Ohio | Public Utilities Commission

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

Case No.: 13-0085-EL-EEC

Mercantile Customer: Southington Local Schools

Electric Utility: Ohio Edison Company

Program Title or Description: New K-12 Facility

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

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

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

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

Section 1: Mercantile Customer Information

Name:Southington Local Schools

Principal address:2482 State Route 534 Southington, OH. 44470

Address of facility for which this energy efficiency program applies:2482 State Route 534 Southington, OH. 44470

Name and telephone number for responses to questions:Neil Wittberg: 614.949.5616

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: Ohio Edison 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):

See Exhibit 1.

☐ 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 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**

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

Annual savings:  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.

Section 4: Demand Reduction/Demand Response Programs

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

☐ Coincident peak-demand savings from the customer's energy efficiency program.

☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)

☐ Potential peak-demand reduction (check the one that applies):

☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.

☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) On what date did the customer initiate its demand reduction program?

_____

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

_____ kW

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

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

Note: If Option 2 is selected, the application will not qualify for the 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 [redacted] (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.)

OR

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

Section 6: Cost Effectiveness

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

☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____(Continue to Subsection 1, then skip Subsection 2)

☒ Utility Cost Test (UCT) . The calculated UCT value is: **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.

Ohio | Public Utilities Commission

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

Case No.: 12-3099-EL-EEC

State of Ohio :

Janet K. Ward, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

   Southington Local Schools
   [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.

Janet K. Ward, Treasurer
Signature of Affiant & Title

Sworn and subscribed before me this 29 day of November, 2012 Month/Year

Kim M Lambert
Signature of official administering oath

Janet K. Ward - Treasurer/CFO
Print Name and Title

My commission expires on Sept. 28, 2013

NOTARIAL SEAL * STATE OF OHIO *

KIM M. LAMBERT
Notary Public, State of Ohio
My Commission Expires
September 28, 2013

Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between Ohio Edison Company, its successors and assigns (hereinafter called the "Company") and Southington Local Schools, Taxpayer ID No. 34-6002699 its permitted successors and assigns (hereinafter called the "Customer") (collectively the "Parties" or individually the "Party") and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

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

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

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain 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 the Public Utilities Commission of Ohio's ("Commission") September 15, 2010 Order in Case No. 10-834-EL-EEC, desires to pursue a cash rebate of some of the costs pertaining to its Customer Energy Project(s) ("Cash Rebate") and is committing the Customer Energy Project(s) as a result of such incentive.

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 a Cash Rebate.

WHEREAS, in consideration of, and upon receipt of, said cash rebate, Customer will commit the Customer Energy Project(s) to the Company and will comply with all other terms and conditions set forth herein.

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

1. **Customer Energy Projects**. Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, 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 appropriate, "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 cash rebate discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations.

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 the Commission's standard 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" ("Joint Application") 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 Cash Rebate.

   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 Cash Rebate.** Upon Commission approval of the Joint Application, Customer shall provide Company with a W-9 tax form, which shall at a minimum include Customer's tax identification number. Within the greater of 90 days of the Commission's approval of the Joint Application or the completion of the Customer Energy Project, the Company will issue to the Customer the Cash Rebate in the amount set forth in the Commission's Finding and Order approving the Joint Application.

   a. Customer acknowledges: i) that the Company will cap the Cash Rebate at the lesser of 50% of Customer Energy Project(s) costs or $250,000; ii) the maximum rebate that the Customer may receive per year is $500,000 per Taxpayer Identification Number per utility service territory; and iii) if the Customer Energy Project qualifies for a rebate program approved by the Commission and offered by the Company, Customer may still elect to file such project under the Company's mercantile customer self direct program, however the Cash Rebate that will be paid shall be discounted by 25%; and

   b. Customer acknowledges that breaches of this Agreement, include, but are not limited to:

      i. Customer's failure to comply with the terms and conditions set forth in the Agreement, or its equivalent, within a reasonable period of time after receipt of written notice of such non-compliance;

      ii. Customer knowingly falsifying any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application.

   c. In the event of a breach of this Agreement by the Customer, Customer agrees and acknowledges that it will repay to the Company, within 90 days of receipt of written notice of said breach, the full amount of the Cash Rebate paid under this Agreement. This remedy is in addition to any and all other remedies available to the Company by law or equity.

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

   a. If the Commission fails to approve the Joint Agreement;

   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 Cash Rebate, 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.

5. **Confidentiality**. Each Party shall hold in confidence and not release or disclose to any person any document or information furnished by the other Party in connection with this Agreement that is designated as confidential and proprietary ("Confidential Information"), unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; or (iii) such document or information was available to the receiving Party on a non-confidential basis at the time of disclosure.

   a. Notwithstanding the above, a Party may disclose to its employees, directors, attorneys, consultants and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, directors, attorneys,

consultants and agents have been advised of the confidential nature of this information and through such disclosure are deemed to be bound by the terms set forth herein.

b. A Party receiving such Confidential Information shall protect it with the same standard of care as its own confidential or proprietary information.

c. A Party receiving notice or otherwise concluding that Confidential Information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall endeavor to: (i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such Confidential Information, including without limitation, the filing of such information under a valid protective order.

d. By executing this Agreement, Customer hereby acknowledges and agrees that Company may disclose to the Commission or its Staff any and all Customer information, including Confidential Information, related to a Customer Energy Project, provided that Company uses reasonable efforts to seek confidential treatment of the same.

6. **Taxes.** Customer shall be responsible for all tax consequences (if any) arising from the payment of the Cash Rebate.

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

If to the Company:

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

If to the Customer:

Southington Local Schools
2482 State Route 534
Southington, OH. 44470
Attn:Janet K. Ward
Telephone:330-898-7480
Fax:330-898-4824
Email:janet.ward@neomin.org

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

8. **Authority to Act.** The Parties represent and warrant that they are represented by counsel in connection with this Agreement, have been fully advised in connection with the execution thereof, have taken all legal and corporate steps necessary to enter into this Agreement, and that the undersigned has the authority to enter into this Agreement, to bind the Parties to all provisions herein and to take the actions required to be performed in fulfillment of the undertakings contained herein.

9. **Non-Waiver.** The delay or failure of either party to assert or enforce in any instance strict performance of any of the terms of this Agreement or to exercise any rights hereunder conferred, shall not be construed as a waiver or relinquishment to any extent of its rights to assert or rely upon such terms or rights at any later time or on any future occasion.

10. **Entire Agreement.** This Agreement, along with related exhibits, and the Company's Rider DSE, or its equivalent, as amended from time to time by the Commission, contains the Parties' entire understanding with respect to the matters addressed herein and there are no verbal or collateral representations, undertakings, or agreements not expressly set forth herein. No change in, addition to, or waiver of the terms of this Agreement shall be binding upon any of the Parties unless the same is set forth in writing and signed by an authorized representative of each of the Parties. In the event of any conflict between Rider DSE or its equivalent and this document, the latter shall prevail.

11. **Assignment.** Customer may not assign any of its rights or obligations under this Agreement without obtaining the prior written consent of the Company, which consent will not be unreasonably withheld. No assignment of this Agreement will relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained.

12. **Severability.** If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement, and the Parties further agree to substitute for the invalid portion a valid provision that most closely approximates the economic effect and intent of the invalid provision.

13. **Governing Law.** This Agreement shall be governed by the laws and regulations of the State of Ohio, without regard to its conflict of law provisions.

14. **Execution and Counterparts.** This Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically or telephonically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

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

Ohio Edison Company_
(Company)

By: _____

Title: V.P. Of Energy Efficiency

Date: _____

Southington Local Schools_
(Customer)

By: _____

Title: Treasurer/CFO

Date: 12/3/12

Affidavit of Southington Local Schools – Exhibit _A _

STATE OF OHIO)
) SS:
COUNTY OF Trumbull)

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

1. I am the Treasurer/CFO of Southington Local Schools ("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 Ohio Edison 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 Cash ("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.

Janet K. Ward
Treasurer

Sworn to before me and subscribed in my presence this 29 day of Nov, 2012

Kim M Lambert
Notary

NOTARIAL SEAL * STATE OF OHIO *

KIM M. LAMBERT
Notary Public, State of Ohio
My Commission Expires
September 28, 2013

Exhibit 1

Customer Legal Entity Name: Southington Local Schools

Site Address: Southington School
Principal Address: 2482 State Route 534

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	Lighting and Occupancy Sensors	This project includes the installation of efficient lighting inlcuding mostly T8 lamps for the newly constructed K through 12 school in Southington, Ohio. Tied in to most of the lighting fixtures are motion sensors to turn the lights off during unoccupied times.	Using the building drawings, the light fixtures and senors were counted and put into the lighting countsheet, Attachment A (OE.Southington.Lighting_Count_Sheet.P1.A). Also put into the countsheet were the fixture wattages, taken from spec sheets based off of the model numbers from the plans' lighting fixture schedule and the total building area. The countsheet then uses ASHRAE 2007 code to compare the building's energy consumption to what is required by code. The FE lighting rebate calculator (OE.Southington.Lighting_Rebate_Form.P1) was then filled out using information from the countsheet and is representative of the numbers shown in this application above.	N/A	Lower energy-using T8 fixtures were chosen to reduce energy consumption and operational costs.
2	Energy Efficient Motors	Energy efficient motors were installed throughout the new facility	Tab 1 (label P-2) in the Attachment C excel file OE.Southington.SavingsCalcs.P2_P3.C calculates a kWh savings (shown above) for the premium efficient motors installed in the school by comapring them to ASHRAE code standards. All model numbers and specifications for the motors are represented in both Attachment C and the motors and drives rebate calculator (OE.Southington.Motors_Drives_Rebate_Form.P2_P3), the FE motors and drives form which gives the prescriptive incentive amount for the motors installed.	N/A	Premium efficiency chosen over regular or low efficiency
3	Variable Frequency Drives	VFDs were installed to control some of the motors in the facility.	Tab 2 (label P-3) in the Attachment C excel file OE.Southington.SavingsCalcs.P2_P3.C calculates a kWh savings (shown above) for the variable frequency drives installed in the school based on approximate runtimes. All model numbers and specifications for theVFDs are represented in both Attachment C and the motors and drives rebate calculator (OE.Southington.Motors_Drives_Rebate_Form.P2_P3), the FE motors and drives form which gives the prescriptive incentive amount for the VFDs installed.	N/A	VFDs were cosen instead of constant systems that waste energy
4	Ground Source Heat Pumps	There were 49 efficient heat pumps installed in the Southington School to accommodate the geothermal system that was implemented.	The model numbers and specs including efficiency, cooling/heating capacity, and CFM for all 49 heat pumps can be found in Attachment D OE.Southington.Heat_Pump_Calcs.P4.D. This calculator compares the heat pumps installed to what is required by code and deems whether they are eligible for a presecriptive incentive or not. It also calculates a total kWh savings (represented above) and total prescriptive incentive amount. The actual heat pump schedule from the Southington School plans can be found in Attachment E, OE.Southington.Heat_Pump_Schedule.P4.E.	N/A	-
5	Heat Recovery Units	Heat Recovery Units were installed to reclaim heat that would be otherwise lost.	Attachment F (OE.Southington.HRU_Schedule.P5.F) is the energy recovery unit schedule from the building plans and lists the model numbers and specs for each of the 7 units. Attachment G (OE.Southington.HRU.calcs.P5.G) uses information from Attachment F and calculates kWh savings and incentive amount based on weather data for the Youngstown area. The kWh savings represented above is the total of all 7 units individual savings.	N/A	Less efficient equipment would just not have included a recovery system
6	Energy Efficient Envelope	The new k-12 facility has a roof which is better insulated than required by ashrae code	eQuest was used to model the new southington k12 facility. Savings were calculated based on the installed roof versus the code minimum roof insulation values. Model Reports showing savings are shown in attachment H OE.Southington.ModelReports.H.pdf	N/A	N/A

Exhibit 2

Customer Legal Entity Name: Southington Local Schools
Site Address: Southington School
Principal Address: 2482 State Route 534

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (c) *Note 1*
2011	1,081,600	1,081,600	1,081,600
Average	**1,081,600**	**1,081,600**	**1,081,600**

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) $ *Note 2*
1	Lighting and Occupancy Sensors	07/27/2012	$104,880	$52,440	131,332	131,332	-	$6,428	$4,821
2	Energy Efficient Motors	08/01/2012	$76,825	$38,413	9,838	9,838	-	$1,582	$1,187
3	Variable Frequency Drives	08/01/2012	$140,746	$70,373	135,143	135,143	-	$6,475	$4,856
4	Ground Source Heat Pumps	08/01/2012	$149,675	$74,838	161,788	161,788	-	$12,250	$9,188
5	Heat Recovery Units	08/01/2012	$258,500	$129,250	67,977	67,977	-	$6,302	$4,727
6	Energy Efficient Envelope	08/14/2012	$295,000	$147,500	15,494	15,494	-	$1,240	$930
					-	-	-		
		Total	**$1,025,626**		**521,572**	**521,572**	**0**	**$34,277**	**$25,708**

Docket No. 13-0085
Site: 2482 State Route 534

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 or 75% of $0.08/kWh for custom programs for all energy savings eligible for a cash rebate as defined in the PUCO order in Case NO.10-834-EL-EEC dated 9/15/2010, not to exceed the lesser of 50% of the project cost or $250,000 per project. The rebate also cannot exceed $500,000 per customer per year, per utility service territory.

Commitment Payment $
$0

Exhibit 3 Utility Cost Test

UCT = Utility Avoided Costs / Utility Costs

Project	Total Annual Savings, MWh (A)	Utility Avoided Cost $/MWh (B)	Utility Avoided Cost $ (C)	Utility Cost $ (D)	Cash Rebate $ (E)	Administrator Variable Fee $ (F)	Total Utility Cost $ (G)	UCT (H)
1	131	$ 308	$ 40,487	$ 675	$4,821	$1,313	$ 6,809	**5.9**
2	10	$ 308	$ 3,033	$ 675	$1,187	$98	$ 1,960	**1.55**
3	135	$ 308	$ 41,662	$ 675	$4,856	$1,351	$ 6,883	**6.05**
4	162	$ 308	$ 49,876	$ 675	$9,188	$1,618	$ 11,480	**4.34**
5	68	$ 308	$ 20,956	$ 675	$4,727	$680	$ 6,081	**3.45**
6	15	$ 308	$ 4,776	$ 675	$930	$155	$ 1,760	**2.71**
Total	**522**	**$ 308**	**160,790**	**4,050**	**$25,708**	**$5,216**	**34,973**	**4.6**

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)

Southington Local Schools ~ Southington School
Docket No. 13-0085

Site: 2482 State Route 534

Non-Standard Lighting Incentives Program applicants must attach a completed copy of FirstEnergy NonStandard Lighting Calculator to the application form. FirstEnergy NonStandard Lighting Calculator can be found on the program Web site - www.energysaveohio.com

Please use the Retrofit and/or New Construction Lighting Forms, as appropriate. For both the Pre Fixture Code and Post Fixture Code (for Retrofit, post fixture code only for New Construction), please refer to the "Wattage Table" tab of FirstEnergy NonStandard Lighting Calculator for appropriate Fixture Code. "Pre Watts/Fixture" and "Post Watts/Fixture" will be assigned based on the fixture code entered in their respective columns. The "Fixture Code Generator" can also be used to assign the fixture code based on technology specifications.

In cases where Pre Watts/Fixture or Post Watts/Fixture for the make/model/configuration of lighting equipment is available and differs from the value shown in the Wattage Table, or if the fixture configuration/technology is not represented in the Wattage Table, please enter the appropriate description and fixture wattage in the Wattage Table under the section for Cut Sheet Fixtures. *Please note that manufacturer's specification (cut) sheets showing the actual input wattage are required for all pre-installation fixtures that do not use the Wattage Table values. Please clearly indicate the relevant data on the provided specification (cut) sheets by circling or highlighting the information.*

When you have completed the Lighting Form and adjusted for Change in Connected Load (when necessary), use the Project Estimated Summary tab to fill in page 3 of the Non-Standard Lighting Application - Project Estimated Annual Savings Summary.

If you have questions about the program or need assistance completing the form, please call the program at 1-866-578-5220 or email your inquiry to energysaveohio@saic.com.

The table below explains and/or provides examples of input in each of the spreadsheet columns.

Project Basic Information

Column Name	Column Description	Example/Explanation
Applicant Information Block	Lighting Zone (exterior only)	Please select the appropriate lighting zone for your location, as defined in the table below.
Line Item	Integer line number	Used only for program reference
Building Address	Building address	The address of the facility in which the fixtures will be replaced/installed.
Floor	Floor number where fixture(s) are located	Please use B for basements and corresponding numerals for all other floors.
Area Description	Description of location that matches site map	Examples include: director's office, room 325, copy room.
Space Description (New Construction only)	Determines whether or not occupancy sensors are required by code. If required, any occupancy sensors installed in this space will not be incented.	Area Description: University Classroom (excluding Shop or Labs); Conference, Meeting or Training Room; Employee Lunch or Break Room; Other
Predominant Space Type	Description of predominant space type for the area	Some examples include: Education - Primary School, Grocery, All Hospitals, Office - Large, Warehouse, and Other (see below for the complete list under Coincidence Factor). *Note: This choice determines the values used for Coincidence Factor, and Equivalent Full Load Hours, and must be one of the choices in the drop-down list on the worksheet. This field will account for energy savings related to the percentage of the connected load that is on during the electric system's peak window. If the choice is Other, please contact a program representative for determination of an appropriate Coincidence Factor. For interior New Construction fixtures, this also determines the baseline lighting power density (LPD) in ft^2.*
Area Cooling	Description of cooling available in area.	Choices are: Cooled space, Freezer Space, Medium-temperature refrigerated space, High-temperature refrigerated space, Uncooled space and Exterior Space. *Note: This choice determines the values used for Interactive Factor (demand) and Interactive Factor (energy) and must be one of the choices listed above. This field will account for energy savings related to interactive effects of reduced lighting space heat gains on the cooling system.*

Lighting Zone	Description
0	Undeveloped areas within national parks, state parks, forest land, rural areas, and other undeveloped areas as defined by the authority having jurisdiction
1	Developed areas of national parks, state parks, forest land, and rural areas
2	Areas predominantly consisting of residential zoning, neighborhood business districts, light industrial with limited nighttime use and residential mixed use areas
3	All other areas
4	High activity commercial districts in major metropolitan areas as designated by the local jurisdiction

Pre-Installation (Retrofit only)	Pre Fixt. No.	# of existing fixtures	Quantity of existing fixtures accounted for on a line item
	Pre Fixt Code	Code from Wattage Table	This value can be entered manually or selected from the drop-down list and must match one of the fixture codes in the Wattage Table. If using default fixture codes and their associated Wattages, see the Fixture Code Legend worksheet for instructions on determining fixture codes found in the Wattage Table worksheet. If using custom fixture codes (e.g. for project specific fixture wattages, or if the desired fixture is not available in the Wattage Table), use the Cut Sheet Fixtures portion of the Wattage Table to add a fixture description (column C) and Watt/Fixt (column G). These values will need to be verified by manufacterers' cut sheets.
	Pre Watts / Fixt	Watts/Fixt for the existing fixture type on a given line	Column J will assign this value based on the fixture code entered in column I. However, if this value for the existing lighting equipment is available and differs from the value shown in the Wattage Table, enter this value in the Cut Sheet Fixtures portion of the Wattage Table, as described above.
	Pre kW / Space	(Pre Watts/Fixt) * (Pre Fixt No.)	This item is calculated.
	Existing Control	Pre-installation control device	Examples include: wall switch, Building Automation System Control, timer, occupancy sensor, daylight harvesting photosensor
Baseline (New Construction only)	Units	Area, linear feet or quantity	For interior lighting this is the area (ft^2) associated with the space type. For exterior lighting this is the quantity, linear feet (ft) or area (ft^2) associated with the exterior lighting description.
	Lighting Power Density	Watts per unit	For interior lighting, this value is determined by the space type. For exterior lighting, this value is determined by the exterior lighting description.
Post-Installation	Post Fixt. No.	# of new fixtures	Quantity of new fixtures accounted for on a line item
	Post Fixt Code	Code from Wattage Table	This value can be entered manually or selected from the drop-down list and must match one of the fixture codes in the Wattage Table. If using default fixture codes and their associated Wattages, see the Fixture Code Legend worksheet for instructions on determining fixture codes found in the Wattage Table worksheet. If using custom fixture codes (e.g. for project specific fixture wattages, or if the desired fixture is not available in the Wattage Table), use the Cut Sheet Fixtures portion of the Wattage Table to add a fixture description (column C) and Watt/Fixt (column G). These values will need to be verified by manufacterers' cut sheets.
	Post Watts / Fixt	Watts/Fixt for the new fixture type on a given line	Column P will assign this value based on the fixture code entered in column O. However, if this value for the new lighting equipment is available and differs from the value shown in the Wattage Table, enter this value in the Cut Sheet Fixtures portion of the Wattage Table, as described above.
	Post kW / Space	(Post Watts/Fixt) * (Post Fixt No.)	This item is calculated.
	Proposed Control	Post-installation control device	Please enter OCC for occupancy sensor, DAYLTG for daylighting photosensor, or NONE for none. *Note: This choice determines the value used for controls factor, and must be one of the three choices listed above. This field will account for energy savings related to lighting control as per the state-mandated TRM calculation methodolgy.*

