Ohio | Public Utilities Commission

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

Case No.: **13-1322-EL-EEC**

Mercantile Customer:	Toledo Zoological Society
Electric Utility:	The Toledo Edison Company
Program Title or Description:	Mercantile Customer Program For Energy Efficient Projects Completed 2011-2013

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:Toledo Zoological Society

Principal address:2 Hippo Way Toledo, OH 43609

Address of facility for which this energy efficiency program applies:1140 Shadowlawn Drive Toledo, OH 43609

Name and telephone number for responses to questions:Rick Payeff 419-389-6403 ext: 3017

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: The Toledo Edison Company

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.)

Projects #1 and 2

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: 227,192 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**

Projects # 1 and 2

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.

Project #3

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: _____ 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**

Project #3

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.

To determine how much percentage of kWh we saved by installing Solatubes we took an average over a period of time as to how many hours a day the lights in the warehouse are turned off due to the increased lighting by the Solatubes and came up with a 16% decrease in necessary lighting time. This in turn saves us 4,667 kWh/year.

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?

3/15/2011

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

43 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 $_____. (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.

Ohio | Public Utilities Commission

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

Case No.: **13-1322-EL-EEC**

State of Ohio :

Rick Payeff, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

   Toledo Zoological Society
   [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.

Director of Facilities and Planning
Signature of Affiant & Title

Sworn and subscribed before me this 11th day of July, 2013 Month/Year

Signature of official administering oath

Cindy Aumiller Contracted Purchasing Assistant
Print Name and Title

CINDY LOU AUMILLER
NOTARY PUBLIC • STATE OF OHIO
Recorded in Fulton County
My commission expires March 27, 2016

My commission expires on _____

Exhibit 1

Customer Legal Entity Name: Toledo Zoological Society

Site Address: Toledo Zoological Society
Principal Address: 1140 Shadowlawn Drive

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	Toledo Zoo Lighting Fixture Improvements	The Toledo Zoo has upgraded the lighting fixtures of many areas throughout the zoo over the past three years. Project #1 lumps all of these projects into one category. In the Raptor Barn we replaced 20 T12 fixtures with 20 T8 fixtures (4 Bulbs/Lamp). In the Aviary we upgraded 14 T12 fixtures to 14 T8 fixtures (4 Bulbs/Lamp) in 2012 and in 2011 we replaced 3 400 Watt Metal Halide fixtures with 3 150 Watt Induction bulbs and replaced 3 250 Watt Metal Halide fixtures with 3 150 Watt Induction bulbs. In the Primate Building we replaced 14 250 Watt Metal Halide fixtures with 14 150 Watt Induction bulbs and in the Giraffe Barn replaced 10 250 Watt Metal Halide fixtures with 10 125 Watt Induction Bulbs. In North Star we replaced 55 65 Watt Halogens with 55 12 Watt LED's and 90 67 Watt Halogens with 90 17 Watt LED's. At the African Carousel we repalced 350 20 Watt Incandescent bubls with 350 4.3 Watt LED's. In the Warehouse we repalced	To measure the results we used the lighting calculator to determine how much energy in kWh we are saving based on the projects listed above.	Based on the average life of our current bulbs they would have needed replacement during the year of 2018. I determined this based on the past installation date for the lightbulbs and the average life that they have.	N/A
2	Refrigerator/Freezer Appliance Replacement Project	The Toledo Zoo disposed of 26 old refrigerator and freezer appliances and replaced them with only 19 new appliances. This project focused on consolidating refrigerator space and upgrading our worn down appliances to energy star rated ones.	We used a watt meter and attached them to our old appliances to determine which ones were the least energy efficient and needed to be replaced. After that we used the cut sheets for the new appliances to determine the new kWh usage and used the difference to calculate our savings.	We would have replaced these appliances in the year 2020. I based this date off analyzing the current condition of our refrigerators.	N/A
3	Warehouse Solatube Installation	This upgrade installed Solatube lighting in the Warehouse building of the Toledo Zoo to reduce the number of hours that we had to keep the lights running. There were a total of 7 21" Dia. Solatubes installed in the process.	To determine how much percentage of kWh we saved by installing these we took an average over a period of time as to how many hours a day the lights in the warehouse are turned off due to the increased lighting by the Solatubes and came up with this number. Previously the warehouse used 29,174 kWh per year to power the lighting fixtures. After the installation of the solatubes we were able to turn the lights off for an average of 700.8 hours a year (1.92 hours/day) which results in a savings of 4,667 kWh per year. Which in turn saves us around 16% of energy per year at the warehouse building.	N/A	N/A

