



MUNICIPAL ELECTRIC POWER ADVISORY BOARD

Minutes
June 19, 2019

HMLD

6:00 p.m.

Members present: Peter Elkas, Gary Harrington, Tom Rundstrom, Steve Sendrowski, John Shepherd, Scott Carlson and Joe Sullivan

Staff present: Jane Parenteau, General Manager – HMLD
Barry Tupper, Assistant General Manager – HMLD

Public present: Mayhew Seavey – PLM
Jane Dye
Denis Mahoney
Bob Dyer
Jennifer Lish

The meeting was called to order at 6:05 p.m. and determined there was a quorum.

Meeting minutes

On a motion by Mr. Sullivan, with a suggested modification on page 2 to insert in parenthesis with the specific reserve funds listed (Rate Stabilization, Operating Fund and Depreciation) which was accepted and seconded by Mr. Elkas, the minutes of the meeting of May 30, 2019 were approved 6-0-1 with Mr. Carlson abstaining.

2019 Proforma Test Year Cost of Service Study (COSS)

Mayhew Seavey introduced himself. He indicated that he has been performing COSS for over 35 years and has completed them for approximately 30 out of the 40 municipal light plants in the state of Massachusetts. Mr. Seavey reviewed the next steps from the February 27 meeting update:

- Reconcile revenue calculation in the COSS model to actual revenues reported for municipal pumping rate
- Review classification of customers between commercial and general service rates
- Set Objectives for new rate design, including:
 - Unbundling rates into distribution and purchase power components
 - Clarify the classification of non-residential customers
 - Consider setting NYPA credit equal to actual savings
- Create proforma 2019 COSS on budget information

Mr. Seavey indicated that HMLD provided detailed billing data on all customer usage for 2018. Using the detail billing data, 20 commercial customers were identified with usage over 10,000 kWh per month.

- In aggregate they use over 5 million kWh per year
- Nearly 40% of current commercial class usage

Mr. Seavey noted these customers should be moved to the General Service rate. However, there is no reliable demand data for any of these customers which would be needed to assess the impact of moving the customers to the General Service rate. Mr.



Seavey recommended gathering data for 12 months before moving the customers to the GS rate.

Mr. Seavey then reviewed the LED Street Light Rates. The monthly carrying charge works out to be \$3.03 for the 38 watt LED, \$5.32 for the 88 watt LED and \$10.70 for the 193 watt LED. Ms. Parenteau explained that this is a significant reduction from the High Pressure Sodium lights as well as any Mercury Vapor lights that were replaced. She also stated that Municipal Light Plants (MLPs) have the option of either charging cost of service rates or a formula rate for municipal street lights. HMLD has elected historically to use the formula rate.

Mr. Seavey proceeded to discuss the Proforma 2019 COSS. Using 2017 Historic test year COSS model as the basis, he updated the expenses, plant and projected kWh sales from the 2019 budget. Based on 2018 actual billing data, he corrected billing units for commercial, GS rate, and municipal pumping. The model was then calibrated to the forecast revenues from the 2019 budget.

The next step was to unbundle the rates into Distribution and Purchase Power components.

- Purchase power charges would be recalculated every 6-12 months based on forecast purchase power costs
- Over and under-collection of costs would be tracked and carried forward to the next period.

Mr. Seavey recommended setting the NYPA credit to \$0.005/kWh, reflecting the actual value of the hydropower.

Mr. Seavey reviewed the results of the rate of return by customer class.

- Net income is forecasted to be \$240k
- The calculated rate of return on gross plant is .8%
- Individual major class rate of returns vary from -1.5% for residential to 8.7% for Commercial

Mr. Seavey then discussed the allocated cost of service summary by rate class. He concluded that the class rates of return are still well within the normal range for municipal electric departments. He stated that revenues are projected to be adequate to cover expenses however the overall level of net income is quite low and may not support the capital needs of the system. Next steps would be to create a 5 year financial projection, determine the level of distribution rates needed to fund future capital needs and determine the best timing of rate adjustments to minimize the impact on the customers. Based on the expectation that purchase power costs should be decreasing in the next 2 years based on Forward Capacity Market (FCM) auction results, it should be possible to increase distribution rates without increasing the overall customer bill.

Mr. Elkas asks if the residential rate of return is typical. Mr. Seavey replied yes with the objective of achieving a 0% rate of return.

Mr. Shepherd asked if the MEPAB should be concerned regarding the overall level of net income being quite low and may not support the capital needs of the system. Mr. Seavey replied yes this is a definite concern.

Mr. Carlson had some concern with the municipal pumping rate and the ability of the light department to continue to support the new pumping station that are projected to



come on line in the future. Mr. Tupper stated that the developer pays the pumping rate until the street is turned over to the Town of Holden. At that time the town incurs the rate.

Mr. Sullivan commented on the capital plan and the need to fund reserve balances appropriately.

