



John Keel, CPA
State Auditor

An Audit Report on

**Energy Savings Performance
Contracts at Selected Agencies
and Institutions of Higher
Education**

September 2008
Report No. 09-001



An Audit Report on

Energy Savings Performance Contracts at Selected Agencies and Institutions of Higher Education

SAO Report No. 09-001
September 2008

Overall Conclusion

Nine state agencies and institutions of higher education have entered into 15 energy savings performance contracts (contracts) with total calculated costs of \$203.1 million. These contracts have reduced energy consumption, lowered utility costs, and resulted in needed capital improvements to state facilities. However, most of the contracts reviewed lack sufficient guaranteed savings to ensure that all contract costs will be recovered (see text box for definition of guaranteed savings). Improvements are needed in how contracts are reviewed, approved, and managed to maximize the benefit of these contracts to the State.

Analysis of the 15 contracts determined that:

- Two contracts with calculated costs totaling \$30.9 million have guaranteed savings that are sufficient to recover the costs of the associated projects, as required by Texas Government Code, Section 2166.406, and Texas Education Code, Section 51.927.
- Thirteen contracts with calculated costs totaling \$172.1 million do not have guaranteed savings that are sufficient to recover the costs of the associated projects. The guaranteed savings on these 13 contracts is \$27.6 million less than the projected cost of the associated projects. While sufficient energy savings may be achieved over the life of these contracts to pay for the costs of the contracts, the guaranteed savings amounts specified in these contracts do not ensure recovery of total costs.

Background Information

An energy savings performance contract (contract) allows a state agency or institution of higher education to finance the cost of energy-saving improvements with funds saved through reduced utility expenditures. Agencies and institutions of higher education typically finance the cost of the improvements through the state Master Lease Purchase Program.

The State Energy Conservation Office and the Higher Education Coordinating Board are responsible for establishing guidelines and approving these contracts for agencies and higher education institutions, respectively. The Bond Review Board approves requests for Master Lease Purchase Program financing.

These types of contracts are authorized under Texas Government Code, Section 2166.406, for state agencies and Texas Education Code, Section 51.927, for institutions of higher education.

Guaranteed Savings

The contractor guarantees an amount of savings that will be achieved as a result of implementing the energy savings measures in the contract. If the actual energy savings achieved after installation do not meet the amount of savings guaranteed, the contractor is obligated to reimburse the agency or higher education institution for the difference.

By statute, the guaranteed savings must be equal to or greater than the total costs of the contract.

Auditors performed a detailed review of reported energy savings at three entities—Texas Woman’s University, the Parks and Wildlife Department, and the Health and Human Services Commission—and verified combined energy savings of \$14.1 million through reporting year 2007 and that the majority of the equipment in auditors’ samples had been installed at the facilities visited. The energy savings reported by the energy savings performance companies (contractors) were materially accurate at these three entities.

State agencies and institutions of higher education have primary responsibility for ensuring that these contracts conform to statute. In addition, the State Energy Conservation Office and the Higher Education Coordinating Board are required by statute and the Texas Administrative Code to approve these contracts; however, their oversight processes are not sufficient to ensure that guaranteed energy savings cover the cost of these contracts. The State Energy Conservation Office’s and the Higher Education Coordinating Board’s procedures do not ensure that all costs are considered when contract applications are submitted for approval.

Key Points

Guaranteed savings are equal to or exceed total costs in the contracts reviewed at two of the nine entities.

Only two of the nine state agencies and institutions of higher education reviewed—Texas Woman’s University and Texas State Technical College–West Texas—have entered into contracts in which guaranteed savings are equal to or exceed total calculated costs. Statute requires that guaranteed savings equal or exceed the total cost of an energy savings contract.

Neither the State Energy Conservation Office (SECO) nor the Higher Education Coordinating Board (Coordinating Board) verify that guaranteed savings equal or exceed the total costs of proposed contracts.

SECO and the Coordinating Board do not obtain and review proposed contracts, which include the detailed utility audits prepared by the contractor. Instead, SECO and the Coordinating Board rely on agencies and institutions of higher education to self-certify that their contracts meet all statutory requirements, including whether the guaranteed savings equal or exceed costs. Ten of 13 contracts reviewed did not meet the requirement that savings equal or exceed costs when these proposed contracts went through SECO’s or the Coordinating Board’s approval processes.

Statute requires an independent engineer to perform a third-party review of proposed contracts. However, SECO and the Coordinating Board do not review the third-party reviewer summary reports and certifications to ensure the completeness and accuracy of the financial projections contained in these

documents. Auditors identified a number of third-party reports and certifications that were incomplete and/or contained inaccurate information.

Fifteen contracts reviewed commit agencies and institutions of higher education to pay contractors a total of \$17.3 million in measurement and verification fees over the life of these contracts.

With the exception of Texas Tech University, the contracts reviewed require measurement and verification fees to be paid annually to the contractor for the measurement and verification of energy savings, as well as for providing other ongoing and periodic services. These fees range from 2 percent to 27 percent of the total contract amounts. Paying the contractor annual fees to measure and verify energy savings may not be necessary after the equipment has been installed and the energy savings have been consistently achieved. Although contracts allow agencies and institutions of higher education to cancel the payment of these fees, cancellation would allow the contractor to void the statutorily required guarantee of savings.

In addition, the amount of services the contractor will provide in exchange for payment of measurement and verification fees is not defined in the contracts reviewed. As a result, it is not possible to evaluate the reasonableness of the cost of these services.

Contracts include provisions that (1) do not comply with statute and (2) allow the contractor to reduce the total amount of refunds owed when energy savings do not achieve the guaranteed savings amounts.

All 15 contracts reviewed require the contractor to pay for the difference if actual savings fall short of guaranteed savings in a given year. However, if actual savings exceed guaranteed savings in another year, the contracts allow the contractor to recoup its previous payments. These provisions appear to conflict with both Texas Government Code, Section 2166.406, and Texas Education Code, Section 51.927. The amount of energy savings achieved during one year is intended to cover that year's costs and should not be recouped by the contractor in a future year.

Five of the contracts reviewed allowed the contractor to reduce the level of guaranteed energy savings to the amount of debt service. Reducing the guarantee to the amount of debt service may result in the guarantee covering fewer costs.

Energy savings reported by the contractors were materially accurate for the three contracts reviewed in detail.

Energy savings reported by the contractors were materially accurate for Texas Woman's University, the Parks and Wildlife Department, and the Health and Human Services Commission.

Summary of Management's Response

The Bond Review Board, Texas Public Finance Authority, and Higher Education Coordinating Board agree with all recommendations for their agencies. The State Energy Conservation Office is in general agreement with most of the recommendations involving improved oversight of energy savings performance contracts. However, the State Energy Conservation Office does not agree that it is statutorily required to review and approve these contracts.

Several agencies and higher education institutions whose contracts were reviewed by auditors disagreed with selected audit findings and recommendations in this report. Management responses from these agencies and higher education institutions indicate the need for enhanced guidance and oversight by the State Energy Conservation Office and the Higher Education Coordinating Board to ensure that contracts comply with the Texas Government Code and Texas Education Code. Significant disagreements include whether:

- Measurement and verification fees should be included in the total cost of the contract amount that guaranteed savings must equal or exceed.
- Non-energy savings projects may be included in an energy savings performance contract, and whether the costs of non-energy savings projects should be included in the total cost of the contract amount that guaranteed savings must equal or exceed.

Detailed responses from the agencies and institutions of higher education are presented in Appendices 9 through 18 beginning on page 57. All higher education institutions whose contracts are discussed in this report were invited to submit a management response; Angelo State University and Lamar University submitted management responses.

Summary of Objectives, Scope, and Methodology

The audit objectives were to:

- Determine whether the selected contracts were competitively bid.
- Verify the accuracy of reduced energy consumption and the amount of dollars saved.
- Determine how the amounts of projected annual energy savings and monitoring fees were established under the contracts.
- Benchmark the State's practice of contracting for post-installment monitoring with other government agencies' energy conservation programs.

- Determine the accuracy and completeness of information submitted by participating agencies to the Bond Review Board for financing under the Master Lease Purchase Program.
- Determine whether the contractors are performing the work specified in the terms and conditions of the contracts.
- Determine whether the State's interests are adequately protected under the contracts.

The scope of this audit included contracts at two state agencies and seven institutions of higher education that were approved for financing by the Bond Review Board for fiscal years 2000 through 2008. In addition, auditors reviewed a draft energy savings contract for the Texas Youth Commission that was submitted to the Bond Review Board in 2007 and later withdrawn. Auditors also reviewed the oversight roles of SECO, the Coordinating Board, the Bond Review Board and Texas Public Finance Authority.

The audit methodology included collecting information and documentation; performing selected tests and other procedures; analyzing and evaluating the results of the tests; and conducting interviews with the management and staff at SECO, the Coordinating Board, the Bond Review Board, the Public Finance Authority, Texas Woman's University, the Parks and Wildlife Department, the Health and Human Services Commission, and their contractors. Auditors also reviewed contracts, third-party certifications and summary reports, and SECO's and the Coordinating Board's procedures. Auditors performed an in-depth analysis of the contracts at Texas Woman's University, the Parks and Wildlife Department, and the Health and Human Services Commission for Phase 1. This included a review of these entities' procurement processes, reported energy savings, equipment installation, and payments for contracts.

Contents

Detailed Results

Chapter 1 Energy Savings Performance Contracts Have Saved Energy and Reduced Utility Costs; However, Contracts for Seven of Nine Entities Reviewed Do Not Comply with Statute	1
Chapter 2 Entities Responsible for Overseeing Contracts Do Not Ensure That Guaranteed Savings Cover the Cost of Energy Contracts	4
Chapter 3 Contracting Practices for Energy Savings Contracts Should Be Improved to Better Protect the State's Interests.....	19
Chapter 4 Results of Detailed Audits of Selected Contracts	28

Appendices

Appendix 1 Objectives, Scope, and Methodology.....	39
Appendix 2 Detailed Information on Energy Savings Contracts at Texas State Agencies and Higher Education Institutions	43
Appendix 3 Comparison of Energy Savings Contracts in Texas with Similar Contracts in Other States	44
Appendix 4 Methods of Financing that State Agencies and Higher Education Institutions Can Use for Energy Savings Contracts.....	45

Appendix 5	SECO Approval Checklist for State Agencies' Energy Savings Contracts	47
Appendix 6	The Coordinating Board's Approval List for Institutions of Higher Educations' Energy Savings Contracts.....	48
Appendix 7	Texas Government Code and Texas Education Code Requirements for Energy Savings Contracts.....	50
Appendix 8	Flowchart of Approval Process for Energy Savings Contracts in Texas.....	56
Appendix 9	Responses from State Energy Conservation Office	57
Appendix 10	Responses from the Higher Education Coordinating Board	62
Appendix 11	Responses from the Bond Review Board	65
Appendix 12	Responses from the Texas Public Finance Authority.....	66
Appendix 13	Responses from Texas Woman's University	67
Appendix 14	Responses from the Parks and Wildlife Department	69
Appendix 15	Responses from the Health and Human Services Commission	72
Appendix 16	Responses from the Texas Youth Commission	76
Appendix 17	Responses from Angelo State University.....	77
Appendix 18	Responses from Lamar University	80

Detailed Results

Chapter 1

Energy Savings Performance Contracts Have Saved Energy and Reduced Utility Costs; However, Contracts for Seven of Nine Entities Reviewed Do Not Comply with Statute

Energy Savings Performance Contracts

According to Texas Government Code, Section 2166.406, and Texas Education Code, Section 51.927, a state agency or institution of higher education may enter into an energy savings contract only if the amount spent on the energy savings contract will not exceed the amount to be saved in any one year. In addition, these statutes require the energy savings performance company to guarantee this amount of savings.

State agencies and institutions of higher education have reduced energy consumption and lowered utility costs through energy savings performance contracts (contracts). Detailed audits at three entities—Texas Woman’s University, the Parks and Wildlife Department, and the Health and Human Services Commission—verified a combined savings of \$14.1 million through reporting year 2007. These contracts also have resulted in needed facility improvements, and the energy savings measures will likely result in increased benefits if the cost of energy increases in the future. However, of the 15 contracts reviewed at two agencies and seven institutions of higher education, 13 do not contain sufficient guaranteed savings to repay costs, as required by statute (see text box), and several contracts are at risk of not generating enough savings to pay for the calculated total cost of the contracts.

To be in compliance with statute, contracts should be designed so that guaranteed savings cover all costs related to the contract. Costs include the face value of the contracts including change orders; financing costs, including interest and administrative fees; and measurement and verification fees paid to the contractor. The 15 contracts at 2 agencies and 7 institutions of higher education have \$203.1 million in total calculated costs. However, only two of nine entities—Texas Woman’s University and Texas State Technical College-West Texas—have guaranteed energy savings equal to or greater than the total costs of their energy savings contracts. As a result, two state agencies and five institutions of higher education have entered into contracts that do not have enough guaranteed savings to cover the calculated total costs (see Table 1 on the next page).

While actual energy savings achieved during the terms of these contracts may be sufficient to pay for the costs of the energy saving improvements, the guaranteed savings amounts specified in the contracts do not ensure complete recovery of all costs. If sufficient actual savings are not achieved, these seven state agencies and institutions of higher education could need to pay for a portion of the costs of the contracts from another source of funds.

Table 1

Summary of Energy Savings Performance Contracts Reviewed ^a							
Agency/Higher Education Institution	Contract Term in Years	Contract Amount	Financing Costs	Measurement and Verification Fees ^c	Total Contract Costs ^{d f}	Face Value of Guaranteed Savings Over Contract Term ^e	Guaranteed Amount Over (Under) Total Costs
Angelo State University	15	\$ 13,198,066	\$ 6,420,342	\$ 1,365,000	\$ 20,983,408	\$ 11,985,210	\$ (8,998,198)
Health and Human Services Commission (Seven Contracts)	15	76,467,674 ^f	33,671,912 ^b	9,820,488	119,960,074	105,212,080 ⁱ	(14,747,994)
Lamar University	15	13,747,451	6,409,256	981,400	21,138,107	19,794,555	(1,343,552)
Parks and Wildlife Department	15	2,652,239 ^g	381,634 ^b	142,143	3,176,016	1,561,120 ⁱ	(1,614,896)
Texas State Technical College-Harlingen	15	990,755	314,961	270,878	1,576,594	1,083,780	(492,814)
Texas State Technical College-West Texas	10	1,383,987	387,653	72,796	1,844,436	2,072,154	227,718
Texas Woman's University	15	19,356,139	7,425,084	2,320,503	29,101,726	34,513,128 ⁱ	5,411,402
Texas Tech University	6	573,243 ^h	111,051	\$10,500 ^h	694,794	668,028 ⁱ	(26,766)
University of North Texas - Health Science Center at Fort Worth	15	3,200,000	1,016,656	426,741	4,643,397	4,299,810	(343,587)
Totals		\$131,569,554	\$56,138,549	\$15,410,449	\$203,118,552	\$181,189,865	\$(21,928,687)

^a These amounts are denominated in present value and do not account for the future value of dollars.

^b This does not include the cost to the State for financing with Proposition 8 funds.

^c These incorporate amounts actually paid as of August 31, 2007.

^d The total contract costs noted here do not include third-party review costs. Entities received a total of \$420,843 in utility rebates not reflected here.

^e Guarantees may not be fully realized on an annual basis (see Chapter 3-B for more information).

^f Includes change orders totaling \$1,596,275.

^g Includes change orders totaling \$158,288.

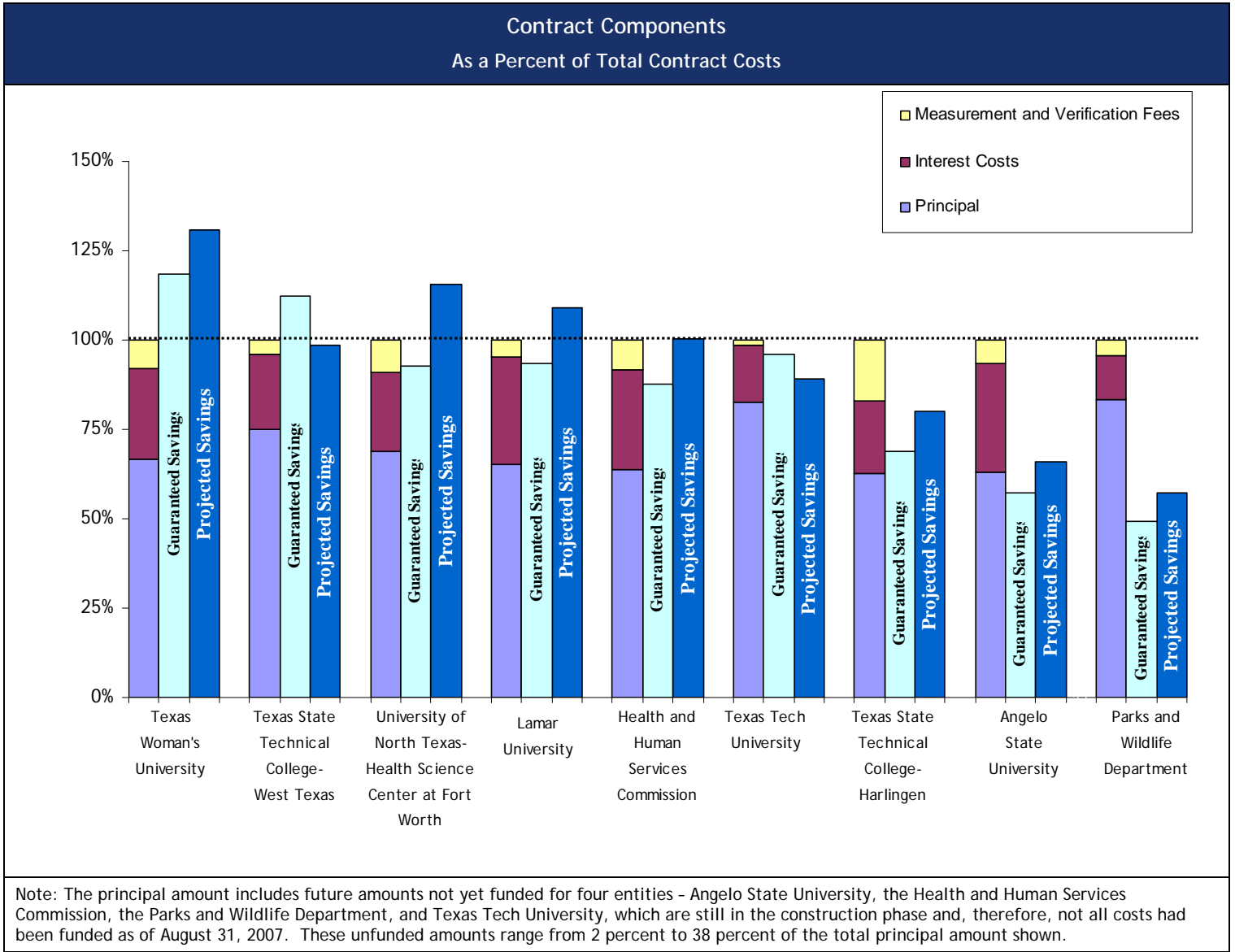
^h The total contract cost includes a \$10,500 one-time measurement and verification fee.

ⁱ Includes installation period guarantee amounts.

The energy savings performance company (contractor) projected, but did not guarantee, that savings would exceed total costs in the University of North Texas-Health Science Center at Fort Worth and Lamar University contracts. While the Health and Human Services Commission's seven contracts in the aggregate have projected savings that exceed the contracts' debt service principal and interest amounts, the guaranteed saving amounts do not cover the full amount of principal and interest.

The contracts at Texas Tech University, Texas State Technical College-Harlingen, Angelo State University, and the Parks and Wildlife Department have guaranteed and projected savings that are less than the projected debt service principal and interest amounts. These four contracts are not structured to recover the costs of the contracts through energy savings (see Figure 1).

Figure 1



Sources: Energy savings performance contracts, detailed utility audits, and financial information provided by state agencies and institutions of higher education.

Entities Responsible for Overseeing Contracts Do Not Ensure That Guaranteed Savings Cover the Cost of Energy Contracts

The agencies and institutions of higher education entering into contracts bear primary responsibility for ensuring these contracts conform to state statutes. However, according to the financial information in the contracts at the time they were executed, seven of the nine agencies and higher education institutions reviewed did not ensure that guaranteed energy savings equaled or exceeded costs, as required by statute.

Specifically, the agencies and institutions of higher education reviewed:

- Did not account for all costs associated with the contracts.
- Included a number of energy savings measures with payback periods significantly longer than the term of the contract, which reduces the overall cost-effectiveness of the energy savings contract.
- Over-relied on third-party reviewers and either the State Energy Conservation Office (SECO) or the Higher Education Coordinating Board (Coordinating Board) to ensure that savings equaled or exceeded total costs.

