LIMITED-SCOPE PERFORMANCE AUDIT REPORT

Kansas Corporation Commission: Evaluating Savings Achieved through the Facility Conservation Improvement Program

AUDIT ABSTRACT

In 2000, the Kansas Legislature enacted legislation establishing the Facility Conservation Improvement Program (FCIP). Public entities can use the program to streamline the process for energy-efficient and deferred-maintenance projects such as installing new lighting or replacing boilers or chillers. The program is designed for project costs to be paid for with energy savings within a set period of time. We reviewed three FCIP projects and were unable to determine whether the public entity achieved the energy savings guaranteed under the terms of the contract with an energy service company because follow-up verification reports either were not required, were missing, or were based on faulty analysis. We made a number of recommendations to address issues with the program, and identified issues for further study.

A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
State of Kansas
April 2016

L-16-003

From the Legislative Post Auditor:

This limited-scope audit was authorized by the Legislative Post Audit Committee at its March 9, 2016 meeting. It addresses the following question: For a limited sample of Facility Conservation Improvement Program (FCIP) projects, do the public entities appear to have achieved the energy savings guaranteed under the terms of their contracts?

Our work included several steps to identify whether the public entities achieved the guaranteed energy savings agreed to in the contract with the energy service company. First, we reviewed statutes related to FCIP and interviewed officials from the KCC to understand the program, the KCC's role in the program, and the steps the KCC takes to verify that actual reductions in energy usage met the savings guaranteed in project contracts. Next, we selected projects from three local entities for our review: Wichita State University, the Unified Government of Wyandotte County/Kansas, City, Kansas, and the Plainville school district (USD 270). This was a judgmental sample and our results cannot be projected to all FCIP projects in Kansas. To evaluate each of the sample projects, we interviewed agency officials and reviewed various project documents to determine whether the projects met the savings guarantees agreed to in the contracts. Given the time constraints of the audit, we did not conduct any testwork to verify the information in any of the project documents.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. Overall, we believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Audit standards require that we report on any work we did related to internal controls. We performed a limited review of selected internal controls, including asking KCC officials about their role in the FCIP specific to oversight and monitoring to ensure the guaranteed savings are met for our selected projects.

This audit was requested by Representative Mark Hutton and conducted by Brad Hoff. Chris Clarke was the audit manager. If you need any additional information about the audit's findings, please contact Brad at (785) 296-3792.

Sincerely,

Scott Frank
Legislative Post Auditor
April 26, 2016

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For a Limited Sample of FCIP Projects, Do the Public Entities Appear to Have Achieved the Energy Savings Guaranteed Under the Terms of Their Contracts?

Background Information

In 2000, the Kansas Legislature established the Facility Conservation Improvement Program (FCIP) to promote and facilitate energy-saving projects in public buildings. Public entities such as school districts, local governments, and state universities are eligible to use the program to implement energy-efficient and deferred-maintenance projects. Examples of eligible projects include installing new lighting, replacing boilers or chillers, improving water fixtures, and exploring alternative energy systems such as wind, solar, and geothermal. State law requires these projects to create energy savings that offset the project costs within 30 years. In theory, the projects are revenue neutral because the energy savings should more than offset project costs over time.

Since 2007, there have been 60 FCIP projects with total project costs of nearly $200 million. The average FCIP project costs $3.3 million to complete and is estimated to produce savings that would meet or exceed project costs within 16 years. ***Appendix A*** includes a list of all FCIP projects since 2007.

The Kansas Corporation Commission's (KCC) Energy Division has operated the FCIP since 2007 and provides administrative support to public entities that use the program. The FCIP was originally administered by the Department of Administration, but was moved to the KCC in 2007. According to state law, the KCC may provide administrative support and resources to the program. It does so in the following main areas:

- **Providing standard energy performance <u>contracts</u> with approved energy service companies.** As of March 2016, the Department of Administration, Division of Purchases had established state contracts with ten energy service companies to actively participate in the program. The companies help public entities identify and install energy efficient equipment.

  KCC officials told us using energy performance contracts offers several benefits to public entities that they would not receive in a traditional improvement project. These include using standard, simplified contracts and pre-approved energy saving companies. This arrangement streamlines the process and saves the public entity both time and money because the public entity does not have to issue request for proposals and only has to choose an energy company from a small list who the state has already vetted and approved.

