Ohio Public Utilities Commission

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

13-0445 Case No.: 13-0445 EL-EEC	
Mercantile Customer:	Hexpol Compounding-Burton Rubber Processing
Electric Utility:	The Cleveland Electric Illuminating Company
Program Title or Description:	Lighting Upgrade, Air Conditioner Replacement, VFD and Control Upgrade on Air Compressor.

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. <u>10-834-EL-POR</u>

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

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-1-

Section 1: Mercantile Customer Information

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Name: Hexpol Compounding- Burton Rubber Processing

Principal address:14330 Kinsman Road Burton Ohio 44021

Address of facility for which this energy efficiency program applies:14330 Kinsman Road Burton Ohio 44021

Name and telephone number for responses to questions: Richard Samuels 330-357-2354

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

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

The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

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

Individually, without electric utility participation.

Jointly with the electric utility.

B) The electric utility is: The Cleveland Electric Illuminating Company

C) The customer is offering to commit (check any that apply):

Energy savings from the customer's energy efficiency program.(Complete Sections 3, 5, 6, and 7.)

Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)

Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

- A) The customer's energy efficiency program involves (check those that apply):
 - Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)). If Checked, Please see Exhibit 1 and Exhibit 2
 - Installation of new equipment to replace equipment that needed to be replaced The customer installed new equipment on the following date(s):
 - Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s):

Behavioral or operational improvement.

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

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

Annual savings: <u>625,966</u> kWh

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

Annual savings: _____ kWh

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

Revised June 24, 2011

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

11

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Annual savings: _____ kWh

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

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

Revised June 24, 2011

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Section 4: Demand Reduction/Demand Response Programs

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

May 23, 2011

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

<u>90</u> kW

Revised June 24, 2011

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

Option 1: A cash rebate reasonable arrangement.

OR

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

OR

Commitment payment

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

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

- A cash rebate of \$_____. (Rebate shall not exceed 50% project cost. Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)
- Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.
 - An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for ______ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

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

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OR

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

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Section 6: Cost Effectiveness

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

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

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

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

The electric utility's avoided supply costs were _____.

Our program costs were _____

The incremental measure costs were _____.

-7-

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

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The utility's program costs were See Exhibit 3

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

Section 7: Additional Information

Please attach the following supporting documentation to this application:

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

Revised June 24, 2011

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Ohio Public Utilities Commission

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

13-0445 Case No.: 13-0445.EL-EEC

State of Ohio :

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

I am the duly authorized representative of: 1.

HEXPOL COMPOUNDING, BURTON RUBBER PROCESSING

[insert customer or EDU company name and any applicable name(s) doing business as]

I have personally examined all the information contained in the foregoing application, 2. 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.

COOPORATE ELECTRICAL ENGINEER

- Signature of Affiant & Title

Sworn and subscribed before me this 7,3 day of 7, ..., 2012 Month/Year

Signature of official administering oath

Loci A. Smith HRManager Print Name and Title

LORI A. SMITH My commission expires on _______ Notary Public - State of Ohlo _______My Commission Expires Sept. 11, 2013

Revised June 24, 2011

FE Rev 06.29.11

-9-

Site Address: Hexpol Compounding Burton Rubber Processing Principal Address: 13330 Kinsman Road

What date would you have replaced your

equipment if you had not replaced it early? Please describe the less efficient new Narrative description of your program including, but not limited to, Project Description of methodologies, protocols and practices Also, please explain briefly how you equipment that you rejected in favor of No. Project Name make, model, and year of any installed and replaced equipment: used in measuring and verifying project results determined this future replacement date. the more efficient new equipment. The replacement of the metal halide fixtures/bulbs would have been scheduled in 2016. We were looking to take Remove 309 HID metal halide fixtures/bulbs and replace with T8 flourescent with motion advantage of the DSE2 Rider exemption. Replacing the Burton MFG Site Lighting Upgrade See file Hexpol_P1_engineering study.xls N/A 1 sensors for energy savings. metal halide fixtures/bulbs with the T8 fixtures/bulbs has given us energy savings and better lighting for our facility 1. Removed vintage 1970 10 ton air condition split system unit with 7.0 EER rating and replace with new Carrier 11.20 EER 2. Removed vintage 1980 4 ton air condition unit with 9.0 seer rating and replaed with new Carrier 4 2 Replace air conditioners ton 13.0 seer rating. 3. Removed vntage 1990 3 ton air See file Hexpol_P2_engineeringstudy.xls. With the on going maintenance estimated 3years 2015. N/A condition unit with 9.0 seer rating and replace with new Carrier 3 ton 13.0 seer rating. 4. Removed vintage 1970 10 ton air condition unit with 7.0 EER rating with new Carrier 11.20 EER. Install Variable Speed Drive and new Installed a Variable Speed Drive with new controls on an existing 75 HP Air Compressor See files Hexpol_P3_engineeringstudy.pdf and Hexpol_P3_engineering 3 N/A 5 years. controls on 75 HP Air Compressor to be able to handle variable compressed air usage. study docx.

