

EPM SAVINGS TIMES

MANUFACTURERS OF COMPUTERIZED TEMPERATURE CONTROL
FOR A THIRD OF A CENTURY

Volume 03 Issue 09

UTILITY COST SAVINGS WITHOUT SACRIFICE

Apr 1, 2009

EPM CTC SYSTEMS BENEFITS

- Reduce energy costs between 20% and 42%.
- Continuous training eliminates costly maintenance contracts.
- Quick identification of heating and air conditioning service issues.
- Free annual verification of CTC system operation.
- If we cannot help you, we will tell you who can, we promise.

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OZARK R-VI HAD ENOUGH AND STOPPED BURNING MONEY

Dr. Kevin Patterson, Asst. Superintendent Ozark R-VI School District, decided to stop burning dollars. In 2007, Dr. Patterson investigated and installed EPM's Computerized Temperature Control (CTC) systems in five schools. EPM's CTC system replaced the existing night setback and Direct Digital Control (DDC) systems. With EPM, the utility cost savings was projected to be 23%.

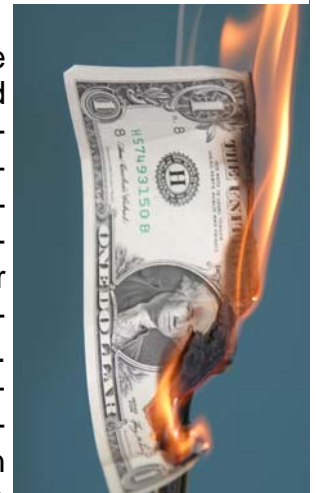
After the first year the actual utility savings was 26%; over \$193,000. This money would have been paid to utility companies. Now, it is paying the debt and an extra \$90,000 is financing other needs in the district. Had all the money been applied to the original installation cost, this would have provided a 5.4 year payback from utility cost savings.

Prior to our CTC systems, comfort problems were blamed on faulty heating and air conditioning equipment. However, EPM's CTC system corrected the majority of the problems. It is obvious the existing comfort problems were due to the DDC controls and not the mechanical equipment.

The mechanical equipment and voltage protection options pro-

tected the heating and air conditioning equipment, drastically reducing repair and maintenance costs. EPM's monitoring programs even saved frozen food in several freezers the first year.

Ozark's maintenance men were trained and are maintaining their EPM CTC system; this is something the other control systems simply do not do. This training eliminated expensive maintenance contracts needed by other control systems. Now, Ozark's outside maintenance savings and lack of maintenance contracts is almost equal to the annual utility cost savings. WIN-WIN FOR OZARK.



**WHEN YOU WANT TO STOP
BURNING MONEY CALL US**

EPM can help, contact us.

(573) 642-6550

(316) 269-2660

JIM'S CORNER-HEATING AND AIR CONDITIONING SYSTEM WARNING (OLD PROBLEM WITH NEW NAME)

Recently, there has been a resurrection of an inefficient heating and cooling protocol. It is called a Variable Air Volume-Fan Terminal Unit (VAV-FTU) system. It continuously sends 55° cold air to every room in the building. If a specific room gets too cold from the 55° supply air, first the VAV reduces the flow of the cold air. If room is still cold, it mixes room air with the cold air. Finally, the fan terminal unit turns on a heater and reheats the mixed cold and return air to as high as 140°.

In other words, cold air is always provided throughout the building, even when the outside air temperature is well below freezing. When the building overcools, the cold air is reheated. You could simulate this at home by running your air conditioning twenty-four hours a day and three hundred sixty-five days a year and leaving a window open. When your home gets too cold, you first close the window about half way. When it continues to get cold your thermostat will turn on your furnace while leaving the air conditioning running and

the window partially open. This system is one of the cheaper heating and cooling systems to install, but a very high energy user. Years ago, with energy cost of \$0.02 per kWh and \$0.15 per therm, energy cost was not considered in building life cycle cost. Energy in the Midwest now averages over \$0.08 kWh and \$0.90 per therm.

Another problem is these systems are difficult to maintain. If you are a rural school or business you probably will not be able to maintain the system. We have found over their life these systems substantially increase utility cost and maintenance cost compared to more conventional heating and cooling systems.

