

*La Capra Associates*



# MEETING OF BELMONT MUNICIPAL LIGHT DEPARTMENT BOARD

*ELECTRIC RATE CHANGES*

**Presented by:**     **Lee Smith**  
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**Presented to:**     **BMLD Board**

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## **BMLD RATE DESIGN STUDY 2008**

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- Total amount of costs needed was determined collectively by BMLD management and La Capra Associates
- BMLD provided data on sales, and La Capra Associates determined overall rate increase needed to cover 2008 costs
- Study also determined how much it will cost to serve different customer classes
- Study also designed rates to collect needed revenues
- Rates designed to give customers an opportunity to reduce customer own costs and system total costs



**RATES CAN HELP REDUCE COSTS BY PROVIDING  
“CORRECT” PRICE SIGNALS**

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- Rates should inform customers that usage at the time of monthly peaks increases costs.
- Rates should inform customers that usage increases costs at the time of the New England peak
- Current rates do not do this
- New rates will provide better “price signals”
- Customers will be able to respond and reduce their bills



## **CHANGES TO CURRENT RATE DESIGNS**

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- Increasing block rates (*e.g., customers will pay more for usage above 1600 kWh per month in the summer*)
- Higher demand charges (charges for maximum monthly use) for commercial customers
- Higher demand charges in summer than in winter
- Demand meters and rates will be put on fairly large commercial customers who do not currently pay for their peak demand

## **THESE RATES ARE ONLY FIRST STEP**

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- Rates that really inform customers of the cost of use at different times (time-differentiated rates) will be even better
- Time differentiated rates enable customers to save by shifting and reducing their energy use
- Implementing these “load response” rates will require more sophisticated metering, monitoring of load, and billing



## **EFFECT OF RATE DESIGN CHANGES**

- Big summer residential users will pay more (\$\$ and %) of the increase than other users
- Customers can reduce bills by reducing summer use
- Commercial & industrial customers who put a heavy demand on system peak will pay for it
- Most commercial customers can reduce bills by reducing their peak load
- Municipal customers can also reduce bills by reducing peak load
- Larger Municipal B customers will save as they are moved to Municipal E



## **NEW RATES**

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- Next slides show what “bundled” rates will mean to various customer classes
- These rates assume each customer class pays full cost of serving them, except for low income residential class
- Final rates that appear on bills will actually split these same charges into charges for generation, transmission, and distribution components



## **LOW INCOME RESIDENTIAL CLASS**

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- Residential customers who qualify as low income by their eligibility for various programs are on a rate without a customer charge – and with a lower than average energy charge
- This treatment of low income rate is continued; the share of costs that they will not pay is collected from other non-municipal classes
- Low income customers' bills will increase by about 48%



## RESIDENTIAL RATE CHANGES *(without RS credit)*

Residential Rate	Changes to Charges			
	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Increase/ (Decrease)</u>	<u>% Increase/ (% Decrease)</u>
Customer Charge	\$7.99	\$10.00	\$2.01	25.2%
First block	\$0.11380	\$0.17417	\$0.06081	53.1%
Over 1600 kwhs summer month	\$0.11380	\$0.20417	\$0.20461	79.4%
<b>Low Income Rate</b>				
	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Increase/ (Decrease)</u>	<u>% Increase/ (% Decrease)</u>
Customer Charge	\$0.00	\$0.00	\$0.00	0.0%
First block	\$0.08500	\$0.12597	\$0.04097	48.2%
Over 1600 kwhs summer month	\$0.08500	\$0.15597	\$0.15597	83.5%



## IMPACTS OF THIS RATE ON RESIDENTIAL CUSTOMERS

<u>Regular rate</u>	Monthly kwhs	Approximate # customers Impacted	Changes to Bills	
			Monthly \$ increase	Monthly % increase
any month	700	1500	\$44.27	50.5%
winter month	2000	200	\$122.76	52.1%
summer month	2000	300	\$134.76	57.2%
<u>Low income residential</u>				
any month	300	100	\$12.29	48.2%
any month	700	40	\$28.68	48.2%
summer month	2000	2	\$93.94	55.3%



## SMALL COMMERCIAL BILL IMPACTS

	monthly kwhs	winter monthly bill	winter % increase	summer % increase
<b><u>Rate B</u></b>				
Without demand meter	2000	\$397	53.2%	53.2%
Without demand meter	6000	\$1,162	53.6%	53.6%
Low load factor	2000	\$398	53.4%	60.4%
High load factor	2000	\$358	37.9%	41.4%
Low load factor	10000	\$1,930	53.8%	61.0%
High load factor	10000	\$1,728	37.8%	41.3%
<b><u>Muni Rate B</u></b>				
Low load factor	2000	\$382	89.8%	89.8%
Low load factor	10000	\$1,902	97.2%	106.5%
High load factor	10000	\$1,700	76.3%	80.9%



