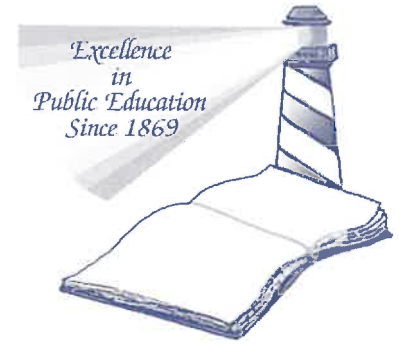


Joseph G. Joyner, Ed.D.
Superintendent



MEMORANDUM

TO: Members of the School Board

FROM: Joseph G. Joyner, Ed.D., Superintendent of Schools

SUBJECT: Request for Acceptance of the Energy Conservation Program Quarterly Status Report

DATE: September 9, 2014

Background Information: The School District entered into an agreement with Cenergistic - The Energy Conservation Company (previously known as Energy Education, Inc.) on July 1, 2008. The Facilities Department then began the development of the Energy Conservation Program (ECP) for the District. The ECP was established following the hiring of an energy manager and initial training by Cenergistic and has included onsite training and assessments, Cenergistic specialists training, and monitoring of energy consumption by each site’s Maintenance Manager. The training period ended December 2008 with performance evaluations beginning in January 2009. Quarterly Energy Program Status Reports have been presented to the School Board since April 2009.

The District completed its five-year performance contract with Cenergistic effective June 30, 2013. Performance payments are no longer being made to Cenergistic, however, we will continue to receive their full support and services as part of the initial agreement and contract.

The September 2014 Energy Program Status Report summarizes the performance results of the Energy Conservation Program for the quarterly period April 2014 – June 2014. The report shows data on energy consumption of the District during this period. Also provided is data for each district facility. The information is presented to show actual energy consumed and cost avoidance to the District as a result of the implementation of energy conservation strategies.

Strategic Plan Impact: Supports the District's Mission by providing appropriate facilities to help inspire good character and a passion for lifelong learning in all students, creating educated and caring contributors to the world.

Educational Impact: The program is intended to reduce operational costs related to utilities, therefore increasing dollars available for other District related operational expenses.

Fiscal Impact: During the quarterly period April 2014 – June 2014 the Energy Savings Program has resulted in additional cost avoidance for the School District of \$1,120,495.18. The current rate of energy savings significantly exceeds the projected performance of the program.

Recommendation: Acceptance of the Energy Conservation Program Quarterly Status Report.

Action Required: Approval of the Superintendent’s recommendation.

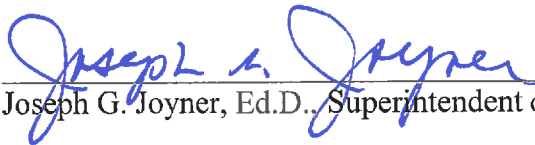
Drafted and submitted for approval by: Al Crutchfield, Energy Manager.

Reviewed and submitted for approval by: Paul Rose, Executive Director for Facilities & New Construction.

Respectfully Submitted,



Tim Forson, Deputy Superintendent for Operations



Joseph G. Joyner, Ed.D., Superintendent of Schools

QUARTERLY ENERGY REPORT April 2014 – June 2014

EXECUTIVE SUMMARY

The June 2014 Energy Program Status Report summarizes the performance results of the Energy Conservation Program during the quarterly period April 2014 – June 2014 and is comprised of the following:

- Cost Avoidance Summary by Site (April 2014 – June 2014): The District realized a total cost avoidance for this quarterly period of \$1,120,495.18 (or a 46% cost avoidance from the baseline period).
- Greenhouse Gas Reduction: Greenhouse Gas Reduction for this quarterly period reduced CO² by 4,765 metric tons.
- Year to Date Monthly Cost Avoidance Summary (January 2014 – June 2014): This reflects the monthly summary of total cost avoidance for the period January 2014 – June 2014.
- Energy Consumption Summary (Cumulative Year to date): Summary breakdown for electricity, water & sewer, and irrigation for April 2014 – June 2014.
- Total cost avoidance for the district from program inception (July 2008 – June 2014): This reflects the total cost avoidance since the implementation of the program. Total cumulative cost avoidance of \$28,053,893.

