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RECEIVED-DOCKETING DIV

2011 DEC 30 PM 4:52

PUCO

December 30, 2010

Renee Jenkins  
Chief of Docketing  
The Public Utilities Commission of Ohio  
180 E. Broad Street, 11th Floor  
Columbus, Ohio 43215

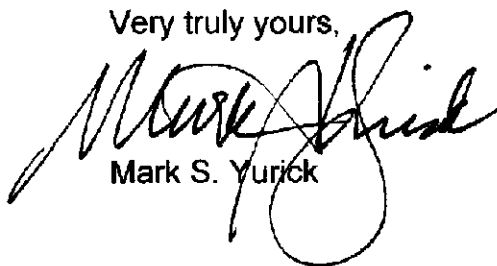
Re: Incentive Application – The Kroger Co. and Duke Energy of Ohio  
PUCO Case No. 10-3134-EL-EEC

Dear Ms. Jenkins:

Please find enclosed the incentive application for energy efficiency projects to be filed on behalf of The Kroger Co. and Duke Energy of Ohio. The docket number was obtained today by telephone.

Do not hesitate to contact me with any questions or concerns. Thank you for your assistance.

Very truly yours,



Mark S. Yurick

Enclosure

4853-2746-2408, v. 1

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.  
Technician AW Date Processed 12/30/10



1014 Vine Street  
Cincinnati, Ohio 45202-1100  
(513) 762-4957 office (513) 762-1537 fax

RECEIVED-DOCKETING DIV  
2010 DEC 30 PM 4:52  
PUCO

Tracy MacDonald  
The Kroger Co.  
Energy Department, 5<sup>th</sup> Fl  
1014 Vine St.  
Cincinnati, OH 45202  
Tracy.MacDonald@Kroger.com

Ohio Public Utility Commission  
180 East Broad Street  
Columbus, Ohio 453215

Attention: Docketing Division

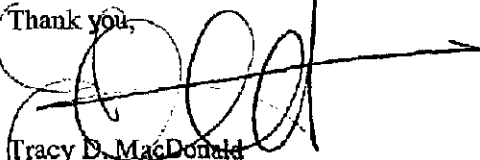
RE: Incentive application for 2007 Projects with Duke Energy – Case No. 10-3134 EL-EEC

On behalf of The Kroger Co., I am submitting an incentive application for energy efficiency projects completed in 2007. These projects include a HID retrofit and ECM motor retrofit. Kroger opted out of Duke Energy's 2007 energy efficiency rider but the 2007 efficiency program offered by Duke Energy did not include a custom program, so these measures were not eligible for incentives. We are currently working with Duke Energy to determine the cash value of these projects and will supplement this filing once we determine the amount.

We have already collected incentive payments for our HID and ECM motor retrofits from other Ohio utility companies, please refer to Case No. 09-1494 EL-EEC as an example. We hope to collect payments for the energy efficiency measures completed in Duke Energy's territory.

Please return a time stamped copy of this application to me in the enclosed self-addressed envelope. If you have any questions, please contact me at 513.762.4957.

Thank you,

  
Tracy D. MacDonald  
The Kroger Co.  
Energy Department, 5<sup>th</sup> Fl  
1014 Vine St.  
Cincinnati, OH 45202  
Tracy.MacDonald@Kroger.com



## **Public Utilities Commission**

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

**Case No.: 10-3134-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: **The Kroger Co.**

Principal address: **1014 Vine Street Cincinnati, Ohio 45202**

Address of facility for which this energy efficiency program applies: **See Attached**

Name and telephone number for responses to questions:

**Tracy MacDonald 513.762.4957 or Denis George 513.762.4538**

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 Attached**
- ☐ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.) **See Attached**

## 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: **Duke Energy**

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.)

**Address of facility for which this energy efficiency program applies:**

| <b>Site ID</b> | <b>Account Number</b> | <b>Address 1</b>             | <b>City</b> | <b>State</b> | <b>Zip Code</b> |
|----------------|-----------------------|------------------------------|-------------|--------------|-----------------|
| 01400310       | 064435277             | 2435 Harrison Ave            | Cincinnati  | OH           | 45211           |
| 01400376       | 106941934             | 2900 W.St .Rte. 22 & 3       | Maineville  | OH           | 45039           |
| 01400379       | 106008079             | 954 E.McMillan               | Cincinnati  | OH           | 45206           |
| 01400383       | 106072987             | 7300 Yankee Road             | Middletown  | OH           | 45044           |
| 01400396       | 000645605             | 1783 Ohio Pike - SR 125      | Amelia      | OH           | 45102           |
| 01400400       | 106967484             | 6401 Colerain Ave.           | Cincinnati  | OH           | 45239           |
| 01400402       | 89600703200           | 6950 Miami Ave               | Madeira     | OH           | 45243           |
| 01400405       | 011352571             | 8241 Vine St                 | Cincinnati  | OH           | 45216           |
| 01400413       | 011552517             | 800 Loveland Madeira Rd      | Loveland    | OH           | 45140           |
| 01400426       | 54202078020           | 5210 State Route 741         | Mason       | OH           | 45040           |
| 01400428       | 7202089024            | 4777 Kenard Ave              | Cincinnati  | OH           | 45232           |
| 01400430       | 106967713             | 5420 Liberty - Fairfield Rd  | Hamilton    | OH           | 45011           |
| 01400431       | 9501                  | 450 Ohio Pike(SR 125)        | Cincinnati  | OH           | 45255           |
| 01400432       | 108011054             | 2310 Ferguson Rd             | Cincinnati  | OH           | 45238           |
| 01400435       | 682159                | 6388 Branch Hill Guinea Pike | Loveland    | OH           | 45140           |
| 01400436       | 90502199047           | 5830 Harrison                | Cincinnati  | OH           | 45248           |
| 01400445       | 3260219701            | 4001 ST.RT. 128              | Clevers     | OH           | 45002           |
| 01400448       | 52003508021           | 5100 Terra Firma Drive       | Mason       | OH           | 45040           |
| 01400902       | 10129                 | 4530/500 EASTGATE BLVD       | CINCINNATI  | OH           | 45245           |
| 01400908       | 13867                 | 9690 COLERAIN AVENUE         | CINCINNATI  | OH           | 45251           |
| 01400915       | 48103542017           | 7580 Beechmont Avenue        | Cincinnati  | OH           | 45255           |
| 01400921       | 010296669             | 1093 ST. RT. 28 BY-PASS      | MILFORD     | OH           | 45150           |
| 01400943       | 000004925             | 1212 W. KEMPER RD.           | FOREST PARK | OH           | 45240           |

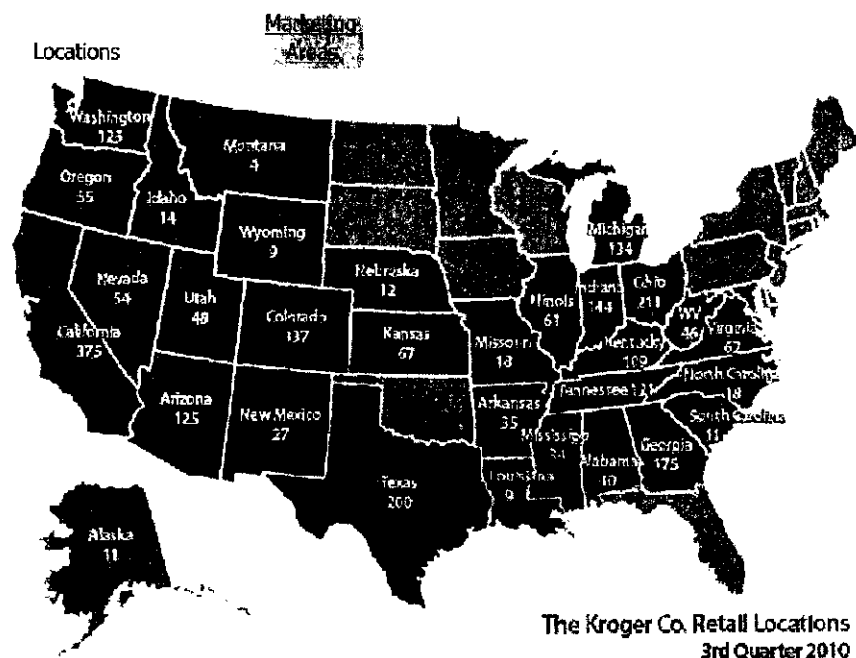
**We use more than seven hundred thousand kilowatt hours per year at our facility.**

Listed below are those sites specific to this application and their KWh usage for 2009.  
Total usage for all Duke energy account listed below.

| Site Name   | Year: 2009<br>Elec<br>Use<br>(kWh) |
|---|------------------------------------|
| 01400310 -- Cincinnati  | 2,238,565                          |
| 01400379 -- Cincinnati  | 1,790,280                          |
| 01400405 -- Cincinnati  | 2,428,427                          |
| 01400413 -- Loveland  | 2,964,098                          |
| 01400396 -- Amelia  | 3,299,609                          |
| 01400430 -- Hamilton  | 3,048,335                          |
| 01400921 -- Milford   | 2,876,762                          |
| 01400426 -- Mason   | 2,798,510                          |
| 01400400 -- Cincinnati  | 2,626,599                          |
| 01400428 -- Cincinnati  | 4,132,358                          |
| 01400943 -- Forest Park   | 3,367,466                          |
| 01400908 -- Cincinnati  | 3,316,267                          |
| 01400445 -- Whitewater  | 2,972,073                          |
| 01400431 -- Cincinnati  | 3,133,630                          |
| 01400402 -- Madeira   | 2,792,637                          |
| 01400376 -- Maineville  | 3,122,118                          |
| 01400436 -- Dent  | 3,130,915                          |
| 01400432 -- Cincinnati  | 3,020,573                          |
| 01400448 -- Deerfield   | 3,005,522                          |
| 01400435 -- Miami Township  | 2,992,797                          |
| 01400902 -- Cincinnati  | 2,770,413                          |
| 01400915 -- Cincinnati  | 4,437,830                          |
| 01400383 -- Liberty Township                                      | 3,598,819                          |
| <b>Total</b>  | <b>69,864,603</b>                  |
| <b>Total Usage for all Duke Energy<br/>Accounts company wide:</b> | <b>450,743,237</b>                 |

We are part of a national account involving multiple facilities in one or more states.