State statute requires SECO (for state agencies) and the Coordinating Board (for institutions of higher education) to establish guidelines and an approval process for awarding contracts. In addition, the Texas Government Code requires SECO and the Texas Administrative Code requires the Coordinating Board to approve all energy savings contracts entered into by agencies or institutions of higher education. While both SECO and the Coordinating Board have created guidelines and an approval process for awarding energy savings contracts, these guidelines and approval processes are not adequate to ensure that these contracts comply with state statutes and that the State's interests are sufficiently protected. Specifically, SECO and the Coordinating Board:

- Did not review copies of the proposed contracts before approving them.
- Did not review the completeness of reports prepared by third-party engineer reviewers.
- Did not compare third-party reviewer reports to the financial projections of costs and savings in the detailed utility audits prepared by the energy savings companies.

After a contract has gone through SECO's or the Coordinating Board's approval process, agencies and institutions of higher education must seek

Bond Review Board approval if they choose to use Master Lease Purchase Program financing. However, the Bond Review Board:

- Did not verify that SECO or the Coordinating Board had approved the contract.
- Lacked written policies or procedures to guide it in reviewing financing for energy contracts.

Chapter 2-A

Most of the State Agencies and Institutions of Higher Education Reviewed Did Not Ensure That Guaranteed Energy Savings Equaled or Exceeded Costs

Under state statute, state agencies and institutions of higher education are allowed to enter into an energy savings contract for more than one year only if the costs of the contract do not exceed the guaranteed savings. However, only two of nine state agencies and institutions of higher education—Texas Woman’s University and Texas State Technical College-West Texas—entered into energy savings contract in which guaranteed savings were equal to or exceeded projected total costs.

Most of the state agencies and institutions of higher education reviewed did not account for all costs associated with the contracts.

The executed contracts at the agencies and institutions of higher education reviewed contained sufficient financial projections to determine whether guaranteed savings were equal to or exceeded projected total costs. However, contracts at two agencies and five institutions of higher education did not contain sufficient guaranteed savings. Had these seven entities adequately reviewed this financial information and accurately considered all costs, they should have concluded that these contracts did not comply with statute.

Currently, the guidelines for SECO and the Coordinating Board do not specify who at the agency or institution of higher education should certify that costs do not exceed guaranteed savings. As a result, the person making this certification may not have the necessary financial and legal expertise to accurately evaluate the costs and legal requirements of these contracts.

Several contracts reviewed contain projects with projected payback periods that are longer than the term of the contract.

Contracts at six of the entities reviewed contained at least one project in which the energy savings generated will not pay for the cost of the projects within the term of the contract. For example, Angelo State University’s energy savings contract, which has a 15-year term, contains projects with payback periods of more than 20 years. While state statute does not prohibit individual projects from having a payback period that exceeds an energy savings

contract's term, these projects must be bundled with other projects that generate sufficient savings so that the combined savings of all projects covers all contract costs. If agencies and institutions of higher education do not ensure that projects with longer payback periods are sufficiently offset by projects with shorter payback periods, they risk having insufficient savings to cover total costs.

Examples of contracts with long payback projects include:

- Lamar University, whose \$13.7 million, 15-year contract includes:
 - ♦ \$3.3 million in costs for the replacement of central plant equipment at one facility with a projected payback period of 27.1 years.
 - ♦ \$338,818 in costs for replacement of central plant equipment at another facility with a projected payback of 49 years.
- The Parks and Wildlife Department, whose \$2.4 million, 15-year contract includes:
 - ♦ \$1.9 million in costs for mechanical renovations with a projected payback period of 23.2 years.
 - ♦ \$134,835 in costs for the installation of window film with a projected payback period of 68.9 years.
 - ♦ \$129,804 in costs for the installation of high-energy transformers with a projected payback period of 45.2 years.
 - ♦ \$39,915 in costs for the construction of an entrance vestibule with a payback period of 77.6 years.
- The University of North Texas Health Science Center at Fort Worth, whose \$3.2 million, 15-year contract includes \$493,584 in costs for the installation of chillers with a projected payback period of 23.5 years.
- Angelo State University, whose \$13.2 million, 15-year contract includes:
 - ♦ \$5.1 million in costs for replacement of air handler units with a projected payback period of 25.3 years.
 - ♦ \$1.6 million in costs for other improvements to air handler units with a projected payback of 23.5 years.

In addition, Angelo State University's contract included \$1.0 million in costs for the installation of laboratory vent hoods, which is projected to generate no energy savings. This project should not have been included in the energy savings contract.

Third-party Reviewer Requirements

Texas Government Code, Section 2166.406(i), and Texas Education Code, Section 51.927(i), require that the cost savings projected by a contractor be reviewed by a third-party reviewer who meets the following requirements:

- Is a licensed professional engineer.
- Has a minimum of three years of experience in energy calculation and review.
- Is not an officer or employee of an offeror for the contract under review.
- Is not otherwise associated with the energy savings contract.

State agencies and institutions of higher education rely on third-party reviewers for ensuring that savings are equal to or exceed costs.

Most of the state agencies and institutions of higher education reviewed did not independently ensure that all costs associated with the contracts did not exceed savings. These entities did not verify that the financial projections contained in the reports and certifications prepared by third-party reviewers were complete and accurate.

These third-party reviewer's reports are a critical control that should help to ensure the effectiveness of these contracts. However, auditors identified inaccuracies and incomplete information in third-party reports that were not addressed before the contracts were submitted to either SECO or the Coordinating Board for approval (see Chapters 2-B and 2-C for more information).

Recommendation

SECO and the Coordinating Board should revise their guidelines to specify that an agency's or institution of higher education's chief financial officer and general counsel review the energy savings contract and third-party certification to ensure that (1) costs do not exceed guaranteed savings and (2) other legal provisions are in compliance.

Although SECO Has Established Guidelines and an Approval Process for State Agencies, It Does Not Approve Draft Energy Savings Contracts as Required by Statute

SECO has developed contracting and technical requirements, guidelines, and an approval process for energy contracts, as required by statute (see text box).

However, this approval process is not adequate to ensure that the contracts comply with all statutory requirements. None of the eight energy savings contract applications approved by SECO had guaranteed savings greater than or equal to the total cost of the contract.

SECO's Statutory Oversight Requirements

Texas Government Code, Section 2166.406 (i), states:

"The State Energy Conservation Office shall establish guidelines and an approval process for awarding energy savings performance contracts."

"An energy savings performance contract may not be entered into [by a state agency] unless the contract has been approved by the State Energy Conservation Office."

SECO does not obtain, review, or approve the proposed contracts. The contract includes the detailed utility audit, which includes financing assumptions, costs, and saving projections for the energy savings proposal. Without reviewing the proposed contracts, SECO cannot ensure compliance with the statutory requirement that savings are greater than or equal to costs.

Instead, SECO's approval process relies on the agency's self-certification that it has met the statutory requirements incorporated into SECO's guidelines. In addition, as discussed in Chapter 2-A, SECO guidelines do not specify who at the agency should certify that costs do not exceed guaranteed savings. SECO's approval process requires that an agency submit three documents:

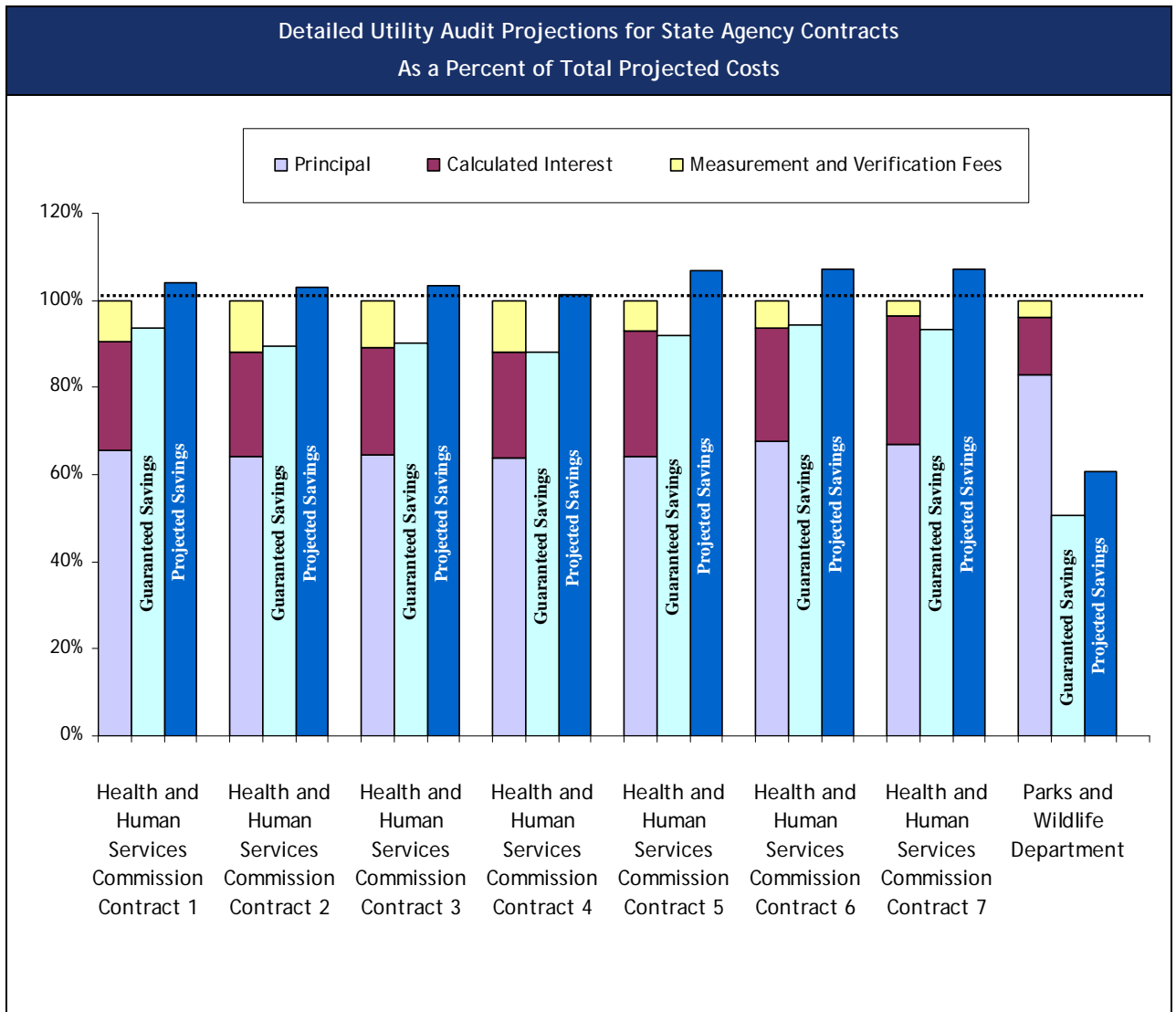
- A completed checklist indicating that the agency has complied with all SECO guidelines (see Appendix 5 for a copy of this checklist).
- A third-party reviewer certification.
- A summary of the findings report prepared by the third-party reviewer.

SECO does not verify that these self-certifications are complete and accurate. As a result, SECO approved the non-compliant self-certifications submitted by the agencies. None of the eight self-certifications approved by SECO since December 2004 complied with statute because guaranteed savings were not projected to cover total costs associated with the energy savings contract.

Both the Parks and Wildlife Department and the Health and Human Services Commission submitted self-certifications stating that the guaranteed savings in their contracts were equal to or greater than projected costs. However, at the time of approval, none of the contracts at these two agencies had guaranteed energy savings that were equal to or greater than the projected costs of the contract. Costs exceeded guaranteed savings for the Parks and Wildlife Department contract by \$1.5 million, and the total combined cost for all seven of the Health and Human Services Commission's contracts exceeded

guaranteed savings by a total of \$10 million.¹ In addition, the guaranteed savings for three of Health and Human Services Commission’s contracts—Contracts 4, 5, and 7—did not cover principal and interest. Figure 2 shows the projected costs and energy savings for these contracts at the time they were submitted to SECO.

Figure 2



Sources: Auditors’ review of detailed utility audits for the state agency contracts, and the Texas Public Finance authority debt estimator calculator.

¹ The numbers in this chapter differ from those presented in Chapter 1. Auditors calculated the projected costs and savings in this chapter based on the amounts in the proposed energy savings contract. The totals in Chapter 1 included actual payments made as of August 31, 2007, which differed from the contracted amounts due to construction delays and variances in reported savings. Actual interest rates for five of these Health and Human Service Commission contracts increased from a projected 4 percent to an actual 5 percent. Due to the increase in interest rates, the deficit between costs and guaranteed savings increased from \$10 million to \$14.7 million (see Table 1 in Chapter 1).

SECO did not review reports from third-party reviewers to verify the accuracy of financial information.

While third-party reviewer reports are a critical control to help guarantee the effectiveness of the contracts, SECO did not review the reports and certifications prepared by third-party reviewers and submitted by agencies to

Third-party Reviewer Certification

Third-party reviewers of energy savings contracts are required to submit to SECO a certification attesting that:

- “The guaranteed annual savings will be equal to or greater than the total annual cost of the project, for each year during the life of the contract.”
- “To the best of [the reviewer’s] knowledge, all contract documents comply with all applicable federal, state, and local construction and environmental codes and regulations.”
- “The contract contains a utility assessment report, a [measurement and verification] plan, and a sample periodic savings report that documents current energy consumption and will document further energy and water savings that occur as a direct result of the project.”
- “Payment and performance bonds are required by contract.”
- “All costs for verification of savings, provision of bonds, financing, administration, guarantees, etc. are included in the overall cost of the contract.”

ensure that these summary reports and certifications were complete and the projections of costs and savings were accurate (see text boxes for list of required assertions of third-party reports and certifications). As discussed above, SECO does not obtain a copy of the proposed contract, which contains the detailed utility audit. This is the only document that presents the contractor’s analysis of financing assumptions, costs, and savings. If SECO does not review these documents, it cannot ensure that the summary information contained in the third-party reports and certifications is complete and accurate.

Auditors’ review of eight summary reports—seven from the Health and Human Services Commission and one from the Parks and Wildlife Department—identified several reports that were incomplete and/or did not comply with SECO guidelines.

The Health and Human Services Commission’s summary reports had the following problems and were still accepted by SECO:

- Three of the seven reports:
 - ♦ Clearly stated that the engineer did not review the contract.
 - ♦ Did not contain a statement that the technical interests of the State were protected.
- One report stated that all financial provisions were not evaluated.

The Parks and Wildlife Department’s summary report had the following problems:

- It did not discuss the reasonableness of the budget estimates.
- It did not include a statement that the technical interests of the Department were protected.

Summary of Findings Report

Third-party reviewers also prepare a summary of findings report, which the agency must submit to SECO in its application for energy savings contract approval. This report must contain assertions that:

- Project descriptions are complete, accurate, and represent on-site conditions observed by the reviewer.
- Projects included in the contract are appropriate solutions to the existing on-site conditions.
- The methods of calculating savings are reasonable and accurate according to generally accepted engineering standards.
- Contract measurement and verification plans are appropriate for each utility cost reduction measure and meet International Performance Measurement and Verification Protocol requirements.
- Budget estimates are reasonable.
- The technical interest of the agency is protected in the contract. This is a technical review (not a legal review) that considers construction and environmental codes and regulations, energy efficiency standards, equipment quality, equipment pricing, projects’ savings calculations, the proposed measurement and verification fees plan, and other technical interests.
- Costs and benefits are in balance.

In addition, SECO guidelines do not require third-party reviewers to attest that they are independent from the contractor and not otherwise associated with the energy savings contract to conduct the review.

Third-party reviewers use different criteria when determining whether energy savings are greater than or equal to contract costs. Auditors interviewed three engineers who signed and certified third-party engineering reports for the contracts reviewed. One engineer reported that the calculations were based on total projected savings, which can be as much as 25 percent higher than the guaranteed savings amounts in the contract. Another engineer reported that the calculations used guaranteed savings amounts in the contract. The third engineer reported that the review was limited and relied on the assertions made by a licensed engineer employed by the contractor.

Recommendations

SECO should:

- Review and analyze energy savings performance contracts before approving these contracts. This should include:
 - ♦ Reviewing a copy of the proposed contract to ensure it complies with SECO guidelines.
 - ♦ Reviewing third-party reports and certifications to ensure all information is complete and meets all SECO guidelines.
 - ♦ Comparing third-party reviewer reports to the proposed contract to ensure that the information on costs and savings is consistent and that savings are greater than or equal to all costs associated with the contract.
- Amend its third-party reviewer certification and summary of findings report to require third-party reviewers to attest to their independence.
- Ensure that third-party reviewers use guaranteed savings in determining whether a contract's savings will cover total costs.

The Coordinating Board Approved Contracts That Did Not Comply with Statute

The Coordinating Board did not detect inaccurate and incomplete information in energy savings contract applications and approved contracts that did not comply with state statute and the Texas Administrative Code. Only three of five energy savings contract applications approved by the Coordinating Board had guaranteed savings greater than or equal to the total cost of the contracts.

Coordinating Board's Statutory Oversight Requirements

Texas Education Code, Section 51.927(i), states:

"The Texas Higher Education Coordinating Board, in consultation with the State Energy Conservation Office with regard to energy and water conservation measures, shall establish guidelines and an approval process for awarding energy savings performance contracts."

Title 19, Texas Administrative Code, Section 17.80, states:

"[Coordinating] Board approval is required before an institution enters into an energy savings performance contract as defined in Texas Education Code, Section 51.927."

The Coordinating Board must approve all energy savings contracts entered into by institutions of higher education (see text box). Although the Coordinating Board has established guidelines and an approval process, these are not adequate to ensure that energy savings contracts comply with all statutory requirements and administrative rules. The Coordinating Board's one-page guidelines do not contain sufficient detail to provide adequate guidance to institutions of higher education for the development and procurement of energy savings contracts (see Appendix 6 for the Coordinating Board's approval list).

The Coordinating Board's approval process does not include obtaining and reviewing proposed contracts before approving them. The contract includes the detailed utility audit, which includes all financing assumptions, costs, and savings projections for the energy savings proposal. Without reviewing this contract, the Coordinating Board cannot accurately determine whether the savings equal or exceed costs.

Instead, the Coordinating Board relies on third-party reviews and summary information provided by the institution of higher education. In addition, as discussed in Chapter 2-A, Coordinating Board guidelines do not specify who at the institution of higher education should certify that costs do not exceed guaranteed savings. The Coordinating Board's approval process requires an institution of higher education to submit:

- A completed project application, which includes Board of Regent's approval of the proposed contract.
- A third-party reviewer certification.

In addition, the institution of higher education must provide the Coordinating Board with a copy of the signed contract within 30 days of its effective date. However, the Coordinating Board had on file only two of the five contracts submitted for approval, and the Coordinating Board did not obtain these contracts until as much as 440 days after the contracts were executed.

