## **hio** Public Utilities Commission

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

13-0110 Case No.: 1-7-- -3743EL-EEC

Mercantile Customer:	The Babcock & Wilcox Company
Electric Utility:	The Cleveland Electric Illuminating Company
Program Title or Description:	B&W NOG-E Lighting Upgrade

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 <u>ee-pdr@puc.state.oh.us</u>.

## Section 1: Mercantile Customer Information

Name: The Babcock & Wilcox Company

Principal address:24703 Eulcid Avenue Euclid Ohio 44117

Address of facility for which this energy efficiency program applies:23555 Euclid Ohio 44117

Name and telephone number for responses to questions: Chuck Ponyik 216-912 -1772

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>597,827</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

요즘 이 바람이 한 동안 가지 않는 것 같이 같다.

. Kilini

 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:

1.1

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

		Section 4: Demand Reduction/Demand Response Programs
A)	The	customer's program involves (check the one that applies):
	$\square$	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?
C)		at is the peak demand reduction achieved or capable of being achieved w calculations through which this was determined):
		63 kW

<u>63</u> 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.

a sa kata sa kata sa kata sa ƙ

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

- A) The customer is applying for:
  - Option 1: A cash rebate reasonable arrangement.

OR

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

OR

Commitment payment

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

- Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):
  - A cash rebate of \$\_\_\_\_\_. (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.)

Revised June 24, 2011

FE Rev 06.29.11

-6-

## 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.)

11

## **Section 6: Cost Effectiveness**

tin kinder in der som

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).

방문 방송 문화 방송 문화 문화 문화

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.

## hio

# Public Utilities Commission

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

13-0110 Case No .: 1-2---- 3763-EL-EEC

State of Ohio:

Charles

우리적 그 말했는 것은 방법과 같은 .

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

1. I am the duly authorized representative of:

BABCOCK + Wilcor Company NOG-E [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.

Charles Panik, PLANT ENCINGER Signature of Affian & Title

Sworn and subscribed before me this 17 day of Dec, 2012-Month/Year  $\frac{1}{2012}$ -Month/Year  $\frac{1}{2012}$ -Month/Year Signature of official administering oath  $\frac{1}{2012}$ -Month/Year

Signature of official administering oath

Print Name and Title

My commission expires on Sept 1, 2014

MARIE VITTORI, Notary Public In and for the State of Ohio My Commission Expires Sept. 1, 2014

Revised June 24, 2011

#### Customer Legal Entity Name: The Babcock & Wilcox Company

#### Site Address: B&W NOG-E

#### Principal Address: 25555 Euclid Avenue

#### What date would you have replaced your

_	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	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	B&W NOG-E Lighting Upgrade		See attached Lighting Calculator in file Rabcock&Wilcox, Lighting, Calculator vis	Estimated 5 years 2012. The lighting would have continued to operate with our maintenance replacing lamps and ocasional ballast as needed.	N/A

Docket No. 13-0110

Site: 25555 Euclid Avenue

#### Customer Legal Entity Name: The Babcock & Wilcox Company

#### Site: B&W NOG-E

#### Principal Address: 25555 Euclid Avenue

		Principal Address: 25555 Euclid Avenue					
				Weather Adjusted			
		Unadjusted Usage, kwh Wea	ther Adjusted Usage,	Usage with Energy	Note 1		
		(A)		Efficiency Addbacks,	Note 1		
			.,	kwh (C)			
	2011	6,828,800	6,828,800	7,426,627			
	2010	6,153,600	6,153,600	6,751,427			
	2009	5,696,000	5,696,000	5,722,206			
=	Average	6,226,133	6,226,133	6,633,420	•		
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	B&W NOG-E Lighting Upgrade	12/16/2009	\$126,121	597,827	597,827	63	
				-	-	-	
				-	-	-	
				-	-	-	
				-	-		
				-	-	-	
				-	-	-	
			Total	597,827	597,827	63	\$0

Docket No.	13-0110	Savings as percent of usage	9.0% Note 2
Site:	25555 Euclid Avenue	= Total (D) divided by Average (C)	

Customer Eligible Exemption Period: 90 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

Project	Total Annual Savings, MWh (A)	Utility Avoi Cost \$/MWh (B)		Utility Avoided Cost \$ (C)	Utility Cost \$ (D)	Cash Rebate \$ (E)	Administrator Variable Fee \$ (F)	Total Utility Cost \$ (G)	UСТ (Н)
1	598	\$ 3	308 \$	\$ 184,298	\$ 4,050	\$0	\$5,978	\$ 10,028	18.4
Total	598	\$ 3	08	184,298	4,050	\$0	\$5,978	10,028	18.4

#### 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)

## The Babcock & Wilcox Company ~ B&W NOG-E

Docket No. 13-0110

Site: 25555 Euclid Avenue

#### Lighting Inventory Form

Applicant Name:		Instructions: Please use one line for each facture type in a score or anna
Facility Name:	BAW NOG - E	For existing or proposed control, choose OCC for Occupany Sensor, DAY for photosensor, H4-Lo for L-level sensors or NONE for none. Controls in spaces where exist do not quality.
Date:	Chuck Ponyk	The total of Column 5, the quantities of CFL and wilk signs in Column M, and the quantities of sensors in Column R, will be used to calculate your incomtive on the Nordiandard Lighting term.
Lighting Zone (exterior critit:	Listeiro Zone 3	

