



Public Utilities Commission

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

Case No.: 20-0104-EL-EEC

Mercantile Customer: The Cleveland Clinic Foundation

Electric Utility: The Cleveland Electric Illuminating Company

**Program Title or
Description:** 105th Garage

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

Completed applications requesting the cash rebate reasonable arrangement option 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 for a period of up to 12 months will also qualify for the 60-day automatic approval. However, all applications requesting an exemption from the EEDR rider for longer than 12 months must provide additional information, as described within the Historical Mercantile Annual Report Template, that demonstrates additional energy savings and the continuance of the Customer's energy efficiency program. This information must be provided to the Commission at least 61 days prior to the termination of the initial 12 month exemption period to prevent interruptions in the exemption period.

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 altered or incomplete applications may result in a suspension of the automatic approval process or denial of the application.

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

Section 1: Mercantile Customer Information

Name: The Cleveland Clinic Foundation

Principal address: 9500 Euclid Avenue Cleveland OH 44195

Address of facility for which this energy efficiency program applies: 2118 East 106th St.
Cleveland OH 44195

Name and telephone number for responses to questions: Jon Utech, 216-448-8726

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 failed equipment which has no useful life remaining. 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):

12/11/18.
- ☐ Behavioral or operational improvement.

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

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

Annual savings: _____ kWh

- 2) If you checked the box indicating that the customer installed new equipment to replace failed equipment which had no useful life remaining, then calculate the annual savings [(kWh used by new standard equipment) - (kWh used by the optional higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____ kWh

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

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

Annual savings: 996,553 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.

Annual savings: _____ kWh

Section 4: Demand Reduction/Demand Response Programs

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

- ☐ This project does not include peak demand reduction savings.
- ☒ 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?

12/11/18

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

106 kW

Section 5: Request for Cash Rebate Reasonable Arrangement, Exemption from Rider, or Commitment Payment

Under this section, check all boxes that apply and fill in all corresponding blanks.

A) The customer is applying for:

- ☒ A cash rebate reasonable arrangement.
- ☐ An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.
- ☐ Commitment payment

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

A cash rebate reasonable arrangement.

- ☒ A cash rebate of \$37,244. (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.)

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.)
- ☐ 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 12 month period, the customer will need to complete, and file within this application, the Historical Mercantile Annual Report

Template to verify the projects energy savings are persistent.

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

Section 6: Cost Effectiveness

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

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

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

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

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure costs were _____.

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

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

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

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

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

Section 7: Additional Information

Please attach the following supporting documentation to this application:

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



Public Utilities Commission

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

Case No.: 20-0104-EL-EEC

State of Ohio :

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

1. I am the duly authorized representative of:

The Cleveland Clinic Foundation

[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.


Jon Utech, Senior Director
Signature of Affiant & Title

Sworn and subscribed before me this 5th day of March, 2020 Month/Year

Jacqueline Dixon
Signature of official administering oath

My commission expires on 11-08-2023

Print Name and Title
JACQUELINE DIXON
Notary Public
In and for
the State of Ohio
My Commission Expires



**MERCANTILE CUSTOMER SITE INFORMATION FORM****APPLICANT INFORMATION**

SITE NAME:	Cleveland Clinic Foundation	PUCO Docket #	20-0104
Site Address:	2118 East 106th st.	Site City:	Cleveland
Site State:	Ohio	Site Zip code:	44195
Customer Legal Name:	Cleveland Clinic Foundation		
Contact Person:	Jon Utech	Phone:	2164488726
		Email:	utech@ccf.org
FirstEnergy Customer Service Representative or Administrator's Name:	COSE/GCP	Phone:	216-592-2432
NAICS Number:	Applicant Taxpayer ID # (SSN/FEIN) :	34-0714585	

BUSINESS SPECIFIC INFORMATION

Please give a general description of your business below:

Hospital System

OPERATIONAL INFORMATION

Specify hours of operation per day (e.g. 8:00 AM - 5:00 PM): 24 Hours

Specify days of operation per week (e.g. Monday - Friday): 7 Days

Please describe any seasonal outages or ramp-ups applicable to your business below:

CUSTOMER ACKNOWLEDGEMENT

PLEASE CHECK BOXES BELOW



I UNDERSTAND THAT THE PROJECT(S) REPORTED IN THIS DOCUMENT MAY BE INSPECTED BY AN INDEPENDENT EVALUATION CONTRACTOR TO CONFIRM PROJECT COMPLETION, SAVINGS AND USE CONDITIONS.



