction, demand response, and energy efficiency programs. By signing, the Mercantile customer also agrees to serve as a joint applicant in any filings necessary to secure approval of this arrangement by the Public Utilities Commission of Ohio, and comply with any information and compliance reporting requirements imposed by rule or as part of that approval.

Ohio Power Company

By: *[Signature]*

Title: Manager

Date: 11/02/10

WAL-MART STORES EAST LP

By: *[Signature]*

Title: DIRECTOR ENERGY

Date: 11/14/10



Self-Direct Program Project Application

Application Instructions

- Complete the application form for each installation account number.
- Complete the Self-Direct Program spreadsheet, which is in Excel format, fully describing each measure replaced and installed along with project costs, existing and new equipment inventories/operation descriptions, baseline and new usage measurements or detailed calculations, total energy and demand savings, and other specified information. It shall be the customer's responsibility to provide all necessary documentation, calculations, and energy impact and summer peak demand saving verification in order to justify the project for incentives.
- Complete the Self-Direct Program project description and include all required documentation including detailed customer-approved invoices, proof of purchase, receipts, technical specifications, studies/proposals, etc.
- NOTE: Sending inadequate invoice documentation, incomplete/incorrect forms, or backup information, including detailed energy and summer peak demand calculations, will delay review of the application. Contact AEP Ohio if you require additional assistance in completing the application.
- Submit all information to AEP Ohio. All completed submissions become the property of AEP Ohio. Make a copy of all documents for your records.

FORM SUBMITTAL: Please note all Rules and Requirements.
Return the signed, completed form and all required detailed documentation to:

Mail: AEP Ohio
6031 East Main Street, Suite 190
Columbus, OH 43213
Fax: 877-607-0740
Email: gridsmartohio@kema.com
Questions: Call 877-607-0739

Visit **gridsmartohio.com** for more information on the Self-Direct Program and other energy efficiency incentive programs offered by AEP Ohio.



Self-Direct Program Project Application

Project ID provided by AEP Ohio
PROJECT ID: _____

THIS INCENTIVE APPLICATION FORM IS VALID THROUGH DECEMBER 31, 2009.

☐ Pre-approval Application☐ Final Application**SECTION 1: SELF-DIRECT CUSTOMER INFORMATION**

Company Name		Contract Date of Acceptance	
Mailing Address			
City		State	Zip Code
Contact Name (print)	Phone	Fax	
Contact E-mail*			
Building Type: ☐ Office ☐ School/College ☐ Retail/Service ☐ Restaurant ☐ Hotel/Motel ☐ Medical ☐ Grocery ☐ Warehouse ☐ Light industry ☐ Heavy Industry ☐ Government/Municipal ☐ Other _____			

By signing here, I acknowledge the information on this application is accurate and complete. I confirm I have read, agree with and understand the Rules and Requirements of this application and I have the authority to execute on behalf of my company / corporation.

Customer Signature _____ Date _____

* By providing your e-mail address, you are granting AEP Ohio permission to send further e-mails regarding our programs and services

SECTION 2: COMPLETION AND PAYMENT INFORMATION

Attention to	Total Incentive Amount Requested \$	
Taxpayer ID # of Recipient (if not a Corporation or Tax Exempt)	Total Project Cost \$	Total Incremental Cost \$
☐ Corporation (Inc, LLC, PC, etc.) ☐ Tax Exempt	Total Annual kWh Claimed	kW Demand Reduction Claimed
☐ Other (Individual, Partnership – may receive 1099)		

SECTION 3: JOB SITE INFORMATION (where equipment was installed)

Job Site Name		Project Contact Name	
Job Site Address (physical location)		Project Contact Telephone	
City	State	Zip Code	Project Contact Email
Job Site AEP Ohio Account Number (primary account)		Job Site Premise Number	

SECTION 4: CONTRACTOR INFORMATION (equipment or service provider/ installer)

Contractor Name				
Contractor Street Address		City	State	Zip Code
Contractor Contact Name		Contact Telephone	Contact Email	

SECTION 5: CUSTOMER ELECTION (CHOOSE ONE OPTION AND COMPLETE ASSOCIATED INFORMATION)

Option #1	☐ Incentive Payment	Incentive Calculation: \$ _____
Option #2	☐ Exemption From EE/PDR Rider	# of Months Exempted: _____ months (calculation provided by AEP Ohio)

Self-Direct Program Retrospective Projects / Rules and Requirements

Columbus Southern Power Company and Ohio Power Company are collectively known as AEP Ohio ("AEP Ohio"). AEP Ohio provides energy-efficiency incentives for the purchase and installation of qualifying cost-effective equipment in the customer's facility (the customer's "Commitment of Resources") under the Rules and Requirements provided in this incentive application and subject to regulatory approvals.

