

Light Commission March 25, 2025 meeting minutes

To: Light Commission: Commissioners
Light Department: J. Kowalik, General Manager
From: Jean-Jacques Yarmoff, Secretary
Date: April 7, 2025

A quorum being present, Chair Wolf brought the meeting to order at 4 pm. The meeting was held in person and with remote internet access, both available to public participation. A recording of the meeting is made available to the public at the following [link](#).

Participated in meeting:

Commissioners: Commissioners Frechette, Hull, Smith, Wolf and Yarmoff all participated in person.
Light Department: General Manager, J. Kowalik.

Marblehead Land Acknowledgment declaration was read by Commissioner Frechette.

Vote to approve minutes of previous meetings

The following minutes of previous meetings were distributed to the commissioners for their review. A motion was proposed to approve the following minutes of previous meetings of the Municipal Light Commission:

March 4, 2025, Public session,
March 4, 2025, Executive session #1,
March 4, 2025, Executive session #2,
March 12, 2025, Public session,
March 12, 2025, Executive session.

Vote #2025-03 Motion to approve the minutes of the meetings listed above was moved by Commissioner Yarmoff and seconded by Commissioner Frechette. **Unanimous.**

Comments from the Public

There were no comments from the public, whether in person or from remote participants.

Outstanding items from previous meetings

Polco Employee Survey is launched. Staff members are back from vacation. Paper surveys are available in the Light Department. A QR code is available for staff members who prefer to take the survey on-line. It is anticipated that the survey period will be two weeks.

2025 Department Goals. The Commission discussed some minor modification to the Mission statement accompanying the goals. The goals were reviewed, and some adjustments were made following recommendations from the General Manager. The final goals, as amended during the discussions, can be found on pages 4 and 5.

Vote #2025-04 Motion to approve the 2025 goals for the Light Department was moved by Commissioner Yarmoff and seconded by Commissioner Frechette. **Unanimous.**

General Manager updates

Village 13 substation. *Switchgear foundations and installation:* The work with engineering firm Fischbach & Moore is progressing smoothly, with good, open communications. They are on track to complete this phase of the project by April 19, 2025, and to receive the switchgear at that time. This will be a 3-week installation process. The General Manager received a notification from the switchgear manufacturer that delivery is now expected in May. *Conduits across the Right of Way.* The Water and Sewer Superintendent, Amy McHugh, alerted MMLD to the potential risks to the forced sewer line of digging to install conduits. These conduits will allow underground connection across the Swampscott Right of Way. Various solutions are being explored by the project team. See slides pp 6-7.

Utility scale batteries. MMLD has signed a contract with Acentech to conduct baseline noise level evaluations at multiple potential battery sites, including the Tioga way site. The sites will be evaluated against a number of criteria, as detailed in the slide p 7. Utility scale batteries are being pursued as they offer one of the most important avenue to continue to reduce Marblehead wholesale power costs. This comes from the way that MMLD is billed for its energy purchases, which depends on: 1) **Quantity** of energy (kWh) purchased; 2) a **Transmission charge** (price to use congested lines bringing in the electricity); and 3) a **Capacity charge** we pay to have power plants on standby to produce electricity to meet peak demand. Capacity and Transmission charges are based on how much electricity Marblehead uses during the peak hour of usage: these two charges represent about as much as the quantity of electricity we purchase. The slide at the bottom of page 7 details how a 5 MW utility scale battery will allow savings of over a million dollar, every year.

In addition to the potential to reduce wholesale electricity purchase costs, a utility scale battery will:

- 1) Provide improved resiliency to the town; and
- 2) Help defer capital improvements.

For these purposes, it will be helpful to have several sites in town, in proximity to emergency centers such as schools, for example.

Wilkins plant update: Slides are shown on page 8 but were not discussed for lack of time.

Human Resources: the General Manager reviewed the six open positions in MMLD, see page 9. The search for an Engineer has been expanded to search for a potential Assistant GM; Interviews are on-going for the Energy Efficiency Marketing Manager position. The position to replace a retiring Foreman has been posted, a new employee is starting this day to replace the 2nd class lineman who resigned recently.

Reliability Numbers. The General Manager shared the data regarding the reliability of power supply in MMLD's territory. The slides in pp 9 compare the data for Marblehead to that of other MLPs in the country, in the North-East of the States, and for utilities of a similar size to MMLD. Both the duration of outages when they occur, the frequency of outages are lower than for our peers, showcasing the effectiveness of MMLD's team.

MMLD won an **APPA Excellence in Reliability – 2024 Certificate**.

Executive Session

During the public meeting of the Light Commission held on March 25, 2025, Chair Wolf recused herself from the Executive Session to come, asked Vice-Chair Frechette to continue the meeting and left the meeting at 5:14 pm. Vice-Chair Frechette requested a motion to enter Executive Session for strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel, not to return to open session.

