



Public Utilities Commission

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

Case No.:  -EL-EEC

Mercantile Customer: City of Tallmadge

Electric Utility: Ohio Edison Company

Program Title or
Description: Project 1 - Booster Station Motor Upgrades

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: City of Tallmadge - Booster Station

Principal address: 46 North Avenue Tallmadge, Ohio 44278

Address of facility for which this energy efficiency program applies: 29 Northeast Avenue Tallmadge, Ohio 44278

Name and telephone number for responses to questions: (330) 633-5639

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

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

Section 2: Application Information

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

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

B) The electric utility is: Ohio Edison 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 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: 194,588 kWh

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

Annual savings: _____ kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

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

Annual savings: _____ kWh

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

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

Section 4: Demand Reduction/Demand Response Programs

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

- ☒ Coincident peak-demand savings from the customer's energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction (check the one that applies):
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) On what date did the customer initiate its demand reduction program?

6/30/2010 - See Exhibit 2A

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

See Exhibit 2A - 5 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 \$3,192.00. (Rebate shall not exceed 50% project cost. Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)

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

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for _____ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

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

OR

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

Section 6: Cost Effectiveness

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

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____(Continue to Subsection 1, then skip Subsection 2)
- ☒ Utility Cost Test (UCT) . The calculated UCT value is: **See Exhibit 3** (Skip to Subsection 2.)

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

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure costs were _____.

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

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

Our avoided supply costs were **See Exhibit 3**

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

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

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.
- A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:
 - 1) any confidentiality requirements associated with the agreement;
 - 2) a description of any consequences of noncompliance with the terms of the commitment;
 - 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
 - 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
 - 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.
- A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.



Public Utilities Commission

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

Case No.:  -EL-EEC

State of Ohio :

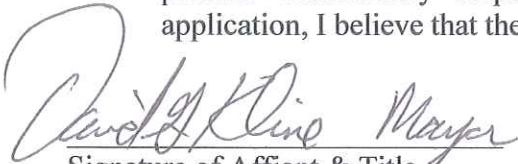
David G. Kline , Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

City of Tallmadge

[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 of Affiant & Title

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

Karen Sue Liska
Signature of official administering oath

Karen Sue Liska Notary
Print Name and Title

My commission expires on _____



KAREN SUE LISKA, Notary Public
Residence - Summit County
Statewide Jurisdiction, Ohio
My Commission Expires Oct. 20, 2014

Customer Legal Entity Name: City of Tallmadge

Site Address: City of Tallmadge NE Ave Booster Station

Principal Address: 29 Northeast Ave

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	Booster Station Motor Upgrades	4 new high efficiency motors were installed along with VFD controls at the Tallmadge Northeast Avenue Booster Pump Station. The pump station is in operation 24 hours per day, 7 days per week. 20 HP motors with VFDs were installed on 2 high-pressure water pumps to provide water to residents. These pumps typically operate from 5:00A.M. - 11:00P.M. 7 days per week. 2 - 75 hp low-pressure pumps were fitted with high efficiency motors. One 75hp pump was fitted with a VFD to control the water flow and pressure based on the demand for water. This pump typically operates from 11:00P.M. - 5:00A.M. The other 75hp pump motor is controlled by a soft-start motor controller, which is activated during times of high demand for water. This pump operates for approximately 500 hours per year.	See the attached Motor and VFD energy savings calculator 'COT_Motor_VFD Energy Savings Calcs.pdf'.	3 to 4 years. The decision to install high efficiency motors and VFD controls was made to reduce energy use, provide better pressure control at point of use, and increase reliability.	N/A

Exhibit 2

Customer Legal Entity Name: City of Tallmadge

Site Address: City of Tallmadge NE Ave Booster Station

Principal Address: 29 Northeast Ave

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C) <i>Note 1</i>
2011	232,656	232,656	427,244 98,627
Average	232,656	232,656	262,935

Project Number	Project Name	In-Service Date	Project Cost \$	50% of Project Cost \$	KWh Saved/Year (D) counting towards utility compliance	KWh Saved/Year (E) eligible for incentive	Utility Peak Demand Reduction Contribution, KW (F)	Prescriptive Rebate Amount (G) \$	Eligible Rebate Amount (H) \$ <i>Note 2</i>	Commitment Payment \$
1	Booster Station Motor Upgrades	06/30/2010	\$63,000	\$31,500	194,588	194,588	5	\$4,256	\$3,192	
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-			
					-	-	-		</	

Docket No. 13-0306

Site: 29 Northeast Ave

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	195	\$ 308	\$ 59,988	\$ 4,050	\$3,192	\$1,946	\$ 9,188	6.5
Total	195	\$ 308	59,988	4,050	\$3,192	\$1,946	9,188	6.5

