

Audit Report

**Department of General Services
Office of the Secretary and Other Units**

January 2011



OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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Karl S. Aro
Executive Director

DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

January 6, 2011

Bruce A. Myers, CPA
Legislative Auditor

Senator Verna L. Jones, Co-Chair, Joint Audit Committee
Delegate Steven J. DeBoy, Sr., Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

We have audited the Office of the Secretary and other units of the Department of General Services (DGS) for the period beginning February 1, 2007 and ending March 8, 2010. The budgetary units covered by the audit are indicated on page 21 of this report. DGS provides professional and technical services for the planning, design, construction, and maintenance of most State facilities; manages and maintains multi-agency State facilities; and coordinates the State's real estate activities.

DGS currently oversees 28 energy performance contracts that have estimated construction costs totaling approximately \$250 million. DGS is responsible for reviewing and approving the scope of all related projects, the methods to be used to calculate related energy cost savings, and the measurements and verifications of the actual savings realized. Our audit disclosed that DGS did not independently verify the propriety of certain data used and assumptions made in calculations performed by the applicable energy service companies (ESCOs). In addition, DGS permitted an ESCO to forego performing certain measurement and verification (M&V) services without reducing the amount paid to the ESCO or obtaining approval from the Board of Public Works. DGS also permitted ESCOs to use certain M&V methods that did not appear to be supported by federal guidelines and industry protocols.

We also noted that DGS lacked adequate procedures for the issuance of State ID cards. Control over these cards is a significant concern since cardholders are allowed access to State facilities and can generally use these IDs to obtain free public transportation (such as bus and metro). We further noted that DGS did not always formally document its decision regarding seeking the recovery of certain costs incurred due to design errors or omissions by project architects or engineers. Finally, deficiencies were noted with regard to certain accounting transactions and controls over equipment.

An executive summary of our findings can be found on page 5. DGS' response to this audit is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during this audit by DGS.

Respectfully submitted,

Bruce A. Myers, CPA
Legislative Auditor

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Executive Summary

Legislative Audit Report on the Department of General Services – Office of the Secretary and Other Units (DGS) January 2011

- **DGS did not determine the propriety of certain data used and assumptions made by energy service companies (ESCOs) to calculate State facility energy usage and verify that related guaranteed cost savings were realized.**

DGS should verify, at least on a test basis, data used and assumptions made in ESCO calculations and verify that guaranteed cost savings were realized.

- **DGS could not adequately support its decision to pay an ESCO for certain required measurement and verification (M&V) services that were not performed and did not request the Board of Public Works to approve the related contract modification.**

DGS should renegotiate with the ESCO the amount paid for the M&V services to be performed and request approval from the Board of Public Works to modify the related contract.

- **DGS allowed certain ESCOs to calculate energy cost savings using M&V methods that were not in accordance with federal guidelines or industry protocols.**

DGS should establish standard M&V procedures, in accordance with federal guidelines and industry protocols, to be followed for all energy performance contracts and document in writing the use of any M&V procedures that deviate from such guidelines and protocols.

- **DGS lacked adequate controls for the issuance and recovery of State identification (ID) cards. For example, there was no supervisory review of ID cards issued to ensure that the cards were issued only to authorized individuals.**

DGS should take the recommended actions to provide adequate oversight of the issuance and recovery of State ID cards.

- **DGS did not formally document its decision regarding seeking the recovery of costs incurred on construction projects due to design errors or omissions by project architects or engineers.**

DGS should document its decision regarding the recovery of costs incurred due to contractor design errors or omissions.

- **DGS inappropriately accrued certain revenues and expenditures during the budgetary closeout process.**

DGS should maintain appropriate documentation to support all closeout transactions.

- **Internal control and recordkeeping deficiencies were noted with respect to equipment.**

DGS should take the recommended actions to improve controls over its equipment and related records.

Background Information

Agency Responsibilities

The Department of General Services' Office of the Secretary and other units (DGS) provide professional and technical services for the planning, design, construction, and maintenance of most State facilities; manage and maintain multi-agency State facilities; and coordinate the State's real estate activities.

According to the State's records, DGS expenditures (excluding statewide capital project expenditures) totaled approximately \$83.5 million during fiscal year 2010.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the eight findings contained in our preceding audit report dated April 17, 2008. We determined that DGS had satisfactorily resolved six of these findings. The remaining two findings are repeated in this report.

Findings and Recommendations

Energy Performance Contracts – Background

An Energy Performance Contract (EPC) is a self-funded financing mechanism that provides infrastructure improvements to applicable State facilities, energy and water savings, monitoring and verification of effectiveness, training, maintenance, and environmental benefits. The Department of General Services (DGS) is responsible for reviewing and approving the scope of all related projects, the methods to be used to calculate related energy cost savings, and the measurements and verifications of the actual savings realized.

Under an EPC, project construction costs incurred (which can be financed through either the State's Master Lease Program or the State Agency Loan Program) are recovered from savings realized over the life of the contract. These savings commonly come from reductions in energy consumption, and reduced operation and maintenance costs. Other costs financed by subsequent savings may include loan financing charges, monitoring services, and system and equipment maintenance provided by the contractor. To ensure that all project costs are subsequently recovered, project contractors are required to guarantee that the applicable facility will realize certain future minimum reductions in energy consumption. Project contractors are also required to assume the risk for the operation and maintenance of all energy systems and related equipment and hardware installed during the project for a specified period of time.