The Coordinating Board does not verify that these self-certifications are complete and accurate. As a result, two of five contracts at higher education

institutions approved by the Coordinating Board did not comply with statute because guaranteed savings were not projected to cover all costs associated with the contracts.²

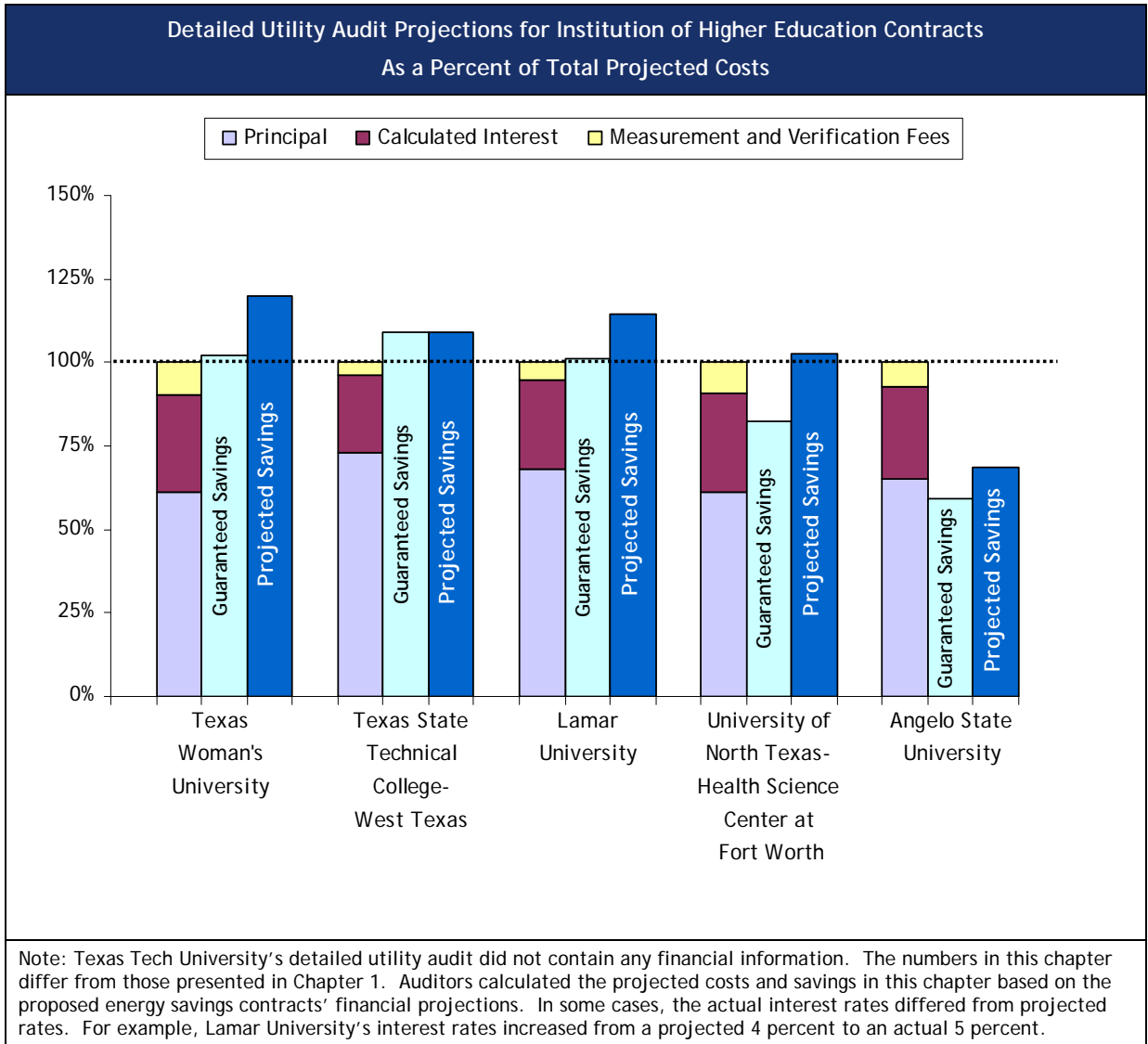
The Coordinating Board's guidelines for energy savings contracts require that energy savings be equal to or greater than the cost of the contract. However, the Coordinating Board does not specify which type of savings—guaranteed or projected—should meet or exceed costs. As discussed in Chapter 2-B, third-party reviewers use different criteria to determine whether energy savings are equal to or greater than contract costs.

Three of the five institutions of higher education have both projected and guaranteed savings that are equal to or greater than the cost of the contracts. The University of North Texas–Health Science Center at Fort Worth has projected savings that are greater than the contract costs; however, guaranteed savings are less than contract costs. Angelo State University did not have either projected or guaranteed savings that met or exceeded costs (see Figure 3 on the next page).

² The Coordinating Board did not receive an application for approval from Texas Tech University. In addition, Texas State Technical College-Harlingen's contract was not subject to Coordinating Board approval at the time it was executed.

Figure 3 shows the detailed utility audit financial projections for the five higher education institutions.

Figure 3



Sources: Auditors' review of detailed utility audits.

The Coordinating Board did not adequately review third-party reviewer certifications to verify the accuracy of financial information.

The Coordinating Board does not verify third-party reviewers' analyses of energy savings to ensure that the certifications were complete and the projections of costs and savings were accurate. As discussed above, the Coordinating Board does not obtain the proposed contract, which includes the detailed utility audit. This is the only document that presents the contractor's analysis of financing assumptions, costs, and savings. If the Coordinating

Board does not review this detailed utility audit, it cannot determine whether the financial assumptions and projections in a third-party reviewer's report are accurate.

For example, in the detailed utility audit for Angelo State University, the contractor clearly stated that the 15-year contract would generate a negative annual cash flow of \$394,533 or \$5.9 million for the life of the contract. However, the third-party reviewer's letter to Angelo State University stated "the savings achieved as a result of this [contract] will be greater than the cost of the [contract]." The total costs related to Angelo State University's proposed contract are projected to exceed energy savings by about \$8.3 million over the life of the contract when financing costs and measurement and verification fees are included.

Coordinating Board rules also require institutions of higher education seeking to enter into an energy contract to provide a statement from a third-party reviewer certifying that the contract meets the Coordinating Board's guidelines (see Appendix 6 for a list of guidelines). Auditors identified third-party certifications that were incomplete and/or did not comply with Coordinating Board guidelines. Specifically:

- Two of five certifications did not:
 - ♦ Contain a statement that the engineer had reviewed the contract.
 - ♦ Contain a statement from the engineer stating that the method of calculating savings was reasonable.
 - ♦ Contain a statement from the engineer that the plans were appropriate.
- Four of five certifications were dated after the Coordinating Board approved the contract.

Recommendations

The Coordinating Board should:

- Work with SECO to formulate more detailed guidelines for energy savings performance contracts to ensure that contracts address all statutory requirements and that third-party reviewers have sufficient criteria for reviewing contractor proposals.
- Review and analyze proposed contracts before approving them. This should include:
 - ♦ Reviewing the proposed contract to ensure it complies with Coordinating Board guidelines.

- ♦ Reviewing third-party certifications to ensure all information is complete and meets Coordinating Board guidelines.
- ♦ Comparing third-party reviewer reports to the proposed contract to ensure that the information on costs and savings is consistent and that savings are greater than or equal to total costs associated with the contract.
- Clarify that third-party reviewers must use the amount of guaranteed savings to determine whether a contract's savings will cover total costs.

Chapter 2-D

The Bond Review Board Lacks Written Policies and Procedures for Approving Financing for Energy Savings Contracts and Does Not Receive Executed Copies of These Contracts

State agencies and institutions of higher education that want to use Master Lease Purchase Program financing for energy contracts are required to receive approval from the Bond Review Board. In fiscal year 2007, the Bond Review Board approved approximately \$5.87 billion in new-money and refunding bonds for state agencies and institutions of higher education. This audit focused only on the Bond Review Board's approval of \$131.6 million in financing for energy saving contracts since fiscal year 2000.

Bond Review Board Approval Process

Agencies and institutions of higher education must submit an application containing a description of the energy savings contract, anticipated principal amount, and financing period. The Bond Review Board reviews the application and either approves Master Lease Purchase Program financing for it or tables the request. The Bond Review Board must notify the agencies or institutions in writing of any action taken on their applications.

Since December 1999, the Bond Review Board approved Master Lease Purchase Program financing for energy savings contracts at two agencies and seven institutions of higher education. However, the Bond Review Board lacks written policies and procedures for approving financing for energy savings contracts, including a procedure to verify that an energy savings contract has been approved by either SECO or the Coordinating Board. In addition, the Bond Review Board does not receive a copy of the executed contract to verify that the total costs and methods of financing have not changed after its approval.

The Bond Review Board lacks written polices and procedures for reviewing energy contracts.

The Bond Review Board requires agencies and institutions of higher education to submit a number of supporting documents with their application for financing. However, the Bond Review Board does not have written policies and procedures specifically for reviewing energy contracts. As a result, the Bond Review Board did not consistently verify that SECO or the Coordinating Board had approved the contract before considering financing.

The Texas Government Code requires state agencies to obtain SECO's approval before entering into an energy savings contract, and the Texas Administrative Code requires institutions of higher education to receive

Coordinating Board approval. However, 6 of 10 applications³ for financing did not include documentation of SECO or Coordinating Board approval required by the Bond Review Board in order to consider financing for these contracts. Detailed, written policies and procedures would help the Bond Review Board ensure that the contracts it approves for financing meets statutory requirements for energy savings performance contracts.

The Bond Review Board does not receive executed contracts to verify total costs and methods of financing.

After financing is approved, the agency or institution of higher education negotiates with the contractor to finalize the scope of work and cost of the contract. There is a risk that significant changes in financing, costs, savings, and other items could occur without the Bond Review Board's knowledge. However, the Bond Review Board does not require agencies or institutions of higher education to provide a copy of the executed contract for review. For example, in its application to the Bond Review Board, the Parks and Wildlife Department did not document that the full amount of its energy savings contract was \$2.5 million; the Department requested financing for only \$1.3 million in its application (see Chapter 4-B for a discussion of the Parks and Wildlife Department's contract). Reviewing the executed contract would also help the Bond Review Board identify whether a requesting agency or institution of higher education had provided inaccurate or incomplete financial information.

Recommendations

The Bond Review Board should:

- Develop written policies and procedures for reviewing and approving financing for energy contracts.
- Ensure that contracts have been approved by either SECO or the Coordinating Board before it considers financing for the contract.
- Establish procedures to ensure that the loan amounts agree with the final executed contract before the transaction is taken to the Bond Review Board for approval.

³ Although the report discusses energy savings contracts at nine state agencies and institutions of higher education, the Bond Review Board received 10 applications for financing because the Health and Human Services Commission submitted two separate applications.

The Texas Public Finance Authority Lacks Procedures to Verify the Eligibility of Costs Contained in Invoices for Energy Savings Contracts

Agencies and institutions of higher education that receive approval from the Bond Review Board for Master Lease Purchase Program financing must enter into a purchase agreement with the Texas Public Finance Authority (TPFA), which manages the State's Master Lease Purchase Program. Agencies and institutions of higher education must submit their energy savings contractor invoices to TPFA as they become due and payable. TPFA finances these transactions by obtaining commercial paper and, once financing is established, sends a payment for the invoices directly to the contractor.

For energy savings contracts, TPFA relies on the state agency or institution of higher education to certify that all costs contained in an invoice are allowable and within the scope of the energy savings contract. TPFA does not verify that certification, nor is it able to perform any review or comparison between submitted invoices and the energy contract because it does not receive a copy of the executed contract or any supporting documents. As a result, TPFA may pay invoices that contain ineligible expenses, such as payment and performance bonds (see Chapter 4 for more information on ineligible expenses).

Recommendations

The Texas Public Finance Authority should:

- Obtain a copy of the executed energy saving contract.
- Establish procedures to ensure that all requests for payment from state agencies and institutions of higher education are payments required under the contract, are within the contracts terms and conditions, and do not exceed the amount of the contract obligations.

Contracting Practices for Energy Savings Contracts Should Be Improved to Better Protect the State's Interests

All 15 contracts that auditors reviewed at nine state agencies or institutions of higher education contain provisions that require these entities to pay measurement and verification fees. These fees pay the contractor to measure and verify savings, as well as to provide other support services, such as training and remote telephone support. With the exception of Texas Tech University, these fees are paid annually for the term of the energy savings contract. For the 15 contracts reviewed, the agencies and institutions of higher education agreed to pay \$17.3 million in measurement and verification fees that are in addition to the total principal contract amount of \$129.8 million.⁴

Auditors reviewed the measurement and verification fees paid by nine state agencies or institutions of higher education and noted the following concerns:

- Payment of annual monitoring and verification fees over the life of an energy savings contract may be unnecessary.
- Measurement and verification fees are likely to increase throughout the term of the energy savings contract because the fees are adjusted annually based on changes in the Consumer Price Index.
- By the terms of the contract, cancellation of the measurement and verification fees allows the contractor to cancel the statutorily required guarantee of savings.
- Agencies and institutions of higher education rely upon the contractor to measure and verify energy savings, creating a potential conflict of interest.

All of the contracts reviewed contained many of the elements required of state contracts, such as scope of work, contractor responsibilities, and dispute resolution. However, the contracts reviewed also contained a number of provisions that do not (1) adequately protect the State's interests, (2) maximize the amount of reimbursement that an agency or institution of higher education would receive if guaranteed savings do not equal or exceed costs, or (3) appear to comply with Texas Government Code and Texas Education Code requirements.

⁴ The \$17.3 million in measurement and verification fees differs from the \$15.4 million in fees presented in Table 1 in Chapter 1. Auditors calculated the fees cited in this chapter based on the amounts agreed upon in the energy savings contracts reviewed. The totals in Chapter 1 included actual payments made as of August 31, 2007, which differed from the contracted amounts due to construction delays and fees not paid due to reported savings not meeting the guaranteed savings amounts.

Measurement and Verification Fees Are a Significant Ongoing Cost

Each of the 15 contracts reviewed contain provisions requiring the agency or institution of higher education to pay measurement and verification fees. As Table 2 shows, measurement and verification fees total \$17.3 million at the nine contracting entities reviewed. The annual measurement and verification fees range from \$7,280 at Texas State Technical College–West Texas to \$207,082 at Texas Woman’s University. Only Texas Tech University does not pay annual measurement and verification fees—a one-time fee of \$10,500 is included in its total energy savings contract price of \$583,743. Total measurement and verification fees range from 2 percent of the total energy savings contract at Texas Tech University to 27 percent of the total energy savings contract at Texas State Technical College–Harlingen.

Table 2

Annual and Total Measurement and Verification Fees at the Time Contracts Were Submitted for Approval Nine State Agencies and Institutions of Higher Education					
Agency/Institution of Higher Education	Contract Vendor	Contract Amount ^a	Annual Measurement and Verification Fees ^a	Total Measurement and Verification Fees ^a	Measurement and Verification Fees as Percent of Contract
The University of North Texas Health Science Center at Fort Worth	TAC Americas	\$3,200,000	\$31,691	\$475,365	15%
Texas Woman’s University	TAC Americas	19,356,139	207,082	3,106,230	16%
Health and Human Services Commission (HHSC) Contract for Phase 1	TAC Americas	13,894,980	135,625	2,034,375	15%
HHSC Contract for Phase 2	TAC Americas	11,545,023	141,510	2,122,650	18%
HHSC Contract for Phase 3	TAC Americas	13,129,700	147,535	2,213,025	17%
HHSC Contract for Phase 4	TAC Americas	11,445,213	141,217	2,118,255	19%
HHSC Contract for Phase 5	TAC Americas	12,140,016	88,901	1,333,515	11%
HHSC Contract for Phase 6	TAC Americas	5,153,072	32,369	485,535	9%
HHSC Contract for Phase 7	TAC Americas	7,563,395	26,306	394,590	5%
Lamar University	TAC Americas	13,747,451	70,100	1,051,500	8%
Parks and Wildlife Department	TAC Americas	2,493,951	11,563	173,445	7%
Angelo State University	TAC Americas	13,198,066	97,500	1,462,500	11%
Texas State Technical College–Harlingen	TAC Americas	990,755	18,139	272,085	27%
Texas State Technical College–West Texas	Direct Energy	1,383,987	7,280	72,796	5%
Texas Tech University	Johnson Controls	573,243 ^b	10,500	10,500	2%
Total for Agencies and Higher Education Institutions		\$129,814,991^a	\$1,167,318	\$17,326,366	13%

Annual and Total Measurement and Verification Fees at the Time Contracts Were Submitted for Approval Nine State Agencies and Institutions of Higher Education					
Agency/Institution of Higher Education	Contract Vendor	Contract Amount ^a	Annual Measurement and Verification Fees ^a	Total Measurement and Verification Fees ^a	Measurement and Verification Fees as Percent of Contract
Totals Per Contractor	TAC Americas	\$127,857,761	\$1,149,538	\$17,243,070	13%
	Direct Energy	1,383,987	\$7,279	\$72,796	5%
	Johnson Controls	573,243 ^b	\$10,500	\$10,500	2%
^a Based on the face value of the energy savings contract (omitting change orders). ^b Amount shown is the full contract amount of \$583,743 less the one-time measurement and verification fee of \$10,500.					

Ongoing annual payment of measurement and verification fees may be unnecessary.

Once all energy savings projects within the contract are completed and the savings verified, it may not be cost-effective to continue to pay annual measurement and verification fees for the life of the contract to monitor savings and provide support services. After the projects are installed and functioning, the agency or institution of higher education should be able to determine whether these projects are achieving the agreed-upon savings, and ongoing measurement and verification may provide minimal benefit for the contracting entity. For example, as discussed in Chapter 4-A, Texas Woman's University has achieved savings in excess of its guaranteed amounts for each of the five years after implementation of its energy savings measures. After savings are established and staff are fully trained in the operation of the new equipment, ongoing payment of measurement and verification fees may unnecessarily reduce the amount of savings that could be realized by the contracting entity.

Of the nine entities reviewed, only Texas Tech University agreed to pay its contractor a non-recurring fee of \$10,500 to conduct a one-time measurement of energy savings one year after installation of all projects were completed.⁵ Texas Tech University's six-year contract stipulates that if savings do not meet the guaranteed amount, the contractor will make a one-time payment to the university covering the difference for the life of the contract. Texas Tech University management told auditors they negotiated a one-time measurement and verification fee because they would know whether the equipment will achieve the savings after the first year and the university has sufficient technical expertise to monitor energy savings. In addition, senior

⁵ The Texas Tech University contract did not follow the statutory requirements of the Texas Education Code, Section 51.927, because it was not submitted to the Coordinating Board for approval.

management at another university questioned the need to pay annual measurement and verification fees because the amount of energy savings were well established once the energy savings projects were completed and operating satisfactorily.

Other Services Funded by Measurement and Verification Fees

In addition to measuring and verifying energy savings, measurement and verification fees pay for other services provided by the contractor. Some of the services included in the contracts reviewed include:

- Conducting remote monitoring.
- Providing ongoing assistance.
- Providing performance tracking reports.
- Performing troubleshooting assistance.
- Conducting onsite training.
- Providing remote telephone support.
- Conducting regularly scheduled site visits.
- Providing a utility efficiency employee awareness program.
- Identifying additional utility savings opportunities.
- Tracking and determining the impact and/or effect of utility meter changes.
- Enhancing and implementing energy conservation programs.

Measurement and verification fees also pay for other services that an agency or institution of higher education may request from a contractor (see text box). For example, these fees allow the contractor to conduct periodic monitoring of equipment, including temperature set points, alarm notifications, and hardware failures. While agencies and institutions of higher education may require assistance from the contractor after the installation of equipment, it is questionable whether it is cost-effective for agencies and institutions of higher education to commit in advance to annual payments for as long as 15 years rather than purchasing services from the contractor on an as-needed basis.⁶

There are no defined performance standards for the services purchased by measurement and verification fees.

Although the contracts reviewed contain general descriptions of the services to be performed, they do not specify the amount of services or outputs, other than periodic energy savings reports, that the contractor must

provide. As a result, the contracting entity cannot determine whether the costs for these additional services are reasonable.

The *State of Texas Contract Management Guide* states that a deliverable should include: (1) a description of the work, (2) a standard for performance, (3) a method or procedure to verify that the deliverable meets the standard, (4) a method or process to monitor and/or ensure the quality of the deliverable, (5) an acceptance process for each deliverable, and (6) a compensation structure that is consistent with the type and value of work performed.

Agencies and institutions of higher education rely upon the contractor to measure and verify energy savings, which creates a potential conflict of interest.

All the contracts that auditors reviewed authorized the contractor to measure and verify the reported energy savings. As a business practice, reliance upon a contractor to report energy savings poses a potential conflict of interest because failure to meet the guaranteed energy savings could result in significant financial losses to the contractor. It should be noted that auditors

⁶ Generally, measurement and verification fees do not purchase services to maintain the equipment installed as part of the energy savings retrofit.

determined that the energy savings reports prepared by the contractors were materially accurate at the three contracting entities that auditors visited (see Chapter 4 for more information).

Measurement and verification fees increase throughout the term of the energy savings contract.

Measurement and verification fees are adjusted annually based on changes in the U.S. Consumer Price Index. The total amount that agencies and institutions of higher education pay for measurement and verification fees could increase significantly as the fees are adjusted due to inflation. Existing contracts have a maximum term of 15 years. However, the 80th Legislature increased the allowable maximum length of energy savings contracts to 20 years, which could substantially increase the total amount a contracting entity pays for measurement and verification fees if these fees are paid over the term of the contract.

Agencies and institutions of higher education cannot cancel the measurement and verification fees without risk of losing the statutorily required savings guarantee.

The contracts at the nine agencies and institutions of higher education reviewed contain provisions allowing the agencies and institutions of higher education to cancel the payment of measurement and verification fees. However, contracts also state that if the agency or institution of higher education cancels payment of these fees, the contractor may also cancel its guarantee of energy savings. The contractual face value of these fees total \$17.3 million over the life of the energy contracts reviewed. Texas Government Code, Section 2166.406, and Texas Education Code, Section 51.927, require all energy savings contracts entered into by state agencies and institutions of higher education to contain a guarantee that costs will not exceed savings.

Recommendations

To limit conflicts of interest and the payment of measurement and verification fees in future energy savings contracts, the Legislature should consider amending the Texas Government Code and the Texas Education Code to:

- Require either (1) an independent third party or (2) SECO or the Coordinating Board to perform the measurement and verification of savings for state agencies and institutions of higher education.
- Require agencies and institutions of higher education to structure future energy savings contracts to stipulate that if savings do not meet the guaranteed amount within a pre-defined period, the contractor will make a one-time payment to the agency or institution of higher education covering the difference for the life of the contract.

