

2009 ANNUAL REPORT OF THE JAFFREY ENERGY COMMITTEE

The purposes to be served by the Committee are set forth in Article II of its By-Laws as follows: “The Jaffrey Energy Committee, acting as advisor to town officials, the schools, businesses and residents on energy matters, will seek to encourage energy conservation and sustainability (and to save money wherever possible) through the wise use of energy, giving special attention to minimizing carbon dioxide emissions, fossil fuel dependency, and wasteful energy consumption while maximizing clean renewable energy use. Among numerous critical energy challenges and opportunities, the Committee shall advocate: reduction of energy and environmental waste through smart recycling; reduction of carbon and other harmful fuel emissions through technological innovations and through shifts to alternative energy sources that minimize fossil fuel dependency; reduction of costs of residential, commercial and town lighting through elimination of unnecessary lighting, use of low energy lighting sources, and good lighting management practices; reduction of heating and air conditioning costs in buildings by maximizing energy conservation and efficiency and other performance factors; increase of energy efficiency through reformed building and property development codes; collaboration with other local, state and national organizations, including other town energy committees, to advance the above-stated purposes.”

Members of the Committee are Richard Ames (Chair), Doug Clayton, Margaret Dillon, Ed Surprenant, Andy Jones, Bonnie Mitchell, Rob Stephenson, Douglas Starr, Steve Dark, and Harry Young (Vice-Chair). Meetings have included presentations on the promise of Biochar systems for clean energy and on energy improvement initiatives implemented at Millipore. The Committee encourages all those interested in participating in the work of the Committee to come to the Committee’s meetings (times and locations are posted on the Town’s web site) or to contact its Chair for further information.

Minutes of the Committee’s meetings, as well as related notices, reports, documents and links, are posted at the Committee’s page which is hosted on the Town’s web site at: www.town.jaffrey.nh.us/Committees/Energy/JECHome.html .

Noteworthy developments in 2009 included the following:

Streetlighting

In April 2009, after more than a year of field work, public meetings and deliberations, the Town’s Ad Hoc Street Lighting Committee, functioning with the full support and participation of the Energy Committee, recommended that 86 of the Town’s 222 streetlights be removed and that the remainder (except the vintage lights in historic Jaffrey Center) be converted to more energy and light efficient 70 watt metal halide lamps. In June, with the support of the Jaffrey Historic District Commission, two of Jaffrey Center’s streetlights were added to the list of recommended removals. The Committee estimated that the dollar savings from these actions would amount to \$29,235 per year after a conversion cost pay-back period of about 3 years. These conversions would reduce the Town’s streetlight energy use by about 17,500 watts. In response to these recommendations, the Board of Selectmen decided to remove 71 lights and to proceed with the energy saving conversions as recommended by the Streetlighting Committee.

Town Offices Energy Audit

Energy Committee member Margaret Dillon, of Sustainable Energy Education Demonstration Services (SEEDS), completed a comprehensive *pro bono* energy audit of the Town Offices building. The audit report identified actions with potential for significant energy and spending savings in three categories, Tier 1, HVAC, and Tier 2. Tier 1 improvements were offered for immediate action in order to “reduce

energy use and improve comfort and durability in the most cost effective manner possible.” A rough estimate for the Tier 1 upgrades was \$32,350. The likely impact of these Tier 1 upgrades would be “dramatic reduction or elimination of all ice dams; significant increase in comfort and reduced temperature differentiation between floors; reduced propane use of approximately 400-500 gallons.” Options for HVAC improvements were identified with a likely cost considerably less than the \$70,000 that had been suggested in the recent Turner Group Report. Tier 2 actions, which would accomplish a “deep energy retrofit to effect a high performance building”, were offered for consideration as the Town develops its long-term plans for this building. The Town Offices audit report is posted on the Energy Committee’s page of the Town’s web site. The Town’s Facilities Committee has recommended to the Board of Selectmen that the Town apply immediately for grants to fund the Tier 1 and HVAC improvements.

Grant for Energy Audits of Town Facilities

On the Energy Committee’s recommendation and with its support, the Town applied for and has received a \$16,250 grant for energy audits of all town facilities other than the Town Offices building. The grant was awarded late this fall from the Regional Greenhouse Grant Fund administered by the Public Utilities Commission. This work will be done in early 2010 after selection of a qualified contractor through a public competitive process.

Grant Application for Energy Improvements at Town Offices Building

With the support of the Energy Committee and the Town’s Facilities Committee, the Town began in late 2009 to lay the groundwork for grant applications to fund Tier 1 and HVAC energy improvements. A likely source of funding is the federal Energy Efficiency Conservation Block Grant Program. The application process for block grant funds will begin in January 2010.

Other Activities

Other Energy Committee activities in 2009 included:

- collaborating with Clean Air-Cool Planet and Town staff to develop baseline energy usage data for the Town;
- supporting the Town’s plan to install a pellet boiler at the Town’s wastewater treatment facility;
- participating on the Town’s Facilities Committee and supporting that Committee’s recommendations for energy audits and upgrades at all Town facilities and for the establishment of a new ad hoc committee to conduct a comprehensive review of the Town’s recycling facility;
- supporting the Town in an unsuccessful application for Regional Greenhouse Grant funds to support a solar energy feasibility study;
- voting to recommend to the Town that “any new Town building or major improvement to a Town building should be designed and built to follow the principles of integrated design for high performance buildings.”
- participating in a collaborative meeting with 11 other energy committees from the Monadnock region that was convened in December by the Southwest Region Planning Commission.

Respectfully submitted for the Jaffrey Energy Committee by,

Richard Ames, Chair

Collaboration With Other Town Energy Committees

Waste and inefficiencies in the Town's street lighting system were a principal focus of the Committee in 2008. In _____, 2009, the Town's ad hoc Street Lighting Committee, functioning as a sub-committee of the Energy Committee and established by the Selectmen in late 2007 with a mandate to "study the town's lighting to save money and reduce global warming,"

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Richard Ames, Chair