Project Planning

Individual State agencies may solicit an energy audit and related technical study to determine if an EPC is economically feasible. An interested agency will contact DGS, and DGS will assign an approved contractor (that is, an energy service company, or ESCO) to conduct the audit and study. During the planning phase of the project, the assigned ESCO conducts a comprehensive energy audit and technical study of the applicable State facility, and completes preliminary design work to identify cost effective energy alternatives. Such alternatives are intended to ensure that the facility achieves reductions of at least 20 percent in its current ("baseline") energy consumption, as calculated by the ESCO, during a payback period not to exceed 15 years while also maintaining and/or enhancing existing comfort levels.

Once a facility's baseline energy consumption is determined, the ESCO will estimate the total future energy-related costs that can be avoided through the installation of various facility and equipment upgrades and replacements (such as new windows, doors, roofs, plumbing fixtures, and lighting), and the portion of

the estimated cost savings that the ESCO will guarantee. If a State agency elects to proceed with a project, the agency will enter into a contract with the same ESCO to perform the related energy upgrade work.

Guaranteed Savings

To ensure that guaranteed savings are achieved, the ESCO compares the energy usage and related costs incurred by the facility prior to project construction to the usage and costs incurred after construction has been completed. While the ESCO assumes most of the risk associated with a project by guaranteeing that a certain level of savings will be realized, a State agency still assumes certain risks related to factors over which the ESCO has no control (for example, increases in utility rates). Although adjustments will be made to the measured savings to take such factors into account, the guaranteed savings must be met on an annual basis throughout the life of the contract. Savings that exceed the related annual guaranteed amount cannot be applied to a previous or subsequent year during which the savings guarantee was not met, thus assuring that any annual excess savings solely benefit the State. However, if a guaranteed savings for any given year is not met, the ESCO is required to pay the difference to the State agency.

DGS Responsibilities

DGS is responsible for procuring contracts with ESCOs and for monitoring the design, construction, and maintenance of each project during the applicable payback period. According to its 2009 annual report, DGS was overseeing 28 EPC projects with estimated construction costs totaling approximately \$250 million; these projects are in the development, construction, and measurement and verification (M&V) phases. The costs of these projects are to be recovered by the State from guaranteed savings achieved through reductions in future energy usage by the applicable facilities and/or guaranteed savings paid by the applicable contractors when the savings goal has not been met.¹

DGS' Office of Energy Performance and Conservation was created to monitor EPC projects for all State agencies. Specifically, the Office is responsible for reviewing baseline calculations of energy usage for accuracy, reviewing assumptions associated with estimated cost avoidances, monitoring the

¹ Responsibility for monitoring the actual repayment of project financing costs rests with either the State Treasurer's Office (STO) or the Maryland Energy Administration (MEA), depending on which agency funded the project. The source for repayment of the project costs is derived from the resultant savings in energy costs. After completion of the project, the user agency continues to receive its pre-project appropriation for energy costs. The unexpended appropriation resulting from the reduction in energy usage represents the amount saved. This amount is to be subsequently transferred to either the STO or MEA and used to repay the original project financing costs.

installation and performance of related equipment, overseeing project construction, and independently verifying energy consumption subsequent to the completion of construction. The Office also monitors energy consumption based on M&V reports prepared annually by the applicable ESCO. These reports are used to determine the actual reduction in facility energy usage by comparing the amount of energy used by a facility prior to project construction to the amount of energy used after construction has been completed.

Finding 1

DGS did not determine the propriety of certain data used and assumptions made by ESCOs to calculate facility energy usage and verify that related guaranteed cost savings were realized.

Analysis

DGS did not determine the propriety of certain data used and assumptions made by ESCOs to calculate facility energy usage and verify that related guaranteed cost savings were realized. Consequently, DGS was unable to verify the accuracy or propriety of the related dollar savings calculation presented by the ESCOs in their M&V reports and, therefore, lacked assurance that the related guaranteed cost savings from the EPCs were realized. Specifically, we noted the following conditions:

- DGS did not verify that ESCO baseline data from original proposals (which are incorporated into the EPCs) agreed with baseline data used to calculate the savings realized from completed projects. Our test of five M&V reports, for completed projects with combined guaranteed cost savings of approximately \$68 million, disclosed that certain baseline data used by the applicable ESCOs to calculate the savings realized from reductions in energy usage in two of the tested reports did not agree with the baseline data included in the related EPCs. For example, by using incorrect baseline data throughout one of the aforementioned project's related payback period, the reported reductions in energy usage are projected to exceed by approximately \$200,000 the reductions in usage that would have been reported had the original baseline been used. Although DGS had accepted from the ESCO the aforementioned two M&V reports, the related EPCs did not authorize the ESCO to use different baseline data when preparing such reports.²

² Even if the ESCOs had included the correct baseline data, the actual achieved reductions in energy usage for each of the two projects still would have exceeded the related savings guarantees provided for in the related EPCs, but by a lesser amount.

