Ohio | Public Utilities Commission

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

Case No.: 14-1111-**EL-EEC**

Mercantile Customer:	Eaton Corp.
Electric Utility:	The Cleveland Electric Illuminating Company
Program Title or Description:	HVAC and Lighting projects

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 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 for a period of up to 12 months will also qualify for the 60-day automatic approval. However, all applications requesting an exemption from the EEDR rider for longer than 12 months must provide additional information, as described within the Historical Mercantile Annual Report Template, that demonstrates additional energy savings and the continuance of the Customer's energy efficiency program. This information must be provided to the Commission at least 61 days prior to the termination of the initial 12 month exemption period to prevent interruptions in the exemption period.

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 altered or 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:Eaton Corporation

Principal address:1000 Eaton Blvd., Cleveland, OH 44122

Address of facility for which this energy efficiency program applies:1000 Eaton Blvd., Cleveland, OH 44122

Name and telephone number for responses to questions:Richard Gorze (440)523-4054

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 Cleveland Electric Illuminating 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.)

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 failed equipment which has no useful life remaining. 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):

February 1, 2013.

☐ 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 failed equipment which had no useful life remaining, then calculate the annual savings [(kWh used by new standard equipment) – (kWh used by the optional 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 standard new equipment) – (kWh used by optional higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: 4,184,737 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.

Annual savings: _____ kWh

Section 4: Demand Reduction/Demand Response Programs

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

☒ This project does not include peak demand reduction savings.

☐ 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, Exemption from Rider, or Commitment Payment

Under this section, check all boxes that apply and fill in all corresponding blanks.

A) The customer is applying for:

☒ A cash rebate reasonable arrangement.

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

☐ Commitment payment

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

A cash rebate reasonable arrangement.

☒ A cash rebate of $ 198,944. (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.)

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.)

☐ 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 12 month period, the customer will need to complete, and file within this application, the Historical Mercantile Annual Report

Template to verify the projects energy savings are persistent.

☐ A commitment payment valued at no more than $_____. (Attach documentation and calculations showing how this payment amount was determined.)

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.: 14-1111 **-EL-EEC**

State of : Ohio

RICHARD GORZE, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of: EATON CORPORATION

[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.