[http://www.thekrogerco.com/operations/operations\\_grocery\\_locations.htm](http://www.thekrogerco.com/operations/operations_grocery_locations.htm)



## Grocery Store Banners by State

| State       | Banner  | State          | Banner                                    |
|-------------|---|----------------|---|
| Alabama     | Kroger  | Nebraska       | Baker's                                   |
| Alaska      | Fred Meyer  | Nevada         | Smith's, Food 4 Less                      |
| Arizona     | Fry's, Smith's, Fry's Marketplace                     | New Mexico     | Smith's, City Market                      |
| Arkansas    | Kroger  | North Carolina | Kroger                                    |
| California  | Ralphs, Food 4 Less, Foods Co.                        | Ohio           | Kroger, Kroger Marketplace                |
| Colorado    | King Soopers, City Market                             | Oregon         | Fred Meyer, QFC                           |
| Georgia     | Kroger, Kroger Marketplace                            | South Carolina | Kroger                                    |
| Idaho       | Fred Meyer, Smith's                                   | Tennessee      | Kroger, Kroger Marketplace                |
| Illinois    | Kroger, Hillander, Food 4 Less                        | Texas          | Kroger, Kroger Marketplace                |
| Indiana     | Kroger, Jay C, Pay Less, Owen's, Food 4 Less, Scott's | Utah           | Smith's, Smith's Marketplace, City Market |
| Kansas      | Dillons, Dillons Marketplace                          | Virginia       | Kroger                                    |
| Kentucky    | Kroger, Kroger Marketplace                            | Washington     | QFC, Fred Meyer                           |
| Louisiana   | Kroger  | West Virginia  | Kroger                                    |
| Michigan    | Kroger  | Wyoming        | Smith's, King Soopers, City Market        |
| Mississippi | Kroger  |                |   |
| Missouri    | Kroger, Dillons, Gerbes                               |                |   |
| Montana     | Smith's   |                |   |

### 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, 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)).
- ☐ 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:

Annual savings: 2,397,691 kWh

- 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:



### Section 3: Energy Efficiency Programs

**Assumption: 10 year life expectancy**

#### A) Early replacement of fully functioning equipment with new equipment.

##### HID Lay-in Retrofits

The decision to retrofit was based solely on the energy savings gained by replacing the 360w & 400w HID fixtures with the lower wattage 226w T8 HID lay-in fixtures. Otherwise, it is company policy that lighting is not replaced until a store is remodeled. Typically stores are scheduled to be remodeled every 10 years.

| Site ID  | Account Number | Address 1              | City       | State | Zip Code | Equipment Replaced | Possible replacement |
|----------|----------------|------------------------|------------|-------|----------|--------------------|----------------------|
| 01400402 | 89600703200    | 6950 Miami Ave         | Madeira    | OH    | 45243    | 10/2007            | 2010                 |
| 01400445 | 3260219701     | 4001 ST. RT. 128       | Clevers    | OH    | 45002    | 09/2007            | 2011                 |
| 01400448 | 52003508021    | 5100 Terra Firma Drive | Mason      | OH    | 45040    | 09/2007            | 2016                 |
| 01400915 | 48103542017    | 7580 Beechmont Avenue  | Cincinnati | OH    | 45255    | 01/2007            | 2017                 |

##### ECM (Electronically Commutated Motor) for Air Cooled Single Condenser Fan

The ECM motor retrofit was designed to replace the PSC motors used on air cooled single condenser fans. This retrofit changed our strategy from cycling fan to variable speed drives. This initiative also added additional control points for maximum energy efficiency. Although inefficient, we do have some motors that are in service for over 15 years. Motors are not typically replaced unless there is a problem or an upgrade has been planned. Therefore it is not known when these motors would have been replaced. Equipment is assumed to have a 10 year life expectancy.

| Site ID  | Account Number | Address 1                    | City        | State | Zip Code | Equipment Replaced |
|----------|----------------|------------------------------|-------------|-------|----------|--------------------|
| 01400310 | 064435277      | 2435 Harrison Ave            | Cincinnati  | OH    | 45211    | 8/9/2007           |
| 01400376 | 106941934      | 2900 West .Rte. 22 & 3       | Marienville | OH    | 45039    | 11/29/2007         |
| 01400379 | 106008079      | 954 E. McMillan              | Cincinnati  | OH    | 45206    | 12/20/2007         |
| 01400383 | 106072987      | 7300 Yankee Road             | Middletown  | OH    | 45044    | 11/14/2007         |
| 01400396 | 000645605      | 1783 Ohio Pike - SR 125      | Amelia      | OH    | 45102    | 12/4/2007          |
| 01400400 | 106967484      | 6401 Colerain Ave.           | Cincinnati  | OH    | 45239    | 11/21/2007         |
| 01400405 | 011352571      | 8241 Vine St                 | Cincinnati  | OH    | 45216    | 12/20/2007         |
| 01400413 | 011552517      | 800 Loveland Madeira Rd      | Loveland    | OH    | 45140    | 12/4/2007          |
| 01400426 | 54202078020    | 5210 State Route 741         | Mason       | OH    | 45040    | 8/9/2007           |
| 01400428 | 7202089024     | 4777 Kenard Ave              | Cincinnati  | OH    | 45232    | 12/4/2007          |
| 01400430 | 106967713      | 5420 Liberty - Fairfield Rd  | Hamilton    | OH    | 45011    | 10/26/2007         |
| 01400431 | 9501           | 450 Ohio Pike (SR 125)       | Cincinnati  | OH    | 45255    | 12/20/2007         |
| 01400432 | 108011054      | 2310 Ferguson Rd             | Cincinnati  | OH    | 45238    | 10/26/2007         |
| 01400435 | 682159         | 6388 Branch Hill Guinea Pike | Loveland    | OH    | 45140    | 12/4/2007          |
| 01400436 | 90502199047    | 5830 Harrison                | Cincinnati  | OH    | 45248    | 10/26/2007         |
| 01400902 | 10129          | 4530/500 EASTGATE BLVD       | CINCINNATI  | OH    | 45245    | 12/20/2007         |
| 01400908 | 13867          | 9690 COLERAIN AVENUE         | CINCINNATI  | OH    | 45251    | 10/26/2007         |
| 01400921 | 010296669      | 1093 ST. RT. 28 BY-PASS      | MILFORD     | OH    | 45150    | 12/20/2007         |
| 01400943 | 000004925      | 1212 W. KEMPER RD.           | FOREST PARK | OH    | 45240    | 11/7/2007          |

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

[(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]

**HID Lay-in Retrofits**

| Original fixture |               |         |                   |         | New fixture |               |         |                   |        | Savings |
|------------------|---------------|---------|-------------------|---------|-------------|---------------|---------|-------------------|--------|---------|
| Store            | # of fixtures | Wattage | (18)<br>Hours/day | KWh     | Store       | # of fixtures | Wattage | (18)<br>Hours/day | KWh    |         |
| 402              | 96            | 400     | 6570              | 252288  | 402         | 96            | 226     | 6570              | 142543 | 109745  |
| 445              | 139           | 400     | 6570              | 365292  | 445         | 139           | 226     | 6570              | 206390 | 158902  |
| 448              | 102           | 400     | 6570              | 268056  | 448         | 102           | 226     | 6570              | 151452 | 116604  |
| 915              | 325           | 400     | 6570              | 854100  | 915         | 325           | 226     | 6570              | 482567 | 371534  |
| Total            |               |         |                   | 1739736 | Total       |               |         |                   | 756785 |         |

982,951 KWh saved per year

**ECM (Electronically Commutated Motor) for Air Cooled Single Condenser Fan**

| Original motor |                        |         |                   |        | New motor      |                        |         |                   |       | Savings |
|----------------|------------------------|---------|-------------------|--------|----------------|------------------------|---------|-------------------|-------|---------|
| # of stores    | avg # of<br>motors/str | Wattage | (12)<br>Hours/day | KWh    | # of<br>stores | avg # of<br>motors/str | Wattage | (12)<br>Hours/day | KWh   |         |
| 19             | 68                     | 450     | 4380              | 134028 | X              | 68                     | 250     | 4380              | 74460 | 59568   |
| Total          |                        |         |                   | 134028 | Total          |                        |         |                   | 59568 |         |

1,414,740 KWh saved per year

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?

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

\_\_\_\_\_ kW

**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 of \$ TBD See attached. (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 \$\_\_\_\_\_. (Attach documentation and calculations showing how this payment amount was determined.)

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: See Attached (Continue to Subsection 1, then skip Subsection 2)
- ☐ Utility Cost Test (UCT) . The calculated UCT value is: See Attached (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 \_\_\_\_\_.

The utility's administrative costs were \_\_\_\_\_.

The utility's incentive costs/rebate costs were \_\_\_\_\_.

### **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.
- 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;
  - 2) a description of any consequences of noncompliance with the terms of the commitment;
  - 3) a description of coordination requirements between you and the electric utility with regard to peak demand reduction;
  - 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,
  - 5) a commitment by you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.
- 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.

## **Section 5: Request for Cash Rebate Reasonable**

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

Duke Energy will calculate the value of the option at a later date. After the parties agree to the cash payment, Kroger will submit the data.

## **Section 6: Cost Effectiveness**

Duke Energy will calculate the benefit/cost ratio of these programs at a later date. Once this value has been determined, Kroger will submit the data.

## **Section 7: Additional Information**

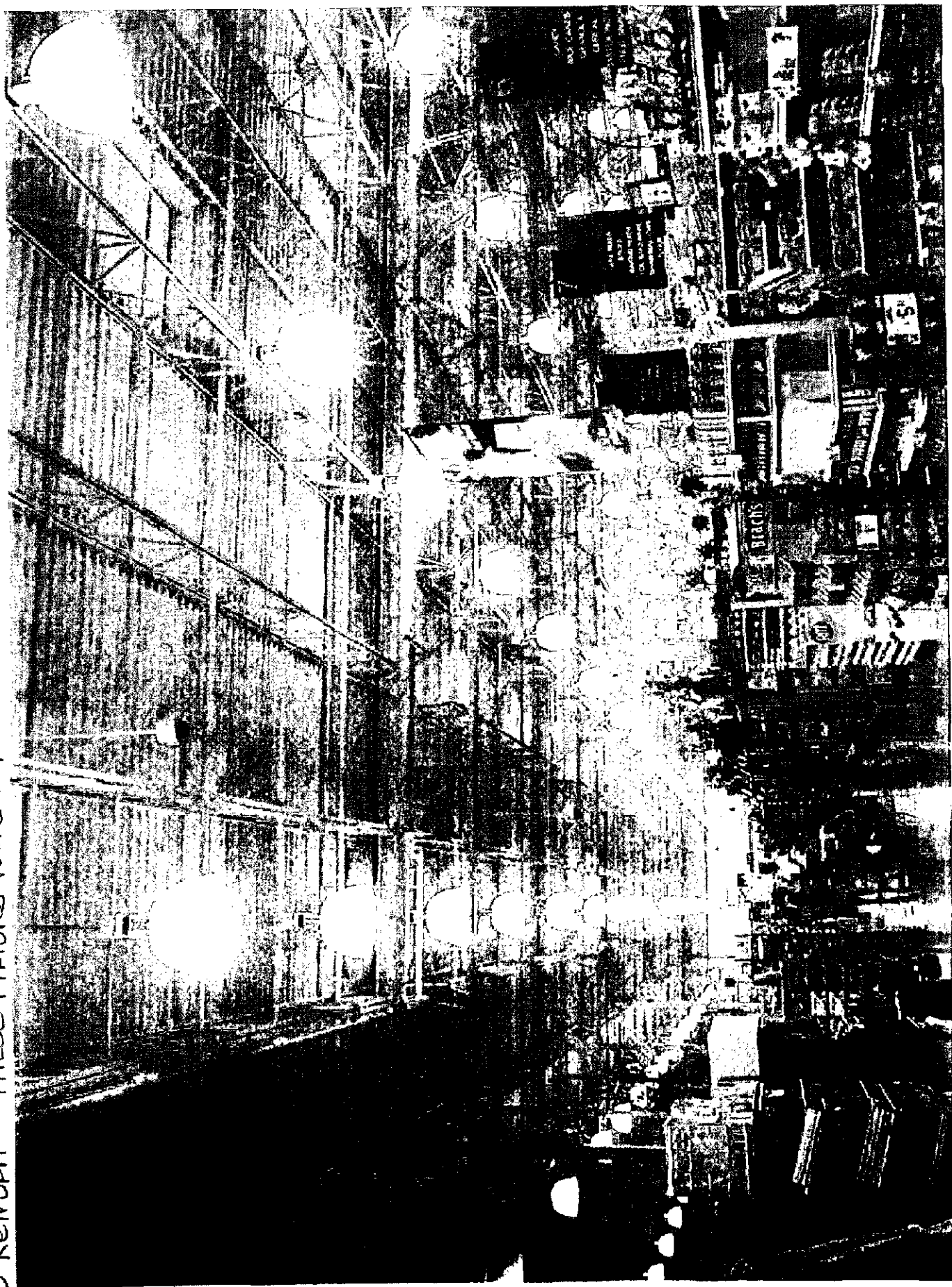
### **HID Lay-in Retrofits**

The decision to retrofit was based solely on the energy savings gained by replacing the 360w & 400w HID fixtures with the lower wattage 226w T8 HID lay-in fixtures. These 2'x4' 6 lamp, HO recessed Harris Lighting troffer fixtures are typically placed in grid ceilings. It is company policy that lighting is not replaced until a store is remodeled. Typically stores are scheduled for a remodel every 10 years. The program began in 2007 and continued into 2008. See Attached