- DGS did not ensure the reasonableness of subjective assumptions (such as anticipated operating hours of a building and future temperature variances) used in certain critical ESCO calculations of energy cost savings. Since ESCOs are unable to ensure that all factors and conditions will remain constant during a contract term, the ESCOs use certain assumptions to calculate the amount of the proposed annual energy cost savings that it will guarantee and to calculate the amount of energy savings realized after the project has been completed. For example, for the year ending September 2009, an ESCO made adjustments to certain assumptions that increased the baseline energy usage for one of the three energy conservation measures applicable to a related project. The effect of these adjustments was to increase the realized cost savings reported by the ESCO by approximately \$400,000. Since the baseline is used throughout the project payback period to measure savings, these adjustments would impact the cost savings reported each year. Because of the subjective nature of these assumptions, an ESCO could artificially inflate the baseline energy usage and/or reduce the actual amount of energy reported as being used by the project facility during the period after construction.
- DGS did not obtain or approve certain required M&V reports from the ESCOs. Specifically, our tests disclosed that DGS had not received 3 of 44 annual M&V reports due from ESCOs for eight projects, and did not follow up with the ESCOs to obtain the missing reports which, as of June 30, 2010, were 8 to 20 months past due. Such reports are generally required to be submitted to DGS within four months of the end of the applicable annual reporting period, and are the only mechanism that allows DGS to monitor energy savings. DGS also was unable to substantiate that it had reviewed and approved two other M&V reports that we tested.

According to DGS records, as of May 31, 2010, there were 14 EPCs statewide in the construction and M&V contract phases, costing approximately \$165 million, which includes fees totaling \$5.6 million for annual M&V services to be rendered by the ESCOs.

Recommendation 1

We recommend that DGS

- independently verify ESCO reported data and the reasonableness of any subjective assumptions used, at least on a test basis, to ensure the propriety of critical calculations (such as guaranteed cost savings) included in the related EPCs and subsequent M&V reports;**
- retain documentation of all such verifications performed; and**

- c. **obtain timely, in accordance with the applicable contract terms, and review and approve all required M&V reports to determine whether related guaranteed energy cost savings are being achieved.**

Finding 2

DGS permitted an ESCO to forego performing certain required M&V services applicable to a specific construction project without reducing the amount it paid for such services or obtaining approval from the Board of Public Works to modify the related EPC.

Analysis

DGS permitted an ESCO to forego performing certain required M&V services applicable to a specific construction project without reducing the amount paid to the ESCO for such services or obtaining approval from the Board of Public Works to modify the related EPC.

Subsequent to completing construction for the related project, the ESCO informed DGS that it would not continue to monitor cost savings related to the agency's electricity usage during the remaining contract term but that it would continue to monitor cost savings related to natural gas and water usage. However, the approved EPC required the ESCO to monitor cost savings for all three utilities by performing M&V services at a cost of \$720,000 over 13 years. These services were intended to determine whether the related guaranteed cost savings were being realized. Although the EPC did not specifically allocate the aforementioned M&V costs among the various energy conservation measures provided, the contract did require the ESCO to perform the same M&V services in order to monitor the usage for each of the aforementioned three utilities (electricity, natural gas, and water).

We were advised by DGS management that the decision to permit the ESCO to forego providing the M&V services for electricity usage was agreed to by DGS and the State agency where the facility improvements were made. DGS also advised us that it considered the scope reduction to be insignificant in relation to the applicable savings guarantees and a minor portion of overall M&V costs. However, DGS was unable to provide any documentation to support its position that the cost of providing the discontinued M&V services was immaterial. Conversely, part of DGS' justification for revising the M&V requirements related to the difficulty in tracking electrical usage leading us to believe that the cost related to those services no longer being provided by the ESCO could be substantial.

The terms of the aforementioned contract state that any modification to the M&V methodology and related procedures used must be explicitly approved by the State. However, no resulting contract modification was executed and the amount to be paid to the ESCO for such services was not renegotiated and reduced. In this regard, State Procurement Regulations require that all contract modifications in excess of \$50,000, or that materially change the scope of the original contract, be approved by the Board of Public Works.

Recommendation 2

We recommend that DGS

- a. authorize in writing any changes made to an approved EPC, including the aforementioned contract, that affect the scope of work to be performed and, when required, obtain approval from BPW prior to implementing a revised contract; and**
- b. renegotiate the amount to be paid to an ESCO in the event that the scope of work specified in an existing EPC, including the aforementioned contract, is subsequently revised.**

Finding 3

DGS allowed user agencies to enter into certain EPCs that permitted the ESCOs to calculate energy cost savings using certain M&V methods that were not supported by federal guidelines or industry protocol.

Analysis

DGS allowed user agencies to enter into certain EPCs that permitted the ESCOs to calculate energy cost savings using M&V methods that were not supported by guidelines promulgated by the Federal U.S. Department of Energy and internationally-accepted protocols. As a result, contractors had substantial influence over M&V results. These guidelines are included in the requests for proposal, which are subsequently incorporated into the contracts.