Lana Mana Cananancian Bulking Addiwar Pharr Ana Dasarghan Byan Di Iana a Rasadi	PROJECT EASE: Ar COMATION Neurope Essent Faster Faster	Exercise Lighting Descriptions Area Costing (Disordie: Lighting Doly)	PRE-INSTALLATION (ISTROFT) Phi Fisane Code Pre Wastal Pris NW / Calling Dry Faster Code (NW) Control (M) (NW) Code Control	BASELING ONLY CONTRUCTOR UNIT         Baseling Security         Baseling (Name         Baseling (Name         Baseling (Name         Baseling (Name         Control (Name         Control (Name         Control (Nam)         Control (Name         Control (Nam) </th <th>Post Post Plant Runnin Collin Press Mark (Past MW)         Are Post Post Runnin Collin Press MW (Past MW)         Are Post Post Post Running Post</th> <th>d Changels Applicat California manual forget california Comment Las California Factor Part (California Manual Manu</th>	Post Post Plant Runnin Collin Press Mark (Past MW)         Are Post Post Runnin Collin Press MW (Past MW)         Are Post Post Post Running Post	d Changels Applicat California manual forget california Comment Las California Factor Part (California Manual Manu
app         Banch         400 logh State         2         Offsa         Offsa           ap         Nano Construction         Sample         1         Restaure         Offsa           ap         Nano Construction         1         Restaure         1         Restaure         Offsa           ap         Nano Construction         1         Restaure         1         Restaure         Offsa           ap         Nano Construction         1         Restaure         1         Restaure         Offsa           ap         Nano         1         1         Restaure         O         O	her Ofea - Small ng ar Taolog Room Exercise Association - Ofea - Small her Interfor Manchastring - Light Indential her Interfor	Loing faces     Loing faces     Loing faces     Could Space	2         F44LL         F12         0.34         NONE           23         HIPS10001         1.530         252.00         NONE           24         HIPS10001         6.53.01         NONE         10           54         HIPS0001         6.25.01         NONE         10           50         F22546         227         2.23         NONE           54         F2546         227         2.32         NONE           54         F2546         227         2.32         NONE	500 Baser 8 3.8 1.00	3         OFTSP1.62         64         0.77         App         OCC         3           5         Example.Cut Shear 2         25         5.01         Ne         OUV         5           41         GOTIGETAT         333         17.56         No         Mode           5         COTIGETAT         333         17.56         No         Mode           5         COTIGETAT         333         17.56         No         Mode           5         COTIGETAT         33         17.56         No         Mode           5         COTIGETAT         43         1.54         No         Mode	477         465,         486,         395,         05,         58,         23,         1.02         2.23         1.05,         69           125         67,         48,         58,         65,         58,         2.3         4.50,         484,         69         2.23         1.05,         68         1.05,
3         Senge         1         Senge         0           4         Fearer         1         By 15 tr 3 745 fearer         0           5         Fearer         1         By 15 tr 3 745 fearer         0           7         Fearer         1         By 15 tr 3 745 fearer         0           7         Fearer         1         By 15 tr 3 745 fearer         0           8         Tearer         1         By 15 tr 3 745 fearer         0           9         Fearer         1         By 15 tr 3 745 fearer         0           9         Fearer         1         By 15 tr 3 745 fearer         0           9         Fearer         1         By 15 tr 3 745 fearer         0           10         Fearer         1         By 15 tr 5 745 fearer         0           11         Fearer         1         By 15 tr 5 745 fearer         0           10         Fearer         1         1         1         0           10         Fearer         1         1         1         0	ter Benforr Haudsaure-Light Indextal	Control Space	32         FP1EHS         125         4.00         NORE           12         CUT SEGT1         36         0.70         NORE           8         FP1HAS         126         0.30         NORE           8         CUT SEGT1         46         0.33         NORE           9         CUT SEGT1         46         0.33         NORE           14         F0254E         227         3.32         NORE           11         F9254D1         466         5.30         NORE           4         F0254D1         466         5.30         NORE           42         F425E         72         3.00         NORE		3:         COTENET         4:         1:31         No.         Cot         1:1           4:         COTENET         4:         4:00         No.         Cot         1:           4:         COTENET         4:         4:00         No.         Cot         1:           4:         COTENET         4:         4:00         No.         Cot         1:           4:         COTENET         3:         4:00         No.         Cot         1:           1:         COTENET         3:         1:00         No.         Cot         1:           1:         COTENET         3:         1:00         No.         Cot         1:           1:         COTENET         3:         1:00         No.         No.         No.           1:         COTENET         3:         1:00         No.         No.         No.           1:         COTENET         3:         1:00         No.         No.         No.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
1         0	ther Interior Manufacturing - Light Industrial ther Interior Manufacturing - Light Industrial ther Interior Manufacturing - Light Industrial	Cooled Space	41 P25-6 227 11.3 NOR 12 P52-14 227 248 NOR 3 F6455 72 248 NOR 4 F5256 227 0.52 NOR 4 F5256 227 0.52 NOR 5 F6456 72 0.52 NOR 5 F6456 72 0.53 NOR 2 F6456 72 0.53 NOR 5 F6456 72 0.55 NOR 5 F6456 72 0.55 NOR 5 NO			Bit         Ob.         Bit         S.         S. <ths< td=""></ths<>
Disput         1         Big SLog Cetab         On           26         Bound         1         Big SLog Cetab         O           26         Bound         1         Big SLog Cetab         O           27         Bound         1         Big SLog Cetab         O           28         Bound         1         Big SLog Cetab         O           29         Bound         1         Scient Research         D           29         Bound         1         Scient Research         D           20         Bound         1         Scient Research         D	Dec         Tests         Statutors         Statutor	Uncoded gene Uncoded gene	12         F455E         72         0.86         NCNE           6         F445E         144         0.86         NCNE           7         F2254E         227         1.66         NCNE           13         CUT 545ET 2         16         0.20         NCNE           24         CUT 545ET 3         43         1.63         NCNE           26         CUT 545ET 3         43         1.63         NCNE           2         E024ET 4         0.17         NCNE         0.17         NCNE           2         E024ET 2         43         1.63         NCNE         0.17         NCNE           2         E024ET 2         5         0.47         NCNE         0.02         E024ET 2         1.64         NCNE		7         CUTSHET7         54         S8         No         NoSE           10         CUTSHET7         54         S54         No         NoSE           4         CUTSHET7         54         S24         No         NoSE           4         CUTSHET7         54         S24         No         NoSE           13         CUTSHET5         54         840         No         COR         COR           4         CUTSHET5         No         840         No         COR         1           4         CUTSHET5         No         840         No         COR         1           4         CUTSHET5         No         840         No         COR         1           4         CUTSHET5         No         840         No         COC         1           4         CUTSHET5         No         840         No         COC         1           4         CUTSHET5         No         840         No         COC         1           5         CUTSHET5         No         840         No         COC         1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
