AEP AMERICAN ELECTRIC POWER

Legal Department

March 11, 2016

Chairman Andre T. Porter
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Re: **In the Matter of the Application of**	**)**	
City of Lima	**)**	
and Ohio Power Company	**)**	**Case No. 16-0476-EL-EEC**
for Approval of a Special Arrangement	**)**	
Agreement with a Mercantile Customer	**)**	

Erin C. Miller
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Dear Chairman Porter,

Attached please find the Joint Application of Ohio Power Company (AEP Ohio) and the above-referenced mercantile customer for approval of a Special Arrangement of the commitment of energy efficiency/peak demand reduction (EE/PDR) resources toward compliance with the statutory benchmarks for 2016 (hereinafter "Joint Application").

Amended Substitute Senate Bill 221, codified at R.C. 4928.66, sets forth EE/PDR benchmarks that electric distribution utilities are required to meet or exceed. The statute allows utilities to include EE/PDR resources committed by mercantile customers for integration into the utilities' programs to be counted toward compliance with a utility's EE/PDR benchmarks. The statute also enables the Commission to approve special arrangements for mercantile customers that commit EE/PDR resources to be counted toward compliance with EE/PDR benchmarks.

The Commission's Order in Case No. 10-834-EL-EEC established a streamlined process to expedite review of these special arrangements by developing a sample application process for parties to follow for consideration of such programs implemented during the prior three calendar years. The attached Joint Application and affidavit conforms with AEP Ohio's version of the streamlined sample application. As requested by Commission Staff, any confidential information referenced in the Joint Application has been provided confidentially to Commission Staff for filing in Commission Docket 10-1599-EL-EEC and subject to the confidentially protections of R.C. 4901.16 and OAC 4901-1-24(E). AEP Ohio respectfully requests that the Commission treat the two cases as associated dockets and that any confidential information provided to Staff for filing in connection with the Joint Application be subject to the protective order requested in Docket 10-1599-EL-EEC.

Cordially,

/s/ Erin C. Miller
Erin C. Miller

Attachments

Ohio | Public Utilities Commission

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

Case No.: 16-0476-**EL-EEC**

Mercantile Customer: CITY OF LIMA

Electric Utility: Ohio Power

Program Title or Description: AEP Ohio Business Incentives for Energy Efficiency: Self Direct Program

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: Company Information

Name: CITY OF LIMA

Principal address: 50 Town Square, 2nd Floor, Lima, OH 45801

Address of facility for which this energy efficiency program applies: 1101 E North St, Lima, Oh 45804-2840

Name and telephone number for responses to questions:

Dale Seibert, City Of Lima, (419) 221-5101

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

☒ The customer uses more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)

See Confidential and Proprietary Attachment 4 – Calculation of Rider Exemption and UCT which provides the facility consumption for the last three years, benchmark kWh, and the last 12 months usage.

☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.) When checked, see Attachment 6 – Supporting Documentation for a listing of the customer's name and service addresses of other accounts in the AEP Ohio service territory.

Section 2: Application Information

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

☐ Individually, on our own.

☒ Jointly with our electric utility.

B) Our electric utility is: Ohio Power Company

The application to participate in the electric utility energy efficiency program is "Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application."

C) The customer is offering to commit (choose which applies):

☐ Energy savings from our 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 demand reduction 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 (choose whichever applies):

☒ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, 10/24/2012 and the date on which the customer would have replaced your equipment if you had not replaced it 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)).

The remaining life of the equipment varies and is not known with certainty. The future replacement date is unknown and has historically been at the end of equipment life. Replacement was completed early to achieve energy savings and to reduce future maintenance costs.

☐ 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 your energy efficiency program:

1) If you checked the box indicating that your project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) – (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Unit Quantity (watts) = Existing (watts x units) – Installed (watts x units)

kWh Reduction (Annual Savings) = Unit Quantity x (Deemed kWh/Unit)

Annual savings: 2,612,607 kWh

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for annual energy savings calculations Attachment 6 – Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.

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

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

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

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

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):

- Choose one or more of the following 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?

The coincident peak-demand savings are permanent installations that reduce demand through energy efficiency and were installed on the date specified in Section 3 A above.

