



July 2nd, 2007

Ms. Donna Geiger
Office of the Governor
1100 San Jacinto
Austin, Texas 78701

Mr. John O'Brien
Deputy Director
Legislative Budget Board (LBB)
Robert E. Johnson Bldg. – 5th Floor
1501 North Congress
Austin, Texas 78701

RE: RP-49, FY 2007 – 3rd Quarter Update

The Texas Tech University Health Sciences Center (TTUHSC) Energy Savings Update is being submitted in accordance with Governor's Executive Order, RP 49, Electric Conservation by State Agencies. TTUHSC continues to promote energy conservation measures and strategies and seek new ideas to reduce consumption and improve building system efficiencies.

A. Energy Goals

Campus Energy Use

Energy units are converted to kBtu to allow for comparisons of the various energy forms and then divided by building areas (square footages) to obtain a unit consumption of kBtu/sq ft. This unit consumption facilitates analysis and monitoring of goals and energy usage as fluctuations may occur in rates and areas / building space.

In the third quarter of FY07, the campuses consumed 46.22 kBtu/sq ft, an increase of 1.9% from FY06. The slight increase is primarily due to additional of research space and campus renovations - previous shell space.

In Table I, the campus energy use is broken down by utility type. A negative change indicates a decrease in consumption, while a positive number indicates an increase compared to the previous year.





Table I: Campus Energy Use (kBtu/Sq ft): March - May

Utility	FY06 Actual	FY07 Actual	% Change
Electricity	15.48	16.78	8.4%
Nat. Gas	3.91	4.42	12.9%
Steam	10.98	11.59	5.6%
Chilled Water	14.97	13.43	(10.3%)
Total	45.35	46.22	1.9%

Refer attached 'EXHIBIT 1' for further details of campus energy use.

B. Current Energy Reduction Plans

1. Install pressure independent control valves for chilled water flow control to the air handling units in a phased manner. This would cost about \$115,000 with an estimated payback of 4½ years for Phase-1.
2. Evaluate and plan to install lighting and vending machine occupancy sensors for electricity consumption reduction.

C. Future Energy Reduction Plans

TTUHSC has identified various energy conservation projects which are projected to cost about \$1,907,980 with an estimated payback of less than 5 years. The details of which are included in the 'Resource Efficiency Plan' in accordance with 34 TAC, Chapter 19.

D. Fuel Consumption Reduction Plans

In regards to Governor's Executive Order RP-49, Texas Tech University has encouraged all vehicle custodians to strategically plan vehicle use, drive economically and pay additional attention to tire air pressure and vehicle condition.

We retired one older vehicle with very poor fuel efficiency.

Statistics for this quarter show a substantial 22.5% decrease in the quantity of fuel purchased in the Third Quarter of 2007 compared to the same period in 2006. The average price of fuel increased 21% resulting in fuel costs still being almost 4% higher in 2007.





Mileage driven was up almost 10% over 2006 and will be addressed in correspondence to vehicle custodians in the 4th Quarter encouraging them to reduce the miles traveled whenever possible without being detrimental to the department's performance goals.

Your consideration of this update and information is appreciated.

Sincerely,

George G. Morales, P.E.
Assistant Vice-President for Physical Plant & Support Services

Enclosure: EXHIBIT 1

XC:

1. Elmo Cavin
Executive Vice-President of Finance & Administration

2. Director, State Energy Conservation Office
Comptroller of Public Accounts
111 E. 17th Street, Suite 1114
Austin, Texas 78774





EXHIBIT I

2006 ACTUAL ENERGY CONSUMPTION					
<u>ENERGY</u>	<u>1st Quarter FY 2006</u>	<u>2nd Quarter FY 2006</u>	<u>3rd Quarter FY 2006</u>	<u>4th Quarter FY 2006</u>	<u>Total FY 2006</u>
ELECTRICITY, kwh	9,393,292	8,833,109	9,074,251	10,354,326	37,654,978
NATURAL GAS, ccf	64,004	119,741	76,174	38,306	298,225
STEAM, mlb	21,660	31,858	19,564	12,404	85,486
CHILLED WATER, tn-hr	<u>2,603,714</u>	<u>1,784,850</u>	<u>2,496,139</u>	<u>3,742,855</u>	<u>10,627,558</u>
THERMAL ENERGY*, mbtu	55,568,748	57,194,734	51,924,366	58,843,649	223,531,496
ENERGY EQUIVALENT, mbtu	<u>94,207,665</u>	<u>99,651,510</u>	<u>90,725,440</u>	<u>98,120,820</u>	<u>382,705,435</u>

*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

2007 ACTUAL ENERGY CONSUMPTION					
<u>ENERGY</u>	<u>1st Quarter FY 2007</u>	<u>2nd Quarter FY 2007</u>	<u>3rd Quarter FY 2007</u>	<u>4th Quarter FY 2007</u>	<u>Total FY 2007</u>
ELECTRICITY, kwh	9,038,188	8,572,930	9,911,544	-	27,522,662
NATURAL GAS, ccf	66,267	151,664	86,703	-	304,634
STEAM, mlb	19,787	39,251	20,821	-	79,859
CHILLED WATER, tn-hr	<u>2,309,839</u>	<u>1,898,332</u>	<u>2,257,151</u>	-	<u>6,465,322</u>
THERMAL ENERGY*, mbtu	49,939,352	66,858,857	50,467,795	-	167,266,004
ENERGY EQUIVALENT, mbtu	<u>87,598,916</u>	<u>111,709,326</u>	<u>93,208,966</u>	-	<u>292,517,209</u>

*Natural Gas is used to produce the Thermal Energies of Steam and Chilled Water

