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AGENDA

REGULAR SESSION

READING MUNICIPAL LIGHT DEPARTMENT CITIZENS' ADVISORY BOARD (CAB) MEETING

MONDAY, APRIL 30, 2018

6:30 pm

230 Ash Street, Winfred Spurr AV Room
Reading, MA 01867

1. Call Meeting to Order – G. Hooper, Chair
2. Approval of Minutes – G. Hooper, Chair

Suggested Motion: Move that the Citizens' Advisory Board approve the Minutes of the February 28, 2018, meeting as written.

3. FY19 Budget Discussion – G. Hooper, Chair

Suggested Motion: Move that the Citizens' Advisory Board recommend to the RMLD Board of Commissioners the adoption of rates MDPU numbers 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, and 290, dated to be effective July 1, 2018, on the recommendation of the General Manager.

RATE	TARIFF #
Residential Schedule A	MDPU #279
Residential Time-of-Use Schedule A2	MDPU #280
Residential Schedule RW	MDPU #281
Commercial Schedule C	MDPU #282
Industrial Time-of-Use Schedule I	MDPU #283
School Schedule SCH	MDPU #284
Cooperative Resale Schedule G	MDPU #285
Residential Customer Owned Generation	MDPU #286
Commercial Customer Owned Generation	MDPU #287
Hazardous Material	MDPU #288
Purchase Power Capacity and Transmission	MDPU #289
Coop Resale Schedule G Rate	MDPU #290

4. Scheduling: Upcoming CAB Meetings and Coverage for Commissioners Meetings – G. Hooper, Chair

5. Adjournment – G. Hooper, Chair

This Agenda has been prepared in advance and does not necessarily include all matters which may be taken up at this meeting.

Attachment #1

Agenda Item 2: Approval of Minutes



Town of Reading Meeting Minutes

Board - Committee - Commission - Council:

RMLD Citizens Advisory Board

Date: 2018-02-28

Time: 6:30 PM

Building: Reading Municipal Light Building

Location: Winfred Spurr Audio Visual Room

Address: 230 Ash Street

Session: Open Session

Purpose: General Business

Version: Draft

Attendees: **Members - Present:**

George Hooper, Chair (Wilmington); Jason Small, Vice Chair (North Reading); Dennis Kelley, Secretary (Wilmington); Vivek Soni (Lynnfield)

Members - Not Present:

Neil Cohen (Reading)

Others Present:

Phillip Pacino, Board of Commissioners
Hamid Jaffari, Wendy Markiewicz, Tom Ollila, Kathleen Rybak, Bill Seldon

Minutes Respectfully Submitted By: Dennis Kelley, Secretary

Topics of Discussion:

1. Call Meeting to Order – G. Hooper, Chair

Chair Hooper called the meeting of the Citizens' Advisory Board to order at 6:30 PM and noted that the meeting was being audio recorded.

2. Approval of Minutes – G. Hooper, Chair

Materials: Draft Minutes from November 15 and January 17, 2017, meetings.

Mr. Kelley made a motion that the Citizens' Advisory Board approve the minutes of the November 15, 2017, meeting and January 17, 2018, meeting both Regular and Executive Sessions, as written, seconded by Mr. Soni. Hearing no further discussion, **motion carried 4:0:1** (4 in favor, 0 opposed, 1 absent).

3. General Manager's Update – H. Jaffari, Director of Engineering & Operations

Handout: LED Street Light Program

Mr. Jaffari represented Ms. O'Brien. Mr. Jaffari reviewed the handout outlining the progress to date on the LED Street Light Program. RMLD is in the final year of the three-year program; the project is scheduled for completion by June 30th. Total spending for this project is estimated to be \$2.2m. Mr. Jaffari noted that staff would provide an analysis at the next meeting of dollar (including maintenance) and kilowatt hour savings.

4. Financial Report – FY18 Q2 – W. Markiewicz, Director of Business, Finance & Technology

Materials: Financial Reports/Graphs for period ending December 31, 2017

Ms. Markiewicz reviewed the Financials for Q2 (ending December 31, 2017).

- Statement of Net Assets shows that RMLD is in a strong cash position. Receivables are 93.8% current. Capital assets at \$76.6m (vs. \$72.9 in FY17) shows that we are

making capital improvements. Account Receivables is up approximately \$1.1m versus Accounts Payable, which reflects a timing difference.