Alternative Net Metering Rates

Mr. Seavey then reviewed alternatives for the net metering rate. The net metering is the default policy for small solar installations where customers avoid the full retail rate for all electricity produced that remains behind the meter. Additionally, the customer is paid the full retail rate for all electricity delivered to the utility. This is mandated by the Massachusetts Department of Public Utilities (MA DPU) for regulated private electric companies for customer installations less than 100 kW. Mr. Seavey then reviewed that Net Metering results in a loss of net income to the utility.

- Every kWh generated by solar facilities reduce distribution revenue
- Solar generation does not reduce the customer's demand on the distribution system and therefore the cost of providing distribution service to the customer

Mr. Seavey stated that HMLD has 3 options:

- Recover the lost income from all customers through high distribution rates (subsidizing the solar customer)
- Recover the lost income from the solar customer
- Accept a lower level of net income

HMLD has approximately 84 net metering customers. It is estimated that HMLD is losing about \$31,000/year in net income.

Mr. Seavey stated that solar generation on HMLD distribution has value to HMLD in reducing wholesale market charges related to energy, capacity and transmission. For this analysis he assumed \$0.05 for energy, \$0.022 for capacity, and \$0.015 for transmission. These values associated with wholesale markets fluctuate with the markets. Mr. Seavey stated that the wholesale markets are trending downward relating to capacity and energy. Additionally, the New England system peak has moved from 2pm to 6pm, greatly reducing the contribution that solar makes to HMLD's capacity and transmission costs.

Mr. Seavey reviewed four alternative net metering rates:

- Monthly Net Metering (present rate)
- Hourly Net Metering where customers avoid the full retail rate for kWh generated and used behind the meter and paid the purchase power charge for every kWh exported
- Monthly net metering with Fixed Charge is where customers avoid full retail rate for every kWh generated and customer pays a fixed monthly charge for installed kW of solar capacity
- Distribution Demand Charge is where customer pays for use of the distribution system through a per kW demand charge rather than a per kWh energy charge

Mr. Seavey reviewed billing examples for each of the four alternative net meter rates. The following table is a summary by rate alternative for both the Municipal Light Plant and the customer.



Alternative	Monthly Net Metering	Hourly Net Metering	Monthly with Fixed Charge	Monthly with Distribution Demand
Solar Customer Savings	\$94	\$83	\$64	\$64
MLP Income Loss	\$31	\$20	\$0	\$0
Non-Solar Customer cost (base on 84 solar customer)	\$2.67	\$1.73	\$0.00	\$0.00

Mr. Seavey also stated that there is research completed by another New England Public Power utility that showed significant increases in usage by customers after they install solar generation.

- Median customer increase was over 20%
- More than half of customers increased usage by at least 10%

Follow up with customers based increase on the following:

- Use of solar generation for space heating
- Added solar as part of renovation that increased overall building size
- Use of solar generation to charge electric vehicles

Mr. Seavey stated that an increase in customer usage of 25% would completely eliminate the loss Net income from the monthly net metering alternative.

Summarizing, Mr. Seavey stated that the present monthly net metering rate results in a loss of Net Income to the MLP of \$30/month for a typical residential installation. Half of this income loss could be recovered by going to Hourly net metering and all of the income loss could be recovered with a fixed charge of \$4.36/kW or a distribution demand charge of \$10.45/kW. Additionally, HMLD would need to verify if an increase in usage by customers after solar installation would eliminate net income loss.

Mr. Shepherd made a comment about the \$2.67/customer increase would need to also take into consideration any new solar installations which could increase this cost proportionately. Mr. Sullivan stated that when customer installs solar and the rate is implemented, what is the effect on the payback? Mr. Seavey indicated that customers who make the investment in solar calculate the payback and this is not taken into consideration in the COSS. Mr. Seavey indicated that an option for HMLD would be to grandfather existing customers for a period of time. Ms. Parenteau informed the MEPAB that in order to address the manual billing of the solar customers, it was suggested to grandfather customers for 5 years from installation before moving them to a new rate. Mr. Carlson commented that he is concerned about the loss of income to HMLD. He asked what other utilities are doing over the long-term. Mr. Seavey stated that many utilities are seeing declining sales. He also indicated that this trend may disappear as a result of electrification and EV sales. Mr. Rundstrom added that in the future more efficient ways to store energy such as batteries may be installed in the residential sector. He asked if this would complicate the matter. Mr. Seavey stated that many utilities are utilizing battery storage such as Sterling and that there exists the potential for utilities to develop programs to dispatch residential batteries during peak periods. Board members asked about the probability of customers getting off the distribution system. Mr. Seavey indicated that it is not likely to occur. Mr. Sullivan reminded the MEPAB that there are



forty municipal light plants in Massachusetts that are customer owned. He also indicated that MLPs do not report to their investors. Mr. Sullivan also indicated that it's the responsibility of the MEPAB to cognizant of the retiree who may not be able to afford the solar subsidization. Mr. Rundstrom stated that most people who install solar are not in that category and the MLP is also considering a low income rate for other customers. Mr. Shepherd stated that a solution needs to be found and perhaps a happy medium could be achieved. Mr. Sullivan stated that since it is anticipated that power supply expenses will be decreasing, a potential increase in distribution revenue could result in customers paying the same rate.