D         Based         1         1         C Art 11 Wood D         0           26         Based         1         Bit Cart 11 Wood D         0         0           26         Based         1         Bit Cart 11 Wood D         0         0           28         Based         1         Dir Cart 11 Wood D         0         0           28         Based         1         Bit Cart 11 Wood D         0         0         0           29         Based         1         Bit Cart 11 Wood D         0	the second	Control Spin     C	6         7223-6         227         0.34         NORE           1         F6223-6         227         0.34         NORE           15         6262         7         0.86         NORE           12         F425E         17         0.86         NORE           12         F425E         72         0.86         NORE           12         F425E         72         0.86         NORE           14         F625E         72         0.86         NORE           14         F625E         72         1.56         NORE           7         F525HE         227         1.56         NORE           3         F645E         72         0.22         NORE           3         F645E         72         0.22         NORE		10         0/758211         8         88         No         PAR           1         0/758211         8         8         No         0.00         1           1         0/758211         8         8         No         0.00         1           1         0/758211         8         8         No         0.00         1           1         0/758211         10         8         No         0.00         1           1         0/75821         10         10         No         0.00         1           1         0/75821         10         13         No         0.00         1           1         0/75821         10         13         No         0.00         1           1         0/75821         10         13         No         0.00         1           1         0/75821         10         10         No         0.00         1           1         0/75821         1         10         No         0.00         1           1         0/75821         1         10         No         0.00         1	46         15         16         16         16         16         16         16         17         17         42           44         155         155         155         155         150         150         157         145           44         155         155         155         150         150         157         156           45         155         155         150         150         157         150         150         155           45         155         156         156         156         150
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	No minor Histobary - Lyt Notatia November - November - Lyt Notatia November - Lyt Notatia	Grootef geks	20 142346 220 4,44 NOA 5 122346 220 4,44 NOA 5 122346 220 4,43 NOA 5 14 142456 27 437 NOA 5 14 14255 27 437 NOA 5 14 14255 27 437 NOA 5 14 14255 27 437 NOA 5 14 14256 27 237 NOA 5 14 14256 27 237 NOA 5 14 144 338 NOA 5 14 144 348 NOA 5 14 144 348 NOA 5 14 144 144 144 144 144 144 144 144 144		G.         Order of the second se	11         13         14         15<
a         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -           b         -         -					$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	
B         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I           0         I         I			Image: state		800         NOG           0.00         NOG	100         100         100         100           200
e         -         -           8         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           7         -         -           8         -         -		 				400         100
37         -		Image:			0         1.60         5.76           0         1.61         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76           0         0         5.76	Add
E						
B         Image: Constraint of the sector of the secto						
00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -           00         -         -		Image: Constraint of the sector of			-         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02           -         0         0.02	100         1 <th1< th="">         1         <th1< th=""> <th1< th=""></th1<></th1<></th1<>
107					Image: Second	
0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -           0:         -         -						
30         -         -           30         -         -           30         -         -           30         -         -           30         -         -           30         -         -           30         -         -           31         -         -           32         -         -           33         -         -						
03         -			0.00 NONE		10         10         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100           0.0         0.0         100	Like         Like <thlike< th="">         Like         Like         <thl< td=""></thl<></thlike<>
16         -         -           10         -         -         -           10         -         -         -         -           10         - <td></td> <td></td> <td>0.00 NONE     0.00 NONE</td> <td></td> <td>100         MCL           400         WCL           400         WCL</td> <td></td>			0.00 NONE		100         MCL           400         WCL	
07         -           08         -           09         -           09         -           09         -           09         -           09         -           09         -           09         -           09         -           09         -						
Bar         Image: Constraint of the second sec						Horizon         Horizon <t< td=""></t<>
03         -         -           03         -         -           03         -         -           03         -         -           03         -         -           03         -         -           03         -         -           04         -         -           05         -         -           06         -         -						10         10<
33         -         -           35         -         -           36         -         -           37         -         -           38         -         -           39         -         -           39         -         -           39         -         -           39         -         -           39         -         -           39         -         -			0.00 NORE		10         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         102           400         105	Image         Image <th< td=""></th<>