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)

City of Tallmadge ~ City of Tallmadge NE Ave Booster Station
Docket No. 13-0306

Site: 29 Northeast Ave

MOTOR AND VFD FORM

Applicant Name:	City of Tallmadge
Facility Name:	Tallmadge NE Avenue Booster Station
Facility Type:	Retail
Utility:	First Energy (Ohio)
Installation Date:	10/10/2010

Project Name:	Booster Station HE Motors
Survey completed by (name):	Burgess & Niple
	Program Year 4

Pre-Installation Data (Equipment Survey of Existing Motors)

							Nameplate Data						Pre-Installation Energy Consumption								
Line Item	Unique Motor I.D.(s)	Motor Function	Number of Identical Units	Load Factor (LF)	Motor Configuration	Coincidence Factor (CF)	Manufacturer	Model Number	Motor Horsepower	Synchronous Speed (RPM)	Enclosure Type	Nominal Efficiency	VFD			Total per Unit				Total all Units	
													VFD on Motor	ESF	DSF	Full Load kW	Peak kW	Operating Hours	Annual kWh	Peak kW	Annual kWh
ex.	CWP-1	CWP	2	0.75	Single	0.74	Acme	10000	50	1,800	ODP	93.0%	No	1.000	1.000	30.1	22.3	1,610	48,430	44.5	96,860
1	Cut Sheet 1	CWP	2	0.75	Single	0.74	WEG	W256JM	20	1,800	TEFC	89.5%	No	1.000	1.000	12.5	9.3	6,570	82,143	18.5	164,287
2	Cut Sheet 2	CWP	1	0.75	Single	0.74	WEG	365JM	75	1,800	TEFC	93.1%	No	1.000	1.000	45.1	33.4	500	22,536	33.4	22,536
3	Cut Sheet 2	CWP	1	0.75	Single	0.74	WEG	365JM	75	1,800	TEFC	93.1%	No	1.000	1.000	45.1	33.4	2,190	98,709	33.4	98,709
4																					
5																					
6																					
7																					
8																					
9																					
10																					
																				85.2	285,532

Post-Installation Data (Equipment Survey of Proposed Motors)

							Nameplate Data						Post-Installation Energy Consumption								
Line Item	Unique Motor I.D.(s)	Motor Function	Number of Identical Units	Load Factor (LF)	Motor Configuration	Coincidence Factor (CF)	Manufacturer	Model Number	Motor Horsepower	Synchronous Speed (RPM)	Enclosure Type	Nominal Efficiency	VFD			Total per Unit				Total all Units	
													VFD on Motor	ESF	DSF	Full Load kW	Peak kW	Operating Hours	Annual kWh	Peak kW	Annual kWh
ex.	CWP-1	CWP	2	0.75	Single	0.74	Acme	20000	50	1,800	ODP	94.5%	Yes	1.000	1.000	29.6	21.9	1,610	47,660	43.8	95,322
1	Cut Sheet 3	CWP	2	0.75	Single	0.74	Baldor	ECP2334T	20	1,800	TEFC	93.0%	Yes	0.271	0.869	12.0	7.7	6,570	21,423	15.5	42,846
2	Cut Sheet 4	CWP	1	0.75	Single	0.74	Baldor	CEM4316T	75	1,800	TEFC	95.4%	No	1.000	1.000	44.0	32.5	500	21,993	32.5	21,993
3	Cut Sheet 5	CWP	1	0.75	Single	0.74	Baldor	CEM4316T	75	1,800	TEFC	95.4%	Yes	0.271	0.869	44.0	32.5	2,190	26,105	32.5	26,105
4																					
5																					
6																					
7																					
8																					
9																					
10																					
																				80.6	90,944

Savings Data

Total Peak kW Reduction	4.6
Total Annual kWh Savings	194,588



Ohio Edison • The Illuminating Company • Toledo Edison

Project Name:	
Site Name:	
Completed by (Name):	
Date completed:	