[signature] - GLOBAL ENERGY MGR. - SCM
Signature of Affiant & Title

Sworn and subscribed before me this 19th day of May, 2014 Month/Year

[signature]
Signature of official administering oath

Devin Givens
Print Name and Title

My commission expires on August 22, 2018

NOTARIAL SEAL STATE OF OHIO

DEVIN GIVENS
NOTARY PUBLIC - OHIO
MY COMMISSION EXPIRES
AUGUST 22, 2018

Exhibit 1

Customer Legal Entity Name: Eaton Corporation

Site Address: Eaton Center
Principal Address: 1000 Eaton Blvd

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	Cooling and Ventilation Systems	Cooling and Ventilation Eaton Center is designed and operated as a showcase for Eaton's commitment to sustainability and energy conservation. Eaton Center's Cooling and Ventilation system is designed to consume 53% less energy to operate than a comparable, code-compliant office building. Please refer to Attachment 1 that details the Project 1 - Cooling and Ventilation. Project 1 covers the chiller plant, air-distribution and controls of the HVAC system. The heating system is excluded from Project 1.	As a part of the design process and for the LEED certification process, an Energy Simulation/Model was developed using Carrier Hourly Analysis Program (HAP v4.51). The Energy Model compares the Eaton Center's design and performance with that of a typical, code-compliant office building of the same size and in the same location. Please refer to Appendix Item 1 for the HAP report.	N/A	Cooling and Ventilation Eaton Center is designed and operated as a showcase for Eaton's commitment to sustainability and energy conservation. Eaton Center's Cooling and Ventilation system is designed to consume 53% less energy to operate than a comparable, code-compliant office building. This efficiency has been achieved by a combination of these features: 1. The Chilled Water System consists of two centrifugal chillers running in parallel, units are sized at 40% of the building cooling load or approximately 500 tons each. Therefore two units carry the building's cooling load the majority of the time. Cooling Towers are located on the Penthouse level away from site on th roof of Building 1. Tower selections are paired with chiller selections. Each tower is equipped with counter flow fan(s) with variable frequency drive equipped with premium efficiency motor(s). The chillers are high efficiency with low kW/ton energy usage. 2. The Primary Chilled Water and Condenser Water Pumps selections based on the chiller and cooling tower capacities, on one to one basis. The basis of design for this contract uses a 2-pass evaporator and a 2-pass condenser. Pumps have been specified with variable speed control, Lead/Lag operation and premium efficient motors. The chillers and pumps provide chilled water to the Air Handler Units to cool the occupied areas as well units serving Computer and Data Rooms. In addition, there is a secondary chilled water system supplying chilled water to fan co units serving Communication and Data Centers and Electrical Rooms. To avoid running a 500 ton chiller year round or installin additional split systems for off season cooling for Data and Computer Rooms, the owner wishes that a recovery or "Free Cooling Type System" be installed. This will help obtain LEED credits as well as being a prudent fiscal decision for reducin
2	Lighting Systes	Eaton Center employs a high-efficiecny lightig system for the interior and exterior. All interior lights are controlled by a fully programmable building automation system that uses combination of photo sensors for daylight harvesting, occupancy sensors and timers to ensure that all interior lighting operates at maximum efficiency. All employees have task lighting that is motion-sensor operated so they rely less on higher wattage ambient lighting and can better control their work environment. All exterior lights are also tied to the building automation system and are controlled by a combination photo sensors and timers. Eaton Center's high efficiency lighting systems are designed and operated to be 60% more efficient than a typical office building.	As a part of the design process and for the LEED certification process, an Energy Simulation/Model was developed using Carrier Hourly Analysis Program (HAP v4.51). The Energy Model compares the Eaton Center's design and performance with that of a typical, code-compliant office building of the same size and in the same location. Please refer to Appendix Item 1 for the HAP report.	N/A	a. Light Fixtures and Lamps: The majority of Eaton Center is equipped with high efficiency lighting fixtures and lamps such as: • High output T5 fluorescent lamps with electronic ballasts. • LED fixtures • Compact fluorescent lamps The light fixture schedule is provided as an attachment to the application. b. Lighting controls: All interior lights are controlled by a fully programmable building automation system that uses a combination of photo sensors for daylight harvesting, occupancy sensors and timers to ensure that all interior lighting operates at maximum efficiency. All employees have task lighting that is motion-sensor operated so they rely less on higher wattage ambient lighting and can better control their work environment. The electrical layouts are provided as an attachment to the application. c. Daylight Harvesting: The building's exterior lighting shelves direct daylight deeper into the interior of the building. All interior office spaces received optimal daylight using the Daylight Harvesting system in place. Motorized sunshades connected to daylight photo sensors, sense the amount of ambient light and open and close to provide the optimal lighting levels to users. If needed, additional lighting comes on automatically. Employees also have the option of using LED task lighting to augment the amount of light.

Exhibit 2

Customer Legal Entity Name: Eaton Corporation
Site Address: Eaton Center
Principal Address: 1000 Eaton Blvd

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (c) *Note 1*
2013	10,210,917	10,210,917	14,040,238
Average	**10,210,917**	**10,210,917**	**14,040,238**

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) $ *Note 2*
1	Cooling and Ventilation Systems	02/01/2013	$4,280,000	$2,140,000	2,446,728	2,446,728	877	$195,738	$146,804
2	Lighting Systes	02/01/2013	$6,364,815	$3,182,408	1,738,009	1,738,009	239	$69,520	$52,140
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
		Total	**$10,644,815**		**4,184,737**	**4,184,737**	**1,116**	**$265,258**	**$198,944**

Docket No. 14-1111
Site: 1000 Eaton Blvd

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	2,447	$ 308	$ 754,277	$ 2,025	$146,804	$21,117	$ 169,945	**4.4**
2	1,738	$ 308	$ 535,793	$ 2,025	$52,140	$17,380	$ 71,545	**7.49**
Total	**4,185**	**$ 308**	**1,290,071**	**4,050**	**$198,944**	**$38,497**	**241,490**	**5.3**

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)

Eaton Corporation ~ Eaton Center
Docket No. 14-1111

Site: 1000 Eaton Blvd

Ohio Edison • The Illuminating Company • Toledo Edison

Mercantile Customer Program - Custom Project Rebate Calculator

Project Name and Number:	Cooling and Ventilation System
Site Name:	**Eaton Corp.**
Completed by (Name):	**Rich Gorze**
Date completed:	**2/1/2013**

Energy Conservation Measure	Annual Energy Savings kWh	Eligible Prescriptive Rebate Amount kWh * $0.08
Cooling and Ventilation System	2,446,728	**195738.24**
Total Project Energy Savings kWh	**2,446,728**	
Total Custom Prescriptive Rebate Amount $		**$ 195,738.24**

Notes about this rebate calculation:
As a part of the design process and for the LEED certification process, an Energy Simulation/Model was developed using Carrier Hourly Analysis Program (HAP v4.51). The Energy Model compares the Eaton Center's design and performance with that of a typical, code-compliant office building of the same size and in the same location. Please refer to Appendix Item 1 for the HAP report.