Rev (2.1.2012)

Customer Legal Entity Name: Hexpol Compounding - Burton Rubber Processing

Site: Hexpol Compounding Burton Rubber Processing

Principal Address: 13330 Kinsman Road

	2011	Unadjusted Usage, kwh We (A) 21,197.619	eather Adjusted Usage, kwh (B) 21,197.619	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C) 21,470.651	Note 1		
	2010	20,819,398	20,819,398	20,819,398			
	2009	19,037,961	19,037,961	19,037,961			
	Average	20,351,659	20,351,659	20,442,670			
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	Commitment Payment \$
1	Burton MFG Site Lighting Upgrade	05/23/2011	\$67,590	446,891	446,891	60	
2	Replace air conditioners	07/20/2012	\$46,500	14,227	14,227	8	
3	Install Variable Speed Drive and new controls on 75 HP Air Compressor	01/15/2012	\$24,876	164,848	164,848	22	
				-	-	-	
				-	-	•	
				-	-	-	
				-	-	-	
			Total	625,966	625,966	90	\$0

Docket No.	13-0445	Savings as percent of usage	3.1% Note 2
Site:	13330 Kinsman Road	= Total (D) divided by Average (C)	

Customer Eligible Exemption Period: 38 Month(s) 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.

Exhibit 3 Utility Cost Test

UCT =	Utility	Avoided	Costs /	Utility Costs	
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Project	Total Annual Savings, MWh	Utility Ave Cost \$/MW	oided t ′h	Utilit	ty Avoided Cost \$ (C)	ι	Jtility Cost \$	Cash Rebate \$	Administrator Variable Fee	Tot	al Utility Cost \$ (C)	UCT
	(A)	(6)						(Ľ)	(F)		(0)	(1)
1	447	\$	308	\$	137,768	\$	1,350	\$0	\$4,469	\$	5,819	23.7
2	14	\$	308	\$	4,386	\$	1,350	\$0	\$142	\$	1,492	2.94
3	165	\$	308	\$	50,819	\$	1,350	\$0	\$1,648	\$	2,998	16.95
Total	626	\$	308		192,973		4,050	\$0	\$6,260		10,310	18.7

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)

Hexpol Compounding - Burton Rubber Processing ~ Hexpol Compounding Burton Rubber Processing Docket No. 13-0445

Site: 13330 Kinsman Road

Lighting Form

Lighting Inventory Form

Applicant Name: Facility Name:	Richard Samuel Hexpol Compounding- Burton Rubber Processing	Instr	ctions: Please use one line fo For existing or propos	or each fixture typ sed control. choo	pe in a room or an use OCC for Occu	a oanv Sensor. D	DAYLTG for photo	osensor. o	or NONE for none. Contro	ls must save ener	rov to qualify.															
Date:	12/30/2011 PROJECT BASIC INFORMATION		The total of Column S	NSTALLATIO	of CFLs and exit si	gris in Column I	M, and the quanti	ties of sen	nsors in Column R, will be	POST-INSTAL	your incentive	on the NonStand	sard Lighting form.							Er	nergy Calculat	ions				
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e.g. 400 North Street 2 Office e.g. Example 1 Restaus	e Interior Office - Small want Exterior Restaurant - Fast Food	Cooled Space Uncooled space	3 F44ILL 5 Example Cut Sheet	112 1 50	0.34	NONE	5	3	CFT55/1-BX Example Cut Sheet 2	56 25	0.17 0.13	OCC DAYLTG	3		0.13	0.17 8	4% 5%	84% 88%	34%	12%	37%	30% 50%	0.19	2.808	3.435 4.156	
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Lighting Form

