

# **ENERGY EFFICIENCY CONTRACTS 2023**

## **MONITORING AND COST SAVINGS**

**PERFORMANCE AUDIT SERVICES**

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May 1, 2024

The Honorable J. Cameron Henry, Jr.  
President of the Senate  
The Honorable Phillip R. DeVillier,  
Speaker of the House of Representatives

Dear Senator Henry and Representative DeVillier:

This report provides the results of our performance audit of the one energy efficiency contract entered into by a state agency in effect as of June 30, 2023. This contract is between the Louisiana Department of Corrections (LADOC) and Johnson Controls, Inc.

The report contains our findings and conclusions. I hope this report will benefit you in your legislative decision-making process.

We would like to express our appreciation to the management and staff at LADOC for their assistance during this audit.

Respectfully submitted,



Michael J. "Mike" Waguespack, CPA  
Legislative Auditor

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# Louisiana Legislative Auditor

Michael J. "Mike" Waguespack, CPA



## Energy Efficiency Contracts 2023 Monitoring and Cost Savings

May 2024

Audit Control # 40230036

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## Introduction

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State law<sup>1</sup> requires the Louisiana Legislative Auditor to conduct periodic performance audits of each performance-based energy efficiency contract entered into by a state agency and in effect on and after January 1, 2010. In accordance with this mandate, we conducted a performance audit of the energy efficiency contract in effect as of June 30, 2023. There is one active contract:

- Louisiana Department of Corrections (LADOC) with Johnson Controls, Inc. (LADOC - Johnson Controls)

The objective of this audit was:

**To determine if the energy service company conducted its monitoring activities and achieved the cost savings required by its contract as of June 30, 2023.**

**LADOC - Johnson Controls.** Johnson Controls has conducted its monitoring activities and achieved the annual cost savings required by the contract for Year 10.

Appendix A details our audit scope and methodology, and Appendix B summarizes background information.

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<sup>1</sup> Louisiana Revised Statute (R.S.) 39:1622 (E)(2)

## Objective: To determine if the energy service company conducted its monitoring activities and achieved the cost savings required by its contract as of June 30, 2023.

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Based on our analysis, Johnson Controls is in compliance with the monitoring requirements specific to its contract with LADOC. The energy service company provided to LADOC the required cost-savings verification report and met its cost savings guarantee as outlined in its contract. This contract is discussed in detail below.

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### LADOC – Johnson Controls Contract

**Contract Summary.** On September 22, 2011, LADOC entered into a performance-based energy efficiency contract with Johnson Controls. The contract term is 16 years. The original contract covered nine sites; however, the contract was amended in 2013 to compensate for the closure of Forcht-Wade Correctional Center and C. Paul Phelps Correctional Center.<sup>2</sup> The amendment reduced the total cost of the contract by \$891,303, to \$39,631,903, and reduced the total guaranteed savings by \$1,081,596 to \$39,741,809. Act 51 of the 2017 Regular Legislative Session allowed LADOC to further amend its contract to deduct the guaranteed savings attributable to the closed sites. As such, LADOC and Johnson Controls amended the contract again on January 18, 2018, to reduce the total guaranteed savings by an additional \$552,709. The contract was amended again on February 26, 2020, to account for the closing of Louisiana Correctional Institute for Women. This amendment reduced the total cost of the contract by \$831,365 and the guaranteed savings by \$2,371,384.

The contract's amended total projected net savings is -\$1,982,822 because LADOC incurred costs for work Johnson Controls completed at Forcht-Wade Correctional Center, C. Paul Phelps Correctional Center, and Louisiana Correctional Institute for Women before the agency closed the three sites, but no energy savings will actually be achieved.<sup>3</sup> Exhibit 1 summarizes the cost and savings guarantee terms of the amended contract.

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<sup>2</sup> The six remaining sites are LADOC Headquarters, Dixon Correctional Institute, B.B. Rayburn Correctional Center, Elayn Hunt Correctional Center, David Wade Correctional Center, and Louisiana State Penitentiary.

<sup>3</sup> The LADOC-Johnson Controls contract contains an annual cost savings guarantee for each year of the contract. Therefore, the negative projected net savings for the total contract term doesn't affect this guarantee.

**Exhibit 1: Projected Financial Performance  
LADOC - Johnson Controls Contract**

(A) Net Lease Payments	(B) Service Costs	(C) Total Costs (A+B)	(D) Electricity and Natural Gas Savings	(E) Water Savings	(F) Operational Savings	(G) Total Guaranteed Savings (D+E+F)	(H) Projected Net Savings (G-C)
\$33,079,706	\$5,720,832	\$38,800,538	\$34,277,375	\$763,342	\$1,776,999	\$36,817,716	-\$1,982,822*

\*The negative projected net savings is a result of LADOC incurring costs prior to the closure of Forcht-Wade Correctional Center, C. Paul Phelps Correctional Center, and Louisiana Correctional Institute for Women, but related savings will not be achieved as a result of the closure of the three sites. The Projected Net Savings does not consider actual savings in excess of the guaranteed savings. See Exhibit 2 for the savings in excess of the guarantee through Year 10 which is \$3,046,406.