### **ECM (Electronically Commutated Motor) for Air Cooled Single Condenser Fan**

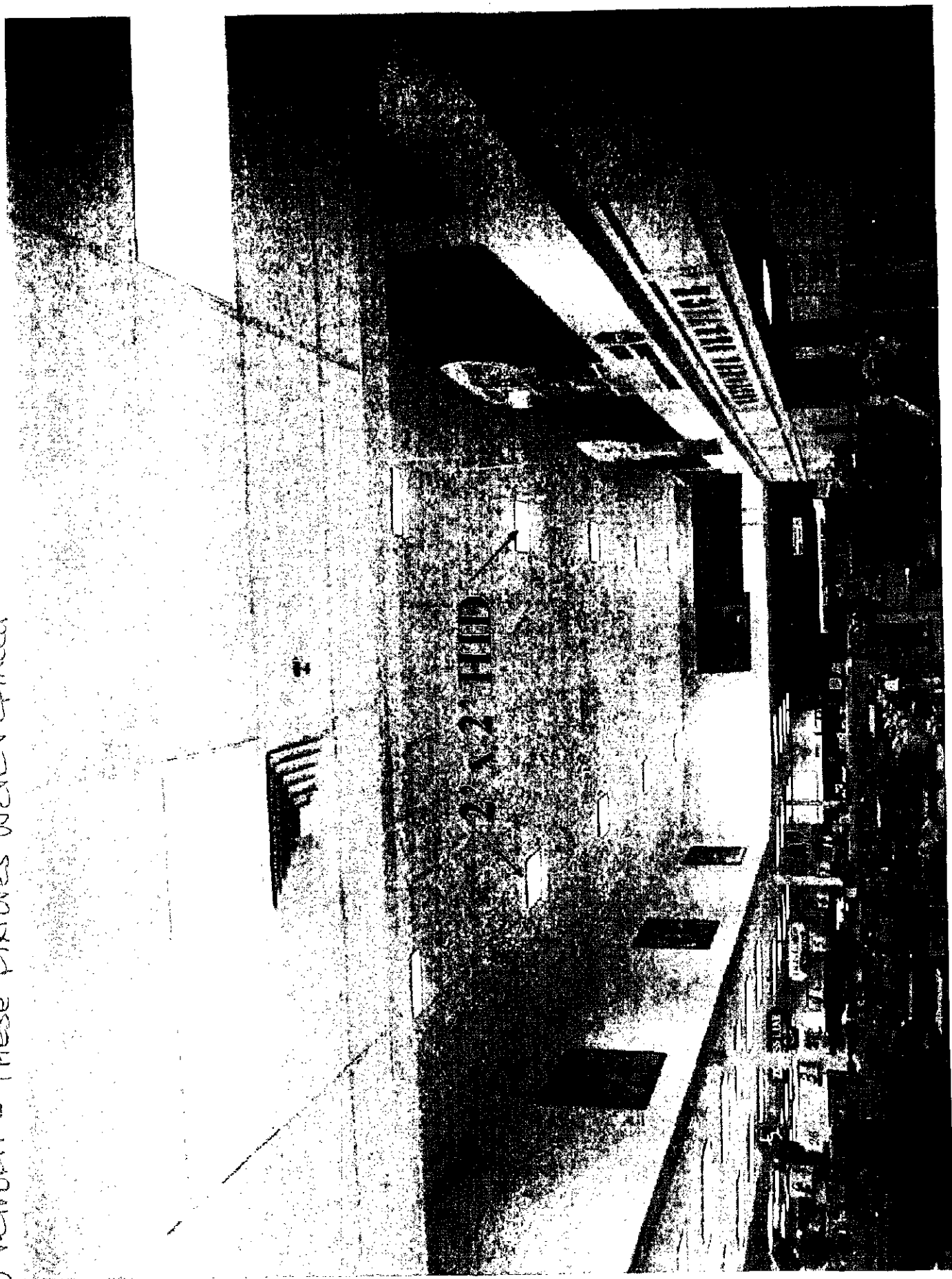
The ECM motor retrofit was designed to replace the PSC motors used on air cooled single condenser fans. The three speed ECM motor changed our strategy from cycling fan to variable speed drives. This motor upgrade also required that we go to a temperature differential control strategy which added additional control points and resulted in maximum energy efficiency. The program began in 2007 and replaced a variety of PSC motors with a single 142 ECM motor that came in a kit that consisted of a new fan blade, mounting spacers and low voltage control whip. See Attached

HID Retrofit - THESE FIXTURES WERE REPLACED





HID retrofit - These fixtures were replaced

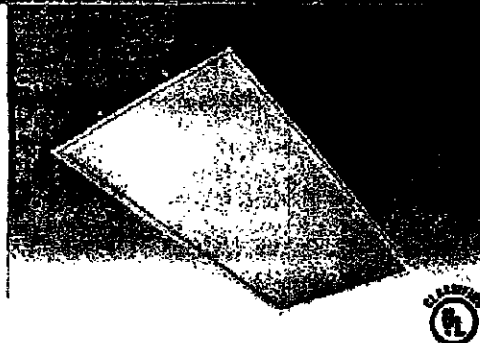


**Harris Lighting**

## 2'x4' Recessed Troffer Fixture

### Design Features:

- Highly efficient
- One piece reflector construction
- "No tools ballast access"
- UL Listed
- Optional customer supplied ballast or standard factory supplied ballast



### Specifications:

Construction - Die formed code gauge cold rolled steel housing, rigid for strength and uniformity. Reflector easily removed without tools. Access Plate on housing top and flush Knockouts on ends for mounting and electrical connections. One piece extruded 100% clear virgin acrylic prismatic lens.

Electrical - Electronic Class P, CBM/ETL certified, HPF ballast comply with Federal Energy Efficiency Standards. UL and CUL Listed.

Finish - All metal parts pretreated with a phosphate bonding process and post painted with an electrostatically-applied high temperature baked white enamel for superior quality and durability. Reflectance in excess of 89%.

### Kroger P-Net Numbers:

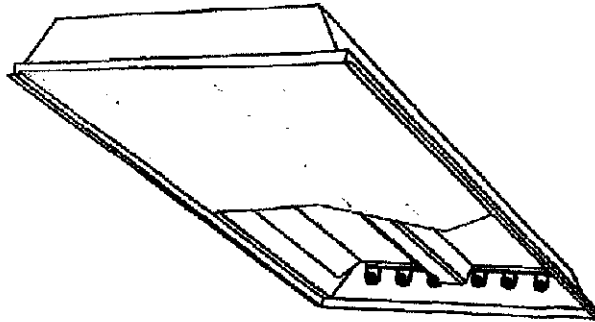
060-00049010 (6 Lamp, HO, Troffer Fixture)  
060-00049022 (Lamps for this fixture)

**Harris Lighting**

Ph: 904-284-1220 • Fax: 904-284-1235 • [www.harrislighting.com](http://www.harrislighting.com)

*Harris Lighting*

## 2'x4' Recessed Troffer Fixture



HARRIS LIGHTING

*Harris Lighting*

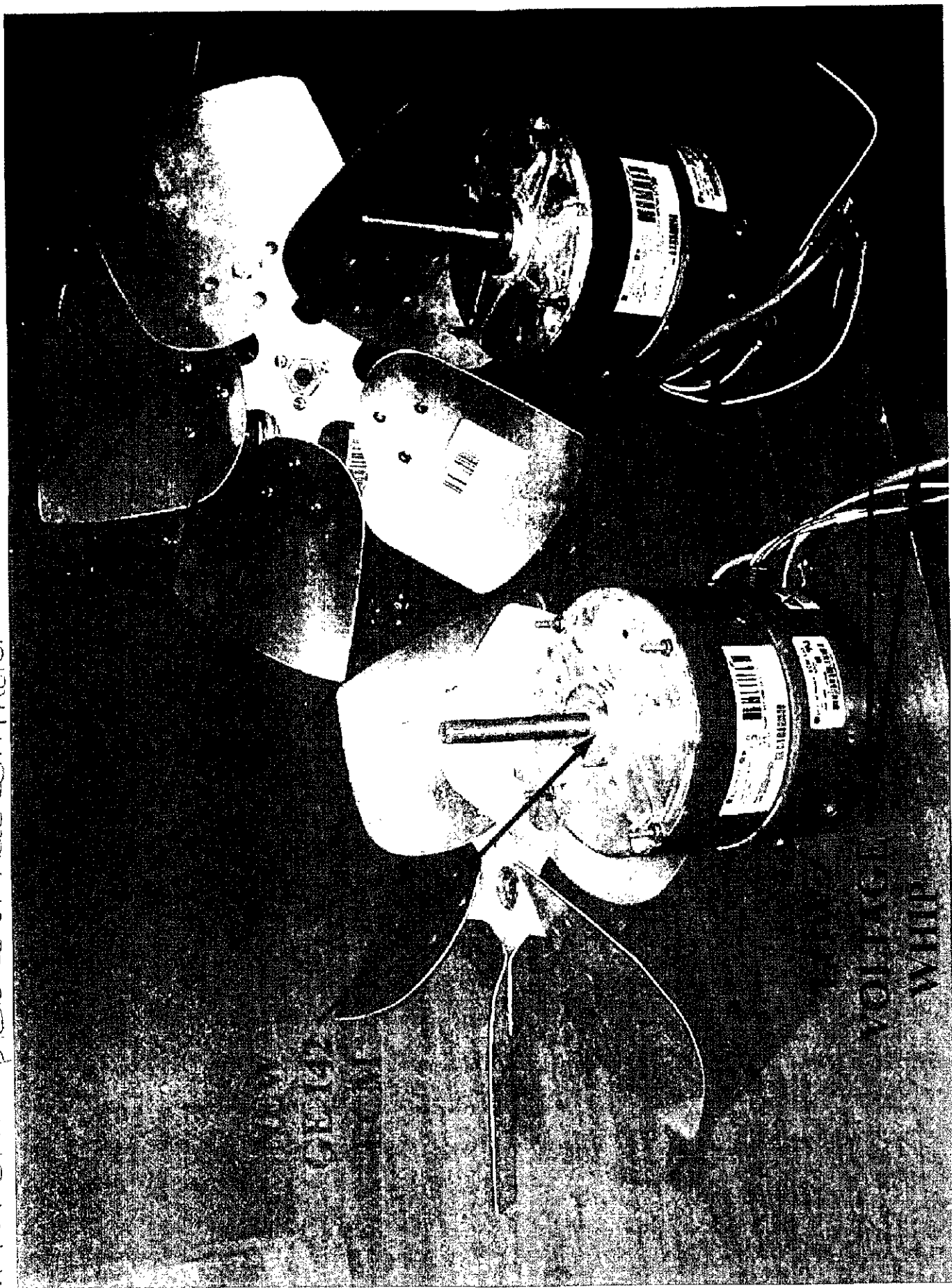
Ph: 904-284-1220 • Fax 904-284-1236 • [www.harrislighting.com](http://www.harrislighting.com)

2007 Harris Manufacturing. All Rights Reserved

HID troffer fixture

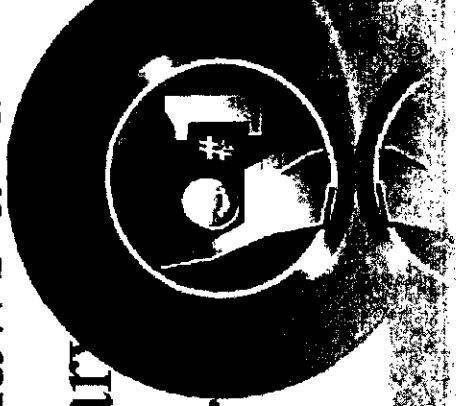


ECM videotape - pictures of new ECM motor



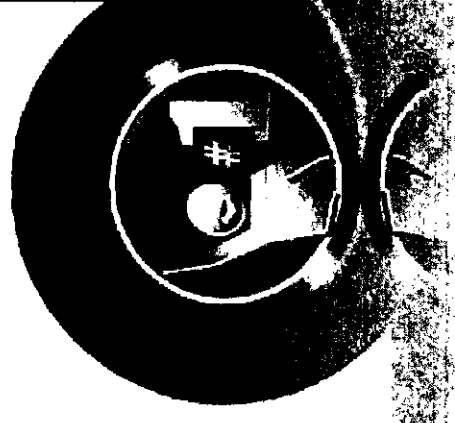
## PROJECT SCOPE

- To replace existing PSC air-cooled single condenser fan motors with new Electronically Commutated Motors.
- To take advantage of the fan laws and use the existing controls to vary the speeds of the new motors.