Page 1 of 4

13062012

			Energy Calculations				INSTALLATION	POST-INI			IE (NEW CONSTRUCTION)	BASELIN		LATION (RETROFT	PRE-INSTALLA			INFORMATION .	PROJECT BASE				
	Applicant Prescribed An Ecuivalent Ecuivalent	Post Demand Applic	Coincidence Interactive Interactive Pre		eed Prep	Are Propose	Past kW/		Poet Fature Cod				Existing Existing			Area Cooling Pre Return	Exterior Lighting Description	Predominant Space Type		ription Space Description	Floor Area Descriptio		Line New Coty
	Full Load Full Load	Dartor AWO Dell				cupancy Collino	010 50				(Weekst)		control sensor	NO RMO	1010	( ° )	(Extense Eighting Only)	(	P course			202	Tan or He
	Full Load Hours Hours (EFLH)	100		<ul> <li>(CF)</li> </ul>	Silver a								When applicable			( )	4	(					1
	(EFUI) Estimate	(674		Estimate		Code?	by I									(	4	(					1
	Estimate	E CEST										please only enter the total				( )	4	(					1
Image         Image <th< td=""><td>/ /</td><td>4 1 1 7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>reacteristic explored per space</td><td></td><td></td><td></td><td>( )</td><td>4</td><td>(</td><td></td><td></td><td></td><td></td><td>1</td></th<>	/ /	4 1 1 7									-	reacteristic explored per space				( )	4	(					1
Image         Image <th< td=""><td></td><td></td><td></td><td>0.00</td><td>c .</td><td>NONE</td><td>0.00</td><td></td><td></td><td></td><td></td><td></td><td>NONE</td><td>0.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>494</td></th<>				0.00	c .	NONE	0.00						NONE	0.00									494
I         I					5	NONE	0.00						NONE	0.00				1					192
				0.00	5	NONE							NONE	0.00				()					193
Image         Image <th< td=""><td></td><td></td><td></td><td>0.00</td><td>5</td><td>NONE</td><td></td><td></td><td></td><td></td><td></td><td></td><td>NONE</td><td>0.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>194</td></th<>				0.00	5	NONE							NONE	0.00									194
				0.00	5	NONE	0.00		-				NONE	0.00									195
				0.00	5	NONE							NONE	0.00				()					197
				0.00	2	NONE	0.00						NONE	0.00				· · · · · · · · · · · · · · · · · · ·					128
1         1				0.00	c .	NONE	0.00						NONE	0.00									200
D         A				0.00	6	NONE	0.00						NONE	0.00				1					201
1         1				0.00	5	NONE	0.00		-				NONE	0.00			4	h			+ +		202
				0.00	2	NONE	0.00		-				NONE	0.00		(	1	(			1 1		204
					2	NONE							NONE	0.00			1	í					205
A         A         A         B				0.00	5	NONE							NONE	0.00	_								205
1       1					6	NONE			-				NUNE	0.00							+ +		207
1     1 <td></td> <td></td> <td></td> <td>0.00</td> <td>5</td> <td>NONE</td> <td>0.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>NONE</td> <td>0.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>209</td>				0.00	5	NONE	0.00						NONE	0.00									209
				0.00	5	NONE	0.00						NONE	0.00									210
					6	NONE			-							· · · · · · · · · · · · · · · · · · ·							211
				0.00	5	NONE	0.00						NONE	0.00				()					213
1       1				0.00			0.00						NONE	0.00				1					214
1       1				0.00	5	NONE	0.00						NONE	0.00									
1       1				0.00	5	NONE	0.00		-				NONE	0.00									217
1         1				0.00	5	NONE	0.00						NONE	0.00				()					210
1         1				0.00	5	NONE	0.00						NONE	0.00									219
1         1					6	NONE			-				NONE	0.00		· · · · · · · · · · · · · · · · · · ·							220
1       1				0.00	6	NONE	0.00						NONE	0.00									222
A         A         A         B																		1					223
A         A         A         B									-							· · · · · · · · · · · · · · · · · · ·							224
1       1				0.00			0.00						NONE	0.00				1					226
A         A				0.00	2	NONE							NONE	0.00				1					227
1       1				0.00	6	NONE	0.00		-				NONE	0.00							+ +		228
10       1				0.00	2	NONE	0.00						NONE	0.00			1	í					230
				0.00	5	NONE	0.00						NONE	0.00	_								221
				0.00		NONE	0.00						NUMB	0.00		· · · · · · · · · · · · · · · · · · ·	+				+ +		202
				0.00	2	NONE	0.00										1	1			1 1		234
				0.00	5	NONE	0.00						NONE	0.00									225
				0.00	6	NONE	0.00		-				NONE	0.00							+ +		236
				0.00	5	NONE	0.00						NONE	0.00			1	1			1 1		238
				0.00	5	NONE	0.00						NONE	0.00			1	í					229
				0.00	5	NONE	0.00						NONE	0.00									240
				0.00	5	NONE	0.00		-				NONE	0.00		(	1	(			1 1		242
				0.00	6	NONE	0.00						NONE	0.00				í					243
				0.00	6	NONE	0.00		_				NONE	0.00									264
					6	NONE	0.00		-				NONE	0.00							+ +		245
				0.00	6	NONE	0.00		1				NONE	0.00			1	· · · · · · · · · · · · · · · · · · ·			1 1		247
24     30     <					5	NONE									_								248
				0.00	6	NONE	0.00		-				NONE	0.00							+ +		250
	8,009	48.07		62.93			68.90			63				121.82		635							Totals