**Source:** Prepared by legislative auditor's staff using information from the LADOC-Johnson Controls contract and amendments.

**Johnson Controls is in compliance with the monitoring requirement.**

The LADOC-Johnson Controls contract contains a service agreement in which Johnson Controls provides measurement and verification services, waste management compactor monitoring, and premium level services on identified facilities and equipment. The 2020 contract amendment reduced the annual service costs LADOC will pay Johnson Controls beginning in Year 7 to the end of the contract because of the closure of Forcht-Wade Correctional Center, C. Paul Phelps Correctional Center, and Louisiana Correctional Institute for Women. The amendment reduced the total service agreement cost from \$6,552,197 to \$5,720,832, a reduction of \$831,365. The service agreement is paid in monthly installments throughout the term of the contract.

As part of the service agreement, Johnson Controls calculates the measured annual energy, operation, and maintenance savings achieved; reconciles the energy, operation, and maintenance savings with the guaranteed savings; and advises LADOC of whether there is a guaranteed savings shortfall or guaranteed savings surplus for the applicable guarantee year. As required, Johnson Controls provided LADOC an annual report that details this information for Year 10 of the contract.

**Third-Party Monitoring.** The Division of Administration (DOA), Office of Facility Planning and Control contracted E/S3 Consultants, Inc. (E/S3) to serve as an independent third-party consultant on the energy efficiency contract between LADOC and Johnson Controls. E/S3 monitors measurement and verification services provided by Johnson Controls. Specifically, E/S3 reviews Johnson Controls' annual energy and costs savings/shortfall calculations, and measurement and verification methodology, as well as recommends adjustments to the baseline used to calculate cost savings.

DOA first entered into a contract with E/S3 on February 11, 2013. The latest contract is dated July 14, 2021 and covers three years with a maximum fee of \$20,766 per year. The cost associated with the E/S3 contract is not included in the calculation of net cost savings because Louisiana Revised Statute 39:1622 requires

that energy savings companies pay a fee, not to exceed 2.5% of the contract, which goes into the Energy Performance Contract Fund to pay for contract oversight.

**Johnson Controls achieved the annual guaranteed cost savings for Year 10 of the contract.** The LADOC - Johnson Controls contract contains a cost-savings guarantee for each year of the contract. Based on the cost-savings report, Johnson Controls exceeded the annual savings guarantee for Year 10 through June 2023. The actual savings reported by Johnson Controls in its cost-savings verification report was independently reviewed and verified by E/S3.

Exhibit 2 is a summary of contract results to date, including whether the cost-savings guarantee was met for each year. Overall, Johnson Controls has exceeded the annual savings guarantees by \$3,046,406 through June 2023.

### Exhibit 2: LADOC - Johnson Controls Contract Cost-Savings Summary

Year	(A) Electricity Savings	(B) Gas Savings	(C) Water/ Sewer Savings	(D) Operation Savings	(E) Total Savings (A+B+C+D)	(F) Guaranteed Savings	Savings in Excess of Guarantee (E-F)
Construction (Jan 12 - June 13)	\$370,885	\$526,810	\$95,553	N/A	\$993,248	\$559,951	\$433,297
Year 1 (July 13 - June 14)	771,617	973,396	276,605	\$143,901	2,165,519	2,294,181	-128,662
Year 2 (July 14 - June 15)	799,337	1,009,879	274,351	143,901	2,227,468	2,335,772	-108,304
Year 3 (July 15 - June 16)	797,568	1,240,544	283,352	143,901	2,465,365	2,340,543	124,882
Year 4 (July 16 - June 17)	855,445	1,334,776	272,890	143,901	2,607,012	2,383,060	223,952
Year 5 (July 17 - June 18)	969,694	1,190,433	235,103	143,901	2,539,131	2,426,427	112,704
Year 6 (July 18 - June 19)	1,028,645	1,117,338	210,599	143,901	2,500,483	2,470,661	29,822
Year 7 (July 19 - June 20)	1,354,953	1,346,590	171,050	50,403	2,922,996	2,266,786	656,210
Year 8 (July 20 - June 21)	1,369,888	1,176,297	162,181	50,403	2,758,769	2,309,351	449,418
Year 9 (July 21 - June 22)	1,380,999	1,235,141	165,225	50,403	2,831,768	2,352,767	479,001
Year 10 (July 22 - June 23)	1,613,453	1,357,260	150,082	50,403	3,171,198	2,397,052	774,146
<b>Total</b>	<b>\$11,312,484</b>	<b>\$12,508,464</b>	<b>\$2,296,991</b>	<b>\$1,065,018</b>	<b>\$27,182,957</b>	<b>\$24,136,551</b>	<b>\$3,046,406</b>

Calculations in this exhibit are based on rounded numbers. Cost savings for the years highlighted in gray were reviewed in prior reports. The reports are available on the Legislative Auditor's website at <http://www.lla.la.gov>.

