

Case No.: 13- 0734 -EL-EEC

Mercantile Customer: OSU Marion

Electric Utility: Ohio Edison

Program Title or Description: Parking Lot Lighting Upgrade

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 in accordance with the Commission's pilot program established in Case No. 10-834-EL-POR

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) 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 EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

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.

Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

Section 1: Mercantile Customer Information

Name: OSU Marion

Principal address: 1465 Mount Vernon Avenue, Marion, Ohio 43302

Address of facility for which this energy efficiency program applies: See Exhibit 1

Name and telephone number for responses to questions: Dan Dumond 614-949-5203

Electricity use by the customer (check the box(es) that apply):

- ☒ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Please attach documentation.)
- ☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) The customer is filing this application (choose which applies):

- ☐ Individually, without electric utility participation.
- ☒ Jointly with the electric utility.

B) The electric utility is: Ohio Edison

C) The customer is offering to commit (check any that apply):

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

Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (check those that apply):

- ☒ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)). **If Checked, Please see Exhibit 1 and Exhibit 2**
- ☐ Installation of new equipment to replace equipment that needed to be replaced. The customer installed new equipment on the following date(s): _____.
- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s): _____.
- ☐ Behavioral or operational improvement.

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

- 1) If you checked the box indicating that the 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: 87,699 kWh

- 2) If you checked the box indicating that the customer 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 any less efficient new equipment that was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

- 3) If you checked the box indicating that the 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 was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

Section 4: Demand Reduction/Demand Response Programs

A) The customer's program involves (check the one that applies):

- ☐ Coincident peak-demand savings from the customer's energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction (check the one that applies):
 - ☐ The customer's 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.
 - ☐ The customer's 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) On what date did the customer initiate its demand reduction program?

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) The customer is applying for:

☒ Option 1: A cash rebate reasonable arrangement.

OR

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

OR

☐ Commitment payment

B) The value of the option that the customer is seeking is:

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

☒ A cash rebate of \$3289. (Rebate shall not exceed 50% project cost. Attach documentation showing the methodology used to determine the cash rebate value 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

☐ A commitment payment valued at no more than \$_____. (Attach documentation and calculations showing how this payment amount 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 the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer 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: **See Exhibit 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 (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure 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 **See Exhibit 3**

The utility's program costs were **See Exhibit 3**

The utility's incentive costs/rebate costs were **See Exhibit 3**

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of the 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 the program or measure 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 the customer and the electric utility with regard to peak demand reduction;
 - 4) permission by the customer 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 the customer 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.



Public Utilities Commission

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

Case No.: 13-0734 -EL-EEC

State of Ohio :

Geoffrey S. Chatas, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

OSU

[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.

hm sk

Geoffrey S. Chatas, Sr. Vice President For
Business & Finance, and CFO
The Ohio State University

Sworn and subscribed before me this 14th day of March, 2013 Month/Year

Korenia Query
Signature of official administering oath

Korenia Query
Print Name and Title

My commission expires on 5/29/16



Korenia Query
Notary Public, State of Ohio
My Commission Expires 05-29-16

Customer Legal Entity Name: OSU Marion Campus
Site Address: OSU Marion
Principal Address: 1465 Mount Vernon Avenue

Project No.	Project Name	Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment:	Description of methodologies, protocols and practices used in measuring and verifying project results	What date would you have replaced your equipment if you had not replaced it early? Also, please explain briefly how you determined this future replacement date.	Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.
1	Parking lot lighting replacement	Replacment of existng 1000 watt metal halide parking lot lights with new more efficient 320 watt metal halide lights.	Data was gathered from attachment A and entered into the lighting rebate calculator to determine savings and rebate.	No specific timeframe. Existing equipment had no known obsolesence date, and was repalced for increased efficiency.	N/A

Exhibit 2

Customer Legal Entity Name: OSU Marion Campus
Site Address: OSU Marion
Principal Address: 1465 Mount Vernon Avenue

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (c) <i>Note 1</i>
2011	3,549,877	3,549,877	3,579,911
Average	3,549,877	3,549,877	3,579,911

Project Number	Project Name	In-Service Date	Project Cost \$	50% of Project Cost \$	KWh Saved/Year (D) counting towards utility compliance	KWh Saved/Year (E) eligible for incentive	Utility Peak Demand Reduction Contribution, KW (F)	Prescriptive Rebate Amount (G) \$	Eligible Rebate Amount (H) \$ <i>Note 2</i>	Commitment Payment \$
1	Parking lot lighting replacement	08/29/2011	\$25,695	\$12,848	87,699	87,699	-	\$4,385	\$3,289	
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
</										

Docket No. 13-0734
Site: 1465 Mount Vernon Avenue

Notes

(1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.