SECO and the Coordinating Board should ensure that future energy contracts clearly define the outputs and service levels expected from energy savings performance companies for services provided after the installation of equipment.

Chapter 3-B

Some Energy Savings Contract Terms and Financing Methods Do Not Comply with Statutory Requirements or Protect the State’s Interests

All 15 contracts reviewed contain provisions that fail to adequately protect the State’s interests and comply with Texas Government Code, Section 2166.406, and Texas Education Code, Section 51.927.

Provisions allow contractors to recoup payments made because of failure to meet guaranteed savings.

All 15 contracts reviewed require the contractor to pay for the difference if actual savings fall short of guaranteed savings in one year. However, if actual savings exceed guaranteed savings in another year, these contracts allow the contractor to recoup its previous payments. In addition, contractors can use savings in excess of guaranteed amounts in one year to offset payments owed in a subsequent year. These provisions appear to conflict with the Texas Government Code and the Texas Education Code, which state that in any one year costs may not exceed total energy savings divided by the number of years in the contract. Therefore, the amount of energy savings achieved during one year is intended to cover that year’s costs and should not be recouped by the contractor in a future year. Table 3 presents guaranteed savings provisions in the 15 contracts reviewed.

Table 3

Contracts Provisions for Guaranteed Savings						
Agency/Institution of Higher Education	Allow Excess Savings to Carry Forward from Year to Year	Contractor Will Pay If Guarantee Is Not Met	Contractor Payments Limited to Amount of Debt Service or Guaranteed Savings, Whichever Is Less	Contractor Can Recoup Shortfall Payments in Subsequent Years	Implementation Period Savings	
					Covers Debt Service	Added to First Year Guarantee
Angelo State University	✓	✓	✓		✓	
HHSC Contract for Phase 1 ^a	✓	✓	✓	✓	✓ ^b	✓
HHSC Contract for Phase 2	✓	✓		✓	✓	✓
HHSC Contract for Phase 3	✓	✓		✓	✓	✓
HHSC Contract for Phase 4	✓	✓		✓	✓	✓

Contracts Provisions for Guaranteed Savings						
Agency/Institution of Higher Education	Allow Excess Savings to Carry Forward from Year to Year	Contractor Will Pay If Guarantee Is Not Met	Contractor Payments Limited to Amount of Debt Service or Guaranteed Savings, Whichever Is Less	Contractor Can Recoup Shortfall Payments in Subsequent Years	Implementation Period Savings	
					Covers Debt Service	Added to First Year Guarantee
HHSC Contract for Phase 5	✓	✓	✓	✓	✓	✓
HHSC Contract for Phase 6	✓	✓		✓	✓	✓
HHSC Contract for Phase 7	✓	✓	✓	✓	✓	✓
Lamar University	✓	✓		✓		✓
Parks and Wildlife Department	✓	✓	✓	✓	✓ ^c	✓
Texas State Technical College-Harlingen	✓	✓		✓		✓
Texas State Technical College-West Texas	✓	✓		✓		✓
Texas Woman's University	✓	✓		✓	✓	✓
Texas Tech University	✓	✓		✓		✓
The University of North Texas Health Science Center at Fort Worth	✓	✓		✓		✓
^a HHSC is the Health and Human Services Commission. ^b Phase 1 installation-period savings are limited to \$475,000. ^c Installation-period savings are limited to \$40,846.						

Five of 15 contracts reviewed contain provisions that allow the contractor to adjust the level of guaranteed savings if the total debt service owed that year is less than the guarantee.

If the amount of total debt service owed by an agency or institution of higher education under the contract is less than the guaranteed amount of energy savings, five of the contracts reviewed allow the contractor to reduce the level of guaranteed energy savings to the amount of debt service. Reducing the guarantee to the amount of debt service may result in the guarantee covering fewer costs. For example, the Parks and Wildlife Department contract contained a provision that allows the contractor to pay the lesser of the annual guaranteed savings or debt service. As a result, the Parks and Wildlife Department received \$19,778 less in the year-one savings period, when energy savings did not achieve the guaranteed amount, than it would have if its contract did not contain this provision. In addition, this provision is noncompliant with statutes because statute does not provide for calculating guaranteed savings based on debt service.

Five of 15 contracts reviewed do not ensure that costs incurred during a contract's installation period are covered by guaranteed savings.

In addition, contracts at two state agencies contain only limited guaranteed savings during the installation period. The guarantee of energy savings begins upon the final date of installation, according to statute. Some agencies and institutions of higher education may incur debt service before the date of substantial completion, which would not be covered by an energy savings guarantee. For three of these entities' contracts, this cost was less than 5 percent of total contract costs. However, the Parks and Wildlife Department incurred additional installation costs that represented 43 percent of total contract costs that were not covered by guaranteed savings. Ten of the 15 contracts reviewed contained implementation period savings guarantees, which reduce the risk that the agency or institution of higher education will incur costs that are not covered by savings.

Proposition 8 financing is not included in the total costs that are required to be repaid from energy savings.

Proposition 8 Funds

Proposition 8 funds are payable from the general revenues of the State for construction and repair projects and for the purchase of needed equipment. Bonds using Proposition 8 financing are issued through the Texas Public Finance Authority; as a result, there are no financing costs incurred by the agencies. The Texas Public Finance Authority makes all debt repayments.

Under the contracts reviewed, the costs of contracts that are financed by Proposition 8 general obligation bonds are not recovered from energy savings (see text box and Appendix 4 for more information on Proposition 8 financing). The Parks and Wildlife Department and the Health and Human Services Commission used Proposition 8 funds to finance a portion of the projects included in their contracts. However, the Texas Public Finance Authority finances all Proposition 8 funds and assumes complete responsibility for the debt service. The Texas Public Finance Authority is appropriated funds biennially to service this debt. As a result, the portion of an energy savings contract funded with Proposition 8 funds is being paid directly from state-appropriated funds and is not reimbursed from the energy savings achieved at the agency or institution of higher education. This appears to circumvent the statutory requirement that a contract's total costs must be paid through energy savings.

Five of 15 contracts reviewed did not require contractors to purchase and maintain payment and performance bonds mandated by statute.

Payment and performance bonds are important safeguards to help protect the contracting entity from default of the contractor's obligations. The Texas Government Code and the Texas Education Code require all contractors on energy savings contracts to provide payment and performance bonds. However, five contracting entities—Lamar University, Angelo State University, Texas State Technical College-West Texas, Texas State Technical College-Harlingen, and Texas Tech University—entered into contracts lacking this requirement.

The three contracts reviewed in detail do not specify the amount of equipment to be installed (see chapter 4 for detail).

In these three contracts, the detailed utility audit prepared by the contractor does not quantify the specific type and amount of equipment to be installed. This lack of detailed information makes it difficult for management to verify that all purchased equipment has been installed.

Recommendations

The Legislature should consider:

- Amending the Texas Government Code and the Texas Education Code to:
 - ♦ Clarify that savings in excess of guaranteed amounts in any one year shall not be carried forward or applied to another year in the contract.
 - ♦ Clarify whether the guaranteed savings period should include the installation phase of contracts.
 - ♦ Clarify whether agencies and institutions of higher education should use general obligation bonds or other methods of finance that do not have to be repaid through energy savings from an energy savings performance contract.

SECO and the Coordinating Board should not approve contracts that:

- Include a provision allowing the contractor to limit payments to the amount of debt service or guaranteed savings, whichever is less, when guaranteed energy savings is not achieved.
- Fail to include a requirement that contractors purchase and maintain a payment and performance bonds as required by statute.
- Do not specify the types and amounts of equipment to be installed.

Results of Detailed Audits of Selected Contracts

Auditors performed detailed reviews on selected aspects of contracts at Texas Woman’s University, the Parks and Wildlife Department, and the Health and Human Services Commission. In addition, auditors reviewed the Texas Youth Commission’s procurement of its energy savings performance company and third-party reviewer.

Verifying Reported Energy Savings

Auditors verified the energy savings reported by the contractor by:

- Reviewing the pre-installation energy use and weather data used by the contractor to create energy savings formulas.
- Determining the difference between:
 - ♦ Pre-installation energy use calculated savings formulas, and
 - ♦ Post-installation energy use verified and recalculated by auditors.

Auditors determined that:

- Energy savings equipment sampled was installed at all three entities.
- Energy savings reported by the contractors were materially accurate for Texas Woman’s University, the Parks and Wildlife Department, and the Health and Human Services Commission.
- Texas Woman’s University and the Parks and Wildlife Department did not review or verify the accuracy of energy savings reported by their contractors. A certified energy manager reviews and verifies the reported energy savings for the Health and Human Services Commission.
- The Parks and Wildlife Department monitored the installation of energy savings equipment; the Health and Human Services Commission did not monitor the installation of equipment. Texas Woman’s University lacked documentation indicating that it monitored the installation of equipment.
- Contractor payments made by all three entities contained ineligible, unallowable, or unsupported payments.
- The Parks and Wildlife Department and the Health and Human Services Commission adequately followed the statutorily required request for qualifications process in procuring their contractors. Texas Woman’s University lacked documentation supporting how it procured its contractor. The Texas Youth Commission lacked documentation supporting its selection process.

Chapter 4-A

Texas Woman’s University Entered Into an Energy Savings Contract in Which Guaranteed Savings Exceeded Total Calculated Costs

In September 2001, Texas Woman’s University (University) entered into an energy savings contract with TAC Americas that complies with statute because the guaranteed savings exceeded the total costs of the contract. The total calculated cost of the 15-year energy savings contract is \$29.1 million,

while the total guaranteed energy savings is \$34.5 million. In addition, TAC Americas projects that total savings over the life of the contract should be \$38.1 million.

Equipment and other energy cost reduction measures listed in the contract were installed.

Auditors verified the installation of the major types of equipment and energy cost reduction measures sampled from the detailed utility audit prepared by TAC Americas for the University.

The University's reported savings were materially accurate for all fiscal years tested.

The energy savings reported by TAC Americas were materially accurate. Auditors determined that during the five complete years of reported savings between 2003 and 2007, the University achieved \$11,562,473 in actual energy savings (see Table 4).

Table 4

Reported and Calculated Energy Savings at Texas Woman's University Fiscal Years 2003 to 2007					
Fiscal Year	Guaranteed Savings	Reported Savings	Auditor Calculated Savings	Difference Between Reported and Calculated Savings	Percent Difference Between Reported and Calculated Savings
2003	\$ 1,521,634	\$ 1,666,214	\$ 1,662,021	(\$ 4,193)	(0.25%)
2004	2,158,166	2,373,651	2,369,360	(4,291)	(0.18%)
2005	2,158,166	2,428,718	2,426,836	(1,882)	(0.08%)
2006	2,158,166	2,548,146	2,546,258	(1,888)	(0.07%)
2007	2,158,166	2,567,190	2,557,997	(9,193)	(0.36%)
Totals	\$10,154,298	\$11,583,919	\$11,562,473	(\$ 21,446)	(0.19%)

The University does not review or verify the accuracy of reported energy savings.

Although the University has two engineers on staff that have sufficient qualifications and experience to verify the accuracy of the energy savings reported by TAC Americas, the University does not verify these savings. The energy savings reports prepared and submitted by TAC Americas to the University provide only the total amount of electrical and natural gas energy unit savings. The University does not request or receive individual account energy unit savings information; without this information, it would be difficult and labor-intensive for the University to verify the accuracy of the reported energy savings or identify errors in TAC Americas' report.

Auditors identified several errors in the January 2008 Annual Periodic Savings Report prepared by TAC Americas. Specifically:

- TAC Americas misapplied two of eight contract adjustments, which overstated the amount of electrical energy used in the pre-upgrade period.
- TAC Americas did not properly calculate the amount of electrical energy used in the post-retrofit period for almost 51 months that auditors reviewed.

These errors resulted in TAC Americas overstating the University's energy savings by approximately \$95,300 in this report. While this total is not significant when compared to the amount of the total energy savings contract, it indicates a lack of overall monitoring of the reported energy savings.

Also, the energy savings contract contained the wrong formulas used to determine pre-retrofit energy consumption, which establishes the baseline used to calculate future energy savings. When notified of the error, TAC Americas management stated it had not used the erroneous formulas printed in the contract to calculate reported savings. However, because the University did not try to verify the reported energy savings, this error went undetected for approximately six years. In addition, auditors determined that the University discontinued the use of one building and did not notify TAC Americas. As a result, reported energy savings were overstated by \$21,572.

The University lacked adequate documentation of its monitoring of the installation of energy savings equipment.

The University lacked adequate documentation demonstrating the monitoring activities it conducted during the installation of the energy savings equipment because the University does not keep these documents past its record retention schedule of four years. In addition, University management stated that the employees who performed the monitoring no longer worked at the University.

The University paid ineligible expenses.

Auditors reviewed selected vendor payments that the University made to TAC Americas during fiscal years 2004, 2005, 2006, and 2007 to determine whether the payments were authorized, supported, and made in accordance with the contract. Of the \$363,255 in payments tested, \$326,092 or 90 percent of the payments were for measurement and verification fees.

Auditors also tested Master Lease Purchase Program payments made by the Texas Public Finance Authority to TAC Americas. Of the \$16,530,143 in Master Lease Purchase Program payments made, \$682,191 (4 percent) lacked adequate supporting documentation. The invoice described the expenses to be paid only as "Audit/Consultant/Bonds," and the University could not provide further details. In addition, the University paid \$230,225 for a performance bond to guarantee the contractor's performance. Payment and performance

bonds are an ineligible expense because the University's energy savings contract does not provide for the contractor to be reimbursed for the costs of the bonds.

The University lacked documentation about the procurement process it used to select its contractor and third-party reviewer.

The University's record retention policies require its staff to retain bidding documents for the fiscal year of an executed contract plus four years. Based on this policy, the University would have destroyed the documents related its procurement process for its energy savings contract in August 2006. As a result, auditors could not determine whether the University appropriately procured the services of the contractor and third-party reviewer.

Recommendations

The University should:

- Monitor and verify the annual energy savings reported by its contractor, TAC Americas. This should include requesting detailed energy unit savings information for each affected account listed in the measurement and verification plan.
- Ensure it makes timely requests for baseline energy adjustments when a change in facility usage occurs.
- Revise its records retention schedule to ensure that it retains all supporting documentation related to active energy savings contracts.
- Ensure that contractor invoices include sufficient detail to determine what is included in each line item billed and that the University does not pay for ineligible expenses.
- Re-evaluate its practice of paying for the contractor's performance bond to ensure it is in compliance with Texas Education Code, Section 51.927(e), and consider recouping the \$230,225 it paid to TAC Americas for the contractor's performance bond.

Chapter 4-B

The Parks and Wildlife Department's Energy Savings Contract Does Not Comply with Statute

The Parks and Wildlife Department (Department) entered into an energy savings contract with TAC Americas that did not comply with statute because the Department's guaranteed savings did not equal or exceed total costs. The total cost of the 15-year energy savings contract is \$3.2 million, while the total

guarantee is \$1.6 million. In addition, TAC Americas projects \$1.8 million of total savings over the term of the contract.

The Department combined projects to renovate and replace capital equipment items with its energy savings projects. In addition, the Department is unable to fully identify which costs are directly related to the energy savings measures that were approved for funding under the Master Lease Purchase Program. The Department financed its \$2.5 million contract with \$1.0 million from Master Lease Purchase Program funds and about \$1.5 million from Proposition 8 funds. The Department will not recover the portion of the contract financed from Proposition 8 funds through energy savings (see Chapter 3-B for further discussion of Proposition 8 funding).

Equipment and other energy cost reduction measures listed in the contract were installed.

Auditors verified the installation of the major types of equipment sampled from the detailed utility audit prepared by the contractor for the Department.

The Parks and Wildlife's reported savings were materially accurate in fiscal years 2006 and 2007.

The energy savings reported by TAC Americas were materially accurate in fiscal years 2006 and 2007 (see Table 5).

Table 5

Reported and Calculated Energy Savings at the Parks and Wildlife Department Fiscal Years 2006 and 2007					
Fiscal Year	Guaranteed Savings	Reported Savings	Auditor Calculated Savings	Difference Between Reported and Calculated Savings	Percent Difference Between Reported and Calculated Savings
2006	\$109,077	\$ 93,000	\$ 92,939	(\$ 61)	(0.07%)
2007	106,937	109,918	110,882	(964)	(0.88%)
Totals	\$216,014	\$202,918	\$203,821	(\$1,025)	(0.51%)

The Department does not verify the accuracy of reported energy savings.

Although Department management stated that they review the energy savings reports provided by the contractor, the Department does not independently verify the reported savings to determine whether the reports are accurate.

The Department monitored the installation of energy savings equipment.

The Department appropriately monitored the installation of the energy saving equipment listed in its energy savings contract. An on-site inspector

monitored the construction and was responsible for verifying that materials and services met contract requirements. The Department's inspection reports adequately documented this work.

The Department paid for ineligible expenses and used the wrong accounts to pay some expenses.

All four vouchers submitted by the Department to the Texas Public Finance Authority for payment through the Master Lease Purchase Program and reviewed by auditors were properly approved, supported, and allowable. These four vouchers totaled \$1,008,951.

Auditors reviewed eight payments totaling \$1,485,000 from Proposition 8 bond funds and determined that the Department had made an unallowable payment of \$14,085 in one of the eight payments to the contractor for payment and performance bonds. Payment and performance bonds are an ineligible expense because the Department's energy savings contract did not provide for the contractor to be reimbursed for the costs of the bonds.

In addition, from February 2005 through July 2007, the Department paid \$10,779 from its General Revenue Fund, \$10,000 from its Game, Fish and Wildlife Account, and \$20,056 from its State Parks Account for expenditures that should have been paid using Proposition 8 funds.

In addition, TAC Americas presented a \$16,139⁷ check to the Department because the reported savings did not meet the guaranteed savings for the first year of the contract's guaranteed term. However, the Department directed TAC Americas to retain the check and use the \$16,139 as a credit toward future monitoring and verification fees and/or future project needs. The Department may be in conflict with Texas Government Code, Section 404.094, which requires that funds be deposited no later than the third business day after the date of receipt.

The Department's contract was procured according to request for qualifications requirements.

The Department's request for qualifications contained all of the elements required by statute. The selection methodology appeared to be reasonable and was applied to all candidates. The Department attempted to negotiate the cost of the energy savings contract.

The Department contracted with the Texas Engineering Experiment Station to perform the third-party review under the provisions of the Interagency Cooperation Act.

⁷ The amount of the refund check differs from the \$14,297 noted above because the refund check includes payment for failure to meet the guarantee savings in both the installation and year one savings periods.

Recommendations

The Department should:

- Monitor and verify the annual energy savings reported by its energy savings performance company (contractor).
- Accept all payments from its contractor for the contractor's failure to meet the energy savings guarantee.
- Re-evaluate its practice of paying for the contractor's performance bond to ensure it is in compliance with Texas Government Code, Section 2166.406(e), and consider recouping the \$26,989 paid to the contractor for the contractor's performance bond.
- Reimburse the (1) General Revenue Fund, (2) Game, Fish and Wildlife Account, and (3) State Parks Account for expenditures that should have been paid using Proposition 8 funds.

Chapter 4-C

The Health and Human Services Commission Entered Into an Energy Savings Contract That Does Not Comply With Statute

The former Department of Mental Health and Mental Retardation (MHMR) and the Health and Human Services Commission (HHSC) entered into an energy savings contract with TAC Americas for Phase 1 that did not comply with statute because the guaranteed savings did not equal or exceed total costs.

HHSC entered into seven contracts with TAC Americas; auditors performed an in-depth review of only the Phase 1 energy savings contract. The total cost for the 15-year Phase 1 energy savings contract is \$20 million, which includes actual costs to date, while the total guaranteed energy savings in the contract is \$19.9 million. TAC Americas projects that total savings over the life of the contract should be \$22.1 million.

Equipment and other energy cost reduction measures listed in the contract were installed.

Auditors verified that major types of equipment and energy cost reduction measures listed in the detailed utility audit prepared by the contractor for HHSC were installed (with the exception of changes at one facility that were not listed in the detailed utility audit or subsequent change orders).

HHSC's reported energy savings for the Phase 1 contract were materially accurate for all reporting years tested.

The energy savings reported by TAC Americas for the Phase 1 contract were materially accurate. During the 22 months of reported savings, HHSC achieved \$2,418,174 in actual energy savings (see Table 6).

Table 6

Reported and Calculated Energy Savings at the Health and Human Service Commission Energy Savings Reporting Years 2006 and 2007 ^b					
Energy Savings Reporting Years	Guaranteed Savings	Reported Savings	Auditor Calculated Savings	Difference Between Reported and Calculated Savings	Percent Difference Between Reported and Calculated Savings
2006	\$ 1,293,815	\$1,319,965	\$1,319,064	(\$901)	(0.07%)
2007 ^a	1,087,179	1,097,087	1,099,110	\$2,023	0.18. %
Totals	\$ 2,371,994	\$2,417,052	\$2,418,174	\$1,122	0.05%
^a This is prorated for 10 months of guaranteed savings.					
^b Energy savings reporting years are April 1 to March 31.					