Motor Rebate Calculation Form

Motor ID, Location, and Operation Data				Old Motor Nameplate Data								New Motor Nameplate Data								Total Motor Incentive¹ \$
Unique Motor ID(s)	Number of Identical Units	Motor Location	Annual Hours of Op²	Loading (Constant, or if variable, indicate control type)	Load Factor (LF)³	Enclosure type: TEFC or ODP	Mfr.	Model Number	Motor HP	Nominal Efficiency	Speed (RPM)	Loading (Constant, or if variable, indicate control type)	Load Factor (LF)³	Enclosure type: TEFC or ODP	Mfr.	Model Number	Motor HP	Nominal Efficiency	Speed (RPM)	
PN - 1/2	2	Ctrl Rm.	6570	Variable	0.8	TEFC	WEG	W256JM	20	88.50%	1800	Variable	0.8	TEFC	Baldor	ECP2334T	20	93.00%	1800	\$226
PN - 3	1	Ctrl Rm.	500	Constant	0.8	TEFC	WEG	365JM	75	93.00%	1800	Constant	0.8	TEFC	Baldor	CEM4316T	75	95.40%	1800	\$290
PN - 4	1	Ctrl Rm.	2190	Variable	0.8	TEFC	WEG	365JM	75	93.00%	1800	Variable	0.8	TEFC	Baldor	CEM4316T	75	95.40%	1800	\$290
Incentive (through 10/11/2011)																				\$806

Motor IDs may be specified by HVAC application type and number. Application types eligible for this incentive include:

- Chilled Water Pump (CHWP),
- Heating Hot Water Pump (HHWP),
- HVAC Fans (HVACF),
- Cooling Tower Fan (CTF), and
- Condensing Water Pump (CWP).

If the HVAC application is not listed above, please describe the application on a separate sheet and include it with your application package.

(1) Motor incentives are listed in Table 2 - Incentive levels per motor located on Motor Incentive Table tab

(2) For VAV fan motors, enter 2790 annual hours of operation. For HVAC pump motors, enter 5520 annual hours of operation. For all other motor usage, please estimate your annual hours of operation and attach an explanation of how you determined this value.

(3) For all motor applications, use the Load Factor (LF) default value of 0.80, unless data is available to support the use of a motor-specific LF other than 0.80. Please attach an explanation, including your analysis and/or data used, to support motor-specific LF value.



Ohio Edison • The Illuminating Company • Toledo Edison

Table 1 - Minimum Motor Efficiency Requirements (NEMA Premium® Efficiencies)

Open Drip Proof (ODP)				Totally Enclosed Fan-Cooled (TEFC)			
Size HP	# of Poles			Size HP	# of Poles		
	6	4	2		6	4	2
	Speed (RPM)				Speed (RPM)		
	1200	1800	3600		1200	1800	3600
1	82.50%	85.50%	77.00%	1	82.50%	85.50%	77.00%
1.5	96.50%	86.50%	84.00%	1.5	87.50%	86.50%	84.00%
2	87.50%	86.50%	85.50%	2	88.50%	86.50%	85.50%
3	88.50%	89.50%	85.50%	3	89.50%	89.50%	86.50%
5	89.50%	89.50%	86.50%	5	89.50%	89.50%	88.50%
7.5	90.20%	91.00%	88.50%	7.5	91.00%	91.70%	89.50%
10	91.70%	91.70%	89.50%	10	91.00%	91.70%	90.20%
15	91.70%	93.00%	90.20%	15	91.70%	92.40%	91.00%
20	92.40%	93.00%	91.00%	20	91.70%	93.00%	91.00%
25	93.00%	93.60%	91.70%	25	93.00%	93.60%	91.70%
30	93.60%	94.10%	91.70%	30	93.00%	93.60%	91.70%
40	94.10%	94.10%	92.40%	40	94.10%	94.10%	92.40%
50	94.10%	94.50%	93.00%	50	94.10%	94.50%	93.00%
60	94.50%	95.00%	93.60%	60	94.50%	95.00%	93.60%
75	94.50%	95.00%	93.60%	75	94.50%	95.40%	93.60%
100	95.00%	95.40%	93.60%	100	95.00%	95.40%	94.10%
125	95.00%	95.40%	94.10%	125	95.00%	95.40%	95.00%
150	95.40%	95.80%	94.10%	150	95.80%	95.80%	95.00%
200	95.40%	95.80%	95.00%	200	95.80%	96.20%	95.40%

Table 2 - Incentive Levels Per Motor

Open Drip Proof (ODP)				Totally Enclosed Fan-Cooled (TEFC)			
Size HP	# of Poles			Size HP	# of Poles		
	6	4	2		6	4	2
	Speed (RPM)				Speed (RPM)		
	1200	1800	3600		1200	1800	3600
1	\$20	\$20	\$20	1	\$20	\$20	\$20
1.5	\$25	\$25	\$25	1.5	\$25	\$25	\$25
2	\$54	\$54	\$54	2	\$54	\$54	\$54
3	\$54	\$54	\$54	3	\$54	\$54	\$54
5	\$54	\$54	\$54	5	\$54	\$54	\$54
7.5	\$70	\$70	\$70	7.5	\$70	\$70	\$70
10	\$70	\$70	\$70	10	\$70	\$70	\$70
15	\$113	\$113	\$113	15	\$113	\$113	\$113
20	\$113	\$113	\$113	20	\$113	\$113	\$113
25	\$140	\$140	\$140	25	\$140	\$140	\$140
30	\$170	\$170	\$170	30	\$170	\$170	\$170
40	\$200	\$200	\$200	40	\$200	\$200	\$200
50	\$230	\$230	\$230	50	\$230	\$230	\$230
60	\$260	\$260	\$260	60	\$260	\$260	\$260
75	\$290	\$290	\$290	75	\$290	\$290	\$290
100	\$320	\$320	\$320	100	\$320	\$320	\$320
125	\$350	\$350	\$350	125	\$350	\$350	\$350
150	\$380	\$380	\$380	150	\$380	\$380	\$380
200	\$400	\$400	\$400	200	\$400	\$400	\$400