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

Unit Quantity (watts) = Existing (watts x units) – Installed (watts x units)

KW Demand Reduction = Unit Quantity (watts) x (Deemed KW/Unit (watts))

298.2 kW

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for peak demand reduction calculation, and Attachment 6 – Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.

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 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 $ 20,250.00. (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.)

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for incentive calculations for this mercantile program.

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 an ongoing efficiency program that is practiced by our organization. (Attach documentation that establishes your organization's ongoing efficiency program. In order to continue the exemption beyond the initial 24 month period your organization will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

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

☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____ (Continue to Subsection 1, then skip Subsection 2)

☒ Utility Cost Test (UCT) . The calculated UCT value is: 21.42 (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 utility's 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 $ 769,466.37

The utility's program costs were $ 15,675.64

The utility's incentive costs/rebate costs were $ 20,250.00.

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment.

  See Attachment 1 - Self Direct Project Overview and Commitment for a description of the project. See Attachment 6 – Supporting Documentation, for the specifications of the replacement equipment work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed. Due to the length of time since the equipment replacement, the make, model and year of the replaced equipment is not available.

- A copy of the formal declaration or agreement that commits your program to the electric utility, including:

  1) any confidentiality requirements associated with the agreement;

     See Attachment 2 – Self Direct Program Project Blank Application including Rules and Requirements. All confidentially requirements are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application.)

  2) a description of any consequences of noncompliance with the terms of the commitment;

     See Attachment 2 – Self Direct Program Project Blank Application including Rules and Requirements. All consequences of noncompliance are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application.

  3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;

     None required because the resources committed are permanent installations that reduce demand through increased efficiency during the Company's peak summer demand period generally defined as May through September and do not require specific coordination and communication to provide demand reduction capabilities to the Company.

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,

   See Attachment 2 – Self Direct Program Blank Application including Rules and Requirements granting such permission pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application.

5) a commitment by you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

   See Attachment 1 - Self Direct Project Overview and Commitment for the commitment to comply with any information and compliance reporting requirements imposed by rule or as part of the approval of this arrangement by the Public Utilities Commission of Ohio.

- 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.

  The Company applies the same methodologies, protocols, and practices to Self Direct Program retrospective projects that are screened and submitted for approval as it does to prospective projects submitted through its Prescriptive and Custom Programs. The Commission has not published a technical reference manual for use by the Company so deviations can not be identified. The project submitted is a custom project and energy savings are determined as described in Confidential and Proprietary Attachment 5 - Self Direct Program Project Calculation, Attachment 6 – Supporting Documentation for custom measures work papers that provide all methodologies, protocols, and practices used in this application for custom measures, as needed.

Ohio | Public Utilities Commission

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

Case No.: 16-0476-EL-EEC

State of OH :

Said AboShaaba Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

   DNV GL Energy Services USA Inc. agent of Ohio Power

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 — Sr. Energy Engineer

Sworn and subscribed before me this 3rd day of March, 2016 Month/Year

Signature of official administering oath

Kristin Phillips/Consultant
Print Name and Title

My commission expires on July 19, 2019

NOTARIAL SEAL STATE OF OHIO

KRISTIN PHILLIPS
NOTARY PUBLIC - OHIO
MY COMMISSION EXPIRES
JULY 19, 2019

AEP OHIO
A unit of American Electric Power

Self Direct Project Overview & Commitment

The Public Utility Commission of Ohio (PUCO) will soon review your application for participation in AEP Ohio's Energy Efficiency/Peak Demand Response program. Based on your submitted project, please select by initialing one of the two options below, sign and fax to 877-607-0740.