The second reporting year was not complete at the time of testing, and therefore, the actual outcome could not be determined.

HHSC reviews and verifies reported energy savings

HHSC employs a certified energy manager to verify the energy savings reported by TAC Americas. The current certified energy manager, who is certified by the Association of Energy Engineers, is responsible for monitoring energy consumption needs of HHSC, as well as the state schools and state hospitals.

HHSC does not monitor its guaranteed savings refunds.

The methodology that TAC Americas used to calculate HHSC's refund⁸ does not comply with statute or contract provisions because:

- TAC Americas calculated the amount HHSC was owed based on the lesser of debt service or guaranteed savings.
- TAC Americas combined costs and savings over multiple contracts, which is not provided for in statute or in its contract. This allows the contractor to offset losses in one contract with savings in other contracts. TAC

⁸ The refunds are based on debt service periods. Therefore, the contractor did not use reporting years to calculate this refund.

Americas made a \$335,392 payment to HHSC; however, if TAC Americas had reconciled the contracts individually and not combined the contracts, the payment would have been \$378,206, a difference of \$42,814.

HHSC did not adequately document its monitoring of the installation of energy savings equipment.

HHSC's construction procedures require that all construction status meetings be documented with meeting minutes. However, HHSC was not able to produce any record of status meetings that were held during the construction of the Phase 1 contract.

HHSC paid for ineligible expenses and contractor invoices lacked proper approvals.

The auditors reviewed vendor payments to TAC and found that:

- HHSC had made unallowable payments of \$118,727 to TAC Americas for performance and payments bonds. Payment and performance bonds are an ineligible expense because HHSC's energy savings contract did not provide for TAC Americas to be reimbursed for the costs of the bonds.
- Invoices did not include HHSC approvals in accordance with its policies. Five of 16 invoices reviewed lacked appropriate signatures.

HHSC appropriately procured an energy savings company.

HHSC appropriately procured the services of TAC Americas, the contractor for its phase 1 energy savings contract. The third-party reviewer for phase 1 was provided by SECO, and therefore, the procurement process was not required.

Recommendations

HHSC should:

- Monitor guaranteed savings by:
 - ♦ Amending its contracts to eliminate the provision allowing the contractor to calculate refunds for guaranteed savings based on the lesser of the guaranteed amount or the debt service amount.
 - ♦ Calculating guaranteed savings on an individual energy savings contract basis rather than combining refund calculations among multiple contracts.
- Monitor, verify, and document the installation of energy savings equipment.

- Ensure that all payments to its energy service company are properly approved.
- Re-evaluate its practice of paying for the contractor's performance bond to ensure it is in compliance with Texas Government Code, Section 2166.406(e), and consider recouping the \$118,727 paid to the contractor for TAC Americas' payment and performance bond.

Chapter 4-D

The Texas Youth Commission Lacked Documentation for Its Procurement of an Energy Savings Performance Contractor and a Third-party Reviewer

In April 2007, the Texas Youth Commission (TYC) submitted a \$10 million application to the Bond Review Board for approval of Master Lease Program Fund financing for a proposed energy savings contract. TYC withdrew its application in June 2007.

TYC lacked documentation supporting its selection of a contractor.

TYC did not retain documentation related to its selection of a contractor. Statute requires that state agencies, when procuring a contract for professional services, select the most highly qualified provider of those services on the basis of demonstrated competence. Because TYC lacked documentation of its selection process for the energy savings performance contractor, auditors could not verify whether TYC selected the most qualified contractor.

TYC's selection process for a third-party reviewer did not follow statute.

In April 2007, SECO gave its approval for LPB Energy Management to act as TYC's owner's agent for the securing of a third-party reviewer. The hiring of LPB Energy Management to act as owner's agent did not violate state statutes; however, LPB Energy Management did not follow the State's contract bidding requirements for procuring professional services. LPB Energy Management did not issue a request for qualification as required by the Texas Government Code.

Recommendations

TYC should:

- Ensure that it maintains all applicable documentation for the contract in one central place for the term of contract.
- Consider re-procuring the services of an energy savings company to verify the requirements of the Texas Professional Services Procurement Act.
- Re-procure the third-party reviewer in accordance with the requirements of the Texas Professional Services Procurement Act.

Appendices

Appendix 1

Objectives, Scope, and Methodology

Objectives

The objectives of this audit were to:

- Determine whether the selected energy savings performance contracts (contracts) were competitively bid.
- Verify the accuracy of reduced energy consumption and the amount of dollars saved.
- Determine how the amounts of projected annual energy savings and monitoring fees were established under the contracts.
- Benchmark the State's practice of contracting for post-installment monitoring with other government agencies' energy conservation programs.
- Determine the accuracy and completeness of information submitted by participating agencies to the Bond Review Board for financing under the Master Lease Purchase Program.
- Determine whether the contractors are performing the work specified in the terms and conditions of the contracts.
- Determine whether the State's interests are adequately protected under the contracts.

Scope

The scope of this audit covered energy savings contracts submitted to the Bond Review Board and entered into by state agencies and institutions of higher education for fiscal years 2000 through 2008, as well as a draft energy savings contract for the Texas Youth Commission that was submitted to the Bond Review Board in 2007 but later withdrawn. Auditors also reviewed information relating to contract approval and financing processes of the State Energy Conservation Office (SECO), the Higher Education Coordinating Board (Coordinating Board), the Bond Review Board, and the Texas Public Finance Authority.

Methodology

The audit methodology included reviewing energy performance contracts, third-party reviewer certifications, and summary reports at two state agencies and seven institutions of higher education. Auditors also performed in-depth analyses of three of these contracts at Texas Woman's University, the Parks and Wildlife Department, and Health and Human Services Commission's contract for Phase 1.

Information collected and reviewed included the following:

- Energy savings contracts, detailed utility audit reports, and measurement and verification plans for contracts and certifications and reports by third-party reviewers at:
 - ♦ Angelo State University.
 - ♦ Lamar University.
 - ♦ The Parks and Wildlife Department.
 - ♦ The Health and Humans Services Commission (contracts for Phases 1 through 7).
 - ♦ Texas State Technical College-Harlingen.
 - ♦ Texas State Technical College-West Texas.
 - ♦ Texas Tech University.
 - ♦ Texas Woman's University.
 - ♦ The University of North Texas Health Science Center at Fort Worth.
- Periodic energy savings reports for the following contracts:
 - ♦ The former Department of Mental Health and Mental Retardation (Phase 1).
 - ♦ The Parks and Wildlife Department.
 - ♦ Texas Woman's University.
- Selected agencies' and institutions of higher education' contracting and purchasing policies and procedures.
- Applications for Master Lease Purchase Program financing for energy saving contracts obtained from the Bond Review Board.

Procedures and tests conducted included the following:

- Reviewed energy savings reports and third-party reviewer contracts for compliance with state laws and SECO or Coordinating Board guidelines.
- Analyzed the energy savings contract approval processes at SECO and the Coordinating Board.
- Reviewed the information submitted to the Bond Review Board by state agencies and institutions of higher education.
- Reviewed total costs and guaranteed energy savings in the final contracts.
- Tested payment requests submitted to the Texas Public Finance Authority by state agencies and institutions of higher education.
- Verified the accuracy of energy savings formulas contained in the contracts.
- Performed in-depth reviews at Texas Woman's University, the Parks and Wildlife Department, and the Health and Human Services Commission, which included:
 - ♦ Analyzing the accuracy of the reported energy savings.
 - ♦ Verifying the installation of selected equipment.
 - ♦ Reviewing the procedures used to monitor reported savings and the installation of energy savings equipment.

Criteria used included the following:

- Texas Government Code, Sections 2166, 2254, and 404.
- Texas Education Code, Chapters 51 and 61.
- Title 19, Texas Administrative Code, Chapter 17.
- International Performance Measurement and Verification Protocol. Concepts and Options for Determining Energy and Water Savings, Volume 1, prepared by the Efficiency Valuation Organization, April 2007.
- SECO Energy Savings Performance Contracting Requirements for State Agencies, State Energy Conservation Office, January 2008.
- *State of Texas Contract Management Guide*, Texas Facilities Commission, Version 1.3.

- Contracting policies and procedures at the Health and Human Services Commission, the Parks and Wildlife Department, the Texas Youth Commission, and Texas Woman's University.

Project Information

Audit fieldwork was conducted from March 2008 through May 2008. 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The following members of the State Auditor's staff performed the audit:

- Jeff Grymkoski, MA (Project Manager)
- Mary Ann Wise, CPA, CFE (Assistant Project Manager)
- Ileana Barboza, MBA, CGAP, CICA
- Michael Clayton, CPA, CFE, CISA
- Kathryn K. Hawkins
- Angelica C. Martinez, CPA
- Joseph Mungai, CIA, CISA
- Michele Pheeney, MBA
- Tamara Shepherd, CGAP
- Barrett Sundberg, MPA, CIA
- James Timberlake, CIA
- Ken Wade
- Gary Leach, MBA, CQA, CISA (Information Systems Audit Team)
- J. Scott Killingsworth, CIA, CGAP, CGFM (Quality Control Reviewer)
- John Young, MPAff (Audit Manager)

Detailed Information on Energy Savings Contracts at Texas State Agencies and Higher Education Institutions

Table 7 lists the face value and contractors for the energy savings performance contracts reviewed at the two state agencies and seven higher education institutions.

Table 7

Contractors and Face Values of Energy Savings Performance Contracts Reviewed		
Contractor	Agency or Higher Education Institution	Face Value of Contract
TAC Americas	Angelo State University	\$13,198,066
Americas Headquarters 1650 West Crosby Road Carrollton, Texas 75006	Lamar University	\$13,747,451
	The Health and Human Services Commission (seven contracts)	\$76,467,674
	The Parks and Wildlife Department	\$2,652,239
	Texas State Technical College - Harlingen	\$990,755
	Texas Woman's University	\$19,356,139
	The University of North Texas Health Science Center at Fort Worth	\$3,200,000
	Total Contracts with TAC Americas	\$129,612,324
Direct Energy 909 Lake Carolyn Parkway Suite 1100 Irving, Texas 75039	Texas State Technical College- West Texas	\$1,383,987
Johnson Controls 3021 West Bend Drive Irving, Texas 75063	Texas Tech University	\$583,743

Comparison of Energy Savings Contracts in Texas with Similar Contracts in Other States

Auditors reviewed the statutory requirements for energy savings performance contracts in the 10 most populated states (including Texas), as well as the four states that border Texas. Georgia and Oklahoma had no comparable statutes. Table 8 lists the monitoring requirements for Texas and the remaining 11 states.

Table 8

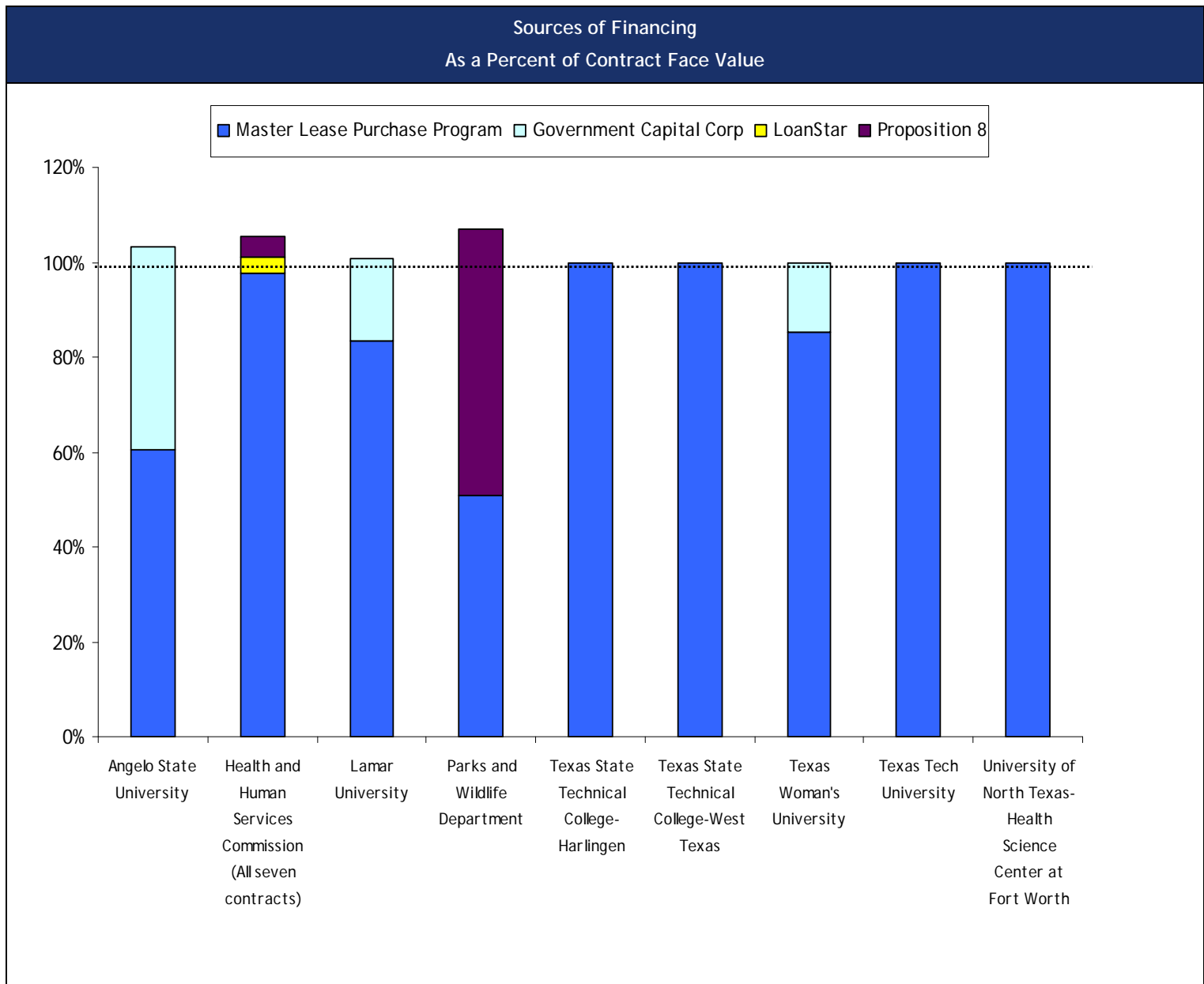
Energy Savings Performance Contracts Requirements in Texas and 11 Other States						
State	Payback Period (in years)	Procurement Process Based on Competitive Bids or Contractor Qualifications?	Savings Guarantee Required?	Types of Financing Addressed in Statute	Measurement and Verification Fees Specifically Addressed in Statute?	Independent Contract Review Required?
Arkansas	20	Competitive Bid	Yes	Not Addressed	Not Addressed	Yes
California	15	Not Addressed	Not Addressed	Can Use Loans and/or Bonds	Not Addressed	Not Addressed
Florida	20	Qualifications	Yes	Can Use Third-party Financing	Not Addressed	Yes
Illinois	7 ^a and 20 ^b	Competitive Bid	Yes ^b	Not Addressed	Yes ^b	Yes
Louisiana	20	Competitive Bid	Yes	Not Addressed	Yes	Yes
Michigan	None	Not Addressed	Not Addressed	Not Addressed	Not Addressed	Not Addressed
New Mexico	10	Competitive Bid ^c	Yes	Can Use Bonds	Not Addressed	Not Addressed
New York	35	Competitive Bid ^c	Not Addressed	Not Addressed	Yes	Yes
North Carolina	20	Competitive Bid	Yes	Installment Payment	Not Addressed	Yes
Ohio	5 to 10	Competitive Bid	Not Addressed	Can Use Notes or Installment Payment	Not Addressed	Yes
Pennsylvania	15	Competitive Bid	Yes	Can Use Installment or Lease Purchase	Not Addressed	Not Addressed
Texas	20	Qualifications	Yes	Can Use Lease/Purchase, Bonds, or Financing from Contract Provider	Not Addressed	Yes

^a Applicable to contracts for state-owned buildings.
^b Applicable to contracts with higher education institutions.
^c A non-competitive process may be used in certain instances.

Methods of Financing that State Agencies and Higher Education Institutions Can Use for Energy Savings Contracts

State agencies and higher education institutions have entered into 15 energy savings performance contracts that are financed, at least in part, through the Master Lease Purchase Program. As Figure 4 shows, contracts at five of the nine agencies and higher education institutions reviewed have utilized other sources of financing in addition to Master Lease Purchase Program funds.

Figure 4



Sources: Energy Performance contracts, detailed utility audits, and financial information provided by state agencies and institutions of higher education.

State-supported financing is generally less expensive for state agencies and higher education institutions to obtain. State-supported financing used to date for the contracts reviewed consists of funding from the Master Lease Purchase Program and Proposition 8 funding, both of which are administered by the Texas Public Finance Authority, and funding from LoanStar, which is administered by the State Energy Conservation Office.

However, three of the higher education institutions have utilized financing from a for-profit corporation, which has costs that are often higher than State-supported financing. Government Capital Corporation (GCC) is a domestic, for-profit corporation that offers financing to the public and private sectors. Three of the nine entities reviewed have financed a portion of their contracts with GCC. Interest costs for these three entities range from 3.25 percent to 5.74 percent.

The financing costs for the three state-supported programs utilized vary. Specifically:

- **Master Lease Purchase Program:** The Texas Public Finance Authority assumes a 5 percent interest rate with a 0.5 percent administrative fee at the time of signing. Leases are financed through commercial paper, which often is purchased at a lower interest rate. Any differences in the actual costs of financing and the agreed-upon rate of 5 percent is credited back to the state agency or higher education institution on an annual basis.
- **LoanStar:** The LoanStar program offers revolving loans to state agencies and higher education institutions at a 3 percent interest rate. The loans are used for public buildings, including those used by state agencies, school districts, higher education institutions, local governments, and hospitals.
- **Proposition 8:** In a special election held on November 6, 2001, voters approved a resolution authorizing the issuance of up to \$850 million in bonds to be payable from the general revenues of the State for construction and repair projects and for the purchase of needed equipment. Thirteen state agencies can use Proposition 8 funding, including the Health and Human Services Commission and the Parks and Wildlife Department, both of which have used Proposition 8 funding to pay for a portion of their contracts. Bonds are issued through the Texas Public Finance Authority; as a result, there are no financing costs incurred by these agencies. The Texas Public Finance Authority makes all debt repayments.

SECO Approval Checklist for State Agencies' Energy Savings Contracts

The document below is the State Energy Conservation Office's (SECO) energy savings performance contract approval checklist.

**State Agency
Energy Savings Performance Contract
Approval Checklist**

(Must be submitted for review by SECO prior to the execution of any ESPC)

This is to certify that the following requirements have been met in the Energy Savings Performance Contract between _____ (agency) and _____ (vendor), contract number: _____. (Check all that apply, sign, date, and return to SECO.)

- The contract documents were reviewed and approved by a Professional Engineer working for a firm licensed in the State of Texas, and the reviewer has provided a Third Party Reviewer Certification in addition to a summary report of findings.
- The contract document review and report were implemented in accordance with SECO's Energy Savings Performance Contracting Requirements and include all specified documents.
- All costs associated with the contracted review, financing, verification of savings, provision of bonds, and guarantees are included in the overall project cost.
- The review demonstrated that the savings achieved will be equal to or greater than the cost of the project each year over the life of the Contract.
- The Contract contains a "no-conflict of interest" certification for any third party ESPC reviewer.
- The Contract requires compliance with any and all applicable federal, state, and local statutes.
- The Contract contains an Energy Assessment Report and a Measurement and Verification Plan that documents current energy consumption and will document future energy and water savings that occur as a direct result of the project.
- The offeror is required to provide a payment and performance bond.
- A copy of the Third Party Review Certification and Summary of Findings Report has been submitted or is submitted with this checklist.
- A copy of the certification by the design architect or engineer will be submitted to SECO (prior to construction) that verifies to the agency or institution that the construction or renovation will comply with the standards that are established under provisions of 34 TAC §19.34.

<p>For SECO USE</p> <p>Date Received: _____</p> <p>Approved By: _____</p> <p>Date: _____</p> <p>Returned to agency: _____</p> <p>Contract requested for review _____</p>	<p>(Name) _____</p> <p>(Title) _____</p> <p>(Agency) _____</p> <p>(Signature) _____</p> <p>Date: _____</p>
---	--

Page 2 of 2

SECO
Energy Savings Performance Contracting
Requirements and Guidelines for
State Agencies
Part 7

The Coordinating Board's Approval List for Institutions of Higher Educations' Energy Savings Contracts

The following is a summary of the procedures that institutions of higher education must follow in seeking approval from the Higher Education Coordinating Board's (Coordinating Board) of an energy savings performance contract.