Eaton Center

1000 Eaton Blvd, Cleveland, OH

Nestled on the crest of a 53-acre site, Eaton Corporation's new global headquarters in the Cleveland suburb of Beachwood offers employees and visitors panoramic views of the surrounding woodland as well as downtown Cleveland and Lake Erie beyond. The headquarters design is formed by two crescent wings that arc around a central tower overlooking a pond. Eaton Center is home to nearly 1000 employees and operates Monday to Saturday 7AM to 6PM.

The state-of-the-art headquarters consolidates employees from three facilities into a single complex and will incorporate a wide range of amenities including a wellness center, conference and meeting facilities, an auditorium, cafeteria and walking trails. The headquarters design is open with floor-to-ceiling glass creating a daylight-filled work environment that features innovative, sustainable design strategies. The project underscores Eaton's commitment to sustainability leadership.

Eaton is a global technology leader in power management solutions that make electrical, hydraulic and mechanical power, operate more efficiently, effectively, safely and sustainably. Eaton solutions help customers reduce their energy consumption, improve the environment and protect lives. We're shrinking the carbon footprint of our customers' operations, as well as our own. We are making a positive contribution to combating climate change while delivering positive results for our shareholders and stakeholders alike.

Eaton cares about "doing business right" in meeting the needs of our global customers, employees and communities. How we get our results at Eaton is just as important as the results themselves. Sustainability is one of the central tenets of Eaton Center's design philosophy and operational strategy. Every effort has been made to optimize the use of all available resources while maximizing employee wellbeing, collaboration and productivity.

Eaton Center is designed and operated as a showcase for Eaton's commitment to sustainability and energy conservation.

Eaton Center is designed to consume 44% less energy to operate than a comparable, code-compliant office building. This efficiency has been achieved by a combination of methods, materials and technologies:

1. **Form and layout of the building:** The narrow curved form of the Eaton Center is ideal for maximizing the amount of daylight within. The Floor-to-ceiling high-efficiency curtain-wall system coupled with the light shelves and daylight harvesting system further promote the use of daylight within the interior while reducing the dependence of artificial lighting.
2. **Building Envelope:** Eaton Center's skin is a significant part of the overall sustainable design of the facility. The high efficiency curtain wall system allows for the highest light transmittance while minimizing solar heat gains. The white roof and additional insulation also help reduce heat gain.
3. **Lighting System:** all interior lights are controlled by a fully programmable building automation system that uses a combination of photo sensors for daylight harvesting, occupancy sensors and timers to ensure that all interior lighting operates at maximum efficiency. All employees have task lighting that is motion-sensor operated so they rely less on higher wattage ambient lighting and can better control their work environment. All exterior lights are also tied to the building automation system and are controlled by a combination photo sensors and timers.
4. **HVAC System:** The HVAC system is designed and operated to be a state-of-the-art, highly responsive and controllable system. The chiller plant consists of three high-efficiency chillers that are staged up and down in response to cooling loads. Other energy conserving features include heat recovery wheels, heat exchangers, demand control ventilation, and VFDs on nearly all motors. A photo-voltaic system on the parking garage can supply nearly 6% of Eaton Center's energy needs.

Eaton Center is currently pursing a Gold rating under the USGBC's LEED for New Construction rating system.

Project 1
Cooling and Ventilation

Eaton Center is designed and operated as a showcase for Eaton's commitment to sustainability and energy conservation. **Eaton Center's Cooling and Ventilation system is designed to consume 53% less energy to operate** than a comparable, code-compliant office building. This efficiency has been achieved by a combination of these features:

1. The Chilled Water System consists of three chillers running in parallel (with the two main chillers in series-counterflow), the chillers are sized at 40% of the building cooling load or approximately 500 tons each. Therefore two units carry the building's cooling load the majority of the time. Cooling Towers are located on the Penthouse level away from site on the roof of Building 1. Tower selections are paired with chiller selections. Each tower is equipped with counter flow fan(s) with variable frequency drive equipped with premium efficiency motor(s). The chillers are high efficiency with low kW/ton energy usage.
2. The Primary Chilled Water and Condenser Water Pumps selections based on the chiller and cooling tower capacities, on a one to one basis. The basis of design for this contract uses a 2-pass evaporator and a 2-pass condenser. Pumps have been specified with variable speed control, Lead/Lag operation and premium efficient motors. The chillers and pumps provide chilled water to the Air Handler Units to cool the occupied areas as well units serving Computer and Data Rooms. In addition, there is a secondary chilled water system supplying chilled water to fan coil units serving Communication and Data Centers and Electrical Rooms. To avoid running a 500 ton chiller year round or installing additional split systems for off season cooling for Data and Computer Rooms, the owner wishes that a recovery or "Free Cooling Type System" be installed. This will help obtain LEED credits as well as being a prudent fiscal decision for reducing utility charges. The recovery cooling system will be enabled when a demand for cooling is established, the outdoor conditions are favorable and the chillers are off.

3. The Primary and Secondary Chilled Water Pumps are variable speed with premium energy- efficient motors and shall operate on a Lead/Lag Operation.
4. The Condenser Pumps are variable speed with premium energy- efficient motors and operate on a Lead/Lag fashion.
5. The secondary chilled water pumps are enabled when the fan coil units call for coiling and the “Free Cooling” heat exchanger is energized.
6. The BAS is programmed for automatic changeover to the standby pump upon pump failure and similarly for cooling tower fan failure. Upon failure, the lag pump or cooling tower fan will start and the lead unit shall turn off.
7. The free cooling heat exchanger and associated chilled water pumps will be energized when the fan coils demand cooling, the outdoor air temperature conditions are right for free cooling and the chillers are off.
8. The Tower and each wing is served by (1) Energy Recovery Unit (ERU). The tower unit provides approximately 40,000 CFM supply air and exhaust air. The wing units provide approximately 20,000 CFM supply air and exhaust air. The units are located on the roof level of each building. The ERU‘S shall provide preheated outside air to the AHU’s. The units shall be controlled on a day/night mode by a time clock program.
9. Primary air is supplied by the VAV Air Handling Units serving the Tower and Wing Buildings via Fan Powered Boxes with hot water coils. The fan powered boxes are installed on the perimeters rooms. Larger rooms or zones i.e. Conference Rooms, Auditoriums dining rooms, etc. shall be equipped with space CO2 sensors which will override normal damper operation to maintain acceptable CO2 levels.
10. These units according to a user time schedule, Time Clock Program varies temperature setpoints based on an occupied / unoccupied modes. The BAS Network monitors and controls these units. In addition, Demand-Limiting at peak cooling conditions is used to conserve energy.

11. Primary air is provided by the VAV Air Handling Units serving The Tower and Wing Buildings to the VAV air terminals located in the interior areas with or without hot water coils, staged. Larger rooms or zones i.e. Conference Rooms, Auditoriums, Dining Rooms, etc. are equipped with space CO2 sensors to increase air flow to the space which will require reheat coils.
12. These units according to a user time schedule, Time Clock Program varies temperature setpoints based on an occupied / unoccupied modes. The BAS Network monitors and controls these units. In addition, Demand-Limiting at peak cooling conditions is used to conserve energy.
13. There are approximately 125 VAV Boxes in the Tower and 50 in each wing building. The boxes are pressure independent. They are programmed via the BAS and scheduled for Occupied and Unoccupied Modes to minimize energy usage.
14. Building Automation System: Optimizing energy consumption software is utilized while maintaining occupant comfort. The system automatically performs source optimization for all air handling units, chillers and boilers in response to the needs of other downstream pieces of equipment, by increasing or decreasing supply temperature setpoints, i.e. chilled water, discharge air, etc. using owner defined parameters. In addition to optimization, the STO capability provides for starting and stopping primary mechanical equipment based on zone occupancy and/or zone load conditions.
15. The Demand Limiting application is programmable. The system is capable of measuring electrical usage from multiple meters serving one building.
16. The system is capable of scheduling Occupied / Unoccupied reset schedules and scheduling operating hours on a weekly schedule while allowing for annual scheduling of dates. In addition, Day / Night Setback, Timed Local Override, Space Temperature Control are also provided.

