

Light Commission March 4, 2025 meeting minutes

To: Light Commission: Commissioners
Light Department: J. Kowalik, General Manager
From: Jean-Jacques Yarmoff, Secretary
Date: March 19, 2025

A quorum being present, Chair Wolf brought the meeting to order at 4:02 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.
Invited: Tom Barry, Director of Energy Markets, Massachusetts Municipal Wholesale Electric Company (MMWEC).

Marblehead Land Acknowledgment declaration was read by Commissioner Frechette.

Vote to approve minutes of previous meetings

The chair noted that according to advice from the town administrator, commissioners can vote to approve minutes whether they participated in the meeting or not; they can abstain if they feel more comfortable doing so. Chair Wolf mentioned she had proposed some editorial and spelling corrections to a few of the minutes, which do not change their substance. In consequence, a motion was proposed to approve the following minutes of previous meetings of the Municipal Light Commission:

October 1, 2024, Public session,
October 29, 2024, Public session and Executive session,
December 17, 2024, Public session and Executive session,
January 7, 2025, Public session and Executive session,
January 15, 2025, Public session and Executive sessions and
January 21, Public session and Executive sessions.

Vote #2025-02 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. The Polco accounts have been activated, MMLD is waiting to receive the paper versions of the survey.

Large Building Energy Reporting, DOER. This is a new request from Mass Department of Energy Resources (DOER) to report energy consumption of buildings over 20,000 sqft. While this request is somewhat controversial (1. It is not clear DOER has the authority to make this request of Municipal Light

Plants which are not Electric Distribution Companies, or EDC; and 2. Information requested is confidential information), MMLD has received a list of the buildings that would be subject to this information request, which totals 42 buildings in Marblehead. If it is determined that this request must be fulfilled, MMLD will be able to reply by the deadline this summer.

2025 Department Goals. Commissioner Wolf distributed a version of the proposed goals, which is very similar to the 2024 goals in structure and substance. Goals are for the calendar year. While we are not ready for a vote as planned at this meeting, she requested the board to review. The General Manager proposed that the battery storage system (BESS) goal be reworded to reflect the need to develop a comprehensive strategic plan for BESS best location. This will be taken up again at our next meeting.

General Manager updates

Village 13 substation: the work spearheaded by engineering firm Fischbach and Moore (F&M) has started. All the work can be done safely within the existing perimeter of the fence, there is no need to encroach on the public Right of Way of the path to Swampscott for now. As MMLD connects some underground conduits to manholes, there will be work on the path for a few days in the coming weeks, which MMLD will make clear to the public ahead of time. As mentioned at our last meeting, the switchgear delivery dates has changed from April to May. Installation of the switchgear will be done by the manufacturer; commissioning of the installed switchgear will be done by an existing contractor of MMLD. Pictures of the on-going work at Village 13 are shown pages 5-7 and of the switchgear, currently in Ohio, pages 7-8.

MMLD Power Portfolio: MMWEC's Tom Barry joined the meeting remotely at this stage. The General Manager and Tom Barry reviewed Marblehead's power portfolio. New short-term contracts have replaced some of the previous hedges that did not have any carbon attributes. There were some variations in the amount of power MMLD received from some of the hydro contracts due to weather fluctuations. Changes in Millstone nuclear power output is due to scheduled outages for refueling: a similar downtime for maintenance will take place at Seabrook in 2025. The Ludlow solar plant came on-line during the year. In addition, MMWEC was able to work with NextEra Energy and swap some RECs linked to Seabrook for certificates Marblehead can use in its carbon free portfolio (see page YY), in a three-year deal covering the period 2024-2026. The results are that the carbon free portion of MMLD's electricity went from 42% in 2023 to reach 65.1% in 2024, and we are well on track to exceed our goal of 70% carbon free electricity by 2028. Remarkably, the wholesale average cost of electricity went down from 11.28 c/kWh to 10.9 c/kWh from 2023 to 2024, a decrease of 3.4%. See page 8.

Hydro Quebec: Currently, there is uncertainty as to whether US Administration imposed tariffs on Canada's energy exports will affect us. If Hydro Quebec power is affected, MMWEC will be looking to replace this source of energy, but there will be upward pressure on electricity prices if tariffs are imposed. MMWEC is in the middle of negotiations with Hydro Quebec to renew a contract expiring in October of 2025. MMLD would like to renew or expand its existing participation in this contract. MMWEC is negotiating to buy more energy, as it should be able to, given its transmission rights, as well as extend the duration of the contract to 10 years. MMWEC does not see a problem in MMLD increasing its position in Hydro Quebec if that is a possibility, MMLD is not over-concentrated with one specific provider. Diversification of energy sources is a source of stability.