- The contract must be reviewed by a licensed professional engineer in the state of Texas prior to the request for approval from the Coordinating Board.
- The selected reviewer must not be an officer or employee of the organization offering the contract, the institution of higher education seeking approval, or otherwise associated with the contract.
- The contract must be implemented in accordance with Federal Energy Management Program's Measurement and Verification Guidelines, the North American Energy Measurement and Verification Protocol, and/or the American Heating, Refrigerating and Air-Conditioning Engineer (ASHRAE) Guidelines.
- The contract must comply with any and all federal, state, and local statutes.
- The contract must contain an energy assessment report and a measurement and verification plan that documents current energy consumption and the detailed calculation of energy savings as a direct result of the project.
- The review must demonstrate that the savings achieved over a 15-year period will be equal to or greater than the cost of the contract.
- The contractor must provide a payment and performance bond to guarantee the amount of anticipated savings.
- All costs associated with the contract review, verification of savings, provisions of bonds, and other guarantees are to be included in the overall contract cost.
- The institution of higher education must submit the standard Coordinating Board project application for evaluation and approval of the contract.
- The project application must include, as an attachment, a statement from the reviewer certifying that the contract meets all of the above mentioned guidelines.

- The institution of higher education shall provide to the Coordinating Board a copy of the signed contract within 30 days of the effective date of the contract.

Texas Government Code and Texas Education Code Requirements for Energy Savings Contracts

Texas Government Code

Below is Texas Government Code, Section 2166.406, governing the requirements, procurement, and monitoring of energy savings performance contracts.

§ 2166.406. ENERGY SAVINGS PERFORMANCE

CONTRACTS. (a) In this section, "energy savings performance contract" means a contract for energy or water conservation measures to reduce energy or water consumption or operating costs of governmental facilities in which the estimated savings in utility costs resulting from the measures is guaranteed to offset the cost of the measures over a specified period. The term includes a contract for the installation of:

(1) insulation of a building structure and systems within the building;

(2) storm windows or doors, caulking or weather stripping, multiglazed windows or doors, heat absorbing or heat reflective glazed and coated window or door systems, or other window or door system modifications that reduce energy consumption;

(3) automatic energy control systems, including computer software and technical data licenses;

(4) heating, ventilating, or air-conditioning system modifications or replacements that reduce energy or water consumption;

(5) lighting fixtures that increase energy efficiency;

(6) energy recovery systems;

(7) electric systems improvements;

(8) water-conserving fixtures, appliances, and equipment or the substitution of non-water-using fixtures, appliances, and equipment;

(9) water-conserving landscape irrigation equipment;

(10) landscaping measures that reduce watering demands and capture and hold applied water and rainfall, including:

(A) landscape contouring, including the use of berms, swales, and terraces; and

(B) the use of soil amendments that increase the water-holding capacity of the soil, including compost;

(11) rainwater harvesting equipment and equipment to make use of water collected as part of a storm-water system installed for water quality control;

(12) equipment for recycling or reuse of water originating on the premises or from other sources, including treated municipal effluent;

(13) equipment needed to capture water from nonconventional, alternate sources, including air conditioning condensate or graywater, for nonpotable uses;

(14) metering equipment needed to segregate water use in order to identify water conservation opportunities or verify water savings; or

(15) other energy or water conservation-related improvements or equipment including improvements or equipment related to renewable energy or nonconventional water sources or water reuse.

(b) Notwithstanding any other provision of this chapter, a state agency, without the consent of the commission, may enter into an energy savings performance contract in accordance with this section.

(c) Each energy or water conservation measure must comply with current local, state, and federal construction, plumbing, and environmental codes and regulations. Notwithstanding Subsection (a), an energy savings performance contract may not include improvements or equipment that allow or cause water from any condensing, cooling, or industrial process or any system of nonpotable usage over which the public water supply system officials do not have sanitary control to be returned to the potable water supply.

(d) A state agency may enter into energy savings performance contracts only with a person who is experienced in the design, implementation, and installation of the energy or water conservation measures addressed by the contract.

(e) Before entering into an energy savings performance contract, a state agency shall require the provider of the energy or water conservation measures to file with the agency a payment and performance bond relating to the installation of the measures in accordance with Chapter 2253. The agency may also require a separate bond to cover the value of the guaranteed savings on the contract.

(f) The state agency may enter into an energy savings performance contract for a period of more than one year only if the state agency finds that the amount the state agency would spend on the energy or water conservation measures will not exceed the amount to be saved in energy, water, wastewater, and operating costs over 20 years from the date of installation.

(g) An energy savings performance contract with respect to existing buildings or facilities may be financed:

(1) under a lease/purchase contract that has a term not to exceed 20 years from the final date of installation and that meets federal tax requirements for tax-free municipal leasing or long-term financing, including a lease/purchase contract under the master equipment lease purchase program administered by the Texas Public Finance Authority under Chapter 1232;

(2) with the proceeds of bonds; or

(3) under a contract with the provider of the energy or water conservation measures that has a term not to exceed the lesser of 20 years from the final date of installation or the average useful life of the energy or water conservation or usage measures.

(h) An energy savings performance contract shall contain provisions requiring the provider of the energy or water conservation measures to guarantee the amount of the savings to be realized by the state agency under

the contract. If the term of the contract exceeds one year, the agency's contractual obligation, including costs of design, engineering, installation, and anticipated debt service, in any one year during the term of the contract beginning after the final date of installation may not exceed the total energy, water, wastewater, and operating cost savings, including electrical, gas, water, wastewater, or other utility cost savings and operating cost savings resulting from the measures, as determined by the state agency in this subsection, divided by the number of years in the contract term.

(i) An energy savings performance contract shall be let according to the procedures established for procuring certain professional services by Section 2254.004. Notice of the request for qualifications shall be given in the manner provided by Section 2156.002. The State Energy Conservation Office shall establish guidelines and an approval process for awarding energy savings performance contracts. The guidelines adopted under this subsection must require that the cost savings projected by an offeror be reviewed by a licensed professional engineer who has a minimum of three years of experience in energy calculation and review, is not an officer or employee of an offeror for the contract under review, and is not otherwise associated with the contract. In conducting the review, the engineer shall focus primarily on the proposed improvements from an engineering perspective, the methodology and calculations related to cost savings, increases in revenue, and, if applicable, efficiency or accuracy of metering equipment. An engineer who reviews a contract shall maintain the confidentiality of any proprietary information the engineer acquires while reviewing the contract. An energy savings performance contract may not be entered into unless the contract has been approved by the State Energy Conservation Office. Sections 1001.053 and 1001.407, Occupations Code, apply to work performed under the contract.

(j) The legislature shall base an agency's appropriation for energy, water, and wastewater costs during a fiscal year on the sum of:

(1) the agency's estimated energy, water, and wastewater costs for that fiscal year; and

(2) if an energy savings performance contract is in effect, the agency's estimated net savings resulting from the contract during the contract term, divided by the number of years in the contract term.

Texas Education Code

Below is Texas Education Code, Section 51.927, governing the requirements, procurement, and monitoring of energy savings performance contracts.

§ 51.927. ENERGY SAVINGS PERFORMANCE CONTRACTS.

(a) In this section, "energy savings performance contract" means a contract for energy or water conservation measures to reduce energy or water consumption or operating costs of institutional facilities in which the estimated savings in utility costs resulting from the measures is guaranteed to offset the cost of the measures over a specified period. The term includes a contract for the installation or implementation of:

- (1) insulation of a building structure and systems within a building;
- (2) storm windows or doors, caulking or weather stripping, multiglazed windows or doors, heat-absorbing or heat-reflective glazed and coated window or door systems, or other window or door system modifications that reduce energy consumption;
- (3) automatic energy control systems, including computer software and technical data licenses;
- (4) heating, ventilating, or air conditioning system modifications or replacements that reduce energy or water consumption;
- (5) lighting fixtures that increase energy efficiency;
- (6) energy recovery systems;
- (7) electric systems improvements;
- (8) water-conserving fixtures, appliances, and equipment or the substitution of non-water-using fixtures, appliances, and equipment;
- (9) water-conserving landscape irrigation equipment;
- (10) landscaping measures that reduce watering demands and capture and hold applied water and rainfall, including:
 - (A) landscape contouring, including the use of berms, swales, and terraces; and
 - (B) the use of soil amendments that increase the water-holding capacity of the soil, including compost;
- (11) rainwater harvesting equipment and equipment to make use of water collected as part of a storm-water system installed for water quality control;
- (12) equipment for recycling or reuse of water originating on the premises or from other sources, including treated municipal effluent;
- (13) equipment needed to capture water from nonconventional, alternate sources, including air conditioning condensate or graywater, for nonpotable uses;
- (14) metering equipment needed to segregate water use in order to identify water conservation opportunities or verify water savings; or
- (15) other energy or water conservation-related improvements or equipment, including improvements or equipment related to renewable energy or nonconventional water sources or water reuse.

(b) The governing board of an institution of higher education may enter into an energy savings performance contract in accordance with this section.

(c) Each energy or water conservation measure must comply with current local, state, and federal construction, plumbing, and environmental codes and regulations. Notwithstanding Subsection (a), an energy savings performance contract may not include improvements or equipment that allow or cause water from any condensing, cooling, or industrial process or any system of nonpotable usage over which the public water supply system

officials do not have sanitary control, to be returned to the potable water supply.

(d) The board may enter into energy savings performance contracts only with entities that are experienced in the design, implementation, and installation of the energy or water conservation measures addressed by the contract.

(e) Before entering into an energy savings performance contract, the board shall require the provider of the energy or water conservation measures to file with the board a payment and performance bond in accordance with Chapter 2253, Government Code. The board may also require a separate bond to cover the value of the guaranteed savings on the contract.

(f) The board may enter into an energy savings performance contract for a period of more than one year only if the board finds that the amount the institution would spend on the energy or water conservation measures will not exceed the amount to be saved in energy, water, wastewater, and operating costs over 20 years from the date of installation. If the term of the contract exceeds one year, the institution's contractual obligation in any year during the term of the contract beginning after the final date of installation may not exceed the total energy, water, wastewater, and operating cost savings, including electrical, gas, water, wastewater, or other utility cost savings and operating cost savings resulting from the measures, as determined by the board in this subsection, divided by the number of years in the contract term beginning after the final date of installation. The board shall consider all costs of the energy or water conservation measures, including costs of design, engineering, installation, maintenance, repairs, and debt service.

(g) An energy savings performance contract may be financed:

(1) under a lease/purchase contract that has a term not to exceed 20 years from the final date of installation and that meets federal tax requirements for tax-free municipal leasing or long-term financing, including a lease/purchase contract under the master equipment lease purchase program administered by the Texas Public Finance Authority under Chapter 1232, Government Code;

(2) with the proceeds of bonds; or

(3) under a contract with the provider of the energy or water conservation measures that has a term not to exceed the lesser of 20 years from the final date of installation or the average useful life of the energy or water conservation or usage measures.

(h) An energy savings performance contract shall contain provisions requiring the provider of the energy or water conservation measures to guarantee the amount of the savings to be realized by the institution of higher education under the contract.

(i) An energy savings performance contract shall be let according to the procedures established for procuring certain professional services by Section 2254.004, Government Code. Notice of the request for qualifications shall be given in the manner provided by Section 2156.002, Government Code. The Texas Higher Education Coordinating Board, in consultation with

the State Energy Conservation Office with regard to energy and water conservation measures, shall establish guidelines and an approval process for awarding energy savings performance contracts. The guidelines must require that the cost savings projected by an offeror be reviewed by a licensed professional engineer who has a minimum of three years of experience in energy calculation and review, is not an officer or employee of an offeror for the contract under review, and is not otherwise associated with the contract. In conducting the review, the engineer shall focus primarily on the proposed improvements from an engineering perspective, the methodology and calculations related to cost savings, increases in revenue, and, if applicable, efficiency or accuracy of metering equipment. An engineer who reviews a contract shall maintain the confidentiality of any proprietary information the engineer acquires while reviewing the contract. A contract is not required to be reviewed or approved by the State Energy Conservation Office. Sections 1001.053 and 1001.407, Occupations Code, apply to work performed under the contract.

(j) The legislature shall base an institution's appropriation for energy, water, and wastewater costs during a fiscal year on the sum of:

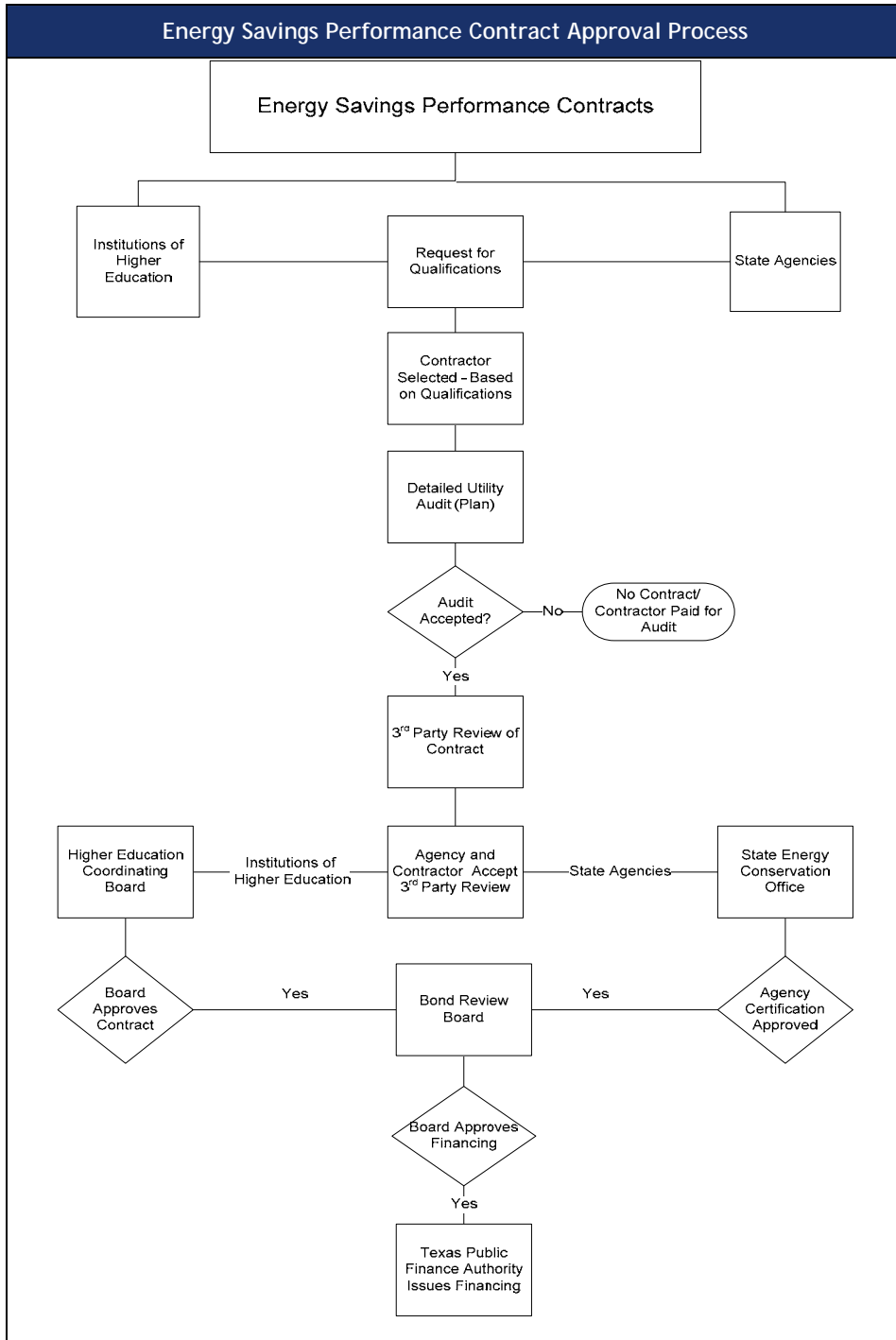
(1) the institution's estimated energy, water, and wastewater costs for that fiscal year; and

(2) if an energy savings performance contract is in effect, the institution's estimated net savings resulting from the contract during the contract term, divided by the number of years in the contract term.

Flowchart of Approval Process for Energy Savings Contracts in Texas

Figure 5 illustrates the energy savings performance contract approval process.

Figure 5



Source: Prepared by the State Auditor's Office.

Responses from State Energy Conservation Office

TEXAS COMPTROLLER *of* PUBLIC ACCOUNTS

S U S A N
C O M B S

August 26, 2008


Mr. Jeffrey Grymkoski
Project Manager
State Auditor's Office
1501 North Congress Avenue
Austin, Texas 78711

Dear Mr. Grymkoski:

Attached are our final responses to your draft audit report on Energy Savings Performance Contracts. We welcome the opportunity to present these responses to the recommendations made in your draft report.

We appreciate the work performed by you and your audit team. Please let us know if we can be of further assistance.

Sincerely,


Martin A. Hubert
Deputy Comptroller

Attachment

cc: Hector Gonzales, Internal Audit
Dub Taylor, State Energy Conservation Office



**An Audit of Energy Savings Performance Contracts
at Selected Agencies and Institutions of Higher Education
SAO Report No. xx-xxx**

**Management Responses to State Auditors Office
Texas Comptroller of Public Accounts, State Energy Conservation Office
August 22, 2008**

General Response

Energy saving performance contracts (contracts) are a useful capital project implementation tool made available to agencies by statute. The Comptroller of Public Accounts, State Energy Conservation Office (SECO) agrees with the State Auditor's Office (SAO) that these contracts have reduced energy consumption, lowered utility costs, and resulted in needed capital improvements to state facilities.

HB 3286 (77R), Section 13, amended the Government Code §2166.406(i) to require SECO to establish guidelines and an approval process for contracts. The bill provided that the adopted guidelines must require that the cost savings projected by a vendor be reviewed by a licensed professional engineer who is not an officer or employee of a vendor for the contract under review or otherwise associated with the contract. Importantly, the bill removed provisions requiring the state agency to submit the contract to SECO for review and comment. The bill also removed provisions requiring SECO to provide a cost benefit analysis of the contracts and an analysis of the guaranteed savings projected by vendors. SECO designed its approval process to reflect the legislative intent around this amended law. See Acts 2001, 77th Leg., R.S., HB 3286, §13. The bill analysis for HB 3286 states, "The bill removes provisions requiring the state agency to submit the proposal to the State Energy Conservation Office and the Texas Energy Coordination Council and provisions authorizing the State Energy Conservation Office and the Texas Energy Coordination Council to charge a fee for providing a cost benefit analysis of the proposals." See Office of House Bill Analysis, HB 3286 (Enrolled), 7/18/2001.

In response to this Legislation, SECO developed an approval process and comprehensive set of guidelines for agencies to follow. This seventy-three page document is divided into eight chapters entitled: 1) Getting the Most from Your Contract and Contractor; 2) For the Owner; 3) Request for Qualifications; 4) For the Contractor; 5) Utility Assessment Report; 6) Third Party Independent Review Requirements; 7) State Agency Approval Checklist; and 8) Project Funding. SECO's guidelines and approval process are consistent with the legislative intent reflected in HB3286 as adopted by the legislature in 2001. These guidelines are reviewed and revised as changes become necessary, and while designed for use by Texas state agencies, they are being used voluntarily by local governments, institutions of higher education, school districts and public entities in other states.

SECO agrees with SAO that agencies have primary responsibility for ensuring that these contracts conform to statute, however, the guidelines and approval process developed by SECO create an important second level of controls. To ensure consistency with changes in statute and to incorporate experience gained through practical implementation in the field, the guidelines are routinely reviewed and revised. SB 831 (80R), Section 3, amended the Government Code §2166.406(i) setting new job qualifications and focusing review requirements for engineers who review the projected cost savings of a contract. In July 2007, SECO initiated a process to create a standard contract template, which will provide uniformity of agency contracts and allow for consistent and efficient review by any third party. This template increases transparency and largely addresses the administrative and guideline-oriented recommendations made by SAO in this report.

SECO appreciates SAO's detailed review of existing agency contracts, and welcomes any recommendation that can further strengthen current processes to ensure agencies are provided good value under these contracts and to ensure the State's interests are protected.

Issue 1: Chapter 2, page 11

SAO Recommendation

"The State Energy Conservation Office and the Higher Education Coordinating Board should revise their guidelines to specify that an agency's or institution of higher education's chief financial officer and general counsel review the energy savings contract and third-party certification to ensure that (1) costs do not exceed guaranteed savings and (2) other legal provisions are in compliance."

SECO Management Response

SECO agrees with this recommendation and will revise the guidelines to specify that an agency's chief financial officer and general counsel review the energy savings contract and third-party certification to ensure that (1) costs do not exceed guaranteed savings and (2) other legal provisions are in compliance.