If you are stuck with one of these variable air volume-fan terminal unit systems we can help. Our Computerized Temperature Control (CTC) system changes its operating protocol while maintaining required fresh air. The EPM CTC system will reduce the utility cost of this heating and cooling system between 20% and 40% while improving

The owners would have been better off had the variable air volume-fan terminal unit systems never been installed!

comfort.

Although our CTC results are impressive, the owners would have been better off had the variable air volume-fan terminal unit systems never been installed, a more efficient heating and air conditioning system installed and the more efficient system controlled by our CTC system.

If you want more information to avoid this architectural and engineering design pitfall, let us hear from you. If you already have one, we can help you.

We are in it for the long haul.

jjohnson.epmctc

ON MAY 28, 2009 EPM CELEBRATES 30 YEARS MANUFACTURING AND INSTALLING CTC SYSTEMS IN THE MIDWEST

Chris' R & D Corner-DOS Based CTC Problems

Most of our customers with DOS based SBD-2280 and SBD-2580 version of our Computerized Temperature Control (CTC) system have upgraded their CTC system front-end to the new graphics based CTC system.

The 2280 and 2580 CTC systems used older PC computers with software and buss timing that is not compatible with new PC or other front-end computers. If the older PC fails your CTC system will continue to operate based on the last setpoints, temperatures and time schedules entered. You will no longer be able to change them

or monitor the operation of the CTC system. This means you will no longer get freeze, phase loss, low voltage, fire or mechanical equipment failure alarms. Since your modem is connected to the PC we will not be able to interface with your CTC system.

Over the past twelve years we have offered upgrades to replace the DOS based front-end PCs.

The upgrade requires the complete operating system, interface, display, monitoring and communication programs be rewritten and installed on a current production computer with the current oper-

ating system. This requires up to four weeks programming. Your SBD-1001 CTC system in the facility will still work with the upgrade.

The CTC system the SBD-3200 upgrade installed is between \$2,500 and \$10,000 depending on the size of the CTC system. We have one old PC we can supply as a loner until the upgrade can be installed.

So much for so little

I can help you with your upgrade.

cadam@epmctc.com

What Makes EPM's CTC System Different From Others?

Over the past twenty years we have all struggled with changes in DOS® and Windows® operating systems. First, we do not have any choice if we want our software supported and second they never seem to get it right.

Most updates, DOS to Windows® 3.1, 3.1 to 95, 95 to 95 Second Edition, 95 Second Edition to 98 and it goes on and on, were done to correct problems with the previous version. Each successive update requires more memory, faster processors and usually runs slower. Finally, we at EPM have had enough.

We have completed our SBD-3200 based Computerized Temperature Control (CTC) system. It is our operating system, HTML based and is classified as a Computer Appliance. Since it is ours we provide future SBD-3200 updates free.

The SBD-3200 does not reside on your network. It simply sits on the internet as a secure web site. You get to the SBD-3200 by going out to the Internet and back to the SBD-3200 as a secure Internet web site. If a hacker happens to make it through the firewall and the SBD-3200 security, they have no idea what

If a hacker happens to make it through the firewall and the 3200 security, they have no idea what they have and can do nothing with it.

they have and can do nothing with it. It is so secure our bank customers have ordered all their Windows® PC based CTC systems be replaced with the SBD-3200 front-end.

The best part, it cost less than the PC front-end-what a deal!

We are in it for the long haul.

www.epmctc.com

EPM

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POSTAGE

Mailing Label

Rick's Corner-No Cost Energy Audit - "No Grant Needed"

When you are ready to find out you are paying too much for utilities, the first step is to call us for a "Shortsheet." The Shortsheet is a building-by-building energy use audit. We will obtain energy (Kilo British Thermal Units or KBTU) per square foot-per year.

EPM CTC SYSTEM

- operate efficiently
- solve comfort problems
- monitor safe operation
- buy with utility savings

This KBTU number is compared against energy efficient schools with EPM systems to gauge potential savings and applicability of our EPM system.

Not every building needs our Computerized Temperature Control (CTC) system. The Shortsheet will help you decide whether to proceed. The Shortsheet gives you your KBTU

number, which is your building's score. Your score is then compared to our existing customers before and after results.