Estimated Savings:

	Unit	Standard Equipment	Eaton Center's Installed Equipment	Percent Savings
PROJECT 1	**Cooling and Ventilation**			
Space Cooling	Energy kWh	2,636,759	939,270	64.00%
	Demand kW	1,094	482	56.00%
Heat Rejection	Energy kWh	830,589	258,741	69.00%
	Demand kW	266	170	36.00%
Fans Interior	Energy kWh	1,759,241	1,248,486	29.00%
	Demand kW	531	362	32.00%
Aggregate Savings	**Energy kWh**	**5,226,589**	**2,446,497**	**53.19%**
	Demand kW	**1,891**	**1,014**	**46.38%**

kWh Saved:	**2,780,092**
Available rebate:	$0.08
Total rebate:	$222,407.36

How the savings have been calculated:

1. As a part of the design process and for the LEED certification process, an Energy Simulation/Model was developed using Carrier Hourly Analysis Program (HAP v4.51).
2. The Energy Model compares the Eaton Center's design and performance with that of a typical, code-compliant office building of the same size and in the same location.

3. Please refer to Appendix Item 1 for the HAP report.

Eaton Center

1000 Eaton Blvd, Cleveland, OH

Nestled on the crest of a 53-acre site, Eaton Corporation's new global headquarters in the Cleveland suburb of Beachwood offers employees and visitors panoramic views of the surrounding woodland as well as downtown Cleveland and Lake Erie beyond. The headquarters design is formed by two crescent wings that arc around a central tower overlooking a pond. Eaton Center is home to nearly 1000 employees and operates Monday to Saturday 7AM to 6PM.

The state-of-the-art headquarters consolidates employees from three facilities into a single complex and will incorporate a wide range of amenities including a wellness center, conference and meeting facilities, an auditorium, cafeteria and walking trails. The headquarters design is open with floor-to-ceiling glass creating a daylight-filled work environment that features innovative, sustainable design strategies. The project underscores Eaton's commitment to sustainability leadership.

Eaton is a global technology leader in power management solutions that make electrical, hydraulic and mechanical power, operate more efficiently, effectively, safely and sustainably. Eaton solutions help customers reduce their energy consumption, improve the environment and protect lives. We're shrinking the carbon footprint of our customers' operations, as well as our own. We are making a positive contribution to combating climate change while delivering positive results for our shareholders and stakeholders alike.

Eaton cares about "doing business right" in meeting the needs of our global customers, employees and communities. How we get our results at Eaton is just as important as the results themselves. Sustainability is one of the central tenets of Eaton Center's design philosophy and operational strategy. Every effort has been made to optimize the use of all available resources while maximizing employee wellbeing, collaboration and productivity.

Eaton Center is designed and operated as a showcase for Eaton's commitment to sustainability and energy conservation.

Eaton Center is designed to consume 44% less energy to operate than a comparable, code-compliant office building. This efficiency has been achieved by a combination of methods, materials and technologies:

1. **Form and layout of the building:** The narrow curved form of the Eaton Center is ideal for maximizing the amount of daylight within. The Floor-to-ceiling high-efficiency curtain-wall system coupled with the light shelves and daylight harvesting system further promote the use of daylight within the interior while reducing the dependence of artificial lighting.
2. **Building Envelope:** Eaton Center's skin is a significant part of the overall sustainable design of the facility. The high efficiency curtain wall system allows for the highest light transmittance while minimizing solar heat gains. The white roof and additional insulation also help reduce heat gain.
3. **Lighting System:** all interior lights are controlled by a fully programmable building automation system that uses a combination of photo sensors for daylight harvesting, occupancy sensors and timers to ensure that all interior lighting operates at maximum efficiency. All employees have task lighting that is motion-sensor operated so they rely less on higher wattage ambient lighting and can better control their work environment. All exterior lights are also tied to the building automation system and are controlled by a combination photo sensors and timers.
4. **HVAC System:** The HVAC system is designed and operated to be a state-of-the-art, highly responsive and controllable system. The chiller plant consists of three high-efficiency chillers that are staged up and down in response to cooling loads. Other energy conserving features include heat recovery wheels, heat exchangers, demand control ventilation, and VFDs on nearly all motors. A photo-voltaic system on the parking garage can supply nearly 6% of Eaton Center's energy needs.

Eaton Center is currently pursing a Gold rating under the USGBC's LEED for New Construction rating system.