- **Providing <u>expertise</u> to the public entity during the process.** KCC officials told us their staff's main responsibility is to help the public entity understand the contract and the guaranteed savings related to the energy-efficient improvements. Specifically, they can help the public entity understand the details of the energy conservation measures and what is measured to prove the savings.

- **KCC officials may assist with dispute resolution.** KCC officials told us they may be asked to establish processes for mediation and arbitration between the public entity and energy service company.

The KCC's administrative support role is funded through fees that are assessed against each project. The fees are on a sliding scale based on the project's size—from 4% for small projects to 0.5% on very large projects. For example, the fee for a $1 million project would be about $25,000 (2.5%), while the fee for a $10 million project would about $90,000 (only 0.9%).

The FCIP process includes several steps before a project is finalized and construction begins. The KCC follows a comprehensive process to ensure the public entity is provided as much information as possible on potential opportunities for savings. As designed, the process ensures the public entity and the energy service company communicate, and the KCC reviews all documentation before a project is finalized. This process is summarized below.

- **The public entity selects several energy service companies to complete preliminary energy audits.** The companies inspect the public entity's facilities, understand the entity's energy needs, and identify potential opportunities for savings. These audits are free to the public entity.

- **The public entity then selects one energy service company to complete a more comprehensive investment grade audit.** The investment grade audit is more thorough than the preliminary energy audit and also includes detailed information related to the improvements' potential savings. The investment grade audit's findings are shared with officials from both the KCC and public entity. The public entity may be responsible for the cost of the investment grade audit.

- **Once KCC officials and the public entity approve the audit, the energy service company develops an energy performance contract based on the audit's results.** Among other things, the contract defines the project scope, lists the energy conservation measures to be installed, guarantees the energy savings will be sufficient to finance the project, and contains a project schedule. The contract also summarizes the project's measurement and verification process (if included). The measurement and verification report—designed to determine whether the guaranteed savings have been met—is typically completed within 12 months after the project's construction is completed.

- **Construction begins once the public entity and the energy service company sign the contract and the energy conservation measures are approved by the KCC.**

Finding #1: We Could Not Determine Whether the Guaranteed Energy Savings Were Realized For the Three Facility Conservation Projects We Reviewed

We selected projects from three public entities for review: Wichita State University, the Unified Government of Wyandotte County/Kansas City, Kansas, and the Plainville school district (USD 270). Project costs for the three projects total $15.7 million and ranged from $840,000 to $12.3 million. Based on a simple payback calculation—dividing total project costs by the guaranteed

annual savings—the payback period for these projects ranges from 11 years to 30 years. Each project will be discussed in more detail in the following sections.

WICHITA STATE UNIVERSITY

In 2006, Wichita State University officials began a FCIP project for a number of building improvements on campus. This included new lighting, installation of new water valves and piping insulation for a number of buildings, as well as replacement boilers at the campus' main power plant. Custom Energy Services, L.L.C was hired as the energy service company for the project, with costs totaling $12.3 million. This amount did not include any ongoing maintenance costs, outside of the warranty period. Total costs included Wichita State's FCIP fee of $101,000 to the KCC. It financed the project with a 15-year bond. According to the contract, Custom Energy Services guaranteed savings of $1.1 million in the first year with a 2% annual increase in savings for each subsequent year. This guarantee meant the project savings should have met or exceeded project costs in about 11 years.

We could not determine if the project achieved the energy savings guaranteed in the contract because Wichita State chose not to require measurement and verification reports. University officials told us they opted out of the verification process because of the cost of a follow-up report. These reports are not required under the program, an issue which is discussed in greater detail on page 5.

Wichita State officials told us they are satisfied with the project's results. Further, officials are confident the project has met the energy savings guaranteed under the terms of the contract based on their own internal reviews of annual utility costs.

UNIFIED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS

In 2010, the Unified Government began a FCIP project for a variety of energy improvements at its court building. As part of the project, Johnson Controls, Inc. was hired to install new lighting, a new cooling tower, and chiller for the court services building. Total project costs were about $840,000, which included an FCIP fee of $22,000 to the Kansas Corporation Commission. Project costs did not include any ongoing maintenance costs, outside of the warranty period. The project was financed as a capital debt project and with funds from U.S. Department of Energy's Energy Efficiency and Conservation Block Grant Program. According to the contract, Johnson Controls guaranteed savings of $45,000 in the first year with a 4.75% annual increase in savings for each subsequent year. This guarantee meant the project savings should have met or exceeded project costs in about 14 years.