Ohio Edison • The Illuminating Company • Toledo Edison

Project Name:	Booster Station Motor Upgrades
Site Name:	Tallmadge NE Avenue Booster Station
Completed by (Name):	Workman Industrial Services, Inc.
Date completed:	6/30/2010

Variable Frequency Drive Rebate Form

VFD and Controlled Motor Nameplate DATA											Total Motor Incentive ¹ \$
Motor Application	VFD Manufacturer	VFD Model Number	Unique Motor ID(s)	Motor Location	Enclosure type: TEFC or ODP	Annual Hours of Operation ²	Load Factor (LF) ³	Motor Model Number	Motor HP	Motor Nominal Efficiency	
Water Pump	Cutler Hammer	SVX-9000	PN - 1	Control Room	TEFC	6570	0.8	ECP2334T	20	93.00%	600
Water Pump	Cutler Hammer	SVX-9000	PN - 2	Control Room	TEFC	6570	0.8	ECP2334T	20	93.00%	600
Water Pump	Cutler Hammer	SVX-9000	PN - 4	Control Room	TEFC	2190	0.8	CEM4316T	75	95.40%	2,250
Incentive through 10/11/2011 @ \$30/hp											3,450

(1) VFD incentives are calculated at a flat rate of \$30 per horsepower controlled, up to a maximum of 500 hp controlled per VFD.

When a single VFD is used to control two motors in a lead/lag (standby, redundant) configuration, use only the horsepower rating of one motor to figure controlled horsepower. For instance, if a single VFD controls two 30hp motors with only one operating at a time, the incentive calculation should be based on 30 hp: 30hp x \$30/hp = \$900.

(2) For VAV fan motors, enter 2790 annual hours of operation. For HVAC pump motors, enter 5520 annual hours of operation. For all other motor usage, please estimate your annual hours of operation and attach an explanation of how you determined this value.

(3) For all motor and VFD applications, use the Load Factor (LF) default value of 0.80, unless data is available to support the use of a motor-specific LF other than 0.80. Please attach an explanation, including your analysis and/or data used, to support motor-specific LF value.



No.:

Date: 05-SEP-2012

DATA SHEET

Three-phase induction motor - Squirrel cage rotor

Customer :
Product line : Close Coupled Pump : Three-Phase - "JM" Type - TEFC - Standard Efficiency

Frame : W256JM
Output : 20 HP
Frequency : 60 Hz
Poles : 4
Full load speed : 1755
Slip : 2.50 %
Voltage : 208-230/460 V
Rated current : 54.2-49.0/24.5 A
Locked rotor current : 417/208 A
Locked rotor current (I_L/I_N) : 8.5
No-load current : 22.0/11.0 A
Full load torque : 59.0 lb.ft
Locked rotor torque : 250 %
Breakdown torque : 300 %
Design : A
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 4 s (hot)
Service factor : 1.15
Duty cycle : S1
Ambient temperature : -20°C - +40°C
Altitude : 1000
Degree of Protection : IP55
Approximate weight : 245 lb
Moment of inertia : 1.7477 sq.ft.lb
Noise level : 61 dB(A)

	D.E.	N.D.E.
Bearings	6309 C3	6209 Z-C3
Regreasing interval	20000 h	20000 h
Grease amount	13 g	9 g

Load	Power factor	Efficiency (%)
100%	0.86	89.5
75%	0.81	88.5
50%	0.68	85.5

Notes:

Performed by

Checked



No.:

Date: 05-SEP-2012

DATA SHEET

Three-phase induction motor - Squirrel cage rotor

Customer :
Product line : Close Coupled Pump : Three-Phase - "JM" Type - TEFC - Standard Efficiency