(2) The eligible rebate amount is based upon 75% of the rebates offered by the FirstEnergy Commercial and Industrial Energy Efficiency programs or 75% of \$0.08/kWh for custom programs for all energy savings eligible for a cash rebate as defined in the PUCO order in Case NO.10-834-EL-EEC dated 9/15/2010, not to exceed the lesser of 50% of the project cost or \$250,000 per project. The rebate also cannot exceed \$500,000 per customer per year, per utility service territory.

Exhibit 3 Utility Cost Test

UCT = Utility Avoided Costs / Utility Costs

Project	Total Annual Savings, MWh (A)	Utility Avoided Cost \$/MWh (B)	Utility Avoided Cost \$ (C)	Utility Cost \$ (D)	Cash Rebate \$ (E)	Administrator Variable Fee \$ (F)	Total Utility Cost \$ (G)	UCT (H)
1	88	\$ 308	\$ 27,036	\$ 4,050	\$3,289	\$877	\$ 8,216	3.3
Total	88	\$ 308	27,036	4,050	\$3,289	\$877	8,216	3.3

Notes

- (A) From Exhibit 2, = kWh saved / 1000
- (B) This value represents avoided energy costs (wholesale energy prices) from the Department of Energy, Energy Information Administration's 2009 Annual Energy Outlook (AEO) low oil prices case. The AEO represents a national average energy price, so for a better representation of the energy price that Ohio customers would see, a Cinergy Hub equivalent price was derived by applying a ratio based on three years of historic national average and Cinergy Hub prices. This value is consistent with avoided cost assumptions used in EE&PDR Program Portfolio and Initial Benchmark Report, filed Dec 15, 2009 (See Section 8.1, paragraph a).
- (C) = (A) * (B)
- (D) Represents the utility's costs incurred for self-directed mercantile applications for applications filed and applications in progress. Includes incremental costs of legal fees, fixed administrative expenses, etc.
- (E) This is the amount of the cash rebate paid to the customer for this project.
- (F) Based on approximate Administrator's variable compensation for purposes of calculating the UCT, actual compensation may be less.
- (G) = (D) + (E) + (F)
- (H) = (C) / (G)

OSU Marion Campus ~ OSU Marion
Docket No. 13-0734

Site: 1465 Mount Vernon Avenue

Lighting Inventory Form

Applicant Name:	OSU Marion Campus
Facility Name:	OSU Marion Parking Lot
Date:	

Instructions: Please use one line for each fixture type in a room or area.

For existing or proposed control, choose OCC for Occupancy Sensor, DAYLTO for photosensor, or NONE for none. Controls must save energy to qualify.

The total of Column S, the quantities of CFLs and exit signs in Column M, and the quantities of sensors in Column R, will be used to calculate your incentive on the NonStandard Lighting form.

[illegible]

Line Item	Building Address	Floor	PROJECT BASIC INFORMATION			PRE-INSTALLATION					POST-INSTALLATION					Energy Calculations										Photo Street Number									
			Area Description	Interior or Exterior Fixture	Predominant Space Type	Area Coding	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre Volts / Spans (V)	Existing Sensor Quantity <small>(None, Occupancy, etc.)</small>	Post Fixture Qty	Post Fixture Code	Post Watts / Fixture (W)	Post Volts / Spans (V)	Proposed Sensor Quantity <small>(None, Occupancy, etc.)</small>	Interior Change in Connected Load (W) excluding CFLs or LED Signs	Exterior Change in Connected Load (W) excluding CFLs or LED Signs	Change in Connected Load (W) CFL or LED only signs	Applicant Calculation Factor (CF) Estimate	Correction Factor	Increase Factor (Demand)	Reduction Factor (Energy)	Pre Correction Factor	Post Correction Factor		Interior Demand Savings (WS) excluding CFLs or LED Signs	Exterior Demand Savings (WS) excluding CFLs or LED Signs	Demand Savings (WS) CFLs or LED Signs	Applciant Evaluation Full Load Hours	Prescribed Standards Full Load Hours	Annual Interior Fixture kWh Based (excluding CFLs or LED Signs)	Annual Exterior Fixture kWh Based (excluding CFLs or LED Signs)	Annual kWh Saved (CFLs or LED only)	Annual kWh Based (Savings only)
111								NONE						NONE																					
112								NONE						NONE																					
113								NONE						NONE																					
114								NONE						NONE																					
115								NONE						NONE																					
116								NONE						NONE																					
117								NONE						NONE																					
118								NONE						NONE																					
119								NONE						NONE																					
120								NONE						NONE																					
121								NONE						NONE																					
122								NONE						NONE																					
123								NONE						NONE																					
124								NONE						NONE																					
125								NONE						NONE																					
126								NONE						NONE																					
127								NONE						NONE																					
128								NONE						NONE																					
129								NONE						NONE																					
130								NONE						NONE																					
131								NONE						NONE																					
132								NONE						NONE																					
133								NONE						NONE																					
134								NONE						NONE																					
135								NONE						NONE																					
136								NONE						NONE																					
137								NONE						NONE																					
138								NONE						NONE																					
139								NONE						NONE																					
140								NONE						NONE																					
141								NONE						NONE																					
142								NONE						NONE																					
143								NONE						NONE																					
144								NONE						NONE																					
145								NONE						NONE																					
146								NONE						NONE																					
147								NONE						NONE																					
148								NONE						NONE																					
149								NONE						NONE																					
150								NONE						NONE																					
151								NONE						NONE																					
152								NONE						NONE																					
153								NONE						NONE																					
154								NONE						NONE																					
155								NONE						NONE																					
156								NONE						NONE																					
157								NONE						NONE																					
158								NONE						NONE																					
159								NONE						NONE																					
160								NONE						NONE																					
161								NONE						NONE																					
162								NONE						NONE																					
163								NONE						NONE																					
164								NONE						NONE																					
165								NONE						NONE																					
166								NONE						NONE																					
167								NONE						NONE																					
168								NONE						NONE																					
169								NONE						NONE																					
170								NONE						NONE																					
171								NONE						NONE																					
172								NONE						NONE																					
173								NONE						NONE																					
174								NONE						NONE																					

