

Time-of-Use Rates Among Massachusetts MLPs

August 19, 2020
Light Board Advisory Committee Meeting

Highlights

- **MA MLPs Researched: 38/41**
- **Number MLPs with a TOUR available to an entire rate class: 11**

	Residential	Commercial	Industrial	Municipal
Count of MLPs w TOU by Customer Category:	4	5	6	3

Chicopee, Concord, Devens, Groton, Littleton, North Attleboro, Peabody, Reading, Sterling, Templeton, Wellesley

Residential TOU Rates

...Of the 11 with TOU, Number Residential Applications: 4

- Concord, Groton, Reading, Sterling
- Details on rates to come

Also Among these 11:

- Chicopee: TOUR for residential electric heating and water heating
- Wellesley: seasonal Generation Charge on standard resi rate
- Sterling: “Residential Controlled Service Rate” for special load control applications

Other Noteworthy Rates

- **Number of other MLPs (not included in count of 11) with a seasonal, peak/off-peak, or other time-sensitive component to a rate: 4**
 - Hingham: Off-peak R water heating rate
 - Marblehead: Off-peak R & C water heating rates
 - South Hadley: Seasonal R electric heat rate
 - Westfield: Generation Charge based on “supplier costs to WG&E”

- **# Residential Meters: 6,941**
- **Rate Details: Opt-In Residential TOU**
 - Customer Charge: \$12.00/mo. (no change from standard rate)
 - Time-Variable Charge: Capacity, Transmission, & Distribution
 - On-Peak- \$0.14683 kWh / Off-Peak- \$0.03088 kWh
 - Hours: On-Peak- 12 PM-10 PM, M-F / Off-Peak- 10 PM-12 PM, M-F & all weekend hours
 - Generation: \$0.07418 all kWh
- **Other info per CMLP**: customers enrolled = 50, less than 1% of resi base. Most popular among EV customers and has been effective at shifting charging. Not very successful at lowering bills for many given currently low uptake. CMLP planning a move to opt-out TOU for all residents.

- **# Residential Meters: 4,407**
- **Rate Details: Opt-In Residential TOU**

Customer Charge: \$4.25/mo. (no change from standard rate)

Time-Variable Charge: Generation

<1000 kWh: Off-Peak- \$0.0481 kWh / Peak- \$0.0754 kWh / Critical Peak- \$0.0982 kWh

>1000 kWh: Off-Peak: \$0.0516 kWh / Peak- \$0.0804 kWh / Critical Peak- \$0.1044 kWh

Hours: Off-Peak- 11 PM-7 AM/ Peak- 7 AM-11AM & 7 PM-11 PM/ “Critical” Peak- 11 AM-7 PM

Transmission: \$0.0237 all kWh

Distribution: \$0.0267 all kWh

Other info per GELD: Ongoing pilot to test new TOU rate. Total TOU residential enrollees: 80, ~2% of resi base, conducting “shadow billing” with 65 other high-peaking residents, GELD considering mandatory TOU

Reading Municipal Light Department

- **# Residential Meters: 27,025**
- **Rate Details: Opt-In Resi TOU**

Customer Charge: \$8.00 (+\$2.88 from standard rate)

Time Variable Charge: Generation/Fuel – adjusted monthly, if needed

Residential Time-of-Use:

	August 2020	July 2020	June 2020	May 2020
On-Peak Fuel Charge	\$0.08935	\$0.08935	\$0.08685	\$0.08685
Off-Peak Fuel Charge	\$0.02587	\$0.02587	\$0.02337	\$0.02337

Hours: On-Peak- 12 PM-7 PM, M-F / Off-Peak- 7 PM-12 PM, M-F;
All Hours Weekends; and designated holidays

Distribution Energy: \$0.0422 all kWh

Sterling Municipal Light Department (SMLD)

- **# Residential Meters: 3,472**
- **Rate Details: Resi & Farm Opt-In**

Customer Charge: \$4.00 (no change from standard rate)

Bundled Rate (TBC):

\$0.1310 for first on-peak 550 kWh

\$0.3000 for on-peak 550+ kWh

\$0.0120 for all off-peak kWh

Hours: On-peak- 7 AM-11 PM / Off-peak- 11:01 PM-6:59 AM

Outstanding Questions

- Is TOU our best solution? What is the overall benefit of TOU to BL & ratepayers? What are the potential negatives? What can we achieve through TOU that we can't through programming?
- Opt-in or Opt-Out Model? Mandatory vs Voluntary? → informed by long-term objectives
- Do we pilot with a small group? Who and how long?
- Modeling assumptions for elasticity
- What are **acceptable** customer impacts? What impacts would be immediately **intolerable**?
- What type of on-peak/off-peak differential will be both palatable for customers and effective at driving change?
- Can we consider TOU for commercial customers interested in electrification?
- Do we want to develop specific goals for peak reduction? Overall kWh savings?

Potential Next Steps- TOU

- More in-depth research with local MLPs & others like SMUD, Fort Collins
- Determine rate scenarios for UFS
- Presentation by UFS to LBAC
- Strategic Plan to MLB (draft report sent 7/13/20) → do our TOU efforts coalesce?
- BL recommendations to MLB – why TOU? Other possible rates?