CITY OF KEY WEST MONTHLY ENERGY MANAGER (EM) REPORT

Prepared By:	T. Justice
Date:	May 4, 2018

Reporting for March and April 2018.

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

March 1-31, 2018 March 1-31, 2017 MWh used: 504 MWh used: 603

Energy cost: \$87,386 Energy cost: \$88,478

April 1-30, 2018 April 1-30, 2017

MWh used: 564 MWh used: 615

Energy cost: \$85,779 Energy cost: \$91,082

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

 March 1-31, 2018
 March 1-31, 2017

 Gal used: 7.06M
 Gal used: 2.75M

 Water cost: \$78,733
 Water cost: \$24,520

 April 1-30, 2018
 April 1-30, 2017

 Gal used: 5.18M
 Gal used: 2.75M

Water cost: \$54,043 Water cost: \$24,520

Note: Current water usage includes extensive irrigation and dust control associated with Truman Waterfront Park and Amphitheater construction. Seasonally dry conditions and initial establishment of sod and tree plantings are temporarily increasing consumption.

Street Lighting:

- Working with Keys Energy to transfer billing for South Roosevelt Blvd. lights east of Smathers Beach to FDOT. If FDOT produces documentation indicating City responsibility for lighting, fallback plan will be to install meter(s) and pay only for actual energy consumption.
- Working with Keys Energy to develop a plan for year-round turtle-friendly lighting along South Roosevelt Blvd. in Smathers Beach segment.

Priority Assessments:

- City Hall Commissioning (HVAC, Lighting Controls) is continuing. Estimated completion during June 2018.
- Sports Fields dedicated metering.

Energy Manager's Report ~ March—April, 2018 ~ Page 2

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

• March 2018 electric usage (February 7 – March 7, 2018):

o KEYS: 34,560 kWh 138kW Demand Cost: \$4,545

o Solar: 10,647 kWh 23.6% of total energy consumption from solar.

• March 2017 electric usage:

o KEYS: 65,280 kWh 168kW Demand Cost: \$7,724

o Solar: 10,253 kWh 13.6% of total energy consumption from solar.

• April 2018 electric usage (March 8 – April 6, 2018):

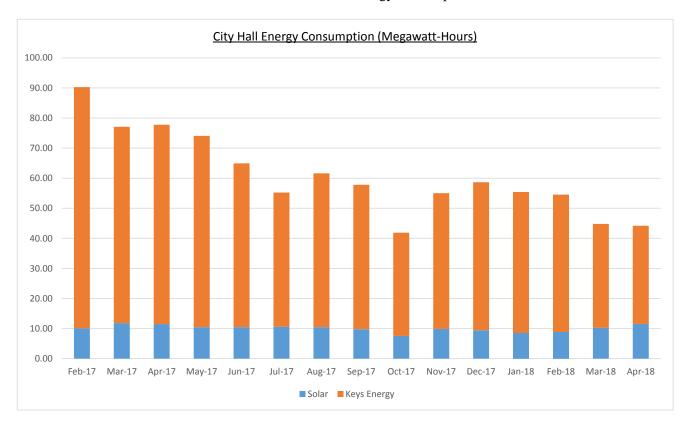
o KEYS: 32,640 kWh 125kW Demand Cost: \$4,319

o Solar: 11,529 kWh 26.2% of total energy consumption from solar.

• April 2017 electric usage:

o KEYS: 66,240 kWh 168kW Demand Cost: \$7,814

o Solar: 11,515 kWh 14.8% of total energy consumption from solar.



- Energy averages to-date December 2016 through April 2018:
 - Solar 9,820kWh per month 15.8% of total.
 - O Utility 52,190 kWh per month 84.2% of total.

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

- March 2018 water usage:
 - o 26,628 gal Cost: \$281
- March 2017 water usage:
 - o 212,000 gal Cost: \$2,100
- April 2018 water usage:
 - o 10,460 gal Cost: \$183
- April 2017 water usage:
 - o 301,000 gal Cost: \$3,116

Fiscal Year 2018-2019 Priority Objectives:

- Permanent energy monitoring equipment at City Hall at Glynn Archer.
 - o Estimated budget \$8,000
- Separate metering for athletic field lighting (due to account reclass and demand billing).
 - o Estimated budget \$5,000 (in-house electrician).
- Field trial retrofit LED sports field lighting.
 - o Estimated budget \$60,000.
- Year-round turtle-friendly lighting along Smathers Beach.
 - o Estimated budget TBD. (Keys Energy cooperating agency.)
- Modifications to Transit Facility electrical distribution to adequately load emergency generator.
 - o Estimated budget \$30,000.
- Minor improvements to City Hall Lutron lighting control system.
 - o Estimated budget \$2,000 (in-house electrician).