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Public Forum:
Take Control of Your Electric Bill With Time of Use Rates

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July 26, 2021

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Agenda

- What Are Time of Use Rates?
- Why Implement Them?
- What Has Been Done So Far?
  - Goals
  - Proposals
  - Final Recommendation
- What Does It Mean For You?
- Next Steps
- Q&A

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What Are Time of Use Rates?

- Time of use (TOU) rates use a more dynamic structure that incentivizes customers to use electricity when the cost of generating it is lowest and disincentives electricity use when generation costs are highest.

- Also called Time of Day Rates

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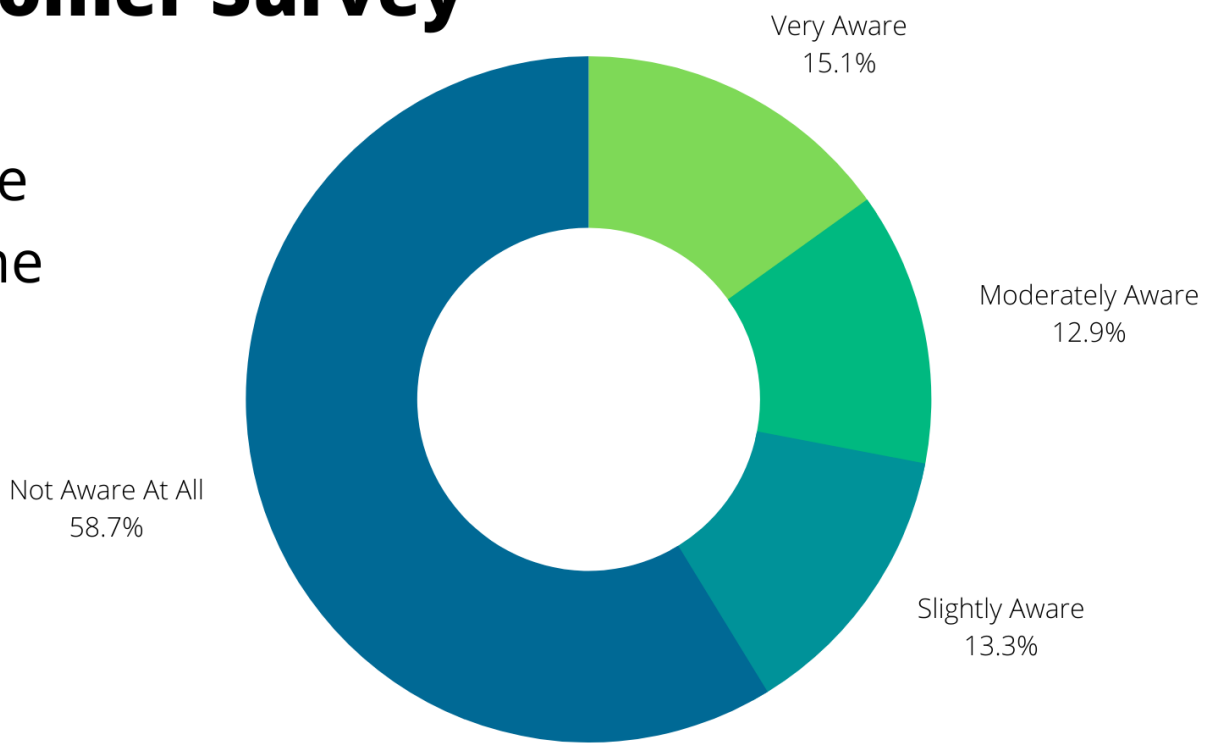
Little Awareness…

2021 Customer Survey

Q: How aware are you of time of use program?



