



ACEC/MA Energy & Utilities Conference 2023

Municipal Light Plant Marketplace

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May 17, 2023



Navigating the energy economy.™

ENE Overview

- What's a Municipal Light Plant?
 - Established under Chapter 164, Section 47C of the Massachusetts General Laws. There are (41) MLP's in Massachusetts and (78) throughout New England.
- Founded in 1998 and owned by 6 municipal light companies
 - Braintree, Concord, Hingham, Reading, Taunton and Wellesley
- Trusted Advisor to Public Power, generation, cogeneration and large retail
 - 24 Full-Service Municipal customers, IPP, Institutional/Higher Education in MA, CT, ME, RI and VT
 - Municipal customers range from 7 to 160 MW peak load
 - 5.5 million MWH energy, 1,300 MW peak load, 500+ MW generation

ENE Services & Approach

- Innovative solutions to energy market challenges
- Active advisor in both the wholesale & retail markets
- Portfolio Management
 - Contract negotiation
 - Hedging
 - Managed budgets
 - Credit/Risk Management
- REC Management
- ISO NE Market Participation
- Peak Load Management
- Distributed Generation
- Energy Efficiency & Electric Vehicles
- Lobbying – ENE Strategies (Energy/Telecommunications/Water/Wastewater)

MA Legislative Actions

- Massachusetts Senate Bill S.9 from the 192nd General Court (signed March 2021)
 - “An Act Creating a Next-Generation Roadmap for Massachusetts for Climate Policy”
 - Establishes first-time GHG emissions standard for MLPs to purchase non-emitting electricity at the following levels
 - 50% by 2030
 - 75% by 2040
 - 100% by 2050

How is ENE getting our clients there

- A nationwide first ever agreement for public power inclusion in awarded Vineyard Wind bid
- Operate and dispatch batteries and other spinning resources as necessary
- Constant engagement with solar developers to acquire large tranches of generation capacity for PPA agreements



Wind

Batteries



Solar

ENE Non-Carbon Emitting Projects since 2020

Year	MW	MWh
2020	146.3	572,365
2021	100.0	182,000
2022	54.5	298,482
2023	123.1	673,123
Total	423.8	1,725,970
Resource	MW	MWh
Wind	103.8	297,969
Solar	150.0	268,600
Hydro	94.0	493,641
Nuclear	76.0	665,760
Status	MW	MWh
New	238.5	538,587
Existing	185.3	1,187,383

Project List:

Project	Status	MW	MWh
RoxWind	New	16.80	50,300
Gravel Pit III	New	50.00	86,600
Cabot Turner	Existing	39.04	200,941
Great River Hydro	Existing	15.83	22,200
Great River Hydro	New	4.70	38,000
NextEra Seabrook 10 Year	Existing	19.90	174,324
Broadleaf Solar	New	100.00	182,000
Spruce Mountain Extension	Existing	20.00	65,982
Shepaug/Stevenson Extension	Existing	34.46	232,500
NextEra Seabrook 2030-2050	Existing	56.10	491,436
Mason Bay Wind	New	9.00	26,687
Western Maine Renewable	New	58.00	155,000

Electrification



Heat Pumps



Hot Water Heat Pumps



Electric Lawn Equipment

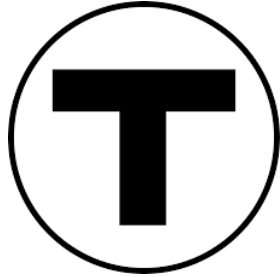


Fleet Electrification



Personal Vehicle Electrification

Energy Advisory Services



- Energy Advisor to the MBTA for the past 6 years
- Received EBC Award for our renewable purchases



- Energy Advisor to BWSC for the past 8 years
- Electric Vehicle Fleet Conversion Advisor



- Energy Advisor to U Conn for past 12 years
- Advisor on Gas purchases

RMLD Maple Meadows Energy Park

Established in 1894, Reading Municipal Light Department (RMLD) is a Massachusetts municipal light department serving over 31,000 customer meters across 4 towns: Reading, North Reading, Wilmington, and Lynnfield Center. RMLD is a microcosm of the region.

Facing rising wholesale costs (especially transmission) and a more fragile regional grid, RMLD is aggressively pursuing within territory generation and energy storage solutions, fulfilling our charter of serving our customers with reliable, low-cost, and non-carbon energy.

New leadership at RMLD is developing out of the box solutions and is purposely building a new electric utility to adapt to the new context.

**Reading Municipal
Light Department**
reliable, low-cost, non-carbon



rml.com

Solar on Landfill – superior use of problematic land area in Wilmington MA

context

- RMLD's load increasing (at least 2X larger by 2050), new business growth and electrification
- RMLD is promoting electrification of transportation and buildings
- RMLD is on track for non-carbon compliance by 2050
- RMLD is ahead of intermediate compliance goals (strong non-carbon power supply portfolio)
- More within territory generation and storage is needed to manage costs and increase reliability

problem

- Solar and storage require large land area
- Our community is well populated
- Minimal open land is available
- Few large area properties remain
- And most remaining properties are “problematic”

solution

- Maple Meadow is a former landfill (uncapped)
- Non-operational since 1976, it is a problematic site
- Complex environmental history as landfill
- Contaminated from nearby Olin Superfund site
- But, portion of Maple can support solar, storage, ...

momentum

- EPA, MA DEP, and Town of Wilmington are supportive
- Each encouraging new use as solar / storage site
- \$25 million investment from RMLD
- Lowest cost solar power in RMLD portfolio
- RMLD applying for IRA and IJA grants and other funds

benefits

- Increase reliability and resiliency (decentralized, non-carbon generation and storage)
- Pilot novel solutions to accelerate decarbonize (RMLD innovation)
- Repurpose unused, contaminated land to benefit local community
- Contribute to local and state decarbonization goals
- Lower costs to customers