We could not determine if the project achieved the energy savings guaranteed in the contract because neither the Unified Government nor the KCC has retained copies of the measurement and verification reports. The contract calls for Johnson Controls Inc. to have completed a measurement and verification report after installation, but Unified Government officials could not find a copy of this report. Further, they told us they thought Johnson Controls Inc. was required to provide reports to verify savings and were providing these documents to the KCC. KCC officials told us they may not have received these reports.

Unified Government officials told us they are satisfied with the project's results, but acknowledged they cannot be certain the energy savings guaranteed under the terms of the contract have been met.

PLAINVILLE SCHOOL DISTRICT (USD 270)

In 2009, the Plainville school district (USD 270) began a FCIP contract for a variety of energy improvements at its elementary/middle school and high school buildings. Trane was hired as the energy service company to upgrade a boiler, install new ventilators, heaters, and lighting, and complete a variety of other improvements in the two buildings. Total project costs were about $2.5 million, which included an FCIP fee of $41,000 to the Kansas Corporation Commission. Project costs did not include any ongoing maintenance costs. The district financed the project with $1 million in its own capital outlay funds with the remainder paid for through an interest-free Qualified Zone Academy Bond. According to the contract, Trane guaranteed savings of $52,000 in the first year with a 3% annual increases for each subsequent year. This guarantee meant the project savings should have met or exceeded project costs in 30 years. In addition, Trane guaranteed $970,000 indirect operational savings—an estimate of future replacement costs that were avoided by replacing equipment early. Indirect operational savings are discussed in more detail on page 10.

We could not determine if the project achieved the energy savings guaranteed in the contract because the measurement and verification report did not include data on actual energy consumption. District officials were able to provide a copy of the project's measurement and verification report which was dated 2012. However, the report's analysis was not based on actual energy costs or usage. Rather, the report concluded that because the energy saving improvements had been installed, that is sufficient evidence that the district will achieve the savings. Here is an excerpt from the measurement and verification report's conclusion:

> The information presented in this report indicates that, Plainville USD 270 achieved the desired energy savings results as defined in the contract. The work provided by Trane, as defined by the contract, was installed in accordance to the contract and will enable the school district to save the energy for the term of the contract.

In the course of this audit, KCC officials reviewed the report and agreed it lacks sufficient detail to conclude whether the Plainville school district has actually realized the energy savings stated in the contract. KCC officials told us they do not doubt the project saved the Plainville school district money, but acknowledged they cannot be certain the energy savings guaranteed under the

terms of the contract have been met. Further, officials agreed there should be more information in the report to support Trane's conclusion.

Plainville officials told us they are satisfied with the project's results, but acknowledged they cannot be certain the energy savings guaranteed under the terms of the contract have been met.

Finding #2: Although Energy Performance Contracts "Guarantee" Savings, We Identified Several Areas of Significant Weakness with this Guarantee

Public entities are not required to have the energy service company prepare a measurement and verification report. KCC officials told us while they strongly recommend public entities require a follow-up report as part of the contract, it is not mandatory. If a measurement and verification report is to be completed, it is generally completed by the energy service company one year after the project is completed. A copy of the report is provided to the customer and sometimes KCC officials receive a report. Not having any measurement and verification after the project's completion creates a risk that none of the involved parties will track or measure whether guaranteed savings are met or not.

A thorough measurement and verification report would compare the pre-project and post-project energy consumption and energy costs. From this one-time comparison, the public entity would be able to project whether the guaranteed savings agreed to in the contract will be met.

Most measurement and verification requirements only require a one-time analysis. The measurement and verification reports are optional and a negotiated term of the contract. If included in the project contract, the energy service company generally will measure and verify the project's savings one year after the project's completion. If the guaranteed savings were met for that year, it is generally accepted the public entity will continue to meet the savings listed in the contract for the life of the project, which in some cases, can be close to 30 years. Meeting the guaranteed savings after the project's first year also makes the energy service company not responsible for completing additional reports in subsequent years. The risk in only completing one measurement and verification report during the life of the project is the possibility that equipment may encounter problems that affect the savings in future years. Without subsequent measurement and verification reports, it can be difficult to determine whether the actual savings match the guaranteed savings agreed to in the contract year after year.

