Light Commission January 30, 2024 meeting minutes

To: Light Commission: Commissioners

Light Department: J. Kowalik, General Manager

From: Jean-Jacques Yarmoff, Secretary

Date: April 22, 2024

Re: Commission Meeting January 30, 2024: Public Session

A quorum being present, Chair Wolf brought the meeting to order at 4:03 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 <u>link</u>.

Participated in meeting:

Commissioners: Commissioners Frechette, Hull, Smith, Wolf and Yarmoff participated in person.

Light Department: General Manager, Joe Kowalik; Matt Barrett, Business Manager; Greg Chane,

Distribution Manager. Bob Jolly, advisor.

Invited: AEGIS, Mark Boone, National Property Manager, BESS Loss Control Expert;

Mike Barrett, PLM;

MMWEC, Jason Viadero, Director Engineering and Generation Assets;

Marblehead Fire Chief, Jason Gilliland;

Delorean: Joseph Leavitt, Matthew Rariden and team.

Marblehead Land Acknowledgment declaration was read by Commissioner Frechette.

Approval of minutes from previous meetings

Vote #2024-01 Motion to approve the minutes of the 12/12/23 meeting (public session and

executive session) and the minutes of the 12/19 public meeting was moved by Commissioner Smith, seconded by Commissioner Frechette. Unanimous.

Comments from the Public No comments were made by members of the public.

Outstanding items

Employee survey. The General Manager commented that after meetings with the company, this is something that will bring useful information and should move forward. This is a longitudinal study, and information over time will be particularly interesting, as will be comparing to benchmarks. While we have seen some of the questions that would be asked to municipal employees, the questionnaire still needs to be adapted to the MMLD framework. The company has worked with municipal utilities before. While the board is in general agreement, there is no need for a formal vote to engage the company, the General Manager will move forward.

Duracell battery proposal. No update.

Village 13 project plans. Mike Barrett of PLM prepared the Gantt chart that is enclosed page 5-7. Since the last update, all major equipment is on order, transformers are scheduled to be delivered in early May; they will be stored on site. In order to access the site, a land bridge will be installed (pre-cast

concrete) under grade to protect sewer pipes underneath the Right of Way. Contracts for this step need to go out to bid. MMLD is streamlining these steps to be ready to receive the transformers. The switchgear is now confirmed for delivery August 2024 after about a three months delay. Bids for general contractor should take place early April, for site construction to start in June, working through most of 2024, with the new switchgear put in place, and energized. Because the site is very compact, work needs to be staggered. Depending on weather conditions, work may continue through the winter. At this stage, completion is expected around June 2025. This schedule should have enough buffer time in various steps to absorb delays/late shipment of some components, without changing the expected completion date. Had the switchgear been delivered on the initial schedule, we might have been able to complete the site work by the end of 2024.

Utility-scale Battery Electric Storage

MMLD invited Aegis to present a current view of risk management strategies associated with utility-scale Battery Electric Storage Systems (BESS). Aegis is a mutual insurance company, focusing on the electric utility market and provide risk management service to their customers. Mark Boone's expertise in the field is well recognized. He is a registered fire protection engineer in multiple states in the US, and a member of the National Fire Protection Association, where he chairs multiple committees on safety of BESS. Interested readers are encouraged to listen to the whole <u>discussion</u>, from minute 34 to 1 hour 32 in the recording, with only highlights summarized here.

Failure rates maybe one in 10 million, but some failures are not caught by battery management systems. Mitigation of possible events is important: ventilation of the BESS, but also, importantly separation of modules from one another (see slide on bottom of page 10). For each system, a Hazard Mitigation Analysis needs to be performed and put in place, as each BESS and site are different. A goal of the meeting is to introduce the Delorean team to Mark Boone, and make sure that the planned system is designed, tested and built in accordance with best practices.

Reviewing the siting options of a BESS at the Tioga way site, MMLD needs to establish an access to the site, possibly from Tioga Way and grade the section where the BESS would be installed and operated by Delorean. Delorean's Joseph Leavitt noted that the site plan has evolved from the preliminary drawing shown and needs to be updated; there is enough room to ensure adequate separation. Delorean is committed to ensuring safety of the installation, and of first responders should an event occur. Delorean will also provide training to the fire department for this particular unit once the final design is determined.

