

TO: School Committee
FROM: Don Sawyer, Business Manager
DATE: March 30, 2009
RE: Building Shutdown Utility Comparison

With regards to the action taken by the Committee to shutdown buildings during December and February vacation periods, I have attached the details comparing FY2009 vs. FY2008 Gas and Electric expenses for December, January, and February for analysis.

To summarize the results:

- ~15% reduction in FY09 Total Electricity consumption (Kwh) vs. FY08
- ~12% reduction in FY09 Total Electricity billed expense vs. FY08
- ~10% reduction in FY09 Total Gas (Heat) consumption (therms) vs. FY08
- ~7% increase in FY09 Total Gas billed expense vs. FY08 (price: +18.4%)

- 1) FY09 savings vs. FY08 totals \$4,314.
- 2) Using previous year's consumption calculated at current year's prices translates to a savings totaling \$24,584.
- 3) Combined (1 & 2 above), FY09 vs. FY08 savings totals ~\$29,000
- 4) This cost control method was effective and should be considered in future operations.

TOTAL FY2009 VACATION SHUTDOWN UTILITY EXPENSE SUMMARY

	<u>Electric</u>			<u>Gas</u>			<u>TOTAL Electric & Gas</u>		
	<u>Total 2007/08</u>	<u>Total 2008/09</u>	<u>+/- % var:</u>	<u>Total 2007/08</u>	<u>Total 2008/09</u>	<u>+/- % var:</u>	<u>Total 2007/08</u>	<u>Total 2008/09</u>	<u>+/- % var:</u>
Taft Billed (Total \$):	\$ 22,488.47	\$ 18,279.63	-18.72%	\$ 29,670.55	\$ 34,159.39	15.13%	\$ 52,159.02	\$ 52,439.02	0.54%
Taft Kilowatts / Therms Used:	144,295	121,316	-15.93%	23,741	23,103	-2.69%	(G) / L \$: \$ 280		
	--- Previous Year Consumption X Current Price ---								
	<u>Electric</u>			<u>Gas</u>			<u>Total +/- \$</u>		
Price Kwh / Therm:	\$ 0.15585	\$ 0.15068	\$ (0.00517)	\$ 1.24976	\$ 1.47857	\$ 0.22881	\$ 21,742	\$ 35,103	
Billing # Days:	97	92	-5.15%	97.00	92.00	-5.15%	\$ 3,462	\$ 943	\$ 4,406
Whitin Billed (Total \$):	\$ 22,536.08	\$ 19,674.01	-12.70%	\$ 20,888.77	\$ 21,977.48	5.21%	\$ 43,424.85	\$ 41,651.49	-4.08%
Whitin Kilowatts / Therms Used:	146,291	132,521	-9.41%	16,691	14,834	-11.13%	(G) / L \$: \$ (1,773)		
	--- Previous Year Consumption X Current Price ---								
	<u>Electric</u>			<u>Gas</u>			<u>Total +/- \$</u>		
Price Kwh / Therm:	\$ 0.15405	\$ 0.14846	\$ (0.00559)	\$ 1.25150	\$ 1.48156	\$ 0.23006	\$ 21,718	\$ 24,729	
Billing # Days:	97	92	-5.15%	97.00	92.00	-5.15%	\$ 2,044	\$ 2,751	\$ 4,796
UHS Billed (Total \$):	\$ 29,713.27	\$ 25,827.36	-13.08%	\$ 39,647.05	\$ 41,172.58	3.85%	\$ 69,360.32	\$ 66,999.94	-3.40%
UHS Kilowatts / Therms Used:	196,244	176,286	-10.17%	31,742	27,844	-12.28%	(G) / L \$: \$ (2,360)		
	--- Previous Year Consumption X Current Price ---								
	<u>Electric</u>			<u>Gas</u>			<u>Total +/- \$</u>		
Price Kwh / Therm:	\$ 0.15141	\$ 0.14651	\$ (0.00490)	\$ 1.24904	\$ 1.47869	\$ 0.22965	\$ 28,751	\$ 46,937	
Billing # Days:	97	92	-5.15%	97.00	92.00	-5.15%	\$ 2,924	\$ 5,764	\$ 8,688
ELC Billed (Total \$):	\$ 2,419.80	\$ 1,865.90	-22.89%	\$ 7,537.27	\$ 7,631.06	1.24%	\$ 9,957.07	\$ 9,496.96	-4.62%
ELC Kilowatts / Therms Used:	14,998	12,173	-18.84%	5,899	5,062	-14.19%	(G) / L \$: \$ (460)		
	--- Previous Year Consumption X Current Price ---								
	<u>Electric</u>			<u>Gas</u>			<u>Total +/- \$</u>		
Price Kwh / Therm:	\$ 0.16134	\$ 0.15328	\$ (0.00806)	\$ 1.27772	\$ 1.50752	\$ 0.22980	\$ 2,299	\$ 8,893	
Billing # Days:	93	92	-1.08%	87.00	94.00	8.05%	\$ 433	\$ 1,262	\$ 1,695
TOTAL Billed (Total \$):	\$ 77,157.62	\$ 65,646.90	-14.92%	\$ 97,743.64	\$ 104,940.51	7.36%	\$ 174,901.26	\$ 170,587.41	-2.47%
TOTAL Kilowatts/Therms Used:	501,828	442,296	-11.86%	78,073	70,843	-9.26%	(G) / L \$: \$ (4,314)		
	--- Previous Year Consumption X Current Price ---								
	<u>Electric</u>			<u>Gas</u>			<u>Total +/- \$</u>		
Price Kwh / Therm:	\$ 0.15375	\$ 0.14842	\$ (0.00533)	\$ 1.25195	\$ 1.48131	\$ 0.22936	\$ 74,511	\$ 115,661	
Avg. Billing # Days:	96	92	-4.17%	95	93	-2.12%	\$ 8,864	\$ 15,720	\$ 24,584