Line	Building Address	Floor Area Description	Interior or Exterior	Predominant Space Type	Area Cooling	Pre Fixture	Pre Fixture Code	Pre Watts /	Pre kW /	Existing	Existing	Post	Post Fixture Code	Post Watts/	Post kW /	Proposed	Proposed	Interior Change	Exterior	Change in	Applicant	Coincidence	Interactive I	nteractive	Pre	Post	Demand A	Applicant	Prescribed Annual
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Project Estimate Savings Sum	d Annual mary	
Estimated Annual kWh Savings	446,891	
Fotal Change in Connected Load	59.68	
	¢44.000.40]
Annual Estimated Cost Savings	\$44,689.10	
Annual Operating Hours	7,488	
nterior Lighting Incentive @ \$0.05/kWh (excluding CFLs, sensors, or LED exit signs)	\$22,344.55	
Exterior Lighting Incentive @ 60.50/W (excluding CFLs, sensors, or LED exit signs)	\$0.00	
Fotal CFL Incentive @ \$1/screw-in CFL lamp; \$15/hard-wired CFL amp (includes all CFLs, both nterior and exterior)	\$0.00	
Fotal LED Exit Incentive @ \$10/exit sign	\$0.00	
Fotal Lighting Controls Incentive @ \$25/sensor (includes all Lighting Controls, both interior and exterior)	\$0.00	
Fotal Calculated Incentive	\$22,344.55	
ED Exit Sign	309	
otal Lamp Quantity for Screw-In CFLs	0	
otal Lamp Quantity for Hard-Wired CFLs	0	
otal Fixture Quantity for LED Exit Signs	0	
otal Quantity for Occupancy Sensors	0	
otal Quantity for Daylight Sensors	0	

Demand Savings (For Internal Use Only) Project 2 Replace Air Conditioner Units

#1AC					Total													
Old	Tons	v	BTUh 12000	(-)	BTUh		BTUs/K	(-)	KBTUs		EER	(_)	KW	v	Hours	(-)	KWh	
	10	х	12000	(_)	120000	÷	1000	(_)	120	÷	9	(-)	15.55	Χ	900	(_)	12,800.00	
New	10	х	12000	(=)	120000	÷	1000	(=)	120	÷	11.2	(=)	10.71	Х	960	(=)	10,285.71	
													2 62	KW Reduce	d		2 514 29	KWh Reduced
													2.02	KW Keuuee	u		2,314.27	K WII Keuuceu
#2AC					Total													
Old	Tons		BTUh		BTUh		BTUs/K		KBTUs		SEER		KW		Hours		KWh	
	4	х	12000	(=)	48000	÷	1000	(=)	48	÷	9	(=)	5.33	Х	960	(=)	5,120.00	
New	4	x	12000	(=)	48000	÷	1000	(=)	48	÷	13	(=)	3.69	Х	960	(=)	3,544.62	
														KW				
													1.64	Reduced			1,575.38	KWh Reduced
#24.0					T-4-1													
#3AC	Toma		ртіц		Total				VDTU		SEED				Hanna			
Ola			12000	(_)	BIUN 26000		1000	(_)	KBIUS		SEEK	(_)	K W		Hours	(-)	K WI	
	3	х	12000	(=)	30000	÷	1000	(=)	50	÷	9	(=)	4.00	Х	900	(=)	5,840.00	
New	3	х	12000	(=)	36000	÷	1000	(=)	36	÷	13	(=)	2.77	Х	960	(=)	2,658.46	
#4AC					Total													
Old	Tons		BTUh		BTUh		BTUs/K		KBTUs		EER		KW		Hours		KWh	
014	10	х	12000	(=)	120000	÷	1000	(=)	120	÷	9	(=)	13.33	х	3300	(=)	44.000.00	
												()					,	
New	10	х	12000	(=)	120000	÷	1000	(=)	120	÷	11.3	(=)	10.62	Х	3300	(=)	35,044.25	
													2.71	KW Reduce	ed		8,955.75	KWh Reduced
														KW				
													1.23	Reduced			1.181.54	KWh Reduced
					Reduced										Reduced		_,	
	Old Kw		New KW	7	KW						Old Kwh		New KWh		KWh			
#1AC	13.33	(-)	10.71	(=)	2.62				#1	AC	12,800.00	(-)	10,285.71	(=)	2,514.29			
#2AC	5.33	(-)	3.69	(=)	1.64				#2	AC	5,120.00	(-)	3,544.62	(=)	1,575.38			
#3AC	4.00	(-)	2.77	(=)	1.23				#3	AC	3,840.00	(-)	2,658.46	(=)	1,181.54			
#4AC	13.33	(-)	10.62	(=)	2.71				#1	AC	44,000.00	(-)	35,044.25	(=)	8,955.75			
Total	36.00	(-)	27.80	(=)	8.20	K	W Reduced		Т	otal	65,760.00	(-)	51,533.04	(=)	14,226.96	KWh	Reduced	