Customer Qualifications

The Self-Direct Program (the "Program") applies to customers served at AEP Ohio's retail electric rates who meet the minimum energy usage requirements of 700,000 kWh per year or who are part of a national account involving multiple facilities in one or more states. This application defines the Date of Acceptance.

Terms and Conditions

- THIS INCENTIVE APPLICATION FORM IS VALID FOR SUBMITTAL BY SELF-DIRECT CUSTOMERS UNTIL DECEMBER 31, 2009. AEP Ohio incentive programs may be changed or cancelled at any time without notice. The Customer and its contractor are solely responsible for contacting AEP Ohio to ask whether or not the program is still in effect and to verify program parameters.
- Customer agrees to commit all energy and demand resources identified in this application to AEP Ohio's energy and demand target / benchmarks as identified in Senate Bill 221.
- Incentive payments are available while program funding lasts.
- To ensure maximum program participation, AEP Ohio reserves the right to limit funding on a per project basis.
- Pre-approval by AEP Ohio is required.
- Incentive items must be installed on the AEP Ohio electric account listed on the application.
- The incentive payment shall be:
 - 75% of the calculated incentive under the Business Lighting or Custom Program, whichever is applicable to this project.
- In lieu of a one-time incentive payment, the customer may elect to seek an exemption from the Energy Efficiency / Peak Demand Reduction (EE/PDR) Rider for the associated electric account(s) for a defined period of time as stated on this Application. For this exemption, and as defined in the table below, the incentive payment amount is compared to the estimated net present value (NPV) of the customer's estimated EE/PDR rider obligation, as calculated by AEP Ohio. If exemption is elected, the customer is not eligible for other programs offered by AEP Ohio during the period of exemption. Unless additional resources are committed, the customer will, after the specified number of months on this Application, be subject to the EE/PDR Rider.
- If an incentive is elected, the customer remains in the EE/PDR rider for the period of time that an exemption would have been in effect and may also participate in other AEP Ohio programs.
- All equipment must be new; used or rebuilt equipment is not eligible for an incentive.
- Eligible measures must produce verifiable and persistent energy and/or demand reduction, for a period of no less than five (5) years from the date of installation, through an increase in efficiency or through the use of load-shifting technologies. Measurement and verification may be required.
- Ineligible measures:
 - Rely solely on changes in customer behavior and require no capital investment, or merely terminate existing processes, facilities and/or operations.
 - Are required by state or federal law, building or other codes, or are standard industry practices.
 - Involve fuel switching, plug loads, or generate electricity.
 - Are easily reverted / removed or are installed entirely for reasons other than improving energy efficiency.
 - Include other conditions to be determined by AEP Ohio.
- Projects submitted for retrospective claims must be installed and operating between January 1, 2006 and the Date of Acceptance into the Self-Direct Program. Incentive levels, as shown in the table below, are based on the calendar year of installation / operation. Customer shall provide proof of equipment installation / operation start-up.
- All applications are subject to AEP Ohio, its contractor(s) / agent(s), and the Public Utility Commission of Ohio (PUCO) review and approval prior to any incentives paid or exemption from the EE/PDR Rider under this program.

