

**CITY OF KEY WEST
MONTHLY ENERGY MANAGER REPORT**

Prepared By: Johnnie Yongue

Date: January 03, 2020

Baseline Energy Use for City Occupied Buildings (see attached table):

December 1-31, 2019
kWh used: 639,299
Energy Cost: \$79,887

December 1-31, 2018
kWh used: 642,610
Energy Cost: \$90,245

OMI Meter Usage

December 1-31, 2019
kWh used: 558,842
Energy cost: \$75,736

Current Vs Baseline Water Use for City Operated Meters

December 1-31, 2019
*Gal used: 2.7M
*Cost: \$31,103

December 1-31, 2018
Gal Used: 8.8M
Cost: \$96,678

*FKAA Data not taken for full 30 days

City Hall at Glynn Archer

Monthly Electrical Usage

FEB: 42,960 kWh
MAR: 43,200 kWh
APR: 40,320 kWh
MAY: 37,680 kWh
JUN: 39,120 kWh
JUL: 46,080 kWh
AUG: 54,960 kWh
SEPT: 54,240 kWh
OCT: 48,960 kWh
NOV: 49,920 kWh
DEC: 51,120 kWh

Solar Production Nov 30, 2019 to Dec 30, 2019
Avg Daily output: **188 kWh**
Total kWh for December 2019: **5,853.61 kWh**
% of demand: **11.44%**

Priorities

1. Successfully completed Association of Energy Engineers, Certified Energy Manager Training December 09 – 13, 2019.
2. Performing internal Audits of City buildings and maintenance programs to establish baseline data and potential cost savings in energy use and programming.

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3. Biggest potential buildings for energy savings would be Police and Fire Headquarters at 1600 N Roosevelt Blvd. and the Facilities / Fleet garage at Palm Avenue.
 - a. Building has 308 fixtures with 3 bulbs per fixture running at a minimum 105 watts each fixture.
 - b. Assuming half of the buildings lights run 24/7 and the other half are only 40 running hours per week that totals to 175,000 kWh per year.
 - c. T8 replacement LED bulbs claim 15 watts demand, if all of the bulbs are switched to these LEDs the kWhs are reduced to 75,000 kWh
 - d. At a price of \$0.15 per kWh, 100,000 kWh reduction is equal to a \$15,000 cost savings.
 - e. At \$8.00 per light(bulk price) the LED lightbulbs would pay for themselves in 6 months.