During the period of April 2014 – June 2014 there were 80 energy audits performed at District facilities. The results of these audits demonstrate continued efforts by employees to reduce energy use.

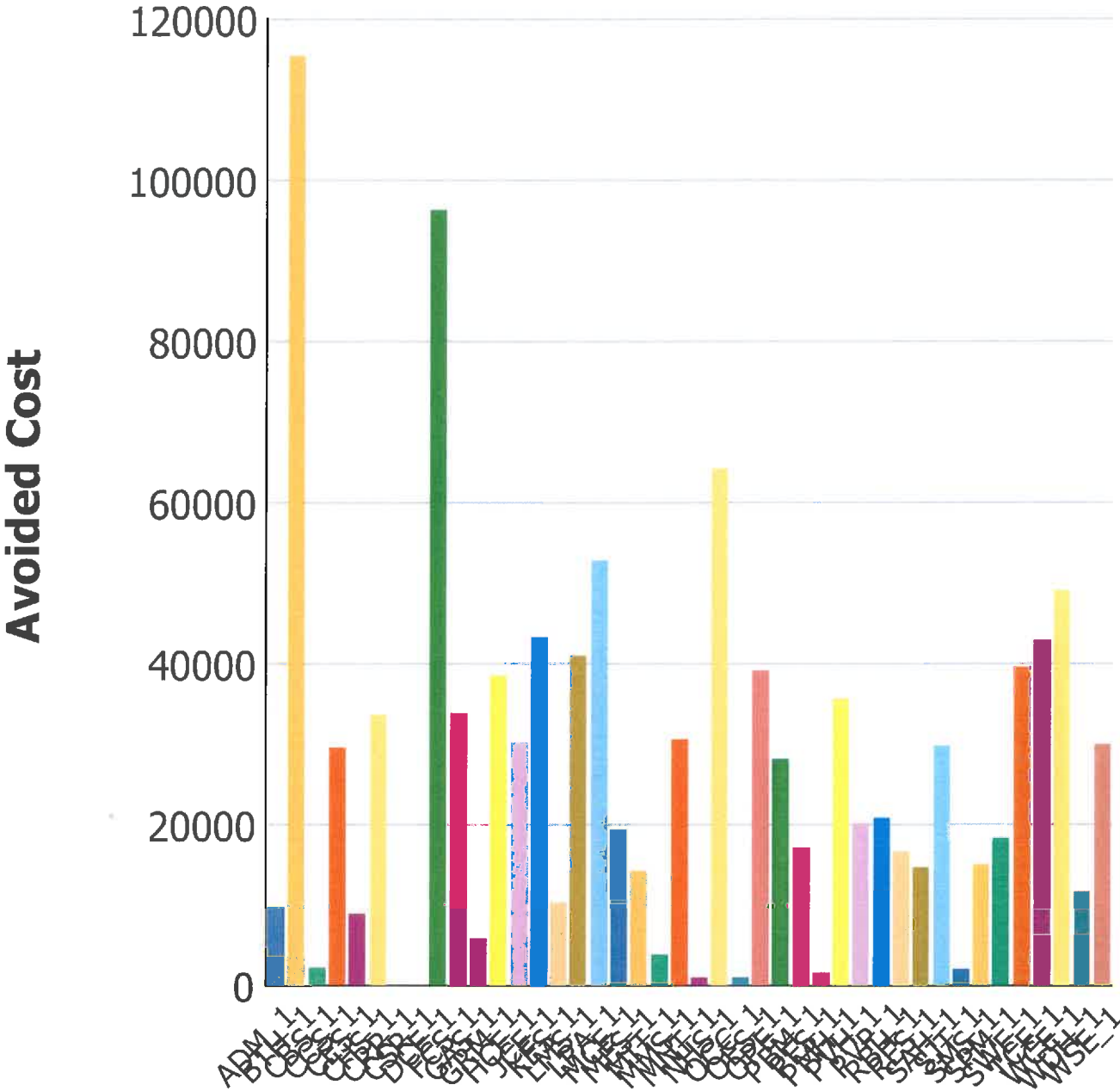
Our winter and spring breaks were some of our best from an energy savings perspective. All school sites did a commendable job in preparing their facilities by turning off all electronics as well as programming and setting back their HVAC and lighting schedules to capture maximum savings. Summer Savings Program results will be released with the July-September 2014 Quarterly Energy Report.