Residential base rate adjustments

The General Manager presented the recent Base Rate change history as shown on slide page 12, having previously distributed a document proposing that when residents have two meters on their property, the base rate for the second meter should go to \$5.00, rather than the new base rates that have been introduced since 2023. See pages 13 and 14 the new rates proposed. About 30 residents have been identified to date that have two meters on their property for historical reasons. Raising the base rate affects them, doubly. In some cases, the service for the second structure / garage was registered as a small commercial rate, where the base rates has gone from \$5 to \$32.25. The General Manager will edit the document to have a simpler version for communication with the public.

Vote #2024-02

Motion to approve the rates as they are described in the attached document for residents with second meters was moved by Commissioner Wolf, seconded by Commissioner Frechette. Commissioners Smith and Yarmoff, who both have second meters on their properties, recused themselves from this vote. **Three votes in favor, motion carries.**

MMLD 2024 Budget

The General Manager had previously distributed a budget document, on which several questions were raised. It would be appreciated to have a document that shows evolution compared to the previous year, as it is not so much the absolute values, but the changes that are meaningful when evaluating the budget. Regarding power purchases, what is the situation with hedging? Lastly, the depreciation number shows a change of 1% from the previous year, when assets have increased in value at double digit rates. Also, while the board has a comprehensive list of projects from the distribution manager, we do not have a budget to go with it. It would be appreciated to receive this information. The budget will be revisited at a subsequent meeting.

General Manager updates

Grant activities. Following the recent storm, we had some emergencies to deal with. We have submitted the emergency response expenditures, as did the Town of Marblehead. If for the State, the damages exceed \$13M, then we may eligible for a FEMA relief grant. The two areas where we are most impacted are Hammond Park and Crowningshield. We have an estimate that has been provided to the town and will be part of the overall state request.

Separately, MMLD participated in a joint effort with Ipswich and Shrewsbury to apply to Mass DOER Low and Moderate-income housing. This is a total \$8.5M application, of which Marblehead's share is about \$5.5M. The grant would cover the purchase of heat pumps.

In addition, Marblehead participated in an application to a DOE Grid Innovation Program, with 7 other MLPs (see slide page 15). The General Manager also explained the block grant that DOE is distributing to state entities to distribute, which is run in Massachusetts by DOER and MassCEC. MMWEC is organizing a meeting on the subject. MMLD did provide support to an application for a grant for electrification of school buses, as discussed at the previous meeting. A site for possible charging at the High School has been identified.

Village 13 update. With the design of the land bridge over the sewer pipe complete, we also have an estimate for precast concrete: around \$75K, which means that the project needs to be put to a competitive bidding process. Installation of the land bridge is estimated to cost another \$45-65K.

Hiring update. The General Manager interviewed two people for the IT position. Separately, the Town Manager has now hired a Sustainability Manager, and additional resumes will be sent to Joe for his review. Commissioner Yarmoff requested a position description to post with the MIT Sloan school, the offer of which had previously been reported. Recruiting for the engineering manager position is going to be the next project for the search firm we are currently using for the IT position, this will be done sequentially.

ISO-NE Inventoried Energy Program: MMLD is going to participate in this ISO-NE program and getting paid for doing so. This will be a very small amount.

Contracts update: there are some elements in the Upnine contract that need to be reviewed, it will hopefully be signed soon; the agreement with Premiere Fence is signed, and work will start by mid-April.

Executive Session During the January 30, 2024 Light Commission meeting, Chair Lisa Wolf proposed a motion to enter Executive Session Motion to discuss trade secrets or confidential or proprietary information regarding activities of a governmental body as energy supplier, municipal aggregator or energy cooperative, if an Open Session will adversely affect conducting business relative to other entities making, selling or distributing energy. Part two of Executive session is to conduct contract negotiations with General Manager Joe Kowalik. Not to return to Open Session.

Motion was seconded by Commissioner Frechette.

Votes: Simon Frechette: Yes; Mike Hull: Yes; Lisa Wolf: Yes; Jean-Jacques Yarmoff: Yes. Executive Session started at 6:45 pm.