Project Estimate Savings Sum	
Lighting	
Estimated Annual kWh Savings	597,827
Total Change in Connected Load	62.93
Annual Estimated Cost Savings	\$59,782.70
Annual Operating Hours	8,009
Interior Lighting Incentive @ \$0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	\$27,444.15
Exterior Lighting Incentive @ \$0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	\$0.00
Total retrofit CFL Incentive @ \$1/screw-in CFL lamp; \$15/hard- wired CFL lamp (includes all retrofit CFLs, both interior and exterior)	\$0.00
Total retrofit LED Exit Incentive @ \$10/exit sign	\$0.00
Total Lighting Controls Incentive @ \$25/occupancy sensor and \$25/daylight sensor (includes all Lighting Controls, both interior and exterior)	\$625.00
Total Calculated Incentive	\$28,069.15
	<i>+_0,000.10</i>
Total Fixture Quantity excluding retrofit CFLs and LED Exit Signs Total Lamp Quantity for retrofit Screw-In	619
CFLs	0

Total Lamp Quantity for retrofit Hard-Wired CFLs	0	
Total Fixture Quantity for retrofit LED Exit Signs	0	
Total Quantity for Occupancy Sensors	25	
Total Quantity for Daylight Sensors	0	

<u>,</u>\*\*

.

Lighting Upgrade Report

,

a.

