

Texas Workforce Commission (TWC) Update to State Agency Energy Savings Plan

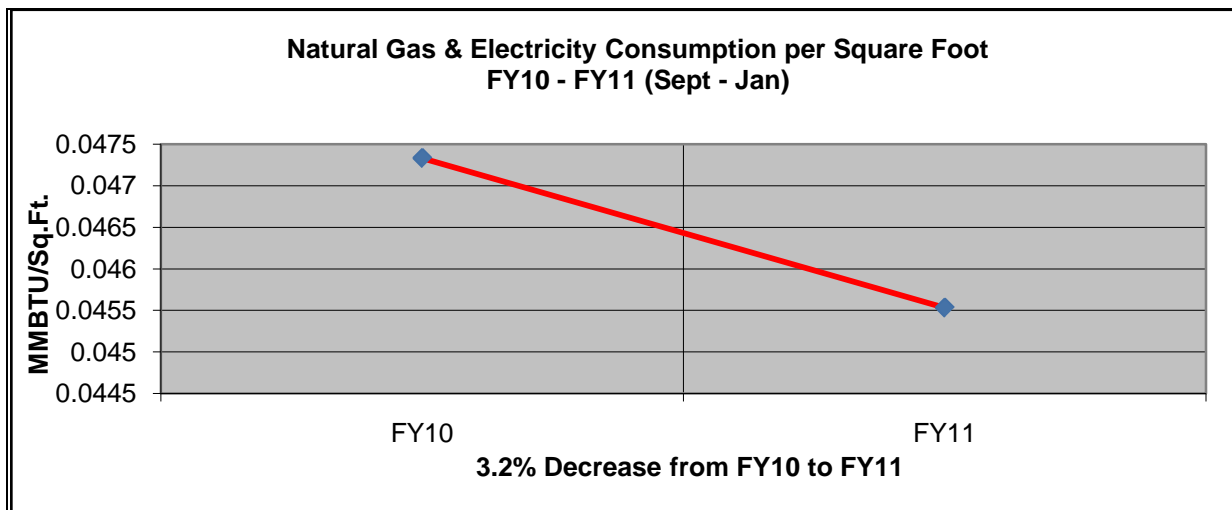
April 2011

A. TWC Energy Consumption Update

With Executive Order RP49, TWC established a goal to reduce electric and natural gas energy consumption (reported as MMBTUs/sq. ft.) by **2%** per year for 5 years.

Electricity and Natural Gas – FY11 Update

TWC did see a decrease of **3.2%** energy consumption for the period September to January of FY11 compared to the same period of FY10. Decreasing our energy usage during this period illustrates TWC's commitment to reduce our energy consumption.



Vehicle Fleet Fuel Usage - FY 11 Update

Thanks to recent TWC fleet upgrades, the agency decreased gasoline use by 24% and we have decreased diesel use by 25%. We have increased alternative fuel usage because we now have five (5) of our nine (9) vehicles using alternative fuel. The remaining vehicles are waived from the alternative fuel requirement.

Overall fuel usage increased by **11.3%** for the period September to February of FY11 compared to the same period of FY10. The increase in TWC fleet usage involved greater internal mail deliveries, staff supply deliveries, maintenance and repair activities. The overall influx of activity was related to increased numbers of unemployment insurance claims.

B. FY10 & 11 Planned Initiatives to Increase TWC Consumption Goals

Detailed below is an update to the deferred maintenance projects ongoing from FY 10 and completed during FY11, as well as new projects initiated in FY 11.

Projects initiated in FY 10, completed in FY11:

- **Harlingen Roof Replacement, Interior Remodel, HVAC and Lighting Replacements:** This project consists of interior renovations, installation of a new electrical system, HVAC for the local area network (LAN) room only, waterproofing the building exterior and replacing the roof. TWC replaced 110 of the “3 lamp” (T-12) with more efficient T-8 bulbs within the 8,160 square feet building. The new roof is a cool top roof as installed in other TWC buildings this year, i.e., a combination of standard 3-ply fiberglass felt over a vented base sheet with a modified bitumen reflective cap sheet. The white solar reflected roof increases energy savings. The bottom layers of the roof system are standard construction. The cap sheet adds the energy efficiency by reflecting heat. In addition, the R value of the insulating system will be R-19. ***This project was completed in September 2010.***
- **Ft. Worth ACM Abatement build back:** While this project was in process, TWC updated light fixtures on the 2nd floor. We removed fifty-one of 2’x4’ fluorescent light fixtures and installed twenty of HID lights. The old bulbs were T-12 fluorescent and they were replaced by the more efficient 175 metal halide. The lighting covered approximately 20,000 square feet of space. **The project was completed in December 2010.**
- **Waxahachie Replace Roof and HVAC:** Existing roof is a coal tar pitch. The new roof will be the cool top roof as installed the other TWC buildings this year, i.e., a combination of standard 3-ply fiberglass felt over a vented base sheet with a modified bitumen reflective cap sheet. (The white solar reflecting roof will increase energy savings). The bottom layers of the roof system are standard construction, the cap sheet adds the energy efficiency by reflecting heat. In addition, the R value of the insulating system will be R-19. All seven (7) rooftop HVACs are being replaced. **This project was completed in January 2011.**
- **Austin Main Roof and Cooling Tower Replacement:** New roof system (partial) will be a combination of standard 3-ply fiberglass felt over a vented base sheet with a modified bitumen reflective cap sheet. (The white solar-reflecting roof will increase energy savings.) The bottom layers of the roof system will be standard construction. The cap sheet will add energy efficiency by reflecting heat. In addition, the R value of the insulating system will be R-19.

Current cooling system has 2-500 ton chillers and three cooling towers. This project replaced the outdated wood construction of the cooling towers with more energy efficient ones. Also, the new chillers will have direct digital controls (DDC) and variable frequency drives that will reduce energy consumption. TWC received a rebate check from the City of Austin of \$14,444.36. **This project was completed in February 2011.**

Projects initiated in FY 11, in progress:

- **Austin Main Roof Replacement (Partial):**The new roof will be a three-ply fiberglass felt over a vented base sheet with a modified bitumen reflective cap sheet. The insulation will include Polyisocyanurate foam with factory laminated facers. The roof will have an R factor of nineteen.
- **Austin Main Lobby, Security and HR Renovations:** TWC will replace forty-one of the “3 lamp” (T-12) with thirty-seven more efficient T-8 bulbs. Also, six new light sensors will be installed. This will effect approximately 2,500 square foot of space.
- **Austin MLK Replace HVAC; Install DDC:** The new HVAC system will replace a total of three roof top units. The three new units will have Seer ratings of 12.5, 12.2, and 15.
- **Fort Worth Replace Lighting on 1st, 3rd and 4th floors:** TWC removed 700 various types of fluorescent fixtures. We installed 700 the of 3 Lamp Ovation light fixtures. The old fixtures were fluorescent (T12’s) and replaced with fixtures that are fluorescent (T8’s). This will effect approximately 45,615 square foot of space.

C. Additional ideas/actions the agency has for reducing energy expenditures

- Activate power management policies that turn off or reduce use of networked assets based on business hours and periods of low use.
- Increase telecommuting options where feasible.

D. Additional ideas/actions to minimize fuel usage of all vehicles

- Replacing all agency vehicles with hybrid electric/gasoline vehicles or motorized carts to perform facility services. This is done as we refresh vehicles.