



Public Utilities Commission

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

Case No.: 11-2106-EL-EEC

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 implemented during the prior three calendar years.

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the 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 electric utilities' energy efficiency rider option (Option 2) will not qualify for the 60-day automatic approval.

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.

If you consider some of the items requested in the application to be confidential or trade secret information, please file a copy of the application under seal, along with a motion for protective order pertaining to the material you believe to be confidential. Please also file a copy of the application in the public docket, with the information you believe to be confidential redacted.

Section 1: Company Information

Name: Johns Manville Inc.

Principal address: 925 Carpenter Road, Defiance, OH 43512

Address of facility for which this energy efficiency program applies:

Plant 08 - 925 Carpenter Road, Defiance, OH 43512

Name and telephone number for responses to questions:

Matt Brown, Complex Manager (419-784-7919)

Electricity use by our company (at least one must apply to your company – check the box or boxes that apply):

- ☒ We use more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)
- ☐ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) We are filing this application (choose which applies):

- ☐ Individually, on our own.
- ☒ Jointly with our electric utility.

B) Our electric utility is The Toledo Edison Company

C) We are offering to commit (choose which applies):

- ☐ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Demand reduction from our demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ Both the energy savings and the demand reduction from our energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you determined this future replacement date (or, if not known, please explain why this is not known). See Exhibit 1 and Exhibit 2
- ☐ Installation of new equipment to replace equipment that needed to be replaced. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____kWh

- b) 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.

Project No. 1 - Optimization of Unit 89 Melter Operations

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1.
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

8/26/2009

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

11 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____ (Attach documentation 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).

Project No. 1 - Optimization of Unit 89 Melter Operations

(Attach calculations showing how this time period 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: 330.8 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 1 - Optimization of Unit 89 Melter Operations

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment.
(Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____kWh

- b) 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.

Project No. 2 -Optimize Efficiency of Melter on Unit 89

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

8/29/2006

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

51 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____ (Attach documentation 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).

Project No. 2 -Optimize Efficiency of Melter on Unit 89

(Attach calculations showing how this time period 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: 150.3 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 2 -Optimize Efficiency of Melter on Unit 89

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____kWh

- b) 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.

Project No. 3 - Establish a Leak Tag Program for Compressed Air

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

☐ Our 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.

☐ Our 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) What is the date your peak demand reduction program was initiated?

9/4/2009

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

29 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____ (Attach documentation 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).

Project No. 3 - Establish a Leak Tag Program for Compressed Air

(Attach calculations showing how this time period 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: ^{87.7} _____ (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 3 - Establish a Leak Tag Program for Compressed Air

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____ kWh

- b) 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.

Project No. 4 - Discontinue use of HEAF fan and abatement system

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

3/4/2010

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

219 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$. (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$. (Attach documentation 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).

Project No. 4 - Discontinue use of HEAF fan and abatement system

(Attach calculations showing how this time period 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: 666.6 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 4 - Discontinue use of HEAF fan and abatement system

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 1: Company Information

Name: Johns Manville Inc.

Principal address: 408 Perry Street, Defiance, OH 43512

Address of facility for which this energy efficiency program applies:

Plant 02 - 408 Perry Street, Defiance, OH 43512

Name and telephone number for responses to questions:

Matt Brown, Complex Manager (419-784-7919)

Electricity use by our company (at least one must apply to your company – check the box or boxes that apply):

- ☒ We use more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)
- ☐ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) We are filing this application (choose which applies):

- ☐ Individually, on our own.
- ☒ Jointly with our electric utility.

B) Our electric utility is The Toledo Edison Company

C) We are offering to commit (choose which applies):

- ☐ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Demand reduction from our demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ Both the energy savings and the demand reduction from our energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s): See
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____kWh

- b) 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.

Project No. 1 -Exhaust fan on 2601 lehr

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

7/15/2010

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

7 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____ (Attach documentation 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).

Project No. 1 -Exhaust fan on 2601 lehr

(Attach calculations showing how this time period 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: 17.0 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative 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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s):

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

- a) 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:

Annual savings: _____kWh

- b) 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.

Project No. 2 - Reduction of roof Exhaust fans

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☐ Coincident peak-demand savings from our energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction).
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

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

_____ kW

**Section 5: Request for Cash Rebate Reasonable
Arrangement (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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____. (Attach documentation 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).

Project No. 2 - Reduction of roof Exhaust fans

(Attach calculations showing how this time period 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: 10.51 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 2 - Reduction of roof Exhaust fans

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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. We installed our new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s): See Exhibit 2

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

- a) 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:

Annual savings: _____ kWh

- b) 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.

Project No. 3 - Discontinue use of HEAF fan and abatement system

- c) 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.

Section 4: Demand Reduction/Demand Response Programs

- A) Our program involves (choose which applies):

- ☒ Coincident peak-demand savings from our energy efficiency program.
- ☒ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction). See Exhibit 1
- ☐ Potential peak-demand reduction (choose which applies):

➤ Choose one or more of the following that applies:

- ☐ Our 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.
- ☐ Our 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) What is the date your peak demand reduction program was initiated?

3/9/2010

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

179 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 60day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

☐ Option 1: A cash rebate reasonable arrangement.

OR

☒ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$ _____ (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined).

OR

☐ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ _____ (Attach documentation 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).

Project No. 3 - Discontinue use of HEAF fan and abatement system

(Attach calculations showing how this time period 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: 409.09 (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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were _____.

Our program costs were _____.

The utility's administrative costs were _____.

Project No. 3 - Discontinue use of HEAF fan and abatement system

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 administrative 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 your 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 your program 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 you and the electric utility with regard to peak demand reduction;
 - 4) permission by you 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 you 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.: 11-2106-EL-EEC

State of Ohio :

Matt Brown, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

Johns Manville Inc.

[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.
3. 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.

Matt Brown Plant Manager

Signature of Affiant & Title

Sworn and subscribed before me this 19 day of April, 2011 Month/Year

Dorothea M. Hammon

Signature of official administering oath

Dorothea M. Hammon

Print Name and Title

My commission expires on 10-31-11

Revised October 28th, 2010

FE Rev 1.3.11

DOROTHEA M. HAMMON
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES OCT. 31, 2011

