

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):

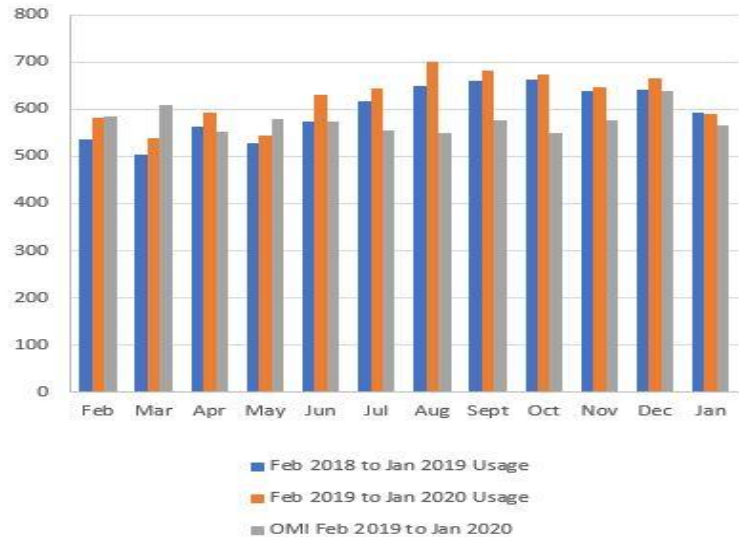
Feb 2019 – Jan 2020				Feb 2018 – Jan 2019			
Month	MWh	Cost	\$/kWh	Month	MWh	Cost	\$/kWh
Feb	582	\$92,042	\$0.16	Feb	537	\$90,655	\$0.17
Mar	539	\$86,273	\$0.16	Mar	504	\$87,386	\$0.17
Apr	593	\$92,156	\$0.16	Apr	564	\$85,778	\$0.15
May	544	\$90,623	\$0.17	May	528	\$83,172	\$0.16
Jun	631	\$98,236	\$0.16	Jun	575	\$87,493	\$0.15
Jul	645	\$97,625	\$0.15	Jul	618	\$92,328	\$0.15
Aug	701	\$104,558	\$0.15	Aug	650	\$94,843	\$0.15
Sept	683	\$101,550	\$0.15	Sept	661	\$96,565	\$0.15
Oct	674	\$101,075	\$0.15	Oct	662	\$90,933	\$0.14
Nov	648	\$98,689	\$0.15	Nov	639	\$89,540	\$0.14
Dec	665	\$100,797	\$0.15	Dec	642	\$90,245	\$0.14
Jan	590	\$94,637	\$0.16	Jan	593	\$92,133	\$0.16
Total	7,496	\$1,158,184		7,173	\$1,081,071		
Average	625	\$96,515.33	\$0.16	598	\$90,089	\$0.15	

Net Increase From Last Year: 322 Mega Watt hours or 4% annual demand,
\$77,190 or 7% increase in annual cost

OMI Meter Usage

Feb 2019 – Jan 2020			
Month	MWh	Cost	\$/kWh
Feb	584	\$72,206	\$0.12
Mar	608	\$71,900	\$0.12
Apr	553	\$66,293	\$0.12
May	579	\$72,421	\$0.13
Jun	575	\$70,363	\$0.12
Jul	554	\$70,452	\$0.13
Aug	549	\$67,476	\$0.12
Sept	576	\$72,685	\$0.13
Oct	551	\$70,930	\$0.13
Nov	578	\$72,955	\$0.13
Dec	639	\$79,736	\$0.12
Jan	567	\$71,052	\$0.13

Monthly Energy Usage 2019



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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
 JAN: 47,280 kWh

Solar Production Dec. 31, 2019 to Jan 30, 2020

Avg Daily output: **225 kWh**
 Total kWh for December 2019: **6,984 kWh**
 % of demand: **14.77%**