Having energy service companies evaluate the success of their own projects creates a significant conflict of interest within the measurement and verification report process. When a follow-up report is required, it is typically conducted by the same energy service company that installed the new equipment. This is also the same company that would be responsible for compensating the public entity if the project does not deliver the energy savings guaranteed in the contract. In other words, the energy service company has a financial incentive to ensure the guaranteed energy savings agreed to in the contract are being met. In addition, with

no independent validation of the measurement and verification report's findings, the public entity is unable to confirm the accuracy of the report.

Given the conflict of interest for the energy company, it would be a good practice to have someone independently verify the reports' findings. As the administrator of the program, the KCC would be a logical choice. However, in some cases the KCC does not receive copies of the measurement and verification reports. In situations where they do receive a report, KCC officials told us they will review the findings to ensure there are no inconsistencies, but do not perform an independent analysis of the findings. If KCC officials find inconsistencies in the report, they will work with the energy service company and public entity to make any adjustments and will help the public entity negotiate any settlements if there are shortfalls in the energy savings.

Finding #3: We Identified Several Issues with How Project Costs Are Calculated and Whether These Projects Will Generate Sufficient Energy Savings to Pay Project Costs

Savings calculations are based on project costs which generally only include materials and initial installation costs and not ongoing maintenance costs. Maintenance costs can be significant because many of these projects are large in scope and last many years. These costs can be significant, but are not included in the guaranteed savings calculation. Public entities may have a separate contract with the energy service company for maintenance. Yet, those contract costs are not considered part of the project.

Further, the public entity has to contract with the energy saving company to fix the equipment or risk voiding the warranty. For example, our 2013 school district efficiency audit of the Southeast school district (USD 247) identified this as a potential problem. In 2007, the district signed an 18-year, $1.9 million contract with Chevron Energy Solutions to upgrade several buildings with more energy efficient equipment including windows, lighting, and thermostats. Problems with the thermostats required Chevron to replace the thermostats once, but that did not solve the problem. Chevron told school officials the problem was a software issue. One of the school district's maintenance staff attempted to fix the thermostat. Not only was this attempt unsuccessful, it violated the district's agreement with Chevron and voided the warranty on the equipment.

Although a project's energy savings will be realized over a number of years, the savings calculations we reviewed did not properly account for the time value of money. As noted earlier, state law requires that ongoing energy and operational savings from the project be at least equal to the project costs within 30 years. To check this, the energy service company prepares calculations which compare the projected energy savings over time to the project costs. Each project we reviewed had a series of calculations which showed savings would offset the project costs within 30 years as required by state law.

However, basic finance principles state that money in the future is less valuable than money today. That is in part because money loses value due to inflation. It is also because today's money can be spent today or tomorrow, while tomorrow's money can only be spent tomorrow. To properly account for this time value of money, future revenue and savings streams should be discounted to reflect their reduced future value. The discounting process should at least account for inflation, but more typically accounts for an entity's cost of borrowing funds.

For the three projects we reviewed, none of the savings calculations included discounting to account for the time value of money. As a result, the savings estimates are overstated. For a more accurate estimate, we recalculated the projected savings for each project using different discounting assumptions. Because the Wichita State and Unified Government projects were estimated to pay off relatively quickly (less than 15 years for both), their payback timeframes remained well within 30 years, though are not as timely as once initially thought. On the other hand, the Plainville school district project's payback timeframe extends well past 30 years.

Conclusion

The Legislature created the Facility Conservation Improvement Program (FCIP) as a way of promoting energy-saving improvements in public buildings. The program is designed to achieve that goal in two ways. First, the FCIP program streamlines the process for public entities through partnerships with pre-approved energy service companies, an easy process for energy audits, and standardized and simplified contracts. The program permits the customer to negotiate a contract that the energy savings will offset the cost of the projects, with the energy service companies agreeing to make up any shortfalls.

Because our analysis in this audit is limited to just three FCIP projects, definitive conclusions about the program are not possible. However, all three public entities expressed satisfaction with their FCIP projects, which provides at least some indication that the program provides a simple and streamlined process that makes these kinds of projects easier to administer.

