



TEC
TOWNSEND ENERGY COMMITTEE
272 Main Street
Townsend, Massachusetts, MA 01469

Michael Brown, Ph.D., Susan Dejniak, PMP,
Ed Hermann

Green Community Grant Progress and Financial Quarterly Report

Green Communities Grant Effective Date: December 13, 2012

Reporting Period: January 1, 2014 – March 31, 2014

Brief Project Summary:

- 1. Installation of idle reduction devices on two police vehicles. 50% completed.**
The Energy Committee discussed with the Police Chief and Deputy Chief and determined that the officers are not idling enough to make the installation of the additional device worth it.
- 2. Energy Audits at Town Hall and the Police Station. 100% completed**
The Energy Audits for the Police Station and Town Hall are complete.
- 3. Implementation of approved energy conservation measures identified by the audits.**

POLICE STATION: 95% Complete.

ECM #1, pg. 20 – Install Programmable Thermostats: Complete.

ECM #2, pg. 21 – Hot Water Supply Temperature Reset: Complete.

ECM #3, pg. 22 – Replace Condensing Boilers: The two boilers have been replaced with one boiler and the project is complete. All invoices have been paid. Electrical work invoice is attached. The rebate was received from Unitil and MassSave in the amount of \$4,000. Rebate documentation previously submitted.

ECM# 4, pg. 23 – Install Lighting Occupancy Sensors: Complete.

ECM #5, pg. 24 – Super T-8 Lighting Upgrade: Complete.

ECM #6, pg. 25 – Prevent Elevator Motor Cycling: Decision yet to be made on implementing this ECM.

Additional Recommendations – pgs. 26-27

#1 - Occupied Standby Mode: Complete.

#2 - LED Exterior Lighting: Complete.

#3 - Implement Boiler Lockout based on Outdoor Temperature: Complete.

#4 - Replace electric unit heater with gas heater in generator room: it has been decided that this item would not be cost effective.

#5 - Implement automatic timer for exterior lighting: This project is completed, invoiced for \$750 and paid in full. See attached documentation.

#6 - Widen occupied temperature range: Complete.

#7 - Use electronically commutated motors in indoor fan coil units: This will be considered at the time these units need to be replaced as recommended.

MEMORIAL HALL: 25% complete

Due to the faulty gas meter at Memorial Hall discovered by Unitil, Guardian Energy will be reevaluating the Audit Report to see if any of the numbers in their recommended ECMs will change.

ECM #1, pg. 17 - Replace three boilers with condensing boilers: the Energy Committee voted not to complete this item as the payback (287 years) is too great. This will be reevaluated by Guardian (see comment above).

ECM #2, pg. 17 - Program existing boilers for outdoor air reset control: Complete.

ECM #3, pg. 17 - Upgrade HVAC controls: Complete.

ECM #4, pg. 18 - Insulate hot water piping in boiler and mechanical rooms: Guardian to reevaluate numbers.

ECM #5, pg. 18 - Repair combustion dampers in the boiler room: Guardian to reevaluate numbers.

ECM #6, pg. 18 - Install smart strip outlets for office equipment: the IT Manager is looking into the cost for smart strip outlets.

ECM #7, pg. 18 - Weatherization improvements: Guardian to reevaluate numbers.

ECM #8, pg. 18 - Lighting Upgrades: Project approved and completed for Unitil to replace the indoor and outdoor lighting at Memorial Hall under their Small Business Retrofit Program. Documentation previously submitted. Invoice received and will be paid in next quarter.

4. **Unitil Small Business Retrofit Program I:** Complete.
Indoors and outdoors at four Fire Department buildings, the Water Department offices, the Police Station and the Highway Garage.
5. **Replacement of Employee Refrigerator:** Complete.
6. **Replacement of 50HP & 60HP motors and adding variable frequency drives to control each motor at the Main Street Water Pumping Station:** project proposal submitted and approved 3/31/2014.
7. **Installation of 30HP variable frequency drive at the Cross Street Water Pumping Station:** project proposal submitted and approved 3/31/2014.
8. **Administrative Support.**
Land Use Coordinator Karen Chapman has expended \$466.90 from the grant monies for this period in support of the Energy Committee and the Green Communities Grant.

Project Budget:

BALANCE:	Jan. 1, 2014	\$ -21,399.19	balance
Payment – ERS Electric	Jan. 14, 2014	<u>\$ -750.00</u>	
Auto timers at Police		\$ -22,149.19	balance
Payment – ERS Electric	Jan. 14, 2014	<u>\$ -2,404.58</u>	
Electrical work on PD boiler		\$ -24,553.77	balance
Credit – DOER	Jan. 28, 2014	<u>\$+78,412.50</u>	
Outdoor lighting-PD		\$ 53,858.73	balance
Payroll distribution	various dates Jan.-March	<u>\$ -466.90</u>	
		\$ 53,391.83	balance

Name and Title of Person Submitting Quarterly Report:

Karen Chapman, Land Use Coordinator

Date: April 3, 2014