Our review of four energy performance projects disclosed that, for three of these projects with total guaranteed cost savings of approximately \$83.7 million, the related EPCs entered into with DGS allowed the ESCOs to use certain M&V methods that were not recommended by the aforementioned industry guidelines to be used in such projects. For example, the EPC for one project provided for the ESCO to use a particular M&V method specifically discouraged by the industry to confirm certain related savings totaling \$5 million.

This particular M&V method is based on the actual energy used by only a sample of newly-installed lighting fixtures and other estimates of energy usage. Under this method, the ESCO attempts to distinguish between energy savings resulting

from multiple conservation measures implemented in the facility and other unassociated factors. However, in contrast, other M&V methods used for this project were based on actual, rather than estimated or assumed, energy savings realized by the facility. Moreover, M&V methods based on actual energy savings are recommended by the aforementioned federal guidelines when multiple conservation measures have been implemented in one facility, as was the case for this project.

Furthermore, the contracts for two of the aforementioned three projects also permit the applicable ESCOs to attest, without performing any M&V services, that certain guaranteed cost savings will be achieved. For example, for one project with total guaranteed cost savings of approximately \$15.6 million, the contract states that the ESCO will be permitted to certify, without performing any M&V services, that certain savings totaling \$453,600 will be achieved. That is, the approved proposal included this stipulation so that DGS could avoid the costs that would be incurred if such services were performed by the ESCO during the project payback period. However, federal guidelines and internationally-accepted protocols referenced in the EPCs generally require all components of energy cost savings to be measured using one of the recommended options.

Recommendation 3

We recommend that DGS establish standard verification procedures, in accordance with federal guidelines and industry protocols, to be followed for EPCs and document any unique circumstances that may require deviation from the standard verification procedures.

State Identification (ID) Cards

Finding 4

DGS lacked adequate controls over State ID cards.

Analysis

DGS lacked adequate controls over State ID cards. According to its records, during the period July 2007 through February 2010, DGS issued approximately 23,000 State ID cards to State employees, and certain other authorized personnel (for example, contractors). Our review disclosed the following conditions:

- DGS did not periodically verify that its listing of authorized agency coordinators was accurate and up-to-date. DGS issued ID cards to applicants based on the signature of the agency coordinator appearing on the application and verified such signatures to the aforementioned listing. Our test of 30 ID

cards issued during calendar year 2009 disclosed that the applications for 9 of the ID cards tested were not signed by agency coordinators included on DGS' current listing. We subsequently verified the propriety of the aforementioned 9 ID cards.

- Independent verifications were not performed to ensure the propriety of State ID cards issued. Specifically, card issuances were not independently reviewed and approved by appropriate supervisory personnel at DGS. For example, although ID card applicants were required to submit a completed application, which was authorized by the applicable agency coordinator and provide proof of identity (such as a drivers license), DGS did not perform any independent verifications to ensure such documentation was provided and valid. A similar condition was commented upon in our preceding audit report.
- DGS did not always pursue recovery of ID cards previously issued to persons who terminated State service. Our test of 20 persons who terminated State service in calendar years 2009 and 2010 disclosed that the ID cards issued to 4 of those persons had never been returned to DGS, and DGS did not follow-up with the applicable State agencies to attempt recovery. We determined that 3 of the aforementioned cards were still active on DGS' automated ID card system; the access for the remaining employee had expired in January 2010. A similar condition was commented upon in our preceding audit report.

State regulations generally require that ID cards assigned to persons terminating State service must be returned to DGS within 10 days of such termination. The regulations also require that the agency coordinator must notify DGS of the names of such persons within 30 days of termination.

Control over State ID cards is significant since cardholders can use the cards to access certain State facilities. ID cards can also be used by certain State employees to obtain free public transportation from the Maryland Transit Administration, which advised us that it estimated the value of that service to State employees at approximately \$1.9 million during fiscal year 2010.

Recommendation 4

We recommend that DGS

- a. periodically update its listing of authorized agency coordinators and ensure the propriety of the related signatures included on ID card application forms;**
- b. ensure an employee independent of the ID card issuance process verifies, at least on a test basis, the propriety of ID cards issued (repeat); and**

- c. **periodically (for example, monthly) identify all persons who have terminated State service and ensure that it has received the applicable ID cards or, as appropriate, pursue recovery of such cards (repeat).**

Design Errors and Omissions

Finding 5

DGS did not formally document the decision regarding seeking the recovery of costs incurred due to contractor design errors or omissions.

Analysis

DGS did not formally document the decision regarding seeking the recovery of unanticipated construction costs attributable to design errors and/or omissions by project architects or engineers. We were advised by DGS management that its practice was to recommend to its legal counsel that such costs be pursued for recovery when the costs exceed three percent of the total related project costs. However, our test of ten change orders (from five separate construction projects) totaling approximately \$1.4 million disclosed that DGS did not always document its decision not to pursue recovery of such costs. Specifically, for one construction project with costs totaling approximately \$584,000, DGS authorized change orders totaling \$73,000 (or 13 percent of the total project costs) that it attributed to design errors and/or omissions committed by the project architect or engineer. However, DGS did not recommend that its legal counsel pursue recovery of the \$73,000, and it did not document that decision.

