LYME ENERGY COMMITTEE MINUTES August 15, 2011

PRESENT: Matt Brown, Charles Regan, Gary Phetteplace, Carola Lea, Sue MacKenzie, Becky Lovejoy, Mark Bolinger, Joanna Laro.

ABSENT: Dan O'hara

Meeting called to order by Becky at 7:30

Minutes of the July meeting were approved as written.

 Topic Meeting with Peregrine and Building and Facilities Committee. Present: Don Elder, Richard Vidal, Dina Cutting, Frank Bowles, Steve Campbell, Mike Mccrory LSRPC, 2 representatives from Peregrine. Sue MacKenzie

Discussion- Peregrine Energy report for the town of Lyme.

No funding available- will get energy related proposals ready to seek funding. LSRPC will help to find funding.

1. Town Garage- Lighting Will contact PSNH to discuss changing to a more energy efficient and effective lighting system.

2. LCS and Academy Building. Major issue is Insulation. Will do incrementally as funding allows.

3. Fire Station. All agreed it was the major concern in Lyme, but since the Fire Dept was not represented, no discussion or action could be taken.

4. Discussion of Oil tanks aging and rusting. Recommend the town have its oil company check all oil tanks in town buildings for water and rusting bottoms. Dina will contact Dead River to check all tanks.

5. Town Selectman have placed repair of Pike House drainage and well for town office higher on list as well as parking at the Lyme Center School and Academy building.

2. Topic- Gary brought the posters from the Junior Solar Sprint project that was on display at the 250th celebration.

Discussion- Some interest from Parents and students.

3. Topic- 2011 Local Business fair. September 24th, With the Flea Market.

Discussion- Tent has been arranged thru Simon Carr

Action- Carola to call a meeting of the subcommittee.

4. Additional comments from Mark Bolinger--Just thought I would jot down my findings on the DPW garage (insulation, ventilation, SolarWall, etc.), mostly for my own benefit (while it's still fresh in my head). I called Conserval (the company that makes SolarWall) and they referred me to their New England rep, DAC HVAC out of Kennebunk, Maine. I talked to Pat Will at DAC, and explained to him the building's history with moisture (as I understand it). Pat's recommendation is to replace the moisture-compromised fiberglass insulation with 3-4 inches of blown-in closed-cell foam insulation, which has an R-Value of R6/inch and does not permit moisture to reach the metal. He says this will keep the moisture in the air from ever reaching the dewpoint and condensing -- and even if it would happen to condense, it would condense on foam and would just run off (rather than saturating fiberglass, leading to mold and metal corrosion). In short, he thinks that properly dealing with the insulation problem will completely solve the moisture problem, in which case fresh air ventilation and/or SolarWall would not necessarily be required.

That said, if we still want to pursue ventilation and/or SolarWall (after first dealing with the insulation), he noted that simply introducing outside winter air into the building will serve to dehumidify the building on its own, whether or not that outside air is pre-heated with SolarWall (he noted that many indoor pools dehumidify only by introducing outside air). This is because winter air has a very low humidity and dewpoint. The problem, of course, is that cold outside air must then be heated for human comfort -- it's the age-old tension between wanting to admit fresh outside air for moisture/health benefits, but not wanting to spend a bundle heating that cold air. This is where SolarWall comes in -- it pre-heats the incoming air by as much as 40-50 degrees before it enters the building. He told me that an existing HVAC distribution system (ductwork, etc.) is not a necessary pre-condition for SolarWall to work -- they've done plenty of installations on industrial buildings without ductwork (all it takes is the installation of one or more intake fans). He estimated the installed cost of SolarWall at \$25/ft^2 (not including the cost of the fan, which might add another \$2-3k).

Bottom line: I'm personally not sure I understand the current state of the building insulation (is it still fiberglass? is it still saturated with moisture? the Peregrine report was kind of vague on this point...), but it sounds like before we spend any money on ventilation (whether or not pre-heated using SolarWall), we should first make sure that the insulation problem has been adequately addressed.

Meeting adjourned at 8:15

Next Meeting Monday, Sept 19, 2011 7:30-8:30 Town Office Building.

Respectfully submitted,

Susan J. MacKenzie

Secretary I will be away for the September meeting.