

Annual Period 15	\$ 96,838	\$ -	\$ 96,838
Annual Period 16	\$ 99,743	\$ -	\$ 99,743
Annual Period 17	\$ 102,736	\$ -	\$ 102,736
Annual Period 18	\$ 105,818	\$ -	\$ 105,818
Annual Period 19	\$ 108,992	\$ -	\$ 108,992
Annual Period 20	\$ 112,262	\$ -	\$ 112,262
Totals	\$ 1,741,408	\$ 66,365	\$ 1,807,773

Table 1.1 – Total Guaranteed Savings (Units)

Performance Period	Electric Energy Saved (kWh)	No. 2 Fuel Oil Saved (Gallons)	Propane Savings (Gallons)	Wood Chips (Tons)
Construction Period	80,105	6,133	-5,884	5.6
Annual Period 1	242,742	18,585	(17,830)	17

1.1 Only Annual Period 1 is shown in Table 1.1 as the energy/utility unit Savings will remain constant for each Annual Period of the Performance Guarantee Period as the CLIENT will operate the Facility in accordance with the Contracted Baseline identified in Article 7.

Performance Period	Energy/Utility Savings (\$)	Operational Savings (\$)	Total Savings (\$)
Construction Period	\$ 21,127	\$ -	\$ 21,127
Annual Period 1	\$ 64,021	\$ 8,661	\$ 72,682
Annual Period 2	\$ 65,942	\$ 8,921	\$ 74,863
Annual Period 3	\$ 67,920	\$ 9,188	\$ 77,109
Annual Period 4	\$ 69,958	\$ 9,464	\$ 79,422
Annual Period 5	\$ 72,057	\$ 9,748	\$ 81,805
Annual Period 6	\$ 74,218	\$ 10,040	\$ 84,259
Annual Period 7	\$ 76,445	\$ 10,342	\$ 86,787
Annual Period 8	\$ 78,738	\$ -	\$ 78,738
Annual Period 9	\$ 81,100	\$ -	\$ 81,100
Annual Period 10	\$ 83,534	\$ -	\$ 83,534
Annual Period 11	\$ 86,040	\$ -	\$ 86,040
Annual Period 12	\$ 88,621	\$ -	\$ 88,621
Annual Period 13	\$ 91,279	\$ -	\$ 91,279
Annual Period 14	\$ 94,018	\$ -	\$ 94,018

Article 3: Performance Guarantee Period Responsibilities of the CLIENT

In addition to the CLIENT'S responsibilities under Article 6 of the Agreement, this Article details the responsibilities of the CLIENT in connection with the management and administration of the Performance Guarantee.

- 3.1 The CLIENT will provide a representative at each Facility to coordinate work and provide required data described below.
- 3.2 The CLIENT will provide SIEMENS with accurate Facility operating information as defined below and in the Contracted Baseline article of this Exhibit C during each Annual Period, within thirty (30) days of any Material Change that may increase or decrease energy usage.
- 3.3 If applicable, the CLIENT will provide SIEMENS with copies of utility bills within thirty (30) days of receipt by the CLIENT or provide access to utility vendor information to allow SIEMENS to include a utility bill analysis in the Annual Performance Assurance Report. The utility bill analysis does not take the place of the Measurement and Verification Plan identified in Article 4 of this Exhibit C and is not used to measure the Project's performance.
- 3.4 CLIENT will provide telephone/data remote access, through SIEMENS Insight® software package or existing 3rd party energy management system, as SIEMENS reasonably requests. All charges related to telephone/data line installation, activation and communication services are the responsibility of the CLIENT. If remote access is not provided for collection of trend data indicated in Article 4 of this Exhibit C, Annual Guaranteed Savings for associated measures may be considered met.
- 2.3 Table 2.2 identifies the source of Operational Savings defined and quantified by the Parties. The Parties affirm that such amounts are Stipulated Savings for purposes of calculating Annual Realized Savings and acknowledge that the Guaranteed Savings identified herein have been based on CLIENT'S affirmation. **OPERATIONAL SAVINGS SHALL NOT BE MEASURED OR MONITORED DURING THE PERFORMANCE GUARANTEE PERIOD.**

Table 2.2 - Source of Operational Savings

Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
EMC	Lighting Maintenance	\$8,661	7	1

- 2.4 SIEMENS has explained to the CLIENT and the CLIENT has satisfied itself as to how Operational Savings are incorporated into the Annual Realized Savings.
- 2.5 The Escalation Factor applicable to the Operational Savings is 3%.
- 3.5 If required for the Work, CLIENT will provide and coordinate utility meter upgrade for interface with SIEMENS metering and data collection. All charges related for these upgrades are the responsibility of the CLIENT.

Article 4: Measurement and Verification Plan

Measured and Verified Savings: The energy savings will be calculated using the methodologies described in this Article 4. The results will be presented annually in the Annual Performance Assurance Report. The Annual Performance Assurance Report will be provided 60 days after the annual period ending provided that all of the required information is available and/or supplied to SIEMENS by CLIENT.

Verification of electric energy Savings (kWh) achieved by the lighting retrofit shall be based upon a one-time measurement of the lighting power capacity under existing conditions, a one-time measurement of the lighting power capacity upon completion of the lighting retrofit project and agreed-upon annual operating hours. Spot wattage measurements of a random sample of baseline and post-installation fixture types or fixture circuits will be used to establish demand. Sample size for wattage measurements will be determined based on IPMVP guidelines for sample size determination, with overall population sample size not to exceed 10% of the retrofit population.