Frame : 365JM
Output : 75 HP
Frequency : 60 Hz
Poles : 4
Full load speed : 1775
Slip : 1.39 %
Voltage : 208-230/460 V
Rated current : 186-168/84.2 A
Locked rotor current : 1250/623 A
Locked rotor current (I_L/I_N) : 7.4
No-load current : 51.7/25.8 A
Full load torque : 219 lb.ft
Locked rotor torque : 260 %
Breakdown torque : 300 %
Design : A
Insulation class : F
Temperature rise : 80 K
Locked rotor time : 15 s (hot)
Service factor : 1.15
Duty cycle : S1
Ambient temperature : -20°C - +40°C
Altitude : 1000
Degree of Protection : IP55
Approximate weight : 915 lb
Moment of inertia : 18.269 sq.ft.lb
Noise level : 75 dB(A)

	D.E.	N.D.E.
Bearings	6314 C3	6314 C3
Regreasing interval	9789 h	9789 h
Grease amount	27 g	27 g

Load	Power factor	Efficiency (%)
100%	0.88	93.1
75%	0.84	93.0
50%	0.75	92.5

Notes:

Performed by

Checked



Product Quick Search

ECP2334T


[WHERE TO BUY](#) | [CONTACT US](#) | [SITE MAP](#)

HOME

PRODUCTS

SUPPORT

NEWS/EVENTS

ABOUT BALDOR

General Information

■ [Overview](#)■ [Specifications](#)■ [Performance Data](#)■ [Parts List](#)■ [Drawings](#)

More Information

■ [Where To Buy](#)■ [Baldor Sales Offices](#)◀ [Return to List](#)
[AC Motors](#) | [Premium Efficient](#) | [Three Phase](#) | [20 HP](#) | [1400-1800 RPM](#) | [TEFC Encl](#) |
Specifications: ECP2334T

SPEC. NUMBER:	09J371Y583G1
CATALOG NUMBER:	ECP2334T
FL AMPS:	48/24
208V AMPS:	51
BEARING-DRIVE-END:	6309
BEARING-OPP-DRIVE-END:	6309
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	93
ENCLOSURE:	TEFC
FRAME:	256T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	H
SPEED [rpm]:	1765
OUTPUT [hp]:	20
PHASE:	3
POWER-FACTOR:	84
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	230/460

* For certified information, contact your local [Baldor office](#).

[Home](#) | [Products](#) | [Support](#) | [News/Events](#) | [About Baldor](#) | [RSS](#) | [YouTube](#)
[California Transparency in Supply Chains Act of 2010 Disclosures](#) | [Terms of Use](#) | [Privacy Policy](#)

Copyright © 2001-2012 Baldor Electric Company. All rights reserved.


BALDOR
A MEMBER OF THE ABB GROUP

Product Quick Search
CEM4316T

Go

WHERE TO BUY | CONTACT US | SITE MAP

HOME | PRODUCTS | SUPPORT | NEWS/EVENTS | ABOUT BALDOR

General Information

- Overview
- Specifications**
- Performance Data
- Parts List
- Drawings

More Information

- Where To Buy
- Baldor Sales Offices

Return to List

[AC Motors](#) | [Premium Efficient](#) | [Three Phase](#) | [75 HP](#) | [1400-1800 RPM](#) | [TEFC Encl](#) |

Specifications: CEM4316T

AG-BLANK-LINE-1B:	--
AG-BLANK-LINE-2A:	SUIT FOR 208V AT 186 AMPS
AG-BLANK-LINE-2B:	--
AMBIENT-TEMPERATURE:	40
FL AMPS:	169/84.9
BRG-DE-AFBMA:	65BC03J30X
BRG-ODE-AFBMA:	65BC03J30X
DESIGN CODE:	B
DUTY:	CONT
FL EFFICIENCY:	95.4
ENCLOSURE:	TEFC
CATALOG NUMBER:	CEM4316T
SPEC. NUMBER:	A36-1117-1816
FRAME:	365TC
HERTZ:	60
INSULATION CLASS:	F
KVA-CODE:	G
SPEED [rpm]:	1780
MOTOR-WEIGHT:	--
OUTPUT [hp]:	75
PHASE:	3
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
TYPE:	P
VOLTAGE:	230/460
AG-BLANK-LINE-1A:	--

* For certified information, contact your local [Baldor office](#).

Home | Products | Support | News/Events | About Baldor | RSS  | YouTube 

California Transparency in Supply Chains Act of 2010 Disclosures | Terms of Use | Privacy Policy

Copyright © 2001-2012 Baldor Electric Company. All rights reserved.