## NEW EQUIPMENT

- GE 142 ECM w/ low voltage whip for 3 preset speeds.
- Lau fan blade.
- Spacers & mounting screws.





# Public Utilities Commission

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

Case No.: 10-3134 -EL-EEC

State of OHIO :

Tracy D. MacDonald, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

The Kroger Co.

[insert customer or EDU company name and any applicable name(s) doing business as]

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.

  
Signature of Affiant & Title

Corporate Incentive Engineer

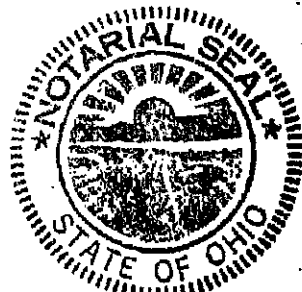
Sworn and subscribed before me this 30<sup>th</sup> day of December, 2010 Month/Year

  
Signature of official administering oath

Dennis E. George  
Print Name and Title

My commission expires on \_\_\_\_\_

DENIS E. GEORGE, Attorney at Law  
Notary Public, State of Ohio  
My Commission has no expiration date  
Section 147.03 O. R. C.







identified in this application to the Company's compliance toward the EE/PDR benchmarks in SB 221.

The Company has reviewed the details associated with the project(s) submitted in this application and based upon a thorough review of the available records believe that the project(s) included in this Joint Application satisfy the requirements in R.C. 4928.66 and also further the State of Ohio's policy goals of reducing energy costs and usage. Attachment 1 (Self Direct Project Overview/Commitment) to this Joint Application includes a project overview that outlines the project, customer size, project installation date, kWh reduction, peak KW demand reduction, total project cost, incentive total, the eligible self direct incentive, and the exemption period from the rider. Attachment 1 (Self Direct Project Overview/Commitment) also provides the signature of the Customer indicating the validity and acceptance of the information, the Customer's support of this Joint Application, and the Customer's intent to participate in the program. The Applicants attest to the fact that the program in this Joint Application complies with the presumption that the mercantile projects are part of a demand response, energy efficiency, or peak demand reduction program to the extent the project either provides for early retirement of functioning equipment which is not yet fully depreciated, or achieves reductions in energy use and peak demand that exceed the reductions that would have occurred had the customer used standard new equipment, to the extent standard is defined by current code or statute.

Applicants agree that approval by the Commission of the Joint Application will result in an arrangement that: 1) addresses coordination requirements between the electric utility and the mercantile customer with regard to voluntary reductions in load by the mercantile customer, which are not part of an electric utility program, including specific communication procedures, if necessary 2) grants permission to the electric utility and Commission staff to measure and verify

savings and/or peak-demand reductions resulting from customer-sited projects and resources, and 3) identifies all consequences of noncompliance by the customer with the terms of the commitment. Attachment 2 (blank Self Direct Program Project Application including Rules & Requirements) is a blank application form identical to the application signed by the Customer that reflects the "Rules and Requirements" agreed to by the Customer without disclosing potential Customer-specific confidential information that would be revealed in a final executed version of the application.

The Customer has provided the Company documentation necessary to calculate energy savings and peak demand reductions. The Company uses methodologies, protocols and/or practices that conform to the general principles of the International Performance Measurement Verification Protocol (IPMVP) in order to justify the energy savings and/or demand reductions.

The Applicants recognize that this Joint Application is filed at a time when the final version of the applicable rules governing the program are not yet effective. This filing attempts to the extent practical to implement the adopted rules ordered by the Commission in 08-888 even though they are not final and effective. As contemplated in the statute, the Company has been seeking mercantile customers, in the absence of final rules, to commit resources consistent with the framework set forth in R.C. 4928.66. Approval of this agreement as proposed under these rules would not serve as precedent for future agreements reached after the final and effective rules. The Commission recognized the need to be flexible in its October 15, 2009, Entry on Rehearing in 08-888-BL-ORD with respect to historical programs implemented prior to the adoption of official rules. At such time as new rules are developed and implemented future filings involving the Company will properly reflect those changes.

If the Joint Application is approved by the Commission, the Customer will have the option to either: (1) take a one-time reduced incentive payment on the condition of continuing

payment of the EE/PDR Rider, or (2) take advantage of an exemption from the EE/PDR Rider for a defined period. It is important to note that a stipulation was filed on November 12, 2009 in 09-1089-EL-POR dealing with the Company's EE/PDR Portfolio plan. The Signatory Parties<sup>1</sup> to the Stipulation support the Company's two options for the Self Direct Program to solicit commitments of previously-installed EE/PDR resources. (See Paragraph XII.3 of the 09-1089 Stipulation.)

"Option 1" provides mercantile customers the opportunity to receive a reduced incentive payment that is equivalent to the estimated payment of a portion of the customer's EE/PDR rider cost obligation due to the requirement that the customer continues to pay the EE/PDR rider cost for the projected period of time that the customer would otherwise be exempt from the EE/PDR Rider. Option 1 is an incentive payment of 75% of the calculated incentive amount under the Prescriptive and Custom Programs and requires the Customer to continue paying the EE/PDR rider. Because the Customer stays in the EE/PDR rider; i.e., keeps paying it, this incentive is simply an advance of a portion of those payments. The reduced incentive and requirement to continue paying the EE/PDR rider provides rate payers a benefit of lower overall program costs reflected in the EE/PDR rider because the Customer continues paying the EE/PDR rider rather than exempting from it as in Option 2. Whereas, a strict exemption approach would spread the overall program costs over fewer customers. The Customer continues to pay the EE/PDR rider for the period of exemption time calculated in Option 2. The 25% reduction over a new project incentive is reasonable because the customer has already made the EE/PDR investment. By remaining in the EE/PDR rider, the customer benefits by also remaining eligible for future

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<sup>1</sup> Ohio Consumers' Counsel, Ohio Environmental Council, Sierra Club, Natural Resources Defense Council, Ohio Poverty Law Center (the previous groups are collectively referred to as the Ohio Consumer and Environmental Advocates), Ohio Energy Group, Ohio Hospital Association, the Ohio Manufacturers' Association, the Ohio Partners for Affordable Energy, Columbus Southern Power Company, and the Ohio Power Company

incentives and can utilize Option 1 incentives to provide additional funding for future EE/PDR investments. "Option 1" is for customers who have completed some EE/PDR projects but want to use the advanced payment to help support new EE/PDR investments. Option 1 also requires participating customers to continue paying the EE/PDR rider allowing the customer to continue participation in EE/PDR programs offered by the Companies.

If the customer has no new energy efficiency projects to complete, the customer may be better served by Option 2 because the Option 1 incentive payment is typically less than the net present value of the projected EE/PDR rider costs over the exemption period calculated in Option 2. The customer may be better served taking Option 1 if they use the incentive payment to supplement Prescriptive or Custom program incentive dollars to help fund new energy efficiency projects. Option 1 encourages greater future energy efficiency investments from mercantile customers at a lower cost to rate payers.

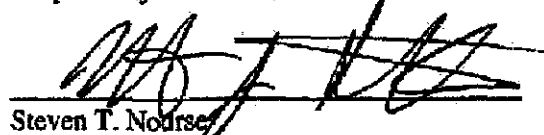
Option 2 provides mercantile customers the opportunity to be exempt from the EE/PDR rider for the period of time that their committed energy savings are equal to the Company's mandated benchmark requirement percentages of energy savings based on the customer's 2006-2008 average annual energy usage baseline. If Option 2 is selected, the Customer is not entitled to participate in any of the Company's EE/PDR programs during the calculated period of exemption. In order to extend the Customer's exemption period, the Customer has to commit additional EE/PDR resources by application for approval by the PUCO. Option 2 is for customers who have installed all cost effective energy efficiency projects and plan no further projects in the exemption period. The Company seeks approval of both Option 1 and Option 2 as part of the Commission's overall approval of this application.

As shown in Attachment 1 (Self Direct Project Overview/Commitment), the Customer must comply with any Commission requirement to provide an annual report on the energy savings and electric utility peak-demand.

The Company will adjust the energy savings and demand reduction effects from this joint application during its applicable baseline period by excluding such effects from the baselines by increasing its applicable baseline for energy savings and baseline for peak demand reductions by the amount of corresponding Customer's energy savings and peak demand reductions, recognizing that savings may have diminishing effects over time as technology evolves or equipment degrades.

For these reasons, the Applicants request that the Commission approve the Joint Application applying the Customer's energy and demand resources to the Company's energy and demand target/benchmarks as identified in SB 221 and approve the Company to either pay the one-time incentive payment or exempt the Customer from the EE/PDR rider as outlined above. Upon approval, the agreement will be implemented and the Company will reflect the cost recovery as part of the EE/PDR Rider.

Respectfully submitted,



Steven T. Nourse  
Matthew J. Satterwhite  
American Electric Power Service Corporation  
1 Riverside Plaza, 29<sup>th</sup> Floor  
Columbus, Ohio 43215  
Telephone: (614) 716-1915  
Fax: (614) 716-2950  
Email: stnourse@aep.com  
mjsatterwhite@aep.com

**Counsel for Columbus Southern Power Company**



**CASE NUMBER:** 09-1494-EL-EEC

**CASE DESCRIPTION:** COLUMBUS SOUTHERN POWER COMPANY

**DOCUMENT SIGNED ON:** 12/30/2010

**DATE OF SERVICE:** \_\_\_\_\_

06/16/2010 Service Notice

06/16/2010 Finding and order stating that the joint applications be approved with concurring opinion of Commissioner Paul A. Centolella.

06/03/2010 Staff review and recommendations for a special arrangement between Columbus Southern Power Company and The Kroger Company filed by R. Wolfe.

04/13/2010 Corrected Exhibit electronically filed by Mr. Matthew J Satterwhite on behalf of Columbus Southern Power Company.









12/31/2009 In the matter of the joint application for approval of a special arrangement between Columbus Southern Power Company with The Kroger Company.

**Case Record**

09-1494-EL-EEC

[File a Public Comment](#)**For:****Case Title:** COLUMBUS SOUTHERN POWER COMPANY**Status:** OPEN-OPEN**Industry Code:** EL-ELECTRIC**Purpose Code:** EEC-Energy Efficiency Credits**Date Opened:** 12/31/2009**Date Closed:**

[Case Documents](#)
[Public Comments](#)
[Parties of Record](#)
[Related Cases](#)

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| 1 - 5 of 5 documents                  |   | 1 / 1             |  |       |
| Date Filed                            | Summary   |   |  | Pages |
| 06/16/2010                            | Service Notice  |   |  | 3     |
| 06/16/2010                            | Finding and order stating that the joint applications be approved with concurring opinion of Commissioner Paul A. Centolella.                 |   |  | 7     |
| 06/03/2010                            | Staff review and recommendations for a special arrangement between Columbus Southern Power Company and The Kroger Company filed by R. Wolfe.  |   |  | 3     |
| 04/13/2010                            | Corrected Exhibit electronically filed by Mr. Matthew J Satterwhite on behalf of Columbus Southern Power Company.                             |   |  | 3     |
| 12/31/2009                            | In the matter of the joint application for approval of a special arrangement between Columbus Southern Power Company with The Kroger Company. |   |  | 12    |
|                                       |   | 1 / 1     |  |       |

Attorney General:

Attorney Examiner:



**Self Direct Project Overview & Commitment**

|   |                                 |
|---|---------------------------------|
| <b>Project Name:</b>                                | The Kroger Co.                  |
| <b>Project Number:</b>                              | 735                             |
| <b>Date Received</b>                                | 11/23/2009                      |
| <b>Project Installation Date</b>                    | 6/26/2008                       |
| <b>kWh Reduction:</b>                               | 166251 kWh                      |
| <b>Peak KW Demand Reduction:</b>                    | 23kW                            |
| <b>Total Project Cost</b>                           | \$16871.9                       |
| <b>Preliminary/Unadjusted Incentive Calculation</b> | \$7957.5467                     |
| <b>Option 1 - Self Direct Incentive (75%)</b>       | \$5968.16                       |
| <b>Option 2 - Rider Exemption Expires</b>           | 81 Months (after PUCO approval) |
| <b>Simple Payback</b>                               | 1.5 Years                       |

**Project Overview:**

The Self Direct Custom/Prescriptive project that The Kroger Company # 514 has completed and applied is as follows:

27 ECM Motors

95 400 W HID to 6L T8 replacements

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 demand reduction, response, and/or energy efficiency resources into the utility's 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.*

Columbus Southern Power Company

The Kroger Co.