Docket No. 13-1322
Site: 1140 Shadowlawn Drive

Exhibit 2

Customer Legal Entity Name: Toledo Zoological Society

Site: Toledo Zoological Society

Principal Address: 1140 Shadowlawn Drive

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C)	Note 1
2012	9,746,762	9,746,762	9,759,294	
2011	8,663,193	8,663,193	8,665,405	
2010	9,134,750	9,134,750	9,134,750	
Average	**9,181,568**	**9,181,568**	**9,186,483**	

Project Number	Project Name	In-Service Date	Project Cost $	KWh Saved/Year Counting towards Utility compliance	KWh Saved/Year (D) eligible for incentive	Utility Peak Demand Reduction Contribution, KW	Commitment Payment $
1	Toledo Zoo Lighting Fixture Improvements	03/21/2013	$65,085	198,068	198,068	40	
2	Refrigerator/Freezer Appliance Replacement Project	09/24/2012	$9,895	29,124	29,124	3	
3	Warehouse Solatube Installation	07/12/2011	$3,450	4,667	4,667	-	
				-	-	-	
				-	-	-	
				-	-	-	
				-	-	-	
			Total	**231,859**	**231,859**	**43**	**$0**

Savings as percent of usage = Total (D) divided by Average (C) **2.5%** Note 2

Docket No. 13-1322

Site: 1140 Shadowlawn Drive

Customer Eligible Exemption Period: **30 Month(s)** Note 3

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) Savings as a percent of usage is equal to the of total project savings (D) divided by the 3 year average Weather Adjusted Usage with Energy Efficiency Addbacks (C).

(3) Customer exemption determined by savings percentage in relation to energy efficiency schedule as set forth in O.R.C. 4928.66(A)(1)(a).

(4) The exemption period reflects the maximum potential exemption period. NOTE: The FirstEnergy Utilities cannot guarantee the length of the exemption period that will ultimately be approved by the Commission.

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	198	$ 308	$ 61,060	$ 1,350	$0	$0	$ 1,350	**45.2**
2	29	$ 308	$ 8,978	$ 1,350	$0	$0	$ 1,350	**6.65**
3	5	$ 308	$ 1,439	$ 1,350	$0	$0	$ 1,350	**1.07**
Total	**232**	**$ 308**	**71,477**	**4,050**	**$0**	**$0**	**4,050**	**17.6**

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)

Toledo Zoological Society ~ Toledo Zoological Society
Docket No. 13-1322

Site: 1140 Shadowlawn Drive

Lighting Inventory Form

Applicant Name: Nathan Buddemeyer

Facility Name: The Toledo Zoo

Date: 13-Jun-13

Lighting Zone (exterior only):

PROJECT BASIC INFORMATION								
Line Item	New Construction or Retrofit	Building Address	Floor	Area Description	Space Description	Interior or Exterior Fixture	Predominant Space Type	Exterior Lighting Description (Exterior Lighting Only)
e.g.	*Retrofit*	*400 North Street*	*2*	*Office*	*Other*	*Interior*	*Office - Small*	
e.g.	*New Construction*	*Example*	*1*	*Restaurant*	*Conference, Meeting or Training Room*	*Exterior*	*Retail - Small*	*Builing facades (liner ft based)*
1	Retrofit	2700 Broadway Street	1	Raptor Barn	Other	Interior	Other - Please estimate CF and EFLH	
2	Retrofit	2700 Broadway Street	1	Aviary	Other	Interior	Other - Please estimate CF and EFLH	
3	Retrofit	2700 Broadway Street	1	Security Lights	Other	Exterior	Dusk-to-Dawn Lighting	Building main entries
4	Retrofit	2700 Broadway Street	1	Museum	Other	Interior	Other - Please estimate CF and EFLH	
5	Retrofit	2700 Broadway Street	1	Museum	Other	Interior	Other - Please estimate CF and EFLH	
6	Retrofit	2700 Broadway Street	1	VS Security Light	Other	Exterior	Dusk-to-Dawn Lighting	Building - other doors
7	Retrofit	2700 Broadway Street	1	Primate (Round 1)	Other	Interior	Other - Please estimate CF and EFLH	
8	Retrofit	2700 Broadway Street	1	Giraffe Barn	Other	Interior	Other - Please estimate CF and EFLH	
9	Retrofit	2700 Broadway Street	1	Aviary 2011	Other	Interior	Other - Please estimate CF and EFLH	
10	Retrofit	2700 Broadway Street	1	Aviary 2011	Other	Interior	Other - Please estimate CF and EFLH	
11	Retrofit	2700 Broadway Street	1	Primate (Round 2)	Other	Interior	Other - Please estimate CF and EFLH	
12	Retrofit	2700 Broadway Street	1	North Star	Other	Interior	Retail - Single-Story Large	
13								
14								
15	Retrofit	2700 Broadway Street	1	Africa Carousel	Other	Interior	Other - Please estimate CF and EFLH	
16	Retrofit	2700 Broadway Street	1	North Star	Other	Interior	Retail - Single-Story Large	
17	Retrofit	2700 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
18	Retrofit	2700 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
19	Retrofit	2700 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
20	Retrofit	2700 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
21	Retrofit	2700 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
22	Retrofit	2701 Broadway Street	1	Warehouse	Other	Interior	Warehouse	
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Lighting Form