There is no charge from EPM for the "Shortsheet" preparation. No grant is needed. The customer must

provide face copies of twelve months energy bills for the study. Our manufactures representative will gather the information including a brief physical description of the facility, size, construction, type of heating and air conditioning equipment and use.

Your Shortsheet is an engineering tool to compare your facility to utility use patterns of similar buildings in your geographical area. The comparison uses algorithms developed by the Department of Energy and us over the past thirty

years to project the efficient energy use for the facility, potential energy saving and ranges of expected dollar saving, CTC system cost, payback, return on investment and, most importantly, your cash flow.

If you want to know how you are doing and are interested to see that you are not wasting utility dollars, call us to complete your Shortsheet. You may be wasting enough utility money to pay for the EPM CTC system in a reasonable amount of time. It is easy to find out.

P.S. (EPM.'s Computerized Temperature Controls (CTC) systems are manufactured by us, installed by us, with custom software, to exactly fit your building.)

WHAT IS YOUR SCORE?

rnick@epmctc.com



**MANUFACTURERS OF COMPUTERIZED TEMPERATURE CONTROL
FOR OVER A QUARTER CENTURY**

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EPM Computerized Temperature Control Savings Examples - Schools

Facility	Cost (\$)	Projected	Actual	Simple	Primary Contact	Phone	Installation Date	KBTU Per Square	
		Savings	Savings	Payback				Foot Per Year	
		(%)	(%)	(# Years)				Before	After
Adair Co. R-II	\$108,193.00	25.37%	31.26%	3.83	Don Wilburn	(660) 323-5272	6/30/2005	72	46
Baldwin City USD #348	\$247,648.00	24.77%	41.75%	2.18	Paul Dorathy	(785) 594-2725	7/13/2001	129	54
Bernie R-XIII School	\$235,086.00	19.24%	34.75%	1.13	Robin Ritchie	(573) 293-5333	8/6/2005	61	43
Brussels	\$88,500.00	21.94%	22.13%	4.71	Tom Knuckles	(618) 883-2131	11/20/1998	145	94
Caney Valley-Jr./Sr. High #436	\$110,000.00	14.90%	25.25%	1.67	Danny Fulton	(620) 879-9220	5/12/1999	58	43
Caney Valley-Lincoln Elementary	\$88,000.00	10.91%	25.00%	2.33	Danny Fulton	(620) 879-9240	5/13/1999	54	33
Cedar Vale #285	\$69,542.00	18.42%	20.13%	2.33	Kenneth Tarrant	(620) 758-2265	4/27/2000	105	92
Central A & M Bond Elementary	\$77,863.00	25.16%	28.60%	5.45	Randall Grigg	(217) 226-4042	9/13/1999	89	48
Central A & M High & Moweaqua Elementary	\$95,008.01	14.97%	33.19%	2.39	Randall Grigg	(217) 226-4042	5/8/1998	83	74
Central A & M Middle School	\$171,765.00	10.78%	23.89%	6.99	Randall Grigg	(217) 226-4042	10/21/1999	43	33
Chautauqua School District #286	\$169,631.00	15.27%	21.22%	3.25	Scott Hills	(620) 725-3187	7/31/2000	90	64