- Customer is allowed and encouraged to consider using all or a portion of the incentive payment, as received from AEP Ohio under this program, to help fund other customer-initiated energy efficiency and demand reduction projects in the future. Future projects can also qualify for incentives under the Business Lighting or Custom program.
- A signed final application with documentation verifying installation of the project including, but not limited to, equipment, invoices, approvals, and other related information must be submitted to AEP Ohio prior to application approval.
- The summer peak period is defined as weekday peak-demand hours (7:00 AM to 9:00 PM, May through September).
- Customers are encouraged to submit projects that warrant special treatment (i.e., non-typical projects) to be considered on a case-by-case basis by AEP Ohio.
- AEP Ohio reserves the right to randomly inspect customer facility(ies) for installation of materials listed on this incentive application and will need access to survey the installed project. Customer understands and agrees that Program installations may also be subject to inspections by the PUCO or their designee, and photographs of installation may be required. All documentation and verification is subject to strict confidentiality.
- If the inspection finds that customer did not comply with program rules and requirements, any incentive received under this Program must be returned to AEP Ohio including interest. Exemption from the rider will be voided as well. In addition, AEP Ohio reserves the right to withhold payment or exemption for projects that do not meet reasonable industry standards as determined by AEP Ohio.
- AEP Ohio reserves the right to refuse payment and participation if the customer or contractor violates program rules and procedures. AEP Ohio is not liable for incentives promised to customers as a result of program misrepresentation.
- The customer understands and agrees that all other terms and conditions, as specified in the application, including all attachments and exhibits attached to this application, which will serve as a contract for the customer's commitment of energy and demand resources to AEP Ohio, shall apply.
- AEP Ohio reserves the right to request additional backup information, supporting detail, calculations, manufacturer specification sheets or any other information prior to any incentive payment.
- Equipment could have been installed in retrofit, replacement, or new construction applications and must meet reasonable industry standards. All equipment / measures must meet minimum cost effectiveness requirements as defined or determined by AEP Ohio. Customer must also provide evidence of measure life.
- AEP Ohio will issue any approved incentives in the form of checks.
- Customer can not apply for incentives for future projects and elect after the fact to apply for exemption under this program.
- All documentation and verification is subject to strict confidentiality.
- All completed submissions become the property of AEP Ohio.

Disclaimers

AEP Ohio:

- Does not endorse any particular manufacturer, product or system design by offering these incentives.
- Will not be responsible for any tax liability imposed on the customer as a result of the payment of incentives. AEP Ohio will report incentives greater than \$45 income on IRS form 1099. Such incentives shall be taxable unless Customer 600 meets acceptable tax exemption criteria. Customers are encouraged to consult with their tax advisors about the taxability of any incentive payments.
- Does not expressly or implicitly warrant the performance of installed equipment (contact your contractor for detailed equipment warranties).
- Is not responsible for the proper disposal/recycling of any waste generated as a result of this project.
- Is not liable for any damage caused by the operation or malfunction of the installed equipment.
- Does not guarantee that a specific level of energy or cost savings will result from the implementation of energy conservation measures or the use of products funded under this program.

OPTION #1 - ONE-TIME INCENTIVE PAYMENT	
Incentive Levels (for retrospective projects completed since January 1, 2006)	75% of the calculated incentive payment under the current Business Lighting or Custom Programs, whichever is applicable.
Min / Max payback w/o incentive applied	1 year Min / 7 Year Max

OPTION #2 - EXEMPTION FROM EE / PDR RIDER
Exemption from the EE/PDR rider is determined by comparing the value of the one-time incentive payment with the estimated net present value (NPV) of the EE/PDR rider payments, as calculated by AEP Ohio, for the customer's associated electric account. This NPV is defined as the customer's financial contribution to AEP Ohio's efforts to reach EE/PDR targets. Exemption term will be rounded to the nearest month.

Self-Direct Program

Retrospective Project Description: Project _____ of _____

Project Descriptive Name	Project In-service Date
Affected Electric Account Number(s)	

Claimed Project Baseline (AEP Ohio will make the final determination of applicable baseline):

- ☐ Retrofit (the project was an elective retrofit and the equipment was still operable)
☐ Replacement (the project was a replacement of equipment at or near the end of its useful life)
☐ New (the project was an addition of new equipment in an existing facility or new construction)

Describe the project including detail of energy savings equipment. Attach additional sheets if needed.

Describe the removed equipment and operating strategy. Attach additional sheets if needed.

Describe the installed equipment and operating strategy. Attach additional sheets if needed.

Describe your calculation method for energy savings. Attach additional sheets if needed.

In addition to electrical energy and/or demand reduction, other benefits of proposed project include:

- | | |
|---|--|
| ☐ Conserves other utilities (gas, water, etc.) | ☐ Meets environmental regulations |
| ☐ Improves process flow | ☐ Reduces labor |
| ☐ Improves product quality | ☐ Saves energy |
| ☐ Increases production capacity | ☐ Uses fewer raw materials |
| ☐ Other _____ | |

Project Technical Specifications

(This sheet provides an example of required data collection. The Self-Direct spreadsheet provides additional guidance and streamlines the process for collecting, documenting and reporting this information to AEP Ohio, and it follows the format of this sheet. Please provide as much detail as possible on the Self-Direct spreadsheet to expedite review and processing of the requested incentive).