- Schedule of Cash and Investments (page 2) outlines unrestricted versus restricted cash funds. Ms. Markiewicz noted while RMLD has a strong cash position, a conservative approach to cash management would call for three months of operating cash on hand at all times; with a \$91.5m annual budget, that would be approximately \$22.8m. RMLD currently has \$16m in operating cash, which is below the target. Ms. Markiewicz reported that RMLD moved \$1.2m at the end of December into the Construction Fund knowing that there were some unforeseen capital projects that were going to be added over the years; the Depreciation Fund and Construction Fund is what funds the Capital Projects.
- Reconciliation of Capital Funds (page 3) shows the balance available to fund capital projects, how much interest we've made, and the monthly depreciation transfer out of the operating fund into the depreciation fund.
- Statement of Revenues, Expenses and Charges in Fund Net Assets (page 4) is a year-to-date snapshot of FY18 versus FY17. There is nothing significant to note on this report. Ms. Markiewicz noted (following up to a question raised at the last financial update) that Maintenance of Line Transformers is a reserve for any type of hazardous waste or oil spills. Chair Hooper asked if there was any environmental impact with any of the spills. Mr. Jaffari noted that since 2014, we have spent approximately \$560k for clean-up due to lack of maintenance/inspections over the years. The transformer replacement program is addressing this issue. To the best of our knowledge all PCB transformers have been replaced.
- Statement of Budgeted Revenues, Expenses and Changes in Fund Net Assets (page 6) shows that Operating and Maintenance expenses are under budget. However, we are slightly over budget overall, primarily due to the fluctuation in power expenses and how we recoup that month to month.

Ms. Markiewicz then reviewed the graphs which reflect the financial statements. The Base Revenue and KWH Sold by Month shows that both revenue and kwh sales are decreasing, which is consistent with what had been predicted. Ms. Markiewicz noted that there was a spike in December which reflects an increase due to heating degree days. The group discussed the impact of both weather and energy efficiency measures on kwh sales.

5. Update on North Reading Substation Energy Storage Project – T. Ollila, Integrated Resources Engineer
Presentation Slides: North Reading Substation Energy Storage Project Update for the CAB

Mr. Ollila began his presentation with a review of the efforts of the Integrated Resources Division (IRD) focused on demand reduction (Slide 2). RMLD has received a three-year, \$1m grant from the State DOER to build a five-megawatt energy storage system at Station 3 in North Reading (Slide 4). RMLD will partner with NextEra who will design, purchase, and install the unit. The goal is to have the project up and running by the end of this calendar year. RMLD will purchase the out-put of the unit through an agreement similar to a purchase power agreement. Once contract documents have been developed, they will be presented for consideration to the CAB and Board of Commissioners. This project builds on RMLD's efforts to diversify its portfolio of options to reduce peak demand. Slide 5 includes pictures of similar energy storage units.

6. Payments to the Towns & Town of Reading Request – H. Jaffari, Director of Engineering & Operations

Chair Hooper noted that he and Mr. Cohen sit on the Subcommittee looking at the payment (return on investment) to the Town of Reading; Mr. Pacino chairs this

Subcommittee. This issue has become a bit controversial, having been raised at a recent Reading Selectmen meeting and at the February 22nd Board of Commissioners meeting. Chair Hooper requested an update for all CAB members. Mr. Jaffari reported that staff has been meeting to develop proposals, which will be submitted to Mr. Pacino, for consideration at the March 12th Subcommittee meeting. Mr. Pacino noted that it is his hope that the final proposal will benefit all the towns.

Mr. Pacino reported that an additional Reading Selectman has been added to the subcommittee, which includes the two CAB members, two RMLD Commissioners, and the two members of the Reading Board of Selectmen (Mr. Ensminger and Mr. Arena). One Reading Finance Committee member will serve as a liaison on the Committee. However, Mr. Pacino noted that the meeting is a posted public meeting.

Once the Subcommittee has agreed on a recommendation, it will be presented to both the Board of Commissioners and the CAB for consideration, before being forwarded to the Town. Chair Hooper noted that the CAB will look at what is in the best interest of all the communities and the RMLD. All communities are dealing with tax burdens; he does not want to see this payment used as a tax vessel, or see an impact on RMLD that affects any of its capital improvement projects or maintenance.