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: Manager

Title:

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**AEP OHIO**

*A unit of American Electric Power*

## Self-Direct Program Project Application

### Application Instructions

- Complete the application form for each installation account number.
- Complete the appropriate Self-Direct Program Excel spreadsheet 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. Select the appropriate spreadsheet based on the project:
  - The Self-Direct Custom Spreadsheet for lighting improvements not covered in the Lighting Program and for any other energy efficiency installation.
  - The Self-Direct Lighting Spreadsheet for lighting conversions and installations covered in the Lighting Program.
- 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. Please submit up to five photos of the new equipment and the removed equipment (if available).
- NOTE: Sending inadequate invoice documentation, incomplete/incorrect forms, or incomplete 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.

Emailed submissions with attachments are preferred.

Return the signed, completed form and all required detailed documentation to:

**Email:** [gridSMARTohio@kemà.com](mailto:gridSMARTohio@kemà.com)

**Mail:** AEP Ohio  
6031 East Main Street, Suite 190  
Columbus, OH 43213

**Fax:** 877-607-0740

**Questions:** 877-607-0739

Visit [gridSMARTohio.com](http://gridSMARTohio.com) for more information on the Self-Direct Program and other energy efficiency incentive programs offered by AEP Ohio.

**AEP OHIO**

A unit of American Electric Power

## Self-Direct Program Project Application

THIS INCENTIVE APPLICATION FORM IS VALID THROUGH DECEMBER 31, 2010.

Project ID provided by AEP Ohio

**PROJECT ID:** \_\_\_\_\_

**Account Qualification** (Check one or both if applicable)

☐ 700,000 kWh per year    ☐ National Account or Multiple Facilities (under the same name in Ohio)

|   |       |  |  |
|---|-------|--|--|
| <b>SECTION 1 - CUSTOMER INFORMATION</b>                         |       |  |  |
| Company Name  |       | Contract Date of Acceptance  |  |
| Mailing Address   |       | Contact E-mail*  |  |
| City  | State | Zip Code   |  |
| Contact Name (print)  | Phone | Fax  |  |
| Taxpayer ID # of Recipient (if not a Corporation or Tax Exempt) |       | Tax Status: <input type="checkbox"/> Corporation (Incl. INC, PC, etc.) <input type="checkbox"/> Tax Exempt (may receive 1099) <input type="checkbox"/> Individual <input type="checkbox"/> Other |  |

|  |  |                                     |                             |
|--|--|-------------------------------------|-----------------------------|
| Attention to   |  | Total Incentive Amount Requested \$ |                             |
| Taxpayer ID # of Recipient (if not a Corporation or Tax Exempt)  |  | Total Project Cost \$               | Total Incremental Cost \$   |
| Tax Status: <input type="checkbox"/> Corporation (Incl. INC, PC, etc.) <input type="checkbox"/> Tax Exempt (may receive 1099) <input type="checkbox"/> Individual <input type="checkbox"/> Other |  | Total Annual kWh Claimed            | kW Demand Reduction Claimed |

|   |       |   |                       |
|---|-------|---|-----------------------|
| <b>SECTION 2 - JOB SITE INFORMATION</b>   |       |   |                       |
| Job Site Name   |       | Project Contact Name                                |                       |
| Job Site Address (physical location)  |       | Project Contact Telephone                           |                       |
| City  | State | Zip Code  | Project Contact Email |
| Job Site Account Number   |       | Primary Account Number (if different than Job Site) |                       |
| Construction Type: <input type="checkbox"/> New Construction <input type="checkbox"/> Existing Building <input type="checkbox"/> Major Renovation   |       |   |                       |
| Building Type: <input type="checkbox"/> Office <input type="checkbox"/> School (K-12) <input type="checkbox"/> College <input type="checkbox"/> Retail/Service <input type="checkbox"/> Restaurant <input type="checkbox"/> Hotel/Motel <input type="checkbox"/> Medical <input type="checkbox"/> Grocery <input type="checkbox"/> Warehouse <input type="checkbox"/> Light Industry <input type="checkbox"/> Heavy Industry <input type="checkbox"/> Government/Municipal <input type="checkbox"/> Other _____ |       |   |                       |

|   |  |                   |                   |
|---|--|-------------------|-------------------|
| <b>SECTION 3 - CONTRACTOR INFORMATION</b> |  |                   |                   |
| Contractor Name                           |  |                   |                   |
| Contractor Street Address                 |  | City              | State    Zip Code |
| Contractor Contact Name                   |  | Contact Telephone | Contact Email     |

|                                     |  |   |
|-------------------------------------|--|---|
| <b>SECTION 4 - CUSTOMER CHOICES</b> |  |   |
| Option #1                           | <input type="checkbox"/> Incentive Payment           | Incentive Calculation: \$ _____                                       |
| Option #2                           | <input type="checkbox"/> Exemption From EE/PDR Rider | # of Months Exempted: _____ months (calculation provided by AEP Ohio) |

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.

## 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, 2010. 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 Programs, 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 ~~consistent~~ 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:
  1. Rely solely on changes in customer behavior and require no capital investment, or merely terminate existing processes, facilities and/or operations.
  2. Are required by state or federal law, building or other codes, or are standard industry practices.
  3. Involve fuel switching, plug loads, or generate electricity.
  4. Are easily reverted / removed or are installed entirely for reasons other than improving energy efficiency.
  5. 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.

### Disclosures

#### 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.

| 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  |

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. Please provide up to five photos of the equipment, if available. Attach additional sheets if needed.

Describe the installed equipment and operating strategy. Please provide up to five photos of the equipment. 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:

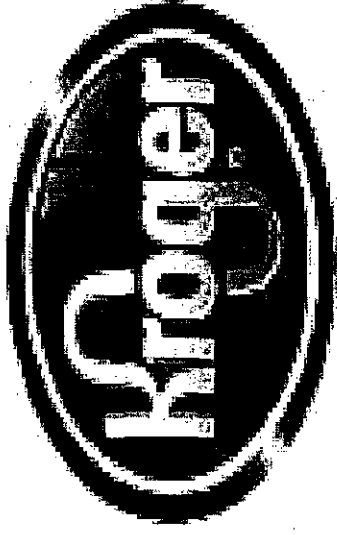
- |   |  |
|---|--|
| <input type="checkbox"/> Conserves other utilities (gas, water, etc.) | <input type="checkbox"/> Meets environmental regulations |
| <input type="checkbox"/> Improves process flow                        | <input type="checkbox"/> Reduces labor                   |
| <input type="checkbox"/> Improves product quality                     | <input type="checkbox"/> Saves energy                    |
| <input type="checkbox"/> Increases production capacity                | <input type="checkbox"/> Uses fewer raw materials        |
| <input type="checkbox"/> 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 (\$)  |  |   |
| <b>Notes:</b>  |  |   |
| Equipment  |  |   |
| Engineering  |  |   |
| Installation   |  |   |
| Other (explain)  |  |   |
| <b>TOTAL PROJECT COST</b>  |  |   |
| Incremental Cost = Installed Option Total Cost - Removed Equipment or Lower Efficiency Option Total Cost   |  |   |
| <p>* 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.</p> <p>* 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.</p> |  |   |