Project 2 – Lighting

Eaton Center's high efficiency lighting systems are designed and operated to be 60% more efficient than a typical office building. The enhanced efficiency is possible due to the following systems and technologies:

1. **Interior Lighting**
   a. **Light Fixtures and Lamps:** The majority of Eaton Center is equipped with high efficiency lighting fixtures and lamps such as:
      - High output T5 fluorescent lamps with electronic ballasts.
      - LED fixtures
      - Compact fluorescent lamps

      The light fixture schedule is provided as an attachment to the application.

   b. **Lighting controls:** All interior lights are controlled by a fully programmable building automation system that uses a combination of photo sensors for daylight harvesting, occupancy sensors and timers to ensure that all interior lighting operates at maximum efficiency. All employees have task lighting that is motion-sensor operated so they rely less on higher wattage ambient lighting and can better control their work environment.
      The electrical layouts are provided as an attachment to the application.

   c. **Daylight Harvesting:** The building's exterior lighting shelves direct daylight deeper into the interior of the building. All interior office spaces received optimal daylight using the Daylight Harvesting system in place. Motorized sunshades connected to daylight photo sensors, sense the amount of ambient light and open and close to provide the optimal lighting levels to users. If needed, additional lighting comes on automatically. Employees also have the option of using LED task lighting to augment the amount of light.
      The daylight harvesting system control diagram is provided as an attachment to the application.

2. **Exterior Lighting**

Exterior lighting consists of a combination of LED luminaires, T5 high-output fluorescent lamps and some metal halide fixtures. All exterior lighting is controlled by the building automation system. Photo sensors and time clocks ensure optimal lighting levels.

Estimated Savings:

	Unit	Standard Equipment	Eaton Center's Installed Equipment	Percent Savings
PROJECT 2	**Lighting**			
Interior Lighting	Energy kWh	2,483,568	1,019,160	59.00%
	Demand kW	686	458	33.00%
Exterior Lighting	Energy kWh	80,190	51,998	35.00%
	Demand kW	17	17	0.00%
Garage Lighting	Energy kWh	311,856	66,447	79.00%
	Demand kW	36	25	30.00%
Aggregate Savings	**Energy kWh**	**2,875,614**	**1,137,605**	**60.44%**
	Demand kW	**739**	**500**	**32.31%**

kWh Saved:	**1,738,009**
Available rebate:	$0.04
Total rebate:	$69,520.36

How the savings have been calculated:

1. As a part of the design process and for the LEED certification process, an Energy Simulation/Model was

developed using Carrier Hourly Analysis Program (HAP v4.51).

2. The Energy Model compares the Eaton Center's design and performance with that of a typical, code-compliant office building of the same size and in the same location.
3. Please refer to Exhibit 2 for the HAP report.

General Information

Simulation Program Name and Version ..... **Hourly Analysis Program v4.51**
Simulation Weather File Name ..... **Cleveland, Ohio (TRY)**

Building Designations

Proposed Building ..... **EATON World HQ**
Baseline - 0 degrees ..... **[B000] EATON World HQ**
Baseline - 90 degrees ..... **[B090] EATON World HQ**
Baseline - 180 degrees ..... **[B180] EATON World HQ**
Baseline - 270 degrees ..... **[B270] EATON World HQ**

Floor Areas and Window-to-Wall Ratios

	Proposed Design	Baseline
Total Conditioned Floor Area (ft²)	605,854	605,854
Total Floor Area (ft²)	605,854	605,854
Window to Wall Ratio	64 %	64 %
Gross Wall Area (ft²)	210,683	210,683
Vertical Window Area (ft²)	134,231	134,231

Advisory Messages

	Proposed Building	Baseline Building (0 deg. rotation)	Difference
Number of hours heating loads not met	2	10	-8
Number of hours cooling loads not met	2	3	-1

Energy Type Summary

Energy Type	Utility Rate Description	Units of Energy	Units of Demand
Electric	CCP	kWh	kW
Natural Gas	Dominion Gas	Therm	MBH