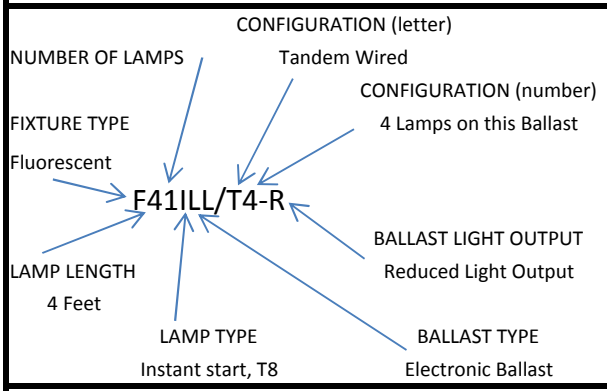
Energy Calculations

Change in Connected Load	Pre kW/Space - Post kW/Space	This item is calculated.
Coincidence Factor	CF = Demand Coincidence Factor. The percentage of the connected load that is on during electric system's peak window (noon - 8 PM, Monday - Friday).	<table><tr><th>Predominant Space Type</th><th>Coincidence Factor</th></tr><tr><td>Education - Primary School</td><td>0.57</td></tr><tr><td>Education - Secondary School</td><td>0.57</td></tr><tr><td>Education - Community College</td><td>0.64</td></tr><tr><td>Education - University</td><td>0.64</td></tr><tr><td>Grocery</td><td>0.94</td></tr><tr><td>All Hospitals</td><td>0.84</td></tr><tr><td>Medical - Clinic</td><td>0.86</td></tr><tr><td>Lodging - Hotel Guest Rooms</td><td>0.84</td></tr><tr><td>Lodging - Motel Common Spaces</td><td>1.00</td></tr><tr><td>Manufacturing - Light Industrial</td><td>0.63</td></tr><tr><td>Office - Large</td><td>0.84</td></tr><tr><td>Office - Small</td><td>0.84</td></tr><tr><td>Restaurant - Sit-Down</td><td>0.88</td></tr><tr><td>Restaurant - Fast Food</td><td>0.88</td></tr><tr><td>Retail - 3-Story Large</td><td>0.89</td></tr><tr><td>Retail - Single-Story Large</td><td>0.89</td></tr><tr><td>Retail - Small</td><td>0.89</td></tr><tr><td>Storage - Conditioned</td><td>0.85</td></tr><tr><td>Storage - Unconditioned</td><td>0.85</td></tr><tr><td>Warehouse</td><td>0.85</td></tr><tr><td>Dusk-to-Dawn Lighting</td><td>0.00</td></tr><tr><td>Exit Signs</td><td>1.00</td></tr><tr><td>Multifamily-Common Areas</td><td>0.84</td></tr><tr><td>Other - Please estimate CF and EFLH</td><td>As measured</td></tr></table>
Interactive factor (demand)	Interactive HVAC Demand Factor – applies to C&I interior lighting in space that has air conditioning or refrigeration only. This represents the secondary demand savings in cooling required which results from decreased indoor lighting wattage.	Cooled Space = 0.34 Freezer Space = 0.50 Medium-Temp Refrig Space = 0.29 High-Temp Refrig Space = 0.18 Uncooled Space = 0 Exterior Space = 0
Interactive factor (energy)	Interactive HVAC Energy Factor – applies to C&I interior lighting in space that has air conditioning or refrigeration only. This represents the secondary energy savings in cooling required which results from decreased indoor lighting wattage.	Cooled Space = 0.12 Freezer Space = 0.50 Medium-Temp Refrig Space = 0.29 High-Temp Refrig Space = 0.18 Uncooled Space = 0 Exterior Space = 0
Controls Factor	Controls Factor is referred to as SVG in the Technical Resource Manual and is defined as SVG = The percent of time that lights are off due to lighting controls relative to the baseline controls system (typically manual switch).	Occupancy Sensor, Controlled Hi-Low Fluorescent Control and controlled HID = 30% Daylight Dimmer System = 50%
Demand Savings	Demand Savings = ΔkW X CF X (1+IFdemand)	This item is calculated.
Applicant Equivalent Full Load Hours Estimate	The average annual operating hours of the baseline lighting equipment as defined by the applicant, which if applied to full connected load will yield annual energy use. Prescribed EFLH at right will be automatically applied in the spreadsheet based on selected Predominant Space Type. If selected Predominant Space Type=Other, the applicant's estimate will be applied in the spreadsheet. These applicants will be asked to verify their EFLH estimates. If the applicant does not provide an estimate of EFLH, 3760 will be used.	<table><tr><th>Facility Type</th><th>EFLH</th></tr><tr><td>Education - Primary School</td><td>2080</td></tr><tr><td>Education - Secondary School</td><td>2080</td></tr><tr><td>Education - Community College</td><td>5010</td></tr><tr><td>Education - University</td><td>5010</td></tr><tr><td>Grocery</td><td>4612</td></tr><tr><td>Medical - Hospital</td><td>4532</td></tr><tr><td>Medical - Clinic</td><td>3392</td></tr><tr><td>Lodging Hotel (Guest Rooms)</td><td>2697</td></tr><tr><td>Lodging Motel</td><td>2697</td></tr><tr><td>Manufacturing - Light Industrial</td><td>5913</td></tr><tr><td>Multifamily - Common Areas</td><td>2697</td></tr><tr><td>Office - Large</td><td>3435</td></tr><tr><td>Office - Small</td><td>3435</td></tr><tr><td>Restaurant - Sit-Down</td><td>4156</td></tr><tr><td>Restaurant - Fast-Food</td><td>4156</td></tr><tr><td>Retail - 3-Story large</td><td>3068</td></tr><tr><td>Retail - Single Story Large</td><td>3068</td></tr><tr><td>Retail - Small</td><td>3068</td></tr><tr><td>Storage - Conditioned</td><td>2388</td></tr><tr><td>Storage - Unconditioned</td><td>2388</td></tr><tr><td>Warehouse</td><td>2388</td></tr><tr><td>Dusk-to-Dawn</td><td>3833</td></tr><tr><td>Other</td><td>3760 unless otherwise specified</td></tr></table>

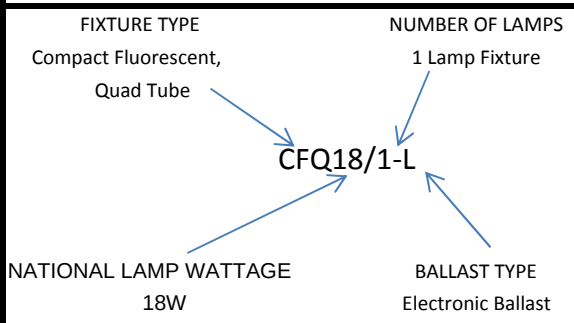
Annual kWh Saved (excluding CFLS or LED exits)	Energy Savings = [kWbase X (1+IFenergy) X EFLH] – [kWinst X (1+IFenergy) X EFLH]	This item is calculated for lighting fixture changes only. CFL lamps, LED exit signs, and savings from sensors are not included here.
Annual kWh Saved (CFL or LED exit sign)	Energy Savings = [kWbase X (1+IFenergy) X EFLH] – [kWinst X (1+IFenergy) X EFLH]	This item is calculated for CFL and LED exit sign installations only.
Annual kWh Saved Sensors	Energy Savings are based on the impact of the new sensor on an existing or retrofitted fixture, relative to the same fixture or retrofit with no sensor.	This item is calculated for savings from installed lighting occupancy sensors or photosensors. Replacing the same sensor technology (i.e. occupancy sensors with occupancy sensors) does not result in energy savings.

Fixture Code Legend and Notes

Sample Linear Fluorescent Fixture Code



Sample of Other Fixture Code:



Code Explanations

Fixture Type

CF	Compact Fluorescent
CFD	Compact Fluorescent, double-D shape
CFS	Compact Fluorescent, Spiral
CFT	Compact Fluorescent, Twin tube (including "Biaxial" fixtures)
CFQ	Compact Fluorescent, Quad tube
ECF	Exit sign, Compact Fluorescent
EI	Exit sign, Incandescent
ELED	Exit sign, LED
F	Fluorescent, linear
FC	Fluorescent, Circline
FU	Fluorescent, U-tube
H	Halogen
HLV	Halogen, Low Voltage
HPS	High Pressure Sodium
I	Incandescent
LED	Light Emitting Diode (LED) traffic signal
MH	Metal Halide
MHPS	Metal Halide, Pulse Start
MV	Mercury Vapor
QL	Induction

Lamp Type

for fluorescent fixtures

A	"F25T12" - 25 watt, 4ft, T12 lamp
IL	T8, Instant start
SIL	T8, Instant start, Super 30 watt
SSIL	T8, Instant start, Super 28 watt
L	T8, rapid start
G	T5, standard
GH	T5, standard, High output lamp
E	T12, Energy efficient
EH	T12, Energy efficient, High output lamp
EI	T12, Energy efficient, Instant start
EV	T12, Energy efficient, Very high output
S	T12, Standard

Ballast Type

for fluorescent fixtures

L	Electronic
S	Standard magnetic
E	Energy efficient magnetic

Configuration (letter)

T	Tandem wired fixture
D	Delamped fixture, i.e. some lamps permanently removed but ballasts remain

Configuration (number)

for delamped fixtures

Number signifies the total number of ballasts in the fixture: e.g. An "F42EEID2" is an "F44EE" with two lamps removed so that there is one extraneous ballast

for tandem wired ballasts

Number signifies the total number of lamps being run by the ballast: e.g. An "F42LLIT4" would indicate that a four-lamp ballast is wired to run two-lamp fixtures.

with no preceding letter

Number indicates the number of ballasts in an ambiguous multiple ballast fixture: e.g. An "F43ILU2" indicates a three-lamp fixture with two ballasts (as is often the case if there is A/B switching).

Ballast Light Output

R	Reduced light output
H	High light output
V	Very high light output

SI	T12, Standard, Instant start
SH	T12, Standard, High output lamp
SV	T12, Standard, Very high output lamp
T	T10, Standard

Notes:
1) The column labeled Watts/Fixtures in the data table includes ballast loads.
2) The fixture wattage values represent an average value, rounded to the nearest whole watt.

Lighting Audit and Design Tool
Lighting Fixture Code Generator

Fill In White Fields

Linear, Circuline and U-tube Fluorescent Fixtures	
Fixture Type:	Fluorescent
Fixture Subtype:	Linear
Lamp Length:	4 Feet (48 Inches)
Number of Lamps:	1 Lamp
Lamp Type:	T8, Instant Start
Ballast Type:	Electronic
Delamped/Tandem/Multiple Ballasts - Optional:	
Ballast Light Output (Ballast Factor) - Optional:	
Fixture Code:	**F41ILL**

Compact Fluorescent and Exit Sign Fixtures	
Fixture Type:	Compact Fluorescent
Fixture Subtype:	Standard
Nominal Lamp Wattage:	11
Number of Lamps:	1 Lamp
Lamp Length - Optional:	Standard
Fixture Code:	**CF11/1**

All Other Fixtures	
Fixture Type:	Halogen
Fixture Subtype:	Standard
Nominal Lamp Wattage:	35
Number of Lamps:	1 Lamp
Fixture Code:	**H35/1**

If a generated code returns "Use Cut Sheet Fixture" for the Pre or Post Watts/Fixture, please use the Wattage Table tab to determine an appropriate code.

On the Wattage Table, filter by Lamps/Fixture (column E) and/or Watts/Lamp (column F) to narrow the results. Refer to the Fixture Code Legend tab for help with the naming convention.

If an appropriate code is NOT found in the Wattage Table, refer to the Instructions tab row 3 on how to create a Cut Sheet Fixture.

TABLE OF STANDARD WATTAGES

Appendix C of the PA TRM

FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
CF10/2D	CFD10W	Compact Fluorescent, 2D, (1) 10W lamp	Mag-STD	1	10	16	CF Screw
CF10/2D-L	CFD10W	Compact Fluorescent, 2D, (1) 10W lamp	Electronic	1	10	12	CF Screw
CF11/1	CF11W	Compact Fluorescent, (1) 11W lamp	Mag-STD	1	11	13	CF Screw
CF11/2	CF11W	Compact Fluorescent, (2) 11W lamp	Mag-STD	2	11	26	CF Screw
CF16/2D	CFD16W	Compact Fluorescent, 2D, (1) 16W lamp	Mag-STD	1	16	26	CF Screw
CF16/2D-L	CFD16W	Compact Fluorescent, 2D, (1) 16W lamp	Electronic	1	16	18	CF Screw
CF18/3-L	CF18W	Compact Fluorescent, (3) 18W lamp	Electronic	3	18	60	CF Screw
CF21/2D	CFD21W	Compact Fluorescent, 2D, (1) 21W lamp	Mag-STD	1	21	26	CF Screw
CF21/2D-L	CFD21W	Compact Fluorescent, 2D, (1) 21W lamp	Electronic	1	21	22	CF Screw
CF23/1	CF23W	Compact Fluorescent, (1) 23W lamp	Mag-STD	1	23	29	CF Screw
CF23/1-L	CF23W	Compact Fluorescent, (1) 23W lamp	Electronic	1	23	25	CF Screw
CF26/3-L	CF26W	Compact Fluorescent, (3) 26W lamp	Electronic	3	26	82	CF Screw
CF26/4-L	CF26W	Compact Fluorescent, (4) 26W lamp	Electronic	4	26	108	CF Screw
CF26/6-L	CF26W	Compact Fluorescent, (6) 26W lamp	Electronic	6	26	162	CF Screw
CF26/8-L	CF26W	Compact Fluorescent, (8) 26W lamp	Electronic	8	26	216	CF Screw
CF28/2D	CFD28W	Compact Fluorescent, 2D, (1) 28W lamp	Mag-STD	1	28	35	CF Screw
CF28/2D-L	CFD28W	Compact Fluorescent, 2D, (1) 28W lamp	Electronic	1	28	28	CF Screw
CF32/3-L	CF32W	Compact Fluorescent, (3) 32W lamp	Electronic	3	32	114	CF Screw
CF32/4-L	CF32W	Compact Fluorescent, (4) 32W lamp	Electronic	4	32	152	CF Screw
CF32/6-L	CF32W	Compact Fluorescent, (6) 32W lamp	Electronic	6	32	228	CF Screw
CF32/8-L	CF32W	Compact Fluorescent, (8) 32W lamp	Electronic	8	32	304	CF Screw
CF38/2D	CFD38W	Compact Fluorescent, 2D, (1) 38W lamp	Mag-STD	1	38	46	CF Screw
CF38/2D-L	CFD38W	Compact Fluorescent, 2D, (1) 38W lamp	Electronic	1	38	36	CF Screw
CF42/1-L	CF42W	Compact Fluorescent, (1) 42W lamp	Electronic	1	42	48	CF Screw
CF42/2-L	CF42W	Compact Fluorescent, (2) 42W lamp	Electronic	2	42	100	CF Screw
CF42/3-L	CF42W	Compact Fluorescent, (3) 42W lamp	Electronic	3	42	141	CF Screw
CF42/4-L	CF42W	Compact Fluorescent, (4) 42W lamp	Electronic	4	42	188	CF Screw
CF42/6-L	CF42W	Compact Fluorescent, (6) 42W lamp	Electronic	6	42	282	CF Screw
CF42/8-L	CF42W	Compact Fluorescent, (8) 42W lamp	Electronic	8	42	376	CF Screw
CFQ10/1	CFQ10W	Compact Fluorescent, quad, (1) 10W lamp	Mag-STD	1	10	15	CF Pin
CFQ13/1	CFQ13W	Compact Fluorescent, quad, (1) 13W lamp	Mag-STD	1	13	17	CF Pin
CFQ13/1-L	CFQ13W	Compact Fluorescent, quad, (1) 13W lamp, BF=1.05	Electronic	1	13	15	CF Pin
CFQ13/2	CFQ13W	Compact Fluorescent, quad, (2) 13W lamp	Mag-STD	2	13	31	CF Pin
CFQ13/2-L	CFQ13W	Compact Fluorescent, quad, (2) 13W lamp, BF=1.0	Electronic	2	13	28	CF Pin
CFQ13/3	CFQ13W	Compact Fluorescent, quad, (3) 13W lamp	Mag-STD	3	13	48	CF Pin
CFQ15/1	CFQ15W	Compact Fluorescent, quad, (1) 15W lamp	Mag-STD	1	15	20	CF Pin
CFQ17/1	CFQ17W	Compact Fluorescent, quad, (1) 17W lamp	Mag-STD	1	17	24	CF Pin
CFQ17/2	CFQ17W	Compact Fluorescent, quad, (2) 17W lamp	Mag-STD	2	17	48	CF Pin
CFQ18/1	CFQ18W	Compact Fluorescent, quad, (1) 18W lamp	Mag-STD	1	18	26	CF Pin
CFQ18/1-L	CFQ18W	Compact Fluorescent, quad, (1) 18W lamp, BF=1.0	Electronic	1	18	20	CF Pin
CFQ18/2	CFQ18W	Compact Fluorescent, quad, (2) 18W lamp	Mag-STD	2	18	45	CF Pin
CFQ18/2-L	CFQ18W	Compact Fluorescent, quad, (2) 18W lamp, BF=1.0	Electronic	2	18	38	CF Pin
CFQ18/4	CFQ18W	Compact Fluorescent, quad, (4) 18W lamp	Mag-STD	2	18	90	CF Pin
CFQ20/1	CFQ20W	Compact Fluorescent, quad, (1) 20W lamp	Mag-STD	1	20	23	CF Pin
CFQ20/2	CFQ20W	Compact Fluorescent, quad, (2) 20W lamp	Mag-STD	2	20	46	CF Pin
CFQ22/1	CFQ22W	Compact Fluorescent, quad, (1) 22W lamp	Mag-STD	1	22	24	CF Pin
CFQ22/2	CFQ22W	Compact Fluorescent, quad, (2) 22W lamp	Mag-STD	2	22	48	CF Pin
CFQ22/3	CFQ22W	Compact Fluorescent, quad, (3) 22W lamp	Mag-STD	3	22	72	CF Pin
CFQ25/1	CFQ25W	Compact Fluorescent, quad, (1) 25W lamp	Mag-STD	1	25	33	CF Pin
CFQ25/2	CFQ25W	Compact Fluorescent, quad, (2) 25W lamp	Mag-STD	2	25	66	CF Pin

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
CFQ26/1	CFQ26W	Compact Fluorescent, quad, (1) 26W lamp	Mag-STD	1	26	33	CF Pin
CFQ26/1-L	CFQ26W	Compact Fluorescent, quad, (1) 26W lamp, BF=0.95	Electronic	1	26	27	CF Pin
CFQ26/2	CFQ26W	Compact Fluorescent, quad, (2) 26W lamp	Mag-STD	2	26	66	CF Pin
CFQ26/2-L	CFQ26W	Compact Fluorescent, quad, (2) 26W lamp, BF=0.95	Electronic	2	26	50	CF Pin
CFQ26/3	CFQ26W	Compact Fluorescent, quad, (3) 26W lamp	Mag-STD	3	26	99	CF Pin
CFQ26/6-L	CFQ26W	Compact Fluorescent, quad, (6) 26W lamp, BF=0.95	Electronic	6	26	150	CF Pin
CFQ28/1	CFQ28W	Compact Fluorescent, quad, (1) 28W lamp	Mag-STD	1	28	33	CF Pin
CFQ9/1	CFQ9W	Compact Fluorescent, quad, (1) 9W lamp	Mag-STD	1	9	14	CF Pin
CFQ9/2	CFQ9W	Compact Fluorescent, quad, (2) 9W lamp	Mag-STD	2	9	23	CF Pin
CFS7/1	CFS7W	Compact Fluorescent, spiral, (1) 7W lamp	Electronic	1	7	7	CF Screw
CFS9/1	CFS9W	Compact Fluorescent, spiral, (1) 9W lamp	Electronic	1	9	9	CF Screw
CFS11/1	CFS11W	Compact Fluorescent, spiral, (1) 11W lamp	Electronic	1	11	11	CF Screw
CFS15/1	CFS15W	Compact Fluorescent, spiral, (1) 15W lamp	Electronic	1	15	15	CF Screw
CFS20/1	CFS20W	Compact Fluorescent, spiral, (1) 20W lamp	Electronic	1	20	20	CF Screw
CFS23/1	CFS23W	Compact Fluorescent, spiral, (1) 23W lamp	Electronic	1	23	23	CF Screw
CFS27/1	CFS27W	Compact Fluorescent, spiral, (1) 27W lamp	Electronic	1	27	27	CF Screw
CFT13/1	CFT13W	Compact Fluorescent, twin, (1) 13W lamp	Mag-STD	1	13	17	CF Pin
CFT13/2	CFT13W	Compact Fluorescent, twin, (2) 13W lamp	Mag-STD	2	13	31	CF Pin
CFT13/3	CFT13W	Compact Fluorescent, twin, (3) 13 W lamp	Mag-STD	3	13	48	CF Pin
CFT18/1	CFT18W	Compact Fluorescent, long twin., (1) 18W lamp	Mag-STD	1	18	24	CF Pin
CFT22/1	CFT22W	Compact Fluorescent, twin, (1) 22W lamp	Mag-STD	1	22	27	CF Pin
CFT22/2	CFT22W	Compact Fluorescent, twin, (2) 22W lamp	Mag-STD	2	22	54	CF Pin
CFT22/4	CFT22W	Compact Fluorescent, twin, (4) 22W lamp	Mag-STD	4	22	108	CF Pin
CFT24/1	CFT24W	Compact Fluorescent, long twin, (1) 24W lamp	Mag-STD	1	24	32	CF Pin
CFT28/1	CFT28W	Compact Fluorescent, twin, (1) 28W lamp	Mag-STD	1	28	33	CF Pin
CFT28/2	CFT28W	Compact Fluorescent, twin, (2) 28W lamp	Mag-STD	2	28	66	CF Pin
CFT32/1-L	CFM32W	Compact Fluorescent, twin or multi, (1) 32W lamp	Electronic	1	32	34	CF Pin
CFT32/2-L	CFM32W	Compact Fluorescent, twin or multi, (2) 32W lamp	Electronic	2	32	62	CF Pin
CFT32/6-L	CFM32W	Compact Fluorescent, twin or multi, (2) 32W lamp	Electronic	6	32	186	CF Pin
CFT36/1	CFT36W	Compact Fluorescent, long twin, (1) 36W lamp	Mag-STD	1	36	51	CF Pin
CFT36/4-BX	CFT36W	Compact Fluorescent, Biax, (4) 36W lamp	Electronic	4	36	148	CF Pin
CFT36/6-BX	CFT36W	Compact Fluorescent, Biax, (6) 36W lamp	Electronic	6	36	212	CF Pin
CFT36/6-L	CFT36W	Compact Fluorescent, long Twin, (6) 36W lamp	Electronic	6	36	198	CF Pin
CFT36/6-L-H	CFT36W	Compact Fluorescent, long Twin, (6) 36W lamp/ High Ballast Factor	Electronic	6	36	210	CF Pin
CFT36/8-BX	CFT36W	Compact Fluorescent, Biax, (8) 36W lamp	Electronic	8	36	296	CF Pin
CFT36/8-L	CFT36W	Compact Fluorescent, long Twin, (8) 36W lamp	Electronic	8	36	270	CF Pin
CFT36/8-L-H	CFT36W	Compact Fluorescent, long Twin, (8) 36W lamp/ High Ballast Factor	Electronic	8	36	286	CF Pin
CFT36/9-BX	CFT36W	Compact Fluorescent, Biax, (9) 36W lamp	Electronic	9	36	318	CF Pin
CFT40/1	CFT40W	Compact Fluorescent, twin, (1) 40W lamp	Mag-STD	1	40	46	CF Pin
CFT40/12-BX	CFT40W	Compact Fluorescent, Biax, (12) 40W lamp	Electronic	12	40	408	CF Pin
CFT40/1-BX	CFT40W	Compact Fluorescent, Biax, (1) 40W lamp	Electronic	1	40	46	CF Pin
CFT40/1-L	CFT40W	Compact Fluorescent, long twin, (1) 40W lamp	Electronic	1	40	43	CF Pin
CFT40/2	CFT40W	Compact Fluorescent, twin, (2) 40W lamp	Mag-STD	2	40	85	CF Pin
CFT40/2-BX	CFT40W	Compact Fluorescent, Biax, (2) 40W lamp	Electronic	2	40	72	CF Pin
CFT40/2-L	CFT40W	Compact Fluorescent, long twin, (2) 40W lamp	Electronic	2	40	72	CF Pin
CFT40/3	CFT40W	Compact Fluorescent, twin, (3) 40 W lamp	Mag-STD	3	40	133	CF Pin
CFT40/3-BX	CFT40W	Compact Fluorescent, Biax, (3) 40W lamp	Electronic	3	40	102	CF Pin
CFT40/3-L	CFT40W	Compact Fluorescent, long twin, (3) 40W lamp	Electronic	3	40	105	CF Pin
CFT40/4-BX	CFT40W	Compact Fluorescent, Biax, (4) 40W lamp	Electronic	4	40	144	CF Pin
CFT40/5-BX	CFT40W	Compact Fluorescent, Biax, (5) 40W lamp	Electronic	5	40	190	CF Pin
CFT40/6-BX	CFT40W	Compact Fluorescent, Biax, (6) 40W lamp	Electronic	6	40	204	CF Pin
CFT40/6-L	CFT40W	Compact Fluorescent, long Twin, (6) 40W lamp	Electronic	6	40	220	CF Pin