I UNDERSTAND THAT ALL CUSTOMER NUMBERS INCLUDED WITHIN THIS APPLICATION MUST BE LOCATED WITHIN ONE SITE AS DEFINED HEREIN

Customer Usage Summary

Total Site Baseline Usage Information ¹

Year	Billed kWh	Weather Adjusted	Total Billed \$
2017	0	0	80
2018	0	0	80
2019	6,500,000	6,500,000	80
Average	6,500,000	6,500,000	80

(1) These numbers will be used to establish the baseline usage for calculation of the potential exemption period for this site

When entering the Customer Number, be sure to add a leading apostrophe so excel does not truncate the number.

Total Site Baseline Usage Information by Customer Number

Account Assignment Number	Customer Number	Address	Rate Code	2017			2018			2019		
				Weather Adjusted kWh	Billed kWh	Total Billed \$	Weather Adjusted kWh	Billed kWh	Total Billed \$	Weather Adjusted kWh	Billed kWh	Total Billed \$
1	08004605661330001132	10524 Euclid Ave Cleveland OH 4410	CE-GSU								6,500,000	
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Billed kWh and Total billed \$ will have to be compiled from your old electric bills. You need to complete three years of data if taking the exemption option or a minimum of one year of data if taking the cash option.

Cleveland Clinic Foundation
Cleveland Clinic Foundation



Project #1

PROJECT INFORMATION SHEET

Cleveland Clinic Foundation

Project Name: East 105th Garage Lighting**Project In-Service Date (MM/DD/YYYY):** 12/11/2018Please Select Account Assignment Number associated with this Project (found on the Customer Usage Summary Tab)

1

*If more than one date, Please use most current***Please provide a narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment:**

New construction of parking garage and included lighting

Total Project Cost: \$533,536**Type of Project:***(Check One That Applies)*☐ Early replacement of fully functioning equipment with new equipment☐ Installation of new equipment to replace failed equipment☒ Installation of new equipment for new construction or facility expansion☐ Behavioral modification or operational improvement**Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.****Project Classification:***(Check all that apply)*☒ Lighting☐ Motor☐ HVAC☐ Air Compressor☐ Controls☐ Refrigeration☐ Process Improvement☐ Water Heating☐ Other/Custom**If Other or Custom Please Explain:****PROJECT INFORMATION SHEET****Equipment Information:**

	New	Old Equipment
Equipment specifications (Model no., size, etc.):	LED	
Number of units:	1,252	
Efficiency rating (R-Value, SEER/EER rating, motor efficiency, etc.)		
What was the estimated remaining useful service life:	15	

Operational Information for Equipment:

Describe the operational period of the equipment (i.e. months, days, hours): 7852

Does this project produce energy savings Monday through Friday during the months of June through August from the hours of 3 PM to 6 PM: ☒ Yes ☐ No

For a new facility, please attach an itemized summary sheet that lists all installed measures that exceed current building standards

For operational improvement projects, provide a detailed description of all operational improvements and/or schedule changes for achievement of conservation efforts:

Energy Savings Information:

Equipment	Kwh usage	Yearly hours of operation	Demand (kW)	
Old	1,512,977	7,852	173	
Standard	1,512,977	7,852	173	
New	581,048	7,852	74	
Annual reduced kWh attributable to this project:	931,929	kWh	kW demand reduction attributable to this project:	99 kW
Annual reduced kWh eligible for an incentive :	931,929	kWh		

Please describe 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.

FirstEnergy Lighting Calculator

Please describe all documents that provide proof of purchase and verification that project was completed and is in-service. Also, provide an accounting of expenditures for this project. (Must attach all described documents with submission of application). *Label all pages deemed to be confidential*

Invoices



Project #2

PROJECT INFORMATION SHEET

Cleveland Clinic Foundation

Project Name: Elevators**Project In-Service Date (MM/DD/YYYY):** 12/11/2018Please Select Account Assignment Number associated with this Project (found on the Customer Usage Summary Tab)

1

*If more than one date, Please use most current***Please Provide a narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment:**

New elevators for the parking garage

Total Project Cost: \$56,000**Type of Project:***(Check One That Applies)*☐ Early replacement of fully functioning equipment with new equipment☐ Installation of new equipment to replace failed equipment☒ Installation of new equipment for new construction or facility expansion☐ Behavioral modification or operational improvement**Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.****Project Classification:***(Check all that apply)*☐ Lighting☐ Motor☐ HVAC☐ Air Compressor☐ Controls☐ Refrigeration☐ Process Improvement☐ Water Heating☒ Other/Custom**If Other or Custom Please Explain:****PROJECT INFORMATION SHEET****Equipment Information:**