The motion was moved by Commissioner Yarmoff, seconded by Commissioner Hull.

Votes: Simon Frechette: Yes; Mike Hull: Yes; Adam Smith, Yes; Jean-Jacques Yarmoff: Yes.

The Executive Session started at 5:15 pm, with Vice-Chair Frechette leading the meeting and Commissioners Hull, Smith and Yarmoff and MMLD General Manager Joe Kowalik participating. KP Law's attorney Karla Doukas was invited to join the meeting remotely.

The Executive Session concluded at 6:41 pm at which point a motion to adjourn was proposed, seconded and, after a roll call of the commissioners voting unanimously in favor, adopted.

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Documents shown during the March 25, 2025 Light Commission Meeting



Agenda

- 4:00 Call to Order, Land Acknowledgement, and Public Comments
- 4:15 Outstanding items and requests from last meeting
 - Polco Employee Survey
- 4:20 MMLD 2025 Dept. Goals - Board vote requested
- 4:30 General Manager Report
- 5:00 Meet in Executive Session, not to return to open session



General Manager updates

- Village 13 update
- Utility Scale Battery
- Wilkins Plant upgrade
- Open positions
- 2024 APPA Excellence in Reliability recognition

MMLD General Manager and Department Objectives Calendar Year 2025

MMLD Mission Statement

“The mission of Marblehead Municipal Light Department (MMLD) is to provide our Marblehead customers with carbon-free, reliable, competitively-priced power, and to maintain a safe and healthy work environment for both employees and customers.”

Objectives

These objectives identify key areas and strategic priorities for the Marblehead Municipal Light Department (MMLD) and are adopted jointly by the General Manager and Commission.

A. Human Resources and Safety

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|--|------------------|
| 1. Define chain of command within organization chart; create succession plan | Essential |
| 2. Expand capacity and develop robust sustainability and communications programs | Essential |
| 3. Expand capacity and develop robust engineering department | Essential |
| 4. Continue department safety and training programs | Important |

B. Operations & Infrastructure

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|---|------------------|
| 1. Continue Village 13 Substation capital improvement project | Essential |
| 2. Create 3-year operational work plan for distribution system and engineering capital improvements | Essential |
| 3. Draft a plan to supplement the existing Railyard substation's dual 23kV transmission supply lines and/or to provide temporary emergency supply | Important |

C. Ensure Financial Stability & Competitive Rates

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|--|------------------|
| 1. Continue new rate structure design and develop implementation timeline | Essential |
| 2. Draft demand management plan with targets to materially reduce consumption during high consumption hours, including likely peak | Essential |
| 3. Identify and apply to relevant grant programs | Essential |
| 4. Prepare three-year Capital investment plan aligned with Operational upgrade plan | Essential |
| 5. Evaluate options and develop a strategic plan to optimize the Wilkins Plant value, that include both economic, system resiliency and carbon emission considerations | Important |

MMLD General Manager Objectives
Calendar Year 2025

D. Decarbonize Power Supply

1. Develop comprehensive strategic plan for BESS including optimal total storage capacity targets and a methodology to rank preferred potential sites on Town-owned land **Essential**
2. Explore options to procure or install additional decarbonized power to reach 70% carbon-free power by 2028 and 85% by 2033 **Important**

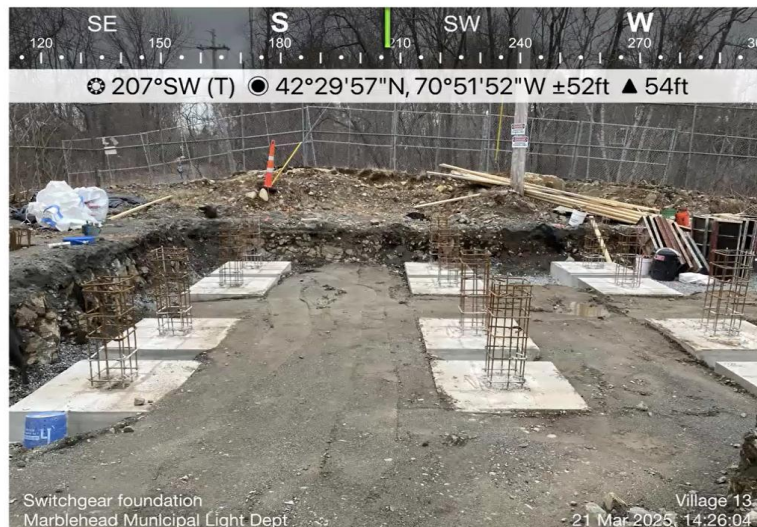
E. Communicate with Stakeholders, Improve Customer Service and Education

1. Launch regular communications with customers (bills inserts/email/social media) **Essential**
2. Create an integrated communication plan (e-mail/paper newsletter, news media, social media, web site, emergency communications) **Essential**
3. Survey customers to establish baseline of customer satisfaction, and assess customer attitudes regarding MMLD and customer-level strategic electrification **Important**
4. Participate in relevant Town initiatives that unlock Federal and State funding **Important**