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
CFT40/6-L-H	CFT40W	Compact Fluorescent, long Twin, (6) 40W lamp/ High Ballast Factor	Electronic	6	40	233	CF Pin
CFT40/8-BX	CFT40W	Compact Fluorescent, Biax, (8) 40W lamp	Electronic	8	40	288	CF Pin
CFT40/8-L	CFT40W	Compact Fluorescent, long Twin, (8) 40W lamp	Electronic	8	40	300	CF Pin
CFT40/8-L-H	CFT40W	Compact Fluorescent, long Twin, (8) 40W lamp/ High Ballast Factor	Electronic	8	40	340	CF Pin
CFT40/9-BX	CFT40W	Compact Fluorescent, Biax, (9) 40W lamp	Electronic	9	40	306	CF Pin
CFT5/1	CFT5W	Compact Fluorescent, twin, (1) 5W lamp	Mag-STD	1	5	9	CF Pin
CFT5/2	CFT5W	Compact Fluorescent, twin, (2) 5W lamp	Mag-STD	2	5	18	CF Pin
CFT50/12-BX	CFT50W	Compact Fluorescent, Biax, (12) 50W lamp	Electronic	12	50	648	CF Pin
CFT50/1-BX	CFT50W	Compact Fluorescent, Biax, (1) 50W lamp	Electronic	1	50	54	CF Pin
CFT50/2-BX	CFT50W	Compact Fluorescent, Biax, (2) 50W lamp	Electronic	2	50	108	CF Pin
CFT50/3-BX	CFT50W	Compact Fluorescent, Biax, (3) 50W lamp	Electronic	3	50	162	CF Pin
CFT50/4-BX	CFT50W	Compact Fluorescent, Biax, (4) 50W lamp	Electronic	4	50	216	CF Pin
CFT50/5-BX	CFT50W	Compact Fluorescent, Biax, (5) 50W lamp	Electronic	5	50	270	CF Pin
CFT50/6-BX	CFT50W	Compact Fluorescent, Biax, (6) 50W lamp	Electronic	6	50	324	CF Pin
CFT50/8-BX	CFT50W	Compact Fluorescent, Biax, (8) 50W lamp	Electronic	8	50	432	CF Pin
CFT50/9-BX	CFT50W	Compact Fluorescent, Biax, (9) 50W lamp	Electronic	9	50	486	CF Pin
CFT55/12-BX	CFT55W	Compact Fluorescent, Biax, (12) 55W lamp	Electronic	12	55	672	CF Pin
CFT55/1-BX	CFT55W	Compact Fluorescent, Biax, (1) 55W lamp	Electronic	1	55	56	CF Pin
CFT55/2-BX	CFT55W	Compact Fluorescent, Biax, (2) 55W lamp	Electronic	2	55	112	CF Pin
CFT55/3-BX	CFT55W	Compact Fluorescent, Biax, (3) 55W lamp	Electronic	3	55	168	CF Pin
CFT55/4-BX	CFT55W	Compact Fluorescent, Biax, (4) 55W lamp	Electronic	4	55	224	CF Pin
CFT55/5-BX	CFT55W	Compact Fluorescent, Biax, (5) 55W lamp	Electronic	5	55	280	CF Pin
CFT55/6-BX	CFT55W	Compact Fluorescent, Biax, (6) 55W lamp	Electronic	6	55	336	CF Pin
CFT55/6-L	CFT55W	Compact Fluorescent, long Twin, (6) 55W lamp	Electronic	6	55	352	CF Pin
CFT55/6-L-H	CFT55W	Compact Fluorescent, long Twin, (6) 55W lamp/ High Ballast Factor	Electronic	6	55	373	CF Pin
CFT55/8-BX	CFT55W	Compact Fluorescent, Biax, (8) 55W lamp	Electronic	8	55	448	CF Pin
CFT55/8-L	CFT55W	Compact Fluorescent, long Twin, (8) 55W lamp	Electronic	8	55	468	CF Pin
CFT55/8-L-H	CFT55W	Compact Fluorescent, long Twin, (8) 55W lamp/ High Ballast Factor	Electronic	8	55	496	CF Pin
CFT55/9-BX	CFT55W	Compact Fluorescent, Biax, (9) 55W lamp	Electronic	9	55	504	CF Pin
CFT7/1	CFT7W	Compact Fluorescent, twin, (1) 7W lamp	Mag-STD	1	7	10	CF Pin
CFT7/2	CFT7W	Compact Fluorescent, twin, (2) 7W lamp	Mag-STD	2	7	21	CF Pin
CFT9/1	CFT9W	Compact Fluorescent, twin, (1) 9W lamp	Mag-STD	1	9	11	CF Pin
CFT9/2	CFT9W	Compact Fluorescent, twin, (2) 9W lamp	Mag-STD	2	9	23	CF Pin
CFT9/3	CFT9W	Compact Fluorescent, twin, (3) 9W lamp	Mag-STD	3	9	34	CF Pin
		EXIT Sign Fixtures					
ECF5/1	CFT5W	EXIT Compact Fluorescent, (1) 5W lamp	Mag-STD	1	5	9	
ECF5/2	CFT5W	EXIT Compact Fluorescent, (2) 5W lamp	Mag-STD	2	5	20	
ECF7/1	CFT7W	EXIT Compact Fluorescent, (1) 7W lamp	Mag-STD	1	7	10	
ECF7/2	CFT7W	EXIT Compact Fluorescent, (2) 7W lamp	Mag-STD	2	7	21	
ECF8/1	F8T5	EXIT T5 Fluorescent, (1) 8W lamp	Mag-STD	1	8	12	
ECF8/2	F8T5	EXIT T5 Fluorescent, (2) 8W lamp	Mag-STD	2	8	24	
ECF9/1	CFT9W	EXIT Compact Fluorescent, (1) 9W lamp	Mag-STD	1	9	12	
ECF9/2	CFT9W	EXIT Compact Fluorescent, (2) 9W lamp	Mag-STD	2	9	20	
EI10/2	I10	EXIT Incandescent, (2) 10W lamp		2	10	20	
EI15/1	I15	EXIT Incandescent, (1) 15W lamp		1	15	15	
EI15/2	I15	EXIT Incandescent, (2) 15W lamp		2	15	30	
EI20/1	I20	EXIT Incandescent, (1) 20W lamp		1	20	20	
EI20/2	I20	EXIT Incandescent, (2) 20W lamp		2	20	40	
EI25/1	I25	EXIT Incandescent, (1) 25W lamp		1	25	25	
EI25/2	I25	EXIT Incandescent, (2) 25W lamp		2	25	50	
EI34/1	I34	EXIT Incandescent, (1) 34W lamp		1	34	34	
EI34/2	I34	EXIT Incandescent, (2) 34W lamp		2	34	68	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
EI40/1	I40	EXIT Incandescent, (1) 40W lamp		1	40	40	
EI40/2	I40	EXIT Incandescent, (2) 40W lamp		2	40	80	
EI5/1	I5	EXIT Incandescent, (1) 5W lamp		1	5	5	
EI5/2	I5	EXIT Incandescent, (2) 5W lamp		2	5	10	
EI50/2	I50	EXIT Incandescent, (2) 50W lamp		2	50	100	
EI7.5/1	I7.5	EXIT Tungsten, (1) 7.5 W lamp		1	7.5	8	
EI7.5/2	I7.5	EXIT Tungsten, (2) 7.5 W lamp		2	7.5	15	
ELED0.5/1	LED0.5W	EXIT Light Emitting Diode, (1) 0.5W lamp, Single Sided		1	0.5	0.5	ELED
ELED0.5/2	LED0.5W	EXIT Light Emitting Diode, (2) 0.5W lamp, Dual Sided		2	0.5	1	ELED
ELED1.5/1	LED1.5W	EXIT Light Emitting Diode, (1) 1.5W lamp, Single Sided		1	1.5	1.5	ELED
ELED1.5/2	LED1.5W	EXIT Light Emitting Diode, (2) 1.5W lamp, Dual Sided		2	1.5	3	ELED
ELED10.5/1	LED10.5W	EXIT Light Emitting Diode, (1) 10.5W lamp, Single Sided		1	10.5	10.5	ELED
ELED10.5/2	LED10.5W	EXIT Light Emitting Diode, (2) 10.5W lamp, Dual Sided		2	10.5	21	ELED
ELED2/1	LED2W	EXIT Light Emitting Diode, (1) 2W lamp, Single Sided		1	2	2	ELED
ELED2/2	LED2W	EXIT Light Emitting Diode, (2) 2W lamp, Dual Sided		2	2	4	ELED
ELED3/1	LED3W	EXIT Light Emitting Diode, (1) 3W lamp, Single Sided		1	3	3	ELED
ELED3/2	LED3W	EXIT Light Emitting Diode, (2) 3W lamp, Dual Sided		2	3	6	ELED
ELED5/1	LED5W	EXIT Light Emitting Diode, (1) 5W lamp, Single Sided		1	5	5	ELED
ELED5/2	LED5W	EXIT Light Emitting Diode, (2) 5W lamp, Dual Sided		2	5	10	ELED
ELED8/1	LED8W	EXIT Light Emitting Diode, (1) 8W lamp, Single Sided		1	8	8	ELED
ELED8/2	LED8W	EXIT Light Emitting Diode, (2) 8W lamp, Dual Sided		2	8	16	ELED
		Linear Fluorescent Fixtures					
F1.51LS	F15T8	Fluorescent, (1) 18" T8 lamp	Mag-STD	1	15	19	
F1.51SS	F15T12	Fluorescent, (1) 18" T12 lamp	Mag-STD	1	15	19	
F1.52LS	F15T8	Fluorescent, (2) 18" T8 lamp	Mag-STD	2	15	36	
F1.52SS	F15T12	Fluorescent, (2) 18", T12 lamp	Mag-STD	2	15	36	
F21SHS	F24T12/HO	Fluorescent, (1) 24", HO lamp	Mag-STD	1	35	62	
F21ILL	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	17	20	
F21ILL/T2	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	17	17	
F21ILL/T2-R	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 2 Lamp Ballast	Electronic	1	17	15	
F21ILL/T3	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	17	16	
F21ILL/T3-R	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 3 Lamp Ballast	Electronic	1	17	14	
F21ILL/T4	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	17	15	
F21ILL/T4-R	F17T8	Fluorescent, (1) 24", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 4 Lamp Ballast	Electronic	1	17	14	
F21LL	F17T8	Fluorescent, (1) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	1	17	16	
F21LL/T2	F17T8	Fluorescent, (1) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	17	16	
F21LL/T3	F17T8	Fluorescent, (1) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	17	17	
F21LL/T4	F17T8	Fluorescent, (1) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	17	17	
F21LL-R	F17T8	Fluorescent, (1) 24", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	1	17	15	
F21LS	F17T8	Fluorescent, (1) 24", T8 lamp, Standard Ballast	Mag-STD	1	17	24	
F21GL	F24T5	Fluorescent, (1) 24", STD T5 lamp	Electronic	1	14	18	
F21SE	F20T12	Fluorescent, (1) 24", STD lamp	Mag-ES	1	20	26	
F21SS	F20T12	Fluorescent, (1) 24", STD lamp	Mag-STD	1	20	28	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F21GHL	F24T5/HO	Fluorescent, (1) 24", STD HO T5 lamp	Electronic	1	24	29	
F22SHS	F24T12/HO	Fluorescent, (2) 24", HO lamp	Mag-STD	2	35	90	
F22GHL	F24T5/HO	Fluorescent, (2) 24", STD HO T5 lamp	Electronic	2	24	55	
F22ILE	F17T8	Fluorescent, (2) 24", T-8 Instant Start lamp, Energy Saving Magnetic Ballast	Mag-ES	2	17	45	
F22ILL	F17T8	Fluorescent, (2) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	17	33	
F22ILL/T4	F17T8	Fluorescent, (2) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	17	31	
F22ILL/T4-R	F17T8	Fluorescent, (2) 24", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 4 Lamp Ballast	Electronic	2	17	28	
F22ILL-R	F17T8	Fluorescent, (2) 24", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	17	29	
F22LL	F17T8	Fluorescent, (2) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	2	17	31	
F22LL/T4	F17T8	Fluorescent, (2) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	17	34	
F22LL-R	F17T8	Fluorescent, (2) 24", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	2	17	28	
F22GL	F24T5	Fluorescent, (2) 24", STD T5 lamp	Electronic	2	14	35	
F22SE	F20T12	Fluorescent, (2) 24", STD lamp	Mag-ES	2	20	51	
F22SS	F20T12	Fluorescent, (2) 24", STD lamp	Mag-STD	2	20	56	
F23ILL	F17T8	Fluorescent, (3) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	17	47	
F23ILL-H	F17T8	Fluorescent, (3) 24", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	3	17	49	
F23ILL-R	F17T8	Fluorescent, (3) 24", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	17	43	
F23LL	F17T8	Fluorescent, (3) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	3	17	52	
F23LL-R	F17T8	Fluorescent, (3) 24", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	3	17	41	
F23SE	F20T12	Fluorescent, (3) 24", STD lamp	Mag-ES	3	20	77	
F23SS	F20T12	Fluorescent, (3) 24", STD lamp	Mag-STD	3	20	84	
F24ILL	F17T8	Fluorescent, (4) 24", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	17	61	
F24ILL-R	F17T8	Fluorescent, (4) 24", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	17	55	
F24LL	F17T8	Fluorescent, (4) 24", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	4	17	68	
F24LL-R	F17T8	Fluorescent, (4) 24", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	4	17	57	
F24SE	F20T12	Fluorescent, (4) 24", STD lamp	Mag-ES	4	20	102	
F24SS	F20T12	Fluorescent, (4) 24", STD lamp	Mag-STD	4	20	112	
F26SE	F20T12	Fluorescent, (6) 24", STD lamp	Mag-ES	6	20	153	
F26SS	F20T12	Fluorescent, (6) 24", STD lamp	Mag-STD	6	20	168	
F31EE	F30T12/ES	Fluorescent, (1) 36", ES lamp	Mag-ES	1	25	38	
F31EE/T2	F30T12/ES	Fluorescent, (1) 36", ES lamp, Tandem wired	Mag-ES	1	25	33	
F31EL	F30T12/ES	Fluorescent, (1) 36", ES lamp	Electronic	1	25	26	
F31ES	F30T12/ES	Fluorescent, (1) 36", ES lamp	Mag-STD	1	25	42	
F31ES/T2	F30T12/ES	Fluorescent, (1) 36", ES lamp, Tandem wired	Mag-STD	1	25	37	
F31ILL	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	25	26	
F31ILL/T2	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	25	23	
F31ILL/T2-H	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, HLO (BF: .96-1.1), Tandem 2 Lamp Ballast	Electronic	1	25	24	
F31ILL/T2-R	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, RLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	25	23	
F31ILL/T3	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	25	22	
F31ILL/T3-R	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 3 Lamp Ballast	Electronic	1	25	22	
F31ILL/T4	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	25	22	
F31ILL/T4-R	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 4 Lamp Ballast	Electronic	1	25	22	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F31ILL-H	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	1	25	28	
F31ILL-R	F25T8	Fluorescent, (1) 36", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	1	25	27	
F31LL	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	1	25	24	
F31LL/T2	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	25	23	
F31LL/T3	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	25	24	
F31LL/T4	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	25	22	
F31LL-H	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1)	Electronic	1	25	26	
F31LL-R	F25T8	Fluorescent, (1) 36", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	1	25	23	
F31SE/T2	F30T12	Fluorescent, (1) 36", STD lamp, Tandem wired	Mag-ES	1	30	37	
F31GHL	F36T5/HO	Fluorescent, (1) 36", STD HO T5 lamp	Electronic	1	39	43	
F31SHS	F36T12/HO	Fluorescent, (1) 36", HO lamp	Mag-STD	1	50	70	
F31SL	F30T12	Fluorescent, (1) 36", STD lamp	Electronic	1	30	31	
F31GL	F36T5	Fluorescent, (1) 36", STD T5 lamp	Electronic	1	21	27	
F31SS	F30T12	Fluorescent, (1) 36", STD lamp	Mag-STD	1	30	46	
F31SS/T2	F30T12	Fluorescent, (1) 36", STD lamp, Tandem wired	Mag-STD	1	30	41	
F32EE	F30T12/ES	Fluorescent, (2) 36", ES lamp	Mag-ES	2	25	66	
F32EL	F30T12/ES	Fluorescent, (2) 36", ES lamp	Electronic	2	25	50	
F32ES	F30T12/ES	Fluorescent, (2) 36", ES lamp	Mag-STD	2	25	73	
F32ILL	F25T8	Fluorescent, (2) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	25	46	
F32ILL/T4	F25T8	Fluorescent, (2) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	25	44	
F32ILL/T4-R	F25T8	Fluorescent, (2) 36", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 4 Lamp Ballast	Electronic	2	25	43	
F32ILL-H	F25T8	Fluorescent, (2) 36", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	2	25	48	
F32ILL-R	F25T8	Fluorescent, (2) 36", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	25	46	
F32LE	F25T8	Fluorescent, (2) 36", T-8 lamp	Mag-ES	2	25	65	
F32LL	F25T8	Fluorescent, (2) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	2	25	46	
F32LL/T4	F25T8	Fluorescent, (2) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	25	45	
F32LL-H	F25T8	Fluorescent, (2) 36", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1)	Electronic	2	25	50	
F32LL-R	F25T8	Fluorescent, (2) 36", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	2	25	42	
F32LL-V	F25T8	Fluorescent, (2) 36", T-8 lamp, Rapid Start Ballast, VHLO (BF>1.1)	Electronic	2	25	70	
F32SE	F30T12	Fluorescent, (2) 36", STD lamp	Mag-ES	2	30	74	
F32GHL	F36T5/HO	Fluorescent, (1) 36", STD HO T5 lamp	Electronic	2	39	85	
F32SHS	F36T12/HO	Fluorescent, (2) 36", HO, lamp	Mag-STD	2	50	114	
F32SL	F30T12	Fluorescent, (2) 36", STD lamp	Electronic	2	30	58	
F32GL	F36T5	Fluorescent, (1) 36", STD T5 lamp	Electronic	2	21	52	
F32SS	F30T12	Fluorescent, (2) 36", STD lamp	Mag-STD	2	30	81	
F33ES	F30T12/ES	Fluorescent, (3) 36", ES lamp	Mag-STD	3	25	115	
F33ILL	F25T8	Fluorescent, (3) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	25	67	
F33ILL-R	F25T8	Fluorescent, (3) 36", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	25	66	
F33LL	F25T8	Fluorescent, (3) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	3	25	72	
F33LL-R	F25T8	Fluorescent, (3) 36", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	3	25	62	
F33SE	F30T12	Fluorescent, (3) 36", STD lamp, (1) STD ballast and (1) ES ballast	Mag-ES	3	30	120	
F33SS	F30T12	Fluorescent, (3) 36", STD lamp	Mag-STD	3	30	127	
F34ILL	F25T8	Fluorescent, (4) 36", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	25	87	
F34ILL-R	F25T8	Fluorescent, (4) 36", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	25	86	
F34LL	F25T8	Fluorescent, (4) 36", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	4	25	89	
F34LL-R	F25T8	Fluorescent, (4) 36", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	4	25	84	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F34SE	F30T12	Fluorescent, (4) 36", STD lamp	Mag-ES	4	30	148	
F34SL	F30T12	Fluorescent, (4) 36", STD lamp	Electronic	4	30	116	
F34SS	F30T12	Fluorescent, (4) 36", STD lamp	Mag-STD	4	30	162	
F36EE	F30T12/ES	Fluorescent, (6) 36", ES lamp	Mag-ES	6	25	198	
F36ILL-R	F25T8	Fluorescent, (6) 36", T-8 lamp, Instant Start Ballast, RLO (BF<.85)	Electronic	6	25	134	
F36SE	F30T12	Fluorescent, (6) 36", STD lamp	Mag-ES	6	30	238	
F40EE/D1	None	Fluorescent, (0) 48" lamp, Completely delamped fixture with (1) hot ballast	Mag-ES	0	0	4	
F40EE/D2	None	Fluorescent, (0) 48" lamp, Completely delamped fixture with (2) hot ballast	Mag-ES	0	0	8	
F41EE	F40T12/ES	Fluorescent, (1) 48", ES lamp	Mag-ES	1	34	43	
F41EE/D2	F40T12/ES	Fluorescent, (1) 48", ES lamp, 2 ballast	Mag-ES	1	34	43	
F41EE/T2	F40T12/ES	Fluorescent, (1) 48", ES lamp, tandem wired, 2-lamp ballast	Mag-ES	1	34	36	
F41EHS	F48T12/HO/ES	Fluorescent, (1) 48", ES HO lamp	Mag-STD	1	55	80	
F41EIS	F48T12/ES	Fluorescent, (1) 48" ES Instant Start lamp. Magnetic ballast	Mag-STD	1	30	51	
F41EL	F40T12/ES	Fluorescent, (1) 48", T12 ES lamp, Electronic Ballast	Electronic	1	34	32	
F41EL/T2	F40T12/ES	Fluorescent, (1) 48", T-12 ES lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	34	32	
F41ES	F40T12/ES	Fluorescent, (1) 48", ES lamp	Mag-STD	1	34	50	
F41EVS	F48T12/VHO/ES	Fluorescent, (1) 48", VHO ES lamp	Mag-STD	1		123	
F41IAL	F25T12	Fluorescent, (1) 48", F25T12 lamp, Instant Start Ballast	Electronic	1	25	25	
F41IAL/T2-R	F25T12	Fluorescent, (1) 48", F25T12 lamp, Instant Start, Tandem 2-Lamp Ballast, RLO (BF<0.85)	Electronic	1	25	19	
F41IAL/T3-R	F25T12	Fluorescent, (1) 48", F25T12 lamp, Instant Start, Tandem 3-Lamp Ballast, RLO (BF<0.85)	Electronic	1	25	20	
F41ILL	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	32	31	
F41SILL	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	30	28	
F41SILL/T2	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	30	27	
F41SILL/T3	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	30	27	
F41SILL/T4	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	30	26	
F41SILL-R	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	1	30	25	
F41SILL/T2-R	F30T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 2 Lamp Ballast	Electronic	1	30	24	
F41SILL/T3-R	F30T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 3 Lamp Ballast	Electronic	1	30	24	
F41SILL/T4-R	F30T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	1	30	23	
F41SILL-H	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	1	30	37	
F41SILL/T2-H	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 2 Lamp Ballast	Electronic	1	30	36	
F41SILL/T3-H	F30T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 3 Lamp Ballast	Electronic	1	30	36	
F41SSILL	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	28	26	
F41SSILL/T2	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	28	25	
F41SSILL/T3	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	28	25	
F41SSILL/T4	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	28	24	
F41SSILL-R	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	1	28	23	
F41SSILL/T2-R	F28T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 2 Lamp Ballast	Electronic	1	28	22	
F41SSILL/T3-R	F28T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 3 Lamp Ballast	Electronic	1	28	22	
F41SSILL/T4-R	F28T8	Fluorescent, (1) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	1	28	21	
F41SSILL-H	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	1	28	33	
F41SSILL/T2-H	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 2 Lamp Ballast	Electronic	1	28	32	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F41SSILL/T3-H	F28T8	Fluorescent, (1) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 3 Lamp Ballast	Electronic	1	28	32	
F41ILL/T2	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	32	30	
F41ILL/T2-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 2 Lamp Ballast	Electronic	1	32	33	
F41ILL/T2-R	F32T8	Fluorescent, (1) 48", T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 2 Lamp Ballast	Electronic	1	32	26	
F41ILL/T3	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	32	30	
F41ILL/T3-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1), Tandem 3 Lamp Ballast	Electronic	1	32	31	
F41ILL/T3-R	F32T8	Fluorescent, (1) 48", T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 3 Lamp Ballast	Electronic	1	32	26	
F41ILL/T4	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	32	28	
F41ILL/T4-R	F32T8	Fluorescent, (1) 48", T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	1	32	26	
F41ILL-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	1	32	36	
F41LE	F32T8	Fluorescent, (1) 48", T-8 lamp	Mag-ES	1	32	35	
F41LL	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	1	32	32	
F41LL/T2	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	32	30	
F41LL/T2-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1), Tandem 2 Lamp Ballast	Electronic	1	32	39	
F41LL/T2-R	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85), Tandem 2 Lamp Ballast	Electronic	1	32	27	
F41LL/T3	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	32	31	
F41LL/T3-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1), Tandem 3 Lamp Ballast	Electronic	1	32	33	
F41LL/T3-R	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85), Tandem 3 Lamp Ballast	Electronic	1	32	25	
F41LL/T4	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	32	30	
F41LL/T4-R	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	1	32	26	
F41LL-H	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1)	Electronic	1	32	39	
F41LL-R	F32T8	Fluorescent, (1) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	1	32	27	
F41SE	F40T12	Fluorescent, (1) 48", STD lamp	Mag-ES	1	40	50	
F41GHL	F48T5/HO	Fluorescent, (1) 48", STD HO T5 lamp	Electronic	1	54	59	
F41SHS	F48T12/HO	Fluorescent, (1) 48", STD HO lamp	Mag-STD	1	60	85	
F41SIL	F48T12	Fluorescent, (1) 48", STD IS lamp, Electronic ballast	Electronic	1	39	46	
F41SIL/T2	F48T12	Fluorescent, (1) 48", STD IS lamp, Electronic ballast, tandem wired	Electronic	1	39	37	
F41SIS	F48T12	Fluorescent, (1) 48", STD IS lamp	Mag-STD	1	39	60	
F41SIS/T2	F48T12	Fluorescent, (1) 48", STD IS lamp, tandem to 2-lamp ballast	Mag-STD	1	39	52	
F41GL	F48T5	Fluorescent, (1) 48", STD T5 lamp	Electronic	1	28	32	
F41SL/T2	F40T12	Fluorescent, (1) 48", T-12 STD lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	40	36	
F41SS	F40T12	Fluorescent, (1) 48", STD lamp	Mag-STD	1	40	57	
F41SVS	F48T12/VHO	Fluorescent, (1) 48", STD VHO lamp	Mag-STD	1	110	135	
F41TS	F40T10	Fluorescent, (1) 48", T-10 lamp	Mag-STD	1	40	51	
F42EE	F40T12/ES	Fluorescent, (2) 48", ES lamp	Mag-ES	2	34	72	
F42EE/D2	F40T12/ES	Fluorescent, (2) 48", ES lamp, 2 Ballasts (delamped)	Mag-ES	2	34	76	
F42EHS	F48T12/HO/ES	Fluorescent, (2) 42", HO lamp (3.5' lamp)	Mag-STD	2	55	135	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F42EIS	F48T12/ES	Fluorescent, (2) 48" ES Instant Start lamp. Magnetic ballast	Mag-STD	2	30	82	
F42EL	F40T12/ES	Fluorescent, (2) 48", T12 ES lamps, Electronic Ballast	Electronic	2	34	60	
F42ES	F40T12/ES	Fluorescent, (2) 48", ES lamp	Mag-STD	2	34	80	
F42EVS	F48T12/VHO/ES	Fluorescent, (2) 48", VHO ES lamp	Mag-STD	2		210	
F42IAL/T4-R	F25T12	Fluorescent, (2) 48", F25T12 lamp, Instant Start, Tandem 4-Lamp Ballast, RLO (BF<0.85)	Electronic	2	25	40	
F42IAL-R	F25T12	Fluorescent, (2) 48", F25T12 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	25	39	
F42ILL	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	32	59	
F42SILL	F30T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	30	53	
F42SILL/T4	F30T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	30	52	
F42SILL-R	F30T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	30	47	
F42SILL/T4-R	F30T8	Fluorescent, (2) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	2	30	46	
F42SILL-H	F30T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-2.2)	Electronic	2	30	72	
F42SSILL	F28T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	28	48	
F42SSILL/T4	F28T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	28	47	
F42SSILL-R	F28T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	28	45	
F42SSILL/T4-R	F28T8	Fluorescent, (2) 48", Super T-8 lamp, IS Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	2	28	44	
F42SSILL-H	F28T8	Fluorescent, (2) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-2.2)	Electronic	2	28	67	
F42ILL/T4	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	32	56	
F42ILL/T4-R	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	2	32	51	
F42ILL-H	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	2	32	65	
F42ILL-R	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	32	52	
F42ILL-V	F32T8	Fluorescent, (2) 48", T-8 lamp, Instant Start Ballast, VHLO (BF>1.1)	Electronic	2	32	79	
F42LE	F32T8	Fluorescent, (2) 48", T-8 lamp	Mag-ES	2	32	71	
F42LL	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	2	32	60	
F42LL/T4	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	2	32	59	
F42LL/T4-R	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85), Tandem 4 Lamp Ballast	Electronic	2	32	53	
F42LL-H	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1)	Electronic	2	32	70	
F42LL-R	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	2	32	54	
F42LL-V	F32T8	Fluorescent, (2) 48", T-8 lamp, Rapid Start Ballast, VHLO (BF>1.1)	Electronic	2	32	85	
F42SE	F40T12	Fluorescent, (2) 48", STD lamp	Mag-ES	2	40	86	
F42GHL	F48T5/HO	Fluorescent, (2) 48", STD HO T5 lamp	Electronic	2	54	117	
F42SHS	F48T12/HO	Fluorescent, (2) 48", STD HO lamp	Mag-STD	2	60	145	
F42SIL	F48T12	Fluorescent, (2) 48", STD IS lamp, Electronic ballast	Electronic	2	39	74	
F42SIS	F48T12	Fluorescent, (2) 48", STD IS lamp	Mag-STD	2	39	103	
F42GL	F48T5	Fluorescent, (2) 48", STD T5 lamp	Electronic	2	28	63	
F42SS	F40T12	Fluorescent, (2) 48", STD lamp	Mag-STD	2	40	94	
F42SVS	F48T12/VHO	Fluorescent, (2) 48", STD VHO lamp	Mag-STD	2	110	242	
F43EE	F40T12/ES	Fluorescent, (3) 48", ES lamp	Mag-ES	3	34	115	
F43EHS	F48T12/HO/ES	Fluorescent, (3) 48", ES HO lamp (3.5' lamp)	Mag-STD	3	55	215	
F43EIS	F48T12/ES	Fluorescent, (3) 48" ES Instant Start lamp. Magnetic ballast	Mag-STD	3	30	133	
F43EL	F40T12/ES	Fluorescent, (3) 48", T12 ES lamps, Electronic Ballast	Electronic	3	34	92	
F43ES	F40T12/ES	Fluorescent, (3) 48", ES lamp	Mag-STD	3	34	130	
F43EVS	F48T12/VHO/ES	Fluorescent, (3) 48", VHO ES lamp	Mag-STD	3		333	
F43IAL-R	F25T12	Fluorescent, (3) 48", F25T12 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	25	60	
F43ILL	F32T8	Fluorescent, (3) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	32	89	
F43SILL	F30T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	30	78	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F43SILL-R	F30T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	30	70	
F43SILL-H	F30T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-3.3)	Electronic	3	30	105	
F43SSILL	F28T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	28	72	
F43SSILL-R	F28T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	28	66	
F43SSILL-H	F28T8	Fluorescent, (3) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-3.3)	Electronic	3	28	98	
F43ILL/2	F32T8	Fluorescent, (3) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), (2) ballast	Electronic	3	32	90	
F43ILL-H	F32T8	Fluorescent, (3) 48", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	3	32	93	
F43ILL-R	F32T8	Fluorescent, (3) 48", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	3	32	78	
F43ILL-V	F32T8	Fluorescent, (3) 48", T-8 lamp, Instant Start Ballast, VHLO (BF>1.1)	Electronic	3	32	112	
F43LE	F32T8	Fluorescent, (3) 48", T-8 lamp	Mag-ES	3	32	110	
F43LL	F32T8	Fluorescent, (3) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	3	32	93	
F43LL/2	F32T8	Fluorescent, (3) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), (2) ballast	Electronic	3	32	92	
F43LL-H	F32T8	Fluorescent, (3) 48", T-8 lamp, Rapid Start Ballast, HLO (BF:.96-1.1)	Electronic	3	32	98	
F43LL-R	F32T8	Fluorescent, (3) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	3	32	76	
F43SE	F40T12	Fluorescent, (3) 48", STD lamp	Mag-ES	3	40	136	
F43GHL	F48T5/HO	Fluorescent, (3) 48", STD HO T5 lamp	Electronic	3	54	177	
F43SHS	F48T12/HO	Fluorescent, (3) 48", STD HO lamp	Mag-STD	3	60	230	
F43SIL	F48T12	Fluorescent, (3) 48", STD IS lamp, Electronic ballast	Electronic	3	39	120	
F43SIS	F48T12	Fluorescent, (3) 48", STD IS lamp	Mag-STD	3	39	162	
F43SS	F40T12	Fluorescent, (3) 48", STD lamp	Mag-STD	3	40	151	