BALDOR
A MEMBER OF THE ABB GROUP

Product Quick Search
CEM4316T

Go

WHERE TO BUY | CONTACT US | SITE MAP

HOME | PRODUCTS | SUPPORT | NEWS/EVENTS | ABOUT BALDOR

General Information

- Overview
- Specifications**
- Performance Data
- Parts List
- Drawings

More Information

- Where To Buy
- Baldor Sales Offices

Return to List

[AC Motors](#) | [Premium Efficient](#) | [Three Phase](#) | [75 HP](#) | [1400-1800 RPM](#) | [TEFC Encl](#) |

Specifications: CEM4316T

AG-BLANK-LINE-1B:	--
AG-BLANK-LINE-2A:	SUIT FOR 208V AT 186 AMPS
AG-BLANK-LINE-2B:	--
AMBIENT-TEMPERATURE:	40
FL AMPS:	169/84.9
BRG-DE-AFBMA:	65BC03J30X
BRG-ODE-AFBMA:	65BC03J30X
DESIGN CODE:	B
DUTY:	CONT
FL EFFICIENCY:	95.4
ENCLOSURE:	TEFC
CATALOG NUMBER:	CEM4316T
SPEC. NUMBER:	A36-1117-1816
FRAME:	365TC
HERTZ:	60
INSULATION CLASS:	F
KVA-CODE:	G
SPEED [rpm]:	1780
MOTOR-WEIGHT:	--
OUTPUT [hp]:	75
PHASE:	3
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
TYPE:	P
VOLTAGE:	230/460
AG-BLANK-LINE-1A:	--

* For certified information, contact your local [Baldor office](#).

Home | Products | Support | News/Events | About Baldor | RSS  | YouTube 

California Transparency in Supply Chains Act of 2010 Disclosures | Terms of Use | Privacy Policy

Copyright © 2001-2012 Baldor Electric Company. All rights reserved.

SVX9000 Adjustable Frequency Drives

Modular,
Configurable,
Compact



Powering Business Worldwide

Multiple communication protocols allow connectivity to any existing automation system

- Modbus TCP
- EtherNet IP
- Modbus®
- PROFIBUS DP
- LonWorks
- CAN
- DeviceNet™

Seven built-in applications

Use for material handling, extruders, mixers, pumps, fans, cranes and more.

- Basic
- Standard
- Local/remote control
- Multi-step speed control
- PID control
- Multi-purpose control
- Pump and fan control with auto-changeover

Power module

- 3/4 hp to 2000 hp
- 208/230V, 480V, 575/690V
- Semiconductor technology
- Connections via multi-pole connector
- Remote mount with a fiber optic cable
- 208/230/480 Vac frame sizes 4–6 equipped with a built-in brake chopper

Power unit options:

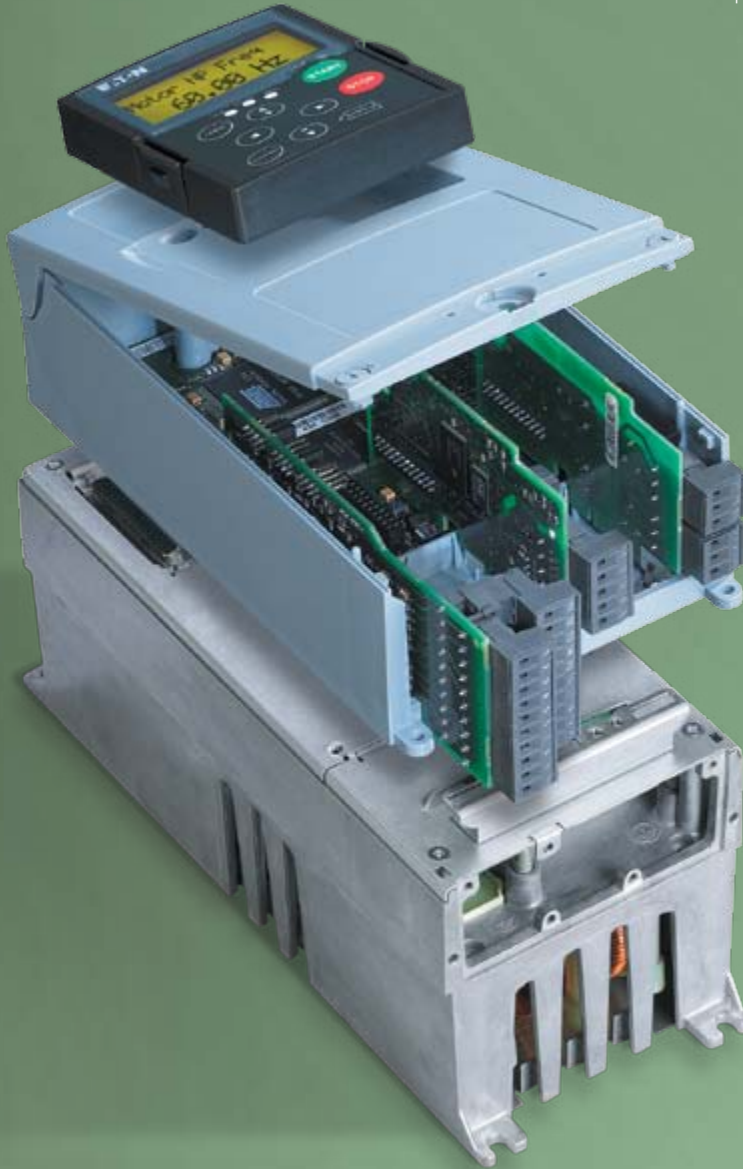
- Input and output filters
- Brake resistors
- NEMA Type 1 (IP21)
- NEMA Type 12 (IP54)
- Open chassis frame 10 and larger