Village 13 Update – Substation Construction Contract

- Fischbach & Moore site work progress is on schedule
 - Assumes MCP switchgear arrival April 19 – 3-week installation process
- MCP Switchgear manufacturing is continuing, but on 3/21 we were informed our delivery is slipping from late April into May.
- New concerns voiced about disrupting the force sewer main pipe in the Swampscott-side ROW when we trench to install new 5-inch underground conduit. New options are considered, including raising the ROW grade and a concrete bridge under the conduit. Will require additional planning & engineering...MMLD, PLM, F&M, W&S, SESD, & CDM





Utility-Scale Battery

- Acentech contract signed to begin noise level analysis at Tioga Way (and other sites tbd)
- Other site evaluation criteria:
 - Proximity to 13 KV feeder lines
 - Interconnection costs
 - Environmental/Conservation impact
 - Residential abutter impact
 - Town-wide distributed placement
 - Suitability for microgrid integration e.g. schools as emergency centers



What is the value of BESS in Marblehead?

1. Enables us to **lower our wholesale power costs** by reducing our capacity & transmission peaks
 - A 1 kwh energy reduction during the annual capacity peak hour will reduce our annual capacity cost by \$76.32, (using 2023 peak data).
 - A 5 MWh reduction = \$382,000 energy cost reduction
 - A 1 kwh energy reduction during a monthly transmission peak hour will reduce a month's transmission cost by \$13.04 (using 2023 peak data). Reducing 12 monthly transmission peaks by 1 kwh will reduce the annual transmission cost by \$156.48.
 - A 5 MWh reduction in 11 of 12 monthly transmission peaks will reduce annual transmission costs by \$717,200
 - **Combined capacity and transmission cost savings above = \$1,099,200.**



What is the value of BESS in Marblehead?

2. Provides us with **improved resiliency**, in response to an ISO-NE load shed instruction or unplanned power outage.
 - As a microgrid power source, providing power to a designated emergency community center as MHS or the Veteran's Middle School.
3. *It may allow us to **defer significant capital investments**: i.e defer the need to expand our sub-transmission feeder line capacity from National Grid into Marblehead*



Wilkins Upgrade

- Reviewed functional spec and contract for new controls with local vendor
- Identifying list of qualified bidders to ensure competitive bids
- Solicited support from Jason Viadaro, MMWEC to serve on tech review committee



Wilkins Plant controls – functional areas for potential updating

- Metering communications with MMLD-80Comm, MMWEC, Ngrid/ISO.
- Run-time equipment monitoring
- Power quality monitoring
- Start-up controls modernization/upgrading
- Remote start-up controls



Open positions - March

- AGM/Engineering Project Mgr.- expanded search with new recruiting team.
- Energy Efficiency Marketing Program Mgr. – candidate interviews ongoing
- Dept. Mechanic- earlier offer declined; new candidate interested
- Sr Substation Specialist (3/28 retirement)- job posted, interviewing, internal candidate exists
- Working Foreman (March retirement)– posting
- 2nd Class lineman (unplanned resignation) – new employee starts 3/24/25



APPA Excellence in Reliability – 2024 Certificate Winner

- MMLD submits all outage data to APPA eReliability Tracker Program
- APPA aggregates data from ~350 MLPs nationwide with the Energy Information Administration (EIA) outage data, including MLPs, IOUs and Co-ops.
- MMLD is ranked in the top 25% of utilities for the System Average Interruption Duration Index (SAIDI*) measurement

*** the average duration (minutes) of an interruption per customer, over one year.**
Calculated by summing all over five-minute customer interruptions for the year and dividing that sum by the number of customers served during that period (~10,300 customers).



Sustained Average Interruption Duration Index (SAIDI) - all outage events, in minutes *			
	2024	2023	2022
MMLD	31	17	38
All Participating Public Power Utilities	120	89	116
Northeast Region Utilities	83	55	47
Utility Range size 4 (~7,500-15,000 meters)	96	72	79
Sustained Average Interruption Frequency Index (SAIFI) - all outage events, percentage **			
	2024	2023	2022
MMLD	0.18	0.12	0.21
All Participating Public Power Utilities	0.78	0.74	0.77
Northeast Region Utilities	0.62	0.55	0.41
Utility Range size 4 (~7,500-15,000 meters)	0.65	0.7	0.63
Average Service Availability Index (ASAI) - all outage events, percentage***			
	2024	2023	2022
MMLD	99.9941%	99.9968%	99.9927%
All Participating Public Power Utilities	99.9775%	99.9833%	99.9783%
Northeast Region Utilities	99.9844%	99.9896%	99.9919%
Utility Range size 4 (~7,500-15,000 meters)	99.9817%	99.9864%	99.9849%

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