Energy Units:
1 kBTU = 1,000 BTU
1 kWh = 3.412 kBTU
1 Therm = 100.000 kBTU

Demand Units:
1 MBH = 1,000 BTU/h
1 kW = 3.412 MBH

Baseline Performance - Performance Rating Method Compliance

End Use	Process	Baseline Design Energy Type	Units of Annual Energy & Peak Demand	Baseline (0 deg rotation)	Baseline (90 deg rotation)	Baseline (180 deg rotation)	Baseline (270 deg rotation)	Baseline Design
Interior Lighting	No	Electric	Energy kWh	2,483,568	2,483,568	2,483,568	2,483,568	2,483,568
			Demand kW	686.4	686.4	686.4	686.4	686.4
Space Heating	No	Electric	Energy kWh	163	167	166	165	165
			Demand kW	0.1	0.1	0.1	0.1	0.1
Space Heating	No	Natural Gas	Energy Therm	136,574	137,404	140,249	141,068	138,824
			Demand MBH	9,933.3	10,024.8	10,024.8	10,011.4	9,998.6
Space Cooling	No	Electric	Energy kWh	2,626,615	2,632,732	2,638,418	2,649,273	2,636,759
			Demand kW	1,087.5	1,095.1	1,094.5	1,099.3	1,094.1
Pumps	No	Electric	Energy kWh	1,182,446	1,181,330	1,182,580	1,182,339	1,182,174
			Demand kW	169.6	169.6	169.6	169.6	169.6
Heat Rejection	No	Electric	Energy kWh	825,252	830,348	830,362	836,393	830,589
			Demand kW	264.7	266.5	265.9	267.6	266.2
Fans - Interior	No	Electric	Energy kWh	1,751,953	1,754,313	1,765,014	1,765,686	1,759,241

			Demand kW	525.7	533.5	532.8	534.8	531.7
Receptacle Equipment	Yes	Electric	Energy kWh	4,225,563	4,225,563	4,225,563	4,225,563	4,225,563
			Demand kW	1,039.8	1,039.8	1,039.8	1,039.8	1,039.8
Exterior Lighting	No	Electric	Energy kWh	80,190	80,190	80,190	80,190	80,190
			Demand kW	16.9	16.9	16.9	16.9	16.9
Garage Lighting	No	Electric	Energy kWh	311,856	311,856	311,856	311,856	311,856
			Demand kW	35.6	35.6	35.6	35.6	35.6
Baseline Energy Totals	Total Annual Energy Use kBTU			59,677,153	59,802,638	60,147,339	60,288,340	59,978,862
	Annual Process Energy kBTU							14,417,621
	Process Energy Modeling Compliance							Y

(1) This form determines compliance using cost calculations from Section 1.9. Process Energy Costs should be modeled to accurately reflect the proposed building. Process Energy must be the same in the baseline and proposed cases, unless an exceptional calculation is used. Process energy costs must be at least 25% of the total baseline energy costs. Any exceptions must be supported by a narrative and/or other supporting doucmentation.
(2) In this project Process Energy is 25% of total baseline energy cost.

Baseline Energy Costs

Energy Type	Baseline Cost (0 deg rotation) ($)	Baseline Cost (90 deg rotation) ($)	Baseline Cost (180 deg rotation) ($)	Baseline Cost (270 deg rotation) ($)	Baseline Building Performance ($)
Electric	676,548	677,940	678,443	679,607	678,134
Natural Gas	158,749	159,713	163,020	163,972	161,363
Total Baseline Costs	**835,296**	**837,653**	**841,462**	**843,579**	**839,498**

Performance Rating Table - Performance Rating Method Compliance

End Use	Process ?	Baseline Building Units	Baseline Building Results	Proposed Design Energy Type	Proposed Design Units	Proposed Building Results	Percent Savings
Interior Lighting	No	Energy kWh	2,483,568	Electric	Energy kWh	1,019,160	59 %
		Demand kW	686.4		Demand kW	458.3	33 %
Space Heating	No	Energy kWh	165	Electric	Energy kWh	42	74 %
		Demand kW	0.1		Demand kW	0.0	77 %
Space Heating	No	Energy Therm	138,824	Natural Gas	Energy Therm	72,517	48 %
		Demand MBH	9,998.6		Demand MBH	4,548.1	55 %
Space Cooling	No	Energy kWh	2,636,759	Electric	Energy kWh	939,270	64 %
		Demand kW	1,094.1		Demand kW	482.2	56 %
Pumps	No	Energy kWh	1,182,174	Electric	Energy kWh	1,947,631	-65 %
		Demand kW	169.6		Demand kW	239.2	-41 %
Heat Rejection	No	Energy kWh	830,589	Electric	Energy kWh	258,741	69 %
		Demand kW	266.2		Demand kW	170.2	36 %
Fans - Interior	No	Energy kWh	1,759,241	Electric	Energy kWh	1,248,486	29 %
		Demand kW	531.7		Demand kW	362.2	32 %
Receptacle Equipment	Yes	Energy kWh	4,225,563	Electric	Energy kWh	2,122,444	50 %
		Demand kW	1,039.8		Demand kW	736.4	29 %
Exterior Lighting	No	Energy kWh	80,190	Electric	Energy kWh	51,998	35 %
		Demand kW	16.9		Demand kW	16.9	0 %
Garage Lighting	No	Energy kWh	311,856	Electric	Energy kWh	66,447	79 %
		Demand kW	35.6		Demand kW	24.9	30 %
Energy Totals	Baseline Total Energy Use (kBTU)		59,978,862	Proposed Total Energy Use (kBTU)		33,367,880	44 %
	Baseline Annual Process Energy (kBTU)		14,417,621	Proposed Annual Process Energy (kBTU)		7,241,777	50 %