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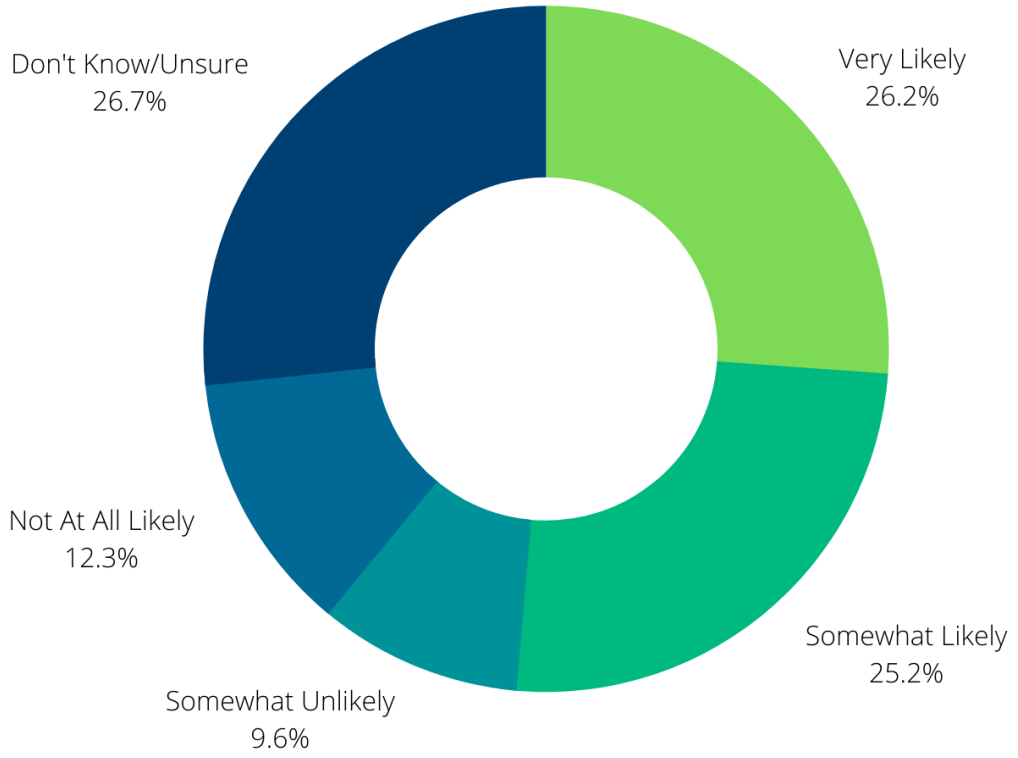
…But Much Potential Interest

2021 Customer Survey

Q: How likely might you be to opt into a time of use program?



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Why TOU Rates?

TOU Rates Do Important Things:

- Lower costs for customers who are able to shift their usage to off-peak times;
- Lower costs for Belmont Light by reducing peak supply costs;
- Create more opportunity for a greener power supply
  - Energy is more likely to come from the dirtiest fossil fuel sources during on-peak times.
- Support strategic electrification

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Lower Costs for Customers

- Designed to be revenue neutral for Belmont Light
  - Minimal impact for an average residential customer with no behavioral change
- Residential Rate A Customers with 20% load shifting year-round - ~5% bill savings per month
  - Average customer could save $73 per year with this load shifting
- Belmont Light and LBAC have studied impacts on all different customer groups (e.g. low income rate, high usage, EV drivers, heat pump owners)

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Lower Costs for Belmont Light

- Belmont Light costs based on transmission and capacity charges
  - Capacity – our load during annual regional peak hour
  - Transmission – our load during monthly network peak hours
- $124/kW savings during annual capacity peak
- $10.27/kW savings during monthly transmission peak
- 1 megawatt of avoided peak load = **~$134,000 savings for Belmont Light**