# Energy Efficiency at The Kroger Co.

Public Utilities Commission of Ohio

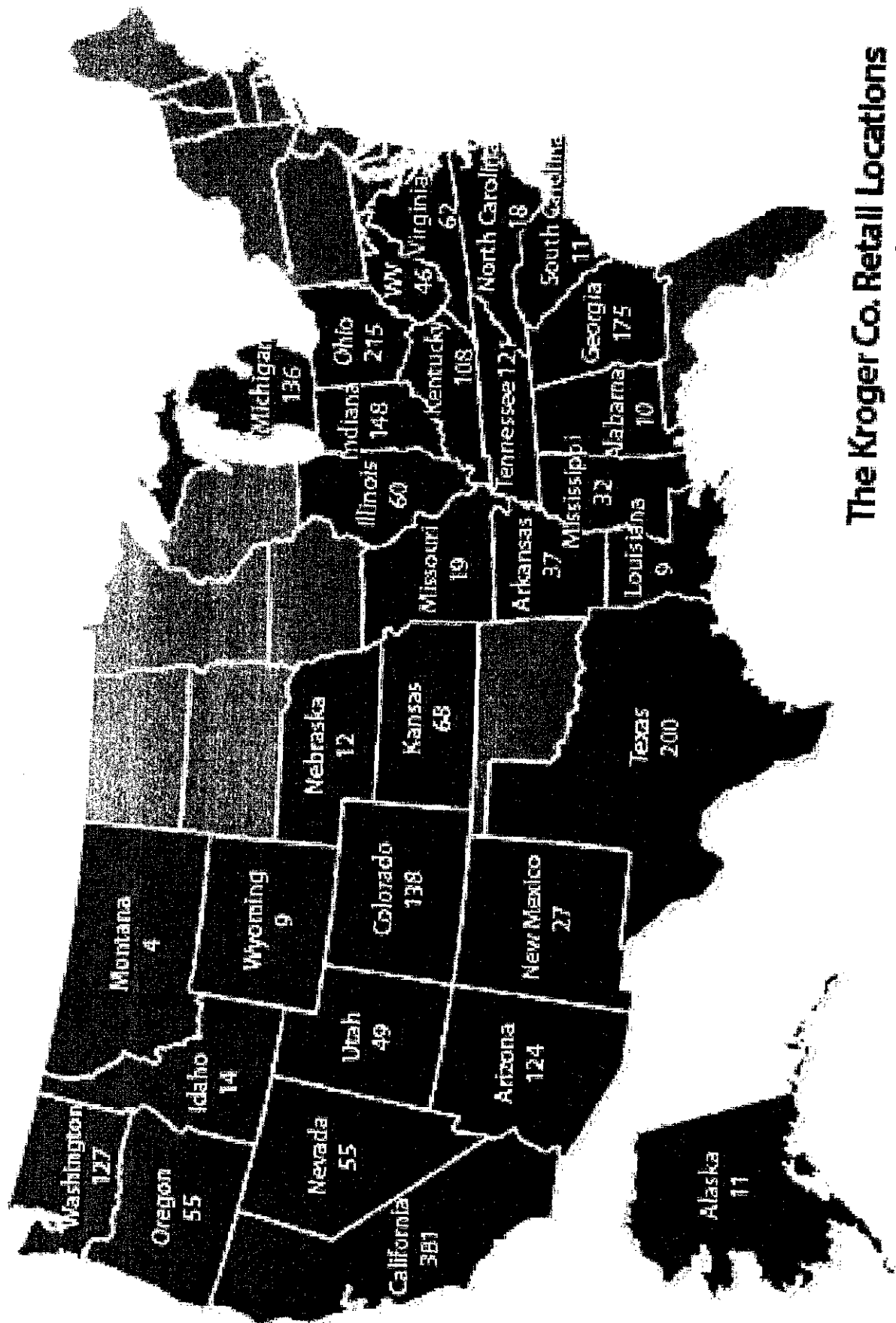
May 20, 2009

Columbus, OH

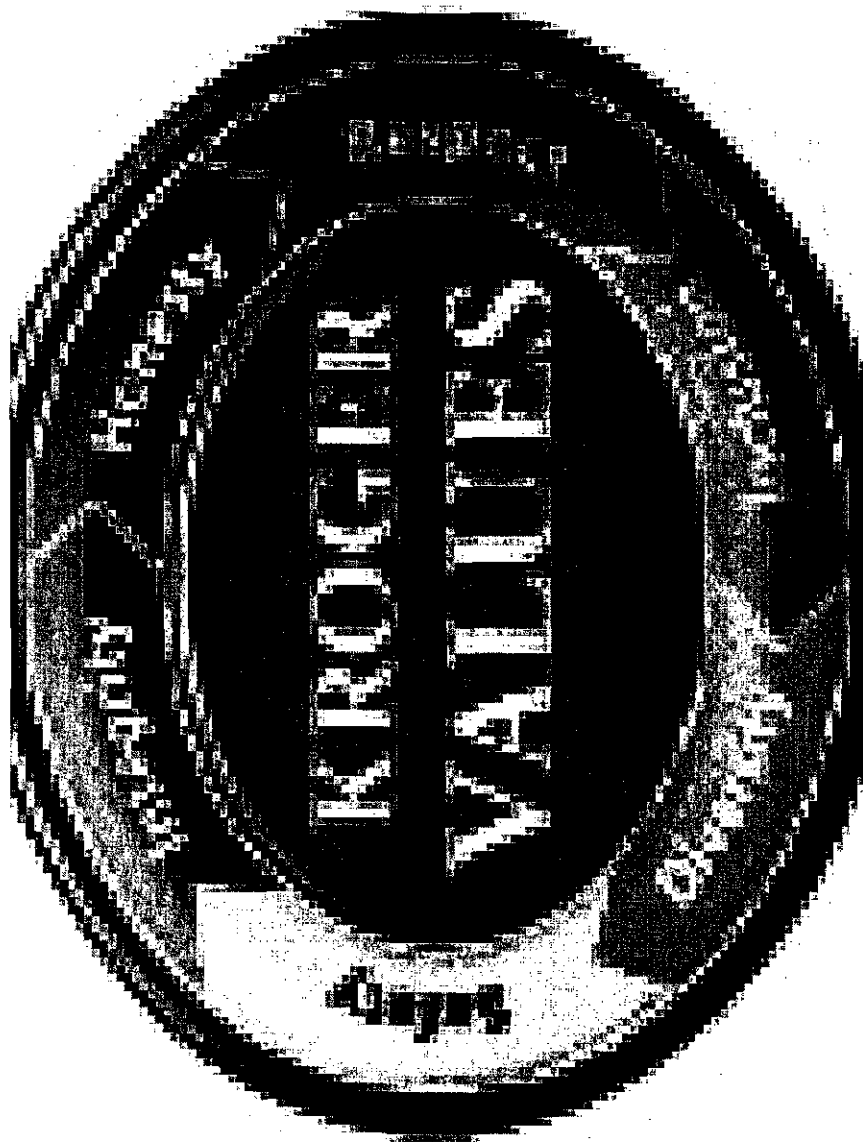
# About The Kroger Co.

- One of the nation's largest retail grocery chains - employs more than 326,000 associates who serve customers in 2,481 supermarkets and multi-department stores in 31 states.
- Operates stores under two dozen local banner names including, Kroger, Ralphs, Fred Meyer, Food 4 Less, Fry's, King Soopers, Smith's, Dillons, QFC and City Market.
- Also serve customers in 771 convenience stores, 385 fine jewelry stores and 781 supermarket fuel centers.
- 2008 Revenue - \$76 Billion – Fortune No. 22.
- Kroger charity focuses on hunger relief, K-12 education, grassroots service organizations and women's health:
  - Named "Retailer of the Year" by America's Second Harvest food banks four of the last six years.
  - Customers and associates donated \$10.6 million to support The Salvation Army's 2008 Red Kettle campaign – 8% of the Army's total collections.
  - Committed \$3 million in donations in 2008 for local breast cancer initiatives across the country to support National Breast Cancer Awareness month.





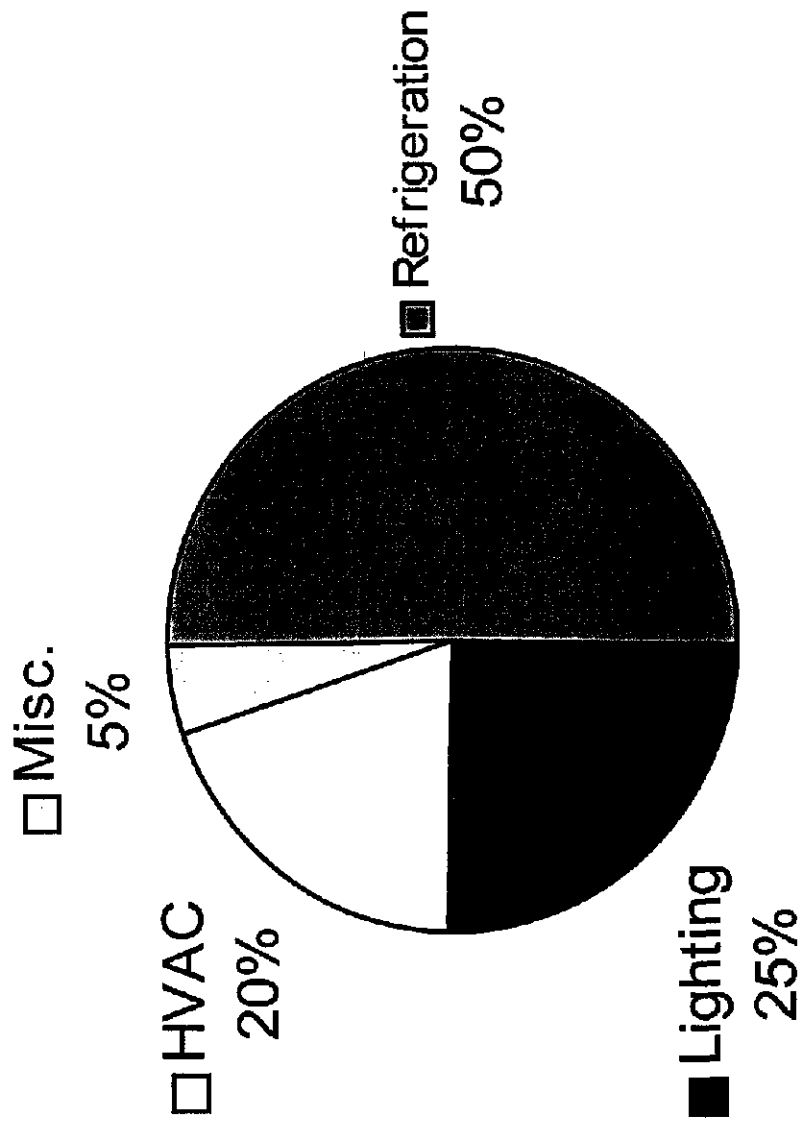
**The Kroger Co. Retail Locations**  
**4th Quarter 2008**



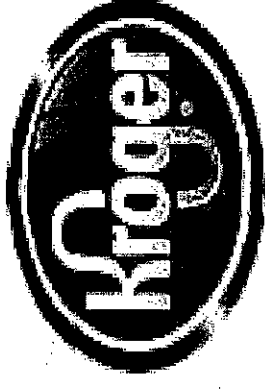
Kroger Co Values

- Rank among the Top 20 (No. 19) most reputable companies in America, according to the Reputation Institute's Reputation Pulse 2009 study of the 153 largest companies in the U.S.
- Manufacturing division recognized in 2009 by the International Dairy Foods Association (IDFA) for outstanding worker safety performance.
- Ongoing commitment to green living and sustainability:
  - First LEED certified store opening in June 2009 in Portland, OR.
  - Sold more than six million reusable bags last year.
  - Recycled more than 16 million pounds of plastic in 2008.
  - Recycle nearly 1 billion pounds of cardboard and paper in '08.
  - Significant reductions in gasoline and diesel fuel usage.
  - To learn more about Kroger's green living initiatives visit [www.kroger.com/green](http://www.kroger.com/green).
  - 2008 Sustainability Report at [www.thekrogerco.com](http://www.thekrogerco.com)
- May, 2009 – joined US EPA EnergyStar partnership.

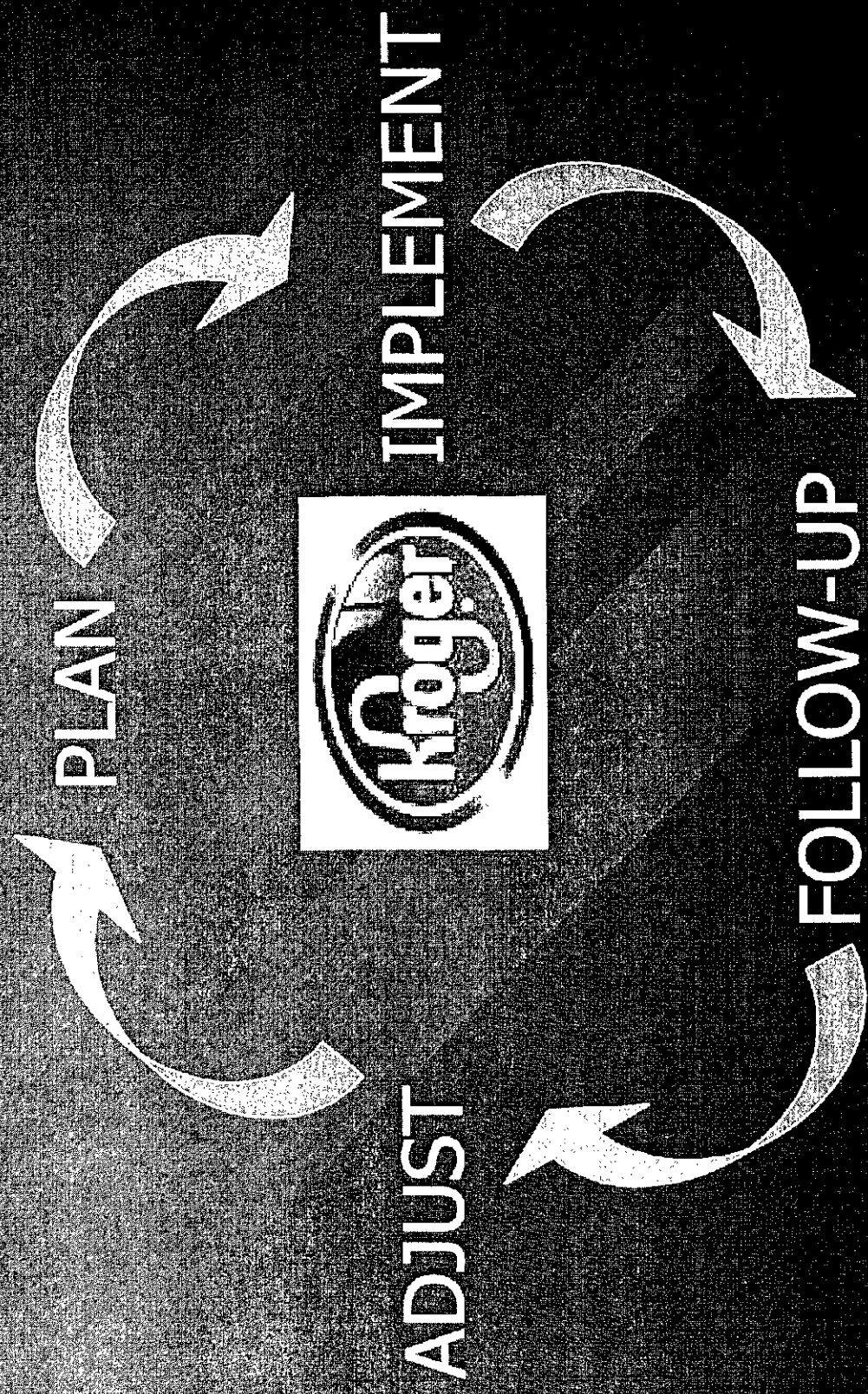
# Electricity Usage - Typical Kroger



# Energy Efficiency at Kroger

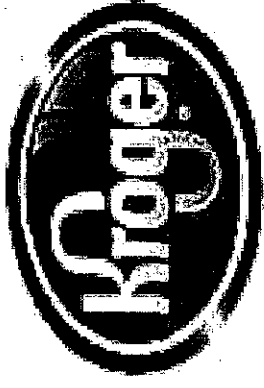


- Corporate Energy Management – defines “best practices,” including retrofit projects, sets reduction goals, provides technical support, maintains metrics & interacts w/ merchandising and store design areas.
- Division Energy Engineers execute “best practices,” manage crews, administer Associate energy awareness (S.A.V.E.-5) & interact with Division personnel.