December Holiday Vacation

<u>Electric</u>	<u>Dec 2007</u>	<u>Dec 2008</u>	<u>+/- % var:</u>	<u>January 2008</u>	<u>January 2009</u>	<u>+/- % var:</u>	<u>Total 2007/08</u>	<u>Total 2008/09</u>	<u>+/- % var:</u>
Taft Electric Billed (Total \$):	\$ 8,171.81	\$ 6,986.09	-14.51%	\$ 7,546.07	\$ 5,739.12	-23.95%	\$ 15,717.88	\$ 12,725.21	-19.04%
Taft Kilowatts Used:	53,360	47,360	-11.24%	48,400	37,920	-21.65%	101,760	85,280	-16.19%
Price Kwh:	\$ 0.15314	\$ 0.14751	\$ (0.00563)	\$ 0.15591	\$ 0.15135	\$ (0.00456)	\$ 0.15446	\$ 0.14922	\$ (0.00524)
Meter Read Date:	12/27/2007	12/29/2008		1/29/2008	1/27/2009				
Billing # Days:	36	35	-2.78%	33	29	-12.12%	69.00	64.00	-7.25%
Whitin Electric Billed (Total \$):	\$ 8,302.13	\$ 7,548.90	-9.07%	\$ 7,582.44	\$ 6,164.62	-18.70%	\$ 15,884.57	\$ 13,713.52	-13.67%
Whitin Kilowatts Used:	54,800	52,200	-4.74%	49,000	41,000	-16.33%	103,800	93,200	-10.21%
Price Kwh:	\$ 0.15150	\$ 0.14461	\$ (0.00688)	\$ 0.15474	\$ 0.15036	\$ (0.00439)	\$ 0.15303	\$ 0.14714	\$ (0.00589)
Meter Read Date:	12/27/2007	12/29/2008		1/29/2008	1/27/2009				
Billing # Days:	36	35	-2.78%	33	29	-12.12%	69.00	64.00	-7.25%
UHS Electric Billed (Total \$):	\$ 10,609.41	\$ 9,737.76	-8.22%	\$ 10,111.09	\$ 8,241.83	-18.49%	\$ 20,720.50	\$ 17,979.59	-13.23%
UHS Kilowatts Used:	71,040	67,680	-4.73%	66,880	55,680	-16.75%	137,920	123,360	-10.63%
Price Kwh:	\$ 0.14934	\$ 0.14388	\$ (0.00546)	\$ 0.15118	\$ 0.14802	\$ (0.00316)	\$ 0.15024	\$ 0.14575	\$ (0.00449)
Meter Read Date:	12/27/2007	12/29/2008		1/29/2008	1/27/2009				
Billing # Days:	36	35	-2.78%	33	29	-12.12%	69.00	64.00	-7.25%
ELC Electric Billed (Total \$):	\$ 823.95	\$ 722.48	-12.32%	\$ 838.41	\$ 578.76	-30.97%	\$ 1,662.36	\$ 1,301.24	-21.72%
ELC Kilowatts Used:	5200	4720	-9.23%	5,100	3,773	-26.02%	10,300	8,493	-17.55%
Price Kwh:	\$ 0.15845	\$ 0.15307	\$ (0.00538)	\$ 0.16439	\$ 0.15340	\$ (0.01100)	\$ 0.16139	\$ 0.15321	\$ (0.00818)
Meter Read Date:	12/27/2007	12/29/2008		1/29/2008	1/28/2009				
Billing # Days:	31	34	9.68%	33	30	-9.09%	64.00	64.00	0.00%
TOTAL Electric Billed (Total \$)	\$ 27,907.30	\$ 24,995.23	-10.43%	\$ 26,078.01	\$ 20,724.33	-20.53%	\$ 53,985.31	\$ 45,719.56	-15.31%
TOTAL Kilowatts Used:	184,400	171,960	-6.75%	169,380	138,373	-18.31%	353,780	310,333	-12.28%
Price Kwh:	\$ 0.15134	\$ 0.14535	\$ (0.00599)	\$ 0.15396	\$ 0.14977	\$ (0.00419)	\$ 0.15260	\$ 0.14732	\$ (0.00527)
Avg. Billing # Days:	35	35	0.00%	33	29	-11.36%	68	64	-5.54%

