



Case No.: 13-2367-EL-EEC

Mercantile Customer: **American Modern Insurance**

Electric Utility: **Duke Energy**

**Program Title or
Description:** **Prescriptive VFD HVAC Fan**

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: **American Modern Insurance Group**

Principal address: **7000 Midland Blvd
Amelia, OH 45102**

Address of facility for which this energy efficiency program applies:

**7000 Midland Blvd
Amelia, OH 45102**

Name and telephone number for responses to questions:

Megan Fox, (513)287-3367

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: **Duke Energy**

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)).
- 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.
The operational improvement was completed in January 2013.

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

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

Annual savings: _____kWh

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

Annual savings: _kWh

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

- 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: **XXXXX kWh (See Attachment 1 - Appendix 2)**

Please describe the less efficient new equipment that was 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.

10 VFDs were added to HVAC fans in the facility.

Annual savings: 248,600 kWh (See Attachment 1 - Appendix 2)

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?

Month(s) and Year(s)

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

38.98 KW (See Attachment 1 - Appendix 2)

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 **\$7,375 (See Attachment 1 - Appendix 3).**

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 11.98 (**See Attachment 1 - Appendix 4**)

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 **\$251,359 (See Attachment 1 - Appendix 5).**

The utility's program costs were **\$5,219(See Attachment 1 - Appendix 6).**

The utility's incentive costs/rebate costs were **\$7,375 (See Attachment 1 - Appendix 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.

Refer to Offer Letter following this application

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.

Attachment 1 – American Modern Insurance

Appendix 1 – Electric History

72102060 02		
AMERICAN MODERN INSURANCE GRP		
7000 MIDLAND BL		
AMELIA, OH 45102		
Date	Actual KWH	Bill KWH
10/9/2013	1,266,109	756,265
10/9/2013	1,266,109	756,265
9/10/2013	1,353,249	849,086
8/9/2013	1,261,682	790,650
7/11/2013	1,262,154	808,640
6/11/2013	1,297,342	786,327
5/10/2013	1,212,196	742,934
4/11/2013	1,270,961	751,743
3/12/2013	1,206,582	701,158
2/11/2013	1,213,261	729,767
1/11/2013	1,294,118	779,137
12/10/2012	1,366,438	797,568
11/7/2012	1,195,075	714,818
10/9/2012	1,198,749	689,688
9/10/2012	1,271,405	769,195
8/9/2012	1,197,259	727,924
7/11/2012	1,190,400	737,315
6/11/2012	1,251,961	742,200
5/10/2012	1,160,041	691,410
4/11/2012	1,241,854	721,928
3/12/2012	1,251,380	718,978
2/10/2012	1,146,370	693,076
1/12/2012	1,231,120	725,800
12/12/2011	1,348,598	779,995
11/9/2011	1,179,683	699,658
10/11/2011	1,176,696	667,965

Appendix 2 – Annual kWh and kW savings

Measure	Measure Amount	Unit of Measure	Annual kWh Gross with losses (per unit)	TOTAL Annual kWh Gross with losses	Saved Summer coincident kW with losses Per Unit	Total KW Gross with losses
VFD HVAC Fans ONLY (1.5-50 HP)	200	HP	1327.79	265558	0.21	42

Existing Equipment Assumptions	New Equipment Assumptions	Annual kWh Savings Per Measure	Annual KW Savings Per Measure	Total kWh Savings	Total kW Savings
Base efficiency is assumed to be a VAV inlet vane. A market average of building types and HVAC air distribution schemes are assumed.	New efficiency is assumed to be a VAV with VFD. A market average of building types and and HVAC air distribution schemes are assumed.	1243	0.1949	248,600	38.98

Appendix 3 – Cash Rebate

Measure	Amount
VFD HVAC Fans ONLY (1.5-50 HP)	\$7,375

Appendix 4 – Utility Cost Test

Measure	UCT
VFD HVAC Fans ONLY (1.5-50 HP)	11.98

Appendix 5 – Avoided Supply Costs

Measure	T&D	Production	Capacity	Quantity	Total Avoided Costs
VFD HVAC Fans ONLY (1.5-50 HP)	\$105.44	\$970.89	\$180.46	200	\$251,359

Appendix 6 – Utility Program Costs

Measure	Qty	Admin Costs	Total Costs
VFD HVAC Fans ONLY (1.5-50 HP)	200	\$26.09	\$5,219



DUKE ENERGY
Mercantile Self Direct Program
139 East Fourth Street
Cincinnati, OH 45202
513 629 5572 fax

February 3, 2014

Rick Lawson
American Modern Insurance
7000 Midland Blvd
Amelia, OH 45102

Subject: Your Motor/Pump/VFD Application for a Duke Energy Mercantile Self-Direct Rebate

Dear Mr. Lawson:

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page two, a total rebate of \$7,375 has been proposed for your VFD on HVAC Fan project completed in the 2013 calendar year. **All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).**

At your earliest convenience, please indicate if you accept this rebate by

- providing your signature on page two
- completing the PUCO-required affidavit on page three.

Please return the documents to my attention via fax at 513-629-5572 or e-mail to SelfDirect@Duke-Energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

At Duke Energy, we value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart Saver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Megan Fox'.

Megan Fox
Product Manager
Mercantile Self Direct Rebates

cc: Mike Harp, Account Manager
Rob Jung, Ecova

Please indicate your response to this rebate offer within 30 days of receipt.

Rebate is accepted. Rebate is declined.

By accepting this rebate, American Modern Insurance affirms its intention to commit and integrate the energy efficiency projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.


Additionally, American Modern Insurance also agrees to serve as joint applicant in any future filings necessary to secure approval of this arrangement as required by PUCO and to comply with any information and reporting requirements imposed by rule or as part of that approval.

Finally, American Modern Insurance affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Information in question would include, but not be limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

If rebate is accepted, will you use the monies to fund future energy efficiency and/or demand reduction projects?

YES NO

If rebate is declined, please indicate reason (optional):



Customer Signature

ANTHONY W. SPENCE

Printed Name

2/3/14

Date

Proposed Rebate Amounts

Measure ID	Energy Conservation Measure (ECM)	Proposed Rebate Amount
ECM-1	VFD HVAC Fan 20 HP (Qty: 10)	\$7,375
Total		\$7,375



Public Utilities Commission

13-2367-EL-UNC

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

Case No.: ___ - ___ -EL-EEC

State of OHIO :

Anthony Spence, Affiant, being duly sworn according to law, deposes and says that:

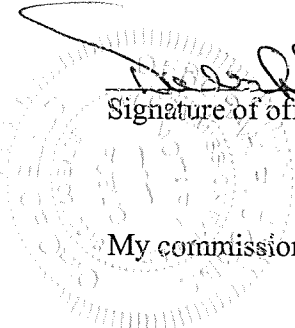
- I am the duly authorized representative of:
American Modern Insurance Group
[insert customer or EDU company name and any applicable name(s) doing business as]
- I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon 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.
- I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

Alison Head of Corporate Facilities
Signature of Affiant & Title

Sworn and subscribed before me this 4th day of February,
2014 Month/Year

Deborah R. Dodds
Signature of official administering oath

Deborah R. Dodds
Print Name and Title



Deborah R. Dodds
Notary Public, State of Ohio
My Commission Expires 6/30/18

My commission expires on _____