

MINUTES OF THE CHESHIRE TOWN COUNCIL ENERGY AUDIT  
PERFORMANCE CONTRACTING REVIEW COMMITTEE HELD ON  
WEDNESDAY, OCTOBER 10, 2012, AT CHESHIRE HIGH SCHOOL, SOUTH  
MAIN STREET, CHESHIRE CT 06410

Present

Town Council Members: James Sima and Patti Flynn-Harris; PW Department  
George Noewatne

Energy Commission: David Gavin; Board of Education: Tod Dixon

Public Representative: Art Crooker

Staff: Vincent Masciana, Dan Marseglia, Frank Biancur

Guests: J. Daylor and Rich Kidder, Ameresco; Andrea Sidoruk, Molly Condron,  
Laura Filion from Cheshire High School Environmental Science Class

Public: Tim White

1. ROLL CALL

The clerk called the roll and a quorum was determined to be present.

2. PLEDGE OF ALLEGIANCE

The group Pledged Allegiance to the Flag.

3. ENERGY AUDIT/PERFORMANCE CONTRACTING REVIEW

Mr. Sima introduced Mr. Daylor and Mr. Kidder from Ameresco, who will give a presentation and update on the process to the committee.

Mr. Daylor explained that Ameresco was selected as the energy service company of choice for this project to audit all the municipal facilities, and identify all possibilities of energy savings and capital improvements that could be self funded through these savings. The company has spent the last few months doing this under the auspices of an investment grade audit, reviewing utility information, reviewing facilities, working with staff to understand the performance of these buildings. A cost and savings profile has been compiled of potential capital projects and energy conservation projects, which can be self funded, in these buildings.

The preliminary set of findings identify a few hundred small projects across all the facilities. As this was discussed and evaluated by Ameresco, the larger projects were considered to be included in the larger aggregate project. \$9 million worth of capital improvements have been identified which can all be self funded through energy savings for a period of 15 years. These energy savings will pay for the cost of designing, building and implementing all those solutions.

Some of the highlights in the \$9 million of capital improvements were identified by Mr. Daylor. They include the following:

- Major mechanical improvements to the high school; complete conversion of the electric heat system.
- Complete conversion of the electrical heat system at Highland School.
- Evaluation of various options for lighting improvements across the entire community.
- Building envelope improvements – windows and roof improvements.
- Going into the nuts and bolts of the mechanical systems – fans, drive motors, pumps, valves, etc. that need replacement or repair, using energy savings to address them.

According to Mr. Daylor, the study committee will help take this project to the next level, carry on from the level of staff discussions, bring things to a compatible technical and financial package which meets the needs of Cheshire. This package would be put forward for discussion and approval.

The assumptions for financing were reviewed by Mr. Daylor. The spread sheet data was displayed (on the screen) and it factors in the cost of savings, and energy profile of each of the measures. Each line can be visited, back and forth, as needed. The bottom of the spread sheet allows changing of the project dynamics, i.e. assumptions on term, assumptions on rate, assumptions on energy escalation.

For the basis of the information in front of the committee, Mr. Daylor said a project was established as self funding over 15 years. Fifteen years is the break in the market place where institutional lenders will fund via a tax exempt lease purchase basis and beyond that it would revert to a traditional bond obligation. There is nothing restricting the Town from going to a 20 year term, and Ameresco has many customers who choose this term, which is allowed under statute in Connecticut.

Another assumption was made on the interest rate, using 3.25%, and Mr. Daylor thinks this is fair in this time and is conservative. Some long term date on the street is sub 3%. In Connecticut there is a unique opportunity through Bank of America with a rate buy down program, should they place the capital for the project, with qualifying measures. The bank discounts the lending rate of those measures by 1%, and with the high school and elementary school electrical conversion that would be a 1% buy down of the rate for 10 years. The net effective rate would be in the low 2% range. The impact is more done in the buildings, more projects, with the low capital costs. Ameresco would plan on staying around 3%, knowing the projects will move forward in the next few months. A rate adjustment can be handled by de-scoping the project, or there can be a more conservative approach of going for 3% to 3.5% rate.

Assumptions were made on utility rebates, capital contribution from the Town based on discussions with staff, i.e. \$250,000 approved for the Town Hall chiller and some other work which would have been funded, with or without Ameresco.

All the scenarios can be run in real time; decisions can be made on what can and cannot be funded, length of term, extra capital to be picked up; and the committee can work from a managerial perspective to vet everything at one time

Mr. Dixon asked about any problems, if any, with generating new capital coming from the Town.

In response, Mr. Sima said that once money is earmarked from the Town it must go to the project for which it is earmarked. We cannot just say there is \$500,000 sitting for a chiller at Town Hall and put this money into an investment for another building. He said we are locked into \$350,00 and under or go back to the Council for redirection of funding.

Mr. Daylor said Cheshire would contribute the money for the chiller, \$180,000, and those funds would be in the escrow account, and the invoices would be directly reconciled against that chiller replacement and attributable to that project. Mr. Daylor further stated that leverage is taking \$180,000 from some other measure that is contributing savings to the project to fund that, and that would mean some other capital improvement wouldn't get done. This is where the leveraging, using capital funds, comes in.

A concern was raised by Mr. Dixon about some of the projects being big enough to go to referendum.

Mr. Sima said that would be only if Town funds had to be used directly to pay for the project. If we go through the savings of taking the operating costs through the performance contracting, then no referendum is required.

Mr. Kidder stated that, internally, Ameresco has the information to identify project numbers.

Mr. Masciana raised two things – the rebates of CL&P and the \$1 million in rebates in the report.

In response, Mr. Daylor commented on the real number stopped at \$1 million per year, derived from the programmatic mechanics of CL&P's rebate program for lighting, heating, cooling and other incentives. Ameresco took the information found in Cheshire, applied to the rebate metrics of CL&P, and the output is a number well north of \$1 million. Under a normal scenario, if Cheshire applied on its own, the cap would be \$1 million a year per tax i.d. number. Under the auspices of a performance contract, CL&P and UI are aware that this is a 12 to 18 month construction cycle, that in aggregate the overall rebate incentives may be north of caps on a calendar year i.d. basis. In the letter of agreement which Cheshire will execute with the utilities they understand it will revolve through multiple calendar years so \$2.5 million could go to Cheshire over a period of time. There is a mechanism in place to resolve this. Rebate and incentives is a

discussion line item. Until CL&P shows up with a letter of agreement we do not know what we will get. The numbers stated come from the mechanics of the CL&P program. Right now, it is a \$9.5 million project, with half a million coming from customer capital contribution, \$1.5 million in rebate incentives and \$8 million of financed funds. Cheshire would be making the commitment that the \$1.5 million would come from rebates and incentives, and they would be contributed to pay for capital improvements.

For clarification, Mr. Sima asked about the rebates and incentives going to Ameresco.

Mr. Daylor said they go to Cheshire.

Mr. Sima cited that these monies go into the calculation from the initial project...\$9.5 million of capital improvements.

According to Mr. Daylor we are funding \$9.5 million in capital improvements. To self fund that money, \$8 million comes from debt; energy savings go to take care of that debt stream.

Mr. Sima said this comes from financing through Bank of America or other source.

It was stated by Mr. Daylor that Cheshire can run its procurement of debt on its own, or use Ameresco's in house finance group on its behalf...this is a service offered at no cost. Within each lender there is a specific energy lender that is adapt at using this, evaluates responses on behalf of the Town, and the Town chooses its own funding source.

Ameresco runs the rebate incentives, and engages CL&P prior to executing the contract with Cheshire.

Mr. Daylor reviewed what will happen next as Ameresco finishes the investment grade document which is in preparation. It is an evaluation of Cheshire's energy base line, financing approach, projects, scope, measurement verification plan...and is the nuts and bolts of what Ameresco plans to build in Cheshire. The document will serve as an exhibit to an energy savings agreement, and is a contractual document which Ameresco will execute. Once there is consensus around this document, Ameresco will populate the ESA, and with the ESA in place, we can go to the market place for financing. Securing financing will take 2 to 3 weeks. With an ESA, financing in place, notice to proceed, Ameresco will begin the rebate incentive process with CL&P. All the independent calculations are done by CL&P, looking at design data from Ameresco, model numbers of equipment, pre-imposed inspections of equipment, installation certification etc. Therefore, before a check shows up the instruction needs to occur. Within the first 3 to 6 months of the design and development process, CL&P will offer the

Town a letter of agreement. This letter will be based on what is to be implemented and makes the offer from CL&P, and it becomes binding between Cheshire and the utility.

When the construction contract is instituted, Mr. Daylor said each party is committed to moving forward under the terms of this contract.

Mr. Sima asked about the letter of agreement saying to the Town that there are sufficient funds for the rebates and they are set aside for the Town.

Stating that was right, Mr. Daylor said the letter or agreement says that this is the Town's money.

Mr. Dixon expressed a concern about how much can be going on in Town and noted that everything cannot begin on day #1, and projects must be phased in.

This is a good point and Mr. Daylor said that this is why the community has turned to performance contracting, partnering with Ameresco, and has bolted itself to a billion dollar construction company to run the projects in Cheshire. Ameresco will be an extension of the Town's facilities departments, is the construction manager, with oversight by Town departments.

Mr. Gavin talked about going with an owner's representative for oversight, and those costs being built into the contract. He asked if most communities go this route to take pressure off its own staff.

Mr. Daylor said that most communities turn to an outside firm to have supplemental resources at their disposal.

Going back to that same point, Mr. Gavin noted that Cheshire has looked at some proposals from companies to help Cheshire decide whether numbers are good, etc.

Should Cheshire choose to have a third party involved in the audit and development process, Mr. Daylor said it is common to have owner agents involved, and they work for the Town. These companies have insight into energy savings and Ameresco as well. During construction the owner representative has oversight. Mr. Daylor stated that with performance contracting there is a guarantee based on a mutually agreed upon verification plan, and should savings not materialize Ameresco is on the hook for them. The cost for the owner's agent is built in, can be paid out of the annual savings, it can be financed, or handled in other ways. Ameresco has worked with all the firms noted by Cheshire, and 3 or 4 of the firms are nationally recognized, and each has strengths and weaknesses.

Mr. Noewatne stated that it is critical that an owner's agent be involved in the process, up front. A firm is needed to hold the Town's hand in many aspects of the process and assist in understanding things.

In response to a question about Connecticut fair trade labor agreement, etc. Mr. Kidder said the numbers are based on prevailing wages for Connecticut for this year and will be based on out years.

#### PUBLIC

Tim White asked about the State creating its own owner's agent through DEEP.

Mr. Daylor said that DEEP is creating a staff position for a performance contracting expert to serve as a resource to municipalities to help figure out what DEEP is terming their "lead by example" program. This program is the prequalification of energy service companies, and usage of State created contractual documents which serve as the lead by example documents. This one staff person is responsible for the entire program. Mr. Daylor said it is uncertain if a community would be back-charged for using this program.

Mr. Daylor said that among the most comprehensive items on the list of energy conservation measures is the retrofit of the high school due to the volume of work to take place in each of the classrooms. This cannot happen when school is in session other than replacement of lighting, and work would happen in the summer. The work would commence on June 15<sup>th</sup>, and to get everything ready there is a 90 day design cycle – back to March 15<sup>th</sup>. Financing must be in place and this takes 30 days – to February 15<sup>th</sup>, and this procurement can be done simultaneously with ESA. For a \$10 million construction project approval in Town it will take another 30 days, so the first Council meeting must take place on January 15, 2013 to meet the schedule.

According to Mr. Daylor the investment grade audit will be completed shortly, so there is a window between November 1<sup>st</sup> and December 31<sup>st</sup>. If the document were turned over to the Town about November 1<sup>st</sup>, this gives the consultant and Town 30 days to review, comment, q&a, evaluate the document, etc. and respond back to Ameresco on December 1<sup>st</sup>, with a litany of questions. Ameresco has a few weeks to clarify the questions, have another round of back and forth.

Mr. Sima stated that the Town cannot make this schedule, as the BOE is swamped the first of January with its budget process, and soon after that the Council will be swamped with the budget process. Plus, the time frame to choose a representative has to happen after the audit is finished, and Mr. Sima said the numbers would not be ready for Ameresco to purchase the equipment and start work the beginning of the summer. If the Town were ready in August he asked what other projects could be undertaken, and the school projects delayed until the following summer.

This is feasible, but Mr. Daylor said the community would be leaving a whole heating season on the table. This project is offered to have \$600,000 a year for energy savings, \$50,000 a month, and a big chunk of this is coming from the electric heat conversion and EMS associated with this. This leaves \$25,000 a month of taxpayer money going to CL&P.

Mr. Sima advised that the Town Council has authorized the Finance Director to look into new blended electric rates, and asked if the number from Ameresco be affected by this. Or, is the Town locked into the numbers originally used on the assumption.

According to Mr. Daylor a base line must be defined by Ameresco and the Town, and when the new blended rates are in place, the information must be reviewed and put into the new base line.

Mr. Masciana said the BOE is locked into December 2014, and Mr. Jaskot is looking at locking in rates to 2018.

Mr. Kidder stated that these rates would have to be looked into, as he thinks the utility company will build in fuel adjustment costs.

It was stated by Mr. Sima that he wants to insure that the new base rate is used.

Mr. Kidder said that the rate there now is based on the existing rates. Going forward the new rates would be used.

In looking at the high school, Mr. Dixon said another boiler is needed. He asked if this could be phased in.

Mr. Biancur said the electric heat does not have to be ripped out; the gas can come off the boilers, and the boilers would not be needed anymore. The work can be phased in and the duct work could be done at night.

Putting in a forced air system is at a higher cost and Mr. Kidder does not know the exact cost.

Mr. Dixon said we cannot put the entire project off a year, and commented on breaking it up into manageable bites to get something started.

One of the biggest concerns is the asbestos issue for both buildings and Mr. Kidder said this must be addressed.

Mr. Dixon said there could be savings with people doing some of the work at the schools.

Stating he hears things pretty clear, Mr. Sima said that in the schools there have been asbestos concerns.

In the information from Ameresco, Mr. Daylor said there is notation of ECM 12 A and B.

To install the system, Mr. Sima questioned whether there would be closing of the building, or if there is another way to do the work when there are breaks in the school schedule.

Mr. Daylor and Ameresco must be conscious of costs, and he is hearing that there is no way the work can be done in summer of 2013.

Mr. Kidder asked for a reasonable time frame for the energy services agreement to be executed.

In reply, Mr. Sima said the earliest time would be late December or early January. At that point we are already behind one month from the Ameresco recommended schedule, and this puts the start of work to the end of July. If nothing else comes up in the Town maybe it can go through. However, if there is a situation like last Fall, things would change.

Mr. Kidder suggested putting the audit together, with July 15<sup>th</sup> signing and finance date, and figuring out a construction window around this date. Boiler work can be done without shutting down a school, and this has been done by Ameresco in the past.

Ms. Flynn-Harris noted that there was some Council discussion about funding the agent-representative separately, but the decision has not been made. She thinks December is a goal.

Mr. Masciana said it is the goal to have the owner-representative in place by December.

It was stated by Mr. Gavin that the owner/rep could look at the list of projects, some of which will be done, some have been done, some will not be done. It is imperative to get this process in place to choose the owner/rep.

#### PUBLIC

Mr. White asked if Ameresco is familiar with the timing of the Town's legislative process. He said BOE adopts a budget in mid-January with many meetings taking place.

In response, Mr. Daylor said many neighboring towns operate under the same budget schedule and executed a contract in January.

Mr. White said the Council adopts the budget on April 17<sup>th</sup>.

Going back to the owner/rep issue, Mr. Noewatne said when the firm is hired, it will be real money, and it will be a substantial amount of money. The Council must authorize that money, and it will be payable whether or not the investment grade audit goes through.

Mr. Sima asked if everyone received the list of owner-rep bidders, and if there is any connection between any of these companies and Ameresco.

Mr. Daylor said Ameresco has history with these companies, but does not have ownership, share staff, etc.

It was determined that there is no conflict of interest with any of the bidding companies for owner/rep.

Mr. Sima asked if there has been any legal dispute between the bidding companies and Ameresco.

Mr. Daylor advised none of the companies has had litigation against Ameresco.

As disclosure, Mr. Noewatne advised that he did work for one of the firms that is bidding.

In looking at the information, Mr. Sima said there is no co-generation recommended, and he asked why since the high school is a huge consumer of electricity. During winter months the pool is a high consumer of electricity. If there is a high demand for electricity, he questioned why it was not considered.

Mr. Kidder stated that co-generation plants are combined heating plants; you need a steady thermo load; and you match the power generation with the thermo load. At the pool one of the measures not included, but since added, is selling a pool cover to reduce energy costs. For half of the year the thermo load is taken away and this will be significant. Power generation is cut in half but the demand is not cut in half, and the biggest consumer in the building is the power filter pump, and then the pool bubble and fans. The electricity demand does not go away and is still paid for; energy costs are 10 cents per kw. The boiler heats the pool water to 85 degrees from 65 degrees in 2 days; in the summer with the bubble down and water at 85 degrees, it is 1.5 million btu's to heat the water. With the bubble up and the pool at 85 degrees it takes less than 800,000 btu's to keep the water warm. The boiler is vastly oversized. Ameresco will recommend a pool cover and small boiler as the biggest bang for the buck.

The idea of a fuel cell was raised by Mr. Dixon.

Mr. Kidder said the thermo load in the winter time is not consistent at the pool, and in the winter time when the bubble is up, it is only 40,000 btu's per hour. That is equal to generating 3kw or 10% of the micro turbines out there. During the time when the cover is off, all the thermal load can be used associated with a 30 kw micro turbine.

According to Mr. Gavin the pool cover saves about \$25,000 a year.

Mr. Kidder said these are not automatic covers, but are installed on three reel systems with a motorized winder, requiring someone to deploy, and walls are needed to do this type of cover.

### PUBLIC

Tim White commented on the high school as the main shelter for the Town, and the involvement of DEEP in micro grid programs, and its relevance to Cheshire.

The parameters of the micro grid program are set up to run at light speed, and Mr. Daylor said Ameresco is capable of doing this and DEEP is not. Cheshire would qualify due to the proximity of the high school and Town Hall...and this is a critical load with funding available. Micro grid applications could be thought about, and if the community wants to pursue this, Ameresco will draw an application with the Town.

Mr. White said that Cheshire is eligible, has a gas line, and the high school would qualify.

There are complications in this discussion, and Mr. Daylor said that a major road cannot be crossed...i.e. high school to the pool facility. Ameresco will get the information, read it, and determine what could be done.

Mr. Gavin asked about Humiston School being in the audit.

Mr. Kidder said this site was not included as a good selection in the preliminary audit report.

Mr. Gavin asked about the issue of LED vs. fluorescent lighting, and where this stands related to the sewer plant etc.

In response, Mr. Kidder said he has talked with school maintenance officials, and LED fixtures are at the high school and Highland School. Ameresco works with a vendor that has proposed LED fixtures, has their pricing, and will offer LED installation for classrooms, on a school by school basis, with a selection sheet. The incentives were misunderstood by the LED vendor; there is a cap on how much the utility will pay the Town; and the formula is 50% of the construction costs or 50 cents per kw hour of savings...which ever is less. In this case, 50

cents per kw hour saved is the driving number. New lamps and ballards tailored to the classroom, fixture by fixture basis, would be about \$400,000. The LED project is about \$2.8 million, on a 23 year payback, and it has a lot to do with installation costs.

Mr. Sima asked about the 15 year payback for LEDs, and in 7 years there is failure, who pays for the new lighting.

It was stated by Mr. Kidder that the manufacturer's warranty is passed onto the Town, and for any equipment, Ameresco could purchase an extended warranty if the Town requests it.

For the life cycle of the equipment, Mr. Sima said Ameresco is stating that if any equipment fails, it is the Town's burden to replace with something better than what was there.

The sub-committee membership for selection of the owner-representative is Mr. Goldberg, Mr. Crooker and Mr. Dixon.

In terms of action items moving forward, Mr. Daylor said Ameresco's expectation is to continue moving forward with projects selected by staff, develop them under a 15 year scenario, and prepare a draft IGA by the end of October. Then, the next step is to have staff and developer review the document.

For some of the schools there are questions and Mr. Sima said some of the buildings listed may not be occupied 15 or 20 years from now. But, we need to make sure this is kept in mind so significant numbers are not placed on them.

Ameresco needs clear direction from Cheshire, and Mr. Daylor said the firm needs completely 100% revaluation, rethinking, knuckle down, pick and choose and reconfigure the information. Then, come up with a \$5 million project, or proceed accordingly with a \$9 million, 15 year pay back.

Mr. Dixon stated that his concern is not that any of the things selected by staff are not worth doing, it is just when and in what order.

Some of the items have been taken care of, and Mr. Sima said some are done or being done.

Ms. Flynn-Harris said this is project managing and phasing.

Mr. Gavin said there are some 200 year payback projects that we may want to do, or have to do.

It was stated by Mr. Sima that if Ameresco's audit is not done until mid-November, how this affects the scheduling.

Mr. Daylor said if the goal was to build something next summer then it would make a difference, but if this is not the goal, then it is irrelevant.

4. ADJOURNMENT

MOTION by Mr. Dixon; seconded by Ms. Flynn-Harris.

MOVED to adjourn the meeting at 9:00 p.m.

VOTE The motion passed unanimously by those present.

Attest:

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Marilyn W. Milton, Clerk

Transcribed from tape.