

Energy Performance Contracting

**Possible Option to Address Energy-
Related Infrastructure Needs at the
Blind Brook Public Schools**

What is Energy Performance Contracting

An Energy Performance Contract (EPC) is an agreement for the provision of energy services, including but not limited to electricity, heating, ventilation or cooling systems, in which a contractor agrees to install, maintain or manage energy systems or equipment to improve the energy efficiency of a building or facility in exchange for a portion of the energy savings or revenues proposed by the Contractor.

A "**Guaranteed Energy Savings**" Performance Contract includes language that obligates the contractor, a qualified Energy Services Company (ESCO), to pay the difference if at any time the savings fall short of the guarantee.

EPC Concept for NYS School Districts

Article 9 of the Energy Law, as amended by Chapter 368 of the Laws of 1994, establishes procedures to be used by NYS school districts and BOCES in initiating and administering energy performance contracts.

http://www.p12.nysed.gov/facplan/articles/C012_energy_perf_contracts.html

EPC Concept for NYS School Districts

- Budget-neutral or cash-positive way to address facility needs
- Proven mechanism to reduce energy consumption and operating costs
- Reduces or eliminates need for future bond issues
- Does not require voter approval
- Results in no change orders
- Wicks Law requirements are not applicable resulting in more construction value

Financial Benefits of EPC

- In theory, reduces operating and capital budgets simultaneously
- Positive Cash Flow - SED will pay building aid on the project as a bonus
- Reinvests energy cost savings into the District instead paying them out to utility suppliers
- Eliminates the possibility of expensive emergency repairs

Past Review of EPC at Blind Brook

In 2009 the District commissioned ECG Engineering to engage in a walkthrough audit of Blind Brook Schools to determine if there were enough savings to justify an EPC. At that time it was determined that only \$1.75 million in work could be generated and boiler replacement was not included. Moving forward with an EPC at that time was not recommended.

Why Re-consider an EPC Now?

The District's Five-Year Capital Facilities Plan identified the need for numerous energy-related electrical, mechanical and HVAC improvements:

- Replacement of aging boilers and controls
- Upgrading temperature management controls
- Replacement of lighting fixtures
- Install lighting control occupancy sensors
- Replacement of heating and ventilation units
- Piping and valve insulation
- Window and floor weatherization and insulation

Why Consider an EPC Now?

The need for these energy-related building upgrades at both campuses, the likelihood that a larger capital project is not going to happen anytime soon, and favorable market conditions seemingly make the EPC a viable option now.

Why Consider an EPC Now?

In the second half of 2011 a second EPC review was performed including a request for proposals (RFP) to test the market and see what ESCOs might be willing to propose.

Recent Activity

- RFP issued – July 29, 2011
- Vendor Pre-Conference Meeting – August 15, 2011
- Proposals Received – October 3, 2011
- Proposals Analyzed – October-December 2011

EPC RFP Results

	Ameresco	ConEdison <i>Solutions</i> (CES)	Johnson Controls
Total Project Cost	\$1,333,430	\$2,639,192	\$2,665,075
Total Project Value	\$1,873,258	\$3,687,228	\$3,416,539
Projected Annual Energy Savings	\$97,617	\$187,464	\$149,633
Percent Reduction In Energy Costs	18%	32%	27%
# of Proposed Energy Conservation Measures	14	17	17

The CES proposal is valued at \$2.6 million and includes 17 proposed energy conservation measures (ECMs) including replacement of 3 boilers and retrofitting more than 3,500 light fixtures yielding a 32% reduction in energy costs.

Energy Conservation Measures (ECMs)

ECMs included in the CES proposal are:

- Replacement of aging boilers and controls
- Upgrading temperature management controls
- Replacement of lighting fixtures
- Install lighting control occupancy sensors
- Replacement of heating and ventilation units
- Piping and valve insulation
- Window and floor weatherization and insulation
- Computer Network Controls
- Vending Machine Controls
- Kitchen Hood Controls

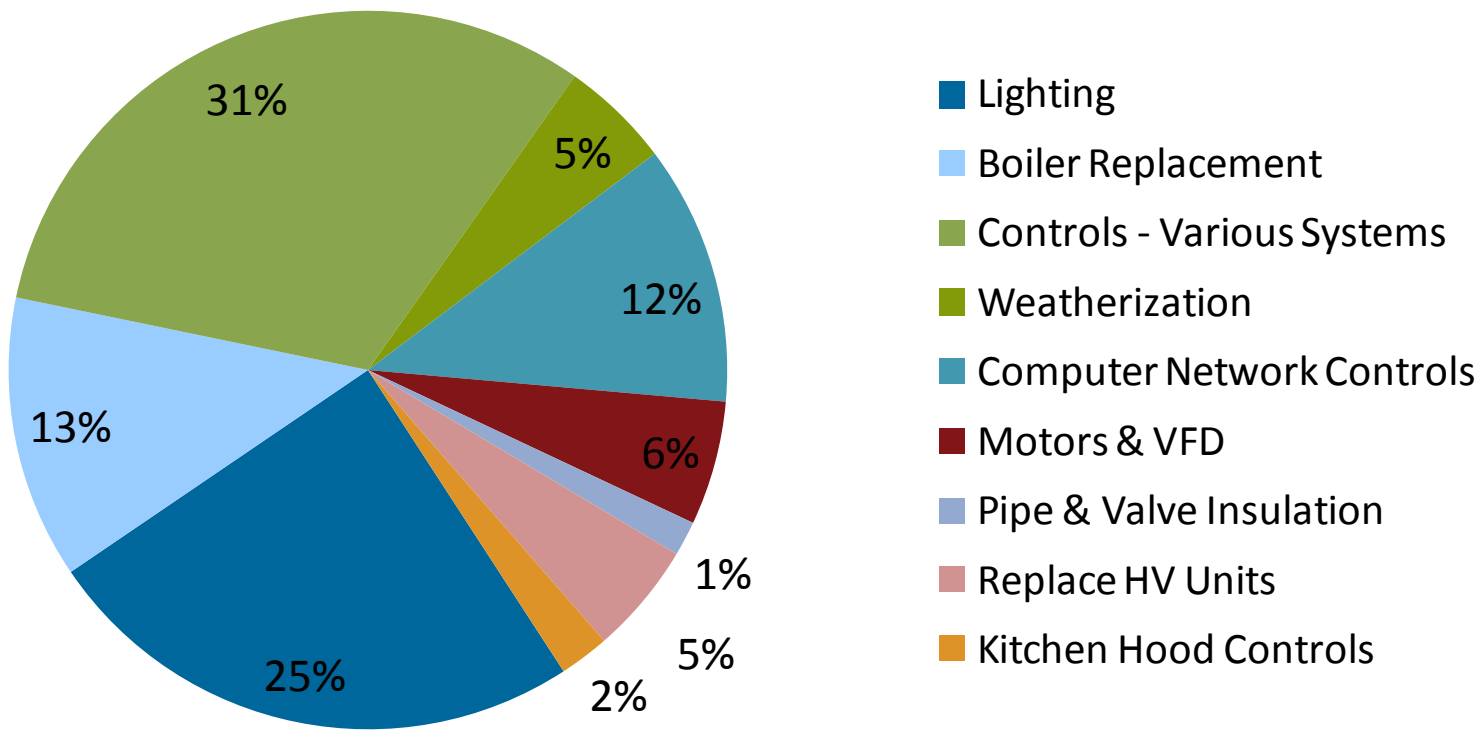
Energy Utilization Index

	Current EUI	Proposed EUI
Blind Brook MS/HS	92.2	56.9
BMP Ridge Street School	81.9	42.6
Overall	88.2	51.4

*EUI is an industry-standard and was calculated by CES and converts all energy used in each building to a common unit, BTUs, and then divides it by the square footage of the heated/cooled space in the building. **The Energy Use Index (EUI) is the most common means of expressing the total energy consumption for each building.***

The national average EUI for K-12 educational facilities is 83

Projected Annual Energy Savings



Proposal Payback Schedule

Project Costs	Value
Total Installed Cost	\$2,639,192
ECG Engineering Fee	\$131,960
ConEdison <i>Solutions</i> Bonding Cost	\$16,726
Total Amount Paid to ConEdison <i>Solutions</i>	\$2,787,878
Utility Incentives	\$0
Interest During Construction	\$56,220
Total Capital Project Cost Financed	\$2,844,098
Total LT Monitoring & Verification Cost (3-years)	\$47,941
Total Cost to Blind Brook School District	\$2,892,039
Total Guaranteed Annual Savings (unescalated)	\$187,464
Length of Payback with Guaranteed Savings	15.43 yrs

ECG's Recommendation

ECG Engineering formally recommends ConEdison *Solutions* as the District's ESCO for the purpose of conducting a comprehensive energy audit and ultimately performing the EPC scope as defined in its proposal.

Administration's Recommendations

1. The Administration supports the recommendation of ECG Engineering that ConEdison *Solutions* be appointed as the District's ESCO for the purposes conducting an investment-grade comprehensive energy audit. This audit will be used to validate the scope of work proposed and confirm the "guaranteed savings" identified in the CES proposal which ultimately will be used to pay-off the cost of the project.

And, if the guaranteed savings remain as originally proposed and the full scope of the CES proposal remains intact then:

2. The Administration also recommends that the EPC proposal be approved by the Board of Education and put before the voters on May 15th to secure approval and as a result, an additional 10% more in state building aid (this would increase the aid ratio to 28.3% of approved expenses).

Mutual Understanding of All Parties

It is agreed by all parties that that the Blind Brook-Rye School District is not under any financial obligation whatsoever until such time that Board of Education and voter approval is granted and an Energy Performance Contract with ConEdison *Solutions* is appropriately executed.

Next Steps

January 2012

Board appoints CES as ESCO

April 2012

CES completes Comprehensive Audit

May 2012

Voter approval of EPC concept

July 2012

District Executes EPC with CES

Aug-Oct 2012

Project Design & NYSED Submission

April 2013

NYSED Approval

May 2013

Financing Secured

June 2013

Construction Begins

June 2014

Construction Complete & Close-out

June 2015

1st year Monitoring & Verification Phase

More Information is Available

ECG Engineering:

<http://www.ecgservices.com/>

ConEdison Solutions:

<http://www.conedsolutions.com/GovernmentEducation/Home.aspx>

Discussion