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
1	Exhaust fan on 2601 Lehr	Each of the glass furnaces has what is called a Lehr exhaust fan. For the past several years only one of the furnaces, either 2601 or 2603 has been in operation at one time. It was typical to leave the Lehr exhaust fan on, for the furnace which was curtailed. In the summer of 2009, Johns Manville entered into a contract with MPC energy consultants. Their goal was to find areas for energy conservation in both Plant 02 and Plant 08, including both electrical and gas usage opportunities. Part of the agreement was to pay them 50% of savings which they found. These savings were based upon the difference between an agreed upon energy usage KVI model and actual utility invoice data. This was one of the behavioral savings which they found. The unneeded exhaust fan was turned off. Please see Attachment B.	Weekly energy audit verifies fan remains shutdown. Internal monthly energy audit, reviews findings.
2	Reduction of roof exhaust fans	There are four roof exhaust fans located on the suction fan platform at Plant 02. During the summer months all four fans are required to remove the excess heat generated by the process suction fans in this area. Current practice is to leave all four roof exhaust fans running year round, which in turn draws warm building air out through the roof. Per the MPC agreement mentioned in project 1, they were able to implement a behavioral change to shut down two of these fans during the winter months. Please See Attachment A.	Weekly energy audits discussed at the weekly energy meetings. Corrections to process done if needed at that time.
3	Discontinue use of HEAF fan and abatement system	Plant 02's fiberglass curing oven exhausts have been in the past directed through a primitive abatement system, otherwise known as a HEAF unit (high efficiency air filtration). Past testing has indicated this type abatement system has little or no effect on reducing plant emissions based upon the current binder/curing process. In early 2010, JM had stack testing done on the HEAF unit to provide and confirm it was acceptable for JM to discontinue the use of the HEAF unit. Stack test results came back as expected and on 3/9/10 the HEAF system was shut down. Prior to shutdown, amp readings were taken during normal operating conditions and found to be 225 amps. By not running the HEAF, the 250 HP fan which ran 24/7/365, could be shut down. Please see Attachment C.	Unit remains shut down and has been communicated to appropriate production and maintenance personnel.

Exhibit 2

Customer Legal Entity Name: Johns Manville Inc.

Site: Plant 02

Principal Address: 408 Perry St.

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C)	Note 1
2010	24,258,958	24,258,958	25,610,281	
2009	23,983,316	23,983,316	23,986,618	
2008	26,139,348	26,139,348	26,139,348	
Average	24,793,874	24,793,874	25,245,415	

Project Number	Project Name	In-Service Date	Project Cost \$	KWh Saved/Year Counting towards Utility compliance	KWh Saved/Year (D) eligible for incentive	Utility Peak Demand Reduction Contribution, KW
1	Exhaust fan on 2601 Lehr	07/15/2010	\$3,319	65,350	65,350	7
2	Reduction of roof exhaust fans	12/02/2009	\$1,892	40,284	40,284	-
3	Discontinue use of HEAF fan and abatement system	03/09/2010	\$11,670	1,568,522	1,568,522	179
				-	-	-
				-	-	-
				-	-	-
				-	-	-
Total				1,674,156	1,674,156	187

**Savings as percent of
usage** **6.6%** Note 2

**= Total (D) divided by
Average (C)**

**Customer Eligible for
Exemption Until** **Jun-2017** Note 3

Notes

(1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.

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

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

(4) The exemption period reflects the maximum potential exemption period. NOTE: The FirstEnergy Utilities cannot guarantee the length of the exemption period that will ultimately be approved by the Commission. Depending on the Commission's order, periods greater than 24 months may be capped at 24 months.

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	65	\$ 308	\$ 20,146	\$ 1,182			\$ 1,182	17.0
2	40	\$ 308	\$ 12,419	\$ 1,182			\$ 1,182	10.51
3	1,569	\$ 308	\$ 483,544	\$ 1,182			\$ 1,182	409.09
Total	1,674	\$ 308	516,109	3,546	\$0	\$0	3,546	145.5

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)

Johns Manville Inc. ~ Plant 02
Docket No. 11-2106

Site: 408 Perry St.

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
1	Optimization of Unit 89 Melter Operations - Minimize Radiated Heat Loss	Unit 89's production starts out with batch material being heated up in an electric melter. Once the batch is heated to a certain temperature, it turns into molten glass which is then turned into fiberglass. A thin layer of non-molten batch is kept on top of the molten glass while in the melter to act as an insulating blanket and keep the heat directed into the molten glass. If not enough is kept in place it takes more electricity to maintain the molten glass below. In the summer of 2009, Johns Manville entered into a contract with MPC energy consultants. Their goal was to find areas for energy conservation in both Plant 02 and Plant 08, including both electrical and gas usage opportunities. Part of the agreement was to pay them 50% of savings which they found. These savings were based upon the difference between an agreed upon energy usage KVI model and actual utility invoice data. MPC worked with the process engineer on U89 to fill in some of the "hot spots" on the batch cover and insulate around openings in the melter hood. Please see Attachment D.	Communicated the importance of proper batch distribution to operators to eliminate "hot spots". Reviewed at weekly energy meetings.
2	Optimize Efficiency of Melter on Unit 89 with Batch Cover by increasing the amount above 1/2"	Unit 89's production starts out with batch material being heated up in an electric melter. Once the batch is heated to a certain temperature, it turns into molten glass which is then turned into fiberglass. A thin layer (approximately 1/2") of non-molten batch is kept on top of the molten glass while in the melter to act as an insulating blanket and keep the heat directed into the molten glass. If not enough is kept in place it takes more electricity to maintain the molten glass below. In the summer of 2009, Johns Manville entered into a contract with MPC energy consultants. Their goal was to find areas for energy conservation in both Plant 02 and Plant 08, including both electrical and gas usage opportunities. Part of the agreement was to pay them 50% of savings which they found. These savings were based upon the difference between an agreed upon energy usage KVI model and actual utility invoice data. MPC worked with the process engineer on U89 to gradually increase this amount of batch cover to between 1-1/2" - 2" which decreased the amount of power required to keep the glass in a molten state in the bottom of the melter. Please see Attachment E.	Batch level is monitored daily by operators. It is also discussed at weekly energy meetings with savings being tracked on the KVI model.
3	Estblish a Leak Tag Program for Compressed Air	Plant 08 uses compressed air in its manufacturing processes. The system pressure is typically just under 100 psi. The compressed air is generated by reciprocating type compressors in one area and rotary screw compressors in others. The only routine maintenance to repair plant air leaks was on complete plant shutdowns, mainly at Christmas time. A new written procedure was put in place for operators to identify specific air leaks with a special tag. A specific work request would then be generated for that particular leak. Initially at the beginning of the program a major effort was under taken by maintenance personnel to repair many of the leaks ahead of time. MPC was involved with assisting the plant in identifying the leaks and making sure they were addressed. The savings was tracked via the KVI model which was mentioned in project #1 and #2. Please see Attachment F.	Leaks were classified into small, medium and large with estimated flow rates of 1.6, 6.49 and 26 CFM respectively. Initial survey found 36 small leaks, 24 medium leaks, and 2 large leaks. This equated to around 458,525 kwh of potential wasted energy. It is estimated that just over 50% of the leaks have been fixed and maintained.
4	Discontinue use of HEAF fan and abatement system	Plant 08's pot and marble fiberglass curing oven exhausts have been in the past directed through a primitive abatement system, otherwise known as a HEAF unit (high efficiency air filtration). Past testing has indicated this type abatement system has little or no effect on reducing plant emissions based upon the current binder/curing process. In early 2010, JM had stack testing done on the HEAF unit to provide and confirm it was acceptable for JM to discontinue the use of the HEAF unit. Stack test results came back as expected and on 3/4/10 the HEAF system was shut down. Prior to shutdown, amp readings were taken during normal operating conditions and found to be 275 amps. By not running the HEAF, the 300 HP fan which ran 24/7/365, could be shut down.	Unit remains down and has been communicated to appropriate production and maintenance personnel.