Project Estimated Annual Savings Summary

Estimated Annual kWh Savings	87,699
Total Change in Connected Load	22.88

Annual Estimated Cost Savings	\$8,769.90
Annual Operating Hours	3,833

Interior Lighting Incentive @ \$0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	\$0.00
Exterior Lighting Incentive @ \$0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	\$4,384.95
Total retrofit CFL Incentive @ \$1/screw-in CFL lamp; \$15/hard-wired CFL lamp (includes all retrofit CFLs, both interior and exterior)	\$0.00
Total retrofit LED Exit Incentive @ \$10/exit sign	\$0.00
Total Lighting Controls Incentive @ \$25/sensor (includes all Lighting Controls, both interior and exterior)	\$0.00

Total Calculated Incentive	\$4,384.95
----------------------------	------------

Total Fixture Quantity excluding retrofit CFLs and LED Exit Sign	32
Total Lamp Quantity for retrofit Screw-In CFLs	0
Total Lamp Quantity for retrofit Hard-Wired CFLs	0
Total Fixture Quantity for retrofit LED Exit Signs	0
Total Quantity for Occupancy Sensors	0
Total Quantity for Daylight Sensors	0

Please briefly describe how you estimated your coincidence factor (CF) and applicant equivalent full-load hours (EFLH) for facility type "Other" indicated on the Lighting Form tab

Demand Savings (For Internal Use Only)

0.00

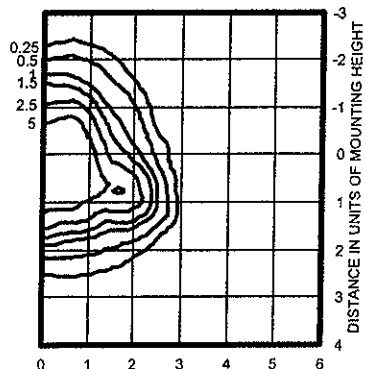
KAD-M-S

KAD Metal Halide, Arm-mounted Soft Square Cutoff

Coefficient of Utilization
Initial Footcandles

KAD 400M R2 Test no. 1193083101P

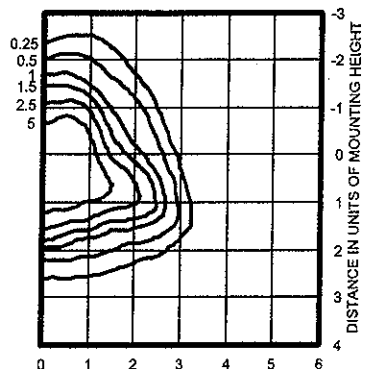
ISOILLUMINANCE PLOT (Footcandle)



400W pulse start metal halide lamp, rated 38000 lumens. Footcandle values based on 20' mounting height.
Classification: Type II, Short, Full Cutoff

KAD 400M R3 Test no. 1192040902P

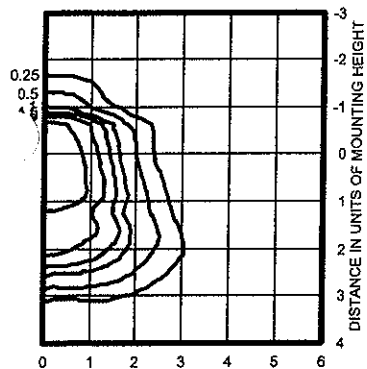
ISOILLUMINANCE PLOT (Footcandle)