Customer Name	**CITY OF LIMA**	
Project Number	**AEP-15-16412**	
Customer Premise Address	**1101 E NORTH ST, LIMA, OH 45804-2840**	
Customer Mailing Address	**50 Town Square, 2nd Floor, Lima, OH 45801**	
Date Received	**8/31/2015**	
Project Installation Date	**10/24/2012**	
Annual kWh Reduction	**2,612,607**	
Total Project Cost	**$113,001.07**	
Unadjusted Energy Efficiency Credit (EEC) Calculation	**$27,000.00**	
Simple Payback (yrs)	**1.0**	
Utility Cost Test (UCT) for EEC	**21.42**	
Utility Cost Test (UCT) for Exemption	**0.26**	
		Please Choose One Option Below and Initial
Self Direct EEC: 75%	**$20,250.00**	☑ **Initial:**
EE/PDR Rider Exemption	**12 Months (with possible extension up to 144 months after PUCO Approval)**	☐ **Initial:**

Note: *This is a one time selection. By selecting EEC, the customer will receive payment in the amount stated above. Selection of EE/PDR rider exemption, will result in the customer not being eligible to participate in any other energy efficiency programs offered by AEP Ohio during the period of exemption. In addition, the term of EE/PDR rider exemption is subject to ongoing review for compliance and could be changed by the PUCO.*

If EEC has been selected, will the Energy Efficiency Funds selected help you move forward with other energy efficiency projects?

X YES ___ NO

Note: Exemptions for periods beyond 24 months are subject to look-back or true-up adjustments every year to ensure that the exemption accurately reflects th EEDR savings. Applicants must file for renewal for any exemption beyond 12 months.

Project Overview:

The Self Direct (Prescriptive and Custom) project that the above has completed and applied is as follows.
Added VFD controls to 3 - 150 hp pumps

The documentation that was included with the application proved that the energy measures applied for were purchased and installed.

By signing this document, the Mercantile customer affirms its intention to commit and integrate the above listed energy efficiency resources into the utility's peak demand reduction, demand response, and energy efficiency programs. By signing, the Mercantile customer also agrees to serve as a joint applicant in any filings necessary to secure approval of this arrangement by the Public Utilities Commission of Ohio, and comply with any information and compliance reporting requirements imposed by rule or as part of that approval.

Ohio Power Company

By: _____

Title: Manager

Date: 2/29/2016

CITY OF LIMA

By: _____

Title: Mayor

Date: 2/29/2016

Prescriptive, Custom & Self-Direct
Program Application

APPLICATION GUIDELINES

All 2015 AEP Ohio Business Incentives Program projects must be completed and Final Applications received no later than November 13, 2015, in order to qualify for incentives identified in this application.

Step 1: Verify Eligibility

- ✓ Customer must have a valid AEP Ohio account.
- ✓ Equipment/measure must be installed at facilities served by the AEP Ohio account.
- ✓ Project must produce permanent reduction in electrical energy use (kWh).
- ✓ All installed equipment must meet or exceed the specifications in the application.
- ✓ **Please see the Terms and Conditions for Self-Direct or**
- ✓ **Terms and Conditions for all other programs for program eligibility and requirements.**

Step 2: Complete Applicant Information

- ✓ All fields in customer and project information sections must be completed.
- ✓ Solution Provider/contractor information must be completed if project is not self-performed.

Step 3: Complete the Incentive Worksheet(s)

- ✓ Find and read specifications related to the project.
- ✓ Ensure new equipment/measure meets or exceeds the specifications.
- ✓ Choose the incentive category on the worksheet based on the installed equipment and specifications.
- ✓ Complete all fields (fixture description, operating hours, etc.) on the related worksheet.

Step 4: Sign Customer Agreement

- ✓ Read the Terms and Conditions before signing and submitting the application.
- ✓ Sign Pre-Approval Agreement and submit the application to reserve funds.
- ✓ Sign Final Application Agreement and submit the application after the project is completed.
- ✓ Complete Third Party Payment Release Authorization ONLY if incentive payment is to be paid to an entity other than AEP Ohio customer listed on the Applicant Information page.

Step 5: Submit Pre-Approval Application[1]
(For Self-Direct applications, skip to Step 7)

- ✓ Submitting a Pre-Approval Application to determine qualification and reserve program funds for a project is strongly recommended.
- ✓ All custom measures require pre-approval.
- ✓ Complete all fields for Pre-Approval Agreement section.
- ✓ **Pre-Approval Application must be submitted with:**
  - **Proposed scope of work (type and quantity of old and new equipment must be listed)**
  - **Specification sheets for all proposed equipment**
  - **W-9 form**
- ✓ Submit application via email, fax or mail.
- ✓ During the application review, an inspection may be required; the team will contact applicants requiring an inspection for scheduling.