On the other hand, none of the three projects had adequate documentation to show that the guaranteed savings had been realized. Wichita State's contract did not require any follow-up analysis, meaning it effectively opted out of the savings guarantee. The Unified Government's contract required at least one follow-up report to verify the energy savings, but neither it nor the KCC had a copy the report. Finally, the Plainville school district did receive a follow-up report from the energy company to verify the savings, but the report's conclusions were based on a deeply flawed methodology.

Even if measurement and verification reports were completed, we identified a significant conflict of interest with the process. The reports are generally conducted by the same energy service company that would be responsible for compensating the public entity if the project does not deliver the energy savings guaranteed in the contract. Therefore, the energy service company has a financial incentive to report that guaranteed savings have been met.

Because of the inadequate follow-up analyses associated with these three projects, we were unable to determine if the public entities achieved the energy savings they were guaranteed under the terms of their contracts. This did not appear to be a significant concern to the entities, as they were all satisfied with their projects. If legislators would like to know if the program is meeting its objectives by promoting energy-saving projects in an efficient manner, additional study and a much deeper analysis than was possible in this limited-scope audit will be required.

Recommendations

1. To address the issue with measurement and verification reports not being required at the conclusion of a FCIP project, the Kansas Corporation Commission should (page 5):

    a. Require an independent third-party complete a measurement and verification report for all projects.

    b. Require the measurement and verification reports to be completed within a set period of time after a project's completion to ensure the savings are being achieved.

    c. Reconsider whether one measurement and verification report is sufficient during the life of a project or whether these reports should be ongoing, especially in projects where it is projected it will take close to 30 years for project savings to equal project costs.

    d. Require a copy of all measurement and verification reports be provided to KCC officials.

    e. Develop a standardized process involving KCC, the public entity, and the energy service company to ensure the measurement and verification reports submitted by the energy service company are consistent and accurate**.**

2. To address the issue of not factoring in variables that can affect payoff schedules over a long period of time, such as borrowing costs, into the project's payoff timeline, the Kansas Corporation Commission should (page 6):

    a. Establish standards for incorporating proper discounting of all future savings when reviewing FCIP projects.

    b. Require all analyses of FCIP projects to adhere to these standards for discounting to help determine a project's projected payoff timeline.

Agency Response

On April 11, 2016, we provided copies of the draft audit report to the Kansas Corporation Commission for technical clarifications and an official response to our findings and recommendations. We also provided a copy to Wichita State University, Unified Government of Wyandotte County and Kansas City, Kansas, and the Plainville school district for technical clarifications. We made several minor clarifications to the final report as a result of the organizations' reviews, but those changes did not affect any of our findings or conclusions.

The Kansas Corporation Commission generally agreed with most of the audit's findings and recommendations, but provided additional clarification and context. KCC officials agreed with or said they will consider the recommended changes to the program, with two exceptions. First, while KCC officials responded they recognize the appeal of periodic measurement and verification methods for projects, they cautioned the use of such measurement procedures on projects would be on a case-by-case basis. They are in the process of gathering and assessing best practices to identify cost effective measures to help improve the program's outcomes. During the course of this limited-scope audit, we did not have time to look at best practices. Second, KCC officials stated their current method for calculating a project's payback time period is consistent with industry standards, and therefore they do not plan to make any changes without legislative directive. During the course of this limited-scope audit we did not have time to fully assess industry standards. Our finding and recommendation in this area are based on common economic reasoning regarding the value of money over long time periods.

The full text of the Kansas Corporation Commission's response is on file and available from Legislative Post Audit.

Potential Issues for Further Consideration

We identified two additional issues worth evaluating in more detail, but because of the limited scope of the audit, we did not have time to fully develop this issue. Although we had unresolved questions about the following issues, more audit work would be needed to determine whether they represent an actual problem or not.