400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Type II, Short, Full Cutoff

KAD 400M R4 Test no. 1191110101P

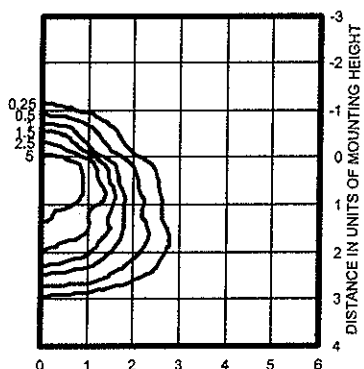
ISOILLUMINANCE PLOT (Footcandle)



400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type III, Very Short), Full Cutoff

KAD 400M R4HS Test no. 1192061101P

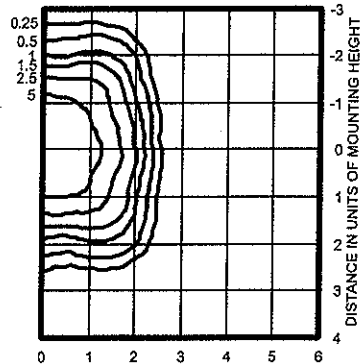
ISOILLUMINANCE PLOT (Footcandle)



400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type III, Very Short), Full

KAD 400M R5S Test no. 1194040801P

ISOILLUMINANCE PLOT (Footcandle)



400W pulse start metal halide lamp, rated 38000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type NC, Very Short), Full Cutoff

Notes

- 1 Photometric data for other distributions can be accessed at www.lithonia.com.
- 2 Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurements. Dimensions and specifications on this sheet are based on the most current available data and are subject to change without notice.
- 3 For electrical characteristics, consult outdoor technical data specification sheets on www.lithonia.com.

Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

25 ft. = 0.64

35 ft. = 0.32

40 ft. = 0.25

$$\left(\frac{\text{Existing Mounting Height}}{\text{New Mounting Height}} \right)^2 = \text{Correction Factor}$$



FEATURES & SPECIFICATIONS

INTENDED USE — Square straight aluminum general purpose pole for up to 35 foot mounting heights.

CONSTRUCTION — Shaft: Made from extruded 6063-T6 or 6061-T6 aluminum alloy, square tube is uniform in cross-section down length of shaft with no taper.

Hand hole: Reinforced rectangular hand hole is located 18" above base, 4" poles have 2" x 4" hand hole; 5" and 6" poles have 2.5" x 4" hand hole. Hand-hole cover plate made from aluminum alloy.

Hardware: Stainless steel

Top cap: Removable top cap provided with drill-mount poles.

Bolt covers: Nut cover discs provided. Optional cast aluminum base cover available.

FINISH — Must specify finish.

GROUNDING — Provision located inside hand hole rim. Grounding hardware is not included (provided by others).

ANCHOR BOLTS — Fabricated from carbon steel bar with minimum-yield strength of 55,000 psi. Upper portion of anchor bolt is galvanized per ASTM A-153. Each anchor bolt is furnished with two hex nuts and two flat washers.

Catalog Number	
Notes	Type

Anchor Base Poles

SSA

SQUARE STRAIGHT ALUMINUM



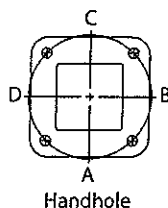
ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: SSA 20 4C DM19 BA

SSA			Mounting ¹		Options		Finish ⁴	
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness						
SSA	8 – 35 feet (See back page.)	(See back page.)	Tenon mounting		Shipped installed		Standard colors	
			PT Open top		L/AB Less anchor bolts		DOB Dark bronze	
			T20 2-3/8" O.D. (2" NPS)		VD Vibration damper		DWH White	
			T25 2-7/8" O.D. (2-1/2" NPS)		TP Tamper proof		DBL Black	
			T30 ² 3-1/2" O.D. (3" NPS)		H1-18Axx Horizontal arm bracket (1 fixture) ^{5,6}		DMB Medium bronze	
			T35 ² 4" O.D. (3-1/2" NPS)		FDLxx Festoon outlet less electrical ⁵		DNA Natural aluminum	
			Drill mounting³		CPL12xx 1/2" coupling ⁵		BA Brushed aluminum	
			DM19 1 at 90°		CPL34xx 3/4" coupling ⁵		Classic colors	
			DM28 2 at 180°		CPL1xx 1" coupling ⁵		DSS Sandstone	
			DM28PL 2 at 180° with one side plugged		NPL12xx 1/2" threaded nipple ⁵		DGC Charcoal gray	
			DM29 2 at 90°		NPL34xx 3/4" threaded nipple ⁵		DTG Tennis green	
			DM39 3 at 90°		NPL1xx 1" threaded nipple ⁵		DBR Bright red	
			DM49 4 at 90°		EHHxx Extra handhole ^{5,7}		DSB Steel blue	
			AERIS™/OMERO™ Drill mounting³				Class 1 architectural anodized	
			DM19AS 1 at 90°				ABL Black	
			DM28AS 2 at 180°				ADB Dark bronze	
			DM29AS 2 at 90°				ANA Natural	
			DM39AS 3 at 90°				Architectural colors	
			DM49AS 4 at 90°				(powder finish) ⁸	
			AERIS™ Suspend drill mounting^{3,4}					
			DMxxAST_					
			OMERO™ Suspend drill mounting^{3,4}					
			DMxxMRT_					