Power supplies

- +10 Vdc reference
- +24 Vdc auxiliary
- Encoder (+15 Vdc/+24 Vdc)

SVX9000 enclosures

- Standard NEMA Type 1 (IP21)
- Sealed NEMA Type 12 (IP54)(Metal cover, internal fan, conduit plate)



Modular, configurable and compact.



Eaton's SVX9000 adjustable frequency drives are the compact, modular solution to variable speed applications. They enable a broad range of new application capabilities. A complete selection of option cards allows you to configure the drive to meet any requirement. With its wide voltage range, high overload ability, and user-friendly alphanumeric keypad, SVX9000 drives are the smart decision for every user.

Modular design: convenient and cost effective.

Just three screws link the control module to the power module. What's more, control units are interchangeable within frame sizes while software, control panels, I/O and communication cards are common throughout the line. Separating the power and control units provides installation advantages and reduced spare parts requirements. For convenience, the SVX9000 is field convertible from Type 1 to Type 12 (frames 4–6). Its reduced size equates to less panel space used and easy retrofits.

Quick start-up wizard.

Even when the drive is unpowered, the SVX9000 can be programmed and tested. The control logic module can be powered from an external +24 Vdc source so you're ready to train, test and go live whenever needed. Whether you choose local or remote operations via the keypad, simple copy/paste functions streamline the process.

Communication flexibility.

The SVX9000 may be configured with several different communication protocols, making it easy to communicate with all commonly used control systems. The control unit's powerful microprocessor can be used for local control tasks, thereby freeing resources of the control system for other control tasks. 9000XEngine, our versatile block-programming tool, eliminates the need for a PLC and significantly simplifies the control system.

Optional I/O: configuration simplified.

Up to five plug-and-play I/O cards, each with unique input and output configurations, can be installed. Multiple analog and digital input and output cards and additional application-specific hardware are available.

Product Selection

230V SVX9000 Drives

SVX9000 Open Drives



208–240V, NEMA Type 1/IP21 Drives

Frame Size	Delivery Code	hp (I _H)	Current (I _H)	hp (I _L)	Current (I _L)	Catalog Number
FR4	W	3/4	3.7	1	4.8	SVXF07A1-2A1B1
		1	4.8	1-1/2	6.6	SVX001A1-2A1B1
		1-1/2	6.6	2	7.8	SVXF15A1-2A1B1
		2	7.8	3	11	SVX002A1-2A1B1
		3	11	—	12.5	SVX003A1-2A1B1
FR5	W	—	12.5	5	17.5	SVX004A1-2A1B1
		5	17.5	7-1/2	25	SVX005A1-2A1B1
		7-1/2	25	10	31	SVX007A1-2A1B1
FR6	W	10	31	15	48	SVX010A1-2A1B1
		15	48	20	61	SVX015A1-2A1B1
FR7	W	20	61	25	75	SVX020A1-2A1N1
		25	75	30	88	SVX025A1-2A1N1
		30	88	40	114	SVX030A1-2A1N1
FR8	W	40	114	50	140	SVX040A1-2A1N1
		50	140	60	170	SVX050A1-2A1N1
		60	170	75	205	SVX060A1-2A1N1
FR9	W	75	205	100	261	SVX075A1-2A1N1
		100	261	125	300	SVX100A1-2A1N1