The Executive Session concluded at 7:14 pm at which point a motion to adjourn was proposed, seconded and, after a roll call of the five commissioners present voting unanimously in favor, adopted.

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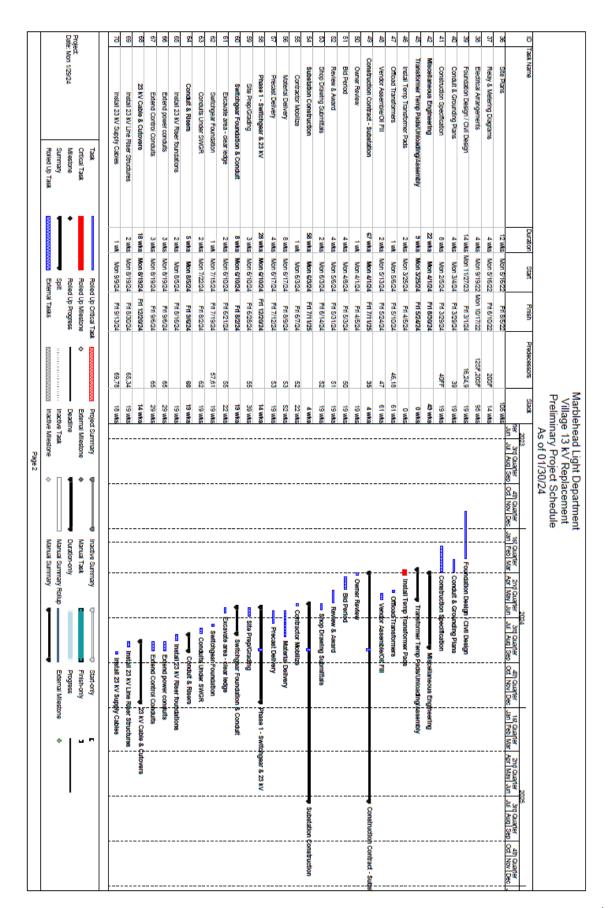
Documents shown during the January 30 Light Commission meeting

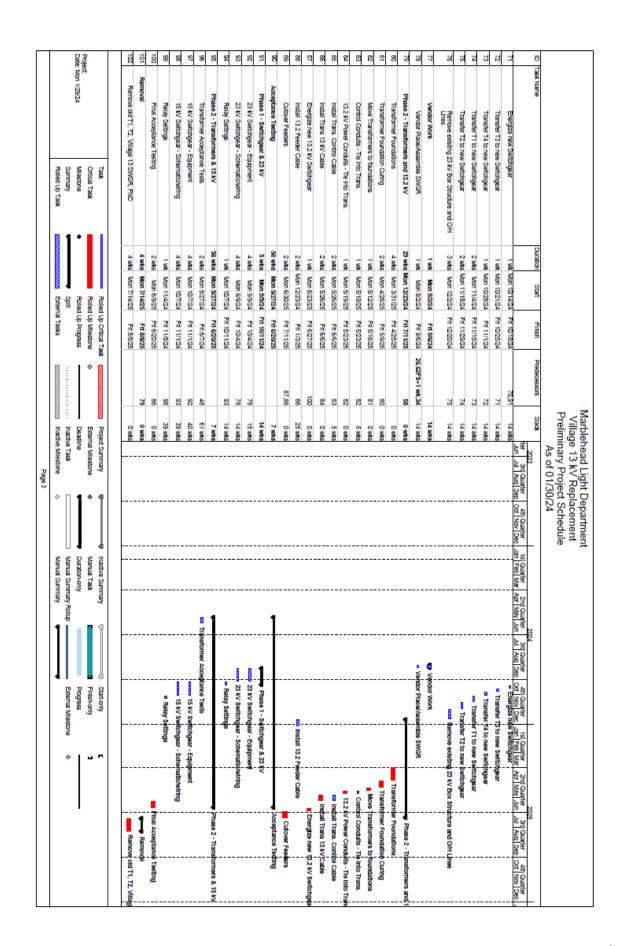


Agenda

- 4:00 Call to Order, Approve Minutes & Public Comments
- 4:15 Board request item
 - Village 13 project plan update Mike Barrett, PLM
- 4:30 Utility-scale Battery Electric Storage –safety and siting
 - AEGIS Loss Control Report discussion Mark Boone, AEGIS
 - Tioga Way site review –MMLD Joe/Colin/Greg; Matt Rariden-Delorean; Capt. Greg McLaughlin- MFD
- 5:15 Specific Residential Property Rate Adjustments review & VOTE
- 5:45 2024 MMLD Operating Budget with updated energy forecasts Matt Barrett, Joe