Education outreach: The General Manager mentioned how MMLD has helped a student share information about the Go Green program in the Village School's 4th Grade class. Photos pages 9-10.

Utility Scale Battery Storage (BESS). Several locations options are being evaluated, including Tioga Way. A sound study is being conducted with the Cambridge-based firm Acentech. The sites need sufficient space, to be close to the high voltage transmission lines of our system: there are tradeoffs to be studied.

The benefits of BESS systems in terms of resiliency and financial impact are clear and explained on slides page 10. In terms of resiliency, if Marblehead was called on by ISO-NE to reduce load, a BESS system would allow to do so without having to cause rotating black-outs in town: unlike towns with a large industrial base, there are no big customers that MMLD could ask to shed load temporarily. The financial benefits are substantial. They depend on being able to predict peak usage on ISO-NE and National Grid territories. MMWEC has a good track record of predicting these peak usage times, as shown on page 11.

Commissioner Yarmoff mentioned that the MLCA, the Massachusetts Light Commissioners Association, is planning to have its monthly meeting dedicated to long duration BESS in May as this subject is of interest to all utilities.

Wilkins Plant update. The General Manager is continuing to evaluate how this diesel generator is going to fit into the department going forward.

Fuel tank review (currently a 40,000-gallon tank). Replacing this tank with one or several smaller tanks less than 10,000 gallons is simpler operationally, with simpler permitting and inspections. One single 10,000 tank would give us a 24 hour of operation runway, when ISO-NE capacity market asks us to guarantee 48 hours of operation. A contract with a firm able to provide guaranteed supply within 24 hours might be a cheaper option than having two tanks on-site. One single tanker truck would be enough to resupply.

Controls. MMLD is preparing specifications for an update in the control systems: this would include updated communications and monitoring of equipment, remote start-up and automatic running, power quality monitoring. This would allow to get bids and evaluate the costs of this upgrade.

Human Resources: the General Manager reviewed the six open positions in MMLD, see page 12. Commissioner Yarmoff asked if a change in approach was possible to fill the open positions which are accumulating: filling them is a lot of work for the General Manager, who has to also run the department.

Distribution system work: Replacing the damaged pole at the intersection of Lee and Union streets will necessitate to de-energize lines which will affect 36 customers. MMLD will communicate with these customers prior to the repair. Staff also responded to an emergency over the recent weekend, when a tree fell over the feeder lines. Line crews were able to repair the lines without having to cut power to the town. This incident highlights the vulnerability of our supply system which still needs to be addressed.

Executive Session

During the public meeting of the Light Commission held on March 4, 2025, Chair Wolf requested a motion to meet in Executive Session with no plan to return to open session, first to

- 1) protect confidential, competitively sensitive or other proprietary information in the course of the proceedings that, if disclosed, will adversely affect our ability to conduct business in relation to other entities making, selling, or distributing electric power and energy, and

2) for strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel.

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

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

The Executive Session One started at 5:45 pm, with MMWEC's Director of Energy Markets, Tom Barry, invited to participate in the meeting with the General Manager and the Commission. Executive Session One concluded at 6:43 pm.

Executive Session Two started at 6:43 pm, with Vice Chair Frechette leading the meeting and Commissioners Hull, Smith and Yarmoff participating. Commissioner Wolf had recused herself from the discussions and did not participate in Executive Session Two.

Executive Session Two concluded at 7:05 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 4, 2025 Light Commission Meeting



Agenda

- 4:00 Call to Order, Land Acknowledgement, and Public Comments
- 4:15 Outstanding items and requests from last meeting
 - Employee satisfaction survey
 - Mass DOER implementation of Large Building Energy Reporting
- 4:30 2025 Dept. Goals
- 4:45 General Manager Updates
- 5:30 Meet in Executive Session, not to return to open session