Energy Cost and Consumption by Energy Type - Performance Rating Method Compliance

	Proposed Design		Baseline Design	
Energy Type	**Energy Use**	**Cost ($)**	**Energy Use**	**Cost ($)**
Electric	7,654,218 kWh	404,923	13,510,104 kWh	678,134
Natural Gas	72,517 Therm	84,291	138,824 Therm	161,363
Subtotal (Model Outputs)	**33,367,880 kBTU**	**489,214**	**59,978,862 kBTU**	**839,498**
	Energy Generated	**Renewable Energy Cost Savings ($)**		
Total On Site Renewable Energy				
	Energy Savings	**Cost Savings ($)**		
Exceptional Calculation Totals				
	Energy Use	**Cost ($)**		
Net Proposed Design Total	**33,367,880 kBTU**	**489,214**		
	Percent Savings		**Energy Use Intensity**	
	Energy	**Cost**	**Proposed Design (kBTU/ft²)**	**Baseline Design (kBTU/ft²)**
Summary Data	**44.4 %**	**41.7 %**	**55.08**	**99.00**

LEED 2009 EA Credit 1 Points Reference Table

New Construction % Cost Savings	Existing Building Renovations % Cost Savings	LEED 2009 Points Awarded
12%	8%	1 pt
14%	10%	2 pt
16%	12%	3 pts
18%	14%	4 pts
20%	16%	5 pts
22%	18%	6 pts
24%	20%	7 pts
26%	22%	8 pts
28%	24%	9 pts
30%	26%	10 pts
32%	28%	11 pts
34%	30%	12 pts
36%	32%	13 pts
38%	34%	14 pts
40%	36%	**15 pts**
42%	38%	16 pts
44%	**40%**	**17 pts**
46%	42%	18 pts
48%	44%	19 pts

Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between The Cleveland Electric Illuminating Company, its successors and assigns (hereinafter called the "Company") and Eaton Corporation, Taxpayer ID No. 34-0196300 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 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 kW reductions resulting from said projects for purposes of complying with the Statute. By committing the Customer Energy Project(s), Customer has the ability to either:

i. Take ownership of the Energy Efficiency resource credits resulting from their Customer Energy Project(s) and may be able to bid - or sell - the Energy Efficiency resource credits into the market operated by the grid operator, PJM Interconnection, Inc. (PJM), provided several prerequisites are met; or

ii. Allow the Company to take ownership of the Energy Efficiency resource credits associated with their Customer Energy Project(s). The Company 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.

Please indicate your preference as to the treatment of your Energy Efficiency resource credits:

☒ Customer would like to retain ownership of its Energy Efficiency resource credits.

☐ Customer assigns ownership of its Energy Efficiency resource credits to Company for purposes of bidding these credits into PJM.

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: vmnofziger@firstenergycorp.com

If to the Customer:

Eaton Corporation
1000 Eaton Blvd.
Cleveland, OH 44122
Attn:Richard Gorze
Telephone:440-523-4054
Fax:440-523-4054
Email:RichPGorze@eaton.com

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.

The Cleveland Electric Illuminating Company_
(Company)

By: _____

Title: **V.P. Of Energy Efficiency**

Date: 9-15-14

Eaton Corporation_
(Customer)

By: _____ RICHARD GONZE

Title: GLOBAL ENERGY MGR-SCM

Date: MAY 19, 2014

Affidavit of Eaton Corporation – Exhibit _A _

STATE OF OHIO)
) SS:
COUNTY OF Cuyahoga)

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

1. I am the Global Energy Manager of Eaton Corporation ("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 Cleveland Electric Illuminating 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.

Sworn to before me and subscribed in my presence this 19th day of May, 2014.

Notary

NOTARIAL SEAL STATE OF OHIO

DEVIN GIVENS
NOTARY PUBLIC - OHIO
MY COMMISSION EXPIRES
AUGUST 22, 2018

Summary: Application to Commit Energy Efficiency/Peak Demand Reduction Programs of The Cleveland Electric Illuminating Company and Eaton Corp. electronically filed by Ms. Jennifer M. Sybyl on behalf of The Cleveland Electric Illuminating Company and Eaton Corp.