



THOMAS P. DiNAPOLI
COMPTROLLER

STATE OF NEW YORK
OFFICE OF THE STATE COMPTROLLER
110 STATE STREET
ALBANY, NEW YORK 12236

GABRIEL F. DEYO
DEPUTY COMPTROLLER
DIVISION OF LOCAL GOVERNMENT
AND SCHOOL ACCOUNTABILITY
Tel: (518) 474-4037 Fax: (518) 486-6479

August 2015

Kelly Fallon, Superintendent of Schools
Members of the Board of Education
Half Hollow Hills Central School District
525 Half Hollow Road
Dix Hills, NY 11746

Report Number: P7-15-39

Dear Superintendent Fallon and Members of the Board of Education:

The Office of the State Comptroller works to help school district officials manage their resources efficiently and effectively and, by so doing, provides accountability for tax dollars spent to support district operations. The Comptroller oversees the fiscal affairs of districts statewide, as well as compliance with relevant statutes and observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations and Board of Education governance. Audits also can identify strategies to reduce costs and to strengthen controls intended to safeguard district assets.

In accordance with these goals, we conducted an audit of five school districts in Nassau and Suffolk Counties. The objective of our audit was to determine whether energy performance contracts (EPCs) entered into by school districts achieved the cost and/or energy savings projected by the vendor who executed the contract. We included the Half Hollow Hills Central School District (District) in this audit. Within the scope of this audit, we examined the District's EPC and reviewed energy consumption and costs for the period June 1, 2007 through March 31, 2013. This audit was conducted pursuant to Article V, Section 1 of the State Constitution and the State Comptroller's authority as set forth in Article 3 of the New York State General Municipal Law.

This report of examination letter contains our findings and recommendation specific to the District. We discussed the results of our audit and recommendation with District officials and considered their comments, which appear in Appendix A, in preparing this report. District officials generally agreed with our findings and recommendation and indicated they have implemented corrective action. At the completion of our audit of the five school districts, we prepared a global report that summarizes the significant issues we identified at all of the districts audited.

Summary of Findings

The District will likely achieve the energy cost savings projected and guaranteed by the energy service company (ESCO) that executed the EPC. The energy cost savings are projected to total

approximately \$22.3 million over the life of the EPC, while total project expenditures are approximately \$20.4 million, resulting in a net savings of approximately \$1.9 million. When grants and rebates are included, the District is projected to save a total of \$3.3 million. As a result of 20 energy improvement measures installed in 14 buildings, the District's energy consumption has decreased. For example, an analysis of just three of the District's 12 buildings shows that use of natural gas decreased by 40 percent and use of electricity decreased by 20 percent in the first year after completion of the EPC, even though the temperatures experienced that year required a greater need for energy than in the base year. Nearly half of the District's cost savings are a direct result of improvements to its light fixtures.

Background and Methodology

New York State Energy Law establishes procedures to be used by school districts in initiating and administering EPCs. An EPC is an agreement by an ESCO for the provision of energy services in which energy systems are installed, maintained or managed to improve the energy efficiency of, or produce energy for, a facility in exchange for a portion of the energy savings or revenues. EPCs are not subject to voter approval or competitive bidding requirements, and the length of the contract must not exceed the useful life of the equipment (which the New York State Education Department has established as 18 years). New York State Education Law (Education Law) requires that the ESCO agree to guarantee that the improvements will generate cost savings sufficient to pay for the project over the term of the EPC. This payback period is calculated using the simple payback method, which divides the total project cost by the projected first year energy cost savings.¹ The simple payback method does not take into account the time value of money, which discounts the value of future dollars relative to today's dollars in order to properly compare the economic benefits of competing long-range upgrade projects. Furthermore, the simple payback method does not take into account additional cost savings that a school district may continue to realize after the EPC ends as a result of the energy improvements. For this reason, school districts should establish procedures to monitor the cost savings achieved by the EPCs.

The District is located in Suffolk County and operates 12 buildings. It has approximately 8,900 students and its general fund expenditures for the 2013-14 fiscal year totaled approximately \$206.8 million. The District is governed by a seven-member Board of Education (Board). The Board is responsible for conducting the District's business within the State's laws and the New York State Commissioner of Education's regulations.

In June 2009, the Board entered into an EPC with an 18-year contract term from March 2013 through February 2031. The State Education Department approved the project in October 2010 and the related project work, completed in March 2013, involved 20 facility improvement measures in 14 District buildings, including several upgrades to the District's boilers, lighting, heating, ventilation and air controls. The ESCO guaranteed an energy cost savings of nearly \$22.5 million over the life of the EPC. The capital project cost of this EPC, excluding financing and ongoing maintenance and verification costs,² totaled approximately \$16.4 million. Subsequent to

¹ Education Law specifies that any State building aid attributable to the project cannot be included in the determination of cost savings.

² The ESCO waived \$49,000 of the maintenance and verification costs for this project.

the project work completion, the District closed two elementary school buildings and removed a 7,000-square foot modular building from a middle school.

To accomplish our objective, we interviewed District officials. We also reviewed the EPC to obtain the work scope, project cost, contract length, contracted ongoing maintenance and verification costs and guaranteed energy cost savings over the life of the project. We obtained utility data, including consumption, costs and rates for the EPC's base year, which was June 2007 through May 2008. We also obtained utility data for the first year after substantial completion of the EPC and compared the consumption and costs for this year to that of the base year to determine the first-year consumption and cost savings for the EPC. We compared our calculations to the ESCO's first-year measuring and verification report to determine whether ESCO-reported savings were reasonable. Using the U.S. Department of Commerce's prescribed formula for projecting present value cost savings, we applied the U.S. Department of Energy's utility price indices to the base year and first-year actual energy costs to project the District's potential cost savings over the life of the EPC. We compared our projection to that which the ESCO had made using engineering industry standards to determine if the ESCO's projections appeared reasonable. We used our professional judgment to determine the reasonableness of the difference between our projection and the ESCO's, considering the differing calculation methods used. We also documented the lease payments to be made over the life of the contract. We determined the expenditures related to the EPC and subtracted them from the total cost savings calculated to identify any potential savings.

We conducted our audit in accordance with generally accepted government auditing standards (GAGAS). 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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Audit Results

The District's EPC is projected to achieve guaranteed energy cost³ savings of \$22.3 million⁴ over the life of the EPC, as shown in Figure 1. The ESCO did not guarantee the associated energy consumption savings.⁵

³ Energy cost is the amount the District pays for energy (i.e., electricity and natural gas).

⁴ The ESCO also guaranteed an additional \$170,000 of savings from a rebate.

⁵ Energy consumption savings would be a reduction in the quantity of energy (i.e., kilowatts of electricity or therms of natural gas) that the District uses. While the goal of the EPC is to reduce consumption, the ESCO did not guarantee that consumption would decrease by a specific number of kilowatts or therms.

| | |
|--|--------------------|
| Projected Energy Cost Savings | \$22,302,104 |
| Less: Capital Costs Including Lease Interest | (\$20,417,804) |
| Less: Ongoing Maintenance and Verification Costs | 0 |
| Net Savings Before Grants and Rebates | \$1,884,300 |
| Add: Grants Received | \$996,688 |
| Add: Rebates Received | \$449,623 |
| Net Savings With Grants and Rebates | \$3,330,611 |

District expenditures to implement the EPC’s terms totaled approximately \$20.4 million, for a net gain to the District of approximately \$1.9 million before any grants or rebates. With the receipt of grants and rebates,⁶ the total savings will amount to approximately \$3.3 million. To further illustrate the energy cost savings achieved through the EPC, Figure 2 compares a projection of what utility costs would be over the 18-year contract period had the EPC not been undertaken to a projection of post-EPC utility costs for the 18-year term of the EPC.

| | Electricity | Natural Gas | Total |
|------------------------------|---------------------|---------------------|---------------------|
| Costs – No EPC (2013-2031) | \$30,700,601 | \$20,255,971 | \$50,956,572 |
| Costs – Post-EPC (2013-2031) | \$20,061,614 | \$10,524,135 | \$30,585,749 |
| Cost Savings From EPC | \$10,638,987 | \$ 9,731,836 | \$20,370,823 |

^a Projections made using U.S. Department of Commerce formula for projecting present value of future cost savings using U.S. Department of Energy utility price indices. This yielded a projection reasonably close to the energy cost savings projected by the ESCO using engineering industry standards.

Related to the projected energy cost savings, the District will also realize energy consumption savings. For example, by looking at just three⁷ of the District’s 12 buildings, the EPC resulted in a 40 percent decrease in consumption of natural gas and a 20 percent decrease in electricity consumption.⁸ The EPC improved the District’s energy efficiency so that this decrease in both cost and consumption was achieved even though the number of heating and cooling days⁹ were 2 percent and 15 percent higher, respectively, in the first year after substantial completion of the EPC, as compared to the base year. The improvements to just the District’s light fixtures accounted for approximately 48 percent of the District’s first-year energy cost savings. In the second year after substantial completion of the EPC, the District closed two elementary school buildings and

⁶ This amount does not include approximately \$5.8 million of State aid that the District received because Education Law specifically excludes State building aid attributable to the project from the calculation of cost savings under the EPC.

⁷ One high school, one middle school and an elementary school

⁸ We excluded oil from our calculations as it accounted for less than 1 percent of total energy costs and consumption.

⁹ Heating and cooling days are a way to relate each day's temperatures to the demand for energy to heat or cool buildings. To calculate the heating degree days for a particular day, find the day's average temperature by adding the day's high and low temperatures and dividing by two. If the number is above 65, there are no heating degree days that day. If the number is less than 65, subtract it from 65 to find the number of heating degree days. Cooling degree days are also based on the day's average minus 65.

removed a 7,000-square foot modular building from a middle school; therefore, the District will need to factor this space reduction into its calculation of any future energy cost savings.

Although the District is guaranteed to realize a certain amount of energy cost savings, and it is projected to achieve energy consumption savings, the District has no effective monitoring procedures in place to ensure that those savings are achieved. No one at the District is verifying the accuracy of the ESCO's annual verification reports or ensuring that the guaranteed energy savings are being achieved. Instead, District officials are relying on the ESCO's annual verification reports that state whether they have been achieving the guaranteed savings. As a result, District officials have limited assurance that the guaranteed savings have truly been achieved and that they do not, therefore, need to seek recourse for any difference.

Recommendation

1. District officials should implement monitoring procedures to ensure the actual cost savings presented by the ESCO are verified and supporting calculations are reviewed. If the guaranteed cost savings are not achieved, District officials should seek recourse, in accordance with the terms of their EPC.

The Board has the responsibility to initiate corrective action. Pursuant to Section 35 of General Municipal Law, Section 2116-a (3)(c) of Education Law and Section 170.12 of the Regulations of the Commissioner of Education, a written corrective action plan (CAP) that addresses the findings and recommendations in this report must be prepared and forwarded to our office within 90 days. To the extent practicable, implementation of the CAP must begin by the end of the next fiscal year. For more information on preparing and filing your CAP, please refer to our brochure, *Responding to an OSC Audit Report*, which you received with the draft audit report. The Board should make the CAP available for public review in the District Clerk's office.

We thank the officials and staff of the Half Hollow Hills Central School District for the courtesies and cooperation extended to our auditors during this audit.

Sincerely,

Gabriel F. Deyo
Deputy Comptroller

APPENDIX A

RESPONSE FROM DISTRICT OFFICIALS

The District officials' response to this audit can be found on the following page.

HALF HOLLOW HILLS CENTRAL SCHOOL DISTRICT
OF HUNTINGTON AND BABYLON

BOARD OF EDUCATION

Eric Geringswald, *President*
Betty DeSabato, *Vice President*
Diana Acampora
Frank Grimaldi
David Kaston
Paul Peller, M.D.
James Ptucha

Rosanne Marini, *District Clerk*

May 11, 2015

Dear Mr. McCracken:

On behalf of the Board of Education and Administration of the Half Hollow Hills School District, thank you for the time your office spent recently to audit the District's Energy Performance Contract.

We are pleased that the findings of the Office of the State Comptroller affirm the District's energy cost savings projected and guaranteed as a result of this project.

Regarding the Office of the State Comptroller's recommendation for the District to implement monitoring procedures to ensure the actual cost savings presented by the energy services company are independently verified and supporting calculations are reviewed, I am pleased to share with you that the District already has a process in place to warrant that such verification and reviews occur. More specifically, the District's Assistant Superintendent for Finance and Facilities, in concert with the District's Facilities Administrator, routinely reviews energy expenses for each of the District's buildings and annually reviews the energy analysis provided by the energy services company. In addition, the District has at its disposal a team of engineers, available through its architect of record, to conduct a deeper analysis should one be warranted at a future date.

Thank you for the opportunity to respond to the report.

Sincerely,

Eric Geringswald
Board of Education President

cc: Mrs. Kelly Fallon, Superintendent of Schools
Ms. Anne Marie Marrone Caliendo, Assistant Superintendent for Finance and Facilities
Mrs. Rosanne Marini, District Clerk