Presented to:



Ohio, .



APO TSD APO Pump and Compressor 6607 Chittenden Road Hudson , Ohio, 44236 Phone: 330-650-1330 Fax: 330-650-1440 Date: September 15, 2011



Table of Contents:

Executive Summary	- 1
Methodology	- 2
Existing Supply Side Schematic	- 3
Existing System Power Statistics	- 4
Existing System Flow Statistics	- 5
Methodology: Solutions Capacity Opportunity	- 6
Methodology: Solutions Pressure Opportunity	- 7
Methodology: Solutions Storage Opportunity	- 8
Proposed Savings Summary	- 9
Proposed System Implementation	- 10
Proposed Supply Side Schematic	- 11
System Overview	- 12
Compressor Overview	- 13
Implementation Products	- 16
Terms and Conditions	- 18
Load Duration Profile	- 19
Daily Graph	- 20



Purpose and Value of IntelliSurvey:

Every year, companies spend significant amounts of money to compress air to operate or support their production processes.

Industry studies show that 30-60% of the amount spent is wasted! Contributing factors include:

- Inefficient and ineffective system operation
- Misapplication of the air system components
- Artificial demand and system leaks

Further, the same studies indicate an extremely low awareness among process owners and operators of the significant savings available through compressed air system optimization.

Optimizing a compressed air system starts with an investigation of system operation over a complete operating cycle (typically 7 days). Once all the data is collected, operating parameters and profiles are analyzed utilizing the principles of compressed air science to clearly define the current system characteristics.

It is only after this analysis that recommendations and solution plans can be made.

Our goal is to offer real solutions based on real data and analysis --IntelliSurvey

"Solutions without data, system knowledge and analysis... are just guesses"

Executive Summary		
Total Savings Opportunity :	\$ 11,788	
Number of Compressors considered	3	
Number of hours of collected data	163	hrs
Total installed compressed air capacity	980	cfm
Average utilized capacity	551	cfm
Highest	980	cfm
Lowest	110	cfm
Average Pressure	107	psig
Highest	112	psig
Lowest	4	psig
Air Quality Rating	6.2	
Annual System Operation	6,403	hrs
Current estimated Annual Power consumption	788,245	kW-h
Blended Energy Cost	0.0800	\$/kW-h
Current Annual Energy Cost -Total (est)	63,060	\$
Current Annual Energy Cost - Unproductive (est)	5,289	\$
New Annual Energy Cost (est)	51,272	\$



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Methodology



Multi-channel logging equipment is installed at the site to collect critical system data in order to establish a baseline of existing system characteristics. We measure the reaction of individual compressors and system pressure in relation to dynamic process demand, which makes it imperative to have maximum resolution of system data. The IntelliSurvey system logs at a rate of 1 scan per second on each channel, resulting in more than 3,000,000 data points during a typical 7-day production cycle.

Once the operating characteristics of the system are established, an analysis is performed, using the principles of compressed air science, to identify opportunities to reduce energy consumption and increase system reliability. Many factors are considered, but the main areas are: inefficient utilization of compressor capacity, excessive compressor operation in the unloaded condition, elevated system pressure, insufficient system storage and the mis-application of air system components.

There are also times when further investigation is warranted, whether it be a more in depth study of the supply side equipment or a detailed evaluation of the efficiency and effectiveness of compressed air at the actual points of use (Full System Audit). These more inclusive investigations can sometimes uncover double the savings opportunities.