Mr. Pacino noted that each of the Commissioners will be meeting individually with the General Manager to review the numbers, and invited any CAB member to do the same. Also, the Commission is looking at moving to a calendar fiscal year, to be consistent with the Department of Public Utilities (DPU). This will result in a cost savings of approximately \$20-30k annually by eliminating the need to duplicate financial reporting based on two different reporting periods (annual vs. fiscal year).

7. Next Meeting – G. Hooper, Chair

Current meetings dates are set through April (March 21, April 11, and April 18). Additional future meeting dates were set as follows: May 16, June 20, July 18 (tentative), August 15, September 19, October 17, November 14, and December 19. The Capital Budget will be presented on April 11 in Lynnfield (tentatively), and the Operating Budget will be presented on April 18. Mr. Small will cover the March 15 Commissioners meeting, and Mr. Kelley the April 19 meeting. A schedule for CAB coverage for future BOC meetings will be developed.

Mr. Kelley noted that he would like to upgrade EMS at the Wilmington Middle School in support of peak management and requested RMLD install smart metering at this location. Mr. Ollila agreed to follow-up. Mr. Kelley asked about available residential audit programs. Mr. Ollila noted RMLD does offer residential audit programs, which are available through the RMLD website.

8. Adjournment – G. Hooper, Chair

Mr. Kelley made a motion to adjourn the Citizens' Advisory Board meeting, seconded by Mr. Small. Hearing no further discussion **motion carried 4:0:1** (4 in favor, 0 opposed, 1 absent).

The Citizens' Advisory Board Meeting adjourned at 7:39 PM.

As approved on _____

LED Street Light Program

Full System-wide Implementation Over Three Years (FY16-FY18)

7,050 LED Light Fixtures Installed through February 18, 2018

	<u>FY15*</u>	<u>FY 16</u>	<u>FY 17</u>	<u>FY 18 YTD</u>	<u>Total</u>	<u>Remaining</u>
• Lynnfield	41	299	277	286	903	complete
• North Reading	62	581	535	489	1,667	298
• Reading	114	961	741	378	2,194	205
• Wilmington	83	980	704	519	2,286	649
Total	300	2,821	2,257	1,672	7,050	1,152

*2015 – Project Pilot Year

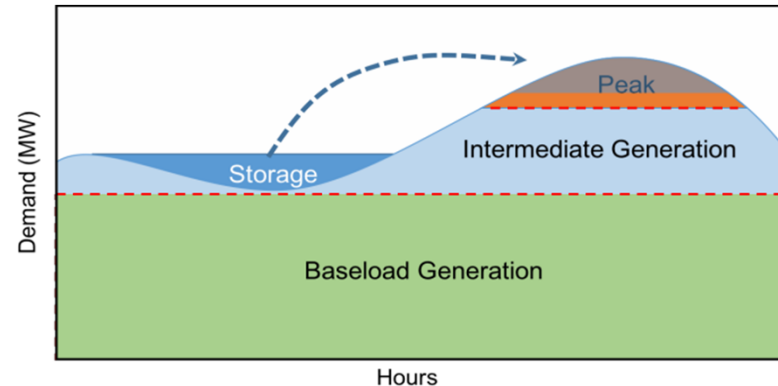
North Reading Substation Energy Storage Project Update for the CAB



Tom Ollila, Integrated Resource Engineer
February 28, 2018

Demand Management Focus

Capacity and Transmission Fees have been the primary driver of electric rate increases over the past few years and are forecast to continue to increase. Since this is one area that RMLD can impact, many of our recent efforts have aimed to shift our load away from critical peak hours.



Key RMLD Efforts to Manage Demand:

- Peak Demand Reduction (PDR) Program
 - ✓ Load Shedding/Demand Reduction “shared savings” program for our largest ~50 Commercial Customers
- Peak Shaving Distributed Generation
 - ✓ Installed 2.5 MW Natural Gas Fueled engine generator at our North Reading Substation
 - ✓ ~6 MW Solar PV Generation in territory, including Community Shared Solar
- Residential “Shred the Peak” Program
 - ✓ Forecast & notification of expected summer peak hours to educate and encourage voluntary residential participation in DR efforts
- Two ACES Grant Applications
 - ✓ **Energy Storage offers potential to significantly benefit load shifting efforts**
 - ✓ RMLD submitted two applications for ES Projects