Our district continues to show a high regard in reducing the overall energy consumption. This is evident in the everyday strategies being used at our sites. All school sites have qualified for the 2013 Energy Star Label.

St. Johns County School Board

Cost Avoidance Summary By Building CAP - 01B

Place	BATCC Cost	Actual Cost	Cost Avoidance	Cost Avoidance %
[ADM_1] Administrative Complex	\$26,718.12	\$16,994.37	\$9,723.75	36.39
[BTH_1] Bartram High School	\$197,922.47	\$82,362.71	\$115,559.76	58.39
[CBS_1] CROOKSHANK BUS GARAGE	\$6,698.26	\$4,517.11	\$2,181.15	32.56
[CCS_1] Cunningham Creek Elementary School	\$59,633.47	\$30,071.11	\$29,562.36	49.57
[CES_1] Crookshank Elementary School	\$27,133.84	\$18,100.66	\$9,033.18	33.29
[CHS_1] Creekside High School	\$127,662.05	\$94,001.08	\$33,660.97	26.37
[CRR_1] CLINIC - RAY ROAD	\$879.41	\$870.55	\$8.86	1.01
[CSR_1] CLINIC-SR206	\$616.88	\$557.29	\$59.59	9.66
[DCE_1] Durbin Creek Elementary	\$146,674.92	\$50,253.29	\$96,421.63	65.74
[FCS_1] Fruit Cove Middle School	\$64,316.46	\$30,512.74	\$33,803.72	52.56
[GAS_1] Gaines Alternative School	\$13,995.88	\$8,125.31	\$5,870.57	41.94
[GRM_1] Gamble Rogers Middle School	\$67,099.40	\$28,491.26	\$38,608.14	57.54
[HCE_1] Hickory Creek Elementary School	\$75,336.10	\$45,048.61	\$30,287.49	40.20
[JCE_1] Julington Creek Elementary School	\$86,439.34	\$43,121.04	\$43,318.30	50.11
[KES_1] Ketterlinus Elementary School	\$26,500.90	\$16,135.14	\$10,365.76	39.11
[LMS_1] Alice B. Landrum Middle School	\$88,691.08	\$47,564.88	\$41,126.20	46.37
[LPA_1] Liberty Pines Academy k-8	\$111,636.18	\$58,826.27	\$52,809.91	47.31
[MCE_1] Mill Creek Elementary School	\$52,377.52	\$32,965.72	\$19,411.80	37.06
[MES_1] Otis Mason Elementary School	\$32,198.12	\$17,831.07	\$14,367.05	44.62
[MIT_1] FULLERWOOD	\$11,735.33	\$7,852.18	\$3,883.15	33.09
[MMS_1] RJ Murray Middle School	\$57,767.89	\$27,050.85	\$30,717.04	53.17
[MNT_1] Maintenance-Purchasing	\$3,597.98	\$2,564.44	\$1,033.54	28.73
[NHS_1] Allen D. Nease High School	\$99,634.36	\$35,303.04	\$64,331.32	64.57
[OCC_1] OCONNELL CENTER	\$2,786.30	\$1,736.27	\$1,050.03	37.69
[OES_1] Osceola Elementary School	\$64,612.48	\$25,352.44	\$39,260.04	60.76
[OPE_1] Ocean Palms Elementary School	\$60,759.17	\$32,572.51	\$28,186.66	46.39
[PBM_1] Pacetti Bay Middle School	\$57,947.73	\$40,770.76	\$17,176.97	29.64
[PES_1] PALENCIA ELEMENTARY	\$19,812.16	\$18,148.92	\$1,663.24	8.40
[PMH_1] Pedro Menendez High School	\$83,646.09	\$47,907.76	\$35,738.33	42.73
[PVH_1] Ponte Vedra High School	\$121,285.85	\$101,134.73	\$20,151.12	16.61
[PVP_1] PV-PV Elementary School	\$43,146.39	\$22,265.17	\$20,881.22	48.40
[RBH_1] RB Hunt Elementary School	\$34,853.36	\$18,026.52	\$16,826.84	48.28
[RES_1] Rawlings Elementary School	\$41,658.06	\$27,043.03	\$14,615.03	35.08
[SAH_1] ST Augustine High School	\$83,726.27	\$53,963.75	\$29,762.52	35.55
[SJT_1] ST Johns Technical High School	\$12,420.23	\$10,420.48	\$1,999.75	16.10
[SMS_1] Sebastian Middle School	\$40,064.16	\$24,896.64	\$15,167.52	37.86
[SPM_1] Switzerland Point Middle School	\$55,223.68	\$36,786.72	\$18,436.96	33.39
[SWE_1] South Woods Elementary School	\$71,490.70	\$31,851.77	\$39,638.93	55.45
[TCE_1] Timberlin Creek Elementary School	\$89,433.53	\$46,522.40	\$42,911.13	47.98
[WCE_1] Wards Creek Elementary School	\$82,666.10	\$33,433.29	\$49,232.81	59.56
[WDH_1] WD Hartley Elementary School	\$32,852.72	\$21,240.32	\$11,612.40	35.35
[WSE_1] Webster School Elementary	\$50,010.87	\$19,972.45	\$30,038.42	60.06
Totals:	\$2,433,661.83	\$1,313,166.65	\$1,120,495.18	46.04