According to its records, during our audit period, DGS processed construction change orders totaling approximately \$9.1 million, which included change orders totaling approximately \$1.2 million that DGS personnel attributed to errors and omissions by the applicable architects or engineers.

Recommendation 5

We recommend that DGS

- a. **formally document the decision when cost recoveries related to design errors and/or omissions made by project architects or engineers are not pursued, and**
- b. **pursue the aforementioned \$73,000 for recovery or document the reasons such costs should not be recovered.**

Budgetary Closeout

Finding 6

DGS inappropriately accrued certain revenues and expenditures during the budgetary closeout process.

Analysis

During the budgetary closeout for fiscal year 2008, DGS inappropriately accrued certain revenues totaling approximately \$549,000, and lacked documentation to support certain accrued expenditures totaling approximately \$1 million.

We were advised by DGS management that the aforementioned accrued revenues related to charges for certain rendered services that it had not billed to the applicable State agencies. However, DGS should not have recorded the related accruals since it lacked documentation to support the charges it claimed not to have billed and did not subsequently bill the State agencies for the services.

Additionally, our test of accrued expenditures recorded during the budgetary closeout process for fiscal years 2007, 2008, and 2009 disclosed that DGS could not provide support for the accruals selected for testing from fiscal year 2008. Specifically, DGS lacked documentation supporting accrued expenditures totaling approximately \$1 million.

The yearly closing instructions issued by the Comptroller of Maryland's General Accounting Division require that an agency maintain appropriate documentation to support all year-end accrual transactions recorded during the budgetary closeout process.

Recommendation 6

We recommend that DGS maintain appropriate documentation to support all closeout transactions, as required.

Equipment

Finding 7

DGS did not maintain its equipment and related records in accordance with State regulations.

Analysis

DGS did not maintain its equipment and related records in accordance with State regulations. According to its detail equipment records, as of June 30, 2010, the

value of DGS equipment totaled approximately \$10.3 million. Specifically, our review disclosed the following conditions:

- Although we were advised by DGS that it conducted annual physical inventories of sensitive and non-sensitive equipment items, all results from such inventories were not compared to the related detail equipment records. For example, as of March 2010, of the 1,455 sensitive items on DGS' equipment records, 386 items totaling \$318,000 had a date of last inventory prior to October 2008. A similar condition was commented upon in our preceding audit report.
- Numerous equipment items included in DGS' related detail records could not be located. Specifically, of the 25 equipment items, totaling \$76,700, selecting for testing, we were unable to locate 20 items, such as computers, totaling \$63,300. DGS was also unable to locate the aforementioned items and could not explain why the items were missing.
- DGS did not report the year-end book value of its equipment inventory for fiscal years 2007, 2008, and 2009.

The DGS *Inventory Control Manual* specifies physical inventory and related equipment recordkeeping requirements to be followed by State agencies.

Recommendation 7

We recommend that the DGS comply with the applicable requirements of the *Inventory Control Manual* (repeat).

Audit Scope, Objectives, and Methodology

We have audited the following units of the Department of General Services (DGS) for the period beginning February 1, 2007 and ending March 8, 2010:

- Office of the Secretary
- Office of Facilities Security
- Office of Facilities Operations and Maintenance
- Office of Real Estate
- Office of Facilities, Planning, Design, and Construction

The audit was conducted 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.

As prescribed by the State Government Article, Section 2-1221 of the Annotated Code of Maryland, the objectives of this audit were to examine DGS' financial transactions, records and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations. We also determined the status of the findings contained in our preceding audit report.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. The areas addressed by the audit included energy performance contracts, real estate, facilities planning / design and construction, State identification cards, expenditures and year-end budgetary transactions, corporate purchasing cards, cash receipts, accounts receivable, payroll, and equipment. Our audit procedures included inquiries of appropriate personnel, inspections of documents and records, and observations of DGS' operations. We also tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives. Data provided in this report for background or informational purposes were deemed reasonable, but were not independently verified.

The DGS Office of the Secretary provides certain support services (for example, invoice processing and maintenance of accounting records) for the DGS Office of Procurement and Logistics. In addition, similar services are provided for certain capital projects authorized by law under the State's operating budget (that is, the Board of Public Works – Capital Appropriations) and the capital project budget (for example, Maryland Consolidated Capital Bond Loans). These support services are included with the scope of the audit.

The DGS Office of Procurement and Logistics provides procurement-related services for the other DGS units. These procurement services are included within the scope of our audit of the Office of Procurement and Logistics. Our audit also did not include activities related to the operation and maintenance of Government House. Although DGS receives an appropriation for these activities, they are audited as part of the Executive Department – Governor.

DGS management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets, and compliance with applicable laws, rules, and regulations are achieved.

Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

Our reports are designed to assist the Maryland General Assembly in exercising its legislative oversight function and to provide constructive recommendations for improving State operations. As a result, our reports generally do not address activities we reviewed that are functioning properly.

This report includes conditions that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect DGS' ability to maintain reliable financial records, operate effectively and efficiently and/or comply with applicable laws, rules, and regulations. Our report also includes findings regarding significant instances of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to DGS that did not warrant inclusion in this report.