SECO Management Implementation

By November 1, 2008, the guidelines will be revised to incorporate these revisions.

Issue 2: Chapter 2-B, page 15

SAO Recommendations

"The State Energy Conservation Office (SECO) should:

- Review and analyze energy savings performance contracts before approving these contracts.*

This should include:

- Reviewing a copy of the proposed contract to ensure it complies with SECO guidelines.*
- Reviewing third-party reports and certifications to ensure all information is complete and meets all SECO guidelines.*
- Comparing third-party reviewer reports to the proposed contract to ensure that the information on costs and savings are consistent and that savings are greater than or equal to all costs associated with the contract.*

- Amend its third-party reviewer certification and summary of findings report to require third-party reviewers to attest to their independence.*

- Ensure that third-party reviewers use guaranteed savings in determining whether a contract's savings will cover total costs."*

SECO Management Response

SECO agrees there should be a continued, objective third party review of these contracts to ensure compliance with statute and ensure value to agencies.

SECO will identify options to feasibly standardize how statutory compliance, third party report review, project costs and savings are represented. SECO will also identify options for efficient in-house review of these representations.

SECO agrees with the recommendation to amend the third-party reviewer certification and summary of findings report to require third-party reviewers to attest to their independence.

SECO agrees with the recommendation to ensure that third-party reviewers use guaranteed savings in determining whether a contract's savings will cover total costs. This requirement will be highlighted and reinforced in agency guidelines.

SECO Management Implementation

By November 1, 2008, SECO will identify options to feasibly standardize how project costs and savings are represented. SECO will also develop options to allow for efficient and consistent review of these representations.

By November 1, 2008, the third-party reviewer certification and summary of findings report will be amended to require third-party reviewers to attest to their independence.

By November 1, 2008, the guidelines will be revised to highlight and reinforce the provision that third-party reviewers use guaranteed savings in determining whether a contract's savings will cover total costs.

Issue 3: Chapter 3, page 27**SAO Recommendations**

"To limit conflicts of interest and the payment of measurement and verification fees in future energy savings contracts, the Legislature should consider amending the Texas Government Code and the Texas Education Code to:

• Require either (1) an independent third party or (2) the State Energy Conservation Office or the Higher Education Coordinating Board to perform the measurement and verification of savings for state agencies and institutions of higher education.

The State Energy Conservation Office and Higher Education Coordinating Board should ensure that future energy contracts clearly define the outputs and service levels expected from energy savings performance companies for services provided after the installation of equipment."

SECO Management Response

SECO agrees that elements of measurement and verification (M&V) service agreements can better conform to the Texas Contract Management Guide and will revise agency guidelines to specify such. M&V services associated with these contracts protect the agency by ensuring projected energy savings are achieved. M&V also serves as the basis for the vendor's savings guarantee. As such, M&V scope, outputs and service levels are agreed to by agencies and vendors prior to contract execution and are determined largely by the project and the agency's specific needs. However, it is technically infeasible and impractical for SECO to provide M&V services associated with these contracts. M&V services require frequent onsite presence and intimate technical expertise and familiarity with the energy savings improvements installed as well as facility use. SECO lacks the staff and resources to be able to provide onsite M&V services.

Additionally, under the current M&V arrangement, that being M&V negotiated by the agency and conducted by the contractor, the cost of M&V is borne by the contractor if there are not additional savings above the guarantee to pay for those services. However, if that function is brought in house or contracted out, the agency would have to bear the expense of the M&V regardless of the level of savings.

CPA/SECO Management Implementation

By November 1, 2008, SECO will revise agency guidelines to ensure M&V service agreements better conform to the Texas Contract Management Guide.

SAO Recommendations

"The State Energy Conservation Office and Higher Education Coordinating Board should not approve contracts that:

- Include a provision allowing the contractor to limit payments to the amount of debt service or guaranteed savings, whichever is less, when guaranteed energy saving is not achieved.*
- Fail to include a requirement that contractors purchase and maintain a payment and performance bond(s) as required by statute.*
- Do not specify the type and amount of equipment to be installed."*

CPA/SECO Management Response

SECO agrees with the intent of these recommendations and will revise agency guidelines to:

- Require contracts to not include specific provisions allowing the contractor to limit payments to the amount of debt service or guaranteed savings, whichever is less, when guaranteed energy saving is not achieved.
- Require that contractors purchase and maintain a payment and performance bond(s) as required by statute.
- Require the type and amount of equipment to be installed.

CPA/SECO Management Implementation

By November 1, 2008, SECO will revise agency guidelines to require:

- contracts to not include specific provisions allowing the contractor to limit payments to the amount of debt service or guaranteed savings, whichever is less, when guaranteed energy saving is not achieved.
- contractors purchase and maintain a payment and performance bond(s) as required by statute.
- the type and amount of equipment to be installed.

Responses from the Higher Education Coordinating Board



TEXAS HIGHER EDUCATION COORDINATING BOARD

P.O. Box 12788 Austin, Texas 78711

Robert W. Shepard
CHAIRMAN

A.W. "Whit" Riter, III
VICE CHAIRMAN

Elaine Mendoza
SECRETARY OF THE BOARD

Charles "Trey" Lewis III
STUDENT REPRESENTATIVE

Laure Bricker
Fred W. Heldenfels IV
Joe B. Hinton
Brenda Pejovich
Lyn Bracewell Phillips
Robert V. Wingo

Raymond A. Paredes
COMMISSIONER
OF HIGHER EDUCATION

512/427-6101
Fax 512/427-6127

Web site
<http://www.thecb.state.tx.us>

August 26, 2008

Mr. Jeff Grymkoski
State Auditor's Office
P.O. Box 12067
Austin, TX 78711

Dear Mr. Grymkoski:

The State Auditor's Office conducted a review of nine state agencies and institutions that had entered into 15 energy savings performance contracts with total calculated costs of \$203 million. The Texas Education Code, Section 51.927, governing the requirements, procurement, and monitoring of energy savings performance contracts mandates the Texas Higher Education Coordinating Board work in consultation with the State Energy Conservation Office with regard to energy and water conservation measures and establish guidelines and an approval process for awarding energy savings performance contracts. Below are the Auditor's recommendations and the Management's responses.

Recommendation Page 11:

The State Energy Conservation Office and the Higher Education Coordinating Board should revise their guidelines to specify that an agency's or institution of higher education's chief financial officer and general counsel review the energy savings contract and third-party certification to ensure that (1) costs do not exceed guaranteed savings and (2) other legal provision are in compliance.

Management's Response:

We concur with the audit team's recommendation that guidelines should be set and will modify our rules to require an institution's chief financial officer's and general counsel's review of energy savings performance contracts and associated third party certifications before they are submitted to the Coordinating Board.

Recommendation Page 19:

The Higher Education Coordinating Board (Coordinating Board) should:

- Review and analyze proposed contracts before approving them. This should include:
 - Reviewing the proposed contract to ensure it complies with Coordinating Board guidelines

Mr. Jeff Grymkoski
August 26, 2008
Page 2

- Reviewing third-party certifications to ensure all information is complete and meets Coordinating Board guidelines.
- Comparing third-party reviewer reports to the proposed contract to ensure that the information on costs and savings is consistent and that savings are greater than or equal to total costs associated with the contract.
- Clarify that third-party reviewers must use the amount of guaranteed savings to determine whether a contract's savings will cover total costs.
- Work with the State Energy Conservation Office to formulate more detailed guidelines for energy savings performance contracts to ensure that contracts address all statutory requirements and that third-party reviewers have sufficient criteria for reviewing contractor proposals.

Management's Response:

We agree that the audit team's recommendations would better protect the State's interests regarding energy savings performance contracts, and will change our rules to require a compliance review be completed by the Texas Higher Education Coordinating Board based on a set of guidelines developed in collaboration with the State Energy Conservation Office.

Recommendation Page 28:

To limit conflicts of interest and the payment of measurement and verification fees in future energy savings contracts, the Legislature should consider amending the Texas Government Code and the Texas Education Code to require either (1) an independent third party or (2) SECO or the Coordinating Board to perform the measurement and verification of savings for state agencies and institutions of higher education.

The State Energy Conservation Office and Higher Education Coordinating Board should ensure that future energy contracts clearly define the outputs and service levels expected from the energy savings performance companies for services provided after the installation of equipment.

Management's Response:

We agree there should be a third party hired at the expense of the contracting institution, but we believe it would be more effective for institutions to contract directly with a third party reviewer.

PA/mlh

AN EQUAL OPPORTUNITY EMPLOYER

Mr. Jeff Grymkoski
August 26, 2008
Page 3

We agree the Coordinating Board should amend its process to require a review ensuring "that outputs and service levels to be expected are clearly defined."

Recommendation Page 31:

The State Energy Conservation Office and Higher Education Coordinating Board should not approve contracts that:

- Include a provision allowing the contractor to limit payment to the amount of debt service or guaranteed savings, whichever is less, when guaranteed energy saving is not achieved.
 - Fails to include a requirement that contractors purchase and maintain a payment and performance bonds as required by statute.
 - Do not specify the type and amount of equipment to be installed.

Management's Response:

We agree to amend our rules to include these items in our review.

We appreciate the review by your office. We remain committed to working with the State Energy and Conservation Office (SECO) in order to strengthen the process for awarding energy savings performance contracts.

Please contact Susan Brown, Assistant Commissioner, if you need any additional information.

Sincerely,



Raymund A. Paredes

c: Arturo Alonzo
Tony Tegbe
Susan Brown

PA/mlh

AN EQUAL OPPORTUNITY EMPLOYER

Responses from the Bond Review Board



TEXAS BOND REVIEW BOARD

Governor Rick Perry, Chairman
Lieutenant Governor David Dewhurst
Speaker Tom Craddick
Comptroller Susan Combs

Robert C. Kline
Executive Director

The State Auditor of Texas
P. O. Box 12067
Austin, TX 78711-2067

The following are management's responses to the three recommendations for the Bond Review Board contained in the SAO's audit of Energy Savings Performance Contracts.

1. Develop written policies and procedures for reviewing and approving financing for energy saving contracts.

Management's Response:

Management concurs with this recommendation and staff is presently in the process of developing written policies and procedures for analyzing and approving Energy Savings Performance Contracts. Although the process for Bond Review Board approval will be drafted over the next several weeks, it should be noted that the new process may require the Board to amend its existing rules and adopt new rules with respect to the analysis and approval of Energy Savings Performance Contracts. The exact timing for the adoption of any changes to the rules and approval for staff procedures cannot be accurately determined at this time, but management anticipates that they will be adopted before the Board resumes accepting applications for energy savings performance transactions.

2. Ensure that contracts have been approved by either the State Energy Conservation Office of the Higher Education Coordinating Board before it considers financing for the contract.

Management's Response:

Management concurs with this recommendation and will incorporate it into the written policies and procedures for reviewing and approving financings for energy savings performance contracts.

3. Establish procedures to ensure that the loan amounts agree with final executed contract before the transaction is taken to the Bond Review Board for approval.

Management's Response:

Management will investigate opportunities to confirm final loan amounts before the transaction comes before the Bond Review Board for approval, including consulting with stakeholders to make certain that the procedures to be adopted don't result in unduly delaying Board approval.

Handwritten signature of Robert C. Kline in black ink.

Robert C. Kline
Executive Director

Handwritten date "8/27/08" in black ink.

Date

P.O. BOX 13292 • AUSTIN, TEXAS 78711-3292 • TEL: 512/463-1741 • FAX: 512/475-4802
WEBSITE: <http://www.brbb.state.tx.us> • EMAIL: bondz@brbb.state.tx.us

Responses from the Texas Public Finance Authority

Texas Public Finance Authority

Board of Directors:

H.L. Bert Mijares Jr., Chair
Ruth C. Schiermeyer, Vice Chair
Linda McKenna, Secretary
Gerald Alley
D. Joseph Meister
Robert T. Roddy, Jr.
Gary E. Wood

Kimberly K. Edwards
Executive Director



Mailing Address:
Post Office Box 12906
Austin, Texas 78711-2906

Physical Address:
300 West 15th Street, Suite 411
Austin, Texas 78701

Telephone: (512) 463-5544
Facsimile: (512) 463-5501
www.tpfa.state.tx.us

August 15, 2008

Mr. Jeffrey L. Grymkoski
Project Manager
State Auditor's Office
Robert E. Johnson Building
1501 N. Congress Avenue
Austin, Texas 78701

Re: Report on Energy Savings Performance Contracts

Dear Mr. Grymkoski,

This letter constitutes Texas Public Finance Authority's management response to the following recommendation contained in Chapter 2 of the referenced report:

Recommendation

The Texas Public Finance Authority should:

- Obtain a copy of the executed energy saving contract.
- Establish procedures to ensure that all requests for payment from state agencies and institutions of higher education are payments required under the contract, are within the contracts terms and conditions, and do not exceed the amount of the contract obligations.

Management's Response

The Authority will implement the recommendation as promptly as possible and reasonably expects full implementation to be completed by January 2009. Mr. John Hernandez, Deputy Director, will be responsible for implementing this corrective action.

Respectfully,

A handwritten signature in blue ink that reads "Kimberly K. Edwards".

Kimberly K. Edwards
Executive Director

An Equal Opportunity Employer
Printed on Recycled Paper

Responses from Texas Woman's University



Vice President for Finance and Administration
P.O. Box 425588, Denton, TX 76204-5588
940-898-3505 FAX 940-898-3509

August 20, 2008

Mr. Jeff Grymkoski
Texas State Auditor's Office
1501 N. Congress Avenue, 4th Floor
Austin, TX 78701

Dear Mr. Grymkoski:

Below are the management responses for the Energy Savings Performance Contract audit that I emailed to you on 8/14/2008.

SAO Recommendation: Monitor and verify the annual energy savings reported by its contractor, TAC Americas. This should include requesting detailed energy unit savings information for each affected account listed in the measurement and verification plan.

Management Response: TWU has from the inception of this project provided on-site office space for TAC personnel and material storage to facilitate the university's inspection and coordination prior to, during, and after installation. As you were informed previously, each quarter the Director of Physical Plant and Assistant Director of Plant Utilities review the TAC Energy Savings Reports. Prior to the Director of Physical Plant's arrival, the Director of Operations performed those duties. TWU meets face-to-face with TAC to review all adjustments for the previous quarter and to discuss the savings figures as reported by TAC. These meetings are also used to discuss changes in a building's use. Formal meeting minutes were not always kept. However, many discussions were documented via email (see attached). During the SAO audit the Director of Physical Plant informed the auditor that TWU was questioning one adjustment for DGL building's 24/7 continuous operation and savings associated with the Child Development Center (CDC). The auditors were also informed that the next TAC Energy Savings Report for the quarter ending February 2008 was due from TAC in April 2008 which would include the corrections for the items questioned by TWU. Ultimately the April report was revised again and released with a report date of May 7, 2008. These items were already identified and were being worked on by both TWU and TAC prior to the State Auditor's Office visit.

Also, worthy of note, the \$95,300 contractor overstatement of energy savings shown in your report is actually a \$122,282 understatement of energy savings as reported in the May 7, 2008 revised quarterly savings report by TAC that included all corrections and revisions back to the initial savings period. The university's representatives have scheduled review meetings with TAC relating to detailed individual account savings.

Individual utility account information will be included in all future quarterly TAC Energy Savings Reports and will be discussed and verified during quarterly review meetings and recorded in the meeting minutes.


Excellence within Reach

SAO Recommendation: Ensure it makes timely requests for baseline energy adjustments when a change in facility usage occurs.

Management Response: As referenced above and contrary to SAO assumptions the university does discuss and coordinate adjustments for changes in facilities use with TAC but only when those decisions are finalized. The university did start recording the Meeting minutes in April 2008 and will continue.

SAO Recommendation: Revise its record retention schedule to ensure that it retains all support documentation related to active energy savings contracts.

Management Response: As we discussed and recommended during our telephone exit interview if the university is to change its retention records that should be a requirement for all state institutions and should be accomplished by virtue of amending the statutes.

SAO Recommendation: Ensure that contractor invoices include sufficient detail to determine what is included in each line item billed and that the University does not pay for ineligible expenses.

Management Response: Invoices include the TWU Purchase Order number and a brief description of work. Also there is typically a quotation detailing the services before the work is accomplished. That could be embellished.

SAO Recommendation: Re-evaluate the practice of paying for the contractor's performance bond in alignment with Texas Education Code, Section 51.927(e), and consider recouping the \$230,225 it paid to TAC Americas for the contractor's performance bond.

Management Response: All construction is governed by the Uniform General Conditions. "Article 10-Payments" stipulates that the contractor develops a Schedule of Values and subsequently bills the owner for materials, work, and applicable fees and general conditions. This includes bonds. As previously stated the requirement was in the contract and follows all state procurement guidelines.

Sincerely,



Brenda Floyd, Ed.D
Vice President for Finance and Administration

Responses from the Parks and Wildlife Department



Life's better outside.™

August 26, 2008

Mr. John Keel, CPA, State Auditor
State Auditor's Office
1501 North Congress Avenue
Austin, Texas 78701

Dear Mr. Keel:

Enclosed is Texas Parks and Wildlife Department's (TPWD) response to the State Auditor's Office (SAO) draft report on energy savings performance contracts (ESPC), dated August 1, 2008. TPWD appreciates the opportunity to provide assistance with this project and respond to the report. Please contact us if you have questions.

The key finding in the SAO report is that the ESPC that TPWD signed in December 2004 was not compliant with Tx. Gov't. Code 2166.406 because under the contract the Department's guaranteed savings do not equal or exceed the total contract costs. TPWD does not dispute SAO's interpretation of the applicable statute. TPWD in good faith construed the statute and the program to allow an agency to combine renovation and replacement projects that could be funded based on savings with those that would not be tied to savings. TPWD funded the project with other sources that were not required to be repaid through savings (Proposition 8 Bond funds). SAO correctly states that TPWD financed its \$2.5 million contract with approximately \$1.5 million from Proposition 8 funds and about \$1.0 million from Master Lease Purchase Program (MLPP) funds.

TPWD construed the statute and State Energy Conservation Office (SECO) guidelines as requiring only those portions of the ESPC financed through MLPP as subject to the provision that savings must equal costs. TPWD's expected savings under the contract totals \$1.8 million and the contract was implemented with the intent to achieve the savings required to repay only the total financed with the MLPP funds. Consistent with its understanding of the program, TPWD made the business decision to include other planned renovations to its headquarters air handling systems in the ESPC. This decision was intended to facilitate the timely implementation of needed system upgrades, avoid duplicative procurements, avoid potential contractor disputes, and permit a single contractor to be accountable for the continued performance of the renovated system. TPWD received no objection to its program from SECO in the course of their review of our ESPC program.

TPWD's intent to be proactive pursuing performance contracting as a means of achieving energy savings, and as a method strongly encouraged through legislation and SECO, placed it among the first agencies to undertake an ESPC utilizing the statute. Its decision to make all needed system upgrades through one contract combined with an inclusive construction of Gov't Code 2166.406 resulted in the unintended consequence of being non-compliant with SAO's interpretation of the statute despite having the required approvals at each phase of the ESPC project.

Commissioners

Peter M. Holt
Chairman
San Antonio

T. Dan Friedkin
Vice-Chairman
Houston

Mark E. Bivins
Amarillo

J. Robert Brown
El Paso

Ralph H. Duggins
Fort Worth

Antonio Falcon, M.D.
Rio Grande City

Karen J. Hixon
San Antonio

Margaret Martin
Boerne

John D. Parker
Lufkin

Lee M. Bass
Chairman-Emeritus
Fort Worth

Carter P. Smith
Executive Director

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512.389.4800
www.tpwd.state.tx.us

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.

Mr. John Keel, CPA, State Auditor
Page 2 of 3
August 26, 2008

The SAO's key audit point related to the statutorily mandated amount of savings from an ESPC has been well made and will be the framework for any future energy savings performance contract undertaken by the Department. Furthermore, TPWD is committed to improving management of its contract, ensuring the Department is receiving accurate savings and ensuring that savings are regularly, more closely and independently monitored and verified in the future.

Please let us know if we may be of further assistance and once again, thank you for the opportunity to respond to this report.

Sincerely,



Carter Smith
Executive Director

CS:SW: dh

cc: Mr. Jeff Grymkoski
Mr. John Young

Recommendations

- Monitor and verify annual energy savings reported by the ESPC contractor.

TPWD Response

TPWD concurs with the finding and will pursue and implement ongoing and independent monitoring and verification of annual savings reported by the ESPC contractor.

Person Responsible: Steve Schroeter

Completion Date: 12/31/08

- Accept all payments from contractor for failure to meet savings guarantee.

TPWD Response

The TPWD concurs with the finding and will accept and deposit within three business days any future payments from the contractor for failure to meet savings guarantee and as soon as possible accept and deposit any outstanding payments due to TPWD.

