

Energy Savings Performance Contract Project Report

April 3, 2017

Jeff Wykoff, CEM, CDSM
Account Executive

Steven Schwerman
M&V Manager



Agenda

- Project Mission
- History & Background
- Realized Benefits
- Measurement & Verification Method
- Verified Savings Results
- Streetlight Issue Resolution
- Q & A With Commission
- Tax Sharing Check Presentment

Project Mission

- Find Positive ROI Energy Conservation Measures (CMs)
 - *Lighting and Controls*
 - *Street Lighting*
 - *Water Conservation*
 - *HVAC Controls*
 - *Demand Controlled Ventilation*
- Self Fund Complete Project per FS 489.145
 - *Audit*
 - *CMs*
 - *Deferred Capital Projects*
 - *Costs of Financing*
- Produce & Recommend Turnkey Project
 - *Fixed Cost*
 - *No Change Orders – Contractor at Risk*
 - *Guaranteed Savings*

History & Background

- Investment Grade Audit
 - *26 Sites – Buildings and Parks*
 - *Initial Surveys Conducted*
 - *Narrowed to 17 Sites*
 - *Multiple Projects Identified*
 - *In Depth Costs and Savings Estimates Calculated*
 - *Project Mix Defined By City With Master Plan*
 - *Delivered February 3, 2014*
- Energy Savings Performance Contract
 - *Executed March 14, 2014*
 - *Value: \$6,039,229*
 - *Annual Savings Guaranteed: \$432,665*
 - *Simple Payback: 13.95 Years*
 - *19 Year Net Present Value: \$1,262,252*



History & Background

- Construction
 - *Start: April 2014*
 - *Complete: October 2015*
- Measurement and Verification
 - *Performance Year 1 Start: October 30, 2015*
 - *Performance Year 1 End: October 29, 2016*
 - *Report Delivery: March 27, 2017*
 - *Commission Verbal Report: April 3, 2017*