			Marblehead Light Department Village 13 kV Replacement Preliminary Project Schedule As of 01/30/24	Replacement ject Schedule //30/24		
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Design Engineering - Substation 98 wks Mon 5/16/22	Fri 3/29/24	2 14	14 wks			Design Engineering - Substation
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AEGIS – Associated Electric & Gas Insurance Services Ltd

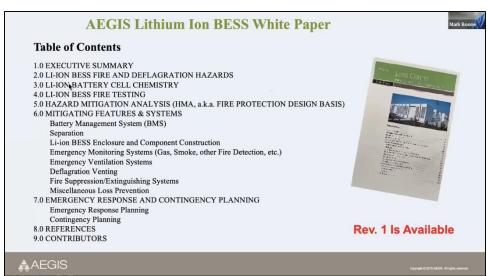
- A leading mutual insurance company that provides liability, property and Directors & Officers insurance coverage to the energy industry
- Also provides specialized risk management services
- Founded by policyholder members (energy companies) in 1975
- \$2.1 billion premium revenue
- \$9.4 billion total assets

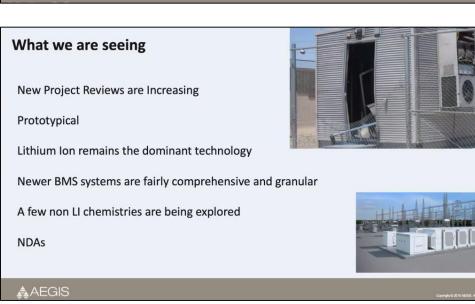


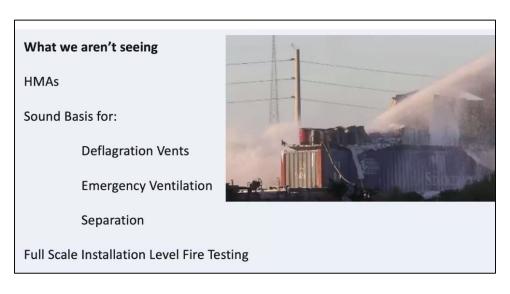
Mark Boone, P.E.

- National Property Manager, AEGIS Loss Control, Co-author of the Dec 2023 BESS Loss Control White Paper
- Registered Fire Protection Engineer in multiple states; 37 yr. career in Loss Control Risk engineering
- Dominion Energy Manager, Corporate Risk Engineering (CRE) group
- Safe Shutdown/Fire Protection Design Engineer at nuclear power plants
- · National Fire Protection Association member,
 - Chair of NFPA 850 Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage DC Converter Stations
 - Chair of NFPA 853 Standard for Installation of Stationary Fuel Cell Power Systems
 - NFPA 72 Principal Member National Fire Alarm and Signaling Code

