

To: Fritz Hext
From: Bob Higginbotham

Let me begin by saying that the tracking that Tomball I.S.D. is doing on Tomball J.H. and Tomball H.S. is very preliminary. Multiple energy savings projects were performed at both schools during the summer of 2008. It would have been advantageous from a tracking standpoint if only one project per school per summer could have been performed so that the measured results of that one project could have been compared against the previous year. Our district; however, was and still is in a Bond Program and participating in the SCORE Program and it is important to complete all projects as soon as possible while money is available.

Partial re-roofing was performed at the high school last summer along with outside air limiting controls being installed on all single zone units except for 3 gyms.

Complete re-roofing, a complete lighting retrofit, and outside air limiting controls on all single zone units except for 2 gyms, were also performed at the junior high last summer.

The months of September and October, 08 did not represent a true picture of what we were trying to measure and compare at that time.

Because of hurricane IKE in September,08, Tomball J.H. was completely down for 5 days but we had to run the a/c 24/7 for about 2 days to dry it out. Also because of the hurricane, CenterPoint was estimating usage and all our locations had erratic swings in kWh readings for September and October. The estimating stopped in November and the readings began to normalize. We did; however, have more after hour usage from September – December, 08 than the previous year due to a church using this facility every Sunday. A new 200 ton air-cooled chiller was just installed during the Christmas holidays so this may skew future usage measurements as compared to last year.

Because of hurricane IKE, Tomball H.S. was completely down for 9 days, but we ran the a/c 24/7 for 2 or 3 days to dry it out. The meter reads for September and October were also erratic, but are now back to normal. A 500 ton water cooled chiller went down in August of 2008, but the remaining 3 water cooled chillers kept the school cool in September and October. In the past, it would have taken all 4 chillers to cool the school down each morning and especially after a weekend. We feel the 3 remaining chillers could not have kept up if it had not been for the roofing retrofit performed in August and September.

The reduction in supply water that had been used by the cratered 500 ton chiller was offset by the other 2 smaller chillers running longer.

A new 200 ton air cooled chiller was also installed at the high school over the Christmas holidays.

According to NOAA weather data, it would appear that September – December, 2008 was slightly cooler than September – December, 2007.

All-in-all, I am personally watching the high school more closely than the junior high. It only had a partial re-roofing, no significant lighting changes and is still showing good results. I feel the reduction in energy consumption is truly the results of the HydroStop coating.

Once we get past the winter months, I will be anxious to see how the high school and junior high does from May to August, 09.

Bob Higginbotham
District Energy Manager