

SAVINGS CALCULATIONS SHEET

Bucknell University

SCS-1

Date of Field Survey	August 30, 2007						
Location #:	# 1	# 2	# 3	# 4	# 5	# 6	# 1 thru # 6
ITEM/EQUIPMENT:	CWP 1	CWP 2	CWP 3	CWP 4	feed pump 401a	Feed Pump B	Summary
Phase:	3	3	3	3	3	3	
Volts:	480	480	480	480	480	480	
Initial Amps:	57.0	60.0	57.0	70.0	47.0	48.0	339.0
Optimized Amps:	50.0	53.0	51.0	61.0	44.0	42.0	301.0
Initial Power Factor:	84.0%	84.0%	84.0%	82.0%	87.0%	86.0%	
Optimized Power Factor:	98.0%	97.0%	98.0%	98.0%	96.0%	99.0%	
Initial W:	47,332.80	49,824.00	47,332.80	58,128.00	39,028.80	39,859.20	281,505.60
Optimized W:	41,520.00	44,011.20	42,350.40	50,654.40	36,537.60	34,876.80	249,950.40
Reduction in Watts:	5,812.80	5,812.80	4,982.40	7,473.60	2,491.20	4,982.40	531,456.00
Hours of Operation/Day:	12.00	12.00	12.00	12.00	12.00	12.00	
Cost/KWH	\$0.100	\$0.100	\$0.100	\$0.100	\$0.100	\$0.100	
Savings/Day	\$6.98	\$6.98	\$5.98	\$8.97	\$2.99	\$5.98	\$37.87
Savings/Month:	\$209.26	\$209.26	\$179.37	\$269.05	\$89.68	\$179.37	\$1,135.99
Investment Cost:	\$3,440.90	\$4,089.90	\$2,869.90	\$3,979.90	\$1,703.90	\$2,889.90	\$18,974.40
Return on Investment:	16.44	19.54	16.00	14.79	19.00	16.11	16.70
Percent Reduction:	12.28%	11.67%	10.53%	12.86%	6.38%	12.50%	11.21%

Date of Field Survey							
Location #:	# 7	# 8	# 9	# 10	# 11	# 12	# 7 thru # 12
ITEM/EQUIPMENT:	Pool Pak 8 set	Pool Pak 7 Set	Pool Pak 5 Set	Pool filter 2	Pool filter 1		Summary
Phase:	3	3	480	3	3		
Volts:	480	480	480	480	480		
Initial Amps:	93.0	116.0	73.0	39.0	34.0		355.0
Optimized Amps:	73.0	81.0	58.0	34.0	31.0		277.0
Initial Power Factor:	81.0%	81.0%	81.0%	84.0%	85.0%		
Optimized Power Factor:	98.0%	93.0%	97.0%	95.0%	95.0%		
Initial W:	77,227.20	96,326.40	60,619.20	32,385.60	28,233.60		294,792.00
Optimized W:	60,619.20	67,262.40	48,163.20	28,233.60	25,742.40		230,020.80
Reduction in Watts:	16,608.00	29,064.00	12,456.00	4,152.00	2,491.20		524,812.80
Hours of Operation/Day:	18.00	18.00	18.00	24.00	24.00		
Cost/KWH	\$0.100	\$0.100	\$0.100	\$0.100	\$0.100		
Savings/Day	\$29.89	\$52.32	\$22.42	\$9.96	\$5.98		\$120.57
Savings/Month:	\$896.83	\$1,569.46	\$672.62	\$298.94	\$179.37		\$3,617.22
Investment Cost:	\$4,090	\$5,890	\$4,031	\$2,111	\$2,011		\$18,132.50
Return on Investment:	4.56	3.75	5.99	7.06	11.21	#DIV/0!	5.01
Percent Reduction:	21.51%	30.17%	20.55%	12.82%	8.82%	#DIV/0!	21.97%