

TOWN OF FALMOUTH, MAINE



Memorandum

To: Town Council

From: Nathan Poore, Town Manager

Date: April 4, 2013

Re: Resolution in Favor of LD 1251 "An Act to Lower Costs to Municipalities and Reduce Energy Consumption in the Municipal Street Lighting Market"

Several towns and cities in Maine, including Falmouth, have worked together during the last eight years to submit legislation that would allow municipalities to own street lights rather than "rent" them from the utility pole owner. Municipal ownership could be a viable option for some communities and would save money. Most recently, the Town of Falmouth has been working closely with the City of South Portland, City of Rockland, Maine Municipal Association, and a consultant, George Woodbury of LightSmart.

Utility distribution systems are generally monopolies regulated by government. A monopoly in this case is not necessarily a bad option. We would certainly not appreciate multiple sets of power lines, telephone lines and data lines within our right of ways. But, there are opportunities for competition with regard to construction and maintenance of a public street light plant. This legislation proposes to allow for competition with multiple options for municipalities. The legislation is not atypical to other states including Massachusetts, where cities and towns have been able to take ownership of their lights. Over 75 communities, including over 150,000 street lights, have been municipally owned for over 12 years and maintained by private contractors or in house personnel without a single incident. Savings by 2011 approached \$15,000,000 for these communities. The City of Boston, has maintained 62,000 streetlights in house for many years. In California, communities started taking ownership of their lights in 1982 and have used private contractors for their service work without incident.

The reasons to support this effort include, but are not limited to the following:

1. Costs to maintain and operate street lights could decrease based on an analysis performed by Republic ITS in 2011, which is the largest street light management company in the United States. We looked at five communities in Maine, including Kennebunkport, Falmouth, Biddeford, South Portland and Farmington. In all cases, the analysis identified cost savings between 30% and 38%.

Depending on the number of street lights and the size of the community, this reduction is equivalent to annual savings between \$21,000 and \$104,000 (for each community).

More recently, George Woodbury of LightSmart, has estimated that Falmouth's saving could approach 65% when taking into consideration the lower cost of materials, updated technology and energy savings from switching to LED fixtures.

2. Additional states allowing municipal street light ownership and maintenance opportunities include New York, California, Pennsylvania, Arizona and Connecticut. In 2008, the New York Comptroller General issued a report about street light ownership and recommended municipalities consider ownership to achieve savings. The report can be found at <http://osc.state.ny.us/localgov/audits/swr/2008/streetlight/streetlighting.pdf>. This report identifies significant savings similar to the analysis performed for several towns in Maine.
3. We could have greater options such as timed operation, dimming, and use of remote controls. One example of advanced technology not yet offered in Maine is the use of wireless features with each fixture. This tool communicates valuable information such as:
 - A. On/off – this feature notifies if the light is actually working.
 - B. Cycling rate – indicates if the light is at its useful life and needs to be replaced. Bulbs cycle off when they are older and create heat causing the ballast to turn them off. When it cools, the light turns back on. It's best to monitor this prior to ballast failure. A bulb could be replaced for \$10 instead of waiting for the ballast to fail and costing nearly \$100.
 - C. Energy consumption – ability to consider better conservation through dimming and controlling. It also allows for more precise kWh billing rather than relying on estimated consumption. Reliability without monitoring is 85% to 95% accurate while new technology is at 95%-98%.

An approximate average of 7% to 10% of the lights are not operating, according to industry standards and 1% to 2% are "day burning". This is either wasteful energy consumption or we are being billed for lights that are not functioning. Local control and monitoring will improve efficiency and service. A device that could help reach 99% operational status and that allows for both dimming and timed operation will add to our anticipated savings as well as improve billing accuracy for the utility. In 2010, Hydro Quebec implemented the new photo cell wireless technology to base their kWh costs. With new technology, Glenwood, Arizona, discovered that 83% of their system was not working with older photocell technology. They improved performance to 98% and eliminated the need for night checks and relying on citizens to call in outages. This is smart metering at the actual street light.

With monopolies, there is little to motivate technological advancements especially if there is no impact on the bottom line. The conversion to the high pressure sodium light in the late 1980s was based on technology introduced around 1960. Municipalities should have the option to drive demand for technological advancements that will yield greater energy efficiency and cost control.

4. LD 1251 is not a mandate and the concept is not new. It is a local option that would provide competition. The Maine Municipal Association *Legislative Bulletin*, dated April 8, 2005, included a statement made by the Public Utilities Commission regarding LD1377 in 2005. *"The Public Utility Commission also supports looking into the issue further. In written testimony, the PUC stated: "Street light service is currently a monopoly service provided by T&D utilities subject to Commission-approved rates. LD 1377 would essentially unbundle this service into its component functions (fixture ownership, installation, and maintenance) and allow each to be offered by either the utility or a municipality. This would have the practical effect of making street light service a competitive industry. We are inclined to think that citizens may well benefit from opening street light and area light service to Competition"*

Please let me know if you have any questions.