- 1. Program Title: Weatherization, Thermal and Electric Energy Efficiency Improvements, and an Energy Educational Exhibit at the Great Stone Dwelling of the Enfield Shaker Museum.
- 2. Program Type: Type 2, 8 and 10.
- 3. *Summary of Work*: The goal of the grant was not only to increase energy efficiency, but to make the project a model for other historic structures. At this quarter we finished the installation of the alternate heating system. We have spent \$19,759.59 thus far on the project, with an advance of \$15,406. We request a reimbursement of \$4,353.59.

Task 1: 100% complete. In November, HVAC Guru completed his installation of the alternate heat system, and installed an additional thermostat/zone so the office can be run independently of the Museum Store, further reducing heating costs and greenhouse gases. He stayed seven (7) days in the Great Stone Dwelling to complete the installation in October. The second payment of \$3,723.75 was made on Oct. 11, 2010. We paid his final bill of \$4,226.25 on November 8, 2010.

Task 2: The insulation and prep work will be done in January 2011 at the slowest time of year for the Museum.

Task 3: 100% complete. We purchased and installed the energy efficient lights.

Task 4: 51% complete. We purchased and installed two clothes washers. We will purchase more in February 2011.

Task 5: The Educational Exhibit will be done after the completion of the activities to document the work and the rationale behind it. Colin High will advise on this.

Task 6: The Thermo IR Scan will be done at the end of the project to test the efficiency of the project. Howard Shaffer is prepared to work on this with Tom Boswell.

Task 7: Colin High will donate his time on the Measurement and Verification at the closure of this project.

4. Summary of Work October 1, 2010 – December 31, 2011: Tom Boswell continued to contact the contractors and reviewed their schedules. He worked with the staff to avoid conflicts in the work schedules and the Museum's activities. He documented the work with images and reports. He also reviewed the scope of the work with the Museum's Building Committee and Preservation Planning Committee, which is chaired by Paul Mirski. As an advisor, Mirski reviewed the contracts, advised on details and reported to the board of trustees. The alternate heating system, designed by HVAC Guru, was installed and completed in September and October.

- 5. Jobs Created: No jobs were created.
- 6. Obstacles encountered: No obstacles were encountered.
- 7. *Beyond the contract:* We are very pleased with the results of HVAC Guru's project. No original structural material was harmed during the installation, and the new heating system is very effective and cost-saving.
- 8. Photos have already been emailed to you separately.
- 9. *Budget vs. Actual:* The alternate heating system is under the original budget as we expected. The actual will be more in line in January and February as we complete the projects.
- 10. Additional Steps. We can now use the Great Stone Dwelling comfortably year-round, including themed overnight programs that are very popular, and are income-producing during the "lean winter months."
- 11. We will have *press activities* upon completion of the project, and we definitely will invite the NHPUC staff to attend the functions. We are very grateful to the NHPUC for funding these projects, which are needed and are saving us utilities costs as well as greenhouse gas emissions.