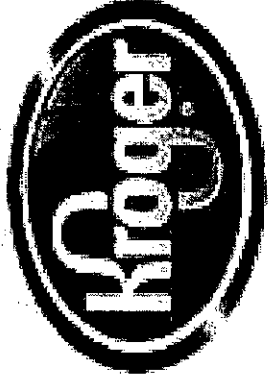
CONTINUOUS IMPROVEMENT

## Efficiency Projects: 2000-2004



- T-12 to T-8 Lighting Retrofits –1,700 Stores.
- First Energy “Best Practices” Document.
- E-Commissioning – 300 CA Stores.
- Night Lighting Setback Strategy.
- Energy Maintenance Program Commenced.
- Anti-Sweat & Lighting Controls –1,500 Stores.
- Variable Speed Drives (“VSD’s”) – Exhaust Fans (w/ spring-loaded hoods & Baffling).
- S.A.V.E – 5 Program.

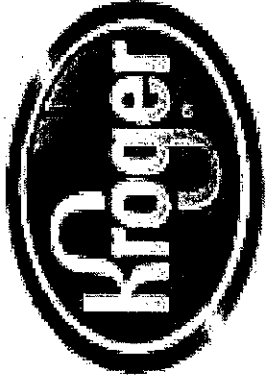
## Efficiency Projects: 2005-2006



- Electronically Commutated Motor (ECM) Retrofit – 190,300 in 18 Months.
- VSD's – Air-Cooled Condenser Fans – 715 Stores.
- VSD's – Evaporative Condenser Fans – 119 Stores.
- VSD's – Air Handler Fans – 467 Stores.
- Heat Reclaim Upgrades.
- Replacing "Legacy" Controllers (HVAC, and Refrigeration).
- Electronic Refrigeration Control – Several Divisions.

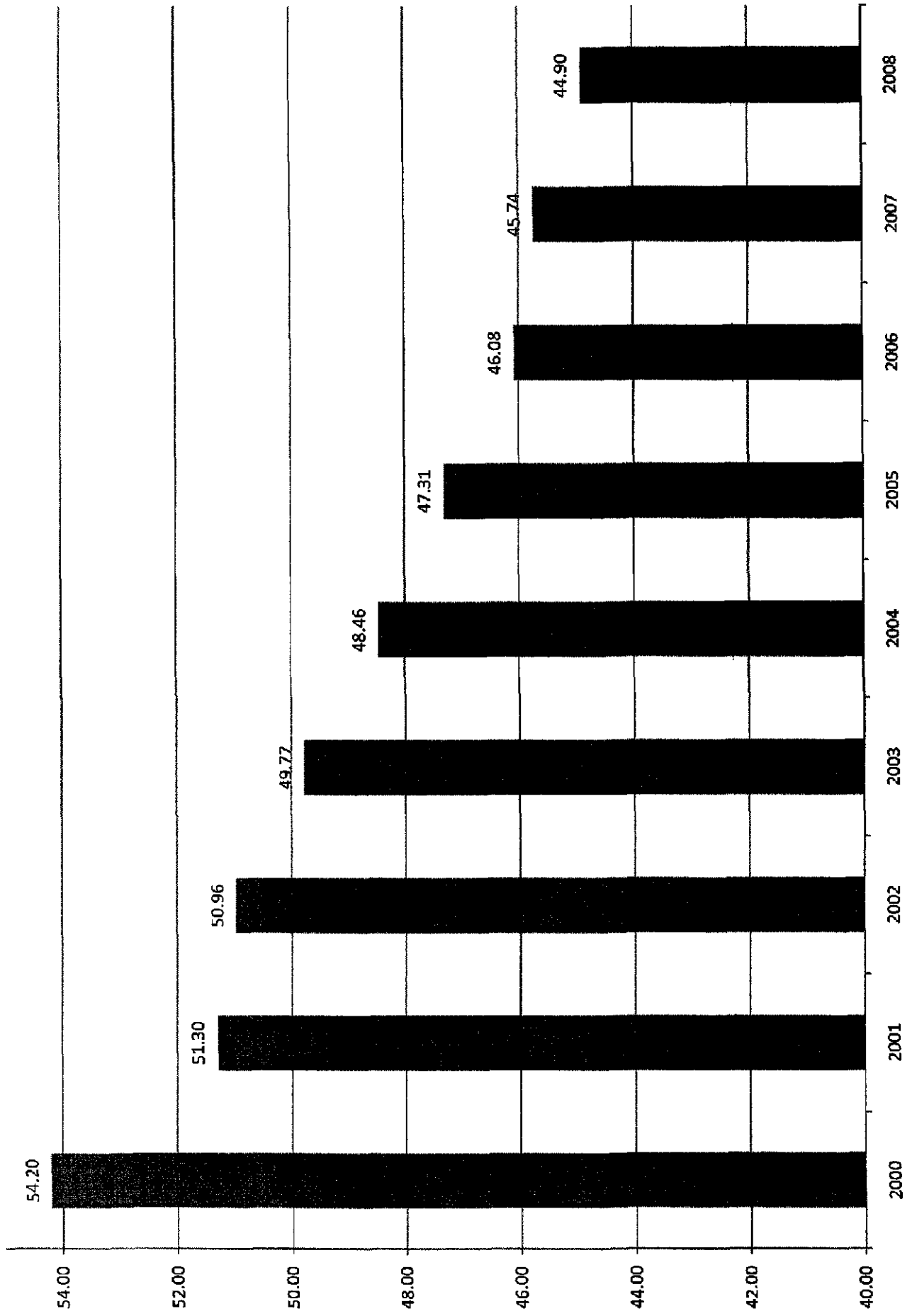


## Efficiency Projects: 2007-2009

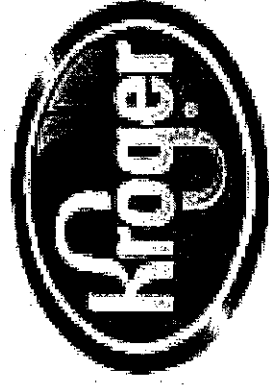


- LED Lighting – Reach-in Doors – Frozen & Dairy.
- Vending Machine Control & Energy Management.
- More ECM's:
  - Head cooling fans,
  - Condenser fans &
  - Evaporator coils.
- Overhead Lighting Retrofits (HID to T-8).
- T-12 to T-8 case lighting retrofits.
- More controller upgrades.
- “Delamping.”

# Kroger Co: Grocery Store kWh/SF - 2000-2008



# Recognition – 2008 & 2009



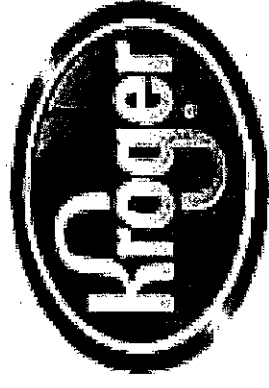
- Idaho Power
- Xcel Energy
- Southern California Gas
- Ameren-IL
- Detroit Edison/Engineering Society of Detroit.

# The Kroger Co. in Ohio

- Corporate headquarters in Cincinnati, OH – Division HQ's in Cincinnati and Columbus.
- 218 Grocery Stores (94 in Cincinnati Division and 124 In Columbus Division) - > 13M Sq Ft.
- 19 other sites – four manufacturing sites, five distribution centers, two data centers & other sites – 3.5 million Sq Ft.
- Employ over 37,700 Associates in Ohio.
- 2008 electricity usage in Ohio: 700+ million kWh & \$56 Million expense.

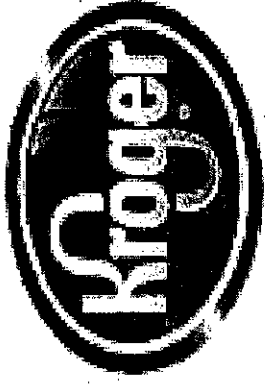


## 2007-2008 Projects: Columbus



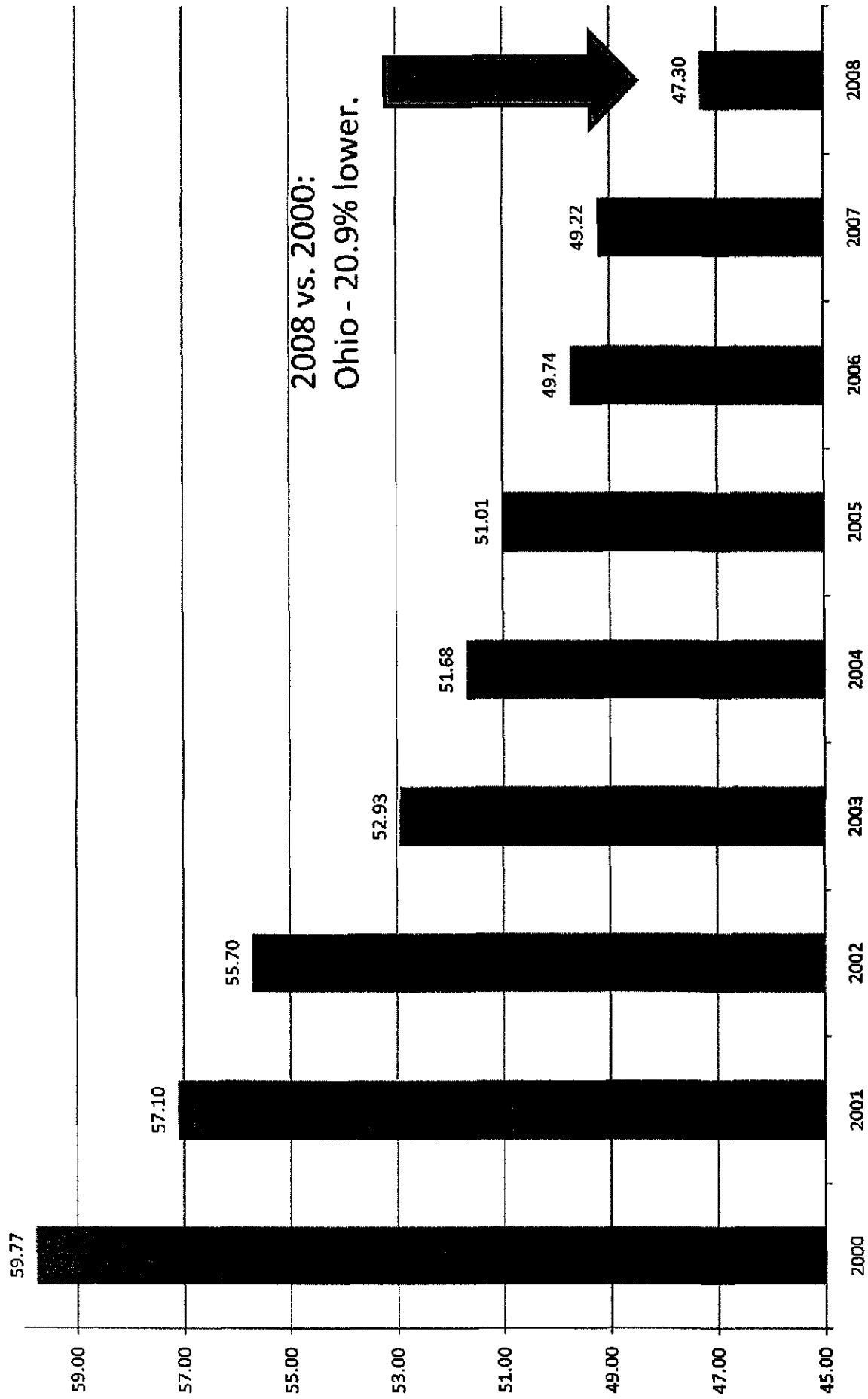
- Replaced HID fixtures w/ 6-lamp T-8 fluorescent fixtures – 44 stores (460 watts to 224 watts w/ more output).
- Retrofitted T12 w/ T8 - case lighting - 33 stores.
- Energy efficient walk-in cooler and freezer evaporator ECM's - 85 stores (over 3,000 motors).
- Head Cooling Fan ECM's - retrofitted 86 stores (over 1,000 motors).
- Condenser Fan ECM's - 69 stores .
- Vending Machine Program – all stores (refrigeration control, lighting control, lighting removal).
- Refrigeration controls upgrade - 17 stores
- Electronic refrigeration control upgrade - 19 stores.