Person Responsible: Steve Schroeter

Completion Date: 12/31/08

- Consider recouping the \$14,085 paid to the contractor's performance bond.

TPWD Response

TPWD has chosen not to recoup the \$14,085 cost of the payment and performance bond from the contractor because TPWD believes it would be inconsistent with accepted business practices of State agencies.

- Reimburse the GR, Game, Fish and Wildlife Account, State Parks Account for expenditures that should have been paid by Prop. 8 funds.

TPWD Response

TPWD concurs with the finding that GR, Game, Fish and Wildlife and State Parks accounts should have been paid using Prop. 8 funds and will reimburse these funds back to the original accounts.

Person Responsible: Joseph Molis

Completion Date: 12/31/08

Responses from the Health and Human Services Commission



TEXAS HEALTH AND HUMAN SERVICES COMMISSION

ALBERT HAWKINS
EXECUTIVE COMMISSIONER

August 22, 2008

John Keel, CPA
State Auditor
1501 North Congress Avenue, Suite 4.224
Austin, Texas 78701

Dear Mr. Keel:

Attached please find the Health and Human Services Commission's management response to the State Auditor's Office (SAO) draft report titled "Energy Savings Performance Contracts at Selected Agencies and Institutions of Higher Education."

We have carefully reviewed the information contained in the draft report, and appreciate the opportunity to provide our response to SAO's findings and recommendations.

Sincerely,

A handwritten signature in blue ink, appearing to read "Albert Hawkins", with a stylized flourish at the end.

Albert Hawkins

cc: Rolando Garza, Deputy Executive Commissioner for System Support Services
Bobby Halfmann, Chief of Staff
David Griffith, Internal Audit Director

P. O. Box 13247 • Austin, Texas 78711 • 4900 North Lamar, Austin, Texas 78751

Health and Human Services Commission
Management Response
to the State Auditor's Office Audit Report on:

**Energy Savings Performance Contracts at
Selected Agencies and Institutions of Higher Education**

Summary of Management Response:

HHSC has realized significant savings by reducing energy consumption as a result of its energy savings performance contracts. Those savings are projected to fully recover contract costs, and contracts may achieve even greater than anticipated savings in future years as utility rates increase.

HHSC has been committed from the outset to the establishment of a strong energy management program, soliciting the assistance of the Texas A&M University Energy Systems Lab (ESL) during program development. ESL helped to establish the program, and continued to assist throughout implementation by reviewing proposed vendor measurement and verification methodologies, and later by inspecting and validating equipment installed by the contractor.

Continued success is in large part the result of a commitment to contract oversight. HHSC's commitment is demonstrated by its employment of a Certified Energy Manager to review contractor reported savings, monitor the measurement and verification process, and provide guidance to facilities on the most efficient use of energy savings equipment and systems. HHSC has continued to improve its management processes over time to ensure that savings are verified and invoices are carefully reviewed and approved before payment is made.

Further, HHSC plans to conduct a thorough review of its energy savings performance contracts to ensure that:

- Contract language related to measurement and verification cost guarantees (\$9.8 million) more clearly reflect business practices already in place.
- Provisions are clarified to ensure that the unused portion (\$4.2 million) of master lease purchase program funding made available through the Bond Review Board is not committed or expended, unless an associated guarantee is provided. Therefore, no guarantee on the unused portion of available funding is needed at this time. Once expenditures are committed, corresponding guarantees will be established.

Clarification in these two areas alone will address over 95 percent of the amount the auditors concluded was not covered by the guaranteed savings amounts.

HHSC will perform additional analysis of the contract structure to ensure that current provisions that allow a shortfall in one period or contract to be offset by savings in other periods or contracts are in compliance with State statute and, if not, formalize required improvements through contract amendments or other appropriate measures.

Finally, while HHSC is committed to continued measurement and verification throughout the term of the contracts to help ensure continued savings, it plans to increase contractor accountability by clearly defining and monitoring performance standards and key deliverables.

Chapter 4-C

SAO Recommendation: *HHSC should monitor guaranteed savings by:*

- *Amending its contracts to eliminate the provision allowing the contractor to calculate refunds for guaranteed savings based on the lesser of the guaranteed amount or the debt services amount.*
- *Calculating guaranteed savings on an individual energy savings contract basis rather than combining refund calculations among multiple contracts.*

Management Response: HHSC will review the terms of its energy savings performance contracts to determine whether changes are necessary to improve compliance with State statute and ensure provisions are unambiguous. This review will include a detailed examination of provisions related to guarantee savings calculation methodologies. HHSC may consider alternative approaches, such as using a single contract rather than multiple contracts, if the state's interests are better served.

If it is determined that contract provisions should be enhanced, HHSC will negotiate terms with the contractor and execute applicable contract amendments.

Estimated Completion Dates:

March 2009

Title of Responsible Person:

Director of Facility Support Services

SAO Recommendation: *HHSC should:*

- *Monitor, verify, and document the installation of energy savings equipment.*
- *Ensure that all payments to its energy service company are properly approved.*

Management Response: Subsequent to the completion of Phase I, HHSC developed and implemented an improved management control structure to address contract monitoring and payment approval activities for its energy savings performance contracts. Improvements ensure site observations are conducted, adequate documentation of installed equipment is maintained, invoices are reviewed, and required approvals are obtained and documented before vouchers are processed for payment.

SAO Recommendation: *HHSC should re-evaluate its practice of paying for the contractor's performance bond to ensure it is in compliance with Texas Government Code, Section*

2166.406(e), and consider recouping the \$118,727 paid to the contractor for TAC Americas' payment and performance bond.

Management Response: State statute requires public works contractors to provide a payment and performance bond. Common practice in state government and in the private sector allows bond premiums to be charged directly to the cost of the work of a construction project. The surety calculates the bond premium based upon the contractor's rating or ability to complete the project and the total cost of the construction.

HHSC's energy savings performance contract requires the contractor to obtain a payment and performance bond in accordance with State statute. The bond premium was identified and included in the project cost and in the Utility Assessment Report submitted by the contractor and approved as a reimbursable cost by HHSC.

HHSC has reviewed its practice of determining that the premium associated with a required payment and performance bond is a reimbursable cost, and concluded that it is in compliance with State statute.

Responses from the Texas Youth Commission



TEXAS YOUTH COMMISSION

RICHARD NEDELKOFF
Conservator

August 14, 2008

Jeffrey L. Grymkoski
Project Manager
State Auditor's Office
P. O. Box 12067
Austin, Texas 78711-2067

Dear Mr. Grymkoski:

In response to your draft report on energy savings performance contracts (8/1/2008), we appreciate the opportunity to provide agency management responses to the recommendations relating to the Texas Youth Commission. The agency's management staff concurs with each recommendation. Specifically:

- The Director of Contracts, Procurement, and Support Services is responsible for supervising the Contracts Manager and working with the Chief Financial Officer to ensure that adequate policies and procedures are established to maintain all applicable documentation for agency contracts within the Contracts Department. The estimated date for completing this task is no later than December 1, 2008. The director and the manager are new agency positions in FY 2008 in response to the identified reform need to strengthen contract-related functions. Previously, some contract records such as the selection scoring matrix were maintained in the Legal Division. When the agency's central office was fundamentally reorganized under new executive management in early FY 2008, including major changes in office space, the score sheets for evaluating each vendor response were inadvertently misplaced during an extraordinary period of agency change.
- The Director of Maintenance and Construction will initiate re-procuring the services of an energy savings company during the first quarter of FY 2009. Previously requested projects will be reviewed for appropriate changes and the need for new projects will be considered. Since the agency's first request was developed in FY 2006, higher priority needs have been addressed by necessity through alternative methods and this is an opportunity to re-evaluate the entire project.
- The agency expects re-procurement of the third-part review services to occur as part of re-procuring the services of an energy savings company.

We appreciate the professionalism of State Auditor staff in conducting this review and being kept informed at every step. Please do not hesitate to contact Robin McKeever, Chief Financial Officer, at 512.424.6201, should questions arise relating to this response.

Sincerely,

A handwritten signature in blue ink, appearing to read "RN", written over a horizontal line.

Richard Nedelkoff
Conservator

cc: Karin Hill, TYC Director of Internal Audit

4900 N. Lamar • Austin, Texas 78751
(512) 424-6130 (Voice)

P.O. Box 4260 • Austin, Texas 78765
1-800-RELAY-TX (TDD)

Equal Opportunity Employer

Responses from Angelo State University



ANGELO STATE UNIVERSITY

Office of Facilities Planning and Construction

August 21, 2008

Mr. Jeff Grymkoski
State Audit Office

Re: Energy Services Contract with Angelo State University

Dear Mr. Grymkoski:

This letter is written in response to the draft report of the audit prepared by the State Audit Office regarding and Energy Services Contract between Angelo State University, further referred to as ASU, and TAC America's, Inc., which contract was executed in 2006.

ASU had a mechanical master plan completed in 2003 and 2004 which indicated a lot of mechanical, electrical and plumbing deferred maintenance on the campus. The study also indicated a lot of opportunities for the university to save some utility costs as a result of replacing some of the inefficient devices.

ASU studied the options we had regarding the problems indicated in the report. We looked at several options regarding the replacement of these items. We also discussed this with peer institutions and found that several of the institutions had entered into energy services contracts and had good experiences with the projects. ASU then prepared an RFQ to hire a firm to work for ASU in solving many of the issues identified in the master plan that was prepared for ASU. It should be noted that several of the items identified in the master plan were life-safety, general safety, or general operational items and could not be tied to any savings benefit to the university, but did remove the items from our deferred maintenance list.

After going through the RFQ process, ASU entered into a contract with TAC Americas, Inc., further referred to as TAC. ASU had three basic reasons for entering into a contract with this firm.

1. ASU desired to replace outdated and inefficient equipment in many of the buildings
2. Replace items that were listed on the mechanical master plans as a life-safety issue.
3. Replace lighting across the campus to provide better security to the students, faculty and staff during the evening.

ASU knew at the beginning of the process that several of these items were deferred maintenance or life-safety items that would not pay for the cost of the replacement, but were needed.

In the audit, it mentions the contract amount being \$13,198,066, which is correct. However, you incorrectly assume that all of the contract amount is for energy savings projects. The correct breakdown of the cost is as follows:

Energy Savings Projects for E & G facilities	\$ 8,000,000
Deferred maintenance/life-safety projects	\$ 2,833,066
Deferred maintenance projects for Auxiliary facilities	<u>2,365,000</u>
Total deferred maintenance projects	\$ 5,198,066
 Total project cost	 \$13,198,066

1635 Vanderventer | ASU Station #10924 | San Angelo, Texas 76909-0924
Phone: (325) 942-2380 | Fax: (325) 942-2356

Member, Texas Tech University System | Equal Opportunity : employer

The debt service for the project is broken down as follows:

E & G financing (TPFA) estimated payment (rounded)	\$ 780,000*
Debt Service for the Deferred Maintenance E & G items	\$ 308,979**
Debt Service for the Deferred Maintenance Auxiliary Building	<u>\$ 257,984**</u>
Total Debt Service	\$1,346,963

*This debt payment is shown as an estimate, since the actual payment is based on the actual draw's that have been paid to the contractor as the project is completed. This amount will vary over the term of the lease.

**These amounts are financed with Tax Free Municipal Financing and are paid with operational savings generated as a result of the completion of this work. This is not an energy savings, but rather an operational savings.

On page 5 of the audit, reference is made that ASU did not account for all costs associated with the contract. We do not agree with this statement. If you look at the portion of the contract that is for energy savings, and properly apply the proper interest rates to the project, we have accounted for the costs of the contract. The audit incorrectly assumes all of the work that we contracted for is for energy savings projects, which is not correct.

Pages 6 and 7 of the audit mention some projects that have a payback over 15 years. The report does not mention the projects that have a payback of 7 years, 8 years, or 9 years. If you blend these projects with the projects that have a longer payback, the overall payback is approximately 14.3 years. This again assumes the projects that are considered to be deferred maintenance/life-safety items are removed from the consideration. It is not correct to add these items into the overall consideration of the project, which is indicated on page 7 of this report. ASU knew at the time the deferred maintenance and life-safety projects would not pay for themselves.

In our phone discussion, you asked why we would include the deferred maintenance items and life-safety items in this contract. These were included in the project so the overall operation of this equipment would work with the new equipment that was being placed on the campus as part of the energy savings portion of the project. Items like fume hoods rely on air supplied by the new air handlers, so it is important to make sure the new air handlers supply enough air for the new fume hoods. There are newer operational requirements and codes that affect the operation of the fume hoods and ASU believed it was important to have the same engineer design both systems so they are compatible with one another.

On page 13 the audit indicates ASU did not have either projected or guaranteed savings that met or exceeded costs and refer to a figure on page 14. There is no discussion on where the amount shown in the figure came from and it incorrectly shows measurement and verification fees (PASS) added to the cost. This graph again shows that all of the project is based on energy savings, which is not the case. On pages 2 and 3 of the Energy Services Contract with TAC, it clearly states that if savings are not sufficient to pay for the PASS fees, they will not be billed to the university, or is only a portion of saving over the guaranteed amount is available, then only that portion of the fees will be billed. The PASS fees were not ever shown to be included in the guaranteed amount of the contract.

I think it is very important to understand that it is in the University's best interest to have the PASS team on site at ASU through the life of this contract. This will insure ASU is maintaining the systems and operating the systems in a manner that will maximize the energy savings.

On page 15 of the audit the report again mentions a negative cash flow. This results from ASU adding projects to take care of deferred maintenance and life-safety items to the schedule of work. ASU knew at the time this portion of the work would not be included in the energy savings calculations.

Page 24 of the audit there is an incorrect mark shown on Table 3. The table shows where the University would allow excess savings to carry forward from year to year. ASU only allows this to occur in year 1 of the contract, as stipulated on page 64 of the Energy Services Contract with TAC.

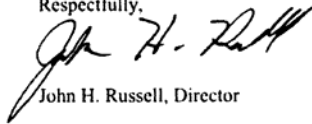
On page 26, the audit indicated ASU did not require the contractor to provide or maintain performance and payment bonds. A performance and payment bond has been maintained on this project through-out the term of the project.

There is reference throughout the audit the third-party reviewer did not properly review the scope of the project and did not consider all work being completed under the energy savings portion of the contract. That is not correct. Since the energy savings portion of the contract only considers the E & G buildings, and does not consider the deferred maintenance portion of the work, the reviewer did consider all parts of the energy saving project.

The last part of the audit indicates that ASU has gone to another source of financing for a portion of the contract that could result in interest rates that are higher than what the state programs offer. This financing was obtained as a result of the state rules that prohibit the University from going to other state funding sources such as the Lone Star program or the TPFA program for projects that pertain to auxiliary buildings or for projects that are not performance based.

I hope this provides some additional information you can consider prior to completing you final report. If you have any questions, or would like to discuss any of these items, please contact me.

Respectfully,



John H. Russell, Director

Responses from Lamar University



LAMAR UNIVERSITY
A Member of The Texas State University System

August 13, 2008

Mr. Jeff Grymkoski, Senior Auditor
Texas State Auditor's Office
Austin, Texas

Dear Mr. Grymkoski;

Lamar University is in receipt of your draft report on Energy Savings Performance Contracts and are pleased that there were no findings or recommendations pertaining to the performance contract that we recently completed. However, we did find some statements that we felt a need to respond to as they, on the surface, made it appear as though Lamar University had entered into this contract without due diligence or the statement is not accurate.

We have responded to each item in the order that they were presented in the draft document.

Table 1 presents the contract information reflecting that the total contract cost exceeded the guaranteed amount of the contract by \$1,343,552. Included in the contract cost amount is the measurement and verification fee. That fee, in our opinion, should not be included in the total contract costs as it is expressly identified as permitted only if there are sufficient savings to pay for that service. That statement is clearly identified in Article 2 – Contract Sum and Payments, paragraph 2.2 of the signed contract. It was also illustrated on the second page of the Financial Projections document under the section "TAC guarantees all costs are covered". Finally the statement appears again on the Lamar University – Summary of Lease Payments and Guaranteed Cash Flows document and states, "If the achieved annual savings are insufficient to pay for the anticipated debt service as shown, and the PASS cost, TAC will not bill for the amount of PASS that would cause the annual savings to go negative."

In your report Below Table 1, appears the statement, "The energy savings performance company (contractor) projected, but did not guarantee that saving would exceed total costs in the Lamar University contracts." This was followed by the statement that "These contracts are not structured to recover the costs of the contracts through energy savings." We are of the opinion that that statement is inaccurate.

At the beginning of this project, before any contracts were signed and approved through all of the proper authorities, we were presented with a spreadsheet outlining the annual payments based on a proposed draw schedule and a TPFA rate of 4% with a .5% administrative fee on outstanding lease balances and a municipal lease-purchase with a 4.98% interest rate. These were the interest rates at the time of the original projection. Over the fifteen year period the total annual payments would accumulate to

Office of Facilities Management
P. O. Box 10016 Beaumont, Texas 77710 409 880-8470 Fax 409 880-8975

\$19,341,571. The guarantee amount of \$19,794,555 therefore exceeded the amount of the projection. During the time that we proceeded through the approval processes, the interest rates increased slightly from the original projection. A draft document prepared by E. Martinez, who was an analyst with the Bond Review Board, used a 4.5% interest rate with a .5% administration fee for the TPFA financing, and a 5.46% interest rate for the Government Capital Corporation portion of the project. Her conclusions showed a total cost of the project to be \$19,255,263, which again is less than the guaranteed amount of \$19,794,555. On that basis the project was approved. Therefore the project was structured to cover the cost through energy savings.

In section 2-A, a statement appears stating we entered into a contract for a project in which the payback period exceeded the term of the contract. The illustration used makes it appear that there was a separate contract for this work. We entered into one contract for the entire project. The illustration for the work done in the central plant was only a part of the total contract. That is how some of the work can be accomplished when it is included with other parts of the project that have very short returns on the investment. Without this part of the project being done as part of the entire project, the total savings could not have been accomplished. If this central plant project was to stand on its own then we would not have been doing it as an energy savings project. To illustrate it in these findings exaggerates the conclusion that these projects don't pay for themselves. It is taking one part of the project out of context for the whole project.

The final point that we wish to address relates to the use of financing from a for-profit corporation. All of the higher education institutions involved with an energy savings performance contract have buildings as part of their heating and cooling systems that are designated as auxiliary buildings. These are student union buildings, dining halls, student health centers, athletic facilities, or student housing. TPFA funds along with appropriated funds by the state legislature cannot by state statute be used to support auxiliary facilities. To comply with that statute funding to complete the activity for improvements associated with those facilities had to come from another source than the TPFA.

In conclusion I would like to emphasize the fact that these programs bring about more benefits than just the energy savings. Our project has exceeded the guaranteed amount in energy savings and has reached the projected amount of savings that the contractor thought could be achieved. Not only do we pay for all of these improvements with money diverted from the energy providers, but we also have reduced our deferred maintenance and have provided a more climate controlled environment in which our faculty, staff, and students can enjoy.

Sincerely,

Gerald E. McCaig
Associate Vice President for Facilities Management

P.O. Box 10016
Beaumont, Texas 77710
409-880-8108 Phone
409-880-8975 Fax
gerald.mccaig@lamar.edu

Copies of this report have been distributed to the following:

Legislative Audit Committee

The Honorable David Dewhurst, Lieutenant Governor, Joint Chair
The Honorable Tom Craddick, Speaker of the House, Joint Chair
The Honorable Steve Ogden, Senate Finance Committee
The Honorable Thomas “Tommy” Williams, Member, Texas Senate
The Honorable Warren Chisum, House Appropriations Committee
The Honorable Jim Keffer, House Ways and Means Committee

Office of the Governor

The Honorable Rick Perry, Governor

Boards, Commissions, and Executive Management of the Following Agencies and Institutions of Higher Education

Angelo State University
Bond Review Board
Department of Aging and Disability Services
Department of State Health Services
Health and Human Services Commission
Higher Education Coordinating Board
Lamar University
Parks and Wildlife Department
State Energy Conservation Office (Office of the Comptroller of Public
Accounts)
Texas Public Finance Authority
Texas Woman’s University



This document is not copyrighted. Readers may make additional copies of this report as needed. In addition, most State Auditor's Office reports may be downloaded from our Web site: www.sao.state.tx.us.

In compliance with the Americans with Disabilities Act, this document may also be requested in alternative formats. To do so, contact our report request line at (512) 936-9880 (Voice), (512) 936-9400 (FAX), 1-800-RELAY-TX (TDD), or visit the Robert E. Johnson Building, 1501 North Congress Avenue, Suite 4.224, Austin, Texas 78701.

The State Auditor's Office is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, national origin, age, or disability in employment or in the provision of services, programs, or activities.

To report waste, fraud, or abuse in state government call the SAO Hotline: 1-800-TX-AUDIT.