Peak Shaving Generator

- ✓ This summer RMLD installed a 2.5 MW Natural Gas Fueled Engine Generator at our North Reading substation to provide peak shaving services
- ✓ Even though it will only be operated <200 hrs/year, it is estimated that it will pay for itself within 6 or 7 years

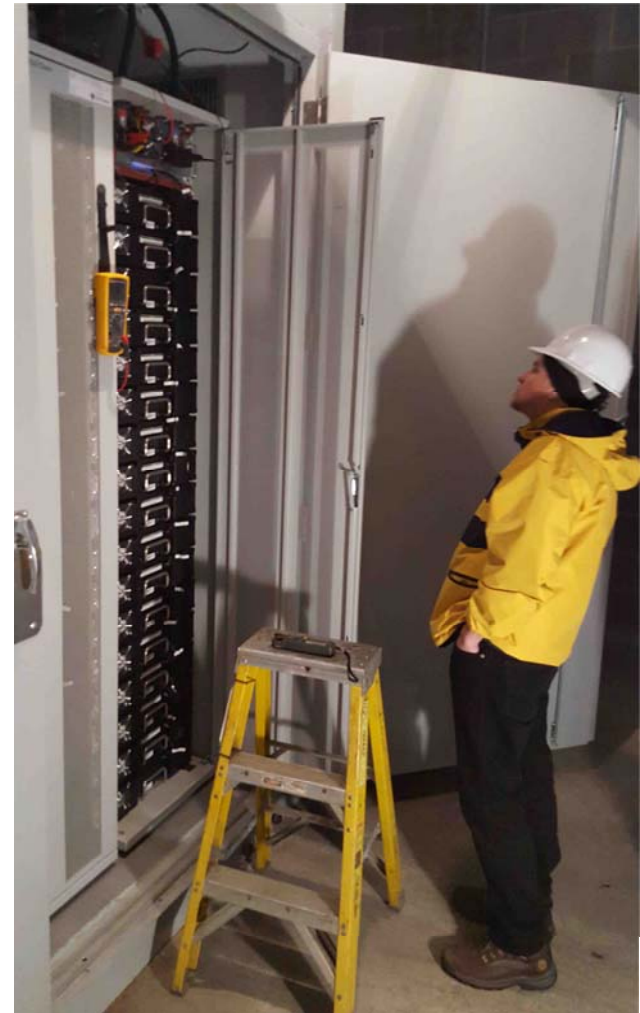


RMLD North Reading Substation Energy Storage Project

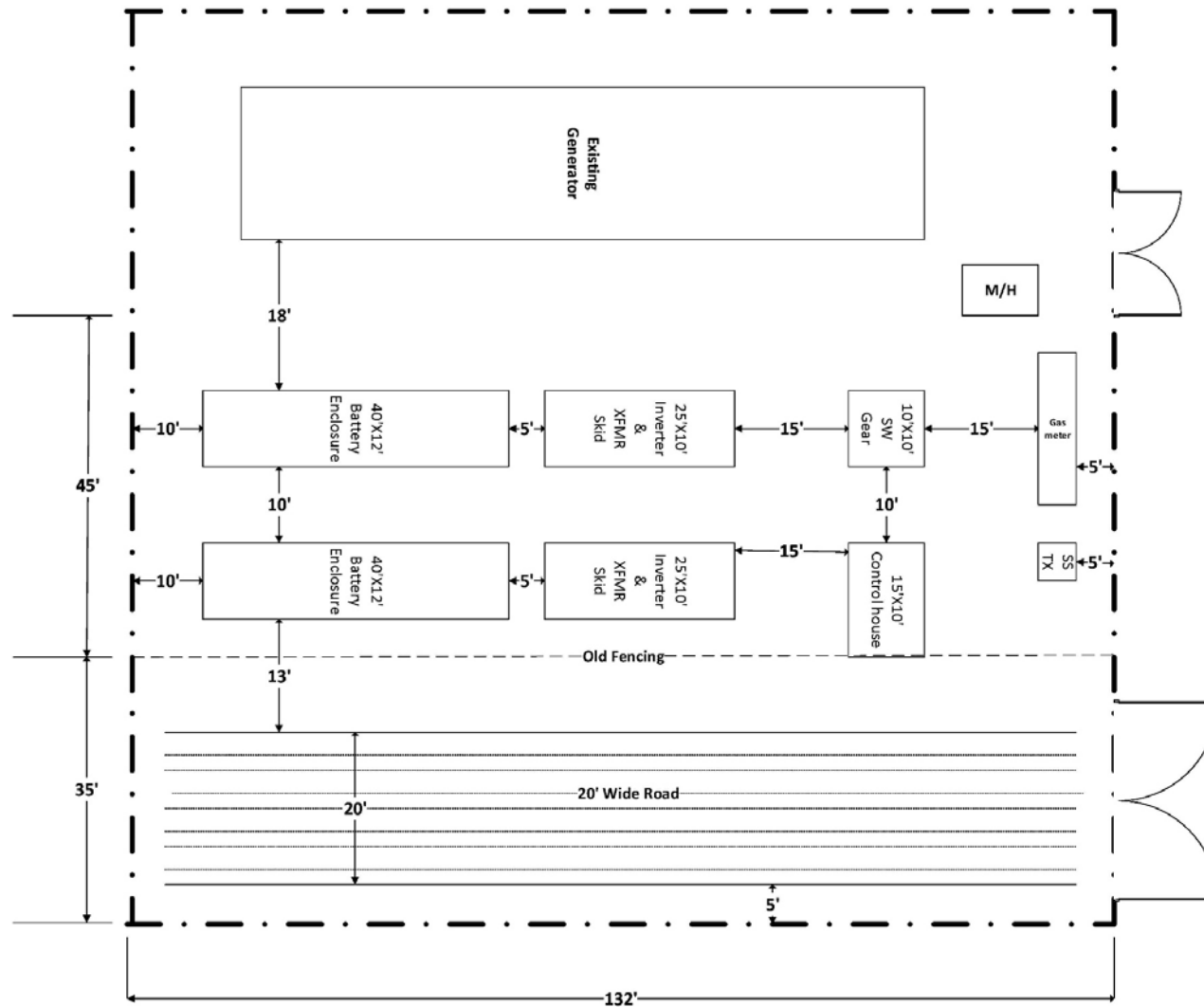
- ✓ RMLD awarded 3 year, \$1 Million grant from Mass Dept of Energy Resources (DOER) to install a 5 MW (10 MWh) grid scale ES system at our North Reading substation to provide peak shaving services
- ✓ Proposed as a “Pay for Performance Contract” model, where RMLD would pay the supplier a defined \$/kW-month amount based on nameplate system rating for a 20 year term
- ✓ In conjunction with a co-located natural gas fueled 2.5 MW generator, the ES system could also provide “black start” functionality during extended (multiple day) grid outages and support a MicroGrid made up of focused, critical loads such as RMLD’s emergency remote command center, etc.
- ✓ Project Team has been formed and is at work
- ✓ Project contracts, license agreements, System Impact Study, etc. are now underway or in negotiations