F43SVS	F48T12/VHO	Fluorescent, (3) 48", STD VHO lamp	Mag-STD	3	110	377	
F44EE	F40T12/ES	Fluorescent, (4) 48", ES lamp	Mag-ES	4	34	144	
F44EE/D4	F40T12/ES	Fluorescent, (4) 48", ES lamp, 4 Ballasts (delamped)	Mag-ES	4	34	152	
F44EHS	F48T12/HO/ES	Fluorescent, (4) 48", ES HO lamp	Mag-STD	4	55	270	
F44EIS	F48T12/ES	Fluorescent, (4) 48" ES Instant Start lamp, Magnetic ballast	Mag-STD	4	30	164	
F44EL	F40T12/ES	Fluorescent, (4) 48", T12 ES lamp, Electronic Ballast	Electronic	4	34	120	
F44ES	F40T12/ES	Fluorescent, (4) 48", ES lamp	Mag-STD	4	34	160	
F44EVS	F48T12/VHO/ES	Fluorescent, (4) 48", VHO ES lamp	Mag-STD	4		420	
F44IAL-R	F25T12	Fluorescent, (4) 48", F25T12 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	25	80	
F44ILL	F32T8	Fluorescent, (4) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	32	112	
F44SILL	F30T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	30	105	
F44SILL-R	F30T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	30	91	
F44SILL-H	F30T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-4.4)	Electronic	4	30	140	
F44SSILL	F28T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	28	96	
F44SSILL-R	F28T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	28	86	
F44SSILL-H	F28T8	Fluorescent, (4) 48", Super T-8 lamp, Instant Start Ballast, HLO (BF:.96-4.4)	Electronic	4	28	131	
F44ILL/2	F32T8	Fluorescent, (4) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), (2) ballast	Electronic	4	32	118	
F44ILL-R	F32T8	Fluorescent, (4) 48", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	4	32	102	
F44LE	F32T8	Fluorescent, (4) 48", T-8 lamp	Mag-ES	4	32	142	
F44LL	F32T8	Fluorescent, (4) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95)	Electronic	4	32	118	
F44LL/2	F32T8	Fluorescent, (4) 48", T-8 lamp, Rapid Start Ballast, NLO (BF: .85-.95), (2) ballast	Electronic	4	32	120	
F44LL-R	F32T8	Fluorescent, (4) 48", T-8 lamp, Rapid Start Ballast, RLO (BF<0.85)	Electronic	4	32	105	
F44SE	F40T12	Fluorescent, (4) 48", STD lamp	Mag-ES	4	40	172	
F44GHL	F48T5/HO	Fluorescent, (4) 48", STD HO T5 lamp	Electronic	4	54	234	
F44SHS	F48T12/HO	Fluorescent, (4) 48", STD HO lamp	Mag-STD	4	60	290	
F44SIL	F48T12	Fluorescent, (4) 48", STD IS lamp, Electronic ballast	Electronic	4	39	148	
F44SIS	F48T12	Fluorescent, (4) 48", STD IS lamp	Mag-STD	4	39	204	
F44SS	F40T12	Fluorescent, (4) 48", STD lamp	Mag-STD	4	40	188	
F44SVS	F48T12/VHO	Fluorescent, (4) 48", STD VHO lamp	Mag-STD	4	110	484	
F45ILL	F32T8	Fluorescent, (5) 48", T-8 lamp, (1) 3-lamp IS ballast and (1) 2-lamp IS ballast, NLO (BF: .85-.95)	Electronic	5	32	148	
F45GHL	F48T5/HO	Fluorescent, (5) 48", STD HO T5 lamp	Electronic	5	54	294	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F46EE	F40T12/ES	Fluorescent, (6) 48", ES lamp	Mag-ES	6	34	216	
F46EL	F40T12/ES	Fluorescent, (6) 48", ES lamp	Electronic	6	34	186	
F46ES	F40T12/ES	Fluorescent, (6) 48", ES lamp	Mag-STD	6	34	236	
F46ILL	F32T8	Fluorescent, (6) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	6	32	175	
F46ILL-R	F32T8	Fluorescent, (6) 48", T-8 lamp, Instant Start Ballast, RLO (BF< .85)	Electronic	6	32	156	
F46LL	F32T8	Fluorescent, (6) 48", T-8 lamp, NLO (BF: .85-.95)	Electronic	6	32	182	
F46GHL	F48T5/HO	Fluorescent, (6) 48", STD HO T5 lamp	Electronic	6	54	351	
F46SE	F40T12	Fluorescent, (6) 48", STD lamp	Mag-ES	6	40	258	
F46SS	F40T12	Fluorescent, (6) 48", STD lamp	Mag-STD	6	40	282	
F48EE	F40T12/ES	Fluorescent, (8) 48", ES lamp	Mag-ES	8	34	288	
F48ILL	F32T8	Fluorescent, (8) 48", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	8	32	224	
F48ILL-R	F32T8	Fluorescent, (8) 48", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	8	32	204	
F48GHL	F48T5/HO	Fluorescent, (8) 48", STD HO T5 lamp	Electronic	8	54	468	
F51ILHL	F60T8/HO	Fluorescent, (1) 60", T-8 HO lamp, Instant Start Ballast	Electronic	1	55	59	
F51ILL	F40T8	Fluorescent, (1) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	40	36	
F51ILL/T2	F40T8	Fluorescent, (1) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	40	36	
F51ILL/T3	F40T8	Fluorescent, (1) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 3 Lamp Ballast	Electronic	1	40	35	
F51ILL/T4	F40T8	Fluorescent, (1) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 4 Lamp Ballast	Electronic	1	40	34	
F51ILL-R	F40T8	Fluorescent, (1) 60", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	1	40	43	
F51SHE	F60T12/HO	Fluorescent, (1) 60", STD HO lamp	Mag-ES	1	75	88	
F51SHL	F60T12/HO	Fluorescent, (1) 60", STD HO lamp	Electronic	1	75	69	
F51GHL	F60T5/HO	Fluorescent, (1) 60", STD HO T5 lamp	Electronic	1	49	54	
F51GHL	F60T5/HO	Fluorescent, (1) 60", STD HO T5 lamp	Electronic	1	80	89	
F51SHS	F60T12/HO	Fluorescent, (1) 60", STD HO lamp	Mag-STD	1	75	92	
F51SL	F60T12	Fluorescent, (1) 60", STD lamp	Electronic	1	50	44	
F51GL	F60T5	Fluorescent, (1) 60", STD T5 lamp	Electronic	1	35	39	
F51SS	F60T12	Fluorescent, (1) 60", STD lamp	Mag-STD	1	50	63	
F51SVS	F60T12/VHO	Fluorescent, (1) 60", VHO ES lamp	Mag-STD	1	135	165	
F52ILHL	F60T8/HO	Fluorescent, (2) 60", T-8 HO lamp, Instant Start Ballast	Electronic	2	55	123	
F52ILL	F40T8	Fluorescent, (2) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	40	72	
F52ILL/T4	F40T8	Fluorescent, (2) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	2	40	67	
F52ILL-H	F40T8	Fluorescent, (2) 60", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	2	40	80	
F52ILL-R	F40T8	Fluorescent, (2) 60", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	40	73	
F52SHE	F60T12/HO	Fluorescent, (2) 60", STD HO lamp	Mag-ES	2	75	176	
F52SHL	F60T12/HO	Fluorescent, (2) 60", STD HO lamp	Electronic	2	75	138	
F52GHL	F60T5/HO	Fluorescent, (2) 60", STD HO T5 lamp	Electronic	2	49	106	
F52SHS	F60T12/HO	Fluorescent, (2) 60", STD HO lamp	Mag-STD	2	75	168	
F52SL	F60T12	Fluorescent, (2) 60", STD lamp	Electronic	2	50	88	
F52GL	F60T5	Fluorescent, (2) 60", STD T5 lamp	Electronic	2	35	76	
F52SS	F60T12	Fluorescent, (2) 60", STD lamp	Mag-STD	2	50	128	
F52SVS	F60T12/VHO	Fluorescent, (2) 60", VHO ES lamp	Mag-STD	2	135	310	
F53ILL	F40T8	Fluorescent, (3) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	40	106	
F53ILL-H	F40T8	Fluorescent, (3) 60", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	3	40	108	
F54ILL	F40T8	Fluorescent, (4) 60", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	40	134	
F54ILL-H	F40T8	Fluorescent, (4) 60", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	4	40	126	
F61SIL	F72T12	Fluorescent, (1) 72", STD lamp, IS electronic ballast	Electronic	1	55	68	
F61SE	F72T12	Fluorescent, (1) 72", STD lamp	Mag-ES	1	55	76	
F61SHS	F72T12/HO	Fluorescent, (1) 72", STD HO lamp	Mag-STD	1	85	120	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F61SS	F72T12	Fluorescent, (1) 72", STD lamp	Mag-STD	1	55	90	
F61SVS	F72T12/VHO	Fluorescent, (1) 72", VHO lamp	Mag-STD	1	160	180	
F62ILHL	F72T8	Fluorescent, (2) 72", T-8 HO lamp, Instant Start Ballast	Electronic	2	65	147	
F62SIL	F72T12	Fluorescent, (2) 72", STD lamp, IS electronic ballast	Electronic	2	55	108	
F62SE	F72T12	Fluorescent, (2) 72", STD lamp	Mag-ES	2	55	122	
F62SHE	F72T12/HO	Fluorescent, (2) 72", STD HO lamp	Mag-ES	2	85	194	
F62SHS	F72T12/HO	Fluorescent, (2) 72", STD HO lamp	Mag-STD	2	85	220	
F62SL	F72T12	Fluorescent, (2) 72", STD lamp	Electronic	2	55	108	
F62SS	F72T12	Fluorescent, (2) 72", STD lamp	Mag-STD	2	55	145	
F62SVS	F72T12/VHO	Fluorescent, (2) 72", VHO lamp	Mag-STD	2	160	330	
F63SIL	F72T12	Fluorescent, (3) 72", STD lamp, IS electronic ballast	Electronic	3	55	176	
F63SS	F72T12	Fluorescent, (3) 72", STD lamp	Mag-STD	3	55	202	
F64SIL	F72T12	Fluorescent, (4) 72", STD lamp, IS electronic ballast	Electronic	4	55	216	
F64SE	F72T12	Fluorescent, (4) 72", STD lamp	Mag-ES	4	55	230	
F64SHE	F72T12/HO	Fluorescent, (4) 72", STD HO lamp	Mag-ES	4	85	388	
F64SS	F72T12	Fluorescent, (4) 72", STD lamp	Mag-STD	4	55	244	
F81EE/T2	F96T12/ES	Fluorescent, (1) 96", ES lamp, tandem to 2-lamp ballast	Mag-ES	1	60	62	
F81EHL	F96T12/HO/ES	Fluorescent, (1) 96", ES HO lamp	Electronic	1	95	80	
F81EHL/T2	F96T12/HO/ES	Fluorescent, (1) 96", ES HO lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	95	85	
F81EHS	F96T12/HO/ES	Fluorescent, (1) 96", ES HO lamp	Mag-STD	1	95	125	
F81EL	F96T12/ES	Fluorescent, (1) 96", ES lamp	Electronic	1	60	60	
F81EL/T2	F96T12/ES	Fluorescent, (1) 96", ES lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	60	55	
F81ES	F96T12/ES	Fluorescent, (1) 96", ES lamp	Mag-STD	1	60	83	
F81ES/T2	F96T12/ES	Fluorescent, (1) 96", ES lamp, tandem to 2-lamp ballast	Mag-STD	1	60	64	
F81EVS	F96T12/VHO/ES	Fluorescent, (1) 96", ES VHO lamp	Mag-STD	1	185	200	
F81ILL	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	59	58	
F81ILL/T2	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	59	55	
F81ILL/T2-R	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, RLO (BF<.85), Tandem 2 Lamp Ballast	Electronic	1	59	49	
F81ILL-H	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, HLO (BF:.96-1.1)	Electronic	1	59	68	
F81ILL-R	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	1	59	57	
F81ILL-V	F96T8	Fluorescent, (1) 96", T-8 lamp, Instant Start Ballast, VHLO (BF>1.1)	Electronic	1	59	71	
F81LHL	F96T8/HO	Fluorescent, (1) 96", T8 HO lamp	Electronic	1	86	85	
F81LHL/T2	F96T8/HO	Fluorescent, (1) 96", T8 HO lamp, tandem wired to 2-lamp ballast	Electronic	1	86	80	
F81SE	F96T12	Fluorescent, (1) 96", STD lamp	Mag-ES	1	75	91	
F81EHS	F96T12/HO	Fluorescent, (1) 96", ES HO lamp	Mag-STD	1	95	125	
F81SHE	F96T12/HO	Fluorescent, (1) 96", STD HO lamp	Mag-ES	1	110	132	
F81SHL/T2	F96T12/HO	Fluorescent, (1) 96", STD HO lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	110	98	
F81SHS	F96T12/HO	Fluorescent, (1) 96", STD HO lamp	Mag-STD	1	110	145	
F81SL	F96T12	Fluorescent, (1) 96", STD lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	1	75	70	
F81SL/T2	F96T12	Fluorescent, (1) 96", STD lamp, Rapid Start Ballast, NLO (BF: .85-.95), Tandem 2 Lamp Ballast	Electronic	1	75	67	
F81SS	F96T12	Fluorescent, (1) 96", STD lamp	Mag-STD	1	75	100	
F81SVS	F96T12/VHO	Fluorescent, (1) 96", STD VHO lamp	Mag-STD	1	215	230	
F82EE	F96T12/ES	Fluorescent, (2) 96", ES lamp	Mag-ES	2	60	123	
F82EHE	F96T12/HO/ES	Fluorescent, (2) 96", ES HO lamp	Mag-ES	2	95	207	
F82EHL	F96T12/HO/ES	Fluorescent, (2) 96", ES HO lamp	Electronic	2	95	170	
F82EHS	F96T12/HO/ES	Fluorescent, (2) 96", ES HO lamp	Mag-STD	2	95	227	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
F82EL	F96T12/ES	Fluorescent, (2) 96", ES lamp	Electronic	2	60	110	
F82ES	F96T12/ES	Fluorescent, (2) 96", ES lamp	Mag-STD	2	60	138	
F82EVS	F96T12/VHO/ES	Fluorescent, (2) 96", ES VHO lamp	Mag-STD	2	185	390	
F82ILL	F96T8	Fluorescent, (2) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	59	109	
F82ILL-R	F96T8	Fluorescent, (2) 96", T-8 lamp, Instant Start Ballast, RLO (BF<0.85)	Electronic	2	59	98	
F82LHL	F96T8/HO	Fluorescent, (2) 96", T8 HO lamp	Electronic	2	86	160	
F82SE	F96T12	Fluorescent, (2) 96", STD lamp	Mag-ES	2	75	158	
F82SHE	F96T12/HO	Fluorescent, (2) 96", STD HO lamp	Mag-ES	2	110	237	
F82SHL	F96T12/HO	Fluorescent, (2) 96", STD HO lamp	Electronic	2	110	195	
F82SHS	F96T12/HO	Fluorescent, (2) 96", STD HO lamp	Mag-STD	2	110	257	
F82SL	F96T12	Fluorescent, (2) 96", STD lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	2	75	134	
F82SS	F96T12	Fluorescent, (2) 96", STD lamp	Mag-STD	2	75	173	
F82SVS	F96T12/VHO	Fluorescent, (2) 96", STD VHO lamp	Mag-STD	2	215	450	
F83EE	F96T12/ES	Fluorescent, (3) 96", ES lamp	Mag-ES	3	60	210	
F83EHE	F96T12/HO/ES	Fluorescent, (3) 96", ES HO lamp, (1) 2-lamp ES Ballast, (1) 1-lamp STD Ballast	Mag-ES/STD	3	95	319	
F83EHS	F96T12/HO/ES	Fluorescent, (3) 96", ES HO lamp	Mag-STD	3	95	352	
F83EL	F96T12/ES	Fluorescent, (3) 96", ES lamp	Electronic	3	60	179	
F83ES	F96T12/ES	Fluorescent, (3) 96", ES lamp	Mag-STD	3	60	221	
F83EVS	F96T12/VHO/ES	Fluorescent, (3) 96", ES VHO lamp	Mag-STD	3	185	590	
F83ILL	F96T8	Fluorescent, (3) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	3	59	167	
F83SHS	F96T12/HO	Fluorescent, (3) 96", STD HO lamp	Mag-STD	3	110	392	
F83SS	F96T12	Fluorescent, (3) 96", STD lamp	Mag-STD	3	75	273	
F83SVS	F96T12/VHO	Fluorescent, (3) 96", STD VHO lamp	Mag-STD	3	215	680	
F84EE	F96T12/ES	Fluorescent, (4) 96", ES lamp	Mag-ES	4	60	246	
F84EHE	F96T12/HO/ES	Fluorescent, (4) 96", ES HO lamp	Mag-ES	4	95	414	
F84EHL	F96T12/HO/ES	Fluorescent, (4) 96", ES HO lamp	Electronic	4	95	340	
F84EHS	F96T12/HO/ES	Fluorescent, (4) 96", ES HO lamp	Mag-STD	4	95	454	
F84EL	F96T12/ES	Fluorescent, (4) 96", ES lamp	Electronic	4	60	220	
F84ES	F96T12/ES	Fluorescent, (4) 96", ES lamp	Mag-STD	4	60	276	
F84EVS	F96T12/VHO/ES	Fluorescent, (4) 96", ES VHO lamp	Mag-STD	4	185	780	
F84ILL	F96T8	Fluorescent, (4) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	59	219	
F84LHL	F96T8/HO	Fluorescent, (4) 96", T8 HO lamp	Electronic	4	86	320	
F84SE	F96T12	Fluorescent, (4) 96", STD lamp	Mag-ES	4	75	316	
F84SHE	F96T12/HO	Fluorescent, (4) 96", STD HO lamp	Mag-ES	4	110	474	
F84SHL	F96T12/HO	Fluorescent, (3) 96", STD HO lamp	Electronic	4	110	390	
F84SHS	F96T12/HO	Fluorescent, (4) 96", STD HO lamp	Mag-STD	4	110	514	
F84SL	F96T12	Fluorescent, (4) 96", STD lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	4	75	268	
F84SS	F96T12	Fluorescent, (4) 96", STD lamp	Mag-STD	4	75	346	
F84SVS	F96T12/VHO	Fluorescent, (4) 96", STD VHO lamp	Mag-STD	4	215	900	
F86EHS	F96T12/HO/ES	Fluorescent, (6) 96", ES HO lamp	Mag-STD	6	95	721	
F86ILL	F96T8	Fluorescent, (6) 96", T-8 lamp, Instant Start Ballast, NLO (BF: .85-.95)	Electronic	6	59	328	
		Circline Fluorescent Fixtures					
FC12/1	FC12T9	Fluorescent, (1) 12" circular lamp, RS ballast	Mag-STD	1	32	31	
FC12/2	FC12T9	Fluorescent, (2) 12" circular lamp, RS ballast	Mag-STD	2	32	62	
FC16/1	FC16T9	Fluorescent, (1) 16" circular lamp	Mag-STD	1	40	35	
FC20/1	FC6T9	Fluorescent, Circlite, (1) 20W lamp, Preheat ballast	Mag-STD	1	20	20	
FC22/1	FC8T9	Fluorescent, Circlite, (1) 22W lamp, preheat ballast	Mag-STD	1	22	20	
FC22/32/1	FC22/32T9	Fluorescent, Circlite, (1) 22W/32W lamp, preheat ballast	Mag-STD	1	22/32	58	
FC32/1	FC12T9	Fluorescent, Circline, (1) 32W lamp, preheat ballast	Mag-STD	1	32	40	
FC32/40/1	FC32/40T9	Fluorescent, Circlite, (1) 32W/40W lamp, preheat ballast	Mag-STD	1	32/40	80	
FC40/1	FC16T9	Fluorescent, Circline, (1) 32W lamp, preheat ballast	Mag-STD	1	32	42	
FC44/1	FC44T9	Fluorescent, Circlite, (1) 44W lamp, preheat ballast	Mag-STD	1	44	46	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
FC6/1	FC6T9	Fluorescent, (1) 6" circular lamp, RS ballast	Mag-STD	1	20	25	
FC8/1	FC8T9	Fluorescent, (1) 8" circular lamp, RS ballast	Mag-STD	1	22	26	
FC8/2	FC8T9	Fluorescent, (2) 8" circular lamp, RS ballast	Mag-STD	2	22	52	
		U-Tube Fluorescent Fixtures					
FU1EE	FU40T12/ES	Fluorescent, (1) U-Tube, ES lamp	Mag-ES	1	34	43	
FU1ILL	FU31T8/6	Fluorescent, (1) U-Tube, T-8 lamp, Instant Start ballast	Electronic	1	32	31	
FU1LL	FU31T8/6	Fluorescent, (1) U-Tube, T-8 lamp	Electronic	1	32	32	
FU1LL-R	FU31T8/6	Fluorescent, (1) U-Tube, T-8 lamp, RLO (BF<0.85)	Electronic	1	31	27	
FU2SS	FU40T12	Fluorescent, (2) U-Tube, STD lamp	Mag-STD	2	40	96	
FU2SE	FU40T12	Fluorescent, (2) U-Tube, STD lamp	Mag-ES	2	40	85	
FU2EE	FU40T12/ES	Fluorescent, (2) U-Tube, ES lamp	Mag-ES	2	34	72	
FU2ES	FU40T12/ES	Fluorescent, (2) U-Tube, ES lamp	Mag-STD	2	34	82	
FU2ILL	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Instant Start Ballast	Electronic	2	32	59	
FU2ILL/T4	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Instant Start Ballast, tandem wired	Electronic	2	32	56	
FU2ILL/T4-R	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Instant Start Ballast, RLO, tandem wired	Electronic	2	32	51	
FU2ILL-H	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Instant Start HLO Ballast	Electronic	2	32	65	
FU2ILL-R	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Instant Start RLO Ballast	Electronic	2	32	52	
FU2LL	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp	Electronic	2	32	60	
FU2LL/T2	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, Tandem 4 lamp ballast	Electronic	2	32	59	
FU2LL-R	FU31T8/6	Fluorescent, (2) U-Tube, T-8 lamp, RLO (BF<0.85)	Electronic	2	31	54	
FU3EE	FU40T12/ES	Fluorescent, (3) U-Tube, ES lamp	Mag-ES	3	35	115	
FU3ILL	FU31T8/6	Fluorescent, (3) U-Tube, T-8 lamp, Instant Start Ballast	Electronic	3	32	89	
FU3ILL-R	FU31T8/6	Fluorescent, (3) U-Tube, T-8 lamp, Instant Start RLO Ballast	Electronic	3	32	78	
		Standard Incandescent Fixtures					
I100/1	I100	Incandescent, (1) 100W lamp		1	100	100	
I100/2	I100	Incandescent, (2) 100W lamp		2	100	200	
I100/3	I100	Incandescent, (3) 100W lamp		3	100	300	
I100/4	I100	Incandescent, (4) 100W lamp		4	100	400	
I100/5	I100	Incandescent, (5) 100W lamp		5	100	500	
I1000/1	I1000	Incandescent, (1) 1000W lamp		1	1000	1000	
I100E/1	I100/ES	Incandescent, (1) 100W ES lamp		1	90	90	
I100EL/1	I100/ES/LL	Incandescent, (1) 100W ES/LL lamp		1	90	90	
I120/1	I120	Incandescent, (1) 120W lamp		1	120	120	
I120/2	I120	Incandescent, (2) 120W lamp		2	120	240	
I125/1	I125	Incandescent, (1) 125W lamp		1	125	125	
I135/1	I135	Incandescent, (1) 135W lamp		1	135	135	
I135/2	I135	Incandescent, (2) 135W lamp		2	135	270	
I15/1	I15	Incandescent, (1) 15W lamp		1	15	15	
I15/2	I15	Incandescent, (2) 15W lamp		2	15	30	
I150/1	I150	Incandescent, (1) 150W lamp		1	150	150	
I150/2	I150	Incandescent, (2) 150W lamp		2	150	300	
I1500/1	I1500	Incandescent, (1) 1500W lamp		1	1500	1500	
I150E/1	I150/ES	Incandescent, (1) 150W ES lamp		1	135	135	
I150EL/1	I150/ES/LL	Incandescent, (1) 150W ES/LL lamp		1	135	135	
I170/1	I170	Incandescent, (1) 170W lamp		1	170	170	
I20/1	I20	Incandescent, (1) 20W lamp		1	20	20	
I20/2	I20	Incandescent, (2) 20W lamp		2	20	40	
I200/1	I200	Incandescent, (1) 200W lamp		1	200	200	
I200/2	I200	Incandescent, (2) 200W lamp		2	200	400	
I2000/1	I2000	Incandescent, (1) 2000W lamp		1	2000	2000	
I200L/1	I200/LL	Incandescent, (1) 200W LL lamp		1	200	200	
I25/1	I25	Incandescent, (1) 25W lamp		1	25	25	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
I25/2	I25	Incandescent, (2) 25W lamp		2	25	50	
I25/4	I25	Incandescent, (4) 25W lamp		4	25	100	
I250/1	I250	Incandescent, (1) 250W lamp		1	250	250	
I300/1	I300	Incandescent, (1) 300W lamp		1	300	300	
I34/1	I34	Incandescent, (1) 34W lamp		1	34	34	
I34/2	I34	Incandescent, (2) 34W lamp		2	34	68	
I36/1	I36	Incandescent, (1) 36W lamp		1	36	36	
I40/1	I40	Incandescent, (1) 40W lamp		1	40	40	
I40/2	I40	Incandescent, (2) 40W lamp		2	40	80	
I400/1	I400	Incandescent, (1) 400W lamp		1	400	400	
I40E/1	I40/ES	Incandescent, (1) 40W ES lamp		1	34	34	
I40EL/1	I40/ES/LL	Incandescent, (1) 40W ES/LL lamp		1	34	34	
I42/1	I42	Incandescent, (1) 42W lamp		1	42	42	
I448/1	I448	Incandescent, (1) 448W lamp		1	448	448	
I45/1	I45	Incandescent, (1) 45W lamp		1	45	45	
I50/1	I50	Incandescent, (1) 50W lamp		1	50	50	
I50/2	I50	Incandescent, (2) 50W lamp		2	50	100	
I500/1	I500	Incandescent, (1) 500W lamp		1	500	500	
I52/1	I52	Incandescent, (1) 52W lamp		1	52	52	
I52/2	I52	Incandescent, (2) 52W lamp		2	52	104	
I54/1	I54	Incandescent, (1) 54W lamp		1	54	54	
I54/2	I54	Incandescent, (2) 54W lamp		2	54	108	
I55/1	I55	Incandescent, (1) 55W lamp		1	55	55	
I55/2	I55	Incandescent, (2) 55W lamp		2	55	110	
I60/1	I60	Incandescent, (1) 60W lamp		1	60	60	
I60/2	I60	Incandescent, (2) 60W lamp		2	60	120	
I60/3	I60	Incandescent, (3) 60W lamp		3	60	180	
I60/4	I60	Incandescent, (4) 60W lamp		4	60	240	
I60/5	I60	Incandescent, (5) 60W lamp		5	60	300	
I60E/1	I60/ES	Incandescent, (1) 60W ES lamp		1	52	52	
I60EL/1	I60/ES/LL	Incandescent, (1) 60W ES/LL lamp		1	52	52	
I65/1	I65	Incandescent, (1) 65W lamp		1	65	65	
I65/2	I65	Incandescent, (2) 65W lamp		2	65	130	
I67/1	I67	Incandescent, (1) 67W lamp		1	67	67	
I67/2	I67	Incandescent, (2) 67W lamp		2	67	134	
I67/3	I67	Incandescent, (3) 67W lamp		3	67	201	
I69/1	I69	Incandescent, (1) 69W lamp		1	69	69	
I7.5/1	I7.5	Tungsten exit light, (1) 7.5 W lamp, used in night light application		1	7.5	8	
I7.5/2	I7.5	Tungsten exit light, (2) 7.5 W lamp, used in night light application		2	7.5	15	
I72/1	I72	Incandescent, (1) 72W lamp		1	72	72	
I75/1	I75	Incandescent, (1) 75W lamp		1	75	75	
I75/2	I75	Incandescent, (2) 75W lamp		2	75	150	
I75/3	I75	Incandescent, (3) 75W lamp		3	75	225	
I75/4	I75	Incandescent, (4) 75W lamp		4	75	300	
I750/1	I750	Incandescent, (1) 750W lamp		1	750	750	
I75E/1	I75/ES	Incandescent, (1) 75W ES lamp		1	67	67	
I75EL/1	I75/ES/LL	Incandescent, (1) 75W ES/LL lamp		1	67	67	
I80/1	I80	Incandescent, (1) 80W lamp		1	80	80	
I85/1	I85	Incandescent, (1) 85W lamp		1	85	85	
I90/1	I90	Incandescent, (1) 90W lamp		1	90	90	
I90/2	I90	Incandescent, (2) 90W lamp		2	90	180	
I90/3	I90	Incandescent, (3) 90W lamp		3	90	270	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
I93/1	I93	Incandescent, (1) 93W lamp		1	93	93	
I95/1	I95	Incandescent, (1) 95W lamp		1	95	95	
I95/2	I95	Incandescent, (2) 95W lamp		2	95	190	
		Halogen Incandescent Fixtures					
H100/1	H100	Halogen Incandescent, (1) 100W lamp		1	100	100	
H1000/1	H1000	Halogen Incandescent, (1) 1000W lamp		1	1000	1000	
H1200/1	H1200	Halogen Incandescent, (1) 1200W lamp		1	1200	1200	
H150/1	H150	Halogen Incandescent, (1) 150W lamp		1	150	150	
H150/2	H150	Halogen Incandescent, (2) 150W lamp		2	150	300	
H1500/1	H1500	Halogen Incandescent, (1) 1500W lamp		1	1500	1500	
H200/1	H200	Halogen Incandescent, (1) 200W lamp		1	200	200	
H250/1	H250	Halogen Incandescent, (1) 250W lamp		1	250	250	
H300/1	H300	Halogen Incandescent, (1) 300W lamp		1	300	300	
H35/1	H35	Halogen Incandescent, (1) 35W lamp		1	35	35	
H350/1	H350	Halogen Incandescent, (1) 350W lamp		1	350	350	
H40/1	H40	Halogen Incandescent, (1) 40W lamp		1	40	40	
H400/1	H400	Halogen Incandescent, (1) 400W lamp		1	400	400	
H42/1	H42	Halogen Incandescent, (1) 42W lamp		1	42	42	
H425/1	H425	Halogen Incandescent, (1) 425W lamp		1	425	425	
H45/1	H45	Halogen Incandescent, (1) 45W lamp		1	45	45	
H45/2	H45	Halogen Incandescent, (2) 45W lamp		2	45	90	
H50/1	H50	Halogen Incandescent, (1) 50W lamp		1	50	50	
H50/2	H50	Halogen Incandescent, (2) 50W lamp		2	50	100	
H500/1	H500	Halogen Incandescent, (1) 500W lamp		1	500	500	
H52/1	H52	Halogen Incandescent, (1) 52W lamp		1	52	52	
H55/1	H55	Halogen Incandescent, (1) 55W lamp		1	55	55	
H55/2	H55	Halogen Incandescent, (2) 55W lamp		2	55	110	
H60/1	H60	Halogen Incandescent, (1) 60W lamp		1	60	60	
H72/1	H72	Halogen Incandescent, (1) 72W lamp		1	72	72	
H75/1	H75	Halogen Incandescent, (1) 75W lamp		1	75	75	
H75/2	H75	Halogen Incandescent, (2) 75W lamp		2	75	150	
H750/1	H750	Halogen Incandescent, (1) 750W lamp		1	750	750	
H90/1	H90	Halogen Incandescent, (1) 90W lamp		1	90	90	
H90/2	H90	Halogen Incandescent, (2) 90W lamp		2	90	180	
H900/1	H900	Halogen Incandescent, (1) 900W lamp		1	900	900	
HLV20/1	H20/LV	Halogen Low Voltage Incandescent, (1) 20W lamp		1	20	30	
HLV25/1	H25/LV	Halogen Low Voltage Incandescent, (1) 25W lamp		1	25	35	
HLV35/1	H35/LV	Halogen Low Voltage Incandescent, (1) 35W lamp		1	35	45	
HLV42/1	H42/LV	Halogen Low Voltage Incandescent, (1) 42W lamp		1	42	52	
HLV50/1	H50/LV	Halogen Low Voltage Incandescent, (1) 50W lamp		1	50	60	
HLV65/1	H65/LV	Halogen Low Voltage Incandescent, (1) 65W lamp		1	65	75	
HLV75/1	H75/LV	Halogen Low Voltage Incandescent, (1) 75W lamp		1	75	85	
		QL Induction Fixtures					
QL55/1	QL55	QL Induction, (1) 55W lamp	Generator	1	55	55	
QL85/1	QL85	QL Induction, (1) 85W lamp	Generator	1	85	85	
QL165/1	QL165	QL Induction, (1) 165W lamp	Generator	1	165	165	
		High Pressure Sodium Fixtures					
HPS100/1	HPS100	High Pressure Sodium, (1) 100W lamp	CWA	1	100	138	
HPS1000/1	HPS1000	High Pressure Sodium, (1) 1000W lamp	CWA	1	1000	1100	
HPS150/1	HPS150	High Pressure Sodium, (1) 150W lamp	CWA	1	150	188	
HPS200/1	HPS200	High Pressure Sodium, (1) 200W lamp	CWA	1	200	250	
HPS225/1	HPS225	High Pressure Sodium, (1) 225W lamp	CWA	1	225	275	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
HPS250/1	HPS250	High Pressure Sodium, (1) 250W lamp	CWA	1	250	295	
HPS310/1	HPS310	High Pressure Sodium, (1) 310W lamp	CWA	1	310	365	
HPS35/1	HPS35	High Pressure Sodium, (1) 35W lamp	CWA	1	35	46	
HPS360/1	HPS360	High Pressure Sodium, (1) 360W lamp	CWA	1	360	414	
HPS400/1	HPS400	High Pressure Sodium, (1) 400W lamp	CWA	1	400	465	
HPS50/1	HPS50	High Pressure Sodium, (1) 50W lamp	CWA	1	50	66	
HPS600/1	HPS600	High Pressure Sodium, (1) 600W lamp	CWA	1	600	675	
HPS70/1	HPS70	High Pressure Sodium, (1) 70W lamp	CWA	1	70	95	
HPS750/1	HPS750	High Pressure Sodium, (1) 750W lamp	CWA	1	750	835	
		Metal Halide Fixtures					
MH100/1	MH100	Metal Halide, (1) 100W lamp	CWA	1	100	128	
MH1000/1	MH1000	Metal Halide, (1) 1000W lamp	CWA	1	1000	1080	
MH150/1	MH150	Metal Halide, (1) 150W lamp	CWA	1	150	190	
MH1500/1	MH1500	Metal Halide, (1) 1500W lamp	CWA	1	1500	1610	
MH175/1	MH175	Metal Halide, (1) 175W lamp	CWA	1	175	215	
MH1800/1	MH1800	Metal Halide, (1) 1800W lamp	CWA	1	1800	1875	
MH200/1	MH200	Metal Halide, (1) 200W lamp	CWA	1	200	232	
MH250/1	MH250	Metal Halide, (1) 250W lamp	CWA	1	250	295	
MH32/1	MH32	Metal Halide, (1) 32W lamp	CWA	1	32	43	
MH300/1	MH300	Metal Halide, (1) 300W lamp	CWA	1	300	342	
MH320/1	MH320	Metal Halide, (1) 320W lamp	CWA	1	320	365	
MH350/1	MH350	Metal Halide, (1) 350W lamp	CWA	1	350	400	
MH360/1	MH360	Metal Halide, (1) 360W lamp	CWA	1	360	430	
MH400/1	MH400	Metal Halide, (1) 400W lamp	CWA	1	400	458	
MH400/2	MH400	Metal Halide, (2) 400W lamp	CWA	2	400	916	
MH450/1	MH450	Metal Halide, (1) 450W lamp	CWA	1	450	508	
MH35/1	MH35	Metal Halide, (1) 35W lamp	CWA	1	35	44	
MH50/1	MH50	Metal Halide, (1) 50W lamp	CWA	1	50	72	
MH70/1	MH70	Metal Halide, (1) 70W lamp	CWA	1	70	95	
MH750/1	MH750	Metal Halide, (1) 750W lamp	CWA	1	750	850	
MHPS/LR/100/1	MHPS100	Metal Halide Pulse Start, (1) 100W lamp w/ Linear Reactor Ballast	LR	1	100	118	
MHPS/LR/150/1	MHPS150	Metal Halide Pulse Start, (1) 150W lamp w/ Linear Reactor Ballast	LR	1	150	170	
MHPS/LR/175/1	MHPS175	Metal Halide Pulse Start, (1) 175W lamp w/ Linear Reactor Ballast	LR	1	175	194	
MHPS/LR/200/1	MHPS200	Metal Halide Pulse Start, (1) 200W lamp w/ Linear Reactor Ballast	LR	1	200	219	
MHPS/LR/250/1	MHPS250	Metal Halide Pulse Start, (1) 250W lamp w/ Linear Reactor Ballast	LR	1	250	275	
MHPS/LR/300/1	MHPS300	Metal Halide Pulse Start, (1) 300W lamp w/ Linear Reactor Ballast	LR	1	300	324	
MHPS/LR/320/1	MHPS320	Metal Halide Pulse Start, (1) 320W lamp w/ Linear Reactor Ballast	LR	1	320	349	
MHPS/LR/350/1	MHPS350	Metal Halide Pulse Start, (1) 350W lamp w/ Linear Reactor Ballast	LR	1	350	380	
MHPS/LR/400/1	MHPS400	Metal Halide Pulse Start, (1) 400W lamp w/ Linear Reactor Ballast	LR	1	400	435	
MHPS/LR/450/1	MHPS450	Metal Halide Pulse Start, (1) 450W lamp w/ Linear Reactor Ballast	LR	1	450	485	
MHPS/LR/750/1	MHPS750	Metal Halide Pulse Start, (1) 750W lamp w/ Linear Reactor Ballast	LR	1	750	805	
MHPS/SCWA/100/1	MHPS100	Metal Halide Pulse Start, (1) 100W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	100	128	
MHPS/SCWA/1000/1	MHPS1000	Metal Halide Pulse Start, (1) 1000W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	1000	1080	
MHPS/SCWA/150/1	MHPS150	Metal Halide Pulse Start, (1) 150W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	150	190	
MHPS/SCWA/175/1	MHPS175	Metal Halide Pulse Start, (1) 175W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	175	208	
MHPS/SCWA/200/1	MHPS200	Metal Halide Pulse Start, (1) 200W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	200	232	