Exhibit 2

Customer Legal Entity Name: Johns Manville Inc.

Site: Plant 08

Principal Address: 925 Carpenter Rd

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C)	Note 1
2010	108,528,715	108,528,715	111,755,834	
2009	102,859,780	102,859,780	103,426,530	
2008	116,192,712	116,192,712	116,192,712	
Average	109,193,736	109,193,736	110,458,359	

Project Number	Project Name	In-Service Date	Project Cost \$	KWh Saved/Year Counting towards Utility compliance	KWh Saved/Year (D) eligible for incentive	Utility Peak Demand Reduction Contribution, KW
1	Optimization of Unit 89 Melter Operations - Minimize Radiated Heat Loss	08/26/2009	\$52,666	951,278	951,278	113
2	Optimize Efficiency of Melter on Unit 89 with Batch Cover by increasing the amount above 1/2"	08/26/2009	\$14,437	432,211	432,211	51
3	Estblish a Leak Tag Program for Compressed Air	09/04/2009	\$10,457	252,189	252,189	29
4	Discontinue use of HEAF fan and abatement system	03/04/2010	\$11,670	1,917,082	1,917,082	219
				-	-	-
				-	-	-
				-	-	-
Total				3,552,760	3,552,760	412

**Savings as percent of
usage** **3.2%** Note 2

**= Total (D) divided by
Average (C)**

**Customer Eligible for
Exemption Until** **Jan-2014** Note 3

Notes

(1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.

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

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

(4) The exemption period reflects the maximum potential exemption period. NOTE: The FirstEnergy Utilities cannot guarantee the length of the exemption period that will ultimately be approved by the Commission. Depending on the Commission's order, periods greater than 24 months may be capped at 24 months.

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	951	\$ 308	\$ 293,260	\$ 887			\$ 887	330.8
2	432	\$ 308	\$ 133,242	\$ 887			\$ 887	150.30
3	252	\$ 308	\$ 77,745	\$ 887			\$ 887	87.70
4	1,917	\$ 308	\$ 590,998	\$ 887			\$ 887	666.66
Total	3,553	\$ 308	1,095,245	3,546	\$0	\$0	3,546	308.9

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)

Johns Manville Inc. ~ Plant 08
Docket No. 11-2106

Site: 925 Carpenter Rd

LOG

ENERGY ACTION ITEM WORKSHEET

EAI # 18

SUBMITTED BY:
DEPARTMENT:
AREA OR EQUIP:

MPC
Glass
Exhaust Fans

DATE IDENTIFIED: 10/30/2009
PLANNED COMPLETE DATE: 12/1/2009
PLANNED FOLLOW-UP DATE: 11/25/2009
ACTUAL COMPLETE DATE:
ASSIGNED RESPONSIBILITY: Doug Ordway

ENERGY TYPE: E
EST. \$\$ SAVINGS: \$2,457

PROBLEM / CONDITION

Exhaust Fans operate continuously in winter months when not required

SOLUTION / RECOMMENDATION

Install Timers on the overhead Exhaust Fans over the section deck to reduce operation from four to one continuously in operation

SAVINGS CALCULATIONS

Time of Reduction will be applied to the Winter Months which consist of 150 days or 3600 hours

Total of four motors will be reduced to the operation of one with alternating usage

Exhaust Fan HP 7.5 Number of Fans 4 HP to KWH Conversion Factor 0.746

Cost rate of Electricity 0.061 \$/kwh Percentage Reduction 50%

Estimated Savings:

# Fans	X	HP	X	Conversion Factor	X	Time	X	Reduction %	X	Electric Cost Rate	
											\$2,457

Capital/Non-Capital -

Total Opportunity

\$2,457

MANAGEMENT OF CHANGE

Comments in this section identify potential impacts to other facets of the operation. For each comment here, there must be an action step below.

IMPLEMENTATION PLAN

Step#	Date	Responsibility	Description of action step
1			Investigate Timer Setup
2			Order the Controls
3	11/6/09	Mackie	Write Work Order
4			Shut off fans instead of running on timers
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

ACTIVITY NOTES REFLECTING ACTIONS TAKEN TOWARDS OBTAINING THE SAVINGS

These should reflect the history of notes placed in the "COMMENTS" section of the Energy Log

Step#	Date	Comments	Savings
1	12/2/09	Decision made to shut off 2 of 4 fans instead of wiring with timers	
2	12/2/09	2 of 4 fans were shut off	\$2,457
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
Total			\$2,457

LOG

ENERGY ACTION ITEM WORKSHEET

EAI # 8

SUBMITTED BY:
DEPARTMENT:
AREA OR EQUIP:

MPC
Glass
Furnace

DATE IDENTIFIED: 6/18/2009
PLANNED COMPLETE DATE:
PLANNED FOLLOW-UP DATE:
ACTUAL COMPLETE DATE: 10/31/2009
ASSIGNED RESPONSIBILITY: MPC

ENERGY TYPE: E
EST. \$\$ SAVINGS: \$3,920

PROBLEM / CONDITION

Exhaust Fan is operating on top of Furnace 2603 which is not in operation

SOLUTION / RECOMMENDATION

Turn off Lehr Exhaust Fan on top of Furnace 2603

SAVINGS CALCULATIONS

Motor Size	X	Conversion Factor	Time	X	Cost of Electricity	
10 hp	X	0.746	8400	X	0.061	\$3,920

Capital/Non-Capital -

Total Opportunity

\$3,920

MANAGEMENT OF CHANGE

Comments in this section identify potential impacts to other facets of the operation. For each comment here, there must be an action step below.

IMPLEMENTATION PLAN

Step#	Date	Responsibility	Description of action step
1			Identify the controls of the fan
2	8/1/09	MPC	Shut down its operation
3	10/31/09	MPC	Follow up to ensure that the fan remains off
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

ACTIVITY NOTES REFLECTING ACTIONS TAKEN TOWARDS OBTAINING THE SAVINGS

These should reflect the history of notes placed in the "COMMENTS" section of the Energy Log

Step#	Date	Comments	Savings
1	8/1/09	The fan has been shut down	\$3,920
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
Total			\$3,920



Environmental Consulting

2615 Wolcott Street
Ferndale, Michigan 48220
(248) 548-8070
Fax (248) 548-8073

January 28, 2010

Mr. Jim Smargiassi EIT
Manager Environmental Affairs
Engineered Products Division
Johns Manville International, Inc.
925 Carpenter Rd.
Defiance, Ohio 43512
P.O. Box 7218

BTEC Proposal No. 102273

Subject: Proposal to conduct an engineering emission test program at two Johns Manville plants in Defiance, Ohio

Dear Mr. Smargiassi:

In response to our recent telephone conversations and my site visit, BT Environmental Consulting, Inc. (BTEC) is pleased to submit this proposal to provide air emissions testing services for engineering evaluation purposes. The engineering testing will include evaluation of filterable particulate matter (PM) and condensable particulate matter (CPM) emission rates at two Johns Manville Plants in Defiance, Ohio.