•

tem	Room	Old H	ins by i	Circuit	New	lis by	Circuit	0id	Existing Fixture	New	New Fixture	Bullas	tType		the second se	•		fil Savings	Sensor S	avinga	Survey
No.	Description	A	B	Both	A	B	Both	Qly	Description	Qty	Description	Bist#1	and the second second			Saved	Max KW	kWi/Yeer	X₩h/Year	%	Commenta
1	Bldg 53) 401 South Highbey Area	7,461		T			7,461	23	High Bay (1) 1000w HPS	41	New 411 Power Bay (6) 411 T5 Lamps	254N	454N	1100	333	767	11.647	\$8,893.3			Add (6) Rows
2	Bldg 53) 27/1 North Highbay Area	7,461	[	T			7,461	.54	High Bay (1) ADOW HIPS	54	New 41 Power Boy (6) 411 T5 Lamps	264N	454N	465	333	132	7.128	53,179.0			One for One
	Blog 53) Under Mezzanine	8,712	1		8,712	[		10	8ft Industriel (2) F96T12HO Lamps	10	New 811 Ship w/Refector (2) 411 To Lamp	232H		237	74	163	1,830	14,200.6	3,223.4	50%	
4	Bldg 53) 1st & 2nd Balconies	8,712			8,712		1	14	88 Industrial (2) F96T12HO Lamps	14	New 8ft Skip wRefector (2) 4ft T8 Lamp	232H		237	74	163	2.282	19,880.8	4,5128	50%	······································
5	Bldg 53) Basemeni	8,712		1	8,712			32	8th Strip (1) F96T12HO Lamp		New 81 Stip (2) 41 T8 Lamps	232N		125	54	71	2.272	19,793.7	7,527.2	50%	New Pipe
6	Eldg 53) Basameni	8,712	h	1	8,712	†			411 Strip (1) F48T12 Lamp		New 41 Ship (1) 41 T8 Lamp	232N		58	29	29	0.348	3,031.8	3,031.8	50%	New Pipe
7	Bidg 53) Sub-Basemani/Pi	8,712		-	8,712		- in main sin	the second second	8/1 Stip (1) F96T12HO Lump		New 811 Ship (2) 41 T8 Lamps	232N	A	125	54	71	0.568	4,948.4	3,763.6	50%	New Pipe
	Eldg 53) Sub-Basement/PR	8,712	†		8,712		******		411 Styp (1) F48T12 Lamp	4	New Alt Ship (1) Alt To Lemp	232N		58	29	29	0,118	1,010.5	1,010.6	50%	New Pipe
	Eldg 53) Penthouse	8,712	<b> </b>	*****	8,712	and the second s			4ft Industriel (2) F40T12 Lamps	19	New 411 Stip wRefector (1) 4ft T8 Lamp	232N		72	29	43	0.817	7,117.7			Did nol Sce
	Bidg 53) Highbery Emergency Lights	<u>, ", , , , , , , , , , , , , , , , , , </u>			1 -1	<u> </u>	·	L	81 Industrial (2) F96T12HO Lamps	A COLOR OF A COLOR OF A	No Change to Fadure			237	237			· · · · · · · · · · · · · · · · · · ·		yua, *** +**** 1 / 4 / ***	On Generalox
	Bldg 12) 301 OC Area	7,461	<b></b> -		**	1	5,968	11	High Bay (1) 400m HPS	and the second s	New 411 Power Bay (6) 4ft T5 Lamps	254N	454N	465	333	132	1.452	16,298.4			One for One
****	Bidg 12) 191 Slorage Aree	8,712	1		8,712	\$ a			High Bay (1) 400w HPS	4	New 4ft Power Bay (6) 4ft T5 Lamps	S	454N	465	333	132	0,528	12,475.6	11,604.4	65%	One for One
	Bidg 12) 100 File Cabinel Room	8,712			8,712		*****	42	41 Industriel (2) F40T12 Lemps	42	New 411 Ship wRolector (1) 411 To Long	S		72	29	43	1.805	15,733.9			Did nol See
	Bidg 15) Large Bond Chip Storage (2N)	6,712	<b> </b>		0,712		**************************************	43	Bit Industrial (2) F96T 12HO Lamps	48	New 81 Ship w/Resector (2) 411 To Lamp	<u></u> ,		237	54	183	6,784	76,526.2			
والمحادثة والمحاد	Bidg 15) NAOS (Room	7,461	<u> </u>	·	7,461			12	Stillindustrial (2) F96T12HO Lamps	12	New 811 Ship w/Reflector (2) 4ft T8 Leng	and the second as		237	74	163	1.956	14,592.9	6,625.0	25%	***** ) = 24 = 25 = 2 = 3 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2
	Bidg 15) NAOS Room	and the second second		uf		+	· · · · · · ·		411 Industrial (2) F40T12 Lamps	- 15	New 411 Ship w/Resector (1) 411 To Lemp	Z		72	29	43	0.129	962.4	649.1	25%	
		7,461	<b>{</b>	~~~~	7,461					12	New 8ft Skip w/Refector (2) 4ft T8 Leng	Station and a state of the stat		237	74	163	0.060	447.6			New Layout
	Bidg (5) NGR Room W/High Shelvos	7,461	ļ		7,461	<u> </u>	*****		811 Industrial (2) F96T 12HO Lamps		Remove Fature	20211		72		72	0.720	5,371.6			(101) 01/00
- 10.000	Ekig 15) NGR Room w/High Shelves	7,461	<u> </u>	┥╌╌┑╸	7,461			10	411 Inclusivial (2) F40T12 Lances	10	New 811 Stip w/Retector (2) 411 TO Leng	14000		237	54	183	4.028	35,074.5	10,349.9	50%	** 19 m
19	Bldg 15) 'L' Shaped Bond Chb (2N)	8,712		******	8,712			22	Bit Industriel (2) F96T12HO Lemps	22				Ann	54	18	0.270	2,352.2	19,048.5		New Spacin
20	Eldy 15) 1.' Shaped Bond Orb Hal	8,712			8,712	- Andrew - A		<b>D</b>	411 Egg Crais (2) F40T12 Lamps	3	New 411 Wrap (2) 411 T8 Lamps	232N		72	<u>}</u>			· · · · · · · · · · · · · · · · · · ·	10.540.0	50%	The second secon
