



# HINGHAM MUNICIPAL LIGHTING PLANT

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Laura M. Burns, Chairman  
Michael Reive, Vice Chairman  
Tyler Herrald, Secretary

## REGULAR MEETING HINGHAM MUNICIPAL LIGHT BOARD

June 6, 2023  
Zoom Meeting  
<https://us02web.zoom.us/j/89640049360>

### Meeting Called to Order

A regular meeting of the Board of Commissioners of the Hingham Municipal Light Plant (HMLP) was called to order by the Board's Chair, Laura Burns, at approximately 7:39 am on Tuesday, June 6, 2023, via Zoom.

Present:

Board Members: Laura Burns, Chair  
Michael Reive, Vice President  
Tyler Herrald, Secretary

HMLP: Thomas Morahan, General Manager  
Mark Fahey, Asst. General Manager  
Joan Griffin - Business Manager  
Stephen Girardi, Engineer  
Ellen McElroy, Customer Service  
Brianna Bennett, Sustainability Coordinator

Guests: Ken Stambler - Energy New England  
Gil Myette - Energy New England  
Laurie Heffron - Energy New England  
Michelle Coscia - Energy New England  
Paul Sprecher

Ms. Burns read the following disclaimer into the record:

*This meeting is being held remotely as an alternative means of public access pursuant to Chapter 107 of the Act of 2022 and all other applicable laws temporarily amending certain provisions of the Open Meeting Law. You are hereby advised that this meeting and all communications during this meeting may be recorded by the Hingham Municipal Light Plant in accordance with the Open Meeting Law. If any participant wishes to record this meeting, please notify the chair at the start of the meeting in accordance with M.G.L. c. 30A, § 20(f) so that the chair may inform all other participants of said recording.*

Ms. Burns asked if anyone other than HMLP wished to record the meeting. No one responded affirmatively.

## **ENE Presentation on Spot Market and Capacity Market**

The presentation on Spot Market and Capacity Market was presented by Laurie Heffron.

### **Glossary:**

|                           |  |
|---------------------------|--|
| Unit contingent contract  | These contracts typically are bilateral. Units have energy and RECs (on renewable contracts) associated with them.   |
| Unit entitlement contract | These contracts provide HMLP with a percentage of the unit. HMLP will receive an entitlement share of energy, capacity, cost and revenue of the given product.   |
| Firm power                | Power or power-producing capacity, intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions. Firm power is a short-term hedge. |
| IBT                       | Internal bilateral transaction   |
| GGES                      | Greenhouse Gas Emissions Standard  |
| ISO                       | Independent System Operator. ISO New England coordinates regional transmission to ensure non-discriminatory access to the electric grid and a reliable electricity system.                                 |
| Intermittent resource     | Intermittent resources are energy sources that are not dispatchable due to their fluctuating nature, such as wind power and solar.   |
| Day Ahead resources       | The Day-Ahead Energy Market allows market participants to bid their load one day before the operating day, to help avoid price volatility.   |
| Real Time Energy Markets  | Real Time Energy Market lets market participants buy and sell wholesale electricity during the course of the operating day   |
| ANI                       | Adjusted Net Interchange   |
| Load following contract   | Supplier is responsible for any deviation between forecast and actual load. The supplier takes the risk but you pay more for it.   |
| LMP                       | Locational marginal price  |
| Congestion                | Congestion occurs when transmission networks fail to transfer power based on the load demand.  |
| FTR                       | Financial Transmission Right   |

### **Slide #1 Hingham Municipal Lighting Plant - All Projects**

This slide shows a snapshot of all resources and the megawatt hours that are provided to Hingham Light each year. This spreadsheet has been updated to include contract type and to remove the Chariot Solar contract.

### **Slide #2 HMLP GGES Requirements**

This slide shows the GGES position for HMLP based on our portfolio projected out to 2039. The assumption is that Hingham's load will remain flat. Ms. Heffron stated that Hingham is in a "great position up to 2039."

Ms. Burns stated that HMLP sells RECs; however, to meet these requirements HMLP is going to have to retire RECs.

### **Slide #3 Day Ahead ANI**

This is a snapshot of HMLP's hourly interchange with ISO for the month of April 2023.