Please complete the Self-Direct spreadsheet for each measure installed and provide supporting documentation including engineering or equipment supplier studies, customer-approved invoices, purchase orders, detailed calculations of baseline and energy and peak summer demand savings. A detailed proposal and complete package will expedite review of application. This information is required by AEP Ohio and/or its consultants for project analysis.

	EQUIPMENT REMOVED OR LOWER EFFICIENCY OPTION	INSTALLED EQUIPMENT OR HIGHER EFFICIENCY OPTION
Equipment type		
Manufacturer of equipment		
Model number(s)		
Date of Removal / In-Service Date		
Age of equipment at removal		
Estimated remaining useful life at time of removal or installation		
Efficiency rating		
Nameplate data: kW, tons, HP, watts, etc.		
Quantity		
Annual operating hours		
Annual energy savings (kWh)		
Summer peak reduction (kW)*		
Annual electric bill savings (\$)		
COST BREAKOUT		
Equipment		
Engineering		
Installation		
Other (explain)		
TOTAL PROJECT COST		
Incremental Cost = Installed Option Total Cost – Removed Equipment or Lower Efficiency Option Total Cost		
* Determination of peak demand reduction (kW) from non-HVAC equipment: For non-HVAC measures, calculate the average kW reduction over the period from 7 a.m. to 9 p.m., weekdays, from May 1 through September 30. The preferred calculation method will estimate hourly kW demands over the peak demand period, and average the results. However, if measures do not vary significantly during those hours, a less rigorous estimation process may be applied if approved in advance by the program.		
* Determination of peak demand reduction (kW) within HVAC systems: Calculate the maximum HVAC peak demand reduction that occurs between 7 a.m. to 9 p.m. on a weekday from May 1 through September 30.		

Energy Savings Calculation for Retrofit of LED lights in Refrigerator/Freezer Cases

Customer:

Lighting Savings

Existing						
Existing Fluorescents:		223 lamps	92 Watts each (based on 1-lamp, one ballast fixture)			
Length of fluorescent		5 feet	Typically 5 or 6 feet			
Base run hours		8760 Ann. hours	AM	to	PM If not 24/7 operation	
New LED						
Number of Center LED's		150 sticks	29 Watts each			
Number of Side LED's		73 sticks	14.5 Watts each			
New LED's not on motion		223				
New LED's on motion		0				
Run Hours no Motion		8760 hours	Note: Must enter hours			
% Reduction in Runtime w/Motion		0 % of prior run hours				
Run Hours w/Motion		8760 hours	Number of motion sensors			
Existing Lighting Load:						
Lighting kWh fluorescents = # of lamps * Watts * base run hours * 1/1000 W/kW						
kWh fluorescents before =		179,720.16				

LED Lighting Load:

LED Lighting Savings	
Lighting kWh of LED's = Total # of LED's * Watts * base run hours * 1/1000 W/kW	
kWh LED's =	47,378.46
<u>kWh Savings of LED Retrofit Only =</u>	<u>132,341.70</u>
<u>No Motion</u>	
Lighting kWh of LED's = # of LED's no motion * Watts * run hours no motion * 1/1000 W/kW	
kWh no motion LED's=	47,378.46
<u>With Motion</u>	
Lighting kWh of LED's = # of LED's with motion * Watts * run hours with motion * 1/1000 W/kW	
kWh LED's w/motion=	0.00

Total Lighting kWh Savings = 132,341.70 kWh

Compressor Savings

COP for Freezer Cases	2.71 Based on case temp, see COP Value tab
COP Refrigerator Cases	4.73 Based on case temp, see COP Value tab
% of Lighting in Freezer Cases	90
% of Lighting in Refrigerator Cases	10

