

Bedford Energy Task Force  
Minutes of July 22, 2009

In attendance: Angelo Colao, Richard Jones, Carolyn Sarno, Juliette Seeley, Kim Siebert, Jessica Watro.

Also in attendance: Abigail Seibert, School Committee.

The minutes for the June meeting were approved as written.

**The audit:** Mr. Jones distributed the state's energy audit summaries for the town buildings and for the schools. 70% of the town's square footage is on the school side, 30% on the town side. Mr. Jones additionally noted that to receive an Energy Star approval, a building must score 75 (out of 100.) None of the 3 schools that were audited achieved a score of 75 but the Lane School came closest with a 74. Davis received a 62; JGMS received 68. On the town side, the only building rated was the Town Hall which received a 41.

Recommendations for upgrades included:

School Side: **Job Lane**

- Lighting upgrades
- Replacement of refrigerator
- Pump Variable Frequency Drives
- Installation of a vestibule
- Demand controlled ventilation
- VFDs on Air Handling Unit fans
- Pilot lights
- Control of air leakage
- Taking a water heater offline
- Installation of a condensing boiler

**Davis School**

- Lighting upgrades
- Timers on vending machines
- Replacement of refrigerators
- Replacement of a washing machine
- Pump VFDs
- Air handler VFDs
- Demand control ventilation
- Pilot light ignition
- Control air leakage

**JGMS**

- Gym lighting
- Vending machine timer

- VFDs on pump motors
- Demand control ventilation
- VFDs on Roof Top Units and AHUs
- Condensing boiler

NOTE: VFD drivers moderate the speed of the motor according to need as opposed to an automatic on/off cycle.

If all upgrades were implemented, the estimated cost savings per year at current utility/energy rates = \$60,195.

On the town side: **Police Station**

- Replace refrigerator
- Upgrade to condensing boiler
- VFDs on pump motors
- Replace A/C unit with heat pump

**Town Hall**

- Exit signs to Light Emitting Diodes
- Pump VFDs
- High efficiency pump motors
- High efficiency AHU motors
- AU VFDs

**DPW**

- Lighting upgrades
- Low velocity fans for destratification
- Fix air leaks
- Install air timer

**Bedford Library**

- Lighting upgrades
- Replace refrigerator
- Fans to destratify heated space
- Control air leakage
- VFDs on AHU supply fan motor

**Town Center**

- Timers on vending machines
- Remove refrigerators
- Replace AC
- Control air leakage
- Pilot light conversion

If all recommended upgrades are performed, the annual savings at current energy/utility rates are estimated at \$24,150

Mr. Jones related the return on investment would be realized after 4.2 years if we commit to doing the whole package. He will meet with NSTAR during the second week of August to discuss lighting upgrades. NSTAR should cover 70% of the lighting upgrade total. (They used to cover 100% but the amount has gone down recently.)

There are also rebates for energy misers for the vending machines.

Mr. Jones was somewhat disappointed at the depth of the audits. He noted that the steam boiler in the Town Center doesn't even show up on the cost/benefit break outs. Also, it is perplexing that the Library—initially shown as the most efficient town building—apparently has the most room for improvement. However, he will send TF members the more in-depth details that he has from the audits.

If the town chose to upgrade to a condensing boiler at Lane, it would take one current boiler offline leaving us with one regular boiler and a condensing boiler. On this particular upgrade, the payback would be 6.5 years, saving the town \$12,535 annually thereafter.

“Special Solutions Projects”: Mr. Jones has a proposal but no details as yet. NSTAR performed this assessment separately on the High School alone.

Looking at the audit results, at the cost, and the potential for savings, the group considered its own recommendations to the town. A strong statement from the Task Force—including, for example, a policy regarding new equipment purchases-- would be valuable in moving forward. By November we should have our recommendations formulated

A co-generation option for the town campus would be desirable but the expense would be high and there is little appetite for big spending. There may be revenue sources that would help. Scott Durkey with the state is helping us with this. For the smaller upgrades, the town can potentially shuffle some money to cover what the utilities, like NSTAR, don't cover.

**Other items:** The Task Force's year-end report is due August 15<sup>th</sup>. It should include 1) the purpose of the TF; 2) Employee statistics (not relevant in our case); 3) highlights of our activities and accomplishments; 4) projections.

There is some confusion about whether the Community Energy Challenge is solely for businesses or for the community as a whole. Mr. Jones will check into it.

Green Communities Act's deadline for assistance with the application is on August 7<sup>th</sup>. There are five criteria points: 1) “Provide for the as-of-right siting of renewable or alternative energy generating facilities, renewable or alternative energy research and development facilities, or renewable energy manufacturing”; 2) “Adopt an expedited application and permitting process under which these energy facilities may be sited

within the municipality”; 3) “Establish an energy baseline inventory for municipal buildings, vehicles, street and traffic lighting, and put in place a comprehensive program to reduce baseline by 20% within 5 years”; 4) “Purchase only fuel-efficient vehicles for municipal use whenever such vehicles are commercially available and practicable”; 5) “Require all new residential construction over 3,000 sq. ft, ad all commercial and industrial construction to minimize the life-cycle cost of the facility by utilizing energy efficiency, water conservation, and other renewable or alternative energy technologies.”

Together, these criteria are a tall order for any town to achieve. The application timeline is very aggressive. The sense is that there will not be a rush to participate in this program if the criteria and timeline are not softened. Mr. Jones will call the DOER with feedback and a few questions to see what our options are and will forward the state’s response to the TF members.

It was noted that Chris Laskey at the town Assessor’s Office has attended some training sessions about the new Stretch Building Code.

Bedford Day: Ms. Watro will look into a 3 sided board display and present a sketch for the TF assess.

Ms. Seeley will contact Joanna Nickerson in the Town Administrator’s office in order to connect with Sherwood Ives about the town website. The TF wants to know if there can be a link from the town’s site to one of our own. At the next meeting, we will discuss the website content.

Also at the next meeting, we will talk about :  
Residences and businesses  
Proposal for Selectman and School Committee  
Commonwealth Solar money. How much do we have? Ms. Watro will tell us.

Mr. Jones announced that we did, in fact, purchase the infrared camera.

Ms. Watro will be leaving the Task Force to go to graduate school. The August meeting on Wednesday the 19<sup>th</sup> will be her last one.

Respectfully submitted,  
Kim Siebert, Clerk