December Holiday Vacation

<u>Gas</u>	<u>Dec 2007</u>	<u>Dec 2008</u>	<u>+/- % var:</u>	<u>January 2008</u>	<u>January 2009</u>	<u>+/- % var:</u>	<u>Total 2007/08</u>	<u>Total 2008/09</u>	<u>+/- % var:</u>
Taft Gas Billed (Total \$):	\$ 9,177.81	\$ 9,752.90	6.27%	\$ 10,446.21	\$ 15,570.72	49.06%	\$ 19,624.02	\$ 25,323.62	29.04%
Taft Gas Used:	7,305	6,574	-10.01%	8,375	10,536	25.80%	15,680	17,110	9.12%
Price / Therm:	\$ 1.25637	\$ 1.48356	\$ 0.22718	\$ 1.24731	\$ 1.47786	\$ 0.23055	\$ 1.25153	\$ 1.48005	\$ 0.22852
Meter Read Date:	12/27/2007	12/18/2008		1/30/2008	1/20/2009				
Billing # Days:	29	29	0.00%	34	33	-2.94%	63.00	62.00	-1.59%
Average Temperature:	29	33	13.79%	30	25	-16.67%	29.50	29.00	-1.69%
Whitin Gas Billed (Total \$):	\$ 6,722.15	\$ 6,553.87	-2.50%	\$ 7,562.04	\$ 9,362.47	23.81%	\$ 14,284.19	\$ 15,916.34	11.43%
Whitin Gas Used:	5,344	4,411	-17.46%	6,056	6,327	4.47%	11,400	10,738	-5.81%
Price / Therm:	\$ 1.25789	\$ 1.48580	\$ 0.22791	\$ 1.24869	\$ 1.47976	\$ 0.23108	\$ 1.25300	\$ 1.48224	\$ 0.22925
Meter Read Date:	12/27/2007	12/18/2008		1/30/2008	1/20/2009				
Billing # Days:	29	29	0.00%	34	33	-2.94%	63.00	62.00	-1.59%
Average Temperature:	29	33	13.79%	30	25	-16.67%	29.50	29.00	-1.69%
UHS Gas Billed (Total \$):	\$ 13,218.82	\$ 12,790.73	-3.24%	\$ 14,171.15	\$ 15,868.65	11.98%	\$ 27,389.97	\$ 28,659.38	4.63%
UHS Gas Used:	10,532	8628	-18.08%	11,370	10,738	-5.56%	21,902	19,366	-11.58%
Price / Therm:	\$ 1.25511	\$ 1.48247	\$ 0.22736	\$ 1.24636	\$ 1.47780	\$ 0.23144	\$ 1.25057	\$ 1.47988	\$ 0.22931
Meter Read Date:	12/27/2007	12/18/2008		1/30/2008	1/20/2009				
Billing # Days:	29	29	0.00%	34	33	-2.94%	63.00	62.00	-1.59%
Average Temperature:	29	33	13.79%	30	25	-16.67%	29.50	29.00	-1.69%
ELC Gas Billed (Total \$):	\$ 2,625.92	\$ 2,237.70	-14.78%	\$ 2,231.80	\$ 3,038.11	36.13%	\$ 4,857.72	\$ 5,275.81	8.61%
ELC Gas Used:	2,046	1,479	-27.71%	1,749	2,019	15.44%	3,795	3,498	-7.83%
Price / Therm:	\$ 1.28344	\$ 1.51298	\$ 0.22954	\$ 1.27604	\$ 1.50476	\$ 0.22872	\$ 1.28003	\$ 1.50824	\$ 0.22820
Meter Read Date:	12/28/2007	12/26/2008		1/25/2008	1/27/2009				
Billing # Days:	31	32	3.23%	28	32	14.29%	59.00	64.00	8.47%
Average Temperature:	29	32	10.34%	30	24	-20.00%	29.50	28.00	-5.08%
TOTAL Gas Billed (Total \$):	\$ 31,744.70	\$ 31,335.20	-1.29%	\$ 34,411.20	\$ 43,839.95	27.40%	\$ 66,155.90	\$ 75,175.15	13.63%
TOTAL Gas Used:	25,227	21,092	-16.39%	27,550	29,620	7.51%	52,777	50,712	-3.91%
Price / Therm:	\$ 1.25836	\$ 1.48564	\$ 0.22728	\$ 1.24905	\$ 1.48008	\$ 0.23103	\$ 1.25350	\$ 1.48239	\$ 0.22890
Avg. Billing # Days:	30	30	0.85%	33	33	0.77%	62	63	0.81%
Average Temperature:	29.00	32.75	12.93%	30.00	24.75	-17.50%	29.50	28.75	-2.54%