The following sections of this proposal detail BTEC's proposed Scope of Work, Project Schedule, On-Site Requirements, and Project Fees.

Scope of Work

PM and CPM emission rates from one exhaust stack at Johns Manville Plant No. 8 will be evaluated under two different plant operating conditions and one exhaust stack at Johns Manville Plant No. 2 will be evaluated under three different plant operating conditions. The engineering test program should be completed over a three-day period with a single equipment mobilization to both Defiance plants. Table 1 summarizes the proposed test schedule, operating conditions and exhaust stacks to be included in the emissions test program.

Table 1
Test Parameters and Summary

Date	Time	Operating Line	Test Method	Stack	Product Run
Monday, February 15, 2010	AM	81	Method 5/202	HEAF 84	1.2 X 3/8 Core 118" width
Monday, February 15, 2010	PM	Set up for 82	NA	NA	NA
Tuesday, February 16, 2010	AM	82	Method 5/202	HEAF 84	1.2 X 3/8 Core 118" width
Tuesday, February 16, 2010	PM	Set up at plant 2	NA	NA	NA
Wednesday, February 17, 2010	AM	25	Method 5/202	SOUTH HEAF	.9 X 1/4" Microlite
Wednesday, February 17, 2010	PM	24	Method 5/202	SOUTH HEAF	AA .42 X 1/2" 72" width
Wednesday, February 17, 2010	PM	23	Method 5/202	SOUTH HEAF	LF4 1/4" UNBACKED 72" width
Thursday, February 18, 2010	NA	Contingency			NA

BTEC will conduct duplicate 60-minute engineering test runs for PM and CPM under each stack/operating condition (for a total of ten 60-minute test runs). Testing will be conducted using the following reference test methods codified at Title 40, Part 60, Appendix A of the Code of Federal Regulations:

- Method 1 - *"Location of the Sampling Site and Sampling Points"*
- Method 2 - *"Determination of Stack Gas Velocity and Volumetric Flowrate"*
- Method 3 - *"Determination of Molecular Weight of Dry Stack Gas" (Fyrite)*
- Method 4 - *"Determination of Moisture Content in Stack Gases"*
- Method 5 - *"Determination of Particulate Emissions from Stationary Sources"*
- Method 202 - *"Determination of Condensible Particulate Emissions from Stationary Sources"*

Single field and reagent blank determinations will be performed for all the test runs at both sources. BTEC will perform the following tasks required for execution of this project:

- Prepare and calibrate field sampling equipment and supply all sampling media required for the emissions testing portions of the sampling project
- Conduct the fieldwork portion of the emissions test program during the week of February 15, 2010
- Perform calculations for concentrations and emission rates upon completion of laboratory analyses
- BTEC will also prepare a final summary report of the test program for review by Johns Manville within 15 working days of the completion of laboratory analyses. The report will provide descriptions of the sampling and analytical methods used a tabular presentation of the emission results, field data sheets, equipment calibrations, and any other appropriate information deemed necessary to complete the project. Upon receipt of comments BTEC will finalize the report and provide Johns Manville with three final copies.

Schedule

The fieldwork portion of the emissions test program will be conducted during a three-day period with a single mobilization to the Defiance facilities during the week of February 15, 2010.

On-Site Requirements

- *Safe access to sampling locations.* Johns Manville will provide access to all sources tested. Access must be in accordance with Occupational Safety and Health Administration (OSHA) specifications. BTEC may require the installation of temporary scaffolding or ladders, or the provision of a manlift with sufficient capacity to accommodate sampling equipment and personnel at the sampling location.
- *Onsite coordinator.* Johns Manville or its designee will be required to coordinate the testing with process operations and provide authorization for any changes in the scope of work.
- *Electricity.* BTEC requires the use **two, 110-volt, 20 amp** power supplies at each sampling location and **one, 480-volt, single phase power supply** for the sampling trailer. These electrical supplies must be uninterrupted during the field-sampling program to avoid compromising the integrity of any sample during collection.

Fees

BTEC will perform the services described in this proposal for a total fixed fee of \$21,700. If BTEC's work is encumbered or stopped because of delays caused by Johns Manville or the facility being tested, additional fees will be charged at a rate of \$80 per labor-hour expended plus any subsistence costs (+10%). Equipment will be charged at a rate of \$600 per day for each additional day used. These charges will be added to the invoice in the event of any of the following unanticipated situations:

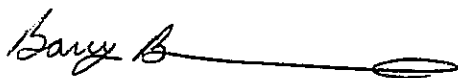
- *Unexpected delays.* Process shutdown, interruptions, equipment failures, or other unexpected conditions beyond BTEC's control that result in delays in the sampling program.
- *Inclement Weather.* Although BTEC personnel attempt to continue working in inclement weather, the BTEC team leader may decide to discontinue the testing for the test day if severe weather conditions pose a hazard to personnel, threaten serious damage to the equipment, or compromise the integrity of the sample being collected.
- *Alterations of the Scope of Work.* If work is requested beyond the scope of work specified in our proposal, the BTEC team leader will estimate the additional fee and obtain written authorization for the added work.
- *Cancellations.* Should Johns Manville postpone or cancel the field testing project within 5 business days of the authorized scheduled test dates, BTEC will charge for all project planning, supplies, and equipment preparation activities.

Terms and Conditions

For your convenience, this proposal is written in a form that can be accepted as an agreement. BTEC's standard Terms and Conditions (attached) are incorporated into this proposal as if presented fully herein. To accept this proposal, please sign the attached Acceptance Page, and return a copy to BTEC by fax at (248) 548-8073.

If you have any questions regarding this proposal, please call me at (248) 548-8072.

Sincerely,



Barry Boulianne
Senior Project Manager

Attachments



ACCEPTANCE PAGE

BTEC Proposal No. 102273

Proposal to conduct an engineering emission test program at two Johns Manville plants in Defiance, Ohio

Fixed Fee Cost: \$21,700

ACCEPTANCE OF THE PROPOSAL BY JOHNS MANVILLE IS AUTHORIZED BY:

SIGNATURE:

PRINTED NAME:

TITLE:

COMPANY:

JOHNS MANVILLE

DATE:

**BT ENVIRONMENTAL CONSULTING, INC.
CONSULTING SERVICES
TERMS AND CONDITIONS**

These Terms and Conditions govern the work to be performed by BT Environmental Consulting, Inc. ("BTEC"), as specified in the proposal (the "Companion Documents") prepared by BTEC of which these Terms and Conditions are a part.

By accepting the Companion or authorizing or accepting any portion of the work done or to be done by BTEC as specified in the Companion Documents, the client ("Client") shall be deemed to have accepted these Terms and Conditions as if fully set forth in any of the Companion Documents.