Clay Center Community Middle School	\$149,250.00	24.16%	32.40%	2.83	Michael Folks	(785) 632-3176	9/24/2002	67	46
Clay City CUSD #10	\$73,695.00	22.18%	23.09%	2.25	James Jones	(618) 676-1431	11/3/2000	76	56
Clearwater R-I	\$101,885.00	18.00%	19.29%	3.00	Blaine Keel	(573) 223-7426	11/11/1993	68	65
Dighton USD #298 Primary School	\$7,597.00	19.44%	44.64%	2.50	Angela Lawrence	(620) 278-2171	11/8/2004	65	34
Dighton USD #298 Elementary	\$92,969.00	27.53%	66.63%	1.67	Angela Lawrence	(620) 278-2171	11/12/2004	76	50
Dighton USD #298 High School	\$148,260.00	20.96%	27.23%	2.00	Angela Lawrence	(620) 278-2171	10/25/2004	62	44
Dighton USD #298 Vocational Shop	\$9,874.00	13.10%	20.99%	2.33	Angela Lawrence	(620) 278-2171	10/25/2004	98	78
Durham-Hillsboro-Lehigh Hillsboro Elementary	\$109,634.00	17.55%	27.21%	2.75	Doug Huxman	(620) 947-3184	02/26/03	57	47
Durham-Hillsboro-Lehigh Middle/High/Voc Tech	\$293,762.00	19.59%	23.31%	2.92	Doug Huxman	(620) 947-3184	5/23/2001	85	56
Eisberry R-II k Thru 12 & Voc-Tech	\$158,000.00	16.41%	40.32%	3.41	Larry Flanagan	(573) 898-5554	12/31/1996	89	60
Flora Cusd #35-Admin	\$14,390.00	23.96%	27.03%	2.50	Gary May	(618) 662-2412	4/7/1998	85	70
Flora Cusd #35-Jr. High	\$86,500.00	22.67%	34.93%	4.08	Gary May	(618) 662-2412	12/29/1997	85	49
Flora Cusd #35-High	\$204,400.00	22.84%	28.54%	2.69	Gary May	(618) 662-2412	11/21/1997	100	68
Flora Cusd #35-Lincoln	\$44,786.00	19.60%	19.09%	2.33	Gary May	(618) 662-2412	3/4/1998	56	42
Flora Cusd #35-McEndree	\$99,000.00	25.35%	20.78%	6.17	Gary May	(618) 662-2412	2/11/1998	82	59
Flora Cusd #35-Washington	\$33,247.00	19.70%	21.26%	1.92	Gary May	(618) 662-2412	4/8/1998	127	103
Flora Cusd #35-Xenia	\$56,295.00	24.07%	34.42%	3.55	Gary May	(618) 662-2412	3/26/1998	126	70
Ft. Larned USD #495 Middle School	\$186,439.00	19.65%	23.69%	4.83	Jon Flint	(620) 285-3185	10/5/2006	63	46
Ft. Larned USD #495 Sr. High School	\$174,854.00	26.59%	30.15%	2.67	Jon Flint	(620) 285-3185	8/31/2005	150	101
Fulton Schools #58-Bartley Elementary	\$68,114.00	18.00%	38.20%	4.08	Mark Enderle	(573) 642-2206	4/30/2000	98	59
Fulton Schools #58-Bush Elementary	\$86,234.70	18.00%	34.85%	4.17	Mark Enderle	(573) 642-2206	5/15/2000	94	64
Fulton Schools #58-High School	\$195,286.30	15.88%	42.65%	2.92	Mark Enderle	(573) 642-2206	9/8/2000	89	49
Fulton Schools #58-McIntire Elementary	\$86,396.88	18.00%	40.24%	4.42	Mark Enderle	(573) 642-2206	7/20/2000	105	61
Fulton Schools #58-Middle School	\$142,046.09	15.88%	33.32%	3.92	Mark Enderle	(573) 642-2206	5/5/2000	98	64
Howard County R-II-Elem	\$68,239.00	20.00%	25.37%	6.49	Mike Reynolds	(660) 338-2012	2/17/1995	109	77
Howard County R-II-High	\$79,995.00	26.00%	25.37%	7.52	Mike Reynolds	(660) 338-2012	4/13/1995	117	88
Humansville R-IV K thru 12 and Voc Tech	\$125,000.00	21.40%	27.30%	3.42	Mark Koca	(417) 754-2535	7/30/2002	62	51