	New	Old Equipment
Equipment Specifications (Model No., Size, etc.):	Energy Efficient elevators 4 passenger and 1 service	
Number of Units:	5	
Efficiency Rating (R-Value, SEER/EER Rating, Motor Efficiency, etc.)		
What was the estimated remaining useful service life:	15	

Operational Information of Equipment:

Describe the operational period of the equipment (i.e. Months, Days, Hours): 8760

Does this project produce energy savings Monday through Friday during the months of June through August from the hours of 3 PM to 6 PM: ☒ Yes ☐ No

For a New Facility, Please attach an itemized summary sheet that lists all installed measures that exceed current building standards

For operational improvement projects, provide a detailed description of all operational improvements and/or schedule changes for achievement of conservation efforts:

Energy Savings Information:

	Equipment	Kwh Usage	Yearly hours of operation	Demand (kW)	
	Old	306,600	8,760	35	
	Standard	306,600	8,760	35	
	New	241,976	8,760	28	
Annual reduced kWh attributable to this project:	64,624	kWh	kW demand reduction attributable to this project:	7	kW
Annual reduced kWh eligible for an incentive :	64,624	kWh			

Please describe 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.

Otis elevator study. Elevator energy calculations

Please describe all documents that provide proof of purchase and verification that project was completed and is in-service. Also, provide an accounting of expenditures for this project. (Must attach all described documents with submission of application). *Label all pages deemed to be confidential*

Invoices

Customer Legal Entity Name: Cleveland Clinic Foundation
Site Address: Cleveland Clinic Foundation
Principal Address: 2118 East 106th 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	What date would you have replaced your equipment if you had not replaced it early? Also, please explain briefly how you determined this future replacement date.		Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.
1	East 106th Garage Lighting	New construction of parking garage and included lighting	FirstEnergy Lighting Calculator	N/A	N/A	
2	Elevators	New elevators for the parking garage	Olis elevator study. Elevator energy calculations	N/A	N/A	

Exhibit 2

Customer Legal Entity Name: Cleveland Clinic Foundation
Site Address: Cleveland Clinic Foundation
Principal Address: 2118 East 106th st.

Project Number	Project Name	In-Service Date	Project Cost \$	50% of Project Cost \$	KWh Saved/Year (D) counting towards utility compliance	KWh Saved/Year (E) eligible for incentive	Utility Peak Demand Reduction Contribution, KW (F)	Prescriptive Rebate Amount (G) \$	Eligible Rebate Amount (H) \$ <i>Note 2</i>	Commitment Payment \$
			Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (C) <i>Note 1</i>					
2019			6,500,000	6,500,000	6,500,000					
Average			6,500,000	6,500,000	6,500,000					
1	East 105th Garage Lighting	12/11/2018	\$533,536	\$266,768	931,929	931,929	99	\$46,428	\$34,821	
2	Elevators	12/11/2018	\$56,000	\$28,000	64,624	64,624	7	\$3,231	\$2,423	
Total			\$589,536		996,553	996,553	106	\$49,659	\$37,244	\$0

Docket No. 20-0104
Site: 2118 East 106th st.

Notes

- (1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.
- (2) The eligible rebate amount is based upon 75% of the rebates offered by the FirstEnergy Commercial and Industrial Energy Efficiency programs, not to exceed the lesser of 50% of the project cost or \$250,000 per project. Combined Heat & Power (CHP) projects are not subject to the \$250,000 project rebate cap.

Exhibit 3

UCT = Utility Avoided Costs / Utility Costs

Project	Utility Avoided Cost		Utility Cost		Cash Rebate \$		Administrator Variable Fee		Total Utility Cost		UCT
	\$	(A)	\$	(B)	(C)	(C)	\$	(D)	\$	(E)	(F)
1	\$	462,470	\$	2,025	\$	34,821	\$	9,319	\$	46,165	10.0
2	\$	32,070	\$	2,025	\$	2,423	\$	646	\$	5,094	6.29
Total		494,539		4,050		37,244		\$9,966		51,260	9.6

Notes

- (A) Represents NPV of avoided energy and capacity costs over a 10 year life multiplied by the annual project savings.
- (B) 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.
- (C) This is the amount of the Rebate Payment paid to the customer for this
- (D) Based on approximate Administrator's variable compensation for purposes of calculating the UCT, actual compensation may be less.
- (E) = (B) + (C) + (D)
- (F) = (A) / (E)

Cleveland Clinic Foundation ~ Cleveland Clinic Foundation

Docket No. 20-0104

Site: 2118 East 106th st.