1. Client Information. Client shall provide BTEC with all information required to enable BTEC to perform its services, and Client warrants to BTEC, that if it knows or has reason to suspect that hazardous materials or conditions may exist at any site to be surveyed by BTEC, or where work is done ("Site"), it will inform BTEC in writing. BTEC shall not be liable for any incorrect advice, judgment, recommendation, finding, decision or conduct based upon any inaccurate or incomplete information supplied by Client.
2. Performance. BTEC shall use commercially reasonable best efforts in performing services under these Terms and Conditions, and the Companion Documents ("Agreement"). BTEC shall not be responsible for failure to perform its services if i) there is a failure or delay by Client or its contractors in providing BTEC with the necessary access to properties, documentation, information or materials; ii) Client or its Contractors fail to approve or disapprove BTEC's work; or iii) if Client causes delay in any way whatsoever. In any of these events, BTEC's time for completion of its service shall be extended accordingly.

BTEC shall not be responsible for failure to perform if such failure is due to any Act of God, labor trouble, fire, inclement weather, act of governmental authority, failure of transportation, accident, power failure or interruption, or any other cause reasonably beyond BTEC's control. In any of these event, BTEC's time for completion of these services shall be extended accordingly.

At the sole discretion of BTEC, all samples obtained by BTEC under this Agreement may be discarded 30 days after analyses, or returned by BTEC to the Client, unless otherwise mutually agreed in writing.

3. Compliance With Laws. BTEC shall use commercially reasonable best efforts to comply with all federal, state and local statutes, codes, laws, and administrative regulations, including but not limited to those related to environmental, fire, safety, and health matters, which are applicable to the performance of its consulting services under this Agreement, but shall not be liable to Client for failure to comply unless such non-compliance is due to the negligence of BTEC.
4. Safety Responsibilities. In the event that any of BTEC's activities hereunder are at the Site, Client will assume sole and complete responsibility for the Site, including safety of all persons and property, and further agrees to defend, indemnify and hold BTEC harmless from any and all liability, including to third parties, in connection with such measures, except to the extent such liability arises from the negligence of BTEC.
5. Site Conditions. It is understood and agreed that i) BTEC is not and has no responsibility as an owner, a handler, generator, operator treater, storer, arranger, transporter, or disposer of hazardous or toxic substances found or identified at the Site; and ii) Client shall undertake for the handling, removal, treatment, storage, transportation, and disposal of hazardous substances or constituents found or identified at the Site. Notwithstanding the above, in the course of performing services under this Agreement, should BTEC, at the request of Client, elect to arrange for the disposal of waste, hazardous or not, Client shall defend, indemnify, release, and hold BTEC harmless from any loss damage, or expense resulting from said activity. It is agreed that this indemnification covers all costs associated with any obligation to access, remediate, or contain any hazardous or non-hazardous waste under any Federal or State, or Superfund law (or Provincial law) in addition to monetary damages.

Client understands and acknowledges that (I) Client may be requesting BTEC to undertake services or work for the benefit of Client involving the presence or potential presence of hazardous substances and (ii) BTEC may be exposed to arising out of, or involving actual, alleged, or threatened discharge, disposal or release or escape of hazardous or potentially hazardous pollutants including but not limited to, solid, liquid, or gaseous irritants or contaminants including smoke, water, vapor, soot, fumes, acids, alkalies, chemicals, wastes and waste materials, and Client understands and agrees that BTEC shall only be responsible for losses that result directly from BTEC's negligence. Therefore, notwithstanding anything to

the contrary in the is Agreement, to the fullest extent permitted by law, Client hereby agrees to defend, indemnify, and hold harmless BTEC, its officers, directors and employees, from and against any and all claims, damages, losses, and expenses, including but not limited to, attorney's fees and court and arbitration costs, arising out of or in connection with, claims relating to these risks which may result from the services provided by this Agreement, except as caused by the negligence of BTEC, its officers, directors, and employees.

6. Confidentiality. BTEC shall use commercially reasonable precautions so that access to information relating to its services for Client is limited to those persons within its employ for whom it is necessary and appropriate for purposes of performing BTEC's services.
7. Insurance. BTEC shall use commercially reasonable best efforts to procure and maintain at its expense, the following insurance, with the limits of liability as set forth below:

<u>Type</u>	<u>Limits</u>
a) <u>Workers' Compensation</u>	Amount required by statute
b) <u>Employer's Liability</u>	\$500,000 per occurrence (or as required by law)
c) <u>Commercial General Liability</u> (including Contractual Liability)	\$1,000,000 per occurrence \$2,000,000 general aggregate
d) <u>Automobile Liability</u> (covering vehicles owned, hired, rented, or non-owned)	\$500,000 combined single limits
e) <u>Consultants Environmental Liability</u> (Professional Liability and Contractor's Pollution legal liability)	\$1,000,000 each claim \$1,000,000 general

BTEC shall name Client as additional insured and other parties that it deems appropriate to be additionally insured under BTEC's Commercial General Liability policy and Automobile Liability policy, if requested to do so by Client. The Client, on its own behalf and on the behalf of any others that are named as additionally insured at Client's request, agrees that providing such insurance or the additional insured endorsement shall in no way be construed as an assumption by BTEC of any liability for

the negligence or willful misconduct or any wrong behavior on the part of Client or others that are named additional insured.

8. WARRANTY. BTEC WARRANTS THAT THE SERVICES, FINDINGS, RECOMMENDATIONS, AND/OR ADVICE PROVIDED TO CLIENT WILL BE PREPARED, PERFORMED, AND RENDERED IN ACCORDANCE WITH PROCEDURES, PROTOCOLS, AND PRACTICES GENERALLY ACCEPTED IN BTEC'S PROFESSION FOR USE IN SIMILAR ASSIGNMENTS. CLIENT ACKNOWLEDGES AND AGREES THAT BTEC HAS MADE NO OTHER IMPLIED OR EXPRESSED REPRESENTATION. WARRANTY, OR CONDITION WITH RESPECT TO THE SERVICES, FINDINGS, RECOMMENDATIONS, OR ADVICE TO BE PROVIDED BY BTEC.

9. Indemnification and Liability. BTEC shall indemnify and hold harmless Client from and against all losses, liabilities, and reasonable costs and expenses for property damage and bodily injury (including reasonable attorney's fees), to the extent directly and proximately arising from BTEC's negligent performance or breach of warranty under this Agreement.

The total and aggregate obligation of BTEC, its employees, directors, officers, and agents, pursuant to the provisions of this Indemnification and for any and all liability and any all damages to Client, its affiliates, owners, directors, employees, officers, agents and representatives, or to any other person or entity, arising out of, or resulting from, this Agreement or the services provided by BTEC, shall in no event exceed the lesser of i) one and one-half the amount BTEC is compensated under this Agreement; or ii) \$500,000.

Client shall defend, indemnify and hold harmless BTEC, its employees, directors, officers, and agents, from and against any and all claims, losses, liabilities, and reasonable costs and expenses including reasonable attorney's fees) that are: i) related to or caused in any way by, the negligence or willful misconduct of Client, its employees, or agents; ii) related to this Agreement or the work to be performed by BTEC for which BTEC is not expressly responsible; or ii) related to this Agreement or the work to be performed by BTEC for which BTEC is not expressly responsible; or iii) the expressed responsibility of the Client under this Agreement.