Step 6: Complete Project

- ✓ New equipment must be installed and operational to submit a Final Application.

Step 7: Submit Final Application

- ✓ Submit a Final Application.
- ✓ Use the same application used during pre-approval (if applicable).
  - Change Application Type to Final Application
- ✓ Complete all fields for Final Application Agreement section.
- ✓ Update the application if there are any changes (customer contact, incentive measure, equipment, etc.).
- ✓ **Final Application must be submitted with:**
  - **Dated and itemized material invoice**
  - **External labor invoice (if applicable)**
  - **If Pre-Approval Application was not submitted, include the documents listed on Step 5**
- ✓ Submit application via email, fax or mail.
- ✓ During the application review, an inspection may be required; the team will contact applicants requiring an inspection for scheduling.

Additional steps are required for Self-Direct applications after application submission. Please see the Self-Direct Terms and Conditions for details.

AEP Ohio Business Incentives Program
2740 Airport Drive, Suite 160. Columbus, OH 43219
Phone: (877) 607-0739 | Fax: (877) 607-0740
aepohioincentives@dnvgl.com
Visit our website at AEPohio.com/solutions

[1]A Pre-Approval Application is not a guarantee of an incentive; the actual incentive will be based on the energy savings and equipment installed as determined in the Final Application. Funds are reserved for 90 days, unless an applicant is granted an extension. The program team reserves the right to contact the customer before the reservation expiration date to ensure that the project is moving forward. If the project is not underway, the reservation may be cancelled. Reserved funds are not transferable to other projects, facilities and/or customers. A waiting list will be established when funds become fully subscribed.

Prescriptive, Custom & Self-Direct
Program Application

CHECKLIST

PRE-APPROVAL APPLICATION

Required Attachments

- ☐ Completed Applicant Information form
- ☐ Completed Incentives Requested section of Application form
- ☐ Signed Customer Agreement form
- ☐ Equipment specifications
- ☐ Proposed scope of work (required on Custom projects and recommended for all projects)
- ☐ W-9 (required for LLC, individual, partnership, property management companies)

Applicable Incentive Worksheets

Please complete worksheets for checked boxes.

- ☐ Lighting
- ☐ HVAC
- ☐ Motors & Drives
- ☐ Compressed Air
- ☐ Refrigeration/Food Service
- ☐ Agriculture & Miscellaneous
- ☐ Transformer
- ☐ UPS
- ☐ Custom

Application date_____
Estimated incremental project cost_____
Expected completion date_____

Incomplete applications will delay processing and reservation of funds.

FINAL APPLICATION

Required Attachments

- ☐ Completed Applicant Information form
- ☐ Completed and signed Final Payment Agreement and Customer Agreement forms
- ☐ Completed Third-Party Payment Release
- ☐ Authorization section (optional)
- ☐ Itemized invoices
- ☐ Equipment specifications[1]
- ☐ Updated scope of work[1]
- ☐ W-9[1] (required for LLC, individual, partnership, property management companies)

Incentive Worksheets

Please complete worksheets for checked boxes.

- ☐ Lighting
- ☐ HVAC
- ☐ Motors & Drives
- ☐ Compressed Air
- ☐ Refrigeration/Food Service
- ☐ Agriculture & Miscellaneous
- ☐ Transformer
- ☐ UPS
- ☐ Custom

Application date_____
Final incremental project cost_____
Final completion date_____

Incomplete applications will delay processing and incentive payment.
[1]If submitted with a pre-application, required only if project changed.

Revised Submittal

Please complete below if this is a revised submittal.