Project Estimated Summary

Lighting Incentive Program

Customer Name	Cleveland Clinic
Building Name	105th Garage
Building Address	2130 E106th

Estimated Annual Energy Savings (kWh)	931,928.56	
Demand Reduction (kW _{summer})	99.07	
Annual Operating Hours	7852	
Total Calculated Project Incentive	\$46,428.10	

Equipment Category	kW	kWh	Quantity	Incentive
Lighting Controls	-	-	0	\$0.00
Linear Fluorescent T8 & T5	-	-	0	\$0.00
Linear LED	(1.46)	(12,789.60)	26	-\$639.48
Exit Signs	-	-	0	\$0.00
LED Fixtures External	(12.41)	(108,683.22)	162	-\$5,434.16
LED Fixtures Internal	-	-	0	\$0.00
LED Lamps	-	-	0	\$0.00
LED Reach-in Refrigerator/Freezer Lighting	-	-	0	\$0.00
LED Channel Signage	-	-	0	\$0.00
Street and Area Lighting	112.93	1,053,401.37	1064	\$52,501.74
Custom - Process Improvement	-	-	0	\$0.00

Sodexo, Inc. - 1 (866) 578-5220 | energysaveOH@sodexo.com

Deemed kW Savings	99.07
As Found kW Savings	99.07
Total kW Savings	99.07
Deemed kWh Savings	931928.56
As Found kWh Savings	931928.56
Total kWh Savings	931928.56
Non Prescriptive kWh Savings	0.00

E105 Garage

Installation of Otis Elvonic R-Series on 6 elevators at E105th

Unit #	Location (Type)	Number of Runs		Quantity	Runs Per Unit	Runs per hour per elevator	Minutes per	Hours per
		Annual					hour @ 15 Sec per run	
WW	209-212	105TH GARAGE	850,000	4.0	212500.0	24.3	6.1	2.4
WW	226	105TH BRIDGE	160,000	1.0	160000.0	18.3	4.6	1.8

Assumed ave run is 15 seconds

Passenger Elevator

From Study By Otis

From Actual Run Times

Standby Avg. Daily Standby time (h)
Standby Power (W) Daily Energy for
Standby (kWh)
KWH Saved Per Day Standby
KWH Saved Per Hour Standby

Before Mod	Eleivonic R-
18	18
2188.72	350.00
23.487	6.3
	17.2
	0.95
6	6
0.096	0.077
42.303	34.1
	8.2
	1.4
126000	126,000
0.149	0.092
23947.455	14,719.94
	25.35
	9253

Before Mod	Eleivonic R-
21.6	21.6
2188.72	350
	20.5
	0.95
2.4	2.4
0.096	0.077
	3.3
	1.4
126000	126000
0.149	0.092
	23.80
	8686

From Otis Study

From Otis Study

Total Distance Travelled per
Elevator Energy (mWh/lbs/ft
KWH Year

KWH Saved per day
KWH Saved per year

Savings for 4 Units

34742 KWH

Based on testing performed at Otis Elevator

Service Elevator

Before Mod	Eleivonic R-
18	18
3041.029	350
32.01	6.3
	25.7
	1.43
6	6
0.096	0.077
60.432	48.771
	11.7
	1.9
126000	126000
0.147	0.087
33649.05	20045.697
	37.4
	13640

From Actual Run Times

Before Mod	Eleivonic R-
22.2	22.2
3041.029	350
23.487	
	31.7
	1.43
1.8	1.8
0.096	0.077
	3.5
	1.9
126000	126000
0.147	0.087
	35.2
	12856

From Otis Study

From Otis Study

KWH Saved per day
KWH Saved per year

Savings for 1 Units

12856 KWH

Total Savings 5 Units
(1 Service, 4 Passenger)

47598

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

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in

Case No(s). 20-0104-EL-EEC

Summary: Application Application by Cleveland Clinic Foundation for a Mercantile Energy Efficiency rebate for the 105th Garage. electronically filed by Mr. William A Smyser on behalf of Cleveland Clinic Foundation