10. Payment. BTEC shall invoice to Client and Client shall pay to BTEC for its consulting services as follows:

- a) Fees and all other charges will be billed to Client up to twice per month.
- b) Fees shall be paid by Client within 30 days of being invoiced by BTEC. If the invoice is not paid within such period, Client shall be liable to BTEC for a late charge accruing from the date of such invoice to the date of such payment at the lower of 18 percent per annum or the maximum rate allowed by law.
- c) If Client fails to pay any invoice fully within (30) days after invoice date, BTEC may, at any time, and without waiving any other rights or claims against Client and without thereby incurring any liability to Client, elect to terminate performance of services immediately following written notice from BTEC to Client. Notwithstanding any such termination of services, Client shall pay BTEC for all services rendered by BTEC up to the date of termination of services plus all interest, termination costs and expense incurred by BTEC. Client shall reimburse BTEC for all costs and expenses of collection, including reasonable attorney's fees.

11. Non-Disclosure Agreement. The technical and pricing information contained in any proposal or other documents submitted to Client by BTEC is to be considered confidential and proprietary and shall not be released or disclosed to a third party without BTEC's written consent.

12. Use of Data. BTEC shall not be responsible for any loss, liability, damage, expense or cost arising from any use of BTEC's analyses, reports, certifications or advice, which is contrary to, or inconsistent with, or beyond the provisions or purposes set forth or included in these Terms and Conditions, or in the Companion Documents. Client understands and agrees that BTEC's analyses, reports, and certifications shall be used solely by the Client.

13. Independent Contractor. In performing its services under this Agreement, BTEC shall be deemed to be acting as an independent contractor, and is not an agent, servant, employee, or representative of Client.

BTEC shall not be responsible for the activities of any contractor or subcontractor or their employees or agents at the Site unless retained by BTEC (in which event BTEC shall be responsible solely for monitoring their performance of the services in accordance with generally accepted practices of BTEC's profession).

14. Assignment. There shall be no assignment of the rights or obligations of this Agreement by either party without the written consent of the other party and any assignment shall be null and void and shall render the corresponding obligations of the other party null and void.

15. Cause of Action. If Client makes a claim against BTEC, for any alleged error, omission, or other act arising out of the performance of its professional services and to the extent the Client fails to prove such claim, then the Client shall pay all costs including attorney's fees incurred by BTEC in defending the claim. Any cause of action brought against BTEC shall be brought within one-year of the work or services performed under this Agreement.

16. Waiver. Failure of either party to enforce any of its rights shall not constitute a waiver of such rights. If any provision herein is held invalid or unenforceable, such provision shall thereupon be deemed modified only to the extent necessary to render it valid or excluded from this Agreement, as the situation may require, and this Agreement shall be enforced and construed as if such provision has been included herein as so modified in scope or applicability or had not been included herein, as the case may be.

17. Termination of Agreement. Notwithstanding any other provisions of this Agreement, either party may terminate this Agreement at any time, in whole or in part, by providing written notice of termination to the other party. Except as otherwise mutually agreed by BTEC and Client, termination shall be effective ten (10) days from receipt of the notice. Client shall compensate BTEC for work performed prior to termination, plus all reasonable costs incurred as a result of termination, on a time-and-materials basis in accordance with BTEC's current hourly rates, if Client terminates this Agreement, or if BTEC terminates it for good legal cause.

18. Complete Agreement. These Terms and Conditions and the Companion Documents constitute the full and complete Agreement of the parties and may only be amended, added to, superseded or waived in writing signed by both parties that specifically states that it is an amendment of this Agreement. Reference by BTEC or Client to any purchase or work number or order supplied by Client shall be for accounting identification purposes only and shall have no other legal effect.

LOG

ENERGY ACTION ITEM WORKSHEET

EAI # 36

SUBMITTED BY: MPC
 DEPARTMENT: 89
 AREA OR EQUIP: Melter
 ENERGY TYPE: E
 EST. \$\$ SAVINGS: \$58,028

DATE IDENTIFIED: 8/3/2009
 PLANNED COMPLETE DATE: 8/26/2009
 PLANNED FOLLOW-UP DATE: 8/26/2009
 ACTUAL COMPLETE DATE: 8/26/2009
 ASSIGNED RESPONSIBILITY: Janney Jr./ J. Brown

PROBLEM / CONDITION

On Unit 89 hot spots are observed on the surface of the melt and openings around the hood at the electrode openings and access ports.

SOLUTION / RECOMMENDATION

Optimize Efficiency of Melter on Unit 89 with minimizing radiated heat loss through exposed surfaces with increased batch cover and curtains.

SAVINGS CALCULATIONS

Radiation Heat flux between black bodies in BTU/ Ft²/ Hr are referenced from North American Combustion Handbook, page 82

Conversion of BTU to kWh: 3412

Surface Area Exposed: 2 ft

Surface Area: 133 ft²

Temperature Melt: 2800 deg F.

Operating Hours: 8400

Loss: 193,200 BTU/ ft²/ Hour

Utilization: 100%

Surface Area	X	Radiated Loss	X	Time	/	Conversion	X	Cost of electricity	\$58,028
--------------	---	---------------	---	------	---	------------	---	---------------------	----------

Capital/Non-Capital -

Total Opportunity

\$58,028

MANAGEMENT OF CHANGE

Comments in this section identify potential impacts to other facets of the operation. For each comment here, there must be an action step below.

IMPLEMENTATION PLAN

Step#	Date	Responsibility	Description of action step
1	8/3/09	MPC	Study the existing conditions of the melter surface and note data
2	8/10/09	MPC	Research the design set parameters
3	8/13/09	JB	Reduce Temperature Settings on the Hood at 10 deg F. increments
4			Monitor progress and status in between changes
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

ACTIVITY NOTES REFLECTING ACTIONS TAKEN TOWARDS OBTAINING THE SAVINGS

These should reflect the history of notes placed in the "COMMENTS" section of the Energy Log

Step#	Date	Comments	Savings
1	8/12/09	Temperature setting on Hood is being decreased 10 deg F to increase Batch Cover	\$58,028
2	8/13/09	Temperature setting on Hood is being decreased 10 deg F to increase Batch Cover	
3	8/14/09	Denny M has dropped power as a result of adding batch cover.	
4	8/15/09	Batch cover has been dispersed evening over entire exposed opening of the Melter at 1/2"	
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
Total Savings			\$58,028

LOG**ENERGY ACTION ITEM WORKSHEET**EAI # **35**

SUBMITTED BY: MPC
 DEPARTMENT: 89
 AREA OR EQUIP: Melter
 ENERGY TYPE: E
 EST. \$\$ SAVINGS: \$26,365

DATE IDENTIFIED: 8/3/2009
 PLANNED COMPLETE DATE:
 PLANNED FOLLOW-UP DATE:
 ACTUAL COMPLETE DATE: 10/13/2009
 ASSIGNED RESPONSIBILITY: J Brown

PROBLEM / CONDITION

The amount of Batch Cover is currently at 1/2" on Unit 89 and excessive energy is being lost.

