

Sterling Municipal Light Department

50 Main Street

Sterling, Massachusetts 01564-2135

Tel: (978) 422-8267

Fax: (978) 422-8054

www.energysterling.com

Respectfully submitted is the one hundredth and one report of the Sterling Municipal Light Department (SMLD).

POWER

The SMLD's Customer base has increased to 3,726 as of December 31, 2011. We have 3,326 Residential, 150 Industrial, 217 Commercial and 33 Municipal Services.

A total of 58,523,478 kilowatt hours (kWhrs) of electricity were sold during calendar year 2011. This represents an increase of 918,588 kWhrs (1.5%) over calendar year 2010. Sterling's hourly peak demand of 13,247 KW was set in July 2011.

The 2011 System Average Interruption Duration Index (SAIDI) for normal outages affecting the Town of Sterling residents was 46.76 minutes per incident. This compares to National Grid SAIDI numbers of 153.98 minutes (last reported for 2009). The Average Service Availability Index (ASAI) of electricity for Sterling residents in 2011 was 99.991 %.

The New England Power Pool expenses continued to increase, primarily by the return on equity allowance the transmission owners received of 11%-14%. We will continue to contest these out of market returns and look to a more equitable solution to the aging transmission problem. This will include the 1.5 mega-watt (MW) solar energy source at Pandolf Perkins that went online on December 19, 2011. This project is supplying 1.5 million kWhrs of below market priced energy to the residents of Sterling and does not require transmission for distribution purposes. We are in discussions with another solar company that we anticipate will provide us with an additional renewable power source that will also be below market rates. This project will take place in the spring of 2012. We continue to pursue alternative sources of power with competitive pricing to provide us with sustainable energy without producing further damage to our environment.

OPERATIONS

The following list summarizes completed and future projects for the Operations Department.

- Installed 9,800 circuit feet of overhead cable on Wiles Road, Clinton Road and Pratts Junction Road. This replaced the conductor that had been in operation for over 35 years and was also damaged during the 2008 ice storm.
- Installed 21,585 feet of heavy insulated tree wire on Holden Road, Wilder Road, Osgood Road, Jewett Road and Old County Road. This wire replaced the copper wire and will provide a more durable wire with better protection from tree limbs.
- Removed a total of 8,650 feet of various size wires as we converted residences and businesses from the old wires to new wires.
- Replaced 1,650 feet of defective primary underground cable on Heather Lane, Sunset Drive and Pheasant Hill Lane.
- Installed two new services and replaced twelve existing services.
- Installed 80 new poles. These improvements were performed as part of our continuing effort to upgrade our distribution system to minimize outages and improve our reliability.
- A complete pole by pole audit of the streetlights and private lights was performed in December. We anticipate this project to be complete by the 1st quarter of 2012.
- Replaced the underground cable in the second of four switches at the Chocksett Substation after the failure in 2008. Future projects will include changing out the remaining two wire raceways. This will be performed by changing one per year for 4 years at an expected cost of \$25,000 each.

POWER SUPPLY

In an effort to diversify power resources and stabilize our purchased power costs we purchase electricity for our customer's through fixed contracts and open market power purchases. Purchased power costs reflect the generation and delivery of electricity to the Town of Sterling. There are many circumstances beyond our control that make the cost of electric energy fluctuate. These include periods of peak power demands during extreme temperatures, unexpected plant shutdowns and spikes in fuel prices. Changing costs are triggered by a number of unpredictable events from fluctuating fuel commodity markets to global unrest. During 2011 our power costs remained stable as natural gas prices declined.

Although fuel prices declined in 2011 our transmission costs continued to rise. During the last five years our transmission costs have increased mainly due in part to transmission owners that received large returns between 12-14% on their investments in regional transmission line upgrades. Other increased costs are due to the regional transmission upgrades. The Regional Network Service (RNS) rate is expected to rise in Sterling from \$662,189.00 in 2010 to \$1,136,877.00 in June of 2014. We will continue to contest these charges with other Municipal Light Plants. We met in Washington, DC with the Federal Energy Regulatory Commission (FERC) and members of Congress to demonstrate the effects that these costs will have on our businesses and residents. The outcome of the meetings was extremely positive and resulted in the filing of various bills to determine if these incentives are still warranted.

The SMLD continues to monitor the transmission charges we receive from ISO New England that operates the region's electric power system. The shared goal is making reliability a top priority in operation of the power grid. We must carefully take into consideration the cost to the consumers before expensive new rules and procedures to enhance reliability are implemented.

The SMLD remains an active participant in development of a new 280-megawatt power plant. The power supply is maintained at The Massachusetts Municipal Wholesale Electric Company (MMWEC) in Ludlow, MA. This new unit is expected to be online in mid-2016.

Sterling's power supply consists of a mixed portfolio of power agreements. The power agreements consist of Hydro Power, specifically from Baltic Mills Hydro, Contoocook Hydro, Mechanicsville Hydro, Methuen Falls Hydro, Public Authority State of New York Hydro (PASNY) and Centennial Falls Hydro Electric Facility. We continue to explore cost efficient renewable energy supply options for our power portfolio. In 2011 over 20% of our power received was from renewable energy sources. This exceeds the Massachusetts requirements (Municipal Light Plants are exempt) for renewable energy supply in power portfolios. In addition, we receive nuclear power from the Millstone III Plant and the Seabrook Power Plant in New Hampshire. Other sources of our power supply come from the MMWEC Stony Brook Plant combined cycle units I & II and the Carbolon generating facility.