1. **It may require negotiations between the energy service company and public entity before the public entity receives compensation for any shortfalls in guaranteed energy savings.** As stated in the report, we could not determine whether the three projects we reviewed met the guaranteed energy savings. However, one project we read about did not achieve the guaranteed savings. The University of Kansas signed an $18 million contract in 2003 with Viron Energy Services, later acquired by Chevron Energy Solutions. The project installed energy-efficient windows, lights, ventilation systems, and other energy conservation measures. According to an article in a higher education journal, the guaranteed annual savings were supposed to be $1 million, while University of Kansas officials claimed the annual savings were closer to $500,000. After lengthy negotiations, an agreement was reached where Chevron Energy Solutions would pay the University of Kansas $400,000 annually for a period of 12 years. Additional work in this area could include a review of selected FCIP projects and whether the energy service company reimbursed the public entity for any shortfalls between the guaranteed and actual savings. In addition, additional work would determine what type and length of negotiations were needed before the energy service company reimbursed the public entity.

2. **KCC officials and energy service companies need to agree how indirect operational savings of an FCIP project should be factored and calculated into a project's estimated savings.** The Plainville school district's FCIP project included about $970,000 in savings that were described as "indirect operational savings." The contract did not define this term and KCC officials were not familiar with it either. A July 2009 KCC memo defines "indirect operational savings" as being "…created by purchasing new improvements now, thus saving the cost of buying them in the future."

   For example, if an entity will need to replace the windows on a building in 10 years, but instead purchases energy-efficient windows as part of an FCIP project, the replacement purchase in 10 years becomes unnecessary and is avoided. If the entity spends $200,000 now on the energy-efficient windows, but would have spent $150,000 on regular windows in 10 years the project's true cost is not the full $200,000. Rather the true cost is $200,000 minus some amount for avoiding a future cost outlay. The difficulty is trying to quantify the future cost. Several factors would need to be considered, including the future outlay (in this case $150,000), the value of the 10 years of life remaining on the current windows, and the proper discount rate for all costs. In other words, "indirect operational savings" may be a legitimate concept, but without clear definitions and standards, it is difficult to interpret and easy to manipulate. Additional work in this area could focus on when "indirect operational savings" should be included in the analysis and how the amount should be calculated.

APPENDIX A
FCIP Projects (2007-2016)

This appendix includes a summary of all Facility Conservation Improvement Program projects since 2007.

APPENDIX A
Listing of Facility Conservation Improvement Projects
2007-2016
(As of March 2016)

Start Year (a)	Customer	ESCO	Total Project Cost (b)	Total Annual Savings	FCIP Fee
2007	Pittsburg USD 250	Chevron Energy Solutions	$2,121,800	$84,651	$37,218
2007	Cherokee USD 247	Chevron Energy Solutions	$1,128,917	$65,358	$27,289
2007	Bluestem USD 205 Phase I & II	Custom Energy	$2,398,413	$80,710	$22,787
2007	Shawnee County	Chevron Energy Solutions	$7,563,370	$258,779	$78,817
2007	North Central Ks. Technical College	TAC Americas	$778,282	$68,516	$16,827
2007	City of Colby	Johnson Controls, Inc.	$264,214	$20,779	$8,686
2007	Highland USD 425	TAC Americas	$368,947	$35,014	$8,553
2007	City of Parsons	Custom Energy	$7,053,886	$391,608	$24,674
2007 (c)	Wichita State University	Custom Energy	$12,316,635	$1,118,277	$101,327
2008	Unified Gov / Wyandotte Co and KCKs	Johnson Controls, Inc.	$839,052	$45,074	$22,334
2008	City of Pittsburg	Custom Energy	$1,826,932	$120,056	$33,768
2008	Haven USD 312	Custom Energy	$3,455,214	$115,424	$50,351
2008	Rawlins County Health Center	TAC Americas	$222,609	$10,761	$5,604
2008	Midway USD 433	TAC Americas	$527,369	$21,306	$11,901
2008	Iola USD 257	TAC Americas	$728,580	$69,370	$15,720
2008	Rawlins County USD 105	TAC Americas	$428,944	$29,145	$9,716
2008	Wichita State University - Housing	Energy Solutions Professionals	$1,548,989	$109,294	$30,556
2008	KU - Deferred Maintenance	Energy Solutions Professionals	$25,596,490	$2,017,439	$166,440
2008	League of Kansas Municipalities	Johnson Controls, Inc.	$241,153	$18,066	$7,995
2008	Osage County	Trane	$1,077,685	$114,396	$26,777
2008	North Jackson USD 335	Custom Energy	$2,326,667	$57,698	$39,241
2008	Smith County	TAC Americas	$2,608,934	$86,966	$41,673
2008	City of Salina	Chevron Energy Solutions	$1,358,187	$54,114	$75,932
2008	Kansas State University - Water	Johnson Controls, Inc.	$2,124,577	$148,862	$46,336
2008	Piper USD 203	Custom Energy	$7,120,864	$268,501	$78,083
2008	Sabetha USD 441	TAC Americas	$880,914	$71,953	$23,155

