

**CITY OF KEY WEST
MONTHLY ENERGY MANAGER (EM) REPORT**

Prepared By: T. Justice

Date: October 31, 2018

Reporting for August–September, 2018.

Current vs. Baseline Energy Use for City-operated Facilities (All City meters):

August 1-31, 2018

MWh used: 650

Energy cost: \$94,844

September 1-30, 2018

MWh used: 661

Energy cost: \$96,566

August 1-31, 2017

MWh used: 623

Energy cost: \$99,579

September 1-30, 2017

MWh used: 647

Energy cost: \$102,131

Current vs. Baseline Water Use for City-operated Facilities (All City meters):

August 1-31, 2018

*Gal used: 1.88M

*Water cost: \$25,615

September 1-30, 2018

*Gal used: 11.5M

*Water cost: \$74,450

August 1-31, 2017

Gal used: 6.19M

Water cost: \$61,653

September 1-30, 2017

**Gal used: 2.23M

**Water cost: \$21,651

** August 2018 billing incomplete, added to September 2018 billing.*

*** September 2017 billing incomplete.*

Street Lighting:

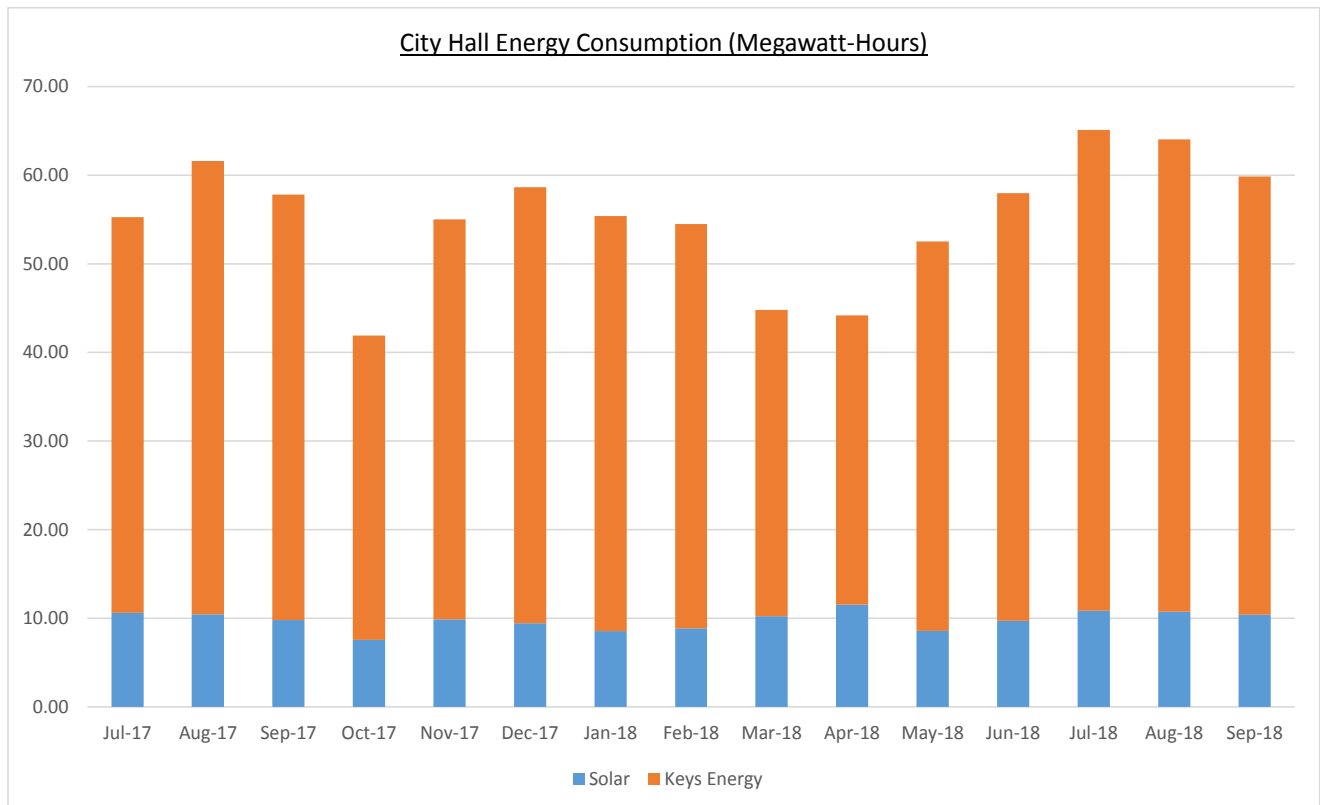
- Request has been issued for Keys Energy to replace Smathers Beach/S Roosevelt street lights with FWC-approved amber luminaires that will remain in service year-round.