PROJECT BASIC INFORMATION								
Line Item	New Construction or Retrofit	Building Address	Floor	Area Description	Space Description	Interior or Exterior Fixture	Predominant Space Type	Exterior Lighting Description (Exterior Lighting Only)
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Lighting Form

PROJECT BASIC INFORMATION								
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Lighting Form

PROJECT BASIC INFORMATION								
Line Item	New Construction or Retrofit	Building Address	Floor	Area Description	Space Description	Interior or Exterior Fixture	Predominant Space Type	Exterior Lighting Description (Exterior Lighting Only)
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Lighting Form

PROJECT BASIC INFORMATION								
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Lighting Form

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

For existing or proposed control, choose OCC for Occupany Sensor, DAY for photosensor, Hi-Lo for bi-level sensors or NONE for none. Controls in spaces where existing controls exist do not 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.

	PRE-INSTALLATION (RETROFIT)						BASELINE (NEW CONSTRUCTION)				POST-I		
Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)
Cooled Space	*3*	*F44ILL*	*112*	*0.34*	*NONE*						*3*	*CFT55/1-BX*	*56*
Cooled Space							*500*	*linear ft*	*#N/A*	*0.00*	*5*	*Example Cut Sheet 2*	*25*
Uncooled space	20	F44SIL	148	2.96	NONE						20	F44ILL	112
Cooled Space	14	F44SIL	148	2.07	NONE						14	F44ILL	112
Uncooled space	3	I75/1	75	0.23	NONE						3	Cut Sheet 13	13
Cooled Space	4	F44SIL	148	0.59	NONE						4	Cut Sheet 13	13
Cooled Space	1	F44SIL	148	0.15	NONE						1	Cut Sheet 14	20
Uncooled space	1	MH175/1	215	0.22	NONE						1	Cut Sheet 6	17
Cooled Space	6	MH250/1	295	1.77	NONE						6	Cut Sheet 1	150
Cooled Space	10	MH250/1	295	2.95	NONE						10	Cut Sheet 1	150
Cooled Space	3	MH400/1	458	1.37	NONE						3	Cut Sheet 1	150
Cooled Space	3	MH250/1	295	0.89	NONE						3	Cut Sheet 1	150
Cooled Space	8	MH250/1	295	2.36	NONE						8	Cut Sheet 2	120
Cooled Space	55	Cut Sheet 3	65	3.58	NONE						55	Cut Sheet 5	12
				0.00	NONE								
				0.00	NONE								
Cooled Space	350	I20/1	20	7.00	NONE						350	Cut Sheet 8	4
Cooled Space	90	Cut Sheet 4	67	6.03	NONE						90	Cut Sheet 6	17
Cooled Space	155	F41SIL	46	7.13	NONE						155	F41ILL	31
Cooled Space	23	HPS400/1	465	10.70	NONE						23	Cut Sheet 9	109
Cooled Space	39	HPS250/1	295	11.51	NONE						39	Cut Sheet 9	109
Cooled Space	4	HPS250/1	295	1.18	NONE						4	Cut Sheet 11	59
Cooled Space	1	HPS100/1	138	0.14	NONE						1	Cut Sheet 10	29
Cooled Space	5	I75/1	75	0.38	NONE						5	Cut Sheet 12	9
				0.00	NONE								
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Lighting Form