The DGS response to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise DGS regarding the results of our review of its response.

APPENDIX

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Alvin C. Collins
Secretary

MARYLAND DEPARTMENT OF GENERAL SERVICES OFFICE OF THE SECRETARY

January 4, 2011

Bruce A. Myers, CPA
Legislative Auditor
Office of Legislative Audits
301 West Preston Street, Room 1202
Baltimore, MD 21201

Dear Mr. Myers:

I am providing this letter with appropriate responses in connection with your fiscal compliance audit of the Department of General Services – Office of the Secretary and Other Units for the period beginning February 1, 2007 and ending March 8, 2010.

I want to thank you and your staff for their patience and cooperation as well as professional courtesy in conducting the audit. DGS staff will continue to work with your office to ensure maximum accountability of the State's assets. I look forward to the next opportunity to work with you.

Feel free to contact me or my staff should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alvin C. Collins'.

Alvin C. Collins, Secretary

cc. W. Steven Hamlett, Director of Fiscal Services



Finding 1

DGS did not determine the propriety of certain data used and assumptions made by ESCOs to calculate facility energy usage and verify that related guaranteed cost savings were realized.

Recommendation 1

We recommend that DGS

- a. independently verify ESCO reported data and the reasonableness of any subjective assumptions used, at least on a test basis, to ensure the propriety of critical calculations (such as guaranteed cost savings) included in the related EPCs and subsequent M&V reports;**
- b. retain documentation of all such verifications performed; and**
- c. obtain timely, in accordance with the applicable contract terms, and review and approve all required M&V reports to determine whether related guaranteed energy cost savings are being achieved.**

Response:

- a. We agree with the Auditor's recommendation. As the M&V part of our OEPC work and has been vastly increased by the expansion of the use of Energy Performance Contracting, we are in the process of soliciting to hire a consultant engineering firm to assist us with the independent Measurement and Verification phase of all the upcoming projects. This will make the task of implementing the above recommendation from OLA, even more practical and efficient. DGS-OEPC has also implemented a comprehensive State Wide energy database, with FY08 a base year and includes all the different utilities used by State agencies. The electricity data is substantially complete and are currently working to complete the remaining utilities. This database, which is available to all State agencies, will support DGS and all other State agencies efforts in our overall energy conservation efforts, and also in the set up of M&V for all upcoming EPCs. The most common reason why baseline data in a project proposal differs from the baseline in a reconciliation report is that we generally require two or three years consumption data for baseline development (proposal), while the reconciliation report uses a 12 month baseline. Typically, the 12 month baseline is a composite, built by averaging monthly consumption over the multi-year period. This is commonly accepted professional practice. OEPC routinely reviews energy baselines, as part of the Phase 1 review process. Upon acceptance of the ESCO's Phase 1 study (Phase 2 Proposal), the entire contents are deemed to have been verified and found acceptable.
- b. We will also insure to document and retain all our verification records.

- c. DGS-OEPC agrees to obtain all reports timely. We have requested, and since received all the remaining outstanding M&V reports to date, and are in the process of completing our review and approval.

Finding 2

DGS permitted an ESCO to forego performing certain required M&V services applicable to a specific construction project without reducing the amount it paid for such services or obtaining approval from the Board of Public Works to modify the related EPC.

Recommendation 2

We recommend that DGS

- a. **authorize in writing any changes made to an approved EPC, including the aforementioned contract, that affect the scope of work to be performed and, when required, obtain approval from BPW prior to implementing a revised contract; and**
- b. **renegotiate the amount to be paid to an ESCO in the event that the scope of work specified in an existing EPC, including the aforementioned contract, is subsequently revised.**

Response:

- a. DGS-OEPC agrees with the recommendation to modify and authorize in writing any change to an approved energy performance contract that will affect the scope of work. Also, DGS agrees to consult its Attorney General and Procurement officer to better assess if a contract modification is required to be brought before the BPW. However, the revision in the referenced example was immaterial and did not require further approval. The change was a revision in methodology for accounting for electric savings at Springfield Hospital as was documented in the Year 1 Measurement and Verification Report (October 1, 2002 – September 30, 2003). As part of the first year reconciliation, DGS, with DHMH approval authorized the ESCO to stipulate electric savings at \$18,760 per year through the remainder of the contract term. This revision was justified on the following grounds (as documented in writing in the ESCOs report, page 13): 1) The difficulty of tracking and calculating the baseline adjustments due to campus wide changes that affect the electric consumption. Initially, electricity savings were estimated to be about 4% of facility baseline consumption, 2) The impact of the electric cost avoidance as it relates to the total project. The estimated electric cost avoidance is \$18,760. This is less than 5% of the guaranteed annual energy cost avoidance of \$388, 625 and only 2% of the guaranteed annual

energy and operational cost avoidance of \$927,085. Due to numerous renovations and new construction occurring at the hospital site, it was deemed impractical to attempt to keep track of all baseline adjustments which would have been necessary to directly account for electrical savings over each year remaining on the contract. (the ESCO actually calculated electric cost avoidance of \$32,706 for Year 1 but agreed to use the lower stipulated figure in report totals.) Given the relatively small portion of electric savings in the total project, it was deemed by all parties that stipulated savings was reasonable approach. Fuel savings comprise 74% of guaranteed savings in the project. These savings are demonstrated through Option C. The change in methodology from C to A for electricity did not represent a material change, as electric savings are a very small portion of overall savings and the cost associated with implementing Option C for electricity was a minor portion of overall M&V costs. OEPC routinely evaluates M&V methodologies in light of likely cost of implementing the methodology, compared with the estimated savings of a particular measure. The change in M&V methodology for the Springfield project was documented in the Year 1 reconciliation report, which was signed by DGS, DHMH and the ESCO.