21	Bidg 15) Bondled Slores by Diffees	8,712	· · · · · · · · · · · · · · · · · · ·		8,712		Į	29	411 Eon Crate (2) F40T 12 Lemps	15	New 811 Ship w/Relactor (2) 411 To Long	2	<u> </u>	72	74	-2	0.904	7,875.6	10,315.0	00%	(4) ere Wrap
	Bidg 15) Office Hallway	6,712			8,712	*****		14	4/1 Egg Crale (2) F40T12 Lamps		New 48 Wrep (2) 48 Tõ Lemps	232N		72	54	18	0.630	5,488.0		·····	Flex over Gr
	Eldg 15) Long Corridor	8,712	A TANATAT		8,712	Amanna		د به به بند بندم برم و	Att Industrial (2) F40T12 Lamps	*****	New 41t Wrop (2) 41t T8 Lamps	232N		72	54	18	0.324	2,022.7	*****		Remove (2)
	Bidg 15) Long Corridor EAST	8,712			8,712	<b> </b>		6	2x4 Moduler Troffer (4) F40T12 Lamps	6	New Alt Wrep (2) Aft T8 Lamps	232N		144	54	00	0.540	4,704.5		7511	Suspended
	Bidy 15) Cel #10 - Storage	8,712			8,712	ļ	-	7	8ft Industrial (2) F96T12HO Lemps	9	New 8ft Ship w/Refector (2) 4ft To Leng	232H	<b> </b>	237	74	163	0.993	8,651.0	6,802.2	75%	New Layou
	Bidg 15) Cel #10 - Sloraga	L	L	<u> </u>		ļ		13	Exil Sign (2) 7W CFL's	13				15		15	0.195		A Mark 2		Demo Rigid
	Bidg 15) Cel #11A · Bowing Aley	8,712			8,712		-	24	4/1 Ship (1) F40T12 Lemp	4	New 81 Stip w/Refector (2) 41 Th Leny	23211		43	74	-31	0,735	6,412.0	2,578.8	75%	New Layout
~~~~~	Bog 15) Col #11A - Bowing Aley	8,712			8,712		*.	6	211 Syp (1) F20T12 Lamp	6	Remove Fidure			29		29	0.174	1,515.9	· · · · · · · · · · · · · · · · · · ·		Demo Al
	Bidg 15) Cel #118 - Storage	8,712	L		8,712	L		2	8/1 Industrial (2) F96T12HO Lemps	12	New 811 Ship WRatector (2) 411 TO Leng	232H	ļ	237	74	163	0.414	-3,696.8	7,736.3	75%	New Leyou
30	Bldg 15) Cel #118 - Storage	1						8	Exit Sign (2) 7W CFL's	9	Remove Fidure	<u> </u>		15		15	0.135				Domo Rigi
31	Bdy 15) Cel #12 - 2' Lab	8,712			8,712			5	411 Industrial (2) F40T12 Lamps	12	New 611 Ship w/Relector (2) 411 T8 Leny			72	74	-2	-0,456	-3,972.7	7,736.3		**
32	Blog 15) Cel #13 - Wood Shop	8,712			8,712			1	8ft Industrial (2) F96T12HO Lamps	12	New Bit Ship w/Refluctor (2) 4th To Long	232H		237	74	183	-0.651	-5,671.5	· · · · · · · · · · · · · · · · · · ·	75%	New 1.6703
33	Bidg 16) Cel #13 - Wood Shop	8,712			8,712			1	4ft Wrep Around (4) F40T12 Lamps	1	Remove Fodure		<u> </u>	144		144	0.144	1,254.8			
34	Bldg 15) Cel #13 - Wood Shop	8,712			8,712			15	Porcelain Socket (1) 300w Lamp	15	Remove Fotore			300		300	4.500	39,204.0			Demo Rijd & (
	Bog 15) Cel #14 - Instrument Repair (4)	2,587	'		2,587			12	411 Industrial (2) F40T12 Lamps	8	New 811 Ship w/Refector (4) 411 To Long	432H		72	147	-75	-0.312	-607.2	3,042.5		
36	Eldg 15) Cel#15 - Slorage	8712	2	T	8,712			12	8fi Industria (2) F96T12HO Lemps	18	New 6/t Ship w/Refector (2) 4/t T8 Lem			237	74	183	1.660	14,461.5	10,315.0	75%	New Layou
37	Bidg 15) Cel #16 - Sub Assembly (4H)	8,712	2		8,712			14	411 Industrial (2) F40T12 Lemps	8	New Bit Ship wiRelector (4) 41 T& Lam	432H		72			-0.168	-1,463.6	10,245.3	75%	New Layou
38	8 dg 15) Cel #17 - Winding (4H)	8,712	2		8,712	:T	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7	8ft Industriet (2) F96T12HO Lamps	12	New 8h Ship wiRelector (4) 4h To Leng	432H	[	237	147	90	0.105	-914.6	15,368.0	75%	New Leyou
	Bidg 15) Cel #17 - Winding Tesk Lights	8,712			8,712		- Contraction	13	48 Wrap Around (2) F40T12 Lemps	3	Remove Fodure		T	72	1	72	0.215	1,881.6			
	Eldg 22) Rocelving (2N)	7,481			7,481			20	81 Industrial (2) F96T12HO Lemps	20	New 8ft Strip w/Refactor (2) 4ft To Leny	232N	Contrast,	237	54	183	3.560	27,305.7	8,057.4	25%	
	Bldg 22) Rust Check - Impection Area (4	7.461			7,461			ß	8/1 Industrial (2) F96T12HO Lamps	8	New 8ft Ship w/Refector (4) 4ft T& Lem	432H	1	237	147	90	0.540	4,028.7	8,580.2	25%	······
Longer and	Bidg 22) Rust Check - Recking	7.481	a second and the second se	***	7.46	~*****	*********	10	4R Industrial (2) F40T12 Lamps	10	New 40 Stip WRetector (1) 40 To Lem		*****	72	29	43	0.430	3,208.0	· · · · · · · · · · · · · · · · · · ·	25%	Aria (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (199
	Blog 22) Oul Ges	7,461			7.46		+	24	411 Industrial (2) F40T12 Lamps	11	New 8ft Ship WRefector (2) 4ft T& Lans	· · · · · · · · · · · · · · · · · · ·		72	74	-2	0.914	6,819.0	a second a s	· · · · · · · · · · · · · · · · · · ·	**************************************