208–240V, NEMA Type 12/IP54 Drives

Frame Size	Delivery Code	hp (I _H)	Current (I _H)	hp (I _L)	Current (I _L)	Catalog Number
FR4	F1	3/4	3.7	1	4.8	SVXF07A2-2A1B1
		1	4.8	1-1/2	6.6	SVX001A2-2A1B1
		1-1/2	6.6	2	7.8	SVXF15A2-2A1B1
		2	7.8	3	11	SVX002A2-2A1B1
		3	11	—	12.5	SVX003A2-2A1B1
FR5	F1	—	12.5	5	17.5	SVX004A2-2A1B1
		5	17.5	7-1/2	25	SVX005A2-2A1B1
		7-1/2	25	10	31	SVX007A2-2A1B1
FR6	F1	10	31	15	48	SVX010A2-2A1B1
		15	48	20	61	SVX015A2-2A1B1
FR7	W	20	61	25	75	SVX020A2-2A1N1
		25	75	30	88	SVX025A2-2A1N1
		30	88	40	114	SVX030A2-2A1N1
FR8	FP	40	114	50	140	SVX040A2-2A1N1
		50	140	60	170	SVX050A2-2A1N1
		60	170	75	205	SVX060A2-2A1N1
FR9	FP	75	205	100	261	SVX075A2-2A1N1
		100	261	125	300	SVX100A2-2A1N1

Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between Ohio Edison Company, its successors and assigns (hereinafter called the "Company") and City of Tallmadge, Taxpayer ID No. 34-6002784 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/or kW reductions resulting from said projects for purposes of complying with the Statute. By committing the Customer Energy Project(s), Customer further acknowledges and agrees that the Company shall take ownership of the energy efficiency capacity rights associated with said Project(s) and shall, at its sole discretion, aggregate said capacity into the PJM market through an auction. Any proceeds from any such bids accepted by PJM will be used to offset the costs charged to the Customer and other of the Company's customers for compliance with state mandated energy efficiency and/or peak demand requirements
 - b. The Company acknowledges that some of Customer's Energy Projects contemplated in this paragraph may have been performed under certain other federal and/or state programs in which certain parameters are required to be maintained in order to retain preferential financing or other government benefits (individually and collectively, as appropriate, "Benefits"). In the event that the use of any such project by the Company in any way affects such Benefits, and upon written request from the Customer, Company will release said Customer's Energy Project(s) to the extent necessary for Customer to meet the prerequisites for such Benefits. Customer acknowledges that such release (i) may affect Customer's cash rebate discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations.
 - c. Any future Customer Energy Project(s) committed by Customer shall be subject to a separate application and, upon approval by the Commission, said projects shall become part of this Agreement.
 - d. Customer will provide Company or Company's agent(s) with reasonable assistance in the preparation of the Commission's standard joint application for approval of this Agreement ("Joint Application") that will be filed with the Commission, with such Joint Application being consistent with then current Commission requirements.
 - e. Upon written request and reasonable advance notice, Customer will grant employees or authorized agents of either the Company or the Commission reasonable, pre-arranged access to the Customer Energy Project(s) for purposes of measuring and verifying energy savings and/or peak demand reductions resulting from the Customer Energy Project(s). It is expressly agreed that consultants of either the Company or the Commission are their respective authorized agents.
2. **Joint Application to the Commission.** The Parties will submit the Joint Application using the Commission's standard "Application to Commit Energy Efficiency/Peak Demand Reduction Programs" ("Joint Application") in which they will seek the Commission's approval of (i) this Agreement; (ii) the commitment of the Customer Energy Project(s) for inclusion in the Company Plan; and (iii) the Customer's Cash Rebate.

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

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

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

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

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

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

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

If to the Company:

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

If to the Customer:

City of Tallmadge
46 North Avenue
Tallmadge, Ohio 44278
Attn: Pat Sauner
Telephone: 330-630-5639
Fax: 330-630-4922
Email: psauner@tallmadge-ohio.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.

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

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

Ohio Edison Company_
(Company)

By: *John C. Dwyer*

Title: V.P. Of Energy Efficiency

Date: 4-18-13

City of Fairbridge
(Customer)

By: *David J. Kline*

Title: MAYOR

Date: Feb 14, 2013

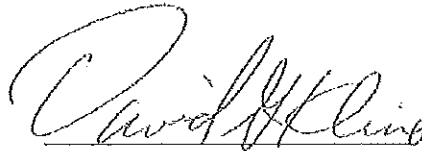
Affidavit of City of Tallmadge – Exhibit A

STATE OF OHIO)
) SS:
COUNTY OF SUMMIT)

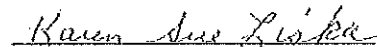
I, David G. Kline, being first duly sworn in accordance with law, deposes and states as follows:

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

FURTHER AFFIANT SAYETH NAUGHT.



Sworn to before me and subscribed in my presence this 14 day of Feb., 2013.


Notary



KAREN SUE LISKA, Notary Public
Residence - Summit County
Statewide Jurisdiction, Ohio
My Commission Expires Oct. 20, 2014

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/2/2013 2:25:43 PM

in

Case No(s). 13-0306-EL-EEC

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