Jewel USD #279 K thru 12 School	\$116,473.00	27.74%	NEW	NEW	Eric Burks	(785) 739-2216	5/5/2008	80.68	NEW
Kennett #39-H.B. Masterson	\$45,164.00	30.00%	33.17%	3.01	Jerry Noble	(573) 717-1100	5/26/1994	82	54
Kennett #39-High School	\$65,213.00	31.00%	40.84%	2.45	Jerry Noble	(573) 717-1100	1/17/1995	63	37
Kennett #39-Junior High	\$16,178.00	15.00%	15.22%	6.57	Jerry Noble	(573) 717-1100	12/30/1993	36	29
Kennett #39-South Elem.	\$38,727.00	29.00%	32.08%	3.12	Jerry Noble	(573) 717-1100	4/29/1994	90	54
Kinsley Elementary	\$85,250.00	18.73%	24.28%	7.00	Bob Davies	(620) 659-3646	3/7/2002	59	49
Kinsley High School	\$153,150.00	20.59%	26.33%	3.60	Bob Davies	(620) 659-3646	5/10/2002	96	73
Kinsley Voc-Tech	\$17,378.00	22.15%	13.10%	14.20	Bob Davies	(620) 659-3646	5/10/2002	76	75
Kirksville R-III-Middle	\$92,296.00	25.00%	30.00%	3.33	Patrick Williams	(660) 665-7774	8/17/1995	87	55
La Plata Elementary School	\$59,097.00	21.28%	27.53%	3.92	Steve Carvajal	(660) 332-7001	3/26/2007	62	49
Lincoln USD #298 Elementary School	\$98,797.00	27.66%	45.52%	2.67	Gary Nelson	(785) 524-4436	11/28/2003	122	57
Lincoln USD #298 High School	\$119,169.00	23.62%	25.35%	3.60	Gary Nelson	(785) 524-4436	11/28/2003	85	47
Lorraine-Holyrood #328	\$71,650.00	15.37%	31.28%	3.23	Lenny Gales	(785) 472-5241	9/12/2000	72	56
Lorraine-Quivera Heights	\$73,550.00	14.85%	23.69%	2.92	Lenny Gales	(785) 472-5241	9/12/2000	71	63
Lorraine-Wilson Complex	\$98,550.00	16.43%	24.16%	2.42	Lenny Gales	(785) 472-5241	8/3/2000	70	57
Madison Cusd #12-Middle	\$198,213.00	21.90%	42.18%	3.04	Sandra Schroeder	(618) 877-1712	3/5/1997	102	60
Madison Cusd #12-High	\$196,608.00	17.04%	18.56%	9.01	Sandra Schroeder	(618) 876-7010	8/20/1998	99	72
Malta Bend R-V	\$48,000.00	19.51%	39.68%	2.34	Melissa Vesser	(660) 595-2371	7/28/1998	75	49
Moniteau Co. R-I High School	\$182,865.00	17.00%	27.51%	3.50	Marty Albertson	(573) 796-2145	2/9/2005	88	57
Montgomery County-Jonesburg	\$8,539.00	10.00%	11.51%	9.25	Tom Ward	(573) 564-2278	7/6/1993	45	39
Montgomery County-Middle/High	\$112,694.00	20.00%	20.36%	5.04	Tom Ward	(573) 564-2278	10/18/1993	98	74
Moundridge Elementary	\$96,827.00	23.71%	24.95%	4.50	Rustin Clark	(620) 345-8611	6/12/2002	61	53
Moundridge Middle, High & Voc-Tech	\$282,580.00	23.86%	41.33%	3.25	Rustin Clark	(620) 345-8611	11/15/2001	41	33
Neoga CUSD #3 Elementary School	\$78,904.00	19.90%	25.17%	7.17	Debbie Poindexter	(217) 895-2201	4/21/03	62	43
North Callaway R-I Auxvasse Elementary	\$75,500.00	13.30%	18.92%	7.28	Roy Moss	(573) 386-2214	6/11/1998	83	66
North Callaway R-I Halton/McCredie Elem.	\$71,500.00	18.43%	26.02%	7.63	Roy Moss	(573) 386-2214	7/8/1998	62	44
North Callaway R-I High School	\$114,000.00	13.36%	37.79%	3.25	Roy Moss	(573) 386-2214	6/15/1998	60	50
North Callaway R-I Williamsburg Elementary	\$69,000.00	15.88%	27.98%	8.94	Roy Moss	(573) 386-2214	6/25/1998	67	49