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Existing Sys	stem Power	Statistics
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	Min	Max	Average
Pressure	4 psig at 09/11/11 9:46 PM	112 psig at 09/07/11 9:28 PM	107 psig
Power	26.2 kW at 09/10/11 1:52 AM	191.2 kW at 09/08/11 12:26 PM	123.1 kW

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Existing System Flow Statistics



		Compressor 1	Compressor 2	Compressor 3	System
Maximum Flow	cfm	327 at 09/06/11 12:02 PM	327 at 09/06/11 12:46 PM	327 at 09/06/11 12:00 PM	980 at 09/06/11 12:46 PM
Minimum Flow	cfm	1 at 09/08/11 2:20 PM	0 at 09/12/11 1:12 PM	121 at 09/10/11 1:50 AM	110 at 09/10/11 1:52 AM
Average Flow	cfm	201	121	326	551



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Methodology: Solutions Capacity Opportunity

Optimizing Air Compressor Capacity Utilization:

Most Air Compressors run most efficiently when fully loaded or turned off.

Opportunities:

- Partially or lightly loaded compressors
- Incorrect control mode selection
- Incorrect control set points
- Rapid load / no load cycling
- Excessive unloaded run time

IntelliSurvey Solutions Methodology:

- 1. Control compressors based on coordinated sequences and set points
- 2. Force all running fixed speed compressors to full load
- 3. Apply efficient load following VSD compressors for trim load requirements

Solutions opportunity AC capacity utilization



Recommendations may include:

- System controllers
- VSD trim compressor
- System storage

Benefits may include:

	Reduction in energy consumption	Maximized operating compressor efficiency
-	Reduction in maintenance costs	Fewer compressors operating
	Increased reliability	Supply capacity back-up / redundancy



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Methodology: Solutions Pressure Opportunity

Optimizing air pressure at the lowest possible level:

Unregulated air usage and system leaks consume (waste) more consumed air at higher pressure

Opportunities:

- System pressure elevated over requirements of production equipment
- Highly variable production
- Rapid load / unload
- High pressure drop across clean up equipment
- Intermittent low pressure spikes

IntelliSurvey Solutions Methodology:

- 1. Determine lowest possible pressure requirements
- 2. Establish effective storage
- 3. Apply flow control for lowest stabilized production pressure

Leakage rates (m ³ /min) for different supply pressures and approximately equivalent orifice				Leakag and ap	ge rates oproxim	s (cfm) nately eo	for diffe quivalen	rent su t orifice	oply pre sizes	essures			
SIZES													
Pressure Orifice Diameter (mm)					Pressu	re	Or	ifice Dia	meter (inches)			
barg	0.5	1.0	1.5	3.0	6.0	10	psig	1/64	1/32	1/16	1/8	1/4	3/8
4	0.012	0.045	0.095	0.400	1.94	5.40	70	0.3	1.2	4.8	19.2	76.7	173
5	0.015	0.055	0.110	0.465	2.17	6.02	80	0.33	1.3	5.4	21.4	85.7	193
6	0.018	0.065	0.130	0.540	2.40	6.65	90	0.37	1.5	5.9	23.8	94.8	213
7	0.022	0.075	0.150	0.710	2.63	7.30	100	0.41	1.6	6.5	26.0	104	234
8	0.028	0.085	0.170	0.790	3.19	8.86	125	0.49	2.0	7.9	31.6	126	284

Example: 18% improvement when decreasing pressure from 7 bar to 8 bar, or from 125 psi to 100 psi

Recommendations may include:

- System controls
- Flow controller
- System storage

Benefits may include:

Reduction in energy consumption	Lower compressed air consumption Lower supply side system pressure
Reduction in maintenance costs	Fewer compressors operating
Increased reliability	Supply capacity back-up



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Methodology: Solutions Storage Opportunity

Optimizing System Storage:

Storage is the one system component where "more is better" and the operating cost is Zero

Opportunities:

- System pressure elevated over requirements of production equipment
- Highly variable production loading
- Excessive unloaded runtime
- Intermittent low pressure spikes

IntelliSurvey Solutions Methodology:

- 1. Determine lowest possible pressure requirements
- 2. Establish largest system event and pressure decay criteria
- 3. Apply storage to support lowest stabilized production pressure