  Based on 2020 actual power supply costs

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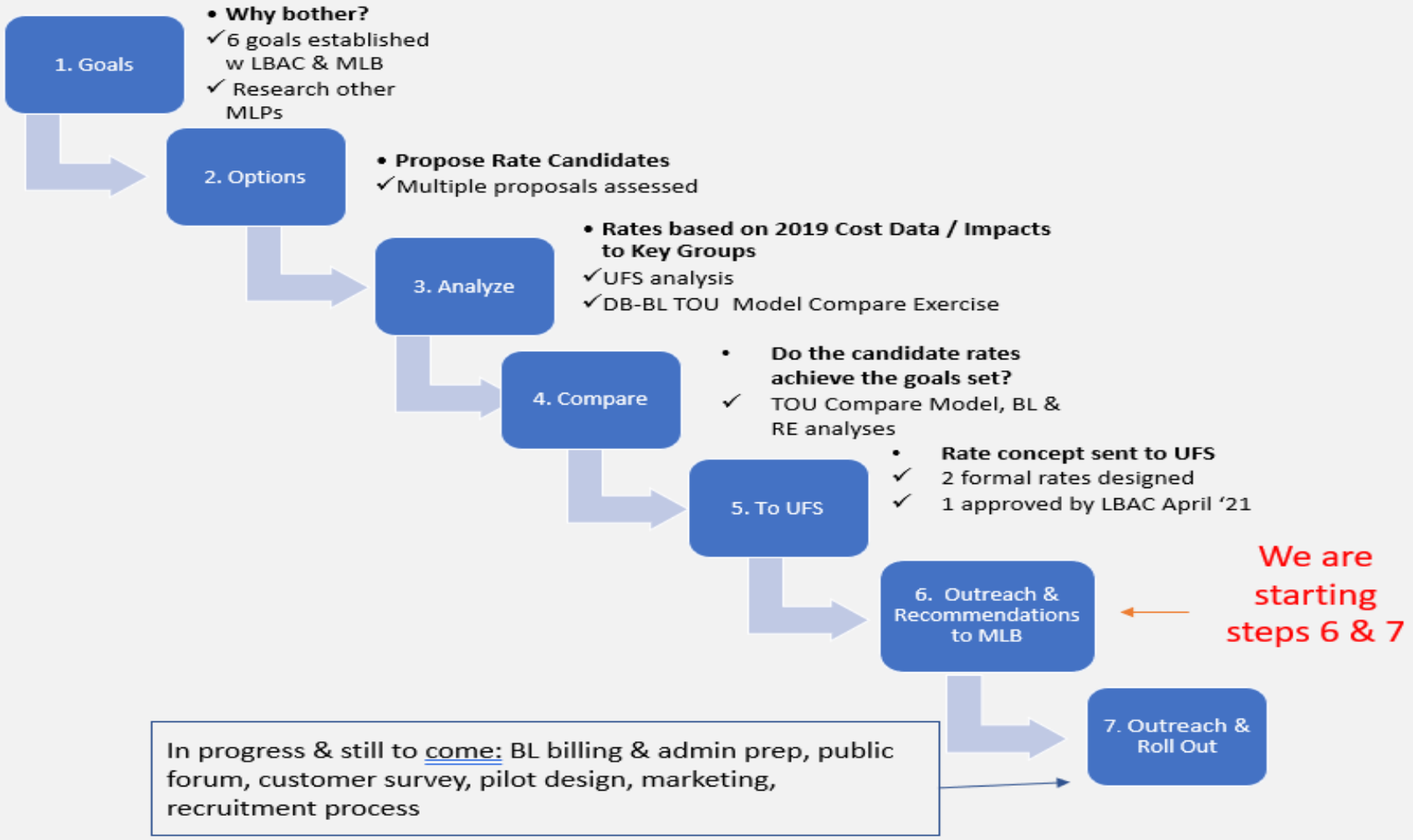
Progress So Far



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Goals of TOU Rates

6 Goals Were Identified by Belmont Light and the Light Board Advisory Committee, approved by Light Board:

1. Align customer savings with savings for Belmont Light
2. Support strategic electrification
3. Protect low-income customers
4. Support energy efficiency efforts & solar initiatives
5. Ensure Belmont Light revenue sufficiency & stability
6. Provide for easy implementation

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What We Learned from Other MLPs

1. Keep It Simple!
2. A Pilot Is Crucial
3. Rate Design is Utility-Specific
4. Communicate, Communicate, Communicate!

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RMLD

CONCORD MUNICIPAL LIGHT PLANT

Groton Electric Light

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Multiple Proposals Assessed

- ~~9-Hour with Critical Peak~~
- ~~9-Hour Year-Round Peak~~
- ~~6-Hour Summer Peak Only~~
- 6 Hour Summer & 4 Hour Winter Peak