HANDHOLE ORIENTATION



NOTES:

- When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
- 3-1/2" and 4" tenons available on 5" and 6" shafts only.
- The drilling template to be used for a particular luminaire depends on the luminaire that is used. Refer to the Technical Data Section of the Outdoor Binder for Drilling Templates.
- Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
- Specify location and orientation when ordering option.
For 1st "x": Specify the height in feet above base of pole.
Example: 5ft = 5 and 20ft = 20
For 2nd "x": Specify orientation from handhole (A,B,C,D)
Refer to the Handhole Orientation diagram on this page.
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard.
- Combination of tenon-top and drill mount includes extra handhole.
- Finish must be specified. Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3).

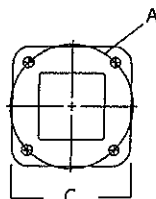
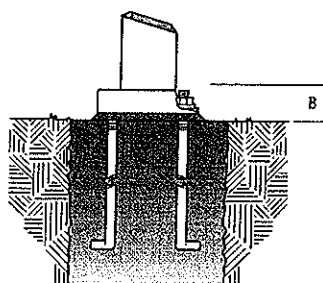
IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use factory template.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.

SSA Square Straight Aluminum Poles

TECHNICAL INFORMATION

Catalog Number	Nominal mount ht. (ft)	Pole Shaft Size (in x ft)	Wall Thick (in)	EPA (ft²) with 1.3 gust				Bolt Circle (in)	Bolt Size (in. x in. x in.)	Approximate ship (lbs.)
				80 mph	90 mph	100 mph	Max.			
SSA 8 4C	8	4.0 x 8.0	0.125	16.5	12.6	9.9	300	8.5-9.625	3/4 x 18 x 3	32
SSA 10 4C	10	4.0 x 10.0	0.125	11.5	8.6	6.5	230	8.5-9.625	3/4 x 18 x 3	37
SSA 12 4C	12	4.0 x 12.0	0.125	12.4	9.2	6.9	160	8.5-9.625	3/4 x 18 x 3	40
SSA 14 4C	14	4.0 x 14.0	0.125	9.3	6.7	4.8	120	8.5-9.625	3/4 x 18 x 3	50
SSA 15 4C	15	4.0 x 15.0	0.125	8.0	5.6	3.9	100	8.5-9.625	3/4 x 18 x 3	52
SSA 16 4C	16	4.0 x 16.0	0.125	6.9	4.7	3.1	90	8.5-9.625	3/4 x 18 x 3	54
SSA 16 4G	16	4.0 x 16.0	0.188	11.8	8.5	6.2	130	8.5-9.625	3/4 x 30 x 3	74
SSA 16 5G	16	5.0 x 16.0	0.188	15.0	11.1	7.5	280	10.5-11.5	3/4 x 30 x 3	83
SSA 18 4C	18	4.0 x 18.0	0.125	4.9	3.0	1.7	70	8.5-9.625	3/4 x 18 x 3	57
SSA 18 4G	18	4.0 x 18.0	0.188	9.2	6.4	4.4	100	8.5-9.625	3/4 x 30 x 3	80
SSA 18 5G	18	5.0 x 18.0	0.188	16.8	12.2	8.9	230	10.5-11.5	3/4 x 30 x 3	91
SSA 20 4C	20	4.0 x 20.0	0.125	3.3	1.7	0.5	40	8.5-9.625	3/4 x 18 x 3	62
SSA 20 4G	20	4.0 x 20.0	0.188	7.0	4.6	2.9	80	8.5-9.625	3/4 x 30 x 3	85
SSA 20 5G	20	5.0 x 20.0	0.188	13.6	9.5	6.6	180	10.5-11.5	3/4 x 30 x 3	107
SSA 20 6G	20	6.0 x 20.0	0.188	22.0	15.9	11.6	230	12-13	1 x 36 x 4	155
SSA 20 6J	20	6.0 x 20.0	0.250	30.4	22.6	17.0	300	12-13	1 x 36 x 4	202
SSA 25 5G	25	5.0 x 25.0	0.188	7.2	4.2	2.0	110	10.5-11.5	3/4 x 30 x 3	130
SSA 25 6G	25	6.0 x 25.0	0.188	13.2	8.6	5.4	180	12-13	1 x 36 x 4	180
SSA 25 6J	25	6.0 x 25.0	0.250	19.7	13.8	9.5	250	12-13	1 x 36 x 4	224
SSA 30 6G	30	6.0 x 30.0	0.188	7.0	3.4	0.8	130	12-13	1 x 36 x 4	210
SSA 30 6J	30	6.0 x 30.0	0.250	12.2	7.5	4.1	170	12-13	1 x 36 x 4	258
SSA 32 6J	32	6.0 x 32.0	0.250	9.7	5.4	2.3	160	12-13	1 x 36 x 4	272
SSA 35 6J	35	6.0 x 35.0	0.250	6.4	2.6	--	200	12-13	1 x 36 x 4	294
SSA 35 7J	35	6.75 x 35.0	0.250	7.6	3.1	--	150	14.625	1 x 36 x 4	290