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Start Year (a)	Customer	ESCO	Total Project Cost (b)	Total Annual Savings	FCIP Fee
2009	Municipal Services of Olathe	Johnson Controls, Inc.	$12,151,017	$1,157,590	$101,726
2009	Tonganoxie USD 464	Trane	$2,147,528	$217,658	$36,961
2009	Wichita County	TAC Americas	$231,112	$8,156	$7,933
2009	City of Sedgwick	Energy Solutions Professionals	$250,000	$12,216	$8,277
2009	Kansas Dept. of Wildlife and Parks	Ameresco, Inc.	$2,188,845	$188,340	$31,755
2009	Emporia USD 253	Custom Energy	$5,896,099	$198,490	$69,951
2009	Nemaha Valley USD 442	Trane	$382,715	$19,546	$12,166
2009	Southeast of Saline USD 306	Trane	$1,401,073	$83,588	$29,650
2009	Plainville USD 270	Trane	$2,494,361	$52,289	$40,869
2009	Hodgeman County	Energy Solutions Professionals	$250,000	$18,105	$7,766
2009	Sumner Regional Medical Center	TAC Americas	$1,124,888	$104,575	$20,372
2009	Edwards County Hospital	Energy Solutions Professionals	$506,415	$33,692	$15,374
2009	Oxford USD 358	Trane	$1,895,670	$74,691	$34,875
2010	Kansas State University - Phase II	Johnson Controls, Inc.	$19,459,752	$1,512,056	$101,900
2010	Fairfield USD 310	ConEdison Solutions	$1,664,526	$133,784	$32,280
2010	Pitt State University	Energy Solutions Professionals	$5,485,309	$519,650	$62,501
2010	City of Manhattan	Trane	$1,199,720	$60,431	$27,720
2010	Valley Heights USD 498	Trane	$773,233	$56,933	$21,044
2010	Marysville USD 364	Trane	$1,935,000	$83,800	$35,000
2010	Rock Creek USD 323	Trane	$2,181,573	$153,922	$37,349
2010	Sedgwick County	ConEdison Solutions	$1,249,730	$241,704	$28,497
2011	Ellis County	Energy Solutions Professionals	$524,127	$54,144	$15,369
2011	Halstead USD 440	Trane	$1,321,062	$44,117	$28,622
2011	Turner USD 202	Trane	$6,115,412	$245,044	$71,221
2011	City of Salina - Street Lighting	Johnson Controls, Inc.	$2,517,645	$84,094	$40,769

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Start Year (a)	Customer	ESCO	Total Project Cost (b)	Total Annual Savings	FCIP Fee
2012	City of Colby - Water	Johnson Controls, Inc.	$1,754,636	$92,762	$33,214
2012	Coffey County Health System	Schneider Electric	$1,554,333	$70,232	$31,231
2013	KSU Phase III - Steam Tunnels	Johnson Controls, Inc.	$17,852,722	$825,907	$129,616
2014	Harvey County	360 Energy Engineers	$3,617,303	$123,890	$52,398
2015	City of Eudora	360 Energy Engineers	$1,487,368	$168,678	$31,355
2015	Stafford County Hospital	360 Energy Engineers	$466,961	$15,906	$14,679
2015	Wamego USD 320	Navitas	$1,970,572	$80,450	$35,706
2015	Dodge City Community College	Johnson Controls, Inc.	$2,533,755	$125,764	$40,934
2015	Parsons USD 503	Trane	$2,239,961	$90,030	$38,400
2016	City of Lawrence (d)	Not Determined	N/A	N/A	N/A
TOTALS			$195,732,047	$12,434,351	$2,339,240

(a) Represents the year the customer started the process, not the year project construction started or when contracts were signed.
(b) Total Project Costs may include FCIP fee for some projects and not others because of the way costs were recorded inconsistently over time.
(c) Contract documents were signed in 2006.
(d) City of Lawrence is just starting the process so no cost estimates are available.
Source: Kansas Corporation Commission (unaudited)