Recommendations may include:

- System controls
- Flow controller
- System Storage

Benefits may include:

	Reduction in energy consumption	Avoid turning on extra compressors Lower supply side system pressure
-	Reduction in maintenance costs	Fewer compressors operating
	Increased reliability	Supply capacity back-up / redundancy



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Proposed Savings Summary

Savings:			-			
Equipment	Size	Savings Source	Estimated Power Savings	Estimated Annual Savings	Estimated Cost	Estimated Installation Cost
Flow Controller:	IR-BP-BV 3.0	Flow Reduction 23 cfm	5.1 kW	\$ 2636		
Variable Speed Drive:	IRN75H-CC- 100	Reduces inefficient loading	13.1 kW	\$ 9152		
TOTAL				\$ 11788		
Payback:						

Examining point of use, or P5, of an air system will often direct action toward the root cause of problems and flush out the symptoms of mis-application. The Solutionizing[™] process goes beyond P4 to P5 and leads to the supply side. A full audit of your system is needed to realize savings associated with this.



Proposed System Implementation

Efficiency Recommendations:				
		Benefit		
Flow Controller:		5.1 kW Reduction		
Variable Speed Drive:		13.1 kW Reduction		

Quality Recommendations:			
		Benefit	
Dryers		Improved ISO8375 Dewpoint Rating	



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Proposed Supply Side Schematic





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11









	Min	Мах	Average
Pressure	4 psig at 09/11/11 9:46 PM	112 psig at 09/07/11 9:28 PM	107 psig
Flow	1 cfm at 09/08/11 2:20 PM	327 cfm at 09/06/11 12:02 PM	201 cfm



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	Min	Мах	Average
Pressure	4 psig at 09/11/11 9:46 PM	112 psig at 09/07/11 9:28 PM	107 psig
Flow	0 cfm at 09/12/11 1:12 PM	327 cfm at 09/06/11 12:46 PM	121 cfm



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	Min	Мах	Average
Pressure	4 psig at 09/11/11 9:46 PM	112 psig at 09/07/11 9:28 PM	107 psig
Flow	121 cfm at 09/10/11 1:50 AM	327 cfm at 09/06/11 12:00 PM	326 cfm



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Implementation Products

Optimizing compressor utilization						
In • •	gersoll Rand Nirvana Variable speed capacity control Unlimited start/stop operation Limits in-rush current to less than 100%					
Benefits Include:						
	Reduction in energy consumption	Handles trim loads at full load efficiency Allows fixed speed compressors to run fully loaded or off Minimizes unloaded/unproductive energy				
	Reduction in maintenance costs	Fewer compressors operating				
•	Increased reliability	Supply capacity back-up / redundancy				

Flow and pressure control					
Ingersoll Rand IntelliFlow					
•	Precise pressure control (+/75psig) Capacities from 500 – 17000 CFM				
Benefits Include:					
	Stable air pressure for production	Eliminate production variability Eliminate production interruption due to insufficient pressure			
	Reduction in energy consumption	Lower compressed air consumption Fewer compressors operating Reduction of artificial demand and leaks			
	Reduction in maintenance costs	Fewer compressors operating			
-	Increased reliability	Supply capacity back-up / redundancy			



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Air Quality					
Ingersoll Rand Externally Heated Regenerative Dryer					
 Upto class 1 dew point 					
Benefits Include:					
 Reduction in energy consumption 	Externally heater results in lower purge air rate				
	Optional energy manage	ment system			



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17

Terms and Conditions

The purpose of this Report is not to identify any errors, omissions, defects, code violations, manufacturer instruction violations or any potential or actual hazardous or dangerous condition, and IR shall not be liable for failure to discover such conditions or include such conditions in this Report. This Report should not be construed as professional engineering advice in any of the following disciplines: electrical, mechanical, structural, foundational or HVAC.

Flow data is free air deliver based on manufacturers' published data.

THE SELLER MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

LIMITATION OF LIABILITY:

THE REMEDIES OF THE BUYER SET FORTH HEREIN ARE EXCLUSIVE, AND THE TOTAL CUMULATIVE LIABILITY OF THE SELLER WITH RESPECT TO THIS CONTRACT SHALL NOT EXCEED THE CONTRACT PRICE.