POLE DATA

Shaft base size	Bolt circle A	Bolt projection B	Base square C	Template description	Anchor bolt description
4"C	8.5" - 9.625"	3.125"	9.938"	ABTEMPLATE PJ50045	AB18-0
4"G	8.5" - 9.625"	3.125"	9.938"	ABTEMPLATE PJ50045	AB30-0
5"	10.5" - 11.5"	3.25"	11.563"	ABTEMPLATE PJ50046	AB30-0
6"	12"-13"	4"	12.25"	ABTEMPLATE PJ50044	AB36-0
7"	14.625"	4.125"	15"	ABTEMPLATE PJ50130	AB36-0

IMPORTANT:

- These specifications are intended for general purposes only. Lithonia reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.



An AcuityBrands Company

Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between Ohio Edison Company, its successors and assigns (hereinafter called the "Company") and OSU Marion, Taxpayer ID No34-6401447its permitted successors and assigns (hereinafter called the "Customer") (collectively the "Parties" or individually the "Party") and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

WHEREAS, the Company is an electric distribution utility and electric light company, as both of these terms are defined in R.C. § 4928.01(A); and

WHEREAS, Customer is a mercantile customer, as that term is defined in R.C. § 4928.01(A)(19), doing business within the Company's certified service territory; and

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain energy efficiency and peak demand reduction ("EE&PDR") benchmarks; and

WHEREAS, when complying with certain EE&PDR benchmarks the Company may include the effects of mercantile customer-sited EE&PDR projects; and

WHEREAS, Customer has certain customer-sited demand reduction, demand response, or energy efficiency project(s) as set forth in attached Exhibit 1 (the "Customer Energy Project(s)") that it desires to commit to the Company for integration into the Company's Energy Efficiency & Peak Demand Reduction Program Portfolio Plan ("Company Plan") that the Company will implement in order to comply with the Statute; and

WHEREAS, the Customer, pursuant to the Public Utilities Commission of Ohio's ("Commission") September 15, 2010 Order in Case No. 10-834-EL-EEC, desires to pursue a cash rebate of some of the costs pertaining to its Customer Energy Project(s) ("Cash Rebate") and is committing the Customer Energy Project(s) as a result of such incentive.

WHEREAS, Customer's decision to commit its Customer Energy Project(s) to the Company for inclusion in the Company Plan has been reasonably encouraged by the possibility of a Cash Rebate.

WHEREAS, in consideration of, and upon receipt of, said cash rebate, Customer will commit the Customer Energy Project(s) to the Company and will comply with all other terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual promises set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, do hereby agree as follows:

1. **Customer Energy Projects.** Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, and as evidenced by the affidavit attached hereto as Exhibit A, Customer acknowledges that the information provided to the Company about the Customer Energy Project(s) is true and accurate to the best of its knowledge.