Priority Assessments:

- City Hall Commissioning (HVAC, Lighting Controls) is completed and functional test report received from commissioning agent.
- Sports Fields dedicated metering.
- Sports field LED trial(s) – first case will be Bocce Courts at Indigenous Park. Design completed and cost quotes requested.

City Hall at Glynn Archer Electrical (4302373-00):

- August 2018 electric usage (August 6 – September 5, 2018):
 - KEYS: 53,280 kWh 166kW Demand Cost: \$6,201
 - Solar: 10,727 kWh 16.8% of total energy consumption from solar.
- August 2017 electric usage:
 - KEYS: 51,120 kWh 180kW Demand Cost: \$7,171
 - Solar: 10,470 kWh 17 % of total energy consumption from solar.
- September 2018 electric usage (September 6 – October 5, 2018):
 - KEYS: 49,440 kWh 158kW Demand Cost: \$5,805
 - Solar: 10,416 kWh 17.4% of total energy consumption from solar.
- September 2017 electric usage:
 - KEYS: 48,000 kWh 180kW Demand Cost: \$6,834
 - Solar: 10,208 kWh 18.7% of total energy consumption from solar.



- 12-month rolling energy averages to-date, October 2017 through September 2018:
 - Solar 9,703 kWh per month – 17.8% of total.
 - Utility 44,780 kWh per month – 82.2% of total.

City Hall at Glynn Archer Water (FKAA 500521-021545):

August 2018 water usage:

28,255 gal Cost: \$298

August 2017 water usage:

212,029 gal Cost: \$2,100

September 2018 water usage:

174,019 gal Cost: \$1,682

September 2017 water usage:

207,607 gal Cost: \$2,040

4th Quarter Objectives:

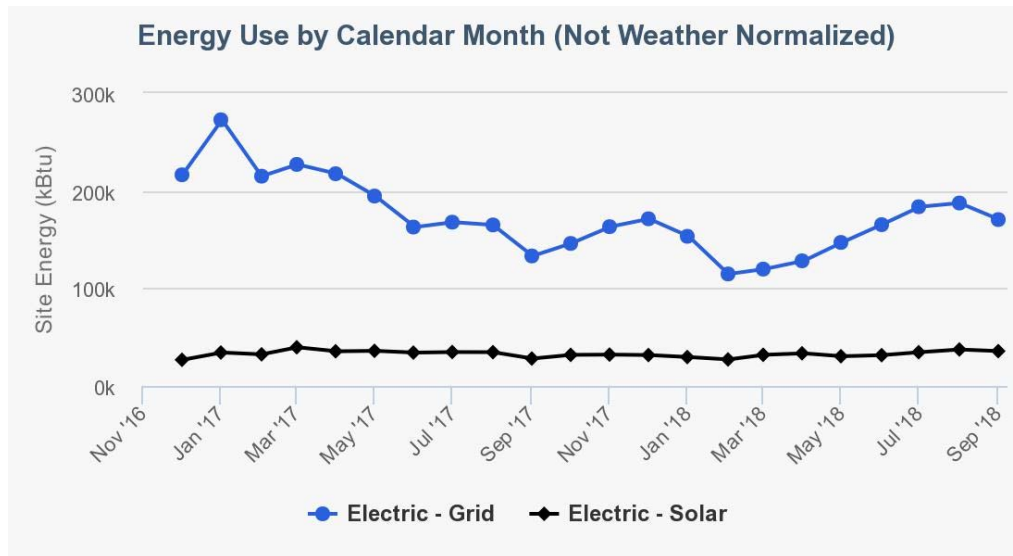
- Energy audit utilizing monitoring equipment at City Hall at Glynn Archer.
- Energy Manager certification. *Passed exam.*
- Turtle-friendly lights installed S. Roosevelt Blvd. / Smathers Beach. *Request issued to KEYS.*
- Separate metering for athletic field lighting (due to account reclass and demand billing).
 - Estimated budget \$5,000 (funded in FY2019 budget).
 - Design & photometrics completed and quotes requested for Bocce Court lighting.
- Minor controls additions to City Hall Lutron lighting control system.
 - Estimated budget \$2,000 (funded in FY2019 budget).
- Install permanent energy monitoring equipment at City Hall at Glynn Archer.
 - Supplement existing Building Automation System already capable of energy monitoring.
 - Estimated budget \$8,000 (funded in FY2019 budget).
- Obtain quotes for relocating irrigation pump to deeper of two cisterns.

The following two graphics depict that both water and power usage reporting has been brought fully up-to-date in **portfoliomanager.energystar.gov**, a commitment made as part of the new facility's LEED submittal. LEED application has been submitted.

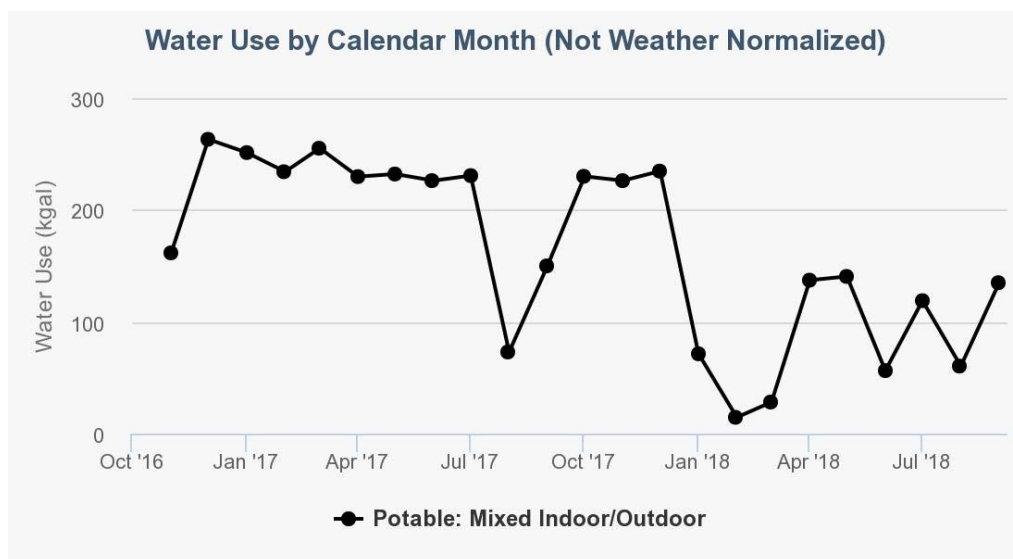
Note that:

On August 27, 2018 performance metrics in Portfolio Manager were updated for U.S. buildings to reflect current market data. You may notice a change in your current and historic 1-100 ENERGY STAR score or other metrics.

This update has apparently lowered City Hall's Energy Star score from a qualifying **83** to an ineligible **65**. Further research will be conducted to determine whether this major downgrade is warranted.



KEY WEST CITY HALL – ENERGY



KEY WEST CITY HALL - WATER