The following example was provided:

- Total Day Ahead Demand Load is 12.926 MWh
- 51 Hours out of the 720 (24 hours a day for 30 days) were Bilateral (contracts) and Resources (Day Ahead) exceeded load
- Total MWh long during those 51 hours was 47.5 MWh (0.37% of total Day Ahead Load)
  - In April 2023, Hingham was 331 MWh long which resulted in a payment of \$7,500 in Hingham's favor
  - The month of April, as a whole, Hingham was 1,641 MWh short which resulted in \$50,000 owed.
  - Net payment to ISO for the month of April 2023 was \$42,500

Mr. Herrald asked whether HMLP receives only resources and bilateral from these contracts or do we receive capacity as well. Mr. Myette stated that it is contract by contract as to whether you receive energy and capacity or just energy only. Ms. Heffron responded that the intermittent resources, such as Saddleback, Spruce, and Canton, do provide capacity as well.

Mr. Myette stated that HMLP is about 85% hedged so ENE purchases are based on seasonality.

Ms., Burns questioned whether most of our contracts are for non-emitting resources, so the extent that we use fossil fuels resources, largely do we get them on the Day Ahead market? Mr. Myette stated that anytime HMLP has an open power position, they are sourced from Grid. You will receive whatever type of power is being produced at the Grid, at that given hour. HMLP would not be able to track what type of power it is. Mr. Herrald stated that the Grid does provide this information and that we could do our own analysis. Mr. Myette cautioned against this type of analysis because "almost all attributes from non-emitting resources are owned by somebody. While the Grid may be showing 25% renewable right now, and Hingham may be buying some Megawatts now. At the end of the day when the tallying is done, someone else is going to claim all those renewable attributes because they are doing the same analysis as you. When we buy power from the Grid, and you get into the legalese, someone else owns those environmental attributes. You want to make sure that you are not 'double counting'. It is not an easy exercise at all." As stated by Mr. Stambler, "you have no way of knowing how much of those MWh are not committed to someone else."

### **Slide #4 Real Time Impacts**

- Load
- Intermittent Resources
- Peaking Units
  - Potter, Stony Brook and Watson
- Other entitlements
  - Seabrook and Millstone

**Slide #5 Day Ahead – 4/10/23 vs NET ANI (DA+RT) – 4/10/23**

Day Ahead resulted in 0 hours of selling back to ISO-NE

Real Time: all hours except hour 1, Resources exceeded additional Load

- Intermittent Resources delivered 2.50 to 3.25 MWh more during these hours
- NET ANI (DA + RT) resulted in hours 23 & 24 long and net short for the day

Mrs. Burns asked if it is typical for municipal contracts to be 85% Day Ahead? Ms. Heffron stated that, in general, it is 80% open and 20% hedged. It is all based on their individual budgets and the level of risk that they want to absorb. Mr. Myette stated that municipalities are “all over the place.” Some want to be 100% hedged but they pay a high premium for that product.

Mrs. Burns asked if this is different from how IOUs operate. Mr. Stambler stated that IOUs operate on a 6-month basis. For the most part they try to match requirements with 6-month contracts, where we would be looking for 20-year contracts. Mr. Myette stated that IOUs contract their energy as load following energy because they sell load estimated contracts.

Mr. Myette explained that Hingham’s load is purchased in the Southeastern Mass load zone. There are resources that produce power in Maine. When they put the power on the Grid in Maine, they get paid the price or the value of the energy in Maine. The value of that energy may not be the same when it gets to Southeastern Mass. HMLP knows that they will pay the contract price, regardless of the value when it gets to SE Massachusetts. This changes every hour. HMLP’s purchases are typically at the retail bus bar or along bilaterals that have been at Mass Hub or delivered to your zone, depending on the contract.

Mr. Herrald asked if HMLP is exposed to congestion and losses and Mr. Myette stated in the affirmative. Mr. Myette explained that everyone is exposed to congestion, but it is not always negative, it can work in your favor. Mr. Herrald then explained that congestion is the difference between the power we may receive and the load price in the location it is used. We pay the contract price (ex: Maine) but we may pay more or less when it reaches us (Southeastern Mass zone). Ms. Burns asked if there would be an advantage to us to contract with energy production in the Southeast zone. Mr. Herrald stated it would be advantageous. Mr. Myette stated that it could be advantageous but the costs of the infrastructure in our area would offset the benefits.