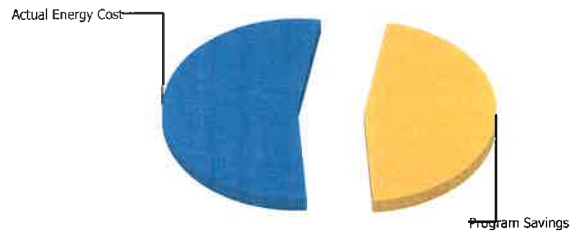


Requested by: acrutchfield
Client Version:
Report version: 5
Filters: Billing Period Between Apr 2014 and Jun 2014

Cumulative Cost Savings

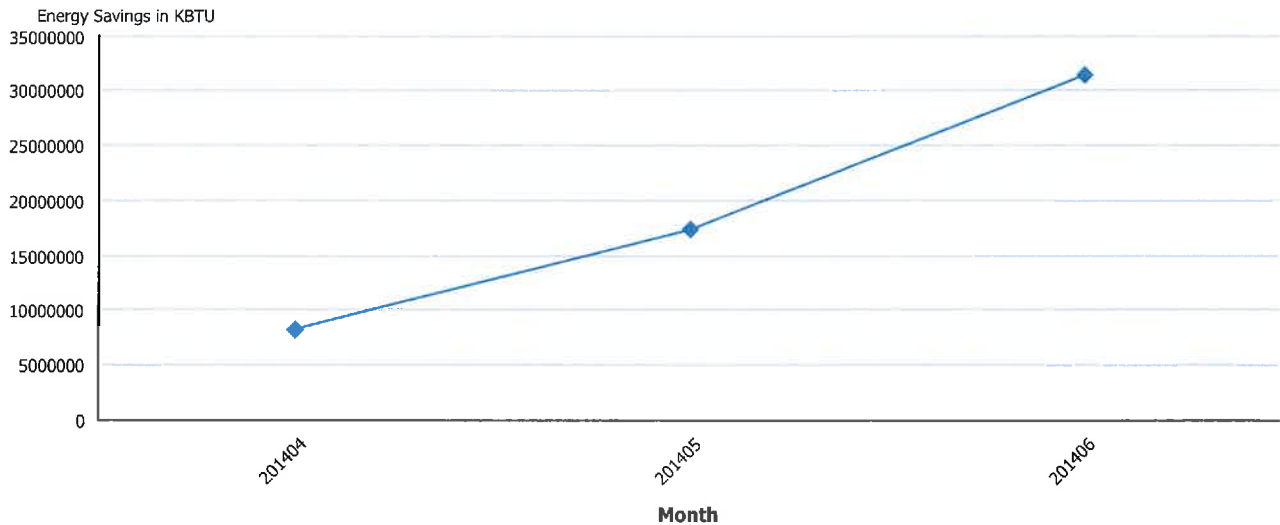
June 2014

Expected Energy Cost	\$2,433,661
Actual Energy Cost	\$1,313,167
Program Savings	\$1,120,494
Percent Savings	46.04%
Other Savings	\$245
Total Savings	\$1,120,739