## 2007-2008 Projects: Cincinnati



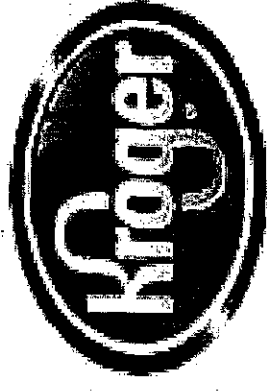
- Replaced HID fixtures w/ 6-lamp T-8 fluorescent fixtures – 28 stores.
- T12 to T8 Case Lighting Retrofit -- 27 stores
- Walk-in cooler and freezer evaporator ECM motor retrofit – 104 stores.
- Compressor Head Cooling Fan ECM retrofit - 69 stores
- Condenser Fan ECM retrofit - 37 stores.
- Vending Machine Program – all stores (refrigeration control, lighting control, lighting removal).
- Electronic refrigeration controller upgrade - 18 stores.

Kroger - Ohio: Average Electricity Usage (kWh/SF - unadjusted for weather)





# 2009 Efficiency Projects:



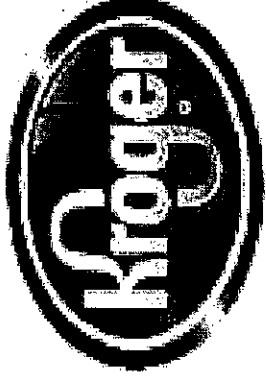
## Columbus

- LED glass door lighting - 32 stores
- Removing beer shelf lights - 40 stores.
- Removing wall wash - 10 stores.
- Refrigeration controller upgrade - 10 stores.
- F-28 overhead lamp (28 watt lamp replacing 30 watt lamp)– 15 stores.

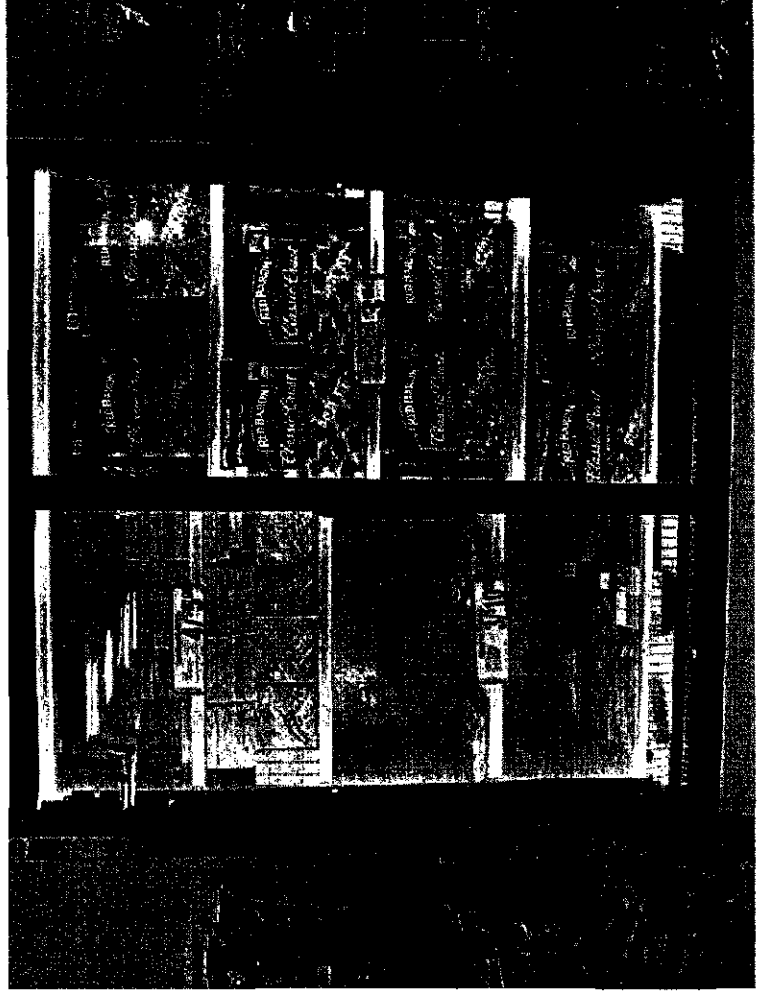
## Cincinnati

- LED glass door lighting – 30 stores.
- Removing wall wash - 21 stores.
- Refrigeration lead compressor VSD's - 30 stores.
- Refrigeration controller upgrade - 15 stores.
- Cleaning up old, HID and T12 lighting in various stores on an as needed basis
- Installing Cooler & Freezer door alarms to minimize impact on refrigeration.
- F-28 Overhead Relamp – 10 stores

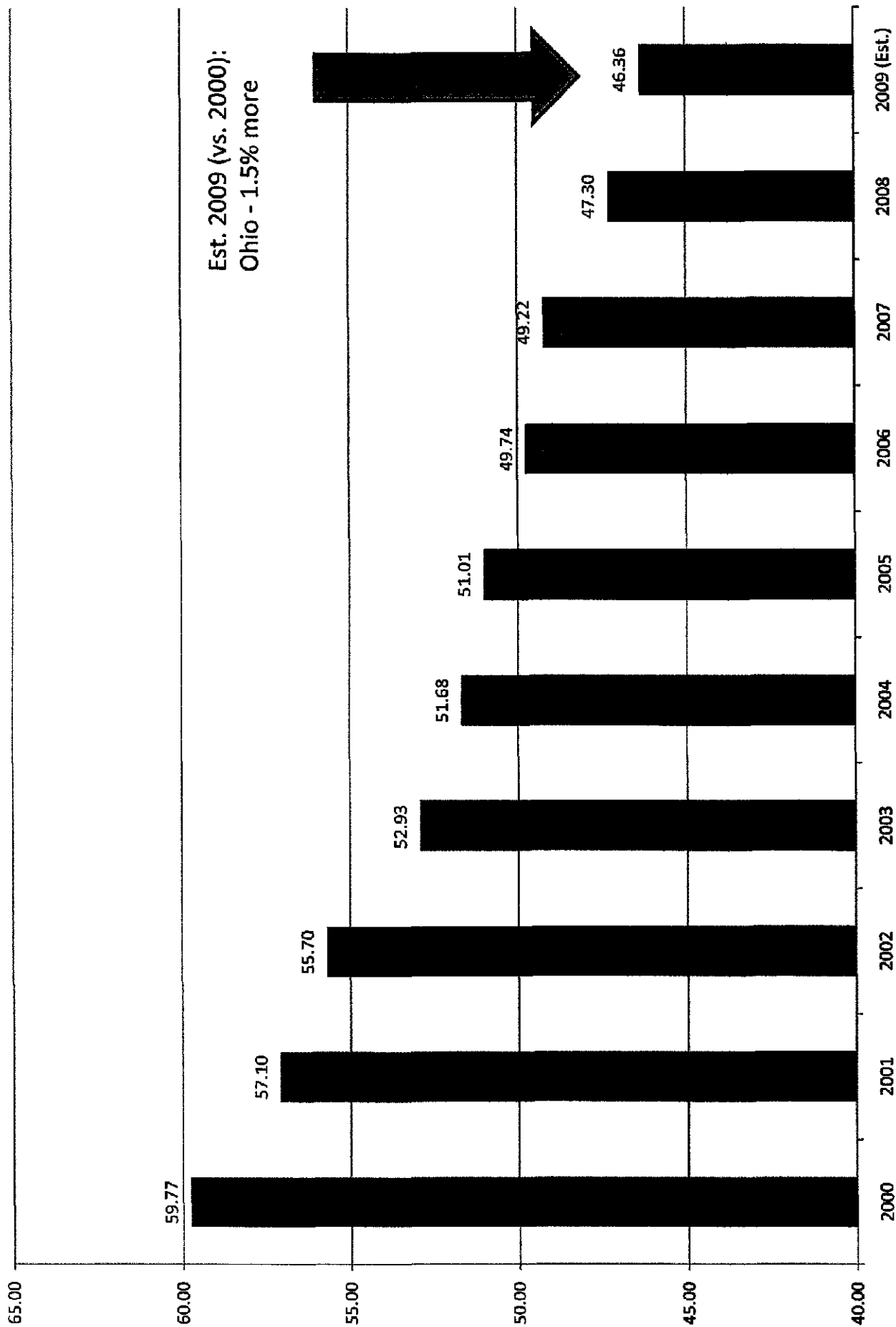
# LED lighting in glass doors . . .



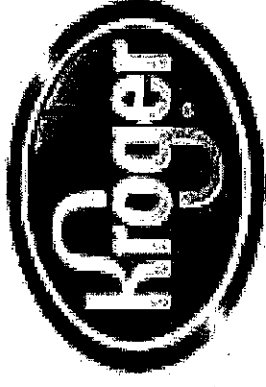
- use 65% less energy, 76% less energy with motion control,
- are dimmable & controllable so they can be turned off and restarted instantly,
- render the same color as the existing lamps,
- are directional to reduce "wasted light," less glare in the aisles,
- last longer (50,000 hours to 70% lumen life) to reduce maintenance cost,
- give off less heat, which reduces refrigeration (energy) load,
- are inherently more rugged because there is no glass to break,
- burn brighter at colder temps,
- don't yellow over time, and
- are more environmentally sound – no gasses, heavy metals or special disposal.



# Kroger - Ohio: Average Electricity Usage (kWh/SF - unadjusted for weather)



## 2010-2012 Efficiency Projects:

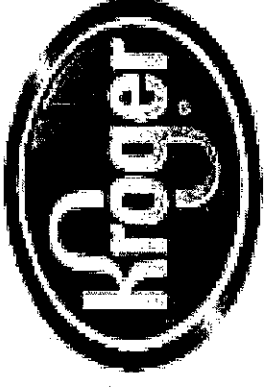


- LED glass door lighting – all remaining stores (w/ vertical lighting).
- F-28 overhead lamp replacement.
- Fuel Center Canopy Lighting Retrofit.
- ECM retrofits in larger applications.
- WAN-based energy metering/monitoring.
- Control system upgrades.
- Other “R&D” projects based on feasibility and return.

# Challenges

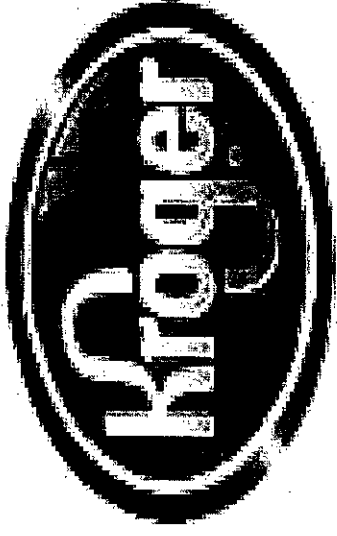
- Economic Growth:
  - Square Footage (and market share) continues to grow Nationwide and in Ohio.
  - Separate economic growth and energy efficiency.
- Environmental Compliance:
  - HCFC's to replace HFC's.
  - Ozone wins - energy, GHG and grocery prices lose.
- Food Safety:
  - Minimum temp requirements define floor for grocery energy efficiency.
  - Coordinating state & local policy.
- Energy efficiency vs. customer preferences – either/or?

## In conclusion . . .



- Kroger has a very well established national and local energy efficiency program w/ in-house specialized technical expertise.
- There are plans to further energy efficiency into the foreseeable future.
- We will apply Ohio monies saved from “opting out” toward energy efficiency in Ohio.
- Future efficiency gains will meet or exceed S.B. 211 reduction targets.





# Energy Efficiency at The Kroger Co.

Public Utilities Commission of Ohio

May 20, 2009

Columbus, OH