February Winter Vacation

Electric	February 08	February 09	+/- % var:	March 08	March 09	+/- % var:	Total 2008	Total 2009	+/- % var:
Taft Electric Billed (Total \$):	\$ 6,770.59	\$ 5,554.42	-17.96%	\$ -	\$ -	#DIV/0!	\$ 6,770.59	\$ 5,554.42	-17.96%
Taft Kilowatts Used:	42,535	36,036	-15.28%	0	0	#DIV/0!	42,535	36,036	-15.28%
Price Kwh:	\$ 0.15918	\$ 0.15414	\$ (0.00504)	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.15918	\$ 0.15414	\$ (0.00504)
Meter Read Date:	2/26/2008	2/24/2009		1/29/2008	1/27/2009				
Billing # Days:	28	28	0.00%	0	0	#DIV/0!	28.00	28.00	0.00%
Whitin Electric Billed (Total \$):	\$ 6,651.51	\$ 5,960.49	-10.39%	\$ -	\$ -	#DIV/0!	\$ 6,651.51	\$ 5,960.49	-10.39%
Whitin Kilowatts Used:	42,491	39,321	-7.46%	0	0	#DIV/0!	42,491	39,321	-7.46%
Price Kwh:	\$ 0.15654	\$ 0.15159	\$ (0.00495)	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.15654	\$ 0.15159	\$ (0.00495)
Meter Read Date:	2/26/2008	2/24/2009		1/29/2008	1/27/2009				
Billing # Days:	28	28	0.00%	0	0	#DIV/0!	28.00	28.00	0.00%
UHS Electric Billed (Total \$):	\$ 8,992.77	\$ 7,847.77	-12.73%	\$ -	\$ -	#DIV/0!	\$ 8,992.77	\$ 7,847.77	-12.73%
UHS Kilowatts Used:	58,324	52,926	-9.26%	0	0	#DIV/0!	58,324	52,926	-9.26%
Price Kwh:	\$ 0.15419	\$ 0.14828	\$ (0.00591)	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.15419	\$ 0.14828	\$ (0.00591)
Meter Read Date:	2/26/2008	2/24/2009		1/29/2008	1/27/2009				
Billing # Days:	28	28	0.00%	0	0	#DIV/0!	28.00	28.00	0.00%
ELC Electric Billed (Total \$):	\$ 757.44	\$ 564.66	-25.45%	\$ -	\$ -	#DIV/0!	\$ 757.44	\$ 564.66	-25.45%
ELC Kilowatts Used:	4,698	3,680	-21.67%	0	0	#DIV/0!	4,698	3,680	-21.67%
Price Kwh:	\$ 0.16123	\$ 0.15344	\$ (0.00779)	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.16123	\$ 0.15344	\$ (0.00779)
Meter Read Date:	2/27/2008	2/25/2009		1/29/2008	1/27/2009				
Billing # Days:	29	28	-3.45%	0	0	#DIV/0!	29.00	28.00	-3.45%
TOTAL Electric Billed (Total \$)	\$ 23,172.31	\$ 19,927.34	-14.00%	\$ -	\$ -	#DIV/0!	\$ 23,172.31	\$ 19,927.34	-14.00%
TOTAL Kilowatts Used:	148,048	131,963	-10.86%	0	0	#DIV/0!	148,048	131,963	-10.86%
Price Kwh:	\$ 0.15652	\$ 0.15101	\$ (0.00551)	#DIV/0!	#DIV/0!	#DIV/0!	\$ 0.15652	\$ 0.15101	\$ (0.00551)
Avg. Billing # Days:	28	28	-0.88%	0	0	#DIV/0!	28	28	-0.88%