	PRE-INSTALLATION (RETROFIT)						BASELINE (NEW CONSTRUCTION)				POST-		
Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)
				0.00	NONE								
				0.00	NONE								
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Lighting Form

	PRE-INSTALLATION (RETROFIT)						BASELINE (NEW CONSTRUCTION)				POST-		
Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)
				0.00	NONE								
				0.00	NONE								
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Lighting Form

	PRE-INSTALLATION (RETROFIT)						BASELINE (NEW CONSTRUCTION)				POST-		
Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)
				0.00	NONE								
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Lighting Form

	PRE-INSTALLATION (RETROFIT)						BASELINE (NEW CONSTRUCTION)				POST-		
Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)
				0.00	NONE								
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	795			63.18							795		

INSTALLATION				Energy Calculations										
Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control drop down	Proposed Sensor Quantity When applicable	Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual kWh Saved
0.17	*No*	*OCC*	*3*	*0.17*	*84%*	*84%*	*34%*	*12%*	*0%*	*30%*	*0.19*	*2,808*	3,435	*646*
0.13	*Yes*	*DAY*	*5*	*-0.13*	*88%*	*89%*	*34%*	*12%*	*0%*	*0%*	*-0.15*	*8,760*	3,068	*-430*
2.24	No	NONE		0.72	100%	100%	0%	0%	0%	0%	0.72	5,110	5,110	3,679
1.57	No	NONE		0.50	100%	100%	34%	12%	0%	0%	0.68	5,110	5,110	2,884
0.04	No	NONE		0.19	0%	0%	0%	0%	0%	0%	0.00	5,475	5,475	1,018
0.05	No	NONE		0.54	85%	85%	34%	12%	0%	0%	0.62	4,380	4,380	2,649
0.02	No	NONE		0.13	85%	85%	34%	12%	0%	0%	0.15	4,380	4,380	628
0.02	No	NONE		0.20	0%	0%	0%	0%	0%	0%	0.00	4,380	4,380	867
0.90	No	NONE		0.87	100%	100%	34%	12%	0%	0%	1.17	5,110	5,110	4,979
1.50	No	NONE		1.45	100%	100%	34%	12%	0%	0%	1.94	5,110	5,110	8,299
0.45	No	NONE		0.92	100%	100%	34%	12%	0%	0%	1.24	5,110	5,110	5,288
0.45	No	NONE		0.44	100%	100%	34%	12%	0%	0%	0.58	5,110	5,110	2,490
0.96	No	NONE		1.40	100%	100%	34%	12%	0%	0%	1.88	5,110	5,110	8,012
0.66	No	NONE		2.92	89%	89%	34%	12%	0%	0%	3.48	4,380	4,380	14,300
0.00		NONE		0.00										0
0.00		NONE		0.00										0
1.51	No	NONE		5.50	100%	100%	34%	12%	0%	0%	7.36	4,380	4,380	26,956
1.53	No	NONE		4.50	89%	89%	34%	12%	0%	0%	5.37	4,380	4,380	22,075
4.81	No	NONE		2.33	85%	85%	34%	12%	0%	0%	2.65	4,380	4,380	11,406
2.51	No	NONE		8.19	85%	85%	34%	12%	0%	0%	9.33	4,380	4,380	40,167
4.25	No	NONE		7.25	85%	85%	34%	12%	0%	0%	8.26	4,380	4,380	35,585
0.24	No	NONE		0.94	85%	85%	34%	12%	0%	0%	1.08	4,380	4,380	4,631
0.03	No	NONE		0.11	85%	85%	34%	12%	0%	0%	0.12	4,380	4,380	535
0.05	No	NONE		0.33	85%	85%	34%	12%	0%	0%	0.38	4,380	4,380	1,619
0.00		NONE		0.00										0
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0.00		NONE		0.00										0
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Lighting Form

INSTALLATION				Energy Calculations										
Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control drop down	Proposed Sensor Quantity When applicable	Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual kWh Saved
0.00		NONE		0.00										0
0.00		NONE		0.00										0
0.00		NONE		0.00										0
0.00		NONE		0.00										0
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Lighting Form