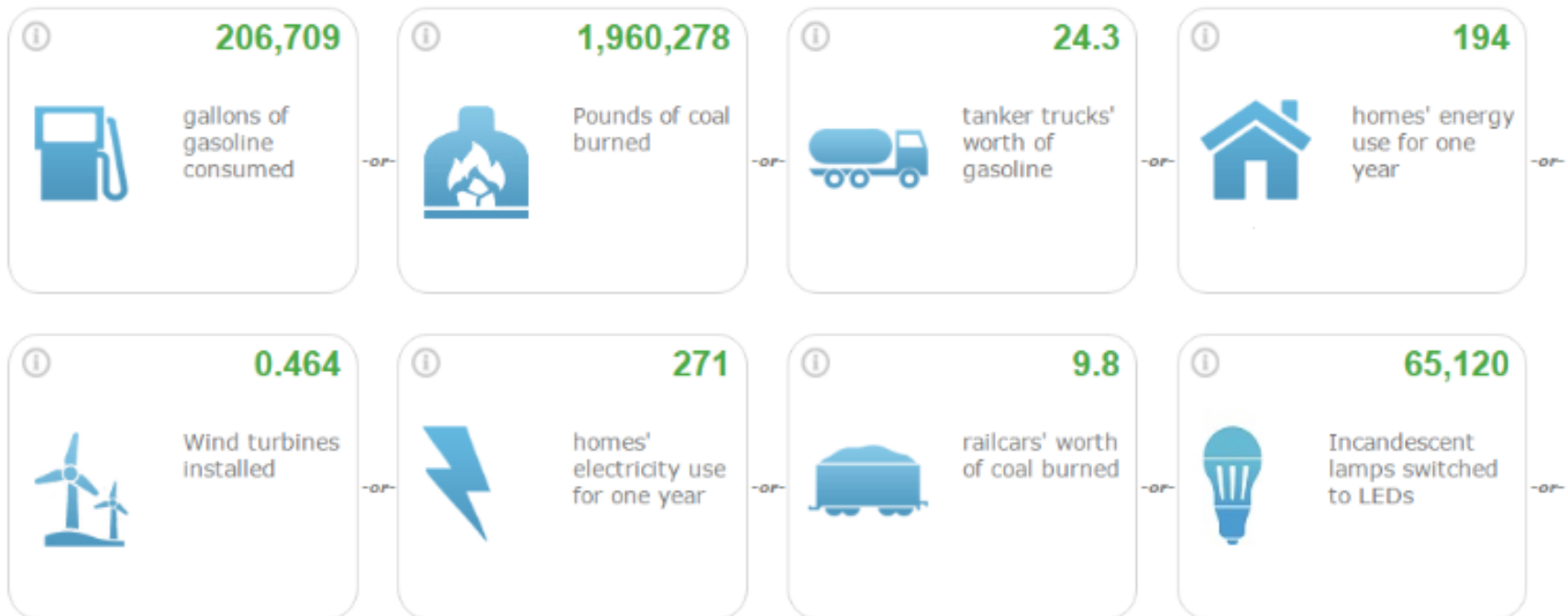
Realized Benefits

- Annual Savings Verified Exceeds Guarantee By \$35,186
 - *Guaranteed* \$ 432,665
 - *Verified* \$ 467,849
- Significant Capital Renewal Projects Completed
 - *Equipment End Of Life Issues – No Capital Budget - Resolved By Project*
 - *HVAC Equipment: New Chillers, Pumps, Air Handlers, Valves, VAV Boxes, Variable Frequency Drives, Fan Coil Units, Split System Units for IT Spaces*
 - *HVAC Controls: Pneumatic Replaced With DDC*
 - *Interior Lighting: Included Replacement 17 Buildings*
 - *Street Lighting: Included Replacement of Over 4,000 Cobra Head and Decorative Lamps With Low Maintenance LED Technology*



Realized Benefits

- Environmental Leadership
- Electrical Energy Saved is 2,613,952 kWh
- Which Avoids 1,837 Annual Tons of CO2 Emissions



Realized Benefits

- IRS Section 179d Tax Sharing Benefit
 - \$24,718 delivered in September 2016!



Measurement and Verification Method

International Performance Measurement & Verification Protocol (IPMVP) Utilized Per Best Practices and Contract Requirement

- Option A: Partially Measured Retrofit Isolation
 - *Used Primarily for Lighting*
 - *Measured Power Draw*
 - *Statistically Relevant Sampling*
 - *One Time Measurement*
 - *Compared to Original Calculated Manufacturer Specification*
- Option D: Calibrated Simulation
 - *Used Primarily for HVAC, Plumbing, and Building Controls*
 - *Calibrated Hourly Simulation Models*
 - *Calibration Against Actual Energy Use Baseline*
 - *Compares Baseline to Post-Installation Mode*

Verified Savings Results

Guaranteed & Verified Annual Savings Summary Table

ECM DESCRIPTION	GUARANTEED ANNUAL PROJECT SAVINGS	VERIFIED ANNUAL PROJECT SAVINGS	EXCESS/ SHORTFALL (DIFFERENCE)
CM 1 - Lighting Improvements & Controls	\$ 46,506	\$ 84,405	\$ 37,899
CM 2 - Street Lighting Retrofit	\$ 352,676	\$ 350,381	\$ (2,295)
CM 3 - Low Flow Plumbing Fixtures	\$ 1,296	\$ 1,296	\$ -
CM 4 - City Hall CHW Mechanical & Controls Upgrades	\$ 12,381	\$ 12,381	\$ -
CM 5 - Police Station CHW Mechanical & Controls Upgrades	\$ 1,447	\$ 1,447	\$ -
CM 6 - IT Split System Upgrades	\$ (1,961)	\$ (1,961)	\$ -
CM 7 - Air Curtains at Dock Doors	\$ 6,750	\$ 6,750	\$ -
CM 8 - Demand Controlled Ventilation	\$ 1,381	\$ 1,381	\$ -
CM 9 - Replace DX Equipment	\$ 419	\$ -	\$ (419)
CM 10 - Add Ductless Split System	\$ 10,232	\$ 10,232	\$ -
CM 11 - HVAC Controls Upgrade/Building Management System	\$ -	\$ -	\$ -
CM - 12 Vending Misers	\$ 1,538	\$ 1,538	\$ -
TOTALS	\$432,665	\$ 467,849	\$ 35,186

Streetlight Issue Resolution

- Regret and Concerned By Disruption and Inconvenience
- ConEd and Its Contractor Partner Are Dedicated to Resolution
- Fully Bearing Costs
- We Appreciate City's Patience and Understanding
- Current Status Verbal Update (as of April 3, 2017)

Questions?

ConEdison Solutions sincerely wishes to thank the City of Fort Pierce for choosing us to be your energy partner!

179d Tax Sharing Check Presentment

CES committed to sharing its Energy Policy Act of 2005 tax deduction with the City of Fort Pierce.

The actual check was sent to the City in September 2016

conEdison Solutions
Energy. Efficiency. Expertise.

3101 W. Martin Luther King Jr. Blvd.
Tampa, FL 33607

5284

August 30, 2016
DATE

PAY TO THE ORDER OF City of Fort Pierce \$ 24,718.00

Twenty-Four Thousand, Seven Hundred-Eighteen DOLLARS

FOR EPAct Sharing Payment

Mick

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Security Features Details on Back