Submittal date_____

AEP Project Number (if known) AEP - 1 __ - __ __ __ __ __

AEP Ohio Business Incentives Program
2740 Airport Drive, Suite 160. Columbus, OH 43219
Phone: (877) 607-0739 | Fax: (877) 607-0740
aepohioincentives@dnvgl.com
Visit our website at AEPohio.com/solutions

Prescriptive, Custom & Self-Direct
Program Application

AEP OHIO®

APPLICANT INFORMATION

AEP Application Number AEP - _ _ - _ _ _ _ _

Application Type (Select One)

Customer Information

Business Name _____

Name as It Appears on Utility Bill _____

AEP Ohio Account Number* at Project Site _____ - _____ - _____ - ___ Multiple AEP Ohio Account Numbers for this Project? (Selec

Taxpayer ID _____ - _____ W-9 Tax Status (Select One)

Contact Name _____ Contact Title _____

Mailing Address _____ City _____ State OH Zip _____

Phone _____ Ext. _____ Contact Email _____

How Did You Hear About the Program? (Select One) AEP OH Energy Advisor _____

Project Information

Project Name (if applicable) _____

☐ Check if mailing address and project site address are the same.

Project Site Address _____ City _____ State OH Zip _____

Building Type (Select One) Shift (Select One)

Annual Operating Hours _____ Building Area (sq. ft.) _____

Construction Type (Select One)

Does the facility have a data center? (Select One)

*Please only enter the first ten digits of the account number.

APPLICANT INFORMATION

Solution Provider/Contractor Information (If project is not self-performed by customer)

Contracting Company Name _____

Contact Name_____ Title of Contact _____

Mailing Address _____ City_____ State OH Zip_____

Phone _____ Ext. _____ Contact Email _____

Who should we contact with questions about the application? ☐ Customer ☐ Contractor

Primary Contact Information

Contact Name_____ Title of Contact_____

Phone _____ Ext. _____ Contact Email _____

INCENTIVE SUMMARY TABLE

Incentive Category	Applied for Incentives	Applicable Self- Direct Incentives
Lighting		
HVAC		
Motors		
Drives		
Compressed Air		
Refrigeration/Food Service		
Agriculture		
Miscellaneous		
Appliance Recycling		
Custom		
NC Lighting (SD Only)		
Total		

CUSTOMER AGREEMENT

AEP Application Number AEP - _ _ - _ _ _ _ _

Pre-Approval Agreement

By signing this document, I agree to program requirements outlined in the measure specifications, Terms and Conditions, and Final Application Agreement. As an eligible customer, I verify the information is correct and request consideration for participation under this program. Furthermore, I concur that I meet all eligibility criteria in order to receive payment under this program.
Link to Prescriptive/Custom Terms and Conditions, and Final Application Agreement.

Estimated Completion Date

_____

Estimated Project Cost

_____

Total Incentive Requested[1]

_____

Date

_____

AEP Ohio Customer Signature

_____

Print Name

_____

[1]Incentives are capped at 50% of the project cost and total incentives are capped at $25,000.

Prescriptive, Custom & Self-Direct
Program Application

CUSTOMER AGREEMENT

AEP Application Number AEP - _ _ - _ _ _ _ _

Third Party Payment Release Authorization (Optional, NOT APPLICABLE TO Self-Direct)

Complete this section ONLY if incentive payment is to be paid to an entity other than the AEP Ohio customer.

Make checks payable to: Company/Individual _____

Mailing Address _____ City_____ State OH Zip_____

Phone _____ Ext. _____

Taxpayer ID of 3rd Party _____ - _____ W-9 Tax Status _____

By signing this document, I authorize the payment of the incentive to the third party named above and understand that I will not receive the incentive payment from AEP Ohio. I also understand that my release of the payment to a third party does not exempt me from the program requirements outlined in the measure specifications, Terms and Conditions, and Final Application Agreement.

Print Name _____ **Date** _____ **Customer Signature (AEP Ohio Customer)** _____

Final Application Agreement

By signing this document, I agree to program requirements outlined in the measure specifications, Terms and Conditions for the applicable program and Final Application Agreement. As an eligible customer, I verify the information is correct and request consideration for participation under this program. Furthermore, I concur that I meet all eligibility criteria in order to receive payment under this program.

Link to Prescriptive/Custom Terms and Conditions, and Final Application Agreement
Link to Self-Direct Terms and Conditions, and Final Application Agreement

Project Completion Year (Select One) _____ Is this a Self-Direct application? (Select One) _____

Project Completion Date _____ **Total Project Cost** _____

Date _____ **Total Applied for Incentive** _____

Total Requested Incentive[1] $ 0.00 **Total Self-Direct Requested Incentive**[2] _____

Print Name _____ **AEP Ohio Customer Signature** _____

SUBMIT VIA EMAIL **PRINT APPLICATION**

[1]Incentives are capped at 50% of the project cost and total incentives are capped at $25,000.
[2]Self-Direct incentives are 75% of Total Requested Incentive, after 50% of the project cost cap and tiering is applied.