We continue to offer the following assistance programs to our Residents:

- HELPS Home Energy Audit (no cost to residents)
- Energy Star® Rebate Program
- Solar Installation Assistance
- Kill-A-Watt™ Electricity Usage Monitor
- TESCO Surge Arrester

Other community activities/contributions sanctioned by the SMLD Light Board:

- \$42,000 in-lieu-of tax payment for year 2011
- Our Annual Open House
- Town Common Lighting
- Sterling Fair
- Banner Hanging
- Town Street Lights (Retrofitted and maintained 489 lights by the SMLD for the Town).
- In November 2011 we initiated a review of the Main Street area to install Light emitting Diode (LED) streetlights that use 67 % less electricity. We expect the installation to begin in March of 2012.

There were many changes that took place during the year 2011 including the reduction in office staff. It was a difficult decision but necessary for us to position ourselves with similar sized operations. We discontinued offering Long Distance Telephone Service and the Oil Referral Programs to focus on our billing and customer service areas. Our succession plan included the move of two tree crew employees into the Line Department. By enabling this changeover we were able to maintain the crew while they get underway with the required 4-year training to become certified Linemen. This has also allowed us to prepare for the two future retirements in the Operations Department. After a competitive bid process for outsourcing the tree trimming we were able to reduce costs. Without the tree crew we were able to retire outdated equipment and sell it at auction and reduce our vehicle maintenance expenses by 40% despite increased fuel cost of 35%.

In May of 2011 the SMLD signed a contract with Mueller Systems to complete the purchase and installation agreement for the \$618,000 Advanced Meter Infrastructure (AMI) project that was procured in 2008. To date we have 1,200 of the 3,760 AMI meters installed. This project was put on hold in October 2010 until the billing and computer system upgrades were completed. This project is expected to be completed in the second quarter of 2012. In order to accomplish this we needed to replace the existing billing system. After multiple vendor presentations, solicitation for bidders began in early February and in May of 2011. A contract was signed and the conversion for the new billing system began with the Southeastern Data Cooperative (SEDC) out of Atlanta, Georgia. SEDC provides billing systems for over 220 utilities across the U.S. In order to accommodate the billing system we needed to replace our existing Infrastructure Technology (IT). In June of 2011 we utilized the state bid to replace the computers and server. The billing system will be fully operational by the 1st quarter 2012.

While the meter upgrade, billing system and computer replacements were in process we completed a new policy manual. The new policy replaced vacation, sick and personal time with paid time off (PTO). This policy also eliminated sick time reducing unfunded sick time liability expenses in the future. We also began funding for our "Other Post-Employment Benefits" (OPEB) requirements to further reduce our unfunded retirement and healthcare cost in the future.

The SMLD employees made a commitment to reduce operating costs. We performed energy conservation measures at our own facilities. These upgrades included blown in insulation in our exterior walls at 50 Main Street, the installation of programmable thermostats throughout our 3 buildings and the replacement of 2 of the 30 year old heat storage units. We will continue by replacing 2 heat storage units per year.

The relocation of the tree working equipment has allowed for that garage to be available for vehicle storage and also reduced heating and utility costs. We also replaced the front and side doors at 50 Main Street with more energy efficient doors. These cost saving measures resulted in substantial savings on our oil and electric bills.

We reduced our Workmen's Compensation claims with no loss time accidents in 2011.

In the fall of 2011, all the interior walls at our 50 Main Street building were painted by the Sheriff's Community Outreach Program.

A consultant was hired to perform a cost of service study. The review involves rates, revenues and expenses. The rate review is to assure that we are providing equitable returns from each rate classification. The cost of service study is currently under review by the Board and any changes will be in early 2012.

We donated a 2005 pickup truck that was declared surplus to the DPW. The DPW has assisted us throughout the year with vehicle maintenance by providing oil changes and small repairs and the Water Department assists in the reduction of our power demand by shedding loads during peak periods, reducing our transmission costs. We also shared in the cost of performing roadside mowing with the DPW to continue preventive tree trimming and increase the reliability of our system.

In May 2011 George Pape retained the seat that he had been appointed to in December of 2010 and was elected to a three-year term on the Light Board Commission.

In close, a recap of 2011 would not be complete without mentioning the October snowstorm that brought 16” of heavy wet snow to the region. Unlike the ice storm in 2008 that brought down many pine trees, this storm accumulated snow on oak trees that still had their leaves, bringing limbs, trees and wires to the ground. This made roadways impassable and caused power outages throughout the town. A special thank you to employees of the SMLD, Police, Fire, DPW and all other Town Departments for their assistance not only during this storm, but throughout the year.

We extend a special thank you to all of the SMLD employees for their hard work and loyal service to the community throughout this transitional year.

Respectfully Submitted,

Sean Hamilton
General Manager

Sterling Municipal Light Board Members:
Matthew Stelmach, Chairman
Michael Rivers, Vice-Chair
George Pape, Clerk