- b. DGS-OEPC agrees that it will renegotiate the amount to be paid to an ESCO in the event there is a material change in the scope of work in an existing EPC. If substantial revision is required in M&V reports in any future contract, OEPC will continue with the standard practice of renegotiating the fees with the ESCO.

Finding 3

DGS allowed user agencies to enter into certain EPCs that permitted the ESCOs to calculate energy cost savings using certain M&V methods that were not supported by federal guidelines or industry protocol.

Recommendation 3

We recommend that DGS establish standard verification procedures, in accordance with federal guidelines and industry protocols, to be followed for EPCs and document any unique circumstances that may require deviation from the standard verification procedures.

Response:

We agree with the Auditors recommendation. DGS- OEPC will strive to clarify and document the specific reasons for choosing any of the four M&V options (below) for all energy conservation measure (ECM) used and the benefit/ value of each. Our review and analysis of M&V takes different formats; they start with initial discussions of the M&V options

for the certain project and later with the ESCO proposal as part of the Phase II submittal. There are four industry standard and internationally accepted M&V options:

- A: fully stipulated; savings are mutually agreed to based on engineering calculations and/or manufacturers' ratings. No on-going documentation of savings is performed following initial acceptance.
- B: partially stipulated; savings are mutually agreed to; typically, capacity (e.g., lighting wattage) is measured prior to and after an energy retrofit; operational parameters (e.g., operating time) are stipulated. Savings are agreed to and no on-going documentation of savings is performed following initial acceptance.
- C: whole building; savings are based on consumption measured at a building level utility meter, after application of appropriate adjustments. Savings must be demonstrated annually, throughout the contract term.
- D: energy simulation; savings are mutually agreed to, based on a computer model. On-going documentation of savings may or may not be required.

The above is also an accepted federal guideline. A final decision on which option to choose takes into account expected energy savings of a measure and the cost of performing M&V. There is no preferred or "best" option, nor there a "correct or wrong" options. For example, it is impractical to attempt to demonstrate savings through Option C, if the expected energy reduction is 5% of baseline energy use. Any savings would likely be lost in the "noise," or normal fluctuation of energy consumption due to factors beyond an ESCO's control. In the referred to case, option B or D would be preferable. On the other hand, OEPC would not accept an entire project, which includes a comprehensive package of energy efficiency measures, based entirely on Option A, B or D.

State Identification (ID) Cards

Finding 4

DGS lacked adequate controls over State ID cards.

Recommendation 4

We recommend that DGS

- a. periodically update its listing of authorized agency coordinators and ensure the propriety of the related signatures included on ID card application forms;**
- b. ensure an employee independent of the ID card issuance process verifies, at least on a test basis, the propriety of ID cards issued (repeat); and**
- c. periodically (for example, monthly) identify all persons who have terminated State service and ensure that it has received the applicable ID cards or, as appropriate, pursue recovery of such cards (repeat).**

Response:

- a. DGS concurs. The DGS-Security Card Processing Center (SCPC) now has a contemporary list of approved agency coordinators. All SCPC members work off the master list which identifies the two “primary coordinators” for each agency. In addition, each agency has several “secondary coordinators” who have authority to sign applications in lieu of the “primary coordinator.” The “secondary coordinators” may also be responsible for small satellite facilities located at a distance from the “primary coordinator.” This “secondary” list is somewhat sizeable and not kept with the “primary” list. When a member of the SCPC does not recognize a signature on an application as a primary coordinator, they will cross reference to the secondary list. If the signature does not appear on either list, the Security Card will not be issued until authorization is granted by the primary coordinator. The supervising officer assigned to the DGS-MCP SCPC will update the primary and secondary coordinators list semi annually (January and July of every year). CID will review random applications monthly to ensure coordinators signatures are valid and contemporary.

Of the nine ID cards issued during the audit period without the signatures of agency coordinators, six (6) were either Temporary or Contractor ID cards. These cards are given to non-merit system employees who are not eligible to partake in the MTA fee waiver program. Because of this stipulation, the Temporary and Contractor ID cards are designed not to look the same as the State ID cards issued to those permanent employees eligible to participate in the MTA fee waiver program. Obtaining a Temporary or Contractor ID card only requires the signature of an immediate supervisor or project manager who verifies eligibility for the ID card. The remaining three (3) ID cards were authorized by sub-agency coordinators. During the audit, the auditor only requested and was only provided with documentation for authorized agency coordinators.

