6/01/22

HMLP Policy on Demand Management and Electrification

Introduction

The carbon-emissions goals of both the Commonwealth of Massachusetts and the Town of Hingham will require strategic electrification of processes currently fueled by carbon-emitting energy sources. A shift from gas and oil fuels to electrification will have a deep impact on the Hingham Municipal Light Plant's (HMLP's) operations.

The replacement of fossil fuels with electricity by HMLP customers will increase demand overall and change the time of day when electricity use is at its peak (the demand curve). Introduction of solar energy generated in Hingham will also affect both the overall demand and the time of day when peak use is expected.

The number and kind of load changes expected in the future make it advisable for HMLP to take an active role in both planning for new behaviors, and incentivizing behaviors that will assist in managing expected changes to the demand curve. Doing so will protect the reliability of HMLP's service and help customers to make this transition with the least cost and disruption. As an important asset to the Town of Hingham, through the adoption of policies like this one HMLP can become a leader in assisting in the shift away from carbon-emitting power sources.

HMLP also has to meet an annual residential conservation services (RCS) compliance requirement established by the Commonwealth. Municipal light plants are mandated to expend a percentage of revenue through conservation programs for ratepayers. This minimum threshold is currently 0.25% of annual revenue. Compliance with this requirement is reported to the Department of Energy Resources (DOER). HMLP works with Energy New England (ENE) to satisfy these requirements and annually report its compliance.

Providing education and incentives for desired behavior changes to produce a net benefit for its ratepayers are examples of how HMLP can promote the electrification process. With this policy, HMLP can expand various programs to begin meeting the demands of the future and achieve cost-effective rate stability for its customers.

Objectives

The goals of the policy are:

- To smooth the demand curve over time;
- To assist in meeting the higher demand expected over time;
- To assist customers in the process of substituting electricity for fossil fuels, and lowering customers' costs to do so; and
- To ensure that all customers have access to electrification technologies and program incentives.

Implementation

To achieve these goals, HMLP will promote and incentivize steps that can be taken by ratepayers in furtherance of its policy. HMLP's programs will include:

PROMOTION of insulation and weatherization of Hingham's built environment in order to smooth the increase in electric demand expected over the next decades and to facilitate adoption of new heating and cooling technologies that use electricity instead of carbon-emitting fuels.

PROMOTION of the adoption of energy-efficient appliances and machinery by all customers.

PROMOTION of the adoption of energy storage devices which can be coordinated with HMLP efforts to shift demand away from peaks.

PROMOTION of the adoption of electric vehicle charging behaviors which have the effect of shifting electricity demand away from peaks.

PROMOTION of the adoption of active demand management strategies by all customers, including residential and business renters and landlords.

ASSISTANCE to ratepayers who choose to install solar arrays. HMLP's programs will promote demand management and reduce carbon emissions.

These are just some examples of the steps that HMLP could take to implement this policy. The rapidly changing energy landscape and the development of new technologies may make it necessary to review and revise this policy from time to time. HMLP reserves the right to adjust or conclude its incentive programs at any time.