SOLUTION / RECOMMENDATION

Optimize Efficiency of Melter on Unit 89 with Batch Cover by increasing the amount above 1/2" to level which minimizes heat loss.

SAVINGS CALCULATIONS

Heat Loss in BTU/ Ft²/ Hr are referenced from North American Combustion Handbook, page 109
 Conversion of BTU to kWh: 3412
 Diameter of Surface of melter: 12 ft
 Surface Area: 133 ft²
 Temperature Initial: 480 deg F. Loss: 1620 BTU/ ft²/ Hour
 Temperature Final: 200 deg F. Loss: 300 BTU/ ft²/ Hour
 Temperature Melt: 2800
 Operating Hours: 8400 Utilization: 100%

Surface Area X Change in Loss X Time / Conversion X Cost of electricity \$26,365

Capital/Non-Capital -

Total Opportunity

\$26,365**MANAGEMENT OF CHANGE**

Comments in this section identify potential impacts to other facets of the operation. For each comment here, there must be an action step below.

IMPLEMENTATION PLAN

Step#	Date	Responsibility	Description of action step
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

ACTIVITY NOTES REFLECTING ACTIONS TAKEN TOWARDS OBTAINING THE SAVINGS

These should reflect the history of notes placed in the "COMMENTS" section of the Energy Log

Step#	Date	Comments	Savings
1	8/3/09	Unit is coming back up to full power and item has been completed	\$13,182
2		Monitoring of effects will be performed when the unit is back on line	
3	10/13/09	Unit 89 is back online and ratios are validating improvements	\$13,182
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
Total Savings			\$26,364

ENERGY ACTION ITEM WORKSHEET

EAI # 5

SUBMITTED BY: MPC
 DEPARTMENT: Plantwide
 AREA OR EQUIP: Compressors
 ENERGY TYPE: E
 EST. \$\$ SAVINGS: \$27,970

DATE IDENTIFIED: 6/11/2009
 PLANNED COMPLETE DATE: 9/4/2009
 PLANNED FOLLOW-UP DATE: 8/26/2009
 ACTUAL COMPLETE DATE:
 ASSIGNED RESPONSIBILITY: Lathrop/ Thieroff

PROBLEM / CONDITION

Several Compressed Air Leaks throughout Plant.

SOLUTION / RECOMMENDATION

Establish a Leak Tag Program for Compressed Air

SAVINGS CALCULATIONS

Calculating the Cost of Compressed Air:

$$\left[\frac{\text{HP} \times 0.746}{0.9} \right] \left(\frac{\text{CFM} \times 60}{1000} \right) \left(\frac{\text{\$/KWH}}{\text{KWH}} \right)$$

Plant Compressed air is at 100 PSI
 4.2 CFM/HP Suggested from Manufacturer
 0.746 KW/HP (Kilowatts per Horsepower)
 0.90 Average Efficiency
 Compressors are 1100 and 1250 HP

= \$0.20 per MCF Compressed Air

Size of Leak (Inch)	Designation	Flow Rate (CFM)	Cost per Day	Cost per Year	Estimated #	
Jan-32	Small	1.62	0.46656	170.2944	36	\$6,131
18-Jan	Medium	6.49	1.86912	682.2288	24	\$16,373
8-Jan	Large	26	7.488	2733.12	2	\$5,466
Capital/Non-Capital -						
Total Opportunity						\$27,970

MANAGEMENT OF CHANGE

If the operation. For each comment here, there must be an action step below.

IMPLEMENTATION PLAN

Step#	Date	Responsibility	Action step
1	8/7/09	Lathrop	Order Leak Tags
2	8/7/09	Lathrop	Write Procedure for Leak Tag Program
3			Survey Plant and Tag Leaks and generate initial list
4			Fix all initial leaks found on survey
5			Trial run on leak tag flow procedure (steps of which tags is transferred through completion)
6			Train Plant personnel in safety meetings on how to properly perform procedures for the Leak Tag
7			Implement Program
8			Continue working with maintenance and production Supervisors to ensure that the program is being implemented
9			Continue to tag leaks to be fixed or entered into the Work Order System
10			
11			
12			
13			
14			
15			

ACTIVITY NOTES REFLECTING ACTIONS TAKEN TOWARDS OBTAINING THE SAVINGS

placed in the "COMMENTS" section of the Energy Log

Step#	Date	Comments	Savings
1	7/4/09	Valves closed off on ovens and leaking wand fittings	\$1,126
2	8/4/09	Hawk completed several air leaks off the list	\$3,799
3	9/23/09	1/2" compressed air leak on the fiberizer floor of 89 will be completed during curtailment	
4	10/13/09	1/2" compressed air leak on the fiberizer floor of 89 was completed during curtailment	\$10,500
5			
6			
7			
8			
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14			
15			
Total Savings			\$15,425

Mercantile Customer Project Commitment Agreement
Exemption Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between The Toledo Edison Company, its successors and assigns (hereinafter called the "Company") and Johns Manville Inc., 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 believes that it is a mercantile customer, as that term is defined in R.C. § 4928.01(A)(19), doing business within the Company's certified service territory; and

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain annual energy efficiency and peak demand reduction ("EE&PDR") benchmarks; and

WHEREAS, when complying with certain EE&PDR benchmarks the Company may include the effects of mercantile customer-sited EE&PDR projects; and

WHEREAS, Customer has certain customer-sited demand reduction, demand response, or energy efficiency project(s) as set forth in attached Exhibit A (the "Customer Energy Project(s)") that it desires to commit to the Company for integration into the Company's Energy Efficiency & Peak Demand Reduction Program Portfolio Plan ("Company Plan") that the Company will implement in order to comply with the Statute; and

WHEREAS, the Customer, pursuant to and consistent with the Statute, desires to pursue exemption from paying charges included in the Company's then current cost recovery mechanism (hereinafter, "Rider DSE") as approved by the Public Utilities Commission of Ohio ("Commission") for recovery of the DSE2 costs associated with the Company Plan; and

WHEREAS, Customer's decision to commit its Customer Energy Project(s) to the Company for inclusion in the Company Plan has been reasonably encouraged by the possibility of an exemption; and

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

NOW THEREFORE, in consideration of the mutual promises set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, do hereby agree as follows:

1. **Customer Energy Projects.** Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, 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. It is expressly agreed that Customer may use any and all energy related and other attributes created from the Customer Energy Project(s) to the extent permitted by state or federal laws or regulations, provided, and to the extent, that such uses by Customer do not conflict with said compliance by the Company.
 - b. The Company acknowledges that some of Customer's Energy Projects contemplated in this paragraph may have been performed under certain other federal and/or state programs in which certain parameters are required to be maintained in order to retain preferential financing or other government benefits (individually and collectively as applicable, "Benefits"). In the event that the use of any such project by the Company in any way affects such Benefits, and upon written request from the Customer, Company will release said Customer's Energy Project(s) to the extent necessary for Customer to meet the prerequisites for such Benefits. Customer acknowledges that such release (i) may affect Customer's exemption benefits discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations, including without limitation any reporting requirements, as set forth herein.
 - c. Any future Customer Energy Project(s) committed by Customer shall be subject to a separate application and, upon approval by the Commission, said projects shall become part of this Agreement.
 - d. Customer will provide Company or Company's agent(s) with reasonable assistance in the preparation of a joint application for approval of this Agreement ("Joint Application") that will be filed with the Commission, with such Joint Application being consistent with then current Commission requirements.
 - e. Upon written request and reasonable advance notice, Customer will grant employees or authorized agents of either the Company or the Commission reasonable, pre-arranged access to the Customer Energy Project(s) for purposes of measuring and verifying energy savings and/or peak demand reductions resulting from the Customer Energy Project(s). It is expressly agreed that consultants of either the Company or the Commission are their respective authorized agents.
2. **Joint Application to the Commission.** The Parties will submit the Joint Application using the Commission's standard "Application to Commit Energy Efficiency/Peak Demand Reduction Programs" in which they will seek the Commission's approval of (i) this Agreement; (ii) the commitment of the Customer Energy Project(s) for inclusion in the Company Plan; and (iii) the Customer's exemption from paying the DSE2 charge of the Company's Rider DSE.

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

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

3. **Customer Exemption and Annual Report.** Upon Commission approval of the request for exemption, the Company will exempt Customer from paying any Rider DSE charges consistent with any Commission directives as set forth in the Commission's Finding and Order approving the Joint Application. Such exempt status shall apply to those accounts identified by Customer that pertain to those Customer sites with one or more Customer Energy Project(s) approved for integration into the Company Plan by the Commission in the Joint Application.
- a. For purposes of this Agreement, a "site" shall be a single location with one or more facilities. As examples only, a site includes an industrial plant, a hospital complex or a university located on one or more parcels of land, provided that said parcels are contiguous.
 - b. For purposes of this Agreement, an "account" shall be as defined by the Company through its normal business practices. Any account identified by Customer shall be eligible for exemption, provided that said account pertains to a specific site with at least one Customer Energy Project that qualifies Customer for exemption from paying Rider DSE charges.
 - c. Any new accounts created at a site on which there is already an approved Customer Energy Project shall, at the option of the Customer, be included within the exemption granted under said project, and shall be included for purposes of calculating future eligibility for exemption under the project. Any such election shall become effective in the first billing cycle after March 15th following identification of said account in the annual report required under Section 3(d)(iii) below.
 - d. Customer acknowledges and agrees that if it desires to pursue such exempt status, as evidenced in the Joint Application, Customer is obligated to provide to the Company an annual report on the energy savings and peak-demand reductions achieved by the Customer Energy Project(s) on a calendar year basis. Company shall provide Customer with such information as it may require, that is in Company's possession, for the purposes of preparing such report. Company shall provide a template for Customer to use in preparing the annual report and shall make available a designated Company representative to answer questions.
 - i. Said report shall be submitted annually on or before January 31 of each year after Commission approval of the Joint Application.
 - ii. Said report shall provide all information required under the Rules, and where the requirements of the Rules conflict with a requirement under this Agreement or the Joint Application, the requirements of the Rules shall control.
 - iii. Said report shall, at a minimum, include the following information for each Customer Energy Project that has been approved by the Commission:
 - 1. A demonstration that the energy savings and peak-demand reductions associated with the Customer Energy Project(s) meet the total resource cost test or that the Company's avoided cost exceeds the cost to the Company for the Customer's program;
 - 2. A statement distinguishing programs implemented before and after January 1 of the current year;
 - 3. A quantification of the energy savings or peak-demand reductions for programs initiated prior to 2009 in the baseline period;

4. A recognition that the Company's baselines have been increased by the amount of mercantile customer energy savings and demand reductions;
5. A listing and description of the Customer Energy Projects that have been implemented, which provides the detail required by the Rules;
6. An accounting of expenditures made by the mercantile customer for each program and its component energy savings and peak-demand reduction attributes; and
7. A timeline showing when each Customer Energy Project went into effect and when the energy savings and peak-demand reductions occurred.
8. Any other information reasonably necessary for the Company to (i) verify Customer's continued eligibility for exemption from paying Rider charges; and (ii) report in the Company's annual status report to the Commission the EE&PDR results related to each Customer Energy Project.

e. Customer's exemption shall automatically terminate:

- i. At the end of the exemption period as determined by the Commission
- ii. Upon order of the Commission or pursuant to any Commission rule;
- iii. If Customer fails to comply with the terms and conditions set forth in the Company's then current Rider DSE, or its equivalent, as amended from time to time by the Commission, within a reasonable period of time after receipt of written notice of such non-compliance;
- iv. If it is discovered that Customer knowingly falsified any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application. In such an instance, Company reserves the right to recover any exempted rider charges from the date of approval of the Joint Application through the date said exemption is terminated; or
- v. If Customer fails to submit the annual report required in (d) above. In such an instance, Company reserves the right to recover any exempted rider charges from the date of approval of the Joint Application through the date said exemption is terminated. It is expressly agreed that this provision shall not apply should said report contain errors, provided that the submission of said report is made in good faith. It is further agreed that the Company will provide written notice of the date on which said report is due at least thirty (30) days prior thereto.

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

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

- a. If the Commission fails to approve this Agreement through the Joint Application;
- b. Upon order of the Commission; or

- c. At the end of the life of the last Customer Energy Project subject to this Agreement.

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

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

- 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 application of the exemption.
- 7. **Notices.** Unless otherwise stated herein, all notices, demands or requests required or permitted under this Agreement must be in writing and must be delivered or sent by overnight express mail, courier service, electronic mail or facsimile transmission addressed as follows:

If to the Company:

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

If to the Customer:

Johns Manville Inc.
925 Carpenter Road
Defiance, OH 43512
Attn: Matt Brown
Telephone: 419-784-7919
Fax: 419-784-7996
Email: brownm@jm.com

or to such other person at such other address as a Party may designate by like notice to the other Party. Notice received after the close of the business day will be deemed received on the next business day; provided that notice by facsimile transmission will be deemed to have been received by the recipient if the recipient confirms receipt telephonically or in writing.

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

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

Johns Manville Inc. - Plant 02 & Plant 08
(Customer)

By: Mark Br
Title: Plant Manager
Date: 4-19-11

The Toledo Edison Company
(Company)

By: John Dargatzis
Title: Vice President Energy Efficiency
Date: 5-13-11

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/27/2011 3:25:46 PM

in

Case No(s). 11-2106-EL-EEC

Summary: Application of The Toledo Edison Company and Johns Manville Inc. to Commit Energy Efficiency/Peak Demand Reduction Programs electronically filed by Mr. Kevin P. Shannon on behalf of The Toledo Edison Company