Expected Energy Cost	Actual Energy Cost	Program Savings
Anticipated expense without energy management.	Actual utility costs for electricity, gas, water, sewer, etc. obtained directly from bills.	The difference between Expected and Actual Cost, calculated in accordance with the International Performance Measurement & Verification Protocol. Does not include savings attributable to reduced equipment maintenance and replacement costs and other collateral benefits. These savings can increase the program savings up to 20%.
Base year usage after adjustments for such variables as changes in weather, equipment, schedules, occupancy and prices.	Other Savings	
	Additional documented savings attributable to Program activities but not the direct result of usage reductions, such as rebates, refunds, tariff changes, etc.	

Cumulative Energy Savings



Cumulative Greenhouse Gas Reduction

Energy Reduction Impact:	31,414,919 KBTU	4,765 equiv. metric tons of CO2
This is equivalent to the following:		
Passenger cars not driven for one year:	993	
Tree seedlings grown for 10 years:	122,176	

Requested by: acrutchfield
Version:
Report Version: 11
Filters: Billing Period Between Apr 2014 and Jun 2014;

Monthly Summary

	2014			
	Cost Avoid \$	Cost Avoid %	Other Savings	* Total \$
Jan	495,066	49.0	0	495,066
Feb	454,992	49.0	0	454,992
Mar	490,532	52.8	0	490,532
Apr	313,841	37.9	245	314,086
May	309,301	41.7	0	309,301
Jun	497,354	57.5	0	497,354
Total	2,561,084	48.3	245	2,561,329

* The Total \$ column is the sum of Cost Avoidance Savings and Other Savings.

Energy Summary

	Use				Cost					
	BATCC	Actual	Avoid	Avoid %	BATCC	Actual	Avoid	Avoid %	Other Savings	Total Savings \$
Electric (KWH)	39,550,088	20,242,618	19,307,470	48.8	4,862,834	2,438,948	2,423,886	49.8	245	2,424,130
Water (KGAL)	470	137	333	70.9	2,905	1,939	966	33.3	0	966
Water & Sewer (KGAL)	28,025	17,937	10,088	36.0	398,331	275,201	123,130	30.9	0	123,130
Irrigation (KGAL)	6,780	4,578	2,202	32.5	36,697	23,595	13,102	35.7	0	13,102
Total (MMBTU)	134,984,450	69,088,054	65,896,396	48.8	5,300,767	2,739,683	2,561,084	48.3	245	2,561,329

Requested by: acrutchfield
 Version:
 Report Version: 7
 Filters: Billing Period Between Jan 2014 and Jun 2014

Commodity		BATCC Cost	BATCC Use	Actual Cost	Actual Use	Cost Avoidance	Cost Avoidance %	Use Avoidance	Use Avoidance %
Electric	KWh	\$57,411,488	483,511,312	\$30,769,216	263,129,006	\$26,642,272	46.4%	220,382,306	45.6%
Irrigation	Kgal	\$312,528	76,192	\$252,070	67,568	\$60,458	19.3%	8,624	11.3%
Water	Kgal	\$12,225	1,981	\$5,818	766	\$6,407	52.4%	1,215	61.3%
Water & Sewer	Kgal	\$4,271,014	333,985	\$2,926,258	232,354	\$1,344,756	31.5%	101,631	30.4%
Totals:		\$62,007,256		\$33,953,362		\$28,053,893	45.2%		

Commodity	BATCC Cost	BATCC Use	Actual Cost	Actual Use	Cost Avoidance	Cost Avoidance %	Use Avoidance	Use Avoidance %
-----------	------------	-----------	-------------	------------	----------------	------------------	---------------	-----------------