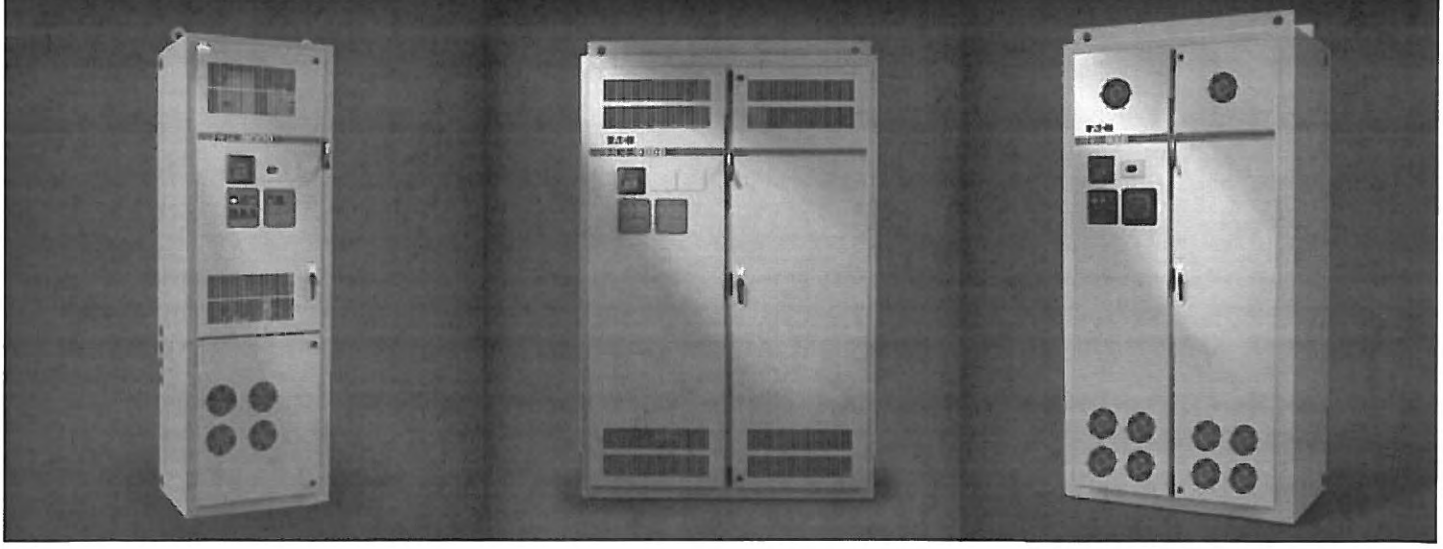
PROJECT SUMMARY

City of Lima has added variable frequency drives to its existing 3 – 150 hp fresh water pumps in order to minimize energy use for varying flows. These pumps operate based on the well water level and flow depends on this level.

Average power of the pumps were determined to be 61.93 kW and new average pump power is determined to be 6.85 kW. Savings are established by the flow rates of the pumps throughout the year which was supplied by the city. In addition, power readings were taken from the pumps to analyze the post power and then pump curves was used to determine the baseline power.

CPX9000 Clean Power Adjustable Frequency Drives

Clean Power Drive Solution to Harmonic Distortion



EATON
Powering Business Worldwide

CPX9000
The Proven Solution for Clean Power.

The most advanced clean power solution on the market—Eaton's CPX9000.

Based on over 15 years of 18-pulse drive experience and the highly successful 9000X Series of adjustable frequency drives, the CPX9000 uses advanced clean power technology to significantly reduce line harmonics at the drive input terminals, resulting in one of the purest sinusoidal waveforms available.

The CPX9000 delivers true power factor, so in addition to reducing harmonic distortion, it prevents overheating of upstream transformers and the overloading of breakers and feeders. It allows adjustable frequency drives to be applied to generators and other high impedance power systems.