Mr. Herrald asked if ENE purchases FTRs for any of their clients. Mr. Myette stated that ENE does not purchase FTRs. He said that most FTRs participants are generators and they want to preserve their contract price on that power supply. The problem is that you may make money on the FTR but you expose yourself to reverse congestion and that can be unlimited.

**Slide #6 Intermittent Generation Exceeds DA-RT Load Change (Data is for April 10,2023)**



| Intermittent Generation   |                    |
|---------------------------|--------------------|
| Day Ahead Forecast        | 45.9 MWh           |
| Real Time Actual:         | 91.9 MWh           |
| RT Delta:                 | 45.97 MWh          |
| Daily Load                |                    |
| Day Ahead:                | 427.2 MWh          |
| Real Time:                | 438.94 MWh         |
| RT Delta:                 | 11.74 MWh          |
| End up selling back in RT | 34.23 MWh          |
| NET ANI (DA+RT)           | 58.8 MWh purchased |

In summary, ENE enters in your forecasted load and the difference between your resources to your load is what is picked up in the Day Ahead market as a firm commitment from the ISO.

Mr. Herrald warned that before HMLP moves to a point where we are contracting, for example, 130% of a load to make sure we have enough renewable generation to meet our goals, we need to sit down and talk about that. We do not want to be in a situation like Georgetown, Texas which got into massive financial trouble because they over-purchased. Mr. Stambler stated that our non-carbon percentage is pretty high and you will get to the point that you have to manage the risk. Mr. Herrald stated that we should look at a menu of options:

1. Throw carbon requirements out and consider the cheapest supply option
2. Stick with 100% non-carbon targets
3. Look for a blend of ideas

Ms. Burns stated that in 2030 there will be requirements for Greenhouse Gas Emissions standards in which we would have the option to not meet the requirements and instead pay a fee based on how far we are from the requirements. The fee is paid to ourselves and would allow us to fund improvements in our renewable portfolio to meet those standards.

Mr. Herrald would like to see in the short-term and over the past 3 years:

- What are our hourly balances and what is our contracted supply in the Day Ahead?
- How much are we bidding into the market in the Day Ahead?
- What is our contracted supply in real time?
- Are we making or losing via the spot exposure?

Long term, Mr. Herrald would like to contract for long term supply. The only exception would be winters {which have not come down in price as much as the other pieces of the forward curve}.

### **Discussion on Capacity**

According to Mr. Myette, you can buy capacity or let ISO procure it for you.

- The price for capacity is determined 3 years earlier so everyone knows the price.
- The price has come down considerably in the last few years.
  - 2018 \$11,080 MW/month
  - 2026 \$ 2,590 MW/month
- Hingham needs about 50MW per month
  - Cost in 2018/2019 was \$7 million
  - Cost in 2026/2027 will be \$1.5 million
- Capacity used to be good for generators but now they are subject to FLM penalties. Penalties are incurred if the generators do not perform.
- The members of the Light Board would like to sit in on the discussion of what we are buying for power.
- Mr. Reive asked if there was any update on the hydro projects coming down from Quebec to Massachusetts. There was no update to be given.

### **Approval of May 2, 2023 Meeting Minutes**

There was a motion to approve meeting minutes with edits.

Vote:

Mr. Reive: “Aye”

Mr. Herrald: “Aye”

Ms. Burns: “Aye”

### **Discussion of Meeting Schedule**

The regular monthly meeting will be on July 11, 2023 at 7:30 am

Two additional meetings will be scheduled on June 13, 2023 and June 27, 2023 at 7:30 am

### **Additional information**

- Customer Satisfaction Survey results should be coming soon. A total of 775 surveys were completed.
- The audit results should be coming this week.
- The new rate structure will be posted shortly. A low-income rate will be on the agenda for the next meeting.
- Mr. Reive would like to present information at the next meeting regarding the 10% discount that is currently on the statements.
- Mrs. Griffin stated that she would like to discuss the solar rate and heat pump rate at the next meeting.

### **Motion to adjourn the meeting.**

Mr. Reive: “Aye”

Mr. Herrald: “Aye”

Ms. Burns: “Aye”

Meeting adjourned at 9:16 am