Mr. Shepherd solicited public comment. Mr. Dyer of Main Street in Holden asked why purchase power costs were decreasing in the next two years. Mr. Seavey commented that the Forward Capacity Markets are based on auctions held three years in advance and the result of recent auctions is a surplus of generation which decreases the price of capacity in the auction.

Mr. Mahoney asked the MEPAB if they have received the flyer and the mission of CHEF (Citizens of Holden's Energy Future) which is sustainability and affordability. He indicated that the current net metering rate has helped home owners make an investment in solar generation. He stated that \$31,000 is .2% of revenue. He also stated that the MLP should be part of change and not change the business model. Ms. Parenteau indicated that HMLD will be offering a solar rebate to potentially off-set any reductions in the model. HMLD has partnered with Department of Energy and Resources (DOER) where customer can receive a rebate from HMLD which will be matched by the state of Massachusetts.

Ms Dye of 39 Lovell road indicated that we are all part of small change in a big world. She emphasized that there needs to be change. She referenced electrification of buildings and transportation and the importance of greening up the grid. Mr. Rundstrom stated that he feels he is of very like minds however this discussion today is about funding the existing distribution system from the various classes of customers. Mr. Sullivan confirmed that the purpose of the COSS was to determine how to allocate the costs and run the business. Ms. Parenteau stated there will be discussion in future meetings about developing a Clean Energy Policy as well as reviewing the power supply portfolio. She also indicated that HMLD has invested in solar on the Mountview School, Senior Center, HMLD building and Recreation Department. She is in discussion with the Town regarding the option of installing solar on the new DPW building that was recently approved by Town vote. Ms. Lish commented that she feels the department is moving in the wrong direction. Mr. Sullivan reiterated that out of a \$14 million budget, the COSS is addressing \$4million.

Mr. Shepherd thanked the public for their comments. Mr. Seavey left the meeting at 7:41pm.

Operations Update

Mr. Tupper updated the MEPAB on the following projects:

- Continue framing new poles along Reservoir St for the upcoming re-conductoring project (estimated completion by end of summer)
- Continue re-conductoring Valley Hill, Terrie Ln and Greenwood Parkway
- Continue to remove old double poles throughout various areas in town



- Removal of deceased/dangerous trees at various locations in town from the tree wardens/DPW tree removal list.(Including very large tree at the library)
- ROW and road way /canopy trimming of Shrewsbury St
- Begin ROW South Main St., 3 phase from Newell Road to Adams Rd
- Awaiting EPA grant to help pay for the new truck 25(Service Bucket Truck)
- Continue to convert all Main St decorative lights to LED

Major Outages:

- June 11 at 5:16pm, Raven flew into Chaffins Substation causing the 68 South and 68 North breakers to operate causing a momentary loss of power
- June 14 7:07pm, a large tree limb came in contact with field and center phases on South Main Street A1 feeder causing both phases to burn down. Crews isolated the area and repaired the break. Power was restored just after 9pm.

Personal changes:

- 2nd Class Lineworker Jonathan Harris fell from truck and fractured collar bone
- Hired 1st class lineworker Brad Tervo
- Posted Groundman position for forestry division

Mr. Carlson asked Mr. Tupper if there were any plans for HMLD when the town is accessing the water pipes on Main Street. Mr. Tupper indicated that HMLD will at least be laying conduit while the street is opened up.

Ms. Parenteau updated the MEPAB on the Shave the Peak campaign. HMLD will be holding an informational evening on July 16 at 6:00pm at the Gale Library. She has reached out to the Senior Center and hoping to do a presentation the week of 6/24 or 7/8. She is also drafting a press release. Customers are able to sign up for a peak demand notification via email on HMLD's website. Ms. Lish suggested she post the information on Facebook. Mr. Sullivan suggested public TV as another means to communicate to our customers.

Ms. Parenteau also updated the MEPAB that she attending a hearing in Boston. MEAM is working on legislation on Greenhouse gas emissions. The bill is HB 2863 and is sponsored by Representative Golden and Golbi. It has 57 signatures from other members of the Massachusetts legislators. The bill sets goals of 7% in 2021, 40% by 2030, 60% by 2040 and 80% by 2050.

There being no further business, on a motion by Mr. Sullivan, seconded by Mr. Sendrowski, the meeting of the Municipal Electric Power Advisory Board was adjourned by consensus at approximately 7:52 pm.

Prepared by: Jane Parenteau, General Manager – HMLD

Approved: July 29, 2019