Proposal Finalist(s)

Season	Hours	Current FLAT Rate ($/kWh)	Scenario 1A [Weekend & Holidays Inc.] ($/kWh)*	Scenario 1B [Weekend & Holidays Exc.] ($/kWh)*
Summer On-Peak	Jun-Sept [1 –7 pm]	$0.193	$0.457	$0.587
Summer Off-Peak	Jun-Sept [7 – 1 pm]		$0.133	$0.136
Winter On-Peak	Oct-May [4 – 8 pm]		$0.299	$0.363
Winter Off-Peak	Oct-May [8 – 4 pm]		$0.138	$0.142

*Rounded to nearest thousandth

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Impacts on Average Residential Customer

Summer Load Shift

Load Shift	0%	1%	2%	3%	4%	5%
0%	$0	-$3	-$5	-$7	-$9	-$12
1%	-$2	-$4	-$6	-$8	-$11	-$13
2%	-$3	-$5	-$8	-$10	-$12	-$14
3%	-$5	-$7	-$9	-$11	-$13	-$16
4%	-$6	-$8	-$10	-$13	-$15	-$17
5%	-$7	-$10	-$12	-$14	-$16	-$18

Winter Load Shift

Load Shift	10%	20%	25%	50%	75%	100%
10%	-$36	-$59	-$70	-$126	-$182	-$238
20%	-$50	-$73	-$84	-$140	-$196	-$252
25%	-$57	-$80	-$91	-$147	-$203	-$259
50%	-$92	-$114	-$126	-$182	-$238	-$293
75%	-$127	-$149	-$160	-$216	-$272	-$328
100%	-$162	-$184	-$195	-$251	-$307	-$363

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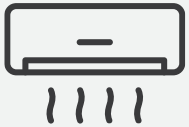
How to Reduce/Shift

HOURLY USAGE
(Summer Only; 1-7 p.m.)

Water Heater (4.5 kWh)
Summer Peak: $2.06
Summer Off-Peak: $0.60
Savings: $1.46

EV Charger (6.6 kWh)
Summer Peak: $3.02
Summer Off-Peak: $0.878
Savings: $2.14

Clothes Dryer (3.75 kWh)
Summer Peak: $1.71
Summer Off-Peak: $0.50
Savings: $1.21



Central AC (3.0 kWh)
Summer Peak: $1.37
Summer Off-Peak: $0.40
Savings: $0.97

Dish Washer (0.9 kWh)
Summer Peak: $0.41
Summer Off-Peak: $0.12
Savings: $0.29

Television (0.15 kWh)
Summer Peak: $0.07
Summer Off-Peak: $0.02
Savings: $0.05

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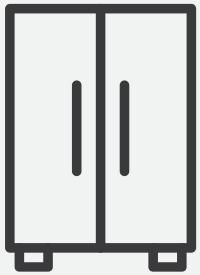
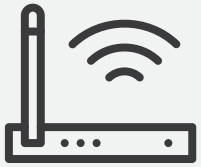
How to Reduce/Shift

ITEMS WITH ALL-DAY USAGE



Refrigerator (1.8 kWh per day)
Summer Day: **$0.39**
Non-Summer Day: **$0.30**
Yearly Cost to Run: **$119.09**
Current Rate A Yearly Cost: **$126.91**
Yearly Savings from TOU: **$7.82**



Wi-Fi Router (.14 kWh per day)
Summer Day: **$0.03**
Non-Summer Day: **$0.02**
Yearly Cost to Run: **$9.53**
Current Rate A Yearly Cost: **$9.87**
Yearly Savings from TOU: **$0.34**

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Next Steps

- Feedback from You
  - Feedback form on website
  - Customer survey to come
- Public Forum #2 – August 2021
  - Pilot Program Info Session
- Pilot Program – Begins October 2021

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Questions?

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Contact Us

www.BelmontLight.com

www.BelmontLight.com/time-of-use-feedback-form/

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