

Fiscal Year 2018 Budget Highlights
Ipswich Electric Light Department

13 June 2017

▪ **Relevant statistics**

- Projected sales: 117,000 MWh
- Projected revenue from sales: \$17.29M
- Projected PILOT: \$345,000
- Projected reserves: \$413,000
- Depreciation rate: 3%

▪ **Significant projects & expenses**

- LED streetlight conversion
 - \$175,000 in grant funding from MA DOER; 50% cost of materials
 - \$429,000 of remaining costs will be used from Conservation Fund
 - Reduce energy consumption by approximately 40% for each replacement
 - Approximately 1200 conventional streetlights will be replaced in FY18
- Power plant maintenance
 - Refurbish one prime mover annually to maintain capable operability; \$100,000 annually
 - Make structural upgrades to maintain integrity of the building; \$30,000
- Advanced metering infrastructure (Mueller Meter System)
 - Currently 85% deployed
 - Anticipate full conversion by FY20; \$100,000 annually
- Substation maintenance
 - Update aging infrastructure (breakers, transformers, relays, etc.); \$50,000 annually
 - Important for safety, reliability and capability
- Two new vehicle purchases
 - Power plant pick-up truck; \$40,000 deferred from FY17
 - Meter van; \$40,000 deferred from FY17

▪ **Major departures from FY17 budget**

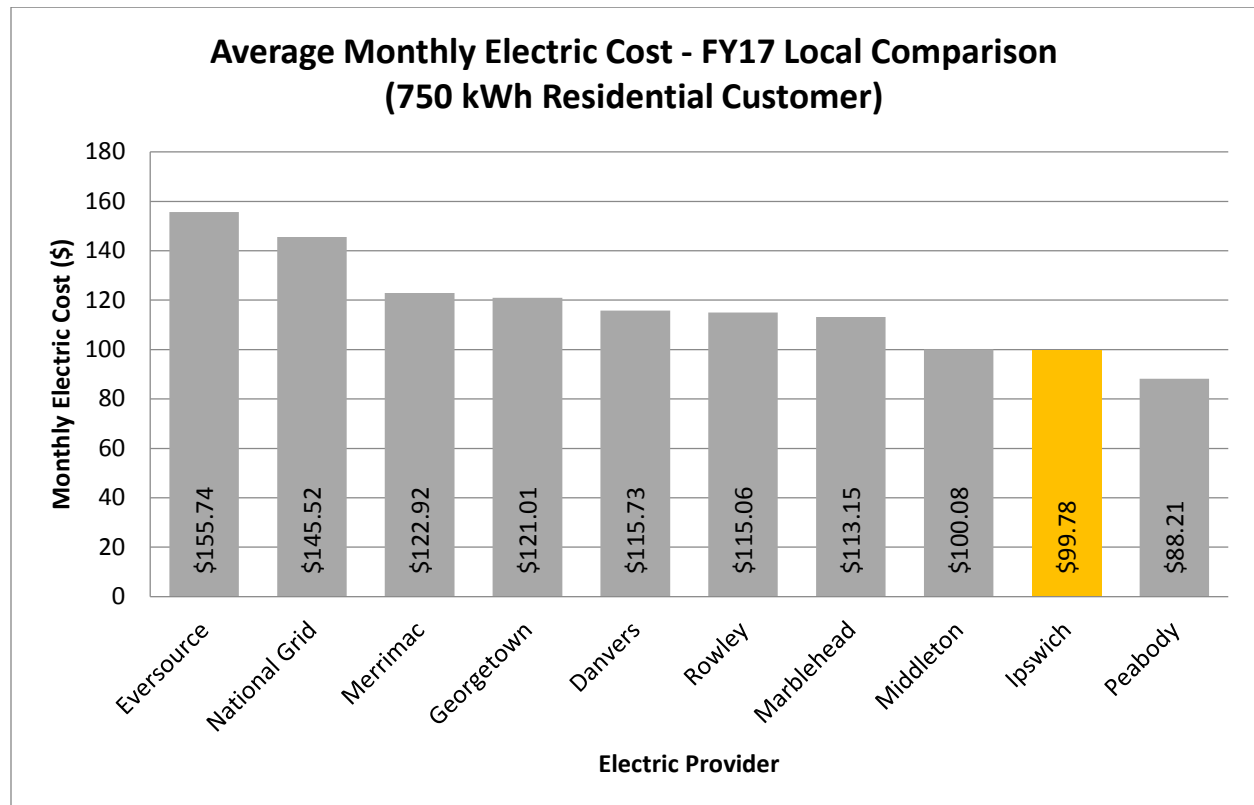
- There is a proposed rate increase of \$0.004/kWh to the base rate for all customers, which is equivalent to an increase of \$3/month for the average residential customer consuming 750 kWh/month. This rate increase is designed to begin building financial reserves and improve the Department's liquidity.
- In FY18, energy and transmission costs are projected to remain relatively constant; however, capacity costs will increase significantly. Therefore, it is predicted that customers will experience an additional increase of \$0.004/kWh in PPFA (\$3/month for the average 750kWh/month residential customer).
- Overhead rates associated with labor have been updated to reflect current costs of pensions and benefits. The previous overhead rate was approximately 30%; this was increased to approximately 40% for FY18.
- Conservation Fund spending was low in FY17. This lack of activity was partially due to the development and subsequent collapse of several large scale projects for which funds were earmarked. Additionally, the Electric Light Department lacked a position dedicated to developing conservation opportunities. These issues have been addressed and Conservation Funds will be actively used to fuel more progress next year.
- An increased allocation has been made to employee training. Supporting the professional development of our team members is critical to the success of our organization. This extends our capability and reinforces a commitment to the belief that people are the Electric Light Department's most valued asset.