- b. DGS concurs. The Department of General Services Maryland Capitol Police (MCP) conducts semi annual internal audits of the Security Card Processing Center (SCPC). This audit is conducted by Headquarters Services staff from the Criminal Investigation Division (CID) whose function is independent of the Security card Processing Center. Part of the audit is to ensure that proper documentation is provided by the applicant during the application process. This is done by reviewing the application to make sure a copy of the proof of identification used by the applicant is attached. In addition the audit includes a review of the total cards removed from inventory, the inventory control numbers of those cards and the number of cards printed in error. In addition, these staff members will conduct monthly reviews to ensure the following.

- A review of the disposition of misprinted and returned cards. Returned and misprinted security cards are currently retained for one year. Once the year passes they are shredded.
 - Random contact will be made with agency coordinators to determine if the circumstances surrounding the issuance of the Security card were valid.
- c. DGS concurs. The MCP (CID) has established a point of contact with staff from the Department of Budget and Management (DBM) to begin the process of receiving monthly information of those individuals no longer in State Service. A form letter will be sent to the last known address of any employee that has separated from service without returning his or her security card as well as a copy of the State law requiring the return of the security card upon separation from service. If the employee does not return the card within ten (10) days and the card has not been reported lost, legal action may be taken against the individual.

Design Errors and Omissions

Finding 5

DGS did not formally document the decision regarding seeking the recovery of costs incurred due to contractor design errors or omissions.

Recommendation 5

We recommend that DGS

- a. **formally document the decision when cost recoveries related to design errors and/or omissions made by project architects or engineers are not pursued, and**
- b. **pursue the aforementioned \$73,000 for recovery or document the reasons such costs should not be recovered.**

Response:

- a. DGS concurs and acknowledges that it does not have a formal policy in place that outlines procedures for notifying the Maryland Attorney Generals Office on projects that have errors and omissions related to architectural/engineering firms. DGS will work with its legal office to determine the need for a formal procedure and/or document, at a minimum, its decision when cost recoveries made by project architects/engineers are not pursued. Currently, DGS refers these matters to its legal Counsel on an “as needed” basis when concerns involving “Errors & Omissions” arise. DGS manages many multi-million dollar projects every year. Using the standard of the industry, that errors and omissions should not exceed (a certain threshold) 3% of the value of the contract, ninety-nine percent of our contracts never exceed the 3%. If we

determine there to be a problem with errors and omissions, we involve our legal office. For example, we recovered funds from three A/E firms caused by errors and omissions, on our 2100 Guilford Ave. project, and we are currently processing a recovery for errors and omissions from an A/E firm on another of our major projects. Both of these were pursued through the Maryland Attorney Generals Office.

- b. DGS concurs and is taking steps to fully document the circumstance surrounding the project in addition to reviewing the change orders for submission to the Maryland Attorney General's office to determine if legal action is required to recovery certain cost. This project was problematic from the onset involving varying requirements from the specific state agency. It was initiated as a commodity purchase of a modular system, which later required an A/E to design a foundation, and perform associated site work. The project then required additional design work to install a communications system and installation. This was all created by the agency's inefficiency.

Budgetary Closeout

Finding 6

DGS inappropriately accrued certain revenues and expenditures during the budgetary closeout process.

Recommendation 6

We recommend that DGS maintain appropriate documentation to support all closeout transactions, as required.

Response:

DGS concurs. In FY 2008, DGS was required by the General Assembly to use approximately \$500,000 of funds appropriated in other agency capital projects to reimburse its permanent construction division inspector salaries (for constructability reviews) under the Capital Facilities Renewal and other projects. The intent was to use these funds as a corresponding offset to the general fund reduction in appropriation. Since this was an enormous task of tracking specific employees and their hours (timesheets) associated with numerous project cost over an extended period of time, DGS has been diligently working with other agencies to acknowledge and reimburse this cost of inspection services.

Additionally, DGS believes it provided the auditor with appropriate backup support and documentation for all its year-end expenditure accruals including \$709,181 for accrued utility bills as well as \$380,409

for the second half semi-annual capital lease management expenditure accrual related to St. Mary's County. Due to the late receipt of actual expenditures from the St. Mary's County finance office, DGS used historical cost as a basis to estimate an amount of accrued expenditure to ensure that the books are closed-out in a timely manner.¹

Equipment

Finding 7

DGS did not maintain its equipment and related records in accordance with State regulations.

Recommendation 7

We recommend that the DGS comply with the applicable requirements of the *Inventory Control Manual* (repeat).

Response:

DGS concurs with the auditors' recommendation. DGS is in the final stages of comparing its account reconciliation with its recent physical inventory which will serve as the basis for preparation of the lost and missing report to be submitted to the ISSSD. In addition, the Annual Reports in question reflecting equipment inventory balances have been completed and copies were supplied to the auditor. DGS maintains a control account and reconciles it monthly to the detail records.

¹**Auditor's Comment:** Although DGS provided us with support for certain accrued expenditures, we were never provided documentation related to the 2008 accrued expenditures commented upon in our finding. Nevertheless, DGS has agreed to implement the recommendation.

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