

Lamar State College - Port Arthur

State Agency Energy Savings Program Quarterly Report April 2006 - June 2006

Lamar State College - Port Arthur continues the process of recovering from Hurricane Rita, which struck the campus on September 24, 2005. The focus on storm related restoration has limited our ability to setup quantifiable measurements to determine how well we are doing toward meeting our established goal of a 1 to 3 percent reduction of energy consumption.

We have taken the opportunity afforded by the storm to incorporate energy efficient construction in the rebuilding that is taking place on our campus. Some of the projects are listed below:

- ! Gates Library - Receiving a roof replacement over 5,365 square feet consisting of two plies of modified bitumen roofing with a polyisocyanurate insulation board underlayment having an R value of 24. This project was completed in mid-June. We will begin monitoring utility bills to see if this additional insulation has any appreciable effect on the utility consumption.

- ! Lecture Hall - This project is currently about 50% complete. The new roof will consist of a new two ply modified bitumen roofing system with a polyisocyanurate insulation board underlayment having a minimum R value of 24. This roof covers an area of 7,500 square feet. This building currently has no insulation under the roofing system. We will compare the consumption per square foot after this project is complete with our previous records to gauge the efficiency of the new roof. Due to reduced enrollment as a result of the hurricane, we are not currently holding classes in this building and the thermostats have been set to the unoccupied setting to gain even more energy savings.

- ! Vulysteke Historic Home - This project will replace the heavily damaged artificial slate roof on this State Historic Home with Lamarite Composite shingles. These plastic composite shingles have a greater R value than the artificial stone that was in place before the storm. This project is scheduled to begin in mid-July.

- ! Armory Re-roof - This project was undertaken to replace the roof of the old National Guard Armory on campus that is used as our HVAC program classroom and training labs. The old roof was a single ply modified bitumen roof that was totally destroyed during the hurricane. This roof was uninsulated. It was replaced by a standing seam galv-alum metal roof. Although this roof is also uninsulated, it is laid over a quarter inch modified bitumen sheet with a reflective foil sheath. The two metallic surfaces will have the ability to reflect heat from the surface of the roof. This building is mostly un-conditioned space and it was determined that additional insulation at the deck level would not add any energy savings return to the cost of the project.

- ! Bookstore - Replaced a 13 year old 36,000 BTU heat-pump (7 SEER) with a 3 ton (13 SEER) unit. This high efficiency replacement will cut the energy usage for heating and cooling this portion of the bookstore by 20%.

- ! Education Annex - Replaced a 7.5 ton (7 SEER) heat-pump with a new 7.5 ton (10 SEER) unit. This replacement will cut the energy usage for heating and cooling this portion of the education annex by 12%.

The Lamar State College - Port Arthur Energy Management Team is currently meeting weekly reviewing the hurricane related reconstruction projects with a view toward taking advantage of any opportunity to make our facilities and processes more energy efficient.

The Lamar State College - Port Arthur Energy Conservation Plan and first quarterly report have been posted on the Lamar - Port Arthur website by the deadline of April 14, 2006. They may be viewed at <http://www.lamarpa.edu/> in the Physical Plant section, found under the Faculty/Staff caption found on the homepage.