INSTALLATION				Energy Calculations										
Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control drop down	Proposed Sensor Quantity When applicable	Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual kWh Saved
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Lighting Form

INSTALLATION				Energy Calculations										
Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control drop down	Proposed Sensor Quantity When applicable	Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual kWh Saved
0.00		NONE		0.00										0
0.00		NONE		0.00										0
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0.00		NONE		0.00										0
0.00		NONE		0.00										0
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Lighting Form

INSTALLATION				Energy Calculations										
Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control drop down	Proposed Sensor Quantity When applicable	Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual kWh Saved
0.00		NONE		0.00										0
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23.76				39.42							46.98		4,690	198,068

Project Estimated Annual Savings Summary

Lighting

Estimated Annual kWh Savings	198,068
Total Change in Connected Load	39.41

Annual Estimated Cost Savings	$19,806.80
Annual Operating Hours	4,690

Interior Lighting Incentive @ $0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	$9,809.10
Exterior Lighting Incentive @ $0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	$94.30
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/occupancy sensor and $25/daylight sensor (includes all Lighting Controls, both interior and exterior)	$0.00

Total Calculated Incentive	$9,903.40

Total Fixture Quantity excluding retrofit CFLs and LED Exit Signs	795
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
Animal areas need to be lit at 100%. Other areas were based off of the chart provided.

Demand Savings (For Internal Use Only)	46.98

Building Name:	Metered Time (hrs)	Metered Cost ($)	Metered kWh	kWh per Year	Cost per Year	Appliance Replaced?	kWh per Year	Cost per Year	Results:	kWh Savings per Year	Cost Savings per Year
Aviary Building											
Breakroom	50.00	0.93	14.35	2,514.12	$162.94	Yes	370.00	$39.00		2,144.12	$123.94
EAC Building											
Keeper Area	25.65	0.53	8.19	2,797.05	$181.01	Yes	578.00	$62.00		2,219.05	$119.01
Exhibits Warehouse											
Exhibits	24.04	0.19	2.97	1,082.25	$69.23	Yes	370.00	$39.00		712.25	$30.23
Grounds	24.05	0.30	4.63	1,686.44	$109.27	No	0.00	$0.00		1,686.44	$109.27
Greenhouse											
Kitchen	50.00	1.32	20.31	3,558.31	$231.26	Yes	383.00	$41.00		3,175.31	$190.26
Kingdom of the Apes											
Basement Keeper Area	26.05	0.30	4.62	1,553.78	$100.89	Yes	383.00	$41.00		1,170.78	$59.89
Basement Keeper Area	71.53	0.85	13.18	1,614.04	$104.09	No	0.00	$0.00		1,614.04	$104.09
Maintenance Warehouse											
Hallway by Restrooms	24.09	0.36	5.59	2,032.73	$130.91	Yes	383.00	$41.00		1,649.73	$89.91
Membership Office											
Kitchen	69.23	0.74	11.45	1,448.82	$93.64	Yes	370.00	$39.00		1,078.82	$54.64
Museum Building											
Elain's Area	25.47	0.04	0.76	261.42	$13.76	No	0.00	$0.00		261.42	$13.76
Library	25.27	0.03	0.58	201.08	$10.40	No	0.00	$0.00		201.08	$10.40
Zoo Teen	25.70	0.20	3.15	1,073.70	$68.17	Yes	383.00	$41.00		690.70	$27.17
Education Staff	23.12	0.02	0.38	144.00	$7.58	No	0.00	$0.00		144.00	$7.58
Volunteer Office	23.23	0.13	2.01	757.87	$49.02	Yes	370.00	$39.00		387.87	$10.02
Security	23.53	0.30	4.71	1,753.49	$111.69	Yes	370.00	$39.00		1,383.49	$72.69
Bat Holding	21.40	0.17	2.66	1,088.86	$69.59	Yes	370.00	$39.00		718.86	$30.59
Basement Storage	69.17	0.81	12.48	1,580.52	$102.58	Yes	383.00	$41.00		1,197.52	$61.58
Basement Storage	69.19	0.75	11.67	1,477.51	$94.96	Yes	460.00	$49.00		1,017.51	$45.96
Basement Storage	69.20	0.82	12.70	1,607.69	$103.80	No	0.00	$0.00		1,607.69	$103.80
Nature's Neighborhood											
Keeper Area	50.00	0.40	6.19	1,084.49	$70.08	Yes	383.00	$4.00		701.49	$66.08
Otter Building											
Keeper Area	21.92	0.18	2.84	1,135.17	$71.95	Yes	370.00	$39.00		765.17	$32.95
Savanna											
Offices	23.10	0.27	4.18	1,585.14	$102.39	Yes	370.00	$39.00		1,215.14	$63.39
Lion Holding	23.10	0.27	4.25	1,611.69	$102.39	Yes	671.00	$71.00		940.69	$31.39
Vet Hospital											
Graphics Storage	24.98	0.05	0.82	287.52	$17.53	No	0.00	$0.00		287.52	$17.53
ICU/Nursery	24.13	0.22	3.51	1,274.09	$79.86	Yes	344.00	$37.00		930.09	$42.86
Visitor Services											
Breakroom	28.16	0.33	5.12	1,592.73	$102.66	Yes	370.00	$39.00		1,222.73	$63.66
										Totals:	
										29,123.51	$1,582.64

