

Stratham Energy Commission

Meeting Minutes

Date: April 10, 2013

Commission members present:

John C. Dold

Michael Gorman

Matthew O'Keefe

James Schlough

Michael Welty

Also Present: John Sapienza, representing the Stratham Fire Department

Call to Order: Meeting was called to order at 6:59 PM.

This meeting was held at the Stratham Fire Station for the purposes of conducting an energy audit of the facility. This facility was newly constructed in 2008. The first order of business was to inspect equipment on the roof of the structure while there was still daylight. John Sapienza provided access to all areas of the building, explained the purpose and use of the many items of equipment and answered numerous general questions.

The flat roof area above the equipment bay was populated with three Carrier propane-fired heating and cooling units and remote AC condensers. There were numerous vents for the plumbing system and kitchen exhaust hoods. The roof surface is a white membrane for good solar reflection. A roof-mounted exhaust fan services the fire truck exhaust collection system.

In the second floor level we surveyed the air handling units associated with the roof mounted heating/cooling units. Several thermostat controlled vents allowed natural exhaust of excess heat. The emergency operations center and the dormitory area (for future use as staffed fire station) had programmable thermostats for occupied/unoccupied requirements. Bathrooms had motion-activated lighting. There are insulation panels below the flat roof area and sprayed insulation on the bottom surface of the pitched roof area.

The first floor equipment bay has motion activated lighting. There is a floor radiant heating system throughout the bay area with an additional radiant loop under the exterior sidewalk. This system uses a propane boiler that was temporarily out of order. The overhead doors are designed to close automatically after two minutes to provide security and prevent heat loss after vehicles leave to respond to a call. An emergency generator provides electricity to the entire building. A diesel powered pump draws water from a 3000 gallon reservoir beneath the station to supply the building's sprinkler system and, in an alternate mode, to replenish the tanks of the pumper trucks.

We continued with normal business in a conference room. The minutes of the March 13 meeting, previously distributed, were approved. John Dold noted that the Fire Station data in Portfolio Manager indicated that the building had an annual energy cost (heating and electric) of \$1.14

per square foot, which is considered very good. John suggested that we continue with our energy audits of the other town buildings, then assess what actions can result in the most savings and approach Unitil for possible funding from their rebate program. Matt O'Keefe noted that only the electrical improvements would be eligible. Since we don't source our heating energy from Unitil's natural gas system, our propane or fuel oil use improvements could not get rebated.

Mike Welty suggested that rather than wait the many months it would take to finish our surveys and prepare plans for improvements, we could move quickly on the known improvements available at the town garage, specifically the lighting. He suggested that for an estimated \$11,500 the exterior lights at the garage could be replaced with LED fixtures and the interior fluorescent lights updated for energy efficiency. He estimated that with a 50% rebate from Unitil, the cost to the town could be offset by one-year of energy savings. The option of using screw-in LED bulbs for direct replacement of the exterior halogen bulbs could reduce the cost by \$2700.

After some discussion on how to proceed with this project, with an emphasis on timing and funding, it was decided that Mike would make a presentation to Paul Deschaine to examine how the process could be initiated.

The commission thanked John Sapienza for hosting our meeting and being very helpful with the survey process. We adjourned at 8:56. The next meeting will be at the Stratham Police Station on Wednesday, May 8th at 7 pm.