Compressor kWh Savings = 46,749.04 kWh

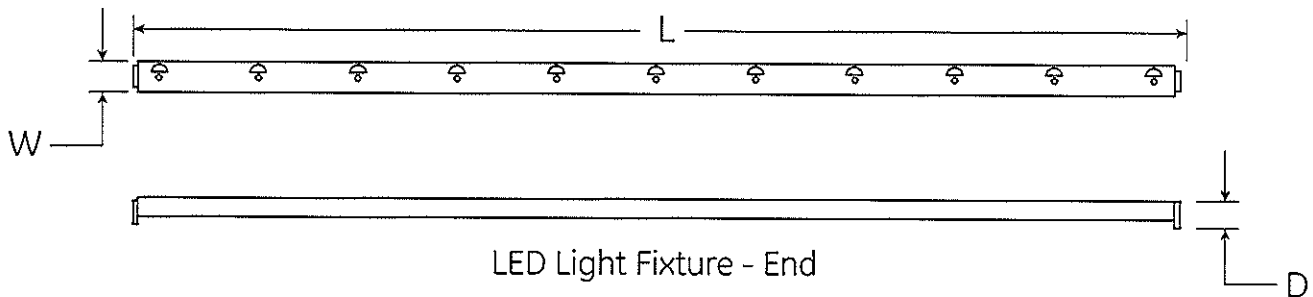
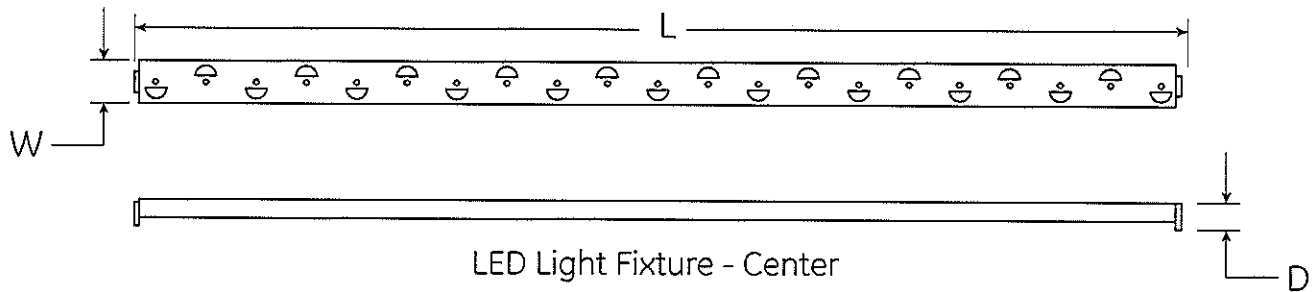
Compressor kWh Savings due to LED's = (kWh of fluorescents - kWh of LED Retrofit w/Sensor Use) * % Lighting for Case Type / COP for Case Type

<u>Freezer Cases</u>	
Freezer Cases Compressor kWh Savings=	43,951.12
<u>Refrigerator Cases</u>	
Refrigerator Cases Compressor kWh Savings=	2,797.92