Mercantile Customer Project Commitment Agreement
Exemption Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between The Toledo Edison Company, its successors and assigns (hereinafter called the "Company") and Toledo Zoological Society, its 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 annual 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 and consistent with the Statute, desires to pursue exemption from paying charges included in the Company's then current cost recovery mechanism (hereinafter, "Rider DSE") as approved by the Public Utilities Commission of Ohio ("Commission") for recovery of the DSE2 costs associated with the Company Plan, and is committing the Customer Energy Project(s) as a result of such exemption.

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 an exemption; and

WHEREAS, in consideration of, and upon receipt of, said exemption, Customer has consented to committing the Customer Energy Project(s) to the Company and complying with all other terms and conditions set forth herein, including without limitation, the submission of an annual report on the energy savings and/or peak demand reductions achieved by the Customer Energy Project(s).

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 applicable, "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 exemption benefits discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations, including without limitation any reporting requirements, as set forth herein.

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 a 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" 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 exemption from paying the DSE2 charge of the Company's Rider DSE.

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 Exemption and Annual Report**. Upon Commission approval of the request for exemption, the Company will exempt Customer from paying any Rider DSE charges consistent with any Commission directives as set forth in the Commission's Finding and Order approving the Joint Application. Such exempt status shall apply to those accounts identified by Customer that pertain to those Customer sites with one or more Customer Energy Project(s) approved for integration into the Company Plan by the Commission in the Joint Application.

a. For purposes of this Agreement, a "site" shall be a single location with one or more facilities. As examples only, a site includes an industrial plant, a hospital complex or a university located on one or more parcels of land, provided that said parcels are contiguous.

b. For purposes of this Agreement, an "account" shall be as defined by the Company through its normal business practices. Any account identified by Customer shall be eligible for exemption, provided that said account pertains to a specific site with at least one Customer Energy Project that qualifies Customer for exemption from paying Rider DSE charges.

c. Any new accounts created at a site on which there is already an approved Customer Energy Project shall, at the option of the Customer, be included within the exemption granted under said project, and shall be included for purposes of calculating future eligibility for exemption under the project. Any such election shall become effective in the first billing cycle after March 15th following identification of said account in the annual report required under Section 3(d)(iii) below.

d. Customer acknowledges and agrees that if it desires to pursue such exempt status, as evidenced in the Joint Application, Customer is obligated to provide to the Company an annual report on the energy savings and peak-demand reductions achieved by the Customer Energy Project(s) on a calendar year basis. Company shall provide Customer with such information as it may require, that is in Company's possession, for the purposes of preparing such report. Company shall provide a template for Customer to use in preparing the annual report and shall make available a designated Company representative to answer questions.

i. Said report shall be submitted annually on or before January 31 of each year after Commission approval of the Joint Application.

ii. Said report shall provide all information required under the Rules, and where the requirements of the Rules conflict with a requirement under this Agreement or the Joint Application, the requirements of the Rules shall control.

iii. Said report shall, at a minimum, include the following information for each Customer Energy Project that has been approved by the Commission:

1. A demonstration that the energy savings and peak-demand reductions associated with the Customer Energy Project(s) meet the total resource cost test or that the Company's avoided cost exceeds the cost to the Company for the Customer's program;