**Source:** Prepared by legislative auditor's staff using information from LADOC annual Cost-Savings Reports.



## APPENDIX A: SCOPE AND METHODOLOGY

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Louisiana Revised Statute 39:1622 (E)(2) provides that the Louisiana Legislative Auditor (LLA) shall conduct annual performance audits of performance-based energy efficiency contracts entered into by state agencies. LLA shall establish a written schedule for the execution of such performance audits, with the schedule posted on LLA's website no later than February 1 of each year.

Audits shall be conducted on each performance-based energy efficiency contract in effect on and after January 1, 2010. LLA shall coordinate with the Commissioner of Administration to develop a description of information to be included as part of each energy efficiency contract performance audit. In accordance with this legislative mandate, we performed a performance audit of the energy efficiency contracts currently in place as of June 30, 2023. Our audit objective was:

**To determine if the energy service company conducted its monitoring activities and achieved the cost savings required by its contract as of June 30, 2023.**

To answer our objective, we performed the following audit steps:

- Contacted Office of Facility Planning and Control to determine if there were any new performance-based energy efficiency contracts entered into by state agencies in effect as of June 30, 2023.
- Researched and reviewed state laws on energy efficiency contracts.
- Researched and summarized various aspects of the current energy efficiency contract held by the Louisiana Department of Corrections (LADOC).
- Contacted LADOC staff to determine the status of its state agency energy efficiency contract in effect as of June 30, 2023, including any new contract amendments.
- Obtained energy performance and savings verification reports from the energy savings company (Johnson Controls) to determine compliance with the contract monitoring requirements.
- Obtained the third-party independent review of JCI's Year 10 Energy Performance and Savings Report. We used this report to verify the cost savings achieved for Year 10 of the energy efficiency contract between LADOC and Johnson Controls.

- Communicated with officials at LADOC to develop an understanding of the processes used to track and verify the energy consumption associated with the equipment installed as part of the contract.
- Provided our report to LADOC to review for accuracy and reasonableness.

We conducted this performance audit in accordance with generally accepted *Government Auditing Standards* issued by the Comptroller General of the United States. 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 objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

We obtained an understanding of internal control that is significant to the audit objective and assessed the design and implementation of such internal control to the extent necessary to address our audit objective. We also obtained an understanding of legal provisions that are significant within the context of the audit objective, and we assessed the risk that illegal acts, including fraud, and violations of applicable contract, grant agreement, or other legal provisions could occur. Based on that risk assessment, we designed and performed procedures to provide reasonable assurance of detecting instances of noncompliance significant to those provisions.

## APPENDIX B: BACKGROUND

Louisiana Revised Statute (R.S.) 39:1622 provides that Louisiana state agencies are allowed to enter into performance-based energy efficiency contracts for services and equipment. The state agency awards a contract to an energy service company through a request for proposal process and the contract extends for a period equal to the lesser of 20 years or the average life of the equipment installed by the performance contractor. The energy service company provides equipment and services to the agency intended to reduce the agency’s energy consumption.

**Current Energy Efficiency Contracts.** There was one energy efficiency contract in effect as of June 30, 2023. This contract is listed below.

- Louisiana Department of Corrections (LADOC) with Johnson Controls, Inc. (“LADOC - Johnson Controls”)

This contract is 16 years in length. Below is a summary of the state energy efficiency contract.

<b>Exhibit 3: Active State Energy Efficiency Contract As of June 30, 2023</b>							
State Agency	Energy Service Company	Contract Initiation	Contract Length	Performance Commencement Date*	Total Cost	Total Guaranteed Savings	Projected Net Savings**
LADOC	Johnson Controls, Inc.	September 22, 2011	16 Years	July 1, 2013	\$38,800,538	\$36,817,716	\$-1,982,822
<p>* The performance commencement date is the first day of the month after the month in which all equipment is installed and commenced operating per the contract, and the date that the first guarantee year and calculation of savings commences.  ** Projected Net Savings doesn’t take into account actual savings in excess of the guaranteed savings. See Exhibit 2 for this information. The negative projected net savings for the LADOC-Johnson Controls contract is a result of LADOC incurring costs prior to the closure of three facilities before related savings could be achieved.  <b>Source:</b> Prepared by legislative auditor’s staff using information from the LADOC - Johnson Controls contract and amendments.</p>							

**Monitoring.** The LADOC-Johnson Controls contract, in accordance with Louisiana Administrative Code 34:V.2505(D), requires that the energy service company use the International Performance Measurement and Verification Protocol standard to measure the financial performance of the respective contracts. The energy service companies provide the agencies with quarterly or annual reports throughout the term of the contract that summarize the contractor’s performance relative to the guaranteed cost savings. These reports compare the actual energy consumed for the given time period to an agreed-upon energy consumption baseline to determine the amount of energy saved.

**Cost Savings.** R.S. 39:1622 (C)(1) requires energy efficiency contracts to include a method to establish their guaranteed cost savings. These savings, at a

minimum, must ensure a total annual savings sufficient to fully fund any financing arrangement entered into to fund the contract. In the event that the guaranteed savings are not met, the energy service company must pay the agency the difference between the guaranteed savings amount and the actual savings amount. This arrangement helps agencies finance equipment and system upgrades that they might otherwise not be able to afford.