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
MHPS/SCWA/250/1	MHPS250	Metal Halide Pulse Start, (1) 250W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	250	288	
MHPS/SCWA/300/1	MHPS300	Metal Halide Pulse Start, (1) 300W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	300	342	
MHPS/SCWA/320/1	MHPS320	Metal Halide Pulse Start, (1) 320W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	320	368	
MHPS/SCWA/350/1	MHPS350	Metal Halide Pulse Start, (1) 350W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	350	400	
MHPS/SCWA/400/1	MHPS400	Metal Halide Pulse Start, (1) 400W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	400	450	
MHPS/SCWA/450/1	MHPS450	Metal Halide Pulse Start, (1) 450W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	450	506	
MHPS/SCWA/750/1	MHPS750	Metal Halide Pulse Start, (1) 750W lamp w/ Super Constant Wattage Autotransformer Ballast	SCWA	1	750	815	
		Mercury Vapor Fixtures					
MV100/1	MV100	Mercury Vapor, (1) 100W lamp	CWA	1	100	125	
MV1000/1	MV1000	Mercury Vapor, (1) 1000W lamp	CWA	1	1000	1075	
MV175/1	MV175	Mercury Vapor, (1) 175W lamp	CWA	1	175	205	
MV250/1	MV250	Mercury Vapor, (1) 250W lamp	CWA	1	250	290	
MV40/1	MV40	Mercury Vapor, (1) 40W lamp	CWA	1	40	50	
MV400/1	MV400	Mercury Vapor, (1) 400W lamp	CWA	1	400	455	
MV400/2	MV400	Mercury Vapor, (2) 400W lamp	CWA	2	400	910	
MV50/1	MV50	Mercury Vapor, (1) 50W lamp	CWA	1	50	74	
MV700/1	MV700	Mercury Vapor, (1) 700W lamp	CWA	1	700	780	
MV75/1	MV75	Mercury Vapor, (1) 75W lamp	CWA	1	75	93	
		Cut Sheet Fixtures					
Example Cut Sheet 1		Pre-Installation Example				50	---------
Example Cut Sheet 2		Post-Installation Example				25	---------
Cut Sheet 1		Pre-Installation				1E+05	---------
Cut Sheet 2		Post-Installation				1E+05	---------
Cut Sheet 3		Edit					---------
Cut Sheet 4		Edit					---------
Cut Sheet 5		Edit					---------
Cut Sheet 6		Edit					---------
Cut Sheet 7		Edit					---------
Cut Sheet 8		Edit					---------
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Cut Sheet 19		Edit					---------
Cut Sheet 20		Edit					---------
Cut Sheet 21		Edit					---------