Pre-Retrofit Measurement Calculations:

$kWh_{pre} = (kW_{pre} \times Quantity_{pre} \times AOHR_{pre})_{\text{fixture type 'n'}}$, summed
across all fixture types = pre-retrofit annual kWh

Where:

kW_{pre} = instantaneous kW based on random sample of existing lighting-fixture types
 $Quantity_{pre}$ = Count of each fixture-type based on as-built survey
 $AOHR_{pre}$ = Pre-Retrofit Annual Operating Hours, stipulated per Exhibit A, Appendix 1

Post-Retrofit Measurement Calculations:

$kWh_{post} = (kW_{post} \times Quantity_{post} \times AOHR_{post})_{\text{fixture type 'n'}}$, summed
across all fixture types = post-retrofit annual kWh

Where:

kW_{post} = instantaneous kW based on random sample of the installed/retrofitted lighting-fixture types
 $Quantity_{post}$ = Count of each fixture-type based on as-built survey
 $AOHR_{post}$ = Post-Retrofit Annual Operating Hours, stipulated per Exhibit A, Appendix 1

Savings Calculations:

Energy (kWh) Savings:

$kWh_S = kWh_{pre} - kWh_{post}$

Heating (Fuel Oil) Penalty: Palermo, Somerville, Windsor, +

$HPFO = ((kWh_S \times HS \times CCH) - ((kWh_S \times HS \times CCH) \times REG)) \times 3,412$
 $\frac{BTU_{kWh}}{138,700 \frac{BTU_{Oil}}{gal}} / \eta_{post}$ (summed over all locations)

Heating (Wood Chips) Penalty: Chelsea

$HPW = ((kWh_S \times HS \times CCH) - ((kWh_S \times HS \times CCH) \times REG)) \times 3,412$
 $\frac{BTU_{kWh}}{9,460,000 \frac{BTU_{TCW}}{ton}} / \eta_{post}$

Cost (\$) Savings:

$\$S = ((kWh_S \times \$/kWh_x) + (HPFO \times \$/Fuel\ Oil_x) + (HPW \times \$/Wood_x))$

Where:

kWh_S = annual post-retrofit kilowatt-hour savings from lighting retrofit
 kWh_S = annual post-retrofit kilowatt savings
Months = months per year of electric demand savings
HPFO = Heating penalty for increased fuel oil use calculated due to more efficient lighting
HPW = Heating penalty for increased wood chip (tons) use calculated due to more efficient lighting
HS = percentage of heating season per year = 60%
CCH = conducted/convected heat = 30%
REG = percentage of lighting heat regained by space = 60%
 η_{post} = post installation boiler efficiency = 88%
 $\$/kWh_x$ = blended electric unit cost of electricity per kWh at each location as defined in Article 6 of this Exhibit C
 $\$/Fuel\ Oil_x$ = fuel oil unit cost per gallon of fuel oil at each location as defined in Article 6 of this Exhibit C
 $\$/Wood_x$ = wood chips unit cost per ton at each location as defined in Article 6 of this Exhibit C
 $\$S$ = Total annual cost savings

Table B.2 – Performance Assurance Program Payment Schedule

Date	Annual Payments (\$)	Notes
Annual Period 1	\$ 6,876	3% escalation annually
Annual Period 2	\$ 7,084	
Annual Period 3	\$ 7,297	
Annual Period 4	\$ 7,516	
Annual Period 5	\$ 7,741	
Annual Period 6	\$ 7,973	
Annual Period 7	\$ 8,212	
Annual Period 8	\$ 8,458	
Annual Period 9	\$ 8,712	
Annual Period 10	\$ 8,973	
Annual Period 11	\$ 9,242	
Annual Period 12	\$ 9,519	
Annual Period 13	\$ 9,805	
Annual Period 14	\$ 10,099	
Annual Period 15	\$ 10,402	
Annual Period 16	\$ 10,714	
Annual Period 17	\$ 11,035	
Annual Period 18	\$ 11,365	
Annual Period 19	\$ 11,707	
Annual Period 20	\$ 12,058	

Article 5: Baseline Data

- 5.1 The year(s) selected as the Baseline Period starts on June 2012 and ends on May 2013. Table 5.1 outlines the utility consumption that occurred during this Baseline Period. This Baseline Period's Facility utility consumption will be used as the reference for comparing the Facility's utility consumption during the Performance Guarantee Period in order to determine the Realized Annual Savings.

Table 5.1 Baseline Utility Consumption

Windsor Elementary		
	Units	2012/2013
Electric	kWh	327,932
Oil	Gal	14,713
Wood Chips	tons	

Whitefield Elementary		
	Units	2012/2013
Electric	kWh	171,597
Oil	Gal	13,275
Wood Chips	tons	

Somerville Elementary		
	Units	2012/2013
Electric	kWh	74,320
Oil	Gal	6,203
Wood Chips	tons	

Chelsea Elementary School		
	Units	2012/2013
Electric	kWh	398,320
Oil	Gal	
Wood Chips	tons	251

Palermo Consolidated School		
	Units	2012/2013
Electric	kWh	139,848
Oil	Gal	6,808
Wood Chips	tons	

Table 6.1.1 Electricity

Tariff Number or Designation: Central Maine Power

Utility Name:

Rate Structure: 0.1260 \$ per kWh
\$ per kW

Rate Escalation: 3 % per Annual Period

Table 6.1.2 Propane

Tariff Number or Designation:

Utility Name:

Rate Structure: 1.60 \$ per Gallon

Rate Escalation: 3 % per Annual Period

Table 6.1.3 Oil

Tariff Number or Designation:

Utility Name:

Rate Structure: 3.25 \$ per gallon

Rate Escalation: 3 % per Annual Period

Table 6.1.4 Wood Chip

Tariff Number or Designation:

Utility Name:

Rate Structure: 65.00 \$ per ton

Rate Escalation: 3 % per Annual Period