

# IED FACILITY TOUR

IPSWICH ELECTRIC LIGHT DEPARTMENT

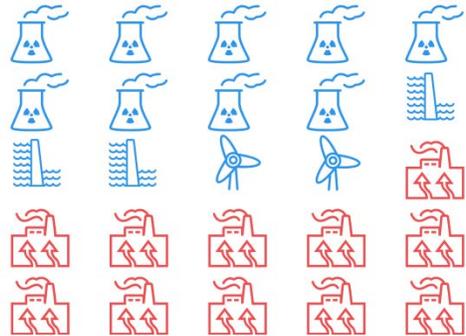
ELECTRIC LIGHT MANAGER, JONATHAN BLAIR



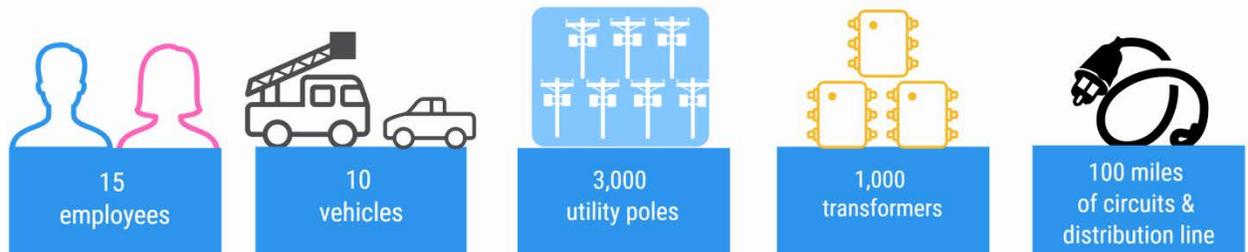
The Electric Light Department provides energy to the Town of Ipswich through three different methods: ownership of generation, long term contracts, and day-ahead purchases on the open market. Diversifying the energy portfolio in this manner reduces risk and provides stable and reasonable rates.

Examining the ownership portion of the energy portfolio, it can be seen that Ipswich is **56% sourced by carbon-free** generation.

These assets include partial ownership shares in Berkshire Wind Farm, Ipswich Wind I, Seabrook Nuclear Power Station, Millstone Nuclear Power Station, and a series of hydro projects throughout New England. The remainder of the energy portfolio is comprised of long term contracts and open market purchases, both of which draw from the regional fuel mix.



The Electric Light Department has 15 employees and a fleet of 10 vehicles to support the needs of its customers. Under the supervision of Daniel Rowland, Distribution Foreman, the line crew maintains 3000 utility poles, 1000 transformers and over 100 miles of circuits, which service 7000 meters via 3 substations.



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, our dedicated line crew provides 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.



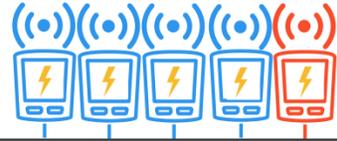
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Metering

Led by David Levesque IV, the Ipswich Utilities Department continues with the implementation of the AMI system (Advanced Metering Infrastructure) for both water and electric revenue meters throughout the town. These meters establish true two-way advanced metering infrastructure.

The Mueller System fully automates the meter-reading-to-billing process for water and energy utilities, linking meters, distribution sensors and control devices in a single, highly efficient wireless mesh communication network which can provide better service through near instantaneous & automatic notification of service interruptions.



**85%** AMI DEPLOYMENT



Power Plant

The Ipswich diesel power plant continues to operate in the forward capacity market, providing 9.2 MW in the local load zone. Under our current posture, the Department is compensated for being available for dispatch when demand exceeds the normal energy supply.

This capability resulted in over \$500,000 of avoided costs in 2016. The operation and maintenance of the plant is overseen by Jeffrey Turner, Assistant Power Plant Superintendent.

**\$500,000**

IN AVOIDED COSTS  
IN 2016

## ANNUAL ELECTRICITY SALES (KWH)

