

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

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Reporting for March 2017.

Current vs. Baseline Energy Use for City Occupied Buildings:

Summary - All City meters/accounts including street lights:

March 2017

kWh used: 603,243

Energy cost: \$88,478.35

March 2016

kWh used: 513,748

Energy cost: \$80,310.69

Keys Energy (KES) billing adjustments and corrections:

- *Waste Management refunded \$48,079 to City for electrical usage at Transfer station improperly billed to City per terms of Solid Waste Contract (Resolution 14-254).*

Street Lighting:

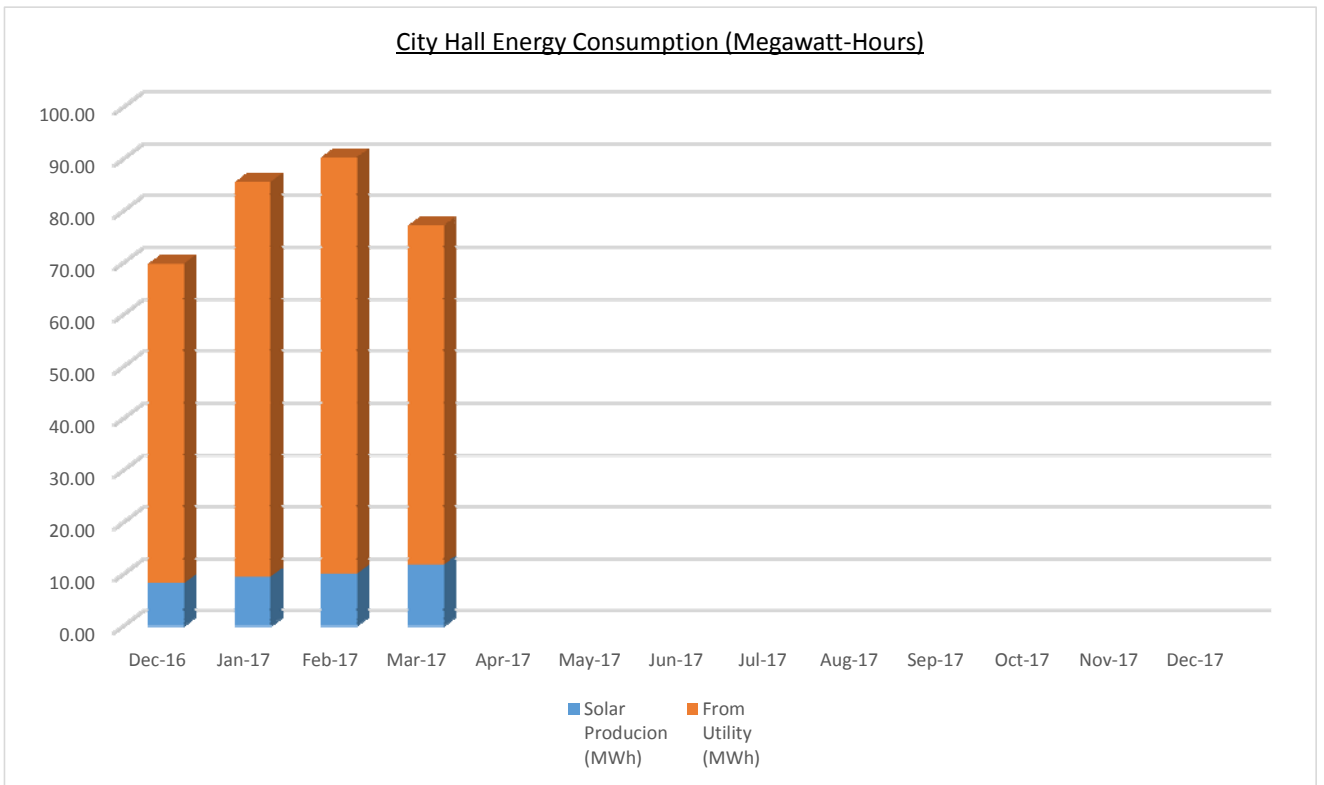
- Engineering and Finance staff met with Dale Finigan. He presented information on how street light tariffs are developed and how the City might collaborate with KES or unilaterally pursue a system retrofit to realize both a reduction in energy consumption and significant cost savings. Consultation with KES will continue and a detailed report containing strategic recommendations will be submitted for management review by August 2017.
- *Identified S. Roosevelt Blvd. street lights installed by FDOT that are being billed to City, apparently without any standing maintenance agreement. Billing for 50 lights (mostly the 400 watt variety) is \$1,058 monthly. Further research is required with the goal of either identifying the agreement by which the City covers this cost or reassigning this billing to FDOT.*
- Identified errors in street light inventory on which billing is based: *Contacted Keys Energy to correct errors and request approximately \$9,300 credit for improper billing on fixtures that were removed by KES in 2013 at the City's Stock Island Transit Facility.*

Priority Assessments:

- Sports Field Lighting.
- Street Lights & LED Conversion.
- Small accounts – identify meters no longer necessary and being billed a base monthly charge.
- Large accounts – target excessive demand billing.

City Hall at Glynn Archer:

- Monthly Water Usage for March: 211,986 gal. (\$2,127).
- March electric usage:
 - KEYS: 65,280 kWh 168.0kW Demand \$7,723.52
 - Solar: 11,810 kWh



- Solar: SALT has replaced a problematic inverter and will install a directional wireless antenna in the near future. (Network connectivity remains unreliable.)
- Programming of the Johnson Controls Building Management System (BMS) remains to be completed. Portions pending completion of Testing & Balancing.
- Programming of the Lutron lighting control system remains to be completed.
- Current concerns and target areas:
 - Demand billing remains very high. We believe issue with programmed HVAC control logic (BMS).
 - Usage remains far above engineering projections. Solution lies in BMS and Lutron system configuration.
 - FMT needs training in both BMS and Lutron system and will work with EM to optimize after Final Commissioning of building systems.

Other:

- Grant search for energy management project support failed to identify available funds.
- Consider inclusion of Energy Management initiatives in future City budget.
- For near-term objectives, can a portion of realized utility savings can be utilized?

Action Items for April 2017:

- Develop means and methods for monitoring and reporting on energy usage profiles for various City facilities. Initial focus on City Hall.
 - Procure portable datalogging energy meter – capable of energy audit at any City facility.
 - Install permanent energy management monitoring equipment at City Hall.
- Once solar system is maintaining reliable reporting, make reporting screens available to IT for inclusion on City website and as content for public display screens at City Hall.
- Meet with City's property manager:
 - Identify properties for which utility billing currently paid by City could be assigned to tenant.
 - Identify properties for which revenue-grade submetering may be viable.
- Ongoing review of billing accounts — identify inaccurate or unnecessary services.
- Ongoing review of consumption and demand for City facilities.