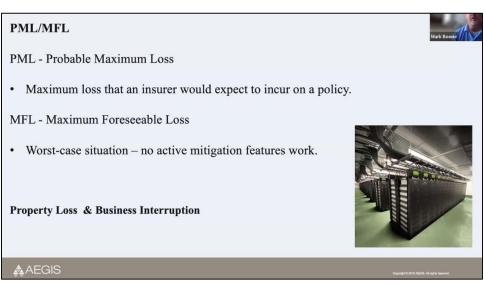


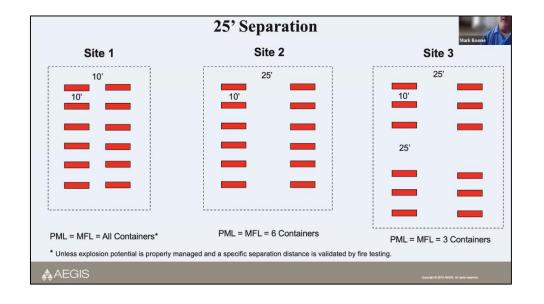










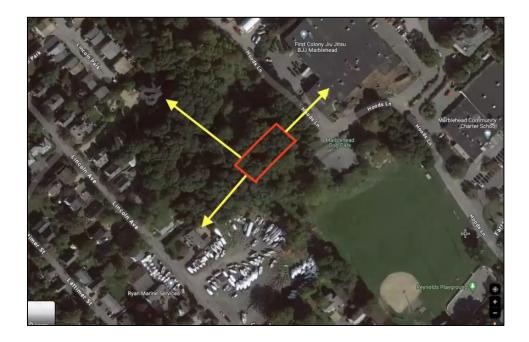


Concerns/Challenges

- · Almost every site is "prototypical"
- Inadequate HMAs = Incoherent Mitigation Features
- Lack of Full Scale Testing for Mitigation Systems/Separation
- Large Values at Risk Warehouse Style or Tight Spacing
- Foreign Lab Testing
- NDAs
- · LI BESS UPS in Occupied Buildings
- LI BESS UPS Exposure to Business Critical Systems

AEGIS will continue to monitor the industry, loss events, and technical papers to provide our best advice to members.

<u></u> AEGIS





Proposed BESS site layout Tioga Way

- 10 Battery Cabinets to hold 20 MWH of battery storage capacity
- 80' x 140' site proposed
- MMLD/MFD/Dolor ean Power/AEGIS to evaluate site expansion & security options







Specific Residential Property Rate Adjustments

- Proposal 2 page doc to be distributed
- Discussion, then VOTE on each Proposal separately



Base Rate Recent History

Rate Class	2022	2023	2024
Residential	\$4.25	\$11.25	\$18.50
Small Commercial	\$5.00	\$18.50	\$32.25
Large Commercial	\$10.00	\$61.75	\$113.50

Residential Property Electric Rate Adjustments

Under specific conditions, residential customers may qualify for an adjustment (reduction) to the MMLD electric rates in effect.

Situation #1: A Single-Family residence, with ONE single-phase electrical service drop and two residential rate meters.

To Qualify:

A single-family residential customer must have <u>one</u>, single-phase electrical service drop to the home, with two MMLD Residential Service meters connected (known as Rate A or Rate 4) to the single service. If the customer receives separate monthly bills for each meter, s/he agrees to combine the two meters into a single MMLD account and receive one monthly bill that combines the two meters.

Rate Adjustment:

The Residential Service meter base rate for the second meter is reduced to \$ 5.00/month. All Residential Energy rates, determined by the actual kwh's consumed by the residential customer each month, remain the same.

Situation #2: A Single-Family residence, with ONE single-phase electrical service drop and two meters, including a Small Commercial meter.

To Qualify

A single-family residential customer with <u>one</u>, single-phase electrical service drop to the home, has two MMLD meters connected: one Residential Service meter (Rate A or Rate 4) and the second a Small Commercial Service meter (Rate B or 5) that provides electrical service to a garage, shed or other structure on the same property. To qualify the use of the garage, shed, or other metered structure must be limited to domestic residential uses, no commercial use. Further, the garage, shed or other structure must be used by the property owner/resident, and not rented to another party. If the customer currently receives a separate monthly bill for each meter, s/he agrees to combine both meters onto a single MMLD account, for a single monthly bill.

Rate Adjustment:

The Small Commercial meter base rate is reduced to a Reduced Residential rate \$ 5.00/month and the Small Commercial energy use rate (kWh) is converted to the Residential energy use rate (kWh).

Situation #3: Single Family Residence, with TWO, single-phase electrical service drops and two meters.

To Qualify:

A single-family residential customer with two, single-phase electrical service drops to the home, is connected to two MMLD meters: one, a Residential Service meter (Rate A or Rate 4) and a second, Small Commercial Service meter (Rate B or 5) for a garage, shed or other structure on the same property. The garage, shed, or other metered structure can only be used for domestic residential uses, no commercial use. Further, the garage, shed or other structure must be used by the property owner/resident, and not rented to another party. If the customer currently receives a separate monthly bill for each meter, s/he agrees to combine both meters onto a single MMLD account, for a single monthly bill.