		Appendix C of the PA TRM					
FIXTURE CODE	LAMP CODE	DESCRIPTION	BALLAST	LAMP/ FIXT	WATT/ LAMP	WATT/ FIXT	Creating a Custom Fixture for ELED, CFL Screw, & CFL Pin Base Insert in this column next to Custom Fixture: "CF Screw" for a screw-in CFL "CF Pin" for pin based CFL "ELED" for LED Exit Sign
Cut Sheet 22		Edit					---------
Cut Sheet 23		Edit					---------
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Cut Sheet 26		Edit					---------
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Cut Sheet 50		Edit					---------

Lighting Form

Lighting Inventory Form

Applicant Name: Southington Local Schools

Facility Name: Southington K-12 School

Date: 11/27/2012

Instructions: Please use one line for each fixture type in a room or area

For existing or proposed control, choose OCC for Occupany Sensor, DAYLTG for photosensor, or NONE for none. Controls must save energy to qualify.

The total of Column S, the quantities of CFLs and exit signs in Column M, and the quantities of sensors in Column R, will be used to calculate your incentive on the NonStandard Lighting form.

PROJECT BASIC INFORMATION							PRE-INSTALLATION						POST-INSTALLATION						Energy Calculations																		Post Fixture Cut Sheet Number
Line Item	Building Address	Floor	Area Description	Interior or Exterior Fixture	Predominant Space Type	Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)	Post kW / Space (kW)	Proposed Control Please enter DAYLTG, OCC or NONE.	Proposed Sensor Quantity When applicable	Interior Change in Connected Load (kW) excluding CFLs or Exit Signs	Exterior Change in Connected Load (kW) excluding CFLs or Exit Signs	Change in Connected Load (kW) CFL or LED exit sign	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Interior Demand Savings (kW) excluding CFLs or Exit Signs	Exterior Demand Savings (kW) excluding CFLs or Exit Signs	Demand Savings (kW) CFLs or LED Exit Signs	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual Interior Fixture kWh Saved (excluding CFLs or Exit Signs)	Annual Exterior Fixture kWh Saved (excluding CFLs or Exit Signs)	Annual kWh Saved (CFL or LED exit signs only)	Annual kWh Saved (Sensors only)	
e.g.	*400 North Street*	*2*	*Office*	*Interior*	*Office - Small*	*Cooled Space*	*3*	*F44ILL*	*112*	*0.34*	*NONE*		*3*	*CFT55/1-BX*	*56*	*0.17*	*OCC*	*3*			*0.17*	*84%*	*84%*	*34%*	*12%*		*30%*			*0.19*	*2,808*	*3,435*			*646*	*194*	*1*
e.g.	*Example*	*1*	*Restaurant*	*Exterior*	*Restaurant - Fast Food*	*Uncooled space*	*5*	*Example Cut Sheet 1*	*50*	*0.25*	*OCC*	*5*	*5*	*Example Cut Sheet 2*	*25*	*0.13*	*DAYLTG*	*5*		*0.13*		*88%*	*88%*			*30%*	*50%*		*0.11*		*8,760*	*4,156*		*208*		*260*	*1A*
1	Route 534, Southington	2	School	Interior	Education - Secondary School	Cooled Space	1	Cut Sheet 1	128,261	128.26	NONE		1	Cut Sheet 2	102,694	102.69	OCC	138	25.57				57%	34%	12%		30%	19.53				2,080	59,561			71,771	
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Lighting Form

PROJECT BASIC INFORMATION							PRE-INSTALLATION						POST-INSTALLATION						Energy Calculations																		
Line Item	Building Address	Floor	Area Description	Interior or Exterior Fixture	Predominant Space Type	Area Cooling	Pre Fixture Qty	Pre Fixture Code	Pre Watts / Fixture (W)	Pre kW / Space (kW)	Existing Control drop down	Existing Sensor Quantity When applicable	Post Fixture Qty	Post Fixture Code	Post Watts/ Fixture (W)	Post kW / Space (kW)	Proposed Control Please enter DAYLTG, OCC or NONE.	Proposed Sensor Quantity When applicable	Interior Change in Connected Load (kW) excluding CFLs or Exit Signs	Exterior Change in Connected Load (kW) excluding CFLs or Exit Signs	Change in Connected Load (kW) CFL or LED exit sign	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Pre Controls Factor	Post Controls Factor	Interior Demand Savings (kW) excluding CFLs or Exit Signs	Exterior Demand Savings (kW) excluding CFLs or Exit Signs	Demand Savings (kW) CFLs or LED Exit Signs	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual Interior Fixture kWh Saved (excluding CFLs or Exit Signs)	Annual Exterior Fixture kWh Saved (excluding CFLs or Exit Signs)	Annual kWh Saved (CFL or LED exit signs only)	Annual kWh Saved (Sensors only)	Post Fixture Cut Sheet Number
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Totals							1			128.26			1			102.69			25.57									19.53					59,561			71,771	
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Lighting Form

Lighting Inventory Form

Applicant Name:

Facility Name:

Date:

Lighting Zone (exterior only): Lighting Zone 3

Instructions: Please use one line for each fixture type in a room or area

For existing or proposed control, choose OCC for Occupany Sensor, DAYLTG for photosensor, or NONE for none. Controls must save energy to qualify.

The total of Column S, the quantities of CFLs and exit signs in Column M, and the quantities of sensors in Column R, will be used to calculate your incentive on the NonStandard Lighting form.

PROJECT BASIC INFORMATION								BASELINE				PROPOSED INSTALLATION							Energy Calculations														Post Fixture Cut Sheet Number
Line Item	Area Description	Floor	Space Description	Interior or Exterior Fixture	Predominant Space Type	Exterior Lighting Description (Exterior Lighting Only)	Area Cooling	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.		Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Proposed Fixture Qty	Proposed Fixture Code	Post Watts/ Fixture (W)	Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control Please enter DAYLTG, OCC or NONE.	Proposed Sensor Quantity When applicable	Interior Change in Connected Load (kW)	Exterior Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Controls Factor	Interior Demand Savings (kW)	Exterior Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual Interior Fixture kWh Saved	Annual Exterior Fixture kWh Saved	Annual kWh Saved (Sensors only)	
e.g.	*Office*	*2*	*Other*	*Interior*	*Office - Small*		*Cooled Space*	*30,000*	*ft^2*	*1.0*	*30.00*	*150*	*F42ILL*	*59*	*8.85*	*No*	*OCC*	*25*	*21.15*		*84%*	*84%*	*34%*	*12%*	*30%*	*23.81*		*2,808*	*3,435*	*81,368*		*10,214*	*1*
e.g.	*Office*	*2*	*Conference, Meeting or Training Room*	*Interior*	*Office - Small*		*Cooled Space*		*ft^2*	*1.0*	*0.00*	*25*	*CF11/1*	*13*	*0.33*	*Yes*	*OCC*	*2*	*-0.33*		*84%*	*84%*	*34%*	*12%*	*30%*	*-0.37*		*2,808*	*3,435*	*-1,250*			*1*
e.g.	*Restaurant*	*1*	*Other*	*Exterior*	*Dusk-to-Dawn Lighting*	*Drive-through windows/doors*	*Uncooled space*	*3*	*window(s)*	*400.0*	*1.20*	*5*	*Example Cut Sheet 2*	*25*	*0.13*	*No*	*NONE*			*1.08*	*88%*	*0%*	*0%*	*0%*	*0%*		*0.00*	*8,760*	*3,833*		*4,120*	*0*	*1A*
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Lighting Form

PROJECT BASIC INFORMATION								BASELINE			PROPOSED INSTALLATION							Energy Calculations														
Line Item	Area Description	Floor	Space Description	Interior or Exterior Fixture	Predominant Space Type	Exterior Lighting Description (Exterior Lighting Only)	Area Cooling	Units e.g. Square Feet (ft^2) If multiple fixture types are used, please only enter the total area/distance/qty once per space.	Lighting Power Density (W/unit)	Baseline kW / Space (kW)	Proposed Fixture Qty	Proposed Fixture Code	Post Watts/ Fixture (W)	Post kW / Space (kW)	Are Occupancy Sensors Required by Code?	Proposed Control Please enter DAYLTG, OCC or NONE.	Proposed Sensor Quantity When applicable	Interior Change in Connected Load (kW)	Exterior Change in Connected Load (kW)	Applicant Coincidence Factor (CF) Estimate	Coincidence Factor	Interactive Factor (demand)	Interactive Factor (energy)	Controls Factor	Interior Demand Savings (kW)	Exterior Demand Savings (kW)	Applicant Equivalent Full Load Hours (EFLH) Estimate	Prescribed Equivalent Full Load Hours	Annual Interior Fixture kWh Saved	Annual Exterior Fixture kWh Saved	Annual kWh Saved (Sensors only)	Post Fixture Cut Sheet Number
180																NONE																
181																NONE																
182																NONE																
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Totals											0							0.00	0.00						0.00	0.00						
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Project Estimated Annual Savings Summary

Estimated Annual kWh Savings	131,332
Total Change in Connected Load	25.57

Annual Estimated Cost Savings	$13,133.20
Annual Operating Hours	2,080

Interior Lighting Incentive @ $0.05/kWh (excluding retrofit CFLs, sensors, or LED exit signs)	$2,978.05
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/sensor (includes all Lighting Controls, both interior and exterior)	$3,450.00

Total Calculated Incentive	$6,428.05

Total Fixture Quantity excluding retrofit CFLs and LED Exit Sign	1
Total Lamp Quantity for retrofit Screw-In 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	138
Total Quantity for Daylight Sensors	0

Please briefly describe how you estimated your coincidence factor (CF) and applicant equivalent full-load hours (EFLH) for facility type “Other” indicated on the Lighting Form tab

Demand Savings (For Internal Use Only)	19.53

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Project Name:	Southington K12
Site Name:	Southington K12
Completed by (Name):	Neil
Date completed:	11/27/2012

Motor Rebate Calculation Form

Motor ID, Location, and Operation Data				Old Motor Nameplate Data								New Motor Nameplate Data								
Unique Motor ID(s)	**Number of Identical Units**	**Motor Location**	**Annual Hours of Op[2]**	**Loading (Constant, or if variable, indicate control type)**	**Load Factor (LF)[3]**	**Enclosure type: TEFC or ODP**	**Mfr.**	**Model Number**	**Motor HP**	**Nominal Efficiency**	**Speed (RPM)**	**Loading (Constant, or if variable, indicate control type)**	**Load Factor (LF)[3]**	**Enclosure type: TEFC or ODP**	**Mfr.**	**Model Number**	**Motor HP**	**Nominal Efficiency**	**Speed (RPM)**	**Total Motor Incentive[1] $**
CWP 4-1, C	3	CWP 4-1, C	5520	constant	0.8	ODP	Baldor		40	93	1750	Variable	0.8	ODP	Baldor	CEM2539T	40	94.1	1750	**$702**
ERU 2-1, E	2	ERU 2-1, E	2790	constant	0.8	ODP	Baldor		7.5	88.5	1750	Variable	0.8	ODP	Baldor	CEM3311T	7.5	91	1750	**$160**
ERU 4-1, 5	7	ERU 4-1, 5	2790	constant	0.8	ODP	Baldor		5	87.5	1750	Variable	0.8	ODP	Baldor	CEM3218T	5	89.5	1750	**$420**
ERU 6-1 su	5	ERU 6-1 su	2790	constant	0.8	ODP	Baldor		3	87.5	1750	Variable	0.8	ODP	Baldor	CEM3211T	3	89.5	1750	**$300**
																			Incentive (through 10/11/2011)	**$1,582**

Motor IDs may be specified by HVAC application type and number. Application types eligible for this incentive include:
- Chilled Water Pump (CHWP),
- Heating Hot Water Pump (HHWP),
- HVAC Fans (HVACF),
- Cooling Tower Fan (CTF), and
- Condensing Water Pump (CWP).

