

Unique proposal: Monroe school buildings could get energy efficiency upgrades with no direct cost to the Board of Education

Written by Brad Durrell

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The Board of Education voted unanimously Monday night to have Honeywell Automation and Control Solutions conduct a comprehensive energy audit of school buildings as the first part of a possible plan to increase the efficiency of the structures.

Honeywell, working with ECG Engineering, could receive a contract to make energy efficiency improvements to the buildings, such as new or altered lighting, boilers, windows, pipe insulation, control systems, computer power management and motors.

The unique part of the plan being considered is that the BOE wouldn't have to directly pay Honeywell or bond to pay for the improvements. Instead, the company would get paid out of the energy savings to be realized over a 15-year period — and if enough savings aren't generated to pay Honeywell the agreed-upon amount, the company would have to give the school district money to make up the difference.

A state law passed in 2011 allows for the so-called “energy performance contracting” approach, with municipal and school energy-efficiency improvement projects funded through outside loans. Technically, the contracts reached with the vendors are considered lease-purchase agreements.

Described as “an alternative funding mechanism”

Kendra McQuilton, ECG business development director, called energy performance contracting “an alternative funding mechanism to upgrade energy consuming building systems.” She said it is “a budget-neutral way of addressing your energy use,” and wouldn't require raising taxes or issuing bonds and would free up BOE money to spend on other physical improvements or instruction.

ECG, a Long Island-based company, has been working with Monroe BOE administrators for a few years on the project. ECG Engineering would be paid by Honeywell if a contract is finalized. ECG Engineering specializes in energy efficiency projects with schools. It is now doing a \$3 million project in Thomaston and expects to begin a \$3.8 million project soon in Darien, according to McQuilton.

Honeywell would be responsible for all aspects of the work — such as design, contracting and servicing. There would be one contract with Honeywell for all the work — from the engineering to the financing. Honeywell assumes all responsibility for the equipment that is installed, and would train BOE workers on how to properly use and maintain the equipment.

McQuilton said there would be “no out of pocket expense” for the Monroe BOE and “no risk,” with a large, well-known company such as Honeywell guaranteeing the energy savings would generate the income needed to pay them.

Honeywell International is a Fortune 100 company that focuses on commercial and consumer products, engineering services and aerospace systems. School Supt. James C. Agostine said energy performance contracting is an

alternative way of funding certain needed infrastructure work in the Monroe schools. He said other school districts have been “very pleased” with the approach.

Could involve up to \$4.5m in work, from boilers to windows

An initial study suggested the Monroe school district could benefit from \$2 million to \$4.5 million in energy upgrades, with some of these projects also being part of the BOE’s five-year capital plan.

Some of the specific possible upgrades that could be made are lighting and control systems system-wide (\$896,682); energy management system system-wide (\$759,824); two boilers at Masuk (\$734,846); window replacements at Stepney Elementary (\$538,363); two boilers at Stepney Elementary (\$489,897); weatherization system-wide (\$218,316); a boiler at Stepney Elementary (\$200,000), and windows at Fawn Hollow (\$175,000). Most of the work likely is to take place at the three elementary schools, since they are older structures and have more antiquated energy infrastructure.

The goal is to have Honeywell complete the comprehensive energy audit by Aug. 13. There will be no cost or obligation to the town for the new audit. Next could be the signing of a contract with Honeywell in October, and all the improvements then could be made by the start of the 2013-14 school year.

Annual energy savings might be \$250,000

According to Honeywell’s Terence M. Guiry, the Monroe BOE now spends about \$1 million a year on energy costs (electricity and heating), and the company initially estimates it could cut that bill by 25%, generating about \$250,000 a year to finance the infrastructure work over the 15 years of a possible contract.

Guiry and Doreen Hamilton, also an engineer with Honeywell, said the company’s energy efficiency improvements often generate more savings for a school district or municipality than expected, with the government entity (the Monroe BOE, in this case) keeping those extra savings. Hamilton said the extra savings, if realized, can be put into “the classroom environment.”

She also said Honeywell likes to use the projects as an educational tool for students, with youngsters learning about energy conservation and renewable sources through what takes place at the school. Sometimes a kiosk is set up in the school that highlights energy efficiency efforts in the community.

Questions by BOE members

BOE members asked questions about the process, and at least one member showed initial skepticism that all the improvements could be made at no cost to the school system. “It seems to me someone has to be paid something,” said BOE member Mark Antinozzi, noting Honeywell is in business to make money. Honeywell representatives responded that the company gets paid through the energy savings, and that serves as a motivating factor to make sure the savings are reached. And if the savings aren’t realized, Honeywell would have to pay the BOE the difference between what is actually saved and what was supposed to be saved, they emphasized.

Honeywell officials will be able to closely monitor the BOE’s energy use through a web-based platform, so the company should become quickly aware if the predicted savings aren’t being reached and make adjustments.

At an earlier meeting, Agostine explained that Honeywell builds a profit into the amount of the initial contract.

BOE Secretary Mark Hughes asked what would happen if Monroe closed another school in the future, and that school building had been part of the energy performance contracting agreement with the BOE. Honeywell officials said the town shouldn’t include buildings in the contract that might close. For that reason, Chalk Hill School was not included in the initial audit work done earlier by ECG.

The Honeywell officials said the new infrastructure put into place would be non-proprietary, meaning it could be used by the BOE, without Honeywell’s involvement, after the contract runs out.