Rate Adjustment:

The Small Commercial base rate is converted to a Reduced Residential base rate of 5.00/month. The Small Commercial Service energy use rate (kWh) is converted to the Residential Service energy use rate (kWh).

Situation #4: Two- and Three-unit Residences

To Qualify

A two- or three-unit, owner-occupied residential building with <u>one</u>, single-phase electrical service drop to the building, and a common area meter in addition to a Residential Service meter for each unit. Mixed-use buildings are not eligible.

Rate Adjustment:

The common area meter base rate is converted to a Reduced Residential base rate of \$5.00/month. The energy use rate (kWh) will be the Residential Service energy use rate (kWh).

Situation #5: Two- and Three-Unit Condominium Associations

To Qualify:

A two- or three-unit, OWNER-OCCUPIED residential condominium building with <u>one</u>, single-phase electrical service drop to the building, and a common area meter in addition to a Residential Service meter for each unit. Mixed-use buildings are not eligible.

Rate Adjustment:

The common area meter base rate is converted to the Reduced Residential Service base rate of \$5.00/month. The energy use rate (kWh) will be the Residential Service energy use rate (kWh).

Situation #6: Historic Marine Use Structures

To Qualify:

A small waterfront wood structure, widely known as a shanty, with an interior area of 400 square feet or less, that is separately metered with a single-phase electrical service drop, and maintained for commercial maritime use.

Rate Adjustment:

The Historic Marine Use Structure base rate is \$5.00/month. The energy use rate (kWh) is the same as the Residential Service energy use rate (kWh).

PROGRAM ADMINISTRATION:

- These residential rate adjustments are not automatic. Customers must apply by completing and signing an eligibility for that is approved by MMLD.
- 2. The Program goes into effect in January 2024.
- Approved applications received from January 1 through March 31, 2024, will go into effect
 with the customer's January 2024 bill. Approved applications received after March 31st will go
 into effect upon the first billing cycle after the approval date.
- 4. Applicants agree to provide MMLD access meter locations and electrical service panels.
- These rate setting regulations are subject to change by majority vote of the Marblehead Municipal Light Department Board.

Page 2 of 2 MMLD Rate Adjustments 2024-01-02v5



2024 Budget Review

- VOTE: to approve operating budget of \$21.240 million
- (See financial spreadsheet with latest wholesale power cost estimates - attached separately)



Grant Application Activity



- Mass DOER Low & Moderate-Income Housing Decarbonization Program – (heat pumps and energy efficiency) – appl'n filed
 - Co-applicant with Ipswich and Shrewsbury MLDs
 - \$8.5 Million total grant application; MMLD portion ~\$5.5 million
- US DOE Grid Innovation Program Mass MLP Green Grid Resilient Energy and Economic Neighborhoods –
 - Concept paper phase submitted with other MLPs Taunton,
 Peabody, Wakefield, Wellesley, Hingham, Concord, Westfield, plus
 Beacon Climate/Greentown Labs in Somerville



Grant Application Activity



- US EPA 2023 Clean School Bus (CSB) Rebate Program-
- Filed with Marblehead Public Schools and Highland Electric Fleets
 - Exact bus size(s) tbd...\$200,000 rebate eligibility
- FEMA storm emergency response and permanent improvements
 - Marblehead has submitted its emergency response expenditures
 - Waiting to see if the Comm of Mass qualifies ~\$13 million qualifying threshold





Village 13 update



- Sewer pipe bridge design is complete
- · Built with 100% precast concrete...
 - \$75,000 manufacturing estimate requires competitive bid process...
 - slow vendor response is a schedule concern
- Installation estimated at \$45-65,000



Agenda



6:00 General Manager update - Joe Kowalik

- Grant Application Updates
 - January storms 1/11-12 and 1/13-15 Crowninshield Way
- · Village 13 updates
- Open position updates
- ISO-NE Inventoried Energy Program (IEP)- Wilkins Plant accepted
- Contracts: Upnine Fiber Backhaul system monitoring,
- Contracts: Premiere Fence 80 Commercial St. ---includes CZM grant dollars

6:30 Executive session

• Conduct strategy sessions in preparation for negotiations with nonunion personnel

7:00 Adjourn

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