If the HVAC application is not listed above, please describe the application on a separate sheet and include it with your application package.

(1) Motor incentives are listed in Table 2 - Incentive levels per motor located on Motor Incentive Table tab

(2) For VAV fan motors, enter 2790 annual hours of operation. For HVAC pump motors, enter 5520 annual hours of operation. For all other motor usage, please estimate your annual hours of operation and attach an explanation of how you determined this value.

(3) For all motor applications, use the Load Factor (LF) default value of 0.80, unless data is available to support the use of a motor-specific LF other than 0.80. Please attach an explanation, including your analysis and/or data used, to support motor-specific LF value.

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Table 1 - Minimum Motor Efficiency Requirements (NEMA Premium® Efficiencies)

Open Drip Proof (ODP)				Totally Enclosed Fan-Cooled (TEFC)			
Size HP	# of Poles			Size HP	# of Poles		
	6	4	2		6	4	2
	Speed (RPM)				Speed (RPM)		
	1200	1800	3600		1200	1800	3600
1	82.50%	85.50%	77.00%	1	82.50%	85.50%	77.00%
1.5	96.50%	86.50%	84.00%	1.5	87.50%	86.50%	84.00%
2	87.50%	86.50%	85.50%	2	88.50%	86.50%	85.50%
3	88.50%	89.50%	85.50%	3	89.50%	89.50%	86.50%
5	89.50%	89.50%	86.50%	5	89.50%	89.50%	88.50%
7.5	90.20%	91.00%	88.50%	7.5	91.00%	91.70%	89.50%
10	91.70%	91.70%	89.50%	10	91.00%	91.70%	90.20%
15	91.70%	93.00%	90.20%	15	91.70%	92.40%	91.00%
20	92.40%	93.00%	91.00%	20	91.70%	93.00%	91.00%
25	93.00%	93.60%	91.70%	25	93.00%	93.60%	91.70%
30	93.60%	94.10%	91.70%	30	93.00%	93.60%	91.70%
40	94.10%	94.10%	92.40%	40	94.10%	94.10%	92.40%
50	94.10%	94.50%	93.00%	50	94.10%	94.50%	93.00%
60	94.50%	95.00%	93.60%	60	94.50%	95.00%	93.60%
75	94.50%	95.00%	93.60%	75	94.50%	95.40%	93.60%
100	95.00%	95.40%	93.60%	100	95.00%	95.40%	94.10%
125	95.00%	95.40%	94.10%	125	95.00%	95.40%	95.00%
150	95.40%	95.80%	94.10%	150	95.80%	95.80%	95.00%
200	95.40%	95.80%	95.00%	200	95.80%	96.20%	95.40%

Table 2 - Incentive Levels Per Motor through 10/11/2011

Open Drip Proof (ODP)				Totally Enclosed Fan-Cooled (TEFC)			
Size HP	# of Poles			Size HP	# of Poles		
	6	4	2		6	4	2
	Speed (RPM)				Speed (RPM)		
	1200	1800	3600		1200	1800	3600
1	$25	$25	$25	1	$25	$25	$25
1.5	$30	$30	$30	1.5	$30	$30	$30
2	$60	$60	$60	2	$60	$60	$60
3	$60	$60	$60	3	$60	$60	$60
5	$60	$60	$60	5	$60	$60	$60
7.5	$80	$80	$80	7.5	$80	$80	$80
10	$80	$80	$80	10	$80	$80	$80
15	$125	$125	$125	15	$125	$125	$125
20	$125	$125	$125	20	$125	$125	$125
25	$164	$164	$164	25	$164	$164	$164
30	$199	$199	$199	30	$199	$199	$199
40	$234	$234	$234	40	$234	$234	$234
50	$269	$269	$269	50	$269	$269	$269
60	$304	$304	$304	60	$304	$304	$304
75	$339	$339	$339	75	$339	$339	$339
100	$374	$374	$374	100	$374	$374	$374
125	$410	$410	$410	125	$410	$410	$410
150	$445	$445	$445	150	$445	$445	$445
200	$468	$468	$468	200	$468	$468	$468

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Project Name:	Southington K-12
Site Name:	Southington K-12
Completed by (Name):	Neil
Date completed:	11/27/2012

Variable Frequency Drive Rebate Form

VFD and Controlled Motor Nameplate DATA											
Motor Application	**VFD Manufacturer**	**VFD Model Number**	**Unique Motor ID(s)**	**Motor Location**	**Enclosure type: TEFC or ODP**	**Annual Hours of Operation[2]**	**Load Factor (LF)[3]**	**Motor Model Number**	**Motor HP**	**Motor Nominal Efficiency**	**Total Motor Incentive [1] $**
Condenser Water P	Danfos	VLT	CWP 4-1, CW	CWP 4-1, CWP 4	ODP	5520	0.8	CEM2539T	40(3)	94.1	**4,200**
Supply/Exhaust Fa	Yaskawa	P7	ERU 2-1, ER	ERU 2-1, ERU 3-	ODP	2790	0.8	CEM3311T	7.5(2)	91	**525**
Supply/Exhaust Fa	Yaskawa	P7	ERU 4-1, 5-1, 7-1,2-2 supply a		ODP	2790	0.8	CEM3218T	5(7)	89.5	**1,225**
Supply/Exhaust Fa	Yaskawa	P7	ERU 6-1 supply, ERU 4-1,6-1,		ODP	2790	0.8	CEM3211T	3(5)	89.5	**525**
										Incentive through 10/11/2011 @ $35/hp	**6,475**

(1) VFD incentives (through 10/11/2011) are calculated at a flat rate of $35 per horsepower controlled, up to a maximum of 500 hp controlled per VFD.
When a single VFD is used to control two motors in a lead/lag (standby, redundant) configuration, use only the horsepower rating of one motor to figure controlled horsepower. For instance, if a single VFD controls two 30hp motors with only one operating at a time, the incentive calculation should be based on 30 hp: 30hp x $35/hp = $900.

(2) For VAV fan motors, enter 2790 annual hours of operation. For HVAC pump motors, enter 5520 annual hours of operation. For all other motor usage, please estimate your annual hours of operation and attach an explanation of how you determined this value.

(3) For all motor and VFD applications, use the Load Factor (LF) default value of 0.80, unless data is available to support the use of a motor-specific LF other than 0.80. Please attach an explanation, including your analysis and/or data used, to support motor-specific LF value.

Southington K12

Attachment C

Motor Savings

P-2

Tag	Quantity	Hours Of Operation	Loading	LF	Enclosure	Make	Model	HP	EFF %	RPM	Minimum Code Efficiency	Savings (kWH)	Savings (kW)
CWP 4-1, CWP 4-2, CWP 4-3	3	5520	VFD	0.8	ODP	Baldor	CEM2539T	40	94.1	1750	93	6211.253642	1.125227109
ERU 2-1, ERU 3-1	2	2790	VFD	0.8	ODP	Baldor	CEM3311T	7.5	91	1750	88.5	969.1469547	0.3473645
ERU 4-1, 5-1, 7-1,2-2 supply and ERU 2-1,3-1.5-1,7-1,2-2 exhaust	7	2790	VFD	0.8	ODP	Baldor	CEM3218T	5	89.5	1750	87.5	1860.415642	0.666815642
ERU 6-1 supply, ERU 4-1,6-1,7-1,2-2 exhaust	5	2790	VFD	0.8	ODP	Baldor	CEM3211T	3	89.5	1750	87.5	797.3209896	0.285778132
											Totals	9838.14	2.425185384

Southington K12

VFD Savings

P-3

Motor Application	VFD Make	Model	Tag	Location	Enclosure	Runtime	LF	Model	HP	Quantity	EFF	Savings (kWh)	Savings (KW)
Condenser Water Pump	Danfos	VLT	CWP 4-1, CWP 4-2,	CWP 4-1, CWP 4-2, CWP 4-3	ODP	5520	0.8	CEM2539T	40	3	94.1	105026.6525	0
Supply/Exhaust Fan	Yaskawa	P7	ERU 2-1, ERU 3-1	ERU 2-1, ERU 3-1	ODP	2790	0.8	CEM3311T	7.5	2	91	6861.56044	0
Supply/Exhaust Fan	Yaskawa	P7	ERU 4-1, 5-1, 7-1,2-2 supply and ERU 2-1,3-1.5-1,7-1,2-2		ODP	2790	0.8	CEM3218T	5	7	89.5	16278.63687	0
Supply/Exhaust Fan	Yaskawa	P7	ERU 6-1 supply, ERU 4-1,6-1,7-1,2-2 exhaust		ODP	2790	0.8	CEM3211T	3	5	89.5	6976.558659	0
													0
													0
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													0
													0
											Totals	135143	

Southington

Attachment L

Ground Loop Heat Pump Custom Rebate Calc

Qualifying Efficiencies	
COP	EER
3.4	**14.7**

Prescriptive Rebate Amount		Heat Pumps that Qualify	Total Prescriptive Rebate Amount	Total Savings kWh	Material Cost (PoPs)
$ 250.00	per heat pump	49	$ 12,250.00	161,788.31	$ -

Equipment Tag	Make	Model	Quantity	EER	COP	Heating Cap (Btuh)	Cooling Cap (Btuh)	Qualify?	Price/Unit	kWh Savings			CFM
WSHP 1-1	Water Furnace	NSH009PSC	1	15.7	3.8	8900	10200	Yes		205.709	649.682	2745.727	300
WSHP 1-2	Water Furnace	NDH064FULL	1	17.6	4.4	58300	71900	Yes		3090.254	4085.227	15533.411	2300
WSHP 1-3	Water Furnace	NDH038FULL	1	20.1	4.4	30900	36300	Yes		1874.149	1805.970	8232.975	1200
WSHP 1-4	Water Furnace	NLH080	1	17.5	4.6	70700	83000	Yes		4083.092	4742.857	18018.248	3200
WSHP 1-5	Water Furnace	NSH015PSC	1	15.5	4.1	13900	15500	Yes		463.561	1000.000	3974.495	700
WSHP 1-5A	Water Furnace	NSH015PSC	1	15.5	4.1	13900	15500	Yes		463.561	1000.000	3974.495	700
WSHP 1-6	Water Furnace	NLH080	1	18.2	4.3	58100	81800	Yes		3166.608	4494.505	15840.127	2600
WSHP 1-7	Water Furnace	NLH095	1	17.1	4.7	90600	94700	Yes		5224.484	5538.012	22598.588	3200
WSHP 1-8	Water Furnace	NSH009PSC	1	15.5	3.8	9000	10300	Yes		199.492	664.516	2776.578	350
WSHP 1-9	Water Furnace	NLV300	1	17.8	4.5	270100	293900	Yes		14864.701	16511.236	70366.028	9200
WSHP 2-1	Water Furnace	NLV300	1	17.6	4.6	273900	295900	Yes		15635.242	16812.500	69804.781	10000
WSHP 2-2	Water Furnace	NLV300	1	17.6	4.6	273900	295900	Yes		15635.242	16812.500	69804.781	10000
WSHP 3-1	Water Furnace	NSH015PSC	1	14.7	4.2	14000	15600	Yes		459.738	1061.224	3907.776	775
WSHP 3-2	Water Furnace	NSH012PSC	1	19.1	3.8	10800	14000	Yes		415.390	732.984	3331.894	380
WSHP 3-3	Water Furnace	NSH009PSC	1	16	3.7	8800	10100	Yes		178.836	631.250	2788.251	310
WSHP 3-4	Water Furnace	NLH080	1	18	4.4	68700	82100	Yes		3715.744	4561.111	18304.380	2800
WSHP 3-5	Water Furnace	NDH038FULL	1	19.2	4.7	34400	42200	Yes		2313.217	2197.917	8580.479	1400
WSHP 3-6	Water Furnace	NLH080	1	18.2	4.3	68100	81800	Yes		3527.449	4494.505	18566.482	2600
WSHP 3-7	Water Furnace	NLV160	1	17.4	3.5	109900	155400	Yes		2181.736	8931.034	36811.254	4400
WSHP 3-8	Water Furnace	NLV240	1	22.9	6	228900	248300	Yes		23148.906	10842.795	44724.502	8000
WSHP 4-1	Water Furnace	NSH015PSC	1	15.5	4.1	13900	15500	Yes		463.561	1000.000	3974.495	700
WSHP 4-2	Water Furnace	NSH015PSC	1	14.7	4.2	14000	15600	Yes		459.738	1061.224	3907.776	775
WSHP 4-3	Water Furnace	NLV120	1	15.9	4	106600	123600	Yes		3391.285	7773.585	31242.673	4200
WSHP 4-4	Water Furnace	NLV095	1	17.6	4.5	85400	97200	Yes		4688.503	5522.727	22248.274	3600
WSHP 4-5	Water Furnace	NDH064FULL	1	17.7	3.9	56500	69200	Yes		2046.687	3909.605	16983.798	1750
WSHP 4-6	Water Furnace	NDH038FULL	1	19	4.8	34700	42500	Yes		2399.165	2236.842	8474.990	1500
WSHP 5-1	Water Furnace	NSH036	1	20.1	4.4	30900	36300	Yes		1874.149	1805.970	8232.975	1200
WSHP 5-1A	Water Furnace	NSH009PSC	1	16	3.7	8800	10100	Yes		178.836	631.250	2788.251	310
WSHP 5-2	Water Furnace	NSH009PSC	1	15.3	3.8	9000	10300	Yes		190.806	673.203	2776.578	360
WSHP 5-3	Water Furnace	NDH022FULL	1	17.1	4.3	19800	23900	Yes		942.655	1397.661	5398.184	900
WSHP 5-4	Water Furnace	NSH015PSC	1	14.7	4.2	14000	15600	Yes		459.738	1061.224	3907.776	775
WSHP 5-5	Water Furnace	NDH038FULL	1	19.3	4.6	34200	41900	Yes		2217.480	2170.984	8716.041	1300
WSHP 5-6	Water Furnace	NSH009PSC	1	16	3.7	8800	10100	Yes		178.836	631.250	2788.251	310
WSHP 5-7	Water Furnace	NLV120	1	15.9	4	106600	123600	Yes		3391.285	7773.585	31242.673	4200
WSHP 5-8	Water Furnace	NDH038FULL	1	19.3	4.6	34200	41900	Yes		2217.480	2170.984	8716.041	1300
WSHP 5-9	Water Furnace	NDH080FULL	1	18.3	4.2	67200	81200	Yes		3293.395	4437.158	18757.327	2300
WSHP 5-10	Water Furnace	NLV080	1	17	4.7	77400	86500	Yes		4486.986	5088.235	19306.079	3400
WSHP 6-1	Water Furnace	NLH080	1	18.3	4.2	67200	81200	Yes		3293.395	4437.158	18757.327	2400
WSHP 6-2	Water Furnace	NLH080	1	18	4.4	68700	82100	Yes		3715.744	4561.111	18304.380	2800
WSHP 6-3	Water Furnace	NSH015PSC	1	14.7	4.2	14000	15600	Yes		459.738	1061.224	3907.776	775
WSHP 6-4	Water Furnace	NLH080	1	17.8	4.5	69600	82600	Yes		3911.729	4640.449	18132.083	3000
WSHP 6-5	Water Furnace	NSH009PSC	1	14.9	3.9	9000	10300	Yes		208.330	691.275	2705.384	380
WSHP 7-1	Water Furnace	NDH038FULL	1	19.2	4.7	34400	42200	Yes		2313.217	2197.917	8580.479	1400
WSHP 7-2	Water Furnace	NDH049FULL	1	17.9	4.2	45500	51600	Yes		2121.672	2882.682	12700.274	1550
WSHP 7-3	Water Furnace	NLH080	1	18	4.4	68700	82100	Yes		3715.744	4561.111	18304.380	2800
WSHP 7-4	Water Furnace	NLH080	1	18	4.4	68700	82100	Yes		3715.744	4561.111	18304.380	2800
WSHP 7-5	Water Furnace	NSH015PSC	1	16.8	4	13700	15400	Yes		485.238	916.667	4015.240	580
WSHP 7-6	Water Furnace	NSH009PSC	1	14.9	3.9	9000	10300	Yes		208.330	691.275	2705.384	380
WSHP 7-7	Water Furnace	NLH080	1	17.8	4.5	69600	82600	Yes		3911.729	4640.449	18132.083	3000
				17.9731	**4.49936**	**2975900**	**3437500**		**Totals**	**161788.313**	**192757.746**	**784696.605**	115160

Heating Cap	Cooling Cap
8.9	10.2
58.3	71.9
30.9	36.3
70.7	83
13.9	15.5
13.9	15.5
58.1	81.8
90.6	94.7
9	10.3
270.1	293.9
273.9	295.9
273.9	295.9
14	15.6
10.8	14
8.8	10.1
68.7	82.1
34.4	42.2
68.1	81.8
109.9	155.4
228.9	248.3
13.9	15.5
14	15.6
106.6	123.6
85.4	97.2
56.5	69.2
34.7	42.5
30.9	36.3
8.8	10.1
9	10.3
19.8	23.9
14	15.6
34.2	41.9
8.8	10.1
106.6	123.6
34.2	41.9
67.2	81.2
77.4	86.5
67.2	81.2
68.7	82.1
14	15.6
69.6	82.6
9	10.3
34.4	42.2
45.5	51.6
68.7	82.1
68.7	82.1
13.7	15.4
9	10.3
69.6	82.6

Attachment _F_: Heat Recovery Unit Calculations

HEAT RECOVERY UNIT SAVINGS SUMMARY										
	ERU 2-1	ERU 3-1	ERU 4-1	ERU 5-1	ERU 6-1	ERU 7-1	ERU 2-2			TOTAL
kWh:	7,280.6	6,711.8	15,636.8	15,636.8	9,307.6	13,403.0	10,796.9			67,976.8
Dollars:	$ 582.45	536.9	1,250.9	1,250.9	744.6	1,072.2	863.7			$ 6,301.89
75%	$ 436.84	402.7	938.2	938.2	558.5	804.2	647.8			$ 4,726.42

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HEAT RECOVERY UNIT SAVINGS

ERU 2-1

INPUTS

Minimum Fraction Outdoor Air:	100%		
Heat Recover Effectiveness:	22.0%		
Summer Set Point Temperature:	72 F	Winter Set Point	70
Set Point Enthalpy:	26.39 Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53 F		
Supply Air Enthalpy:	21.86 Btu/lba		
Supply Air Volume:	6400 cfm		
Supply Air Density:	0.075 lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	1,838.58	Heating kWh:	5,442.06
Dollars:	$147.09	Dollars:	$435.36
75%	$110.32	75%	$326.52