	Bldg 22) Out Gas - Inpaction Table (4H)	7,461			7,46		******	8	Sit Industrial (2) F96T12 Lomps	8	New Eft Stip wRefector (4) 411 To Len		······································	123	147		-0.192	1,432.4			Lensed Task Li
Lynaves	Bldg 22) Storage hext is Magnel Room	7,461			7,46		*	10	41 Inchestrial (2) F40T12 Lemps	10	New 4ft Stip wRetector (1) 4ft T8 Lem			72	29	43	0.430	3,208.0	· · · · · · · · · · · · · · · · · · ·		Most Lemps
	Bidg 22) Magnel Room	7,461		~	7,48		~	10	Sil Industrial (2) F96T12HO Lemps		New 8fl Ship wRefector (2) 4fl T8 Lam	and a subscription of the local division of		237	74	163	1.630	12,160.7		25%	**************************************
	Bdg 22) Magnel Room - Inspection Table				7,46			2	2x4 Modular Troffer (4) F40T12 Loinps		Rebatesi (4) 411 T8 Lemps	432N	·····	144			0.080	596.0		1	
<u> </u>		((40)			1,40	·			Teur monda hours 121 (401 16 ranips		A PARTY AND A PART		+	<u>+</u>							······································
	Bdg 22) QC Office (No Work)	+				.+				┨────		" <b>ł</b>			,	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	-+	**		-	
49 50											· · · · · · · · · · · · · · · · · · ·									• • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
100		1		<u> </u>		1	_ <u>L</u>	1	_1	1		<u></u>	<u></u>	<u></u>	.t,	1			I	<u></u>	L

.

,

## 12/22/2008

6

Lighting Analysis - Marine Mechanical (Euclid, OH)

## <u>Mercantile Customer Project Commitment Agreement</u> <u>Exemption Option</u>

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 The Babcock & Wilcox Company, 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.

### <u>WITNESSETH</u>

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 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 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 15<sup>th</sup> 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;
    - 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.
- 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 Attn: Victoria Nofziger Telephone: 330-384-4684 Fax: 330-761-4281 Email: vnmofziger@firstenergycorp.com

If to the Customer:

The Babcock % Wilcox Company 24703 Euclid Avenue Euclid Ohio 44117 Attn:Chuck Ponyik Telephone:216-912-1772 Fax: Email:caponyik@babcock.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 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.
- 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.

6

- 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.

The Cleveland Electric Illuminating Company

(Company) By

Titles XP of Energy Efficiency

12 20-Date: \_

The Babcock & Wilcox Company\_

(Customer) By: <u>Charles Fangeh</u> Title: <u>PLANT ENGINGER</u> Date: <u>12/17/2012</u>

Affidavit of The Babcock & Wilcox Company - Exhibit A

## STATE OF OHIO

SS:

COUNTY OF CUYANTA

I. Name, being first duly sworn in accordance with law, deposes and states as follows:

}

)

- 1. I am the Title of The Babcock & Wilcox Company ("Customer") As part of my duties, I oversee energy related matters for the Customer.
- 2. The Customer has agreed to commit certain energy efficiency projects to

The Cleveland Electric Illuminating Company ("Company"), which are the subject of the agreement to which this affidavit is attached ("Project(s)").

- 3. In exchange for making such a commitment, the Company has agreed to provide Customer with a Rider Exemption ("Incentive"). This Incentive was a critical factor in the Customer's decision to go forward with the Project(s) and to commit the Project(s) to the Company.
- 4. All information related to said Project(s) that has been submitted to the Company is true and accurate to the best of my knowledge.

FURTHER AFFIANT SAYETH NAUGHT.

 $\partial_{U} \omega$ 

Sworn to before me and subscribed in my presence this 1/7 day of  $bcc_{-20}/2$ otton

8

Notary

MARIE VITTORI, Notary Public In and for the State of Ohlo My Commission Expires Sept. 1, 2014



Version 9.11.12

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/15/2013 3:21:37 PM

in

Case No(s). 13-0110-EL-EEC

Summary: Application electronically filed by Ms. Lindsey E Sacher on behalf of The Cleveland Electric Illuminating Company and The Babcock & Wilcox Company