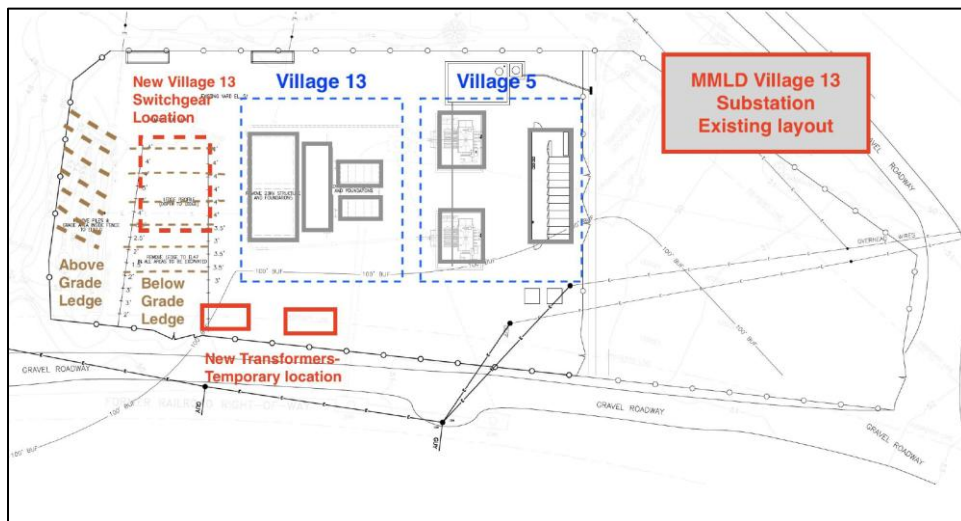
General Manager updates

- Village 13 update
- 2024 Carbon-Free power portfolio results
- Utility scale Battery Energy Storage Siting update
- Open positions
- Wilkins Plant upgrade
- Damaged pole replacement on Union & Lee Streets- March 18-19
 - outage required - 36 customers



Village 13 Update – Substation Construction Contract

- Fischbach & Moore project schedule v1 published
 - Nov 20, 2025 completion date
 - Assumes MCP switchgear arrival April 19 – 3-week installation process
- Detailed Schedule available
- Village 13 site prep photos
- MCP switchgear photos- construction is well underway in MCP factory
- No need to extend the fence line into the Swampscott ROW









2024 MMLD Carbon-Free Power Portfolio

MMLD Carbon-Free Wholesale Power Sources	Energy MWh	RECs Retired	RECs Sold	Energy Purchases without RECs
Millstone 3 Nuclear	15,616	15,616		
Seabrook Nuclear	13,074	13,074		
NY Power Authority Hydro	8,626	8,626		
Hydro Quebec	6,588	6,588		
First Light Hydro	6,707	6,707		
Brookfield Hydro	7,123	7,123		
MSGT Cotton Solar	1,217		1,217	
Berkshire Wind 1	953		953	
Berkshire Wind 2	1,739		1,739	
Hancock Wind	2,186			2,186
Eagle Creek Hydro	1,801			1,801
Carbon-Free Supply Total	65,631	57,735	3,909	3,987
MMLD Customer Solar Rebate				
RECs Retired		117		
MMLD Customer Opt-in Go Green Now! Program		346		
Seabrook EFECs		6,752		
Total RECs & EFECs Retired		64,950		
MMLD Total 2024 Retail Sales (MWh)		99,811		
MMLD Carbon-Free % per Mass Climate Law		65.1%		
Increase of 10% or more from 2023				
decrease of 10% or more from 2023				
Italics - new resource in the 2024 portfolio				

- 65.1% carbon-free power in 2024... an increase of 55% from 42% in 2023!
- The average wholesale power cost decreased 3.4% from 2023: 10.9 cents/kwh in 2024 vs 11.28 cents/kwh in 2023



2024 vs 2023 MMLD Power Portfolio

The average wholesale

Power Generator	2023 Actual Energy (MWh)	2024 Actual Energy (MWh)	Percent Change
Millstone Nuclear	12,704	15,616	22.9%
Seabrook Nuclear	12,882	13,074	1.5%
NY Power Authority Hydro	7,858	8,626	9.8%
Hydro Quebec	6,570	6,588	0.3%
Berkshire Wind 1	1,464	953	-34.9%
Berkshire Wind 2	1,272	1,739	36.7%
Hancock Wind	2,076	2,186	5.3%
Eagle Creek Hydro	2,542	1,801	-29.2%
First Light Hydro	0	6,707	N/A
Brookfield Hydro	0	7,123	N/A
MSGT Cotton Solar	0	1,217	N/A
NE Reliability Project	0	766	N/A
Stony Brook Intermediate	446	1,103	147.3%
Stony Brook Peaking	85	106	24.4%
Marblehead Wilkins Plant	62	95	53.6%
Hedged Power Contracts	33,988	16,456	-51.6%
ISO Interchange Spot Market	21,012	22,716	8.1%
Total Wholesale Energy Supply	102,961	106,873	3.8%