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.37
85	89	87.2	38	69	100%	87.2	38.00	5.07
80	84	82	34.8	188	100%	82.0	34.80	10.01
75	79	76.9	32.2	232	100%	76.9	32.20	8.53
70	74	72.5	30.9	224	100%	72.5	30.90	6.40
65	69	67.9	28.8	257	100%	67.9	28.80	3.92
60	64	62.4	24.6	253	100%	62.4	24.60	2.88
55	59	57.3	21.7	212	100%	57.3	21.70	1.37
50	54	52.1	18.9	235	100%	52.1	18.90	5.69
45	49	47.4	16.8	188	100%	47.4	16.80	7.05
40	44	42.8	14.9	195	100%	42.8	14.90	9.66
35	39	37.5	12.8	258	100%	37.5	12.80	16.22
30	34	32.3	10.8	153	100%	32.3	10.80	11.56
25	29	27.5	8.9	141	100%	27.5	8.90	12.35
20	24	23.1	7.4	108	100%	23.1	7.40	10.48
15	19	17.6	5.7	120	100%	17.6	5.70	12.94
10	14	12.5	4.2	51	100%	12.5	4.20	5.98
5	9	7.7	2.8	17	100%	7.7	2.80	2.15
0	4	2.6	1.4	13	100%	2.6	1.40	1.76
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.28
								134.66

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HEAT RECOVERY UNIT SAVINGS

ERU 3-1

INPUTS

Minimum Fraction Outdoor Air:	100%		
Heat Recover Effectiveness:	22.0%		
Summer Set Point Temperature:	72 F	Winter Set Point	70
Set Point Enthalpy:	26.39 Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53 F		
Supply Air Enthalpy:	21.86 Btu/lba		
Supply Air Volume:	5900 cfm		
Supply Air Density:	0.075 lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	1,694.95	Heating kWh:	5,016.89
Dollars:	$135.60	Dollars:	$401.35
75%	$101.70	75%	$301.01

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.34
85	89	87.2	38	69	100%	87.2	38.00	4.68
80	84	82	34.8	188	100%	82.0	34.80	9.23
75	79	76.9	32.2	232	100%	76.9	32.20	7.87
70	74	72.5	30.9	224	100%	72.5	30.90	5.90
65	69	67.9	28.8	257	100%	67.9	28.80	3.61
60	64	62.4	24.6	253	100%	62.4	24.60	2.65
55	59	57.3	21.7	212	100%	57.3	21.70	1.26
50	54	52.1	18.9	235	100%	52.1	18.90	5.24
45	49	47.4	16.8	188	100%	47.4	16.80	6.50
40	44	42.8	14.9	195	100%	42.8	14.90	8.91
35	39	37.5	12.8	258	100%	37.5	12.80	14.95
30	34	32.3	10.8	153	100%	32.3	10.80	10.65
25	29	27.5	8.9	141	100%	27.5	8.90	11.38
20	24	23.1	7.4	108	100%	23.1	7.40	9.66
15	19	17.6	5.7	120	100%	17.6	5.70	11.93
10	14	12.5	4.2	51	100%	12.5	4.20	5.52
5	9	7.7	2.8	17	100%	7.7	2.80	1.98
0	4	2.6	1.4	13	100%	2.6	1.40	1.62
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.26
								124.14

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HEAT RECOVERY UNIT SAVINGS

ERU 4-1

INPUTS

Minimum Fraction Outdoor Air:	100%			
Heat Recover Effectiveness:	72.0%			
Summer Set Point Temperature:	72	F	Winter Set Point	70
Set Point Enthalpy:	26.39	Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53	F		
Supply Air Enthalpy:	21.86	Btu/lba		
Supply Air Volume:	4200	cfm		
Supply Air Density:	0.075	lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	3,948.78	Heating kWh:	11,688.05
Dollars:	$315.90	Dollars:	$935.04
75%	$236.93	75%	$701.28

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.78
85	89	87.2	38	69	100%	87.2	38.00	10.90
80	84	82	34.8	188	100%	82.0	34.80	21.51
75	79	76.9	32.2	232	100%	76.9	32.20	18.33
70	74	72.5	30.9	224	100%	72.5	30.90	13.74
65	69	67.9	28.8	257	100%	67.9	28.80	8.41
60	64	62.4	24.6	253	100%	62.4	24.60	6.18
55	59	57.3	21.7	212	100%	57.3	21.70	2.94
50	54	52.1	18.9	235	100%	52.1	18.90	12.22
45	49	47.4	16.8	188	100%	47.4	16.80	15.15
40	44	42.8	14.9	195	100%	42.8	14.90	20.75
35	39	37.5	12.8	258	100%	37.5	12.80	34.83
30	34	32.3	10.8	153	100%	32.3	10.80	24.82
25	29	27.5	8.9	141	100%	27.5	8.90	26.52
20	24	23.1	7.4	108	100%	23.1	7.40	22.52
15	19	17.6	5.7	120	100%	17.6	5.70	27.79
10	14	12.5	4.2	51	100%	12.5	4.20	12.85
5	9	7.7	2.8	17	100%	7.7	2.80	4.61
0	4	2.6	1.4	13	100%	2.6	1.40	3.77
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.61
								289.21

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HEAT RECOVERY UNIT SAVINGS

ERU 5-1

INPUTS

Minimum Fraction Outdoor Air:	100%			
Heat Recover Effectiveness:	72.0%			
Summer Set Point Temperature:	72	F	Winter Set Point	70
Set Point Enthalpy:	26.39	Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53	F		
Supply Air Enthalpy:	21.86	Btu/lba		
Supply Air Volume:	4200	cfm		
Supply Air Density:	0.075	lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	3,948.78	Heating kWh:	11,688.05
Dollars:	$315.90	Dollars:	$935.04
75%	$236.93	75%	$701.28

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.78
85	89	87.2	38	69	100%	87.2	38.00	10.90
80	84	82	34.8	188	100%	82.0	34.80	21.51
75	79	76.9	32.2	232	100%	76.9	32.20	18.33
70	74	72.5	30.9	224	100%	72.5	30.90	13.74
65	69	67.9	28.8	257	100%	67.9	28.80	8.41
60	64	62.4	24.6	253	100%	62.4	24.60	6.18
55	59	57.3	21.7	212	100%	57.3	21.70	2.94
50	54	52.1	18.9	235	100%	52.1	18.90	12.22
45	49	47.4	16.8	188	100%	47.4	16.80	15.15
40	44	42.8	14.9	195	100%	42.8	14.90	20.75
35	39	37.5	12.8	258	100%	37.5	12.80	34.83
30	34	32.3	10.8	153	100%	32.3	10.80	24.82
25	29	27.5	8.9	141	100%	27.5	8.90	26.52
20	24	23.1	7.4	108	100%	23.1	7.40	22.52
15	19	17.6	5.7	120	100%	17.6	5.70	27.79
10	14	12.5	4.2	51	100%	12.5	4.20	12.85
5	9	7.7	2.8	17	100%	7.7	2.80	4.61
0	4	2.6	1.4	13	100%	2.6	1.40	3.77
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.61
								289.21

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HEAT RECOVERY UNIT SAVINGS

ER 6-1

INPUTS

Minimum Fraction Outdoor Air:	100%		
Heat Recover Effectiveness:	72.0%		
Summer Set Point Temperature:	72 F	Winter Set Point	70
Set Point Enthalpy:	26.39 Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53 F		
Supply Air Enthalpy:	21.86 Btu/lba		
Supply Air Volume:	2500 cfm		
Supply Air Density:	0.075 lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	2,350.46	Heating kWh:	6,957.17
Dollars:	$188.04	Dollars:	$556.57
75%	$141.03	75%	$417.43

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.47
85	89	87.2	38	69	100%	87.2	38.00	6.49
80	84	82	34.8	188	100%	82.0	34.80	12.80
75	79	76.9	32.2	232	100%	76.9	32.20	10.91
70	74	72.5	30.9	224	100%	72.5	30.90	8.18
65	69	67.9	28.8	257	100%	67.9	28.80	5.01
60	64	62.4	24.6	253	100%	62.4	24.60	3.68
55	59	57.3	21.7	212	100%	57.3	21.70	1.75
50	54	52.1	18.9	235	100%	52.1	18.90	7.27
45	49	47.4	16.8	188	100%	47.4	16.80	9.01
40	44	42.8	14.9	195	100%	42.8	14.90	12.35
35	39	37.5	12.8	258	100%	37.5	12.80	20.73
30	34	32.3	10.8	153	100%	32.3	10.80	14.77
25	29	27.5	8.9	141	100%	27.5	8.90	15.78
20	24	23.1	7.4	108	100%	23.1	7.40	13.40
15	19	17.6	5.7	120	100%	17.6	5.70	16.54
10	14	12.5	4.2	51	100%	12.5	4.20	7.65
5	9	7.7	2.8	17	100%	7.7	2.80	2.74
0	4	2.6	1.4	13	100%	2.6	1.40	2.24
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.36
								172.15

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HEAT RECOVERY UNIT SAVINGS

ERU 7-1

INPUTS

Minimum Fraction Outdoor Air:	100%			
Heat Recover Effectiveness:	72.0%			
Summer Set Point Temperature:	72	F	Winter Set Point	70
Set Point Enthalpy:	26.39	Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53	F		
Supply Air Enthalpy:	21.86	Btu/lba		
Supply Air Volume:	3600	cfm		
Supply Air Density:	0.075	lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	3,384.67	Heating kWh:	10,018.33
Dollars:	$270.77	Dollars:	$801.47
75%	$203.08	75%	$601.10

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.67
85	89	87.2	38	69	100%	87.2	38.00	9.34
80	84	82	34.8	188	100%	82.0	34.80	18.43
75	79	76.9	32.2	232	100%	76.9	32.20	15.71
70	74	72.5	30.9	224	100%	72.5	30.90	11.77
65	69	67.9	28.8	257	100%	67.9	28.80	7.21
60	64	62.4	24.6	253	100%	62.4	24.60	5.29
55	59	57.3	21.7	212	100%	57.3	21.70	2.52
50	54	52.1	18.9	235	100%	52.1	18.90	10.47
45	49	47.4	16.8	188	100%	47.4	16.80	12.98
40	44	42.8	14.9	195	100%	42.8	14.90	17.79
35	39	37.5	12.8	258	100%	37.5	12.80	29.85
30	34	32.3	10.8	153	100%	32.3	10.80	21.27
25	29	27.5	8.9	141	100%	27.5	8.90	22.73
20	24	23.1	7.4	108	100%	23.1	7.40	19.30
15	19	17.6	5.7	120	100%	17.6	5.70	23.82
10	14	12.5	4.2	51	100%	12.5	4.20	11.02
5	9	7.7	2.8	17	100%	7.7	2.80	3.95
0	4	2.6	1.4	13	100%	2.6	1.40	3.23
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.52
								247.90

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HEAT RECOVERY UNIT SAVINGS

ERU 2-2

INPUTS

Minimum Fraction Outdoor Air:	100%		
Heat Recover Effectiveness:	72.0%		
Summer Set Point Temperature:	72 F	Winter Set Point	70
Set Point Enthalpy:	26.39 Btu/lba	Set Point Enthalpy:	22.72
Supply Air Temperature:	53 F		
Supply Air Enthalpy:	21.86 Btu/lba		
Supply Air Volume:	2900 cfm		
Supply Air Density:	0.075 lb/ft^3		

Rate:	$0.08		
75% Load EER:	17.97	COP	4.5

SAVINGS

Cooling kWh:	2,726.54	Heating kWh:	8,070.32
Dollars:	$218.12	Dollars:	$645.63
75%	$163.59	75%	$484.22

HRU on 50% of weekend

Weekend Factor

0.142857

StrTemp	EndTemp	T(F)	h(Btu/lba)	hrs9-16	foa	Tma(F)	hma(Btu/lba)	Q (mmBTU)
105	109	107	-99	0	100%	107.0	-99.00	0.00
100	104	102	-99	0	100%	102.0	-99.00	0.00
95	99	97	-99	0	100%	97.0	-99.00	0.00
90	94	91	40.8	4	100%	91.0	40.80	0.54
85	89	87.2	38	69	100%	87.2	38.00	7.52
80	84	82	34.8	188	100%	82.0	34.80	14.85
75	79	76.9	32.2	232	100%	76.9	32.20	12.66
70	74	72.5	30.9	224	100%	72.5	30.90	9.48
65	69	67.9	28.8	257	100%	67.9	28.80	5.81
60	64	62.4	24.6	253	100%	62.4	24.60	4.26
55	59	57.3	21.7	212	100%	57.3	21.70	2.03
50	54	52.1	18.9	235	100%	52.1	18.90	8.43
45	49	47.4	16.8	188	100%	47.4	16.80	10.46
40	44	42.8	14.9	195	100%	42.8	14.90	14.33
35	39	37.5	12.8	258	100%	37.5	12.80	24.05
30	34	32.3	10.8	153	100%	32.3	10.80	17.14
25	29	27.5	8.9	141	100%	27.5	8.90	18.31
20	24	23.1	7.4	108	100%	23.1	7.40	15.55
15	19	17.6	5.7	120	100%	17.6	5.70	19.19
10	14	12.5	4.2	51	100%	12.5	4.20	8.87
5	9	7.7	2.8	17	100%	7.7	2.80	3.18
0	4	2.6	1.4	13	100%	2.6	1.40	2.60
-5	-1	-1.4	0.3	2	100%	-1.4	0.30	0.42
								199.69

725360TY.bin

StrTemp	EndTemp	T(F)	Twb(F)	h(Btu/lba)	w(lbw/lba)	hrs1-8	hrs9-16	hrs17-24	hrs1-24
105	109	107	-99	-99	-99	0	0	0	0
100	104	102	-99	-99	-99	0	0	0	0
95	99	97	-99	-99	-99	0	0	0	0
90	94	91.3	74.8	38.3	0.0148	0	11	5	16
85	89	87.7	72.4	36.2	0.0138	0	57	23	80
80	84	82.1	68.8	33.3	0.0124	0	229	93	322
75	79	76.7	66	31.2	0.0117	23	289	178	490
70	74	72.5	63.8	29.6	0.0112	80	246	211	537
65	69	67.9	61.9	28.2	0.0109	268	260	273	801
60	64	62.6	57	24.9	0.0091	336	243	293	872
55	59	57.2	51.9	21.7	0.0073	264	172	246	682
50	54	52.1	47.5	19.1	0.0061	260	192	206	658
45	49	47.4	43.5	16.8	0.005	225	133	167	525
40	44	43	39.6	14.8	0.0041	199	199	197	595
35	39	37.4	35.8	12.7	0.0035	329	248	311	888
30	34	32.1	31.6	10.6	0.0027	269	182	180	631
25	29	27.6	28.2	9	0.0022	203	146	167	516
20	24	23.1	24.9	7.4	0.0017	150	100	147	397
15	19	17.4	20.9	5.6	0.0013	117	110	78	305
10	14	12	17.4	4	0.001	70	58	76	204
5	9	7.4	14.4	2.7	0.0008	56	20	42	118
0	4	2.6	11.3	1.3	0.0006	35	19	14	68
-5	-1	-1.7	8.5	0.1	0.0005	25	6	13	44
-10	-6	-7.1	5.1	-1.3	0.0004	11	0	0	11
-15	-11	-13	-99	-99	-99	0	0	0	0
-20	-16	-18	-99	-99	-99	0	0	0	0
-25	-21	-23	-99	-99	-99	0	0	0	0
-30	-26	-28	-99	-99	-99	0	0	0	0

Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between Ohio Edison Company, its successors and assigns (hereinafter called the "Company") and Southington Local Schools, Taxpayer ID No. 34-6002699 its permitted successors and assigns (hereinafter called the "Customer") (collectively the "Parties" or individually the "Party") and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

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

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

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain 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 the Public Utilities Commission of Ohio's ("Commission") September 15, 2010 Order in Case No. 10-834-EL-EEC, desires to pursue a cash rebate of some of the costs pertaining to its Customer Energy Project(s) ("Cash Rebate") and is committing the Customer Energy Project(s) as a result of such incentive.

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 a Cash Rebate.

WHEREAS, in consideration of, and upon receipt of, said cash rebate, Customer will commit the Customer Energy Project(s) to the Company and will comply with all other terms and conditions set forth herein.

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

1. **Customer Energy Projects.** Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, 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 appropriate, "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 cash rebate discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations.

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 the Commission's standard 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" ("Joint Application") 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 Cash Rebate.

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 Cash Rebate.** Upon Commission approval of the Joint Application, Customer shall provide Company with a W-9 tax form, which shall at a minimum include Customer's tax identification number. Within the greater of 90 days of the Commission's approval of the Joint Application or the completion of the Customer Energy Project, the Company will issue to the Customer the Cash Rebate in the amount set forth in the Commission's Finding and Order approving the Joint Application.

   a. Customer acknowledges: i) that the Company will cap the Cash Rebate at the lesser of 50% of Customer Energy Project(s) costs or $250,000; ii) the maximum rebate that the Customer may receive per year is $500,000 per Taxpayer Identification Number per utility service territory; and iii) if the Customer Energy Project qualifies for a rebate program approved by the Commission and offered by the Company, Customer may still elect to file such project under the Company's mercantile customer self direct program, however the Cash Rebate that will be paid shall be discounted by 25%; and

   b. Customer acknowledges that breaches of this Agreement, include, but are not limited to:

      i. Customer's failure to comply with the terms and conditions set forth in the Agreement, or its equivalent, within a reasonable period of time after receipt of written notice of such non-compliance;

      ii. Customer knowingly falsifying any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application.

   c. In the event of a breach of this Agreement by the Customer, Customer agrees and acknowledges that it will repay to the Company, within 90 days of receipt of written notice of said breach, the full amount of the Cash Rebate paid under this Agreement. This remedy is in addition to any and all other remedies available to the Company by law or equity.

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

   a. If the Commission fails to approve the Joint Agreement;

   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 Cash Rebate, 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.

5. **Confidentiality.** Each Party shall hold in confidence and not release or disclose to any person any document or information furnished by the other Party in connection with this Agreement that is designated as confidential and proprietary ("Confidential Information"), unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; or (iii) such document or information was available to the receiving Party on a non-confidential basis at the time of disclosure.

   a. Notwithstanding the above, a Party may disclose to its employees, directors, attorneys, consultants and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, directors, attorneys,

consultants and agents have been advised of the confidential nature of this information and through such disclosure are deemed to be bound by the terms set forth herein.

b. A Party receiving such Confidential Information shall protect it with the same standard of care as its own confidential or proprietary information.

c. A Party receiving notice or otherwise concluding that Confidential Information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall endeavor to: (i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such Confidential Information, including without limitation, the filing of such information under a valid protective order.

d. By executing this Agreement, Customer hereby acknowledges and agrees that Company may disclose to the Commission or its Staff any and all Customer information, including Confidential Information, related to a Customer Energy Project, provided that Company uses reasonable efforts to seek confidential treatment of the same.

6. **Taxes.** Customer shall be responsible for all tax consequences (if any) arising from the payment of the Cash Rebate.

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

If to the Company:

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

If to the Customer:

Southington Local Schools
2482 State Route 534
Southington, OH. 44470
Attn:Janet K. Ward
Telephone:330-898-7480
Fax:330-898-4824
Email:janet.ward@neomin.org

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

8. **Authority to Act.** The Parties represent and warrant that they are represented by counsel in connection with this Agreement, have been fully advised in connection with the execution thereof, have taken all legal and corporate steps necessary to enter into this Agreement, and that the undersigned has the authority to enter into this Agreement, to bind the Parties to all provisions herein and to take the actions required to be performed in fulfillment of the undertakings contained herein.

9. **Non-Waiver.** The delay or failure of either party to assert or enforce in any instance strict performance of any of the terms of this Agreement or to exercise any rights hereunder conferred, shall not be construed as a waiver or relinquishment to any extent of its rights to assert or rely upon such terms or rights at any later time or on any future occasion.

10. **Entire Agreement.** This Agreement, along with related exhibits, and the Company's Rider DSE, or its equivalent, as amended from time to time by the Commission, contains the Parties' entire understanding with respect to the matters addressed herein and there are no verbal or collateral representations, undertakings, or agreements not expressly set forth herein. No change in, addition to, or waiver of the terms of this Agreement shall be binding upon any of the Parties unless the same is set forth in writing and signed by an authorized representative of each of the Parties. In the event of any conflict between Rider DSE or its equivalent and this document, the latter shall prevail.

11. **Assignment.** Customer may not assign any of its rights or obligations under this Agreement without obtaining the prior written consent of the Company, which consent will not be unreasonably withheld. No assignment of this Agreement will relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained.

12. **Severability.** If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement, and the Parties further agree to substitute for the invalid portion a valid provision that most closely approximates the economic effect and intent of the invalid provision.

13. **Governing Law.** This Agreement shall be governed by the laws and regulations of the State of Ohio, without regard to its conflict of law provisions.

14. **Execution and Counterparts.** This Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically or telephonically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

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

Ohio Edison Company_
(Company)

By: _____

Title: **V.P. Of Energy Efficiency**

Date: 12-5-12

Southington Local Schools_
(Customer)

By: _____

Title: Treasurer/CFO

Date: 12/3/12

Affidavit of Southington Local Schools – Exhibit _A_

STATE OF OHIO)
) SS:
COUNTY OF Trumbull)

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

1. I am the Treasurer/CFO of Southington Local Schools ("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 Ohio Edison 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 Cash ("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.

Janet K. Ward
Treasurer

Sworn to before me and subscribed in my presence this 29 day of Nov, 2012

Kim M. Lambert
Notary

NOTARIAL SEAL * STATE OF OHIO *

KIM M. LAMBERT
Notary Public, State of Ohio
My Commission Expires
September 28, 2013

Summary: Application electronically filed by Ms. Lindsey E Sacher on behalf of Southington Local Schools and Ohio Edison Company