FKAA Potable Water Use

Month	Gallons	Cost	Avg \$ / 1,000 gal
Jan 18	6,176,271	\$63,679	\$10.31
Feb 18	1,505,538	\$15,483	\$10.28
Mar 18	7,063,654	\$78,733	\$11.15
Apr 18	5,176,753	\$54,042	\$10.44
May 18	4,645,323	\$47,375	\$10.19
Jun 18	5,560,607	\$57,790	\$10.39
Jul 18	5,857,795	\$61,471	\$10.49
Aug 18	1,878,061	\$25,615	\$13.64
Sept 18	11,520,322	\$74,449	\$6.46
Oct 18	9,190,732	\$97,990	\$10.66
Nov 18	1,730,610	\$19,386	\$11.20
Dec 18	8,883,983	\$96,678	\$10.88
Jan 19	1,677,653	\$19,190	\$11.44
Feb 19	6,212,266	\$68,314	\$11.01
Mar 19	4,084,622	\$46,666	\$11.43
Apr 19	7,851,998	\$86,147	\$10.97
May 19	1,579,744	\$19,435	\$12.31
Jun 19	10,009,520	\$121,898	\$12.18
Jul 19	7,345,184	\$83,960	\$11.43
Aug 19	1,672,489	\$22,094	\$13.21
Sept 19	8,535,301	\$97,327	\$11.40
Oct 19	1,196,744	\$14,833	\$12.39
Nov 19	5,141,280	\$62,863	\$12.23
Dec 19	5,762,341	\$67,697	\$11.75
Jan 20	1,184,581	\$15,332	\$12.95

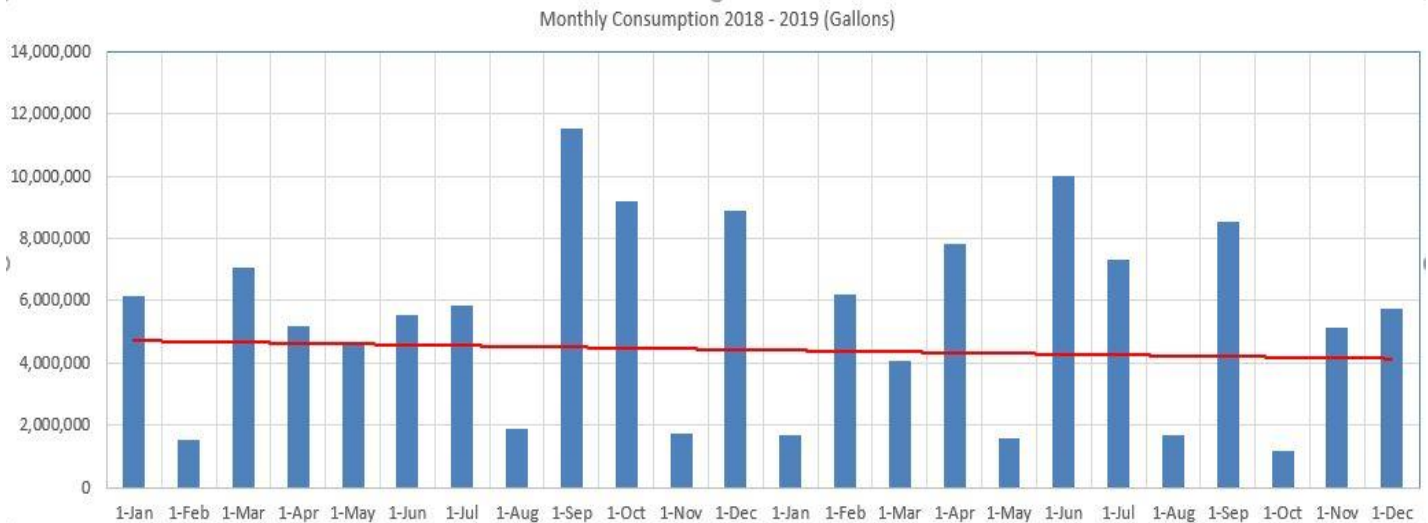
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Quarterly Averages

2018	2019
Q1: 4,915,154	Q1: 3,991,514
Q2: 5,127,561	Q2: 6,480,421
Q3: 6,418,725	Q3: 5,850,991
Q4: 6,601,775	Q4: 5,089,095



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.
3. Evaluation and recommending elimination of redundant unnecessary Street lights. 8 have been identified as redundant and are being reviewed for elimination this month.
4. 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. With 3 bulbs in 330 fixtures it would cost **\$7,200 to purchase** the bulbs and have Facilities install new bulbs in existing fixtures.
 - b. Existing fixtures use 96 watts each hour each fixture. New LED bulbs propose 45 watts per fixture.
 - c. Current energy to light is **66,500 kWh per year**, with New LEDs this energy to light would be **31,168 kWh per year** (this is a 53% reduction) with a **total cost savings of \$3,179 annually**.
 - d. Would pay for itself in **2.25 years**.