

Town of Plymouth
80 Main Street
Terryville, CT 06786
<http://www.plymouthct.us>

Plymouth Town Council
Telephone: (860) 585-4001
Fax: (860) 585-4015

Minutes

September 7, 2011

Call to Order: Acting Chairman/Town Councilman David Sekorski, called the September 7, 2011, Plymouth Town Council Special Meeting to order at 7:05 p.m., in the Community Room, Town Hall.

Roll Call: Present were Town Councilman Martin Sandshaw, Town Councilwoman DiAnna Schenkel, Town Councilman David Sekorski, Town Councilman John Wunsch, and Town Councilman Tom Zagurski. Also in attendance were David C. Carpenter, President, New England Energy Controls, Inc., East Haddam, CT, Derek Duchnowski PTE Energy, Public Works Director Anthony Lorenzetti, and Stephen Possidento, CEM, PTE Energy.

Fire Exits Notification

Town Councilman Sekorski made note of the Fire Exits for the Plymouth Town Council and Public Audience.

Pledge of Allegiance

Town Councilman Sekorski led the Plymouth Town Council and the Public Audience in the Pledge of Allegiance.

Energy Presentation and Discussion by Representatives of CL&P

Town Councilman Sekorski stated that the CL&P Representatives had been overwhelmed with work due to the recent Hurricane, however the Town Council had elected to move forward and listen to the information being presented this evening.

Town Councilman Sekorski introduced the speakers as follows: Derek Duchnowski, PTE Energy, Stephen Possidento, CEM, PTE Energy, Plainville, CT, and David C. Carpenter, President, New England Energy Controls, Inc., East Haddam, CT

**Plymouth Town Council Special Meeting
September 7, 2011
Page Two of Nine Pages**

Energy Presentation and Discussion by Representatives of CL&P Cont'd.

Town Councilman Sekorski requested that Anthony Lorenzetti, Public Works Director, provide a brief overview of what the Town Council and Public Audience would be hearing this evening.

Anthony Lorenzetti stated that New England Energy Controls would provide a presentation and review their information (see attachment) and answer any questions that anyone might have.

David Carpenter, President, New England Energy Controls, Inc., stated that they were a united project team and had been doing green building energy conservations projects in Connecticut for over two years, noting that prior to that, both companies had been doing independent work for a number of clients. He further stated that the focus at his company had been Controls and Energy Management Systems.

D. Carpenter stated that his company has had Energy Management Systems in the Town Hall building since 1974, with two renovations over the past 10 years. D. Carpenter explained the system drives and improvements, which had been done, noting that there had been budget restrictions and therefore, the Town had done the best it could with the monies it had to work with at the time. D. Carpenter stated that his company also has an installation, which controls the boiler system, at the Terryville Public Library and noted that this information had been included in the attached study.

D. Carpenter stated that most recently, his company had done some work with Chase Mechanical at the WPCA, noting that they it had been a small project for them.

D. Carpenter stated that his company was familiar with the Town and had been working with the Town for years and then when the project first came out, under the Energy efficient Block Grant Program, they had received a RFP (Request for Proposal) from the Town. He further stated that had gone through the competitive review process with the Energy Committee, looked at the scope of the project and realized it was all energy consumption and efficiencies. D. Carpenter stated that because no one single company does everything (in terms of energy conservation), he brought their partner company, PTE Energy, with them. He further stated that PTE Energy had a rich and deep background and was a third generation company, noting their specialty was lighting. D. Carpenter stated that it was a perfect match for their company because lighting projects paired with energy management projects, have special incentives from utility companies (CL&P and Yankee Gas) so the amount of money given increases if the project is comprehensive.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Three of Nine Pages**

Energy Presentation and Discussion by Representatives

David Carpenter stated that the project started with a three-year database (see attached audit) and that they had looked at all eleven buildings in Town, including the HVAC system at the WPCA building. He further stated that they had observed that some of the buildings were not occupied all of the time, i.e. the Fire Stations, but that there wasn't a cohesive night setback system for the heat. D. Carpenter stated that the total figures on all of the buildings came to energy costs of approximately \$350,000.00, which covered electricity, gas and oil.