- a. By committing the Customer Energy Project(s) to the Company, Customer acknowledges and agrees that the Company shall control the use of the kWh and/or kW reductions resulting from said projects for purposes of complying with the Statute. By committing the Customer Energy Project(s), Customer further acknowledges and agrees that the Company shall take ownership of the energy efficiency capacity rights associated with said Project(s) and shall, at its sole discretion, aggregate said capacity into the PJM market through an auction. Any proceeds from any such bids accepted by PJM will be used to offset the costs charged to the Customer and other of the Company's customers for compliance with state mandated energy efficiency and/or peak demand requirements
 - b. The Company acknowledges that some of Customer's Energy Projects contemplated in this paragraph may have been performed under certain other federal and/or state programs in which certain parameters are required to be maintained in order to retain preferential financing or other government benefits (individually and collectively, as appropriate, "Benefits"). In the event that the use of any such project by the Company in any way affects such Benefits, and upon written request from the Customer, Company will release said Customer's Energy Project(s) to the extent necessary for Customer to meet the prerequisites for such Benefits. Customer acknowledges that such release (i) may affect Customer's cash rebate discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations.
 - c. Any future Customer Energy Project(s) committed by Customer shall be subject to a separate application and, upon approval by the Commission, said projects shall become part of this Agreement.
 - d. Customer will provide Company or Company's agent(s) with reasonable assistance in the preparation of the Commission's standard joint application for approval of this Agreement ("Joint Application") that will be filed with the Commission, with such Joint Application being consistent with then current Commission requirements.
 - e. Upon written request and reasonable advance notice, Customer will grant employees or authorized agents of either the Company or the Commission reasonable, pre-arranged access to the Customer Energy Project(s) for purposes of measuring and verifying energy savings and/or peak demand reductions resulting from the Customer Energy Project(s). It is expressly agreed that consultants of either the Company or the Commission are their respective authorized agents.
2. **Joint Application to the Commission.** The Parties will submit the Joint Application using the Commission's standard "Application to Commit Energy Efficiency/Peak Demand Reduction Programs" ("Joint Application") in which they will seek the Commission's approval of (i) this Agreement; (ii) the commitment of the Customer Energy Project(s) for inclusion in the Company Plan; and (iii) the Customer's Cash Rebate.

The Joint Application shall include all information as set forth in the Commission's standard form which, includes without limitation:

- i. A narrative description of the Customer Energy Project(s); including but not limited to, make, model and year of any installed and/or replaced equipment;
- ii. A copy of this Agreement; and
- iii. A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results.

3. **Customer Cash Rebate.** Upon Commission approval of the Joint Application, Customer shall provide Company with a W-9 tax form, which shall at a minimum include Customer's tax identification number. Within the greater of 90 days of the Commission's approval of the Joint Application or the completion of the Customer Energy Project, the Company will issue to the Customer the Cash Rebate in the amount set forth in the Commission's Finding and Order approving the Joint Application.
 - a. Customer acknowledges: i) that the Company will cap the Cash Rebate at the lesser of 50% of Customer Energy Project(s) costs or \$250,000; ii) the maximum rebate that the Customer may receive per year is \$500,000 per Taxpayer Identification Number per utility service territory; and iii) if the Customer Energy Project qualifies for a rebate program approved by the Commission and offered by the Company, Customer may still elect to file such project under the Company's mercantile customer self direct program, however the Cash Rebate that will be paid shall be discounted by 25%; and
 - b. Customer acknowledges that breaches of this Agreement, include, but are not limited to:
 - i. Customer's failure to comply with the terms and conditions set forth in the Agreement, or its equivalent, within a reasonable period of time after receipt of written notice of such non-compliance;
 - ii. Customer knowingly falsifying any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application.
 - c. In the event of a breach of this Agreement by the Customer, Customer agrees and acknowledges that it will repay to the Company, within 90 days of receipt of written notice of said breach, the full amount of the Cash Rebate paid under this Agreement. This remedy is in addition to any and all other remedies available to the Company by law or equity.
4. **Termination of Agreement.** This Agreement shall automatically terminate:
 - a. If the Commission fails to approve the Joint Agreement;
 - b. Upon order of the Commission; or
 - c. At the end of the life of the last Customer Energy Project subject to this Agreement.

Customer shall also have an option to terminate this Agreement should the Commission not approve the Customer's Cash Rebate, provided that Customer provides the Company with written notice of such termination within ten days of either the Commission issuing a final appealable order or the Ohio Supreme Court issuing its opinion should the matter be appealed.

5. **Confidentiality.** Each Party shall hold in confidence and not release or disclose to any person any document or information furnished by the other Party in connection with this Agreement that is designated as confidential and proprietary ("Confidential Information"), unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; or (iii) such document or information was available to the receiving Party on a non-confidential basis at the time of disclosure.
 - a. Notwithstanding the above, a Party may disclose to its employees, directors, attorneys, consultants and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, directors, attorneys,

consultants and agents have been advised of the confidential nature of this information and through such disclosure are deemed to be bound by the terms set forth herein.