Compressor kWh Savings= 46,749.04

Total Project kWh Saved = 179,090.74 kWh

LED Light Fixtures



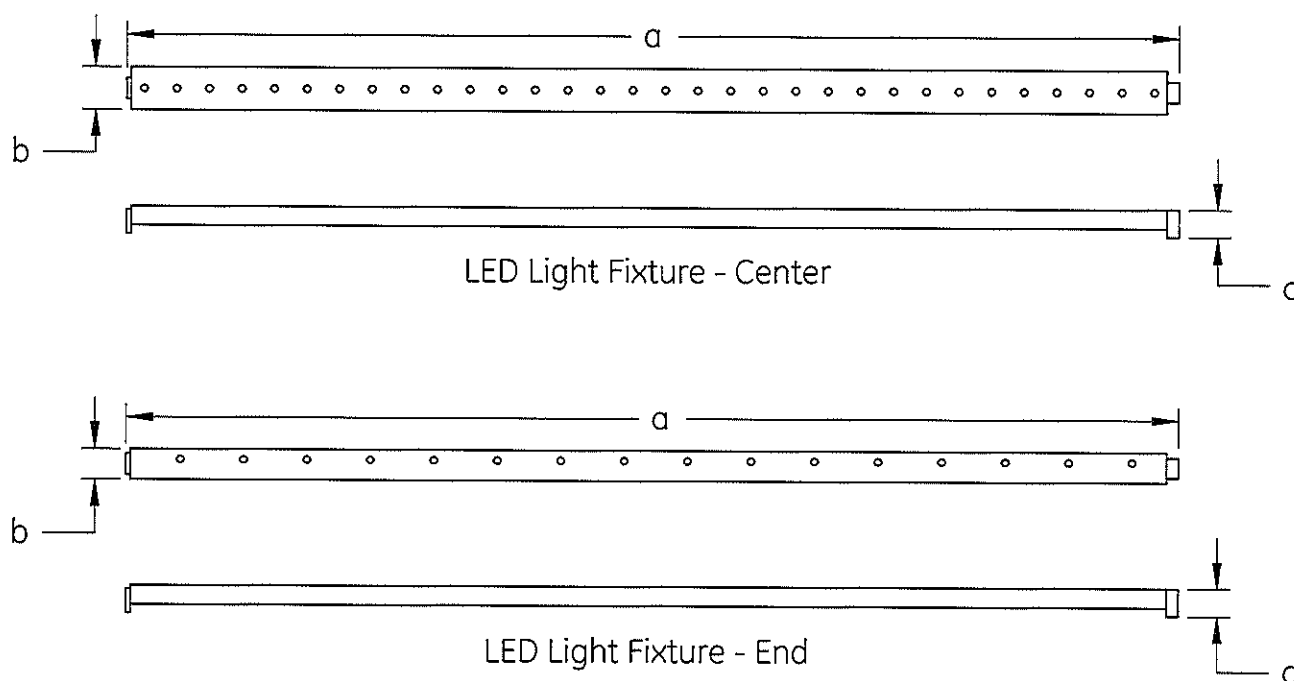
RV-30 Series

Model #	Description	PERFORMANCE DATA						DIMENSIONAL DATA		
		Color Temp (K)*	Illuminance (Lux)**	Life (Hrs)	Lumens	CRI (Typical)	Energy (Watts)	Length (L)	Width (W)	Depth (D)
5000K	✓GE-LT306050CTR 60" Light Fixture - Center	5000	1150	50,000	1500	70	29 per fixture	(in) 57.6	3.3	1.1
							29 per door	(mm) 1463	84	28
	✓GE-LT306050EDL 60" Light Fixture - Left End						14.5 per fixture	(in) 57.7	2.3	1.2
	✓GE-LT306050EDR 60" Light Fixture - Right End						29 per door	(mm) 1466	58	30
4100K	GE-LT306041CTR 60" Light Fixture - Center	4100	1100	50,000	1500	70	29 per fixture	(in) 57.6	3.3	1.1
							29 per door	(mm) 1463	84	28
	GE-LT306041EDL 60" Light Fixture - Left End						14.5 per fixture	(in) 57.7	2.3	1.2
	GE-LT306041EDR 60" Light Fixture - Right End						29 per door	(mm) 1466	58	30
3500K	GE-LT306035CTR 60" Light Fixture - Center	3500	1050	50,000	1500	70	29 per fixture	(in) 57.6	3.3	1.1
							29 per door	(mm) 1463	84	28
	GE-LT306035EDL 60" Light Fixture - Left End						14.5 per fixture	(in) 57.7	2.3	1.2
	GE-LT306035EDR 60" Light Fixture - Right End						29 per door	(mm) 1466	58	30

*Color temp (CCT) +/- 10%

**Initial illuminance (lux) +/-15% based on typical in-store performance

LED Fixture Light



Dimensional Data

Model Number	General Description		a	b	c
GE-LT206050CTR	LED Light Fixture - Center	(in)	61.4	2.5	1.4
		(cm)	156.0	6.4	3.6
GE-LT206050EDL	LED Light Fixture - Left End	(in)	61.4	1.8	1.3
GE-LT206050EDR	LED Light Fixture - Right End	(cm)	156.0	4.6	3.3
GE-LT207050CTR	Tall LED Light Fixture - Center	(in)	68.9	2.5	1.4
		(cm)	175.0	6.4	3.6
GE-LT207050EDL	Tall LED Light Fixture - Left End	(in)	68.9	1.8	1.3
GE-LT207050EDR	Tall LED Light Fixture - Right End	(cm)	175.0	4.6	3.3

Performance Data

Model Number	General Description	Average Life (hrs.)	Typical Lumens	CRI	Color Temp (K)	Typical Watts
GE-LT206050CTR	LED Light Fixture - Center	50,000	1280	72	4800	41
GE-LT206050EDL	LED Light Fixture - Left End	50,000	640	72	4800	20.5
GE-LT206050EDR	LED Light Fixture - Right End					
GE-LT207050CTR	Tall LED Light Fixture - Center	50,000	1440	72	4800	45
GE-LT207050EDL	Tall LED Light Fixture - Left End	50,000	720	72	4800	22.5
GE-LT207050EDR	Tall LED Light Fixture - Right End					

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/21/2010 3:17:43 PM

in

Case No(s). 10-1626-EL-EEC

Summary: Application Application electronically filed by Mr. Matthew J Satterwhite on behalf of American Electric Power Service Corporation