NEITHER PARTY NOR THEIR SUPPLIERS SHALL IN NO EVENT BE LIABLE TO THE OTHER, ANY SUCCESSORS IN INTEREST OR ANY BENEFICIARY OR ASSIGNEE OF THIS CONTRACT FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES ARISING OUT OF THIS CONTRACT OR ANY BREACH THEREOF, OR ANY DEFECT IN OR FAILURE OF OR MALFUNCTION OF THE EQUIPMENT HEREUNDER, WHETHER OR NOT SUCH LOSS OR DAMAGE IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE



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Daily Graph























Mercantile Customer Project Commitment Agreement Exemption Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between The Cleveland Electric Illuminating Company, its successors and assigns (hereinafter called the "Company") and Hexpol Componding Burton Rubber Processing, its permitted successors and assigns (hereinafter called the "Customer") (collectively the "Parties" or individually the "Party") and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

WHEREAS, the Company is an electric distribution utility and electric light company, as both of these terms are defined in R.C. § 4928.01(A); and

WHEREAS, Customer is a mercantile customer, as that term is defined in R.C. § 4928.01(A)(19), doing business within the Company's certified service territory; and

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain 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 1 (the "Customer Energy Project(s)") that it desires to commit to the Company for integration into the Company's Energy Efficiency & Peak Demand Reduction Program Portfolio Plan ("Company Plan") that the Company will implement in order to comply with the Statute; and

WHEREAS, the Customer, pursuant to 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 is committing the Customer Energy Project(s) as a result of such exemption.

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:

 Customer Energy Projects. Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, and as evidenced by the affidavit attached hereto as Exhibit A, Customer

1

acknowledges that the information provided to the Company about the Customer Energy Project(s) is true and accurate to the best of its knowledge.

- a. By committing the Customer Energy Project(s) to the Company, Customer acknowledges and agrees that the Company shall control the use of the kWh and/or kW reductions resulting from said projects for purposes of complying with the Statute. By committing the Customer Energy Project(s), Customer further acknowledges and agrees that the Company shall take ownership of the energy efficiency capacity rights associated with said Project(s) and shall, at its sole discretion, aggregate said capacity into the PJM market through an auction. Any proceeds from any such bids accepted by PJM will be used to offset the costs charged to the Customer and other of the Company's customers for compliance with state mandated energy efficiency and/or peak demand requirements.
- b. The Company acknowledges that some of Customer's Energy Projects contemplated in this paragraph may have been performed under certain other federal and/or state programs in which certain parameters are required to be maintained in order to retain preferential financing or other government benefits (individually and collectively as 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 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:
 - 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;
 - 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;
- 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.
- 3. 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.

- 4. 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.
- 5. Taxes. Customer shall be responsible for all tax consequences (if any) arising from the application of the exemption.
- 6. 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 Atm: Victoria Nofziger Telephone: 330-384-4684 Fax: 330-761-4281 Email: vmnofziger@firstenergycorp.com

If to the Customer:

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Hexpol Compounding Burton Rubber Processing 14330 Kinsman Road Burton, Ohio Attn:Richard Samuel Telephone:330-357-2354 Fax:330-761-4281 Email:RichardSamuel@hexpol.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.

- 7. 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.
- 8. 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.
- 9. Entire Agreement. This Agreement, along with related exhibits, and the Company's Rider DSE, or its equivalent, as atmended 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.
- 10. 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.
- 11. 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.

- 12. 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.
- 13. 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.

Please Select Operating Company (Company) Illumingating Company lr in By: Title: NP of Energy Efficiency 4 -À 1-Date: ___ (Customer) $B_{Y} \leq$ Controluter UCDER PROCESING -Title: FOW Date: 01 DEBORAH SCHMIDT NOTARY PUBLIC Dubolan STATE OF OHIO Recorded in Cuyahoga County My Comm, Exp. 9/12/18

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in

Case No(s). 13-0445-EL-EEC

Summary: Application to Commit Energy Efficiency/Peak Demand Reduction Programs of The Cleveland Electric Illuminating Company and Hexpol Compounding-Burton Rubber Processing electronically filed by Ms. Jennifer M. Sybyl on behalf of The Cleveland Electric Illuminating Company and Hexpol Compounding-Burton Rubber Processing