RMLD North Reading Substation Energy Storage Project



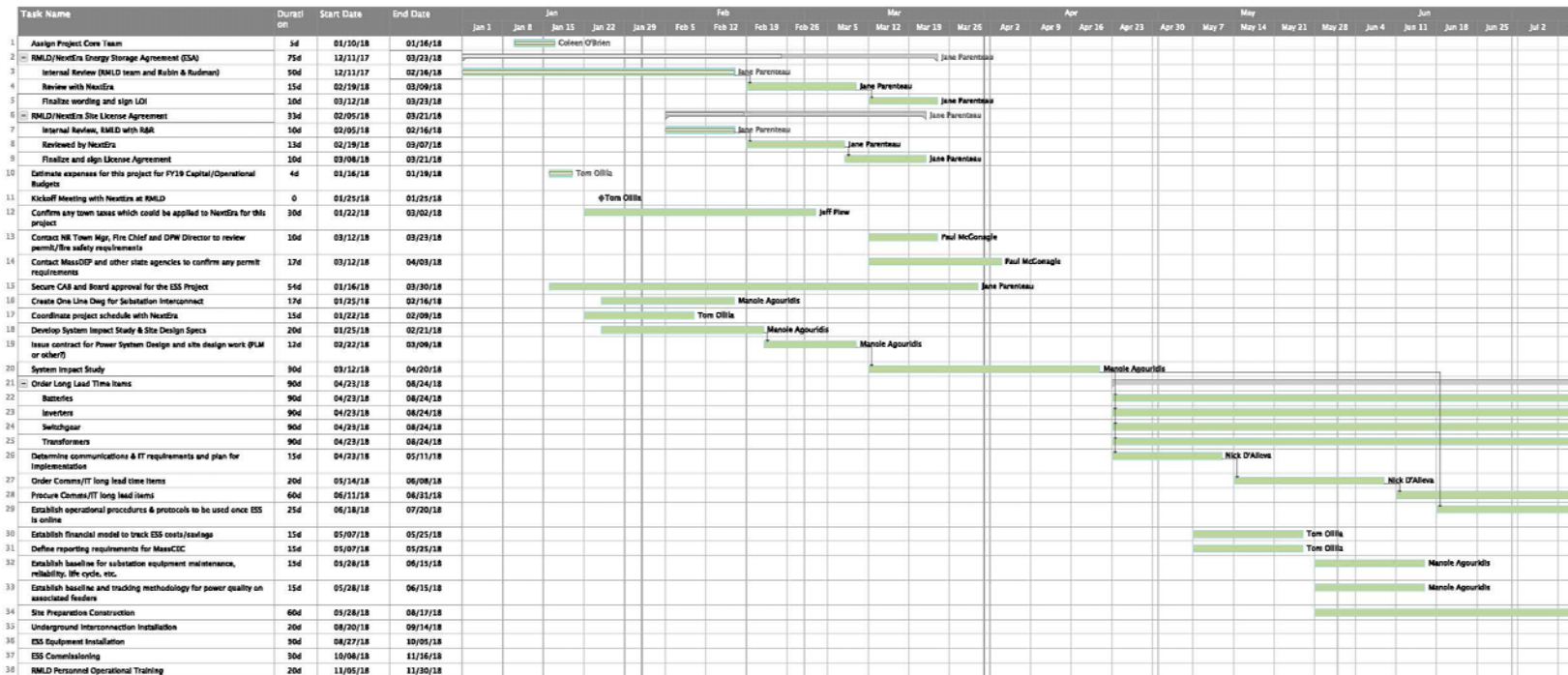
RMLD North Reading Substation Energy Storage Project



**Preliminary
Site
Map**

RMLD North Reading Substation Energy Storage Project

Current Estimated Timeline



Goal for Commercial Operation Date = 12/15/18

Attachment #2

Agenda Item 3: FY19 Budget Discussion

**FY 2019 - Proposed Rate Increase
Comparative Rates Present/Proposed**

Residential

	500 kWh	750 kWh	1000 kWh
Present	\$82.82	\$122.19	\$161.55
Proposed	\$84.79	\$125.01	\$165.25
Difference	\$1.97	\$2.82	\$3.70
% Change	2.38%	2.31%	2.29%
Cost per kWh Present	\$0.16564	\$0.16292	\$0.16155
Cost per kWh Proposed	\$0.16958	\$0.16668	\$0.16525

Residential Hot Water

	1000 kWh	1500 kWh	2000 kWh
Present	\$149.07	\$221.56	\$294.04
Proposed	\$152.09	\$225.97	\$299.85
Difference	\$3.02	\$4.41	\$5.81
% Change	2.03%	1.99%	1.98%
Cost per kWh Present	\$0.14907	\$0.14771	\$0.14702
Cost per kWh Proposed	\$0.15209	\$0.15065	\$0.14993

Residential Time of Use

	1000 kWh	1500 kWh	2000 kWh
Present	\$141.16	\$208.59	\$276.01
Proposed	\$143.75	\$212.29	\$280.82
Difference	\$2.59	\$3.70	\$4.81
% Change	1.83%	1.77%	1.74%
Cost per kWh Present	\$0.14116	\$0.13906	\$0.13801
Cost per kWh Proposed	\$0.14375	\$0.14153	\$0.14041

Residential Low Income

	500 kWh	750 kWh	1000 kWh
Present	\$78.73	\$118.10	\$157.46
Proposed	\$80.46	\$120.70	\$160.94
Difference	\$1.73	\$2.60	\$3.48
% Change	2.20%	2.20%	2.21%
Cost per kWh Present	\$0.15746	\$0.15747	\$0.15746
Cost per kWh Proposed	\$0.16092	\$0.16093	\$0.16094

Residential Hot Water Low Income

	1000