## LARGE COMMERCIAL / INDUSTRIAL BILL IMPACTS

<u>Rate E</u>	monthly kwhs	winter bill	winter % increase	summer % increase
Low load factor	20000	\$4,178	50.1%	56.5%
High load factor	20000	\$3,327	48.1%	52.1%
Low load factor	60000	\$12,174	51.1%	57.7%
High load factor	60000	\$9,620	49.2%	53.4%
<b><u>Muni Rate E</u></b>				
Low load factor	60000	\$9,494	56.7%	65.5%
High load factor	60000	\$8,284	53.0%	57.0%
<b><u>Rate F</u></b>				
Low load factor	10000	\$2,139	64.3%	71.5%
High load factor	10000	\$1,691	60.1%	64.7%
Low load factor	60000	\$12,636	64.6%	71.9%
High load factor	60000	\$9,948	60.4%	65.1%

## **ALTERNATIVES TO PROPOSED RATES**

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- The rates already presented represent each class (except low income) paying cost of serving them (Option 1)
- This has been recommended by Municipal Light Advisory Board
- Another option is that municipal customers be excused from paying any part of BMLD “earnings” – primarily payment to the Town – (Option 2)
- Another option is that increase to municipal customers is kept at the system average increase (Option 3)

## IMPACT OF VARIOUS OPTIONS

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- Rates resulting from Option 1 already shown
- Option 2 will mean that municipal customers will pay \$50,000 less
- Option 2 will mean residential and commercial rates will be somewhat higher than rates that were shown
- Option 3 will mean that municipal customers will pay \$368,000 less and other customers will pay more as a result
- Option 3 conflicts with ratemaking statute that says customers should pay cost of serving them

## DOLLAR INCREASES RESULTING FROM 3 OPTIONS

*All in thousands of dollars*

	<u>Current Revenue</u>	<u>OPTION 1 Increase</u>	<u>OPTION 2 Increase</u>	<u>OPTION 3 Increase</u>
Rate A- Residential	\$9,340	\$4,605	\$4,636	\$4,839
Rate LI- Low Income	\$116	\$54	\$54	\$54
Rate B- Commercial	\$2,308	\$1,162	\$1,170	\$1,220
Power Rate E	\$2,787	\$1,351	\$1,361	\$1,421
Rate F- Commercial	\$257	\$152	\$153	\$159
Street Lighting	\$225	\$364	\$349	\$116
Rate MB - Muni	\$317	\$279	\$260	\$164
Rate ME- Large Muni	\$274	\$147	\$131	\$142
<b>Total Company</b>	<b>\$15,625</b>	<b>\$8,114</b>	<b>\$8,114</b>	<b>\$8,114</b>
<b>Total increase to municipal customers</b>		<b>\$790</b>	<b>\$740</b>	<b>\$422</b>

*Option 1 - all pay costs except Low Income - BMLAB recommendation*

Option 2 - Municipal customers don't pay any of BMLD's earnings

Option 3 - Municipal increase set at system average %age increase

**PERCENTAGE INCREASES RESULTING FROM 3 OPTIONS**

	<b><u>OPTION 1</u></b> <b><u>Increase</u></b>	<b><u>OPTION 2</u></b> <b><u>Increase</u></b>	<b><u>OPTION 3</u></b> <b><u>Increase</u></b>
<b>Rate A- Residential</b>	<b>49%</b>	<b>50%</b>	<b>52%</b>
<b>Rate LI- Low Income</b>	<b>46%</b>	<b>46%</b>	<b>46%</b>
<b>Rate B- Commercial</b>	<b>50%</b>	<b>51%</b>	<b>53%</b>
<b>Power Rate E</b>	<b>48%</b>	<b>49%</b>	<b>51%</b>
<b>Rate F- Commercial</b>	<b>59%</b>	<b>60%</b>	<b>62%</b>
<b>Street Lighting</b>	<b>162%</b>	<b>155%</b>	<b>46%</b>
<b>Rate MB - Muni</b>	<b>88%</b>	<b>82%</b>	<b>52%</b>
<b>Rate ME- Large Muni</b>	<b>54%</b>	<b>48%</b>	<b>52%</b>
<b>Total Company</b>	<b>52%</b>	<b>52%</b>	<b>52%</b>

***Option 1 - all pay costs except Low Income - BMLAB recommendation***

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## **HELP FROM THE RATE STABILIZATION FUND**

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- BMLD had a Rate Stabilization fund that was established to deal with variations in power costs – particularly temporary ones
- A fund will still be needed in case there are sudden increases in costs which must be paid before PPTA can increase revenues
- There is more in the current fund than will be needed
- The fund can be used to benefit all customers in ways that provide some relief from power costs

## **USES OF EXCESS IN RATE STABILIZATION FUND**

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- Cannot reduce Basic Rate increases because when fund is used up, rates would be too low to collect costs
- Can reduce rates through a credit for 6 to 12 months for all customers
- Can use to help reduce power costs, as in installing advanced metering system



## **IMMEDIATE NEXT STEPS**

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- Light Board (Selectmen) must approve rates
- New Rates will be filed at the state Department of Public Utilities
- New Rates will go into effect March 1, 2008
- The Purchased Power and Transmission Adjustor will become zero
- Establish Rate Stabilization Fund credit?



## **RATE STABILIZATION FUND CREDIT**

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- A credit of \$.006 per kWh would return \$800,000 to customers over the next 12 months;
- Instead of an average increase of \$.063 per kWh, customers would experience an average increase of \$.057.
- Average increase would be 5% less than resulting from basic rate change.
- Or credit of about \$.0075 would return this amount during remainder of 2008
- Would save municipal customers about \$50,000

## End of Presentation



*Thanks*

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