2. A statement distinguishing programs implemented before and after January 1 of the current year;

3. A quantification of the energy savings or peak-demand reductions for programs initiated prior to 2009 in the baseline period;

4. A recognition that the Company's baselines have been increased by the amount of mercantile customer energy savings and demand reductions;

5. A listing and description of the Customer Energy Projects that have been implemented, which provides the detail required by the Rules;

6. An accounting of expenditures made by the mercantile customer for each program and its component energy savings and peak-demand reduction attributes; and

7. A timeline showing when each Customer Energy Project went into effect and when the energy savings and peak-demand reductions occurred.

8. Any other information reasonably necessary for the Company to (i) verify Customer's continued eligibility for exemption from paying Rider charges; and (ii) report in the Company's annual status report to the Commission the EE&PDR results related to each Customer Energy Project.

e. Customer's exemption shall automatically terminate:

i. At the end of the exemption period as determined by the Commission

ii. Upon order of the Commission or pursuant to any Commission rule;

iii. If Customer fails to comply with the terms and conditions set forth in the Company's then current Rider DSE, or its equivalent, as amended from time to time by the Commission, within a reasonable period of time after receipt of written notice of such non-compliance;

iv. If it is discovered that Customer knowingly falsified any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application. In such an instance, Company reserves the right to recover any exempted rider charges from the date of approval of the Joint Application through the date said exemption is terminated; or

v. If Customer fails to submit the annual report required in (d) above. In such an instance, Company reserves the right to recover any exempted rider charges from the date of approval of the Joint Application through the date said exemption is terminated. It is expressly agreed that this provision shall not apply should said report contain errors, provided that the submission of said report is made in good faith. It is further agreed that the Company will provide written notice of the date on which said report is due at least thirty (30) days prior thereto.

f. Company reserves the right to recover from Customer any Rider DSE charges incurred by Customer after the date Customer's exemption terminates.

3. **Termination of Agreement**. This Agreement shall automatically terminate:

a. If the Commission fails to approve this Agreement through the Joint Application;

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 exemption, 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.

Customer acknowledges that if a Customer Project is withdrawn pursuant to Paragraph 1(b) of this Agreement, the exemption or a portion of such exemption may be affected. Should Customer elect to withdraw a project pursuant to Paragraph 1(b), Customer shall provide Company with reasonable assistance in preparing any documentation that may be required by the Commission and, upon reasonable request, shall provide documentation supporting the necessity to withdraw such project.

4. **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.

5. **Taxes.** Customer shall be responsible for all tax consequences (if any) arising from the application of the exemption.

6. **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 Nelfziger
Telephone: 330-384-4684
Fax: 330-761-4281
Email: vrnnelfziger@firstenergycorp.com

If to the Customer:

Toledo Zoological Society
1717 Spencer Street
Toledo, OH 43609
Attn:Rick Payeff
Telephone:419-389-6403 ext: 3017
Fax:419-389-3154
Email:rick.payeff@toledozoo.org

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.

7. **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.

8. **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.

9. **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.

10. **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.

11. **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.

12. **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.

13. **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 telegraphically 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 date and year set forth below.

The Toledo Edison Company
(Company)

By: John C. Dwyer

Title: VP of Energy Efficiency

Date: 8-1-13

Toledo Zoological Society
(Customer)

By: [illegible]

Title: Director of Facilities & Planning

Date: 16 JUL 13

Affidavit of Toledo Zoological Society – Exhibit A

STATE OF OHIO)
) SS:
COUNTY OF LUCAS)

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

1. I am the Director of Facilities and Planning of Toledo Zoological Society ("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 The Toledo 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 a Rider Exemption ("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.

Sworn to before me and subscribed in my presence this 16 day of July, 2013.

Notary

CINDY LOU AUMILLER
NOTARY PUBLIC - STATE OF OHIO
Recorded in Fulton County
My commission expires March 27, 2016

Version 9.11.12

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

11/8/2013 12:17:03 PM

in

Case No(s). 13-1322-EL-EEC

Summary: Application to Commit Energy Efficiency/Peak Demand Reduction Programs of The Toledo Edison Company and Toledo Zoological Society electronically filed by Ms. Jennifer M. Sybyl on behalf of The Toledo Edison Company and Toledo Zoological Society