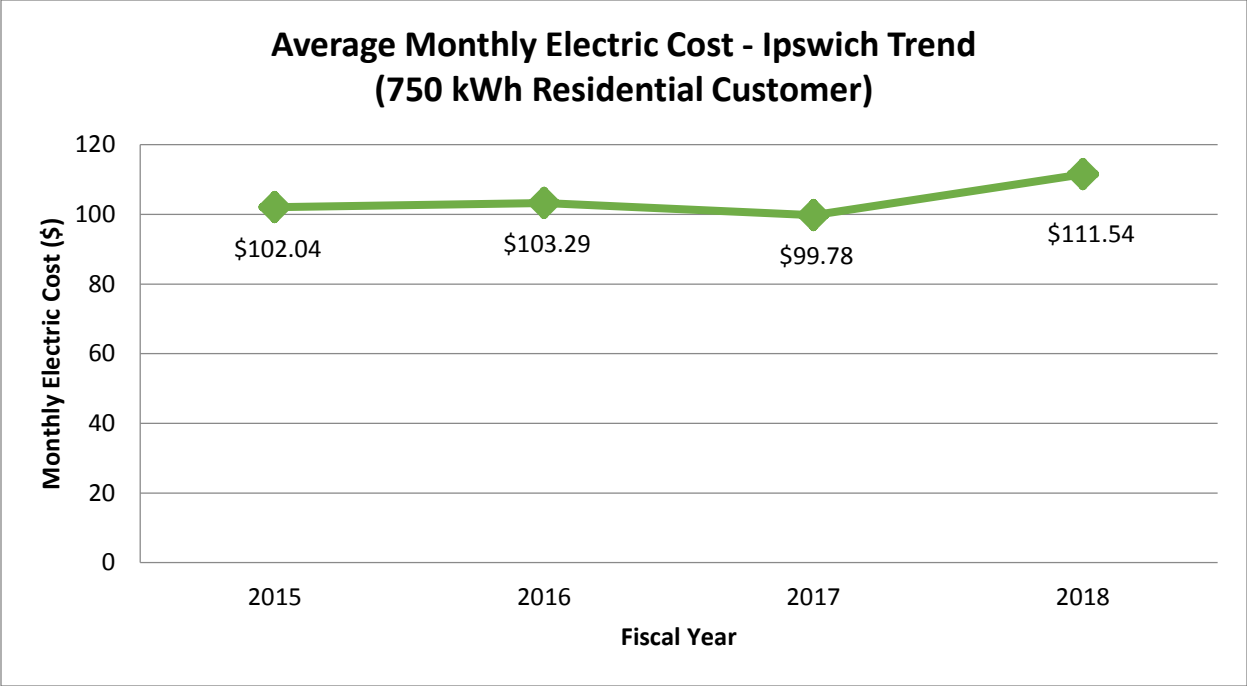
Distribution

Reliability of electric service continues to be a major priority for the Electric Light Department. The combination of robust vegetation, active wildlife and significant storms make reliability a persistent challenge. Aggressive tree trimming is the most important activity to maintaining and improving system reliability. When power outages occur, the crew of dedicated linemen provide rapid restoration. On average, the Town of Ipswich experiences 2 outages each week, impacting 25 customers for less than 90 minutes. Ultimately, Ipswich enjoys a healthy system with strong reliability statistics.

Rates

Residential electric rates in Ipswich continue to be among the lowest in the Commonwealth. One of the goals in the upcoming year will be to reevaluate the existing rate structure to ensure it appropriately serves the evolving needs of the Town. Rate priorities will continue to focus on keeping rates reasonable and stable, while encouraging conservation and avoiding cross-subsidization between rate classes. In order to improve the Electric Light Department's cash position and build reserves, a rate increase of 0.4 cents will be made to the base rate for all rate classes. This rate increase will not fund planned expenses, but rather will begin to improve the liquidity and financial health of the Electric Light Department. Developing the desired amount of cash reserves (90 to 120 days of operating cash on-hand) will take several years to accomplish; however, once achieved it will allow for more flexibility and resiliency in times of crisis or volatility.





Purchased Power Fuel Adjustment (PPFA)

In addition to the increase in the base rate, consumers will also experience an increase in the purchased power fuel adjustment (PPFA) portion of their bill. Energy costs are made up of three components: generation, capacity, and transmission. All of these costs contribute to the PPFA. Generation is the term used to describe the physical production of electrical energy at various stations throughout the New England region. These costs vary based on many factors, but largely follow the local natural gas market. Transmission is the process of moving the high voltage electricity from the generation stations to the local distribution area. Although transmission costs are slowly rising, federal regulation limits the volatility and keeps them relatively stable. Capacity describes the need for excess generation to be created to serve the peak needs for the region. The capacity market costs have historically been very stable; however, beginning in FY17, costs have increased as available generation becomes more limited in the northeast Massachusetts load zone. Understanding each of these factors is important to determine how customers are impacted through changes to the PPFA. In FY17, capacity costs increased, while energy costs decreased and transmission costs remained relatively steady. This allowed the PPFA to remain relatively constant. In FY18, energy and transmission costs are projected to remain relatively constant; however, capacity costs will increase significantly. Therefore, it is predicted that customers will experience an additional rate increase of \$0.004/kwh in the PPFA. To promote stable and predictable rates, the Electric Light Department uses price forecasts to anticipate fluctuations in the energy prices throughout the year and distribute them evenly from month to month. For example, high energy costs in January would typically drive the PPFA up, while low costs in May would keep the PPFA down. To prevent customers from experiencing this type of volatility, PPFA surplus that is developed during spring and fall is used to offset the deficit experienced during summer and winter.