February Winter Vacation

<u>Gas</u>	<u>February 08</u>	<u>February 09</u>	<u>+/- % var:</u>	<u>March 08</u>	<u>March 09</u>	<u>+/- % var:</u>	<u>Total 2008</u>	<u>Total 2009</u>	<u>+/- % var:</u>
Taft Gas Billed (Total \$):	\$ 10,046.53	\$ 13,271.48	32.10%	\$ -	\$ -	#DIV/0!	\$ 10,046.53	\$ 13,271.48	32.10%
Taft Gas Used:	8,061	8,993	11.56%	0	0	#DIV/0!	8,061	8,993	11.56%
Price / Therm:	\$ 1.24631	\$ 1.47576	\$ 0.22944	#DIV/0!	#DIV/0!	#DIV/0!	\$ 1.24631	\$ 1.47576	\$ 0.22944
Meter Read Date:	1/30/2008	2/19/2009		1/30/2008	2/19/2009				
Billing # Days:	34	30	-11.76%	0	0	#DIV/0!	34.00	30.00	-11.76%
Average Temperature:	30	27	-10.00%	0	0	#DIV/0!	15.00	13.50	-10.00%
Whitin Gas Billed (Total \$):	\$ 6,604.58	\$ 6,061.14	-8.23%	\$ -	\$ -	#DIV/0!	\$ 6,604.58	\$ 6,061.14	-8.23%
Whitin Gas Used:	5,291	4,096	-22.59%	0	0	#DIV/0!	5,291	4,096	-22.59%
Price / Therm:	\$ 1.24827	\$ 1.47977	\$ 0.23150	#DIV/0!	#DIV/0!	#DIV/0!	\$ 1.24827	\$ 1.47977	\$ 0.23150
Meter Read Date:	1/30/2008	2/19/2009		1/30/2008	2/19/2009				
Billing # Days:	34	30	-11.76%	0	0	#DIV/0!	34.00	30.00	-11.76%
Average Temperature:	30	27	-10.00%	0	0	#DIV/0!	15.00	13.50	-10.00%
UHS Gas Billed (Total \$):	\$ 12,257.08	\$ 12,513.20	2.09%	\$ -	\$ -	#DIV/0!	\$ 12,257.08	\$ 12,513.20	2.09%
UHS Gas Used:	9,840	8,478	-13.84%	0	0	#DIV/0!	9,840	8,478	-13.84%
Price / Therm:	\$ 1.24564	\$ 1.47596	\$ 0.23032	#DIV/0!	#DIV/0!	#DIV/0!	\$ 1.24564	\$ 1.47596	\$ 0.23032
Meter Read Date:	1/30/2008	2/19/2009		1/30/2008	2/19/2009				
Billing # Days:	34	30	-11.76%	0	0	#DIV/0!	34.00	30.00	-11.76%
Average Temperature:	30	27	-10.00%	0	0	#DIV/0!	15.00	13.50	-10.00%
ELC Gas Billed (Total \$):	\$ 2,679.55	\$ 2,355.25	-12.10%	\$ -	\$ -	#DIV/0!	\$ 2,679.55	\$ 2,355.25	-12.10%
ELC Gas Used:	2,104	1,564	-25.67%	0	0	#DIV/0!	2,104	1,564	-25.67%
Price / Therm:	\$ 1.27355	\$ 1.50591	\$ 0.23236	#DIV/0!	#DIV/0!	#DIV/0!	\$ 1.27355	\$ 1.50591	\$ 0.23236
Meter Read Date:	1/25/2008	2/19/2009		1/30/2008	2/19/2009				
Billing # Days:	28	30	7.14%	0	0	#DIV/0!	28.00	30.00	7.14%
Average Temperature:	30	27	-10.00%	0	0	#DIV/0!	15.00	13.50	-10.00%
TOTAL Gas Billed (Total \$):	\$ 31,587.74	\$ 34,201.07	8.27%	\$ -	\$ -	#DIV/0!	\$ 31,587.74	\$ 34,201.07	8.27%
TOTAL Gas Used:	25,296	23,131	-8.56%	0	0	#DIV/0!	25,296	23,131	-8.56%
Price / Therm:	\$ 1.24872	\$ 1.47858	\$ 0.22986	#DIV/0!	#DIV/0!	#DIV/0!	\$ 1.24872	\$ 1.47858	\$ 0.22986
Avg. Billing # Days:	33	30	-7.69%	0	0	#DIV/0!	33	30	-7.69%
Average Temperature:	30.00	27.00	-10.00%	0.00	0.00	#DIV/0!	15.00	13.50	-10.00%