EPM Computerized Temperature Control Savings Examples - Schools

Facility	Cost (\$)	Projected Savings (%)	Actual Savings (%)	Simple Payback (# Years)	Primary Contact	Phone	Installation Date	KBTU Per Square	
								Foot Per Year	
								Before	After
Ozark R-VI East Elementary	\$193,920.00	20.74%	38.16%	3.83	Kevin Patterson	(417) 582-5900	5/7/2007	40	27
Ozark R-VI North Elementary	\$142,172.00	18.38%	28.58%	3.75	Kevin Patterson	(417) 582-5900	3/15/2007	69	50
Ozark R-VI South Elementary	\$117,231.00	19.36%	32.99%	2.33	Kevin Patterson	(417) 582-5900	4/26/2008	42	28
Ozark R-VI Junior High School	\$270,333.00	24.65%	36.15%	2.92	Kevin Patterson	(417) 582-5900	2/21/2007	43	29
Ozark R-VI High School	\$365,611.00	26.11%	25.98%	2.67	Kevin Patterson	(417) 582-5900	2/23/2007	65	52
Peabody-Burns USD #398 Elementary	\$85,969.00	26.28%	30.42%	4.94	Rex Watson	(620) 983-2198	12/10/2004	72	49
Peabody-Burns USD #398 Brown Building	\$61,980.00	24.52%	25.61%	4.17	Rex Watson	(620) 983-2198	12/23/2004	32	24
Peabody-Burns USD #398 Middle-High	\$120,000.00	24.52%	43.98%	4.00	Rex Watson	(620) 983-2198	12/23/2004	61	32
Quinter USD #293 Elementary	\$129,836.00	21.24%	24.19%	5.18	Allaire Homburg	(785) 754-3660	4/5/2004	80	61
Quinter USD #293 Jr-Sr High School	\$118,796.00	20.35%	29.44%	3.33	Allaire Homburg	(785) 754-3660	6/4/2004	94	66
Reeds Spring R-IV Primary School	\$158,052.00	18.14%	20.49%	6.67	Michael Mason	(417) 272-8173	6/28/2006	42	35
Reeds Spring R-IV Elementary School	\$170,918.00	25.00%	28.13%	5.33	Michael Mason	(417) 272-8173	3/6/2006	47	40
Reeds Spring R-IV Intermediate School	\$149,426.00	12.15%	17.73%	7.00	Michael Mason	(417) 272-8173	6/2/2006	39	34
Reeds Spring R-IV Middle & Tech School	\$225,117.00	25.25%	36.55%	3.50	Michael Mason	(417) 272-8173	4/25/2006	68	51
Reeds Spring R-IV High School	\$227,618.00	23.49%	25.42%	4.92	Michael Mason	(417) 272-8173	2/1/2006	70	53
Reeds Spring R-IV Admin. & Alternative School	\$29,963.00	23.75%	26.51%	4.17	Michael Mason	(417) 272-8173	4/17/2006	63	44
Reeds Spring R-IV Sports Facility	\$15,872.00	23.22%	42.53%	1.92	Michael Mason	(417) 272-8173	2/2/2006	127	82
Richmond R-XVI Middle School	\$118,437.00	17.64%	35.81%	2.17	Jim Robins	(816) 776-6912	6/23/2004	93	42
Richmond R-XVI High School	\$124,612.00	18.77%	26.14%	2.67	Jim Robins	(816) 776-6912	6/15/2004	85	46
Rolla Public Schools - Administration**	\$16,600.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-1329	7/18/1996	N/A	N/A
Rolla Public School - Allied Health**	\$134,817.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-1329	12/10/1998	N/A	N/A
Rolla Public School - High School**	\$160,250.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-4746	9/16/1992	N/A	N/A
Rolla Public School - Vo Tech**	\$34,000.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-3726	4/23/1990	N/A	N/A
Rolla Public School - Junior High**	\$32,380.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-3014	4/23/1990	N/A	N/A
Rolla Public School - Middle School**	\$105,500.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-2151	9/2/1992	N/A	N/A
Rolla Public School - Truman Elementary**	\$66,000.00	20.00%	42.32%	2.36	Aaron Zalis	(573) 364-8193	4/23/1990	N/A	N/A
Russell County USD #407 Admin Office	\$23,085.00	24.73%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	97	NEW
Russell County USD #407 Brickerdyke Elem	\$74,205.00	23.37%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	67	NEW
Russell County USD #407 Luray-Lucas Elem	\$43,076.00	20.52%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	73	NEW