Designed to exceed the IEEE 519-1992 requirements for harmonic distortion, the CPX9000 is the clear choice for applications in the water/wastewater, HVAC, industrial and process industries where harmonics are a concern.

Facility analysis simulations and services.

While utilities may deliver relatively clean power (pure sinusoidal waveforms), nonlinear loads such as computers, drives, and electronic ballasts can introduce undesirable harmonic currents into the power system.

Many facilities demand the IEEE 519-1992 standard for minimizing harmonic distortion be met to eliminate the potential for equipment failures that can lead to increased downtime and costs.

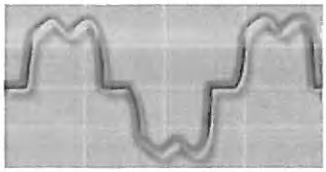
The first step in developing an appropriate clean power solution is a facility analysis. Eaton performs facility simulations for existing facilities and during the design and construction phase of new facilities. In addition to offering the CPX9000 solution, Eaton's Electrical Systems and Services organization is equipped to measure, analyze, and correct harmonic and other power quality issues.

Ensuring IEEE Compliance.

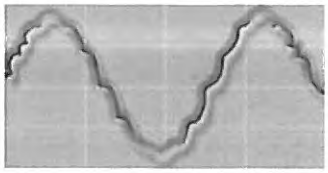
After the simulation is complete, a number of steps can be taken to ensure IEEE 519-1992 compliance. Major technologies include passive filters, active filters, additional inductive reactance, phase-shifted sources, 12-pulse rectifiers and the CPX9000 clean power drive. While all of technologies are viable, the CPX9000 is selected most often because unlike the other technologies, it meets IEEE 529-1992 at the drive input connection even if power system conditions change. This means no re-tuning, no adjustments and no new system analysis.

The 18-pulse rectifier assembly is modular, compact and uses diode packs to eliminate bulky external charging circuitry.

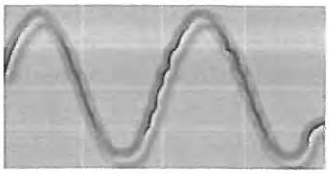
A full range of configuration options includes a variety of bypass contactors and cutting edge starters, such as Eaton's *IT.* reduced voltage soft starters. All combinations are UL508C listed and approved.



6-pulse drives typically have distortion with steep current rises.