MMLD-NextEra Certificate trade

MMLD- NextEra trade of earned 2024 Seabrook Clean Energy Certificates

	MWH	CES-Es* earned	EFECs* earned	Total Certificates
INITIAL MMLD Seabrook 2024 y/e results	13,074	3,377	9,697	13,074
Clean Energy Certificate Trade with NextEra				
MMLD surrendered these Certificates		3,377		
MMLD received these Certificates			10,131	
FINAL MMLD Seabrook 2024 y/e results		0	19,828	
		Certificate Increase	6,754	
*CES-E: Clean Energy Standard - Existing				
*EFEC: Emission Free Energy Certificate				



MMLD in the classroom – Ray Gouley Village School – 4th Graders





MMLD in the classroom – Ray Gouley

Village School – 4th Graders



Utility Battery update

- MMLD BESS siting article is not on the Town Warrant
- Now scheduling noise level testing with Acentech at Tioga Way
- A Preliminary alternative site list is being compiled – 9 sites



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.



MMWEC Peak Forecasting Accuracy 2017-24

	# Peaks Called	National Grid Transmission Peaks Hit?	ISO-NE Capacity Peak Hit?
2017 Total	38	12	Yes
2018 Total	46	12	Yes
2019 Total	36	12	Yes
2020 Total	48	12	Yes
2021 Total	40	11	NO
2022 Total	46	9	Yes
2023 Total	54	10	Yes
2024 Total	84	11	(tbd)
Avg. Annual Peaks/Yr	49	11.1	
Average Annual %		93%	86%



MMWEC Peak Forecasting Accuracy 2024

Month-Yr	# Peaks Called	National Grid Transmission Peak			ISO-NE Capacity Peak			
		Date	Hour Ending	Forecast Hit?	Date	Hour ending	Forecast Hit?	Peak Load
Jan-24	9	1/17/24	19	Yes	1/17/24	18		17,971
Feb-24	6	2/14/24	19	Yes	2/14/24	19		16,807
Mar-24	7	3/11/24	20	Yes	3/11/24	20		15,287
Apr-24	3	4/4/24	11	NO	4/3/24	19		15,319
May-24	4	5/22/24	19	Yes	5/22/24	19		17,023
Jun-24	4	6/20/24	17	Yes	6/20/24	17		23,730
Jul-24	7	7/16/24	18	Yes	7/16/24	18	Preliminarily	24,461
Aug-24	3	8/1/24	18	Yes	8/1/24	18		23,294
Sep-24	2	9/1/24	18	Yes	9/1/24	19		16,668
Oct-24	22	10/29/24	19	Yes	10/28/24	19		14,382
Nov-24	6	11/26/24	18	Yes	11/26/24	18		15,453
Dec-24	11	12/23/24	18	Yes	12/23/24	18		18,717
Total	84							
		NGrid transmission peak with a different date or time than the ISO Capacity Peak						



Wilkins Plant update

- Evaluating the installation of new, smaller tank(s):
 - Under 10,000 gallon tank means simpler permitting, regulation & inspections
 - Do we need one or two 10,000 gallon tanks to meet the ISO 48-hour runtime commitment?
- Update the generator controls:
 - For automated, remote-dispatch power generator and power meter controls.
 - We're reviewing a detailed proposal from a local power engineer/P.E. to write the generator controls bid spec.



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.- continuing expanded search with new recruiting team.
- Energy Efficiency Marketing Program Mgr. – interviewing candidates now
- Dept. Mechanic- offer out now
- Sr Substation Specialist (3/28 retirement)- job posted, interviewing, internal candidate exists
- Working Foreman (March retirement)– posting
- 2nd Class lineman (unplanned resignation) – posting, internal recruiting of outside candidates



General Manager updates

- Village 13 update
- 2024 Carbon-Free power portfolio results
- Utility scale Battery Energy Storage Siting update
- Open positions
- Wilkins Plant upgrade
- Replace the damaged pole replacement on Union & Lee Streets-
March 18-19 – an outage is required - 36 customers
- Sunday March 2 emergency response to trees falling on the 23 KV
feeder lines on the ROW



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