- b. A Party receiving such Confidential Information shall protect it with the same standard of care as its own confidential or proprietary information.
 - c. A Party receiving notice or otherwise concluding that Confidential Information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall endeavor to:
(i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such Confidential Information, including without limitation, the filing of such information under a valid protective order.
 - d. By executing this Agreement, Customer hereby acknowledges and agrees that Company may disclose to the Commission or its Staff any and all Customer information, including Confidential Information, related to a Customer Energy Project, provided that Company uses reasonable efforts to seek confidential treatment of the same.
6. **Taxes.** Customer shall be responsible for all tax consequences (if any) arising from the payment of the Cash Rebate.
7. **Notices.** Unless otherwise stated herein, all notices, demands or requests required or permitted under this Agreement must be in writing and must be delivered or sent by overnight express mail, courier service, electronic mail or facsimile transmission addressed as follows:

If to the Company:

FirstEnergy Service Company
76 South Main Street
Akron, OH 44308
Attn: Victoria Nofziger
Telephone: 330-384-4684
Fax: 330-761-4281
Email: vnnofziger@firstenergycorp.com

If to the Customer:

OSU Marion Campus
1465 Mt Vernon Ave
Marion OH 43302
Attn: Ron Turner Superintendent-Fac Mtn & Secry
Telephone: 740-725-6225
Fax:
Email: turner.27@osu.edu

or to such other person at such other address as a Party may designate by like notice to the other Party. Notice received after the close of the business day will be deemed received on the next business day; provided that notice by facsimile transmission will be deemed to have been received by the recipient if the recipient confirms receipt telephonically or in writing.

8. **Authority to Act.** The Parties represent and warrant that they are represented by counsel in connection with this Agreement, have been fully advised in connection with the execution thereof, have taken all legal and corporate steps necessary to enter into this Agreement, and that the undersigned has the authority to enter into this Agreement, to bind the Parties to all provisions herein and to take the actions required to be performed in fulfillment of the undertakings contained herein.
9. **Non-Waiver.** The delay or failure of either party to assert or enforce in any instance strict performance of any of the terms of this Agreement or to exercise any rights hereunder conferred, shall not be construed as a waiver or relinquishment to any extent of its rights to assert or rely upon such terms or rights at any later time or on any future occasion.
10. **Entire Agreement.** This Agreement, along with related exhibits, and the Company's Rider DSE, or its equivalent, as amended from time to time by the Commission, contains the Parties' entire understanding with respect to the matters addressed herein and there are no verbal or collateral representations, undertakings, or agreements not expressly set forth herein. No change in, addition to, or waiver of the terms of this Agreement shall be binding upon any of the Parties unless the same is set forth in writing and signed by an authorized representative of each of the Parties. In the event of any conflict between Rider DSE or its equivalent and this document, the latter shall prevail.
11. **Assignment.** Customer may not assign any of its rights or obligations under this Agreement without obtaining the prior written consent of the Company, which consent will not be unreasonably withheld. No assignment of this Agreement will relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained.
12. **Severability.** If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement, and the Parties further agree to substitute for the invalid portion a valid provision that most closely approximates the economic effect and intent of the invalid provision.
13. **Governing Law.** This Agreement shall be governed by the laws and regulations of the State of Ohio, without regard to its conflict of law provisions.
14. **Execution and Counterparts.** This Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically or telephonically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized officers or representatives as of the day and year set forth below.

Ohio Edison Company_
(Company)

By: *John C. Larkin*

Title: V.P. Of Energy Efficiency

Date: 5-7-12

OSU Marion_
(Customer)

By: *Geoffrey S. Chatas*
Geoffrey S. Chatas
Sr. Vice President for Business & Finance and CFO



Affidavit of OSU Marion – Exhibit A

STATE OF OHIO)
) SS:
COUNTY OF Marion)

I, Ron Turner ,being first duly sworn in accordance with law, deposes and states as follows:

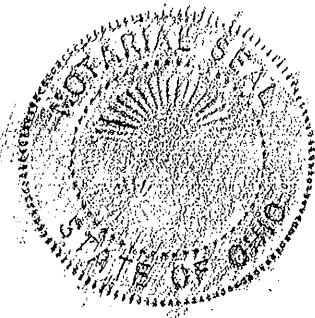
1. I am the Superintendant of OSU Marion ("Customer") As part of my duties, I oversee energy related matters for the Customer.
2. The Customer has agreed to commit certain energy efficiency projects to Ohio Edison Company ("Company"), which are the subject of the agreement to which this affidavit is attached ("Project(s)").
3. In exchange for making such a commitment, the Company has agreed to provide Customer with Cash ("Incentive"). This Incentive was a critical factor in the Customer's decision to go forward with the Project(s) and to commit the Project(s) to the Company.
4. All information related to said Project(s) that has been submitted to the Company is true and accurate to the best of my knowledge.

FURTHER AFFIANT SAYETH NAUGHT:

Ronald Turner

Sworn to before me and subscribed in my presence this 25th day of March, 2013.

Karin E. Lanius
Notary



Karin E. Lanius
Marion County
Expires: June 25, 2015

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/13/2013 3:32:57 PM

in

Case No(s). 13-0734-EL-EEC

Summary: Application to Commit Energy Efficiency/Peak Demand Reduction Programs of Ohio Edison Company and OSU Marion electronically filed by Ms. Jennifer M. Sybyl on behalf of Ohio Edison Company and OSU Marion