Russell County USD #407 Simpson Elem	\$69,143.00	24.02%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	72	NEW
Russell County USD #407 Ruppenthal Middle	\$134,797.00	17.93%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	65	NEW
Russell County USD #407 Lucas-Luray High	\$100,408.00	23.33%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	83	NEW
Russell County USD #407 Russell High	\$247,460.00	20.16%	NEW	NEW	David Couch	(785) 483-2173	5/12/2008	124	NEW
Silver Lake West Elementary #372	\$37,500.00	19.26%	27.53%	5.50	Randy Freeman	(785) 582-4026	1/11/2001	112	79
Silver Lake East Elementary	\$94,000.00	20.86%	32.35%	3.33	Randy Freeman	(785) 582-4026	1/11/2001	164	100
Silver Lake High School	\$189,599.00	20.00%	34.89%	8.83	Randy Freeman	(785) 582-4026	8/15/2001	107	58
Sterling USD #376 Grade School	\$80,273.00	27.48%	18.14%	4.08	Fred Dierksen	(620) 278-3621	12/29/2003	144	111
Sterling USD #376 Middle-High School	\$109,416.00	13.49%	31.13%	2.50	Fred Dierksen	(620) 278-3621	2/12/2004	76	49
Stewartsville C-2 Elementary & High	\$87,647.00	14.83%	24.61%	4.68	Allen Kerr	(816) 669-3792	9/22/1999	63	48
Sullivan C-2-Primary School	\$123,227.00	20.00%	32.28%	3.84	Tanya Voss	(573) 468-5171	3/2/2002	65	44
Sullivan C-2-Middle School	\$166,315.00	24.16%	29.86%	3.75	Tanya Voss	(573) 468-5171	8/28/2003	77	49
Sullivan C-2-High School	\$460,674.00	17.07%	27.21%	5.00	Tanya Voss	(573) 468-5171	5/31/2005	60	42
Van-Far R-I - Elementary	\$61,916.00	19.44%	29.30%	4.41	Christopher Felmlie	(573) 594-6111	7/20/1995	97	50
Van-Far R-I - High	\$101,192.00	25.00%	37.54%	4.95	Christopher Felmlie	(573) 594-6111	11/10/1995	102	52
Waconda USD #272 at Downs	\$107,365.00	23.21%	23.67%	3.42	Jeff Travis	(785) 781-4328	11/11/2005	80	68
Waconda USD #272 at Cawker City	\$97,558.00	23.83%	25.10%	5.58	Jeff Travis	(785) 781-4328	11/11/2005	89	64
Waynesville East Elementary	\$61,519.98	19.60%	56.01%	0.78	Judne Blackburn	(573) 774-6169	7/23/1993	68	60
Waynesville Middle School	\$109,098.38	15.00%	52.13%	1.05	Judne Blackburn	(573) 774-6169	9/17/1993	118	95
Waynesville Early Childhood Center	\$74,384.72	10.00%	15.00%	6.29	Judne Blackburn	(573) 774-6169	11/4/1994	71	58
William Woods University 12 Buildings	\$71,552.05	15.00%	20.00%	5.00	Mike Dillon	(573) 642-2251	Various	N/A	N/A
Winfield R-IV Primary School	\$41,070.08	20.00%	NEW	NEW	Arnold Bell	(636) 668-8188	10/15/2005	65	N/A
Winfield R-IV Middle School	\$37,150.83	20.00%	NEW	NEW	Arnold Bell	(636) 668-8188	10/15/2005	65	N/A
Winfield R-IV High School	\$99,750.00	18.34%	18.38%	2.00	Arnold Bell	(636) 668-8188	3/15/2004	71	60
Winfield R-IV High School Addition	\$46,712.44	18.34%	NEW	NEW	Arnold Bell	(636) 668-8188	9/10/2005	71	NEW

AVERAGE	\$111,406.35	20.36%	30.31%	3.97				80.27	56.00
								100%	70%

**Savings Analysis Completed by School District

CTC system installations shown in BLUE had operating night setback systems removed at the time of the CTC system installation. The CTC system savings is above and beyond the night setback savings from the removed night setback systems.

CTC system installations shown in RED had operating Direct Digital Control (DDC) systems removed at the time of the CTC system installation. The CTC system savings is above and beyond the DDC system savings from the removed DDC systems.

The percent dollar savings may differ from KBTU per SF per YR reduction depending upon if the CTC system is primarily a consumption, electric demand or combination consumption and demand savings CTC system.

For further information contact the Fulton Engineering Office at (573)642-6550

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