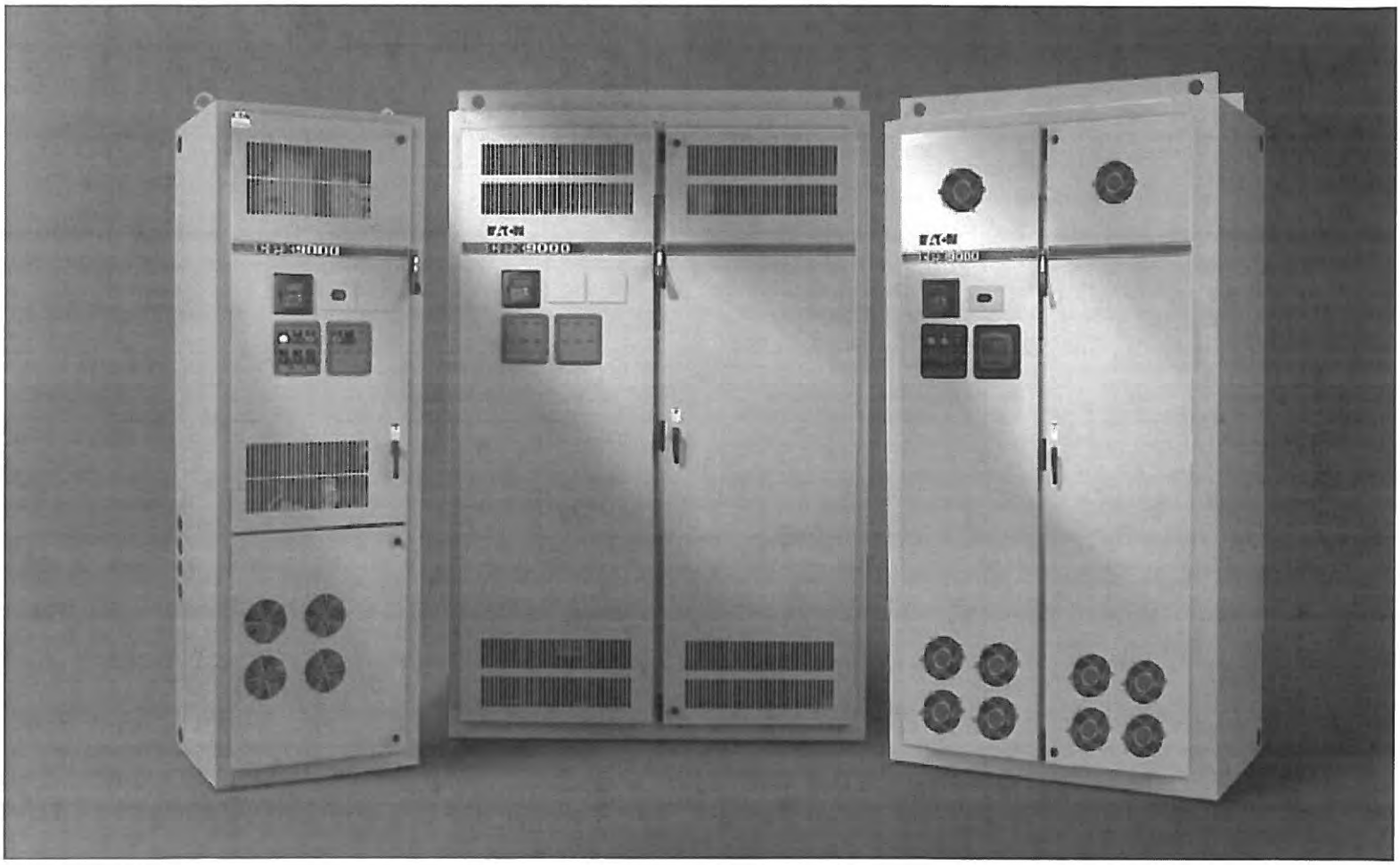


12-pulse drives typically produce a rough sinusoidal waveform.



The CPX9000 clean power drive dramatically reduces harmonic distortion for a clean waveform.

18-pulse drives exceed the IEEE standard of 5% THD. The chart illustrates differences between 6-, 12- and 18-pulse solutions. For sensitive medical and electronic equipment, Eaton's CPX9000 is unsurpassed.

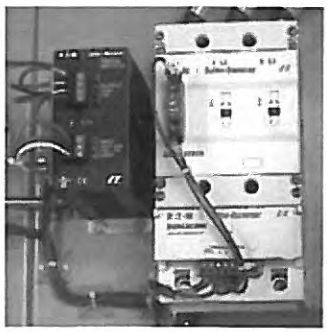


CPX9000 standard features:

- Multi-Line, easy-to-use operator control panel
- 9000X Drive, windows-based programming software
- Selectable sensorless vector
- Input fuses for protection
- Pre-engineered compact Type 1, 12 or 3R enclosures

Communications Capabilities:

- Devicenet
- Profibus DP
- Ethernet
- Modbus-RTU
- Lonworks & key HVAC protocols
- BACNET



Eaton's Electrical Sector is a global leader in power distribution, power quality, control & automation and monitoring products. When combined with Eaton's full-scale engineering services, these products provide customer-driven PowerChain Management® solutions to serve the power system needs of the data center, industrial, institutional, government, utility, commercial, residential, IT, mission critical and OEM markets worldwide.

PowerChain Management solutions help enterprises achieve sustainable and competitive advantages through proactive management of the power system as a strategic, integrated asset throughout its life cycle, resulting in enhanced safety, greater reliability and energy efficiency. For more information, visit www.eaton.com/electrical.

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Printed in USA
Publication No. BR04007001E
December 2009

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PowerChain Management

Summary: Application City of Lima and Ohio Power Company for approval of a special arrangement agreement with a mercantile customer electronically filed by Mr. Steven T Nourse on behalf of Ohio Power Company