D. Carpenter stated that they had gone through and ranked all the buildings in Town (as required by the Energy Efficiency Block Grant Program), by cost of square foot, gallons per square foot if they utilized oil, kilowatt hours per square foot, ccf per square foot, and total energy btu's. He further stated that they used a new index whereby they calculate the cost of square foot per hour of usage and then came up with the best way to set up strategies looking at the national indexes for these types of buildings, noting it was a lengthy process.

D. Carpenter stated that they also noted that some of the hot water pumps in the buildings were running at 55 to 60 degrees and should be locked out at 55 degrees. He further stated that the Town Hall needed terminal control because not all the areas within the building could be locked out. D. Carpenter stated that summed up, the Town would need night set back, hot water set back, terminal control where possible and demand control ventilation (briefly explaining the terminology).

D. Carpenter stated that his company focuses on payback savings for the energy and lighting side that were less than five years. He further stated that the total energy costs of 350,000.00 would be per year after they completed the audit and put together all of the energy conservation records. D. Carpenter stated that they had come up with some strategies and noted that Stephen Possidento, PTE Energy, would talk about the program and that he (himself) would discuss the Executive Summary later in the presentation.

Stephen Possidento, CEM, PTE Energy, gave a brief overview of his company's background and stated that he came from a third generation Electrical Contractor, family business. He further stated that his company had the opportunity and had become involved with CL&P and the Connecticut Energy Efficiency Fund Programs and positioned themselves in the market for the past three to four years with very good success. S. Possidento stated that he was happy to partner with David Carpenter, President, New England Energy Controls, Inc., because he understood the attached audit, paperwork and numbers, as well as the implementation of it, as presented this evening.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Four of Nine Pages**

Energy Presentation and Discussion by Representatives

Stephen Possidento stated that both companies had been able to do some great jobs working together. S. Possidento stated that the information on the attached audit had been approved though CL&P by their Engineers, noting that the numbers were sure, the measures were real and that they were certain it would work because of the mathematics.

S. Possidento briefly explained the types of lighting projects that they had installed, noting they had over 300 separate lighting projects in the last three to four years. He further stated that his company had done all types of projects including schools, and that they were working with D. Carpenter on getting them their Energy Star Building Label, as well. S. Possidento stated that they had worked with Cargo, Star Ruger, and Heart and Vascular Company, noting the cost savings they had been able to obtain for these lighting projects had allowed to remain and be retained as a preferred vendor.

S. Possidento stated that Derek Duchnowski, PTE Energy, had crunched the numbers presented this evening on this project and noted that not only had they provided energy savings, they also provided the right "fit" for the Town, that would be cost effective and work.

Noting that they had signed a contract to install their own work, they would be striving for a long-term vendor relationship and were proud to help D. Carpenter with their projects as well.

Derek Duchnowski stated that he put the numbers together and did all the audits for the buildings. He noted that he looked at the projects (as previously mentioned by David Carpenter) with an under five-year payback, which would be the best return on the Town's investment.

D. Duchnowski stated that they would be changing out some lights, would be adding induction lighting (outside/exterior) same as fluorescent, noting that they had no electrodes in it so the electrode could not get hit by the voltage coming in. He further stated that they had a longer life (100,000 hours) noting that the benefit of this type of lighting was the elimination of paying an electrician to go up on a pole for \$400.00 just to change a light.

D. Duchnowski stated that when he had gone through everything he had used his best judgment and tried to be as comprehensive, honest, and detailed as he could be, noting that he had built a buffer/safety net into the savings.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Five of Nine Pages**

Energy Presentation and Discussion by Representatives

David Carpenter, referencing Table No. Two Comprehensive Energy Conservation Measure (ECM) Executive Summary (see attachment), reviewed the categories and explained the document in detail.

David Carpenter, while explaining deregulation, noted that there were two components of the electric bill; one being transmission and the other would be where the power comes from. He further stated that taking the total composite cost, noting that they use nineteen cents per kilowatt hour, \$3.25 per gallon for heating and that prices fluctuate, they would be recommending gas as a viable option for the Town (including the Town Hall building), should the Town ever decide to switch over from the boilers e further stated that from a btu standpoint, gas would be 30 percent less per btu with the current calculations. D. Carpenter stated that other benefits of going with gas were that it was plentiful, produced domestically, and stays in a competitive price range. He stated that they had a contingency on the total project (referencing page three) the total project cost would be \$282,000.00 (including the contingency) noting that price included everything (see attachment) shown. D. Carpenter stated that all the paybacks for each individual building as included in the Executive Summary, as shown in the attachment, and noted that they had tried to focus on the buildings with the highest ranking.

Town Councilman Sekorski questioned where CL&P came into the project, asking if once CL&P looked at the figures comprehensively would they then evaluate the estimates, etc., and that after the installation was completed would the Town go under contract with New England Energy Controls. He further questioned if the Town would pay and CL&P would pay the Town, in other words, how does Column G in the Executive Summary and the program work.

D. Carpenter stated that the program was becoming very competitive and CL&P was buying down the payback, noting that the comprehensive was now at 30-35 per cent, noting that was the maximum that they would pay on a total installed cost for lighting and HVAC.

Derek Duchnowski stated that the money from the utility company was implemented into the project was right off the top, no rebate form required. He further stated that the proposed project would be submitted to CL&P (who then reviews it) and examines how much the savings was and gives a certain incentive based on the kilowatt-hour reduction. He further stated that once the project was approved, and if the customer wants to move forward, the customer would then pay for the project, minus the utility incentive.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Six of Nine Pages**

Energy Presentation and Discussion by Representatives

Town Council Sandshaw noted that after the installation of the equipment controls, the incentives would allow the Town to have a CL&P loan at zero percent interest/financing.

Derek Duchnowski stated that Town Councilman Sandshaw was correct, and that he would double check, but he was certain that all of the Town buildings had been approved enabling the Town to make monthly payments at zero percent interest, noting that the Town would be saving as much as it would be paying, monthly.

Town Councilman Zagurski questioned if Prospect Street School and Main Street School had been evaluated or had it been done as part of the School Program, noting that he did not see the buildings in the Executive Summary report.

Anthony Lorenzetti stated that Main Street School was not evaluated because it was currently controlled by the Board of Education and that the Town had planned on shutting the heating system down at Prospect Street School this winter (including letting Shaffer drain the waterlines) noting that the building was not being utilized and did not see the reason to evaluate either buildings. He further stated that it was a huge cost to heat the building in the wintertime.

Town Councilman Sandshaw questioned if A. Lorenzetti was going to let the water problem in the basement of Prospect Street School.

A. Lorenzetti stated that he had been over to the building this week and that the electricity was still on and the sump pump was still working.

Town Councilman Zagurski questioned why it was recommended to do the lighting in the old PVAC garage building, when the payback was at 35.8 years, noting that earlier the statement was made that paybacks were not done on anything that came in at 5 years or less.

David Carpenter stated that the hours of usage in a building were very hard to determine without an occupancy sensor in the space, noting that assumptions had been made at that the calculation methodologies (shown) were based on hours, i.e. lighting would be kw times (x) hours, etc., and noted that the HAVC was more complicated and briefly explained the reasoning.

D. Duchnowski stated that he had grossly underestimated the run hours for Fire House No. 7, using 130 hours per year, which equated to 2.5 hours per week, noting he was certain the Fire House was used more hours than shown.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Seven of Nine Pages**

Energy Presentation and Discussion by Representatives

Derek Duchnowski stated that he would contact CL&P tomorrow, to make them aware of the hour/number change. He further stated the new number should be 500+ hours per year.

Public Comments

Melanie Church, 328 Main Street, Terryville, questioned how many hours does it take Town Councilman Sandshaw (who works for the Board of Education) to audit the buildings.

Town Councilman Sandshaw stated that he audits five buildings on a weekly basis, including doing his reports, averages approximately 20 hours per week.

M. Church stated that in turn it would mean that the Town would really need to hire someone part time to do this or would Town Councilman Sandshaw handle a portion of this work.

Town Councilman Sandshaw stated that the program he was in was actually a Conservation Program and that he was teaching the Conservation Program to the BOE Staff and administrators, where this EMS Control Program would be doing what he and the Head Custodian reviews/looks at, noting he was the Auditor who was changing the behavior.

When questioned by M. Church as to who would be changing the behavior for the Town, Town Councilman Sandshaw stated that he didn't know and that the Town probably wouldn't be changing the behavior, immediately, but relying on the equipment that would be installed and the EMS Systems doing the job once they had been established and the trends were reviewed.

M. Church stated that as far as financing this, the Town has an Undesignated Fund and that the Town could actually take money out of and pay cash for this and that it wouldn't cost the tax payers one penny and take the 100 percent savings ourselves.

Town Councilman Sandshaw stated that would put the Town a lot further ahead, a lot sooner.

M. Church stated that with over 2.1 million sitting in the fund, to her that would be something that the Council should look at and make a recommendation to take the cash money, or even take it out of Capital Non-recurring, the Town has a bank account there, instead pay cash.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Eight of Nine Pages**

Public Comments Cont'd.

Melanie Church stated that the Town wouldn't be paying any interest, wouldn't be making payments over time, and it's a one-time appropriation and it's done.

Town Councilman Sekorski stated that from his perspective it was premature to even think about how the Town would be paying for the project because the Town wasn't anywhere near there as yet. He further stated that he appreciated the comment because the Town would have to evaluate a lot of different things on how this project would be funded.

David Carpenter stated that the buildings presently have one or several vendors that service the burners and the pumps and various items, noting that they serviced some, but not all of the buildings. He further stated that when they did their surveys, the existing pumps for some of the Fire Houses had original outdoor air (White Rogers) primitive electric controls that have become outdated or were defunct. D. Carpenter stated that when they hook this up, they would be re-implementing modern technology that should be already be in those buildings. He further stated and that a plan should be put together so that the vendors that go into the building would be fluent enough to understand that when they saw something not working correctly, they would have to report it to Public Works.

Town Councilman Sandshaw questioned if D. Carpenter, based on outside boiler temperatures, would recommend to the existing vendors to adjust it up or down, i.e. the boiler temperature running at 180 degrees at 0 outdoor degrees, running at 140 degrees at 50 outside degrees, etc. He further stated that if the outdoor temperature were at 60 degrees, the pumps probably would not be running, noting that the vendors would have to use common sense.

Town Councilman Sandshaw stated that hopefully, the Head Custodians in each building would be involved in this training process so that they could make those adjustments, if necessary. Town Councilman Sandshaw stated that basically, in the Energy Maintenance Program you become a weatherman looking at the weather two to three weeks out. He further stated that you would not want to set the boiler at 180 degrees today and then change it down to 140 degrees tomorrow, noting that there wouldn't be any efficiency in that behavior. Town Councilman Sandshaw stated that the Head Custodians would need to be aware of this information.

D. Carpenter stated that if the Town was really conscientious, this should save maintenance time because in order to maintain that building at optimum efficiency someone would have to be there to adjust the water temperature every single day verses an automatic reset.

**Plymouth Town Council Special Meeting
September 7, 2011
Page Nine of Nine Pages**

Council Comments

Town Councilwoman Schenkel thanked the invited guests for coming out this evening and providing their presentation.

Town Councilman Sekorski stated that there was a lot of reading material to digest; he was unsure of the next steps, but that the Mayor would be kept abreast of the situation and the Town would go forward from that point.

Adjournment

There being no further business of the Plymouth Town Councilman Sandshaw made a motion seconded by Town Councilwoman Schenkel, to adjourn at 8:27 p.m. This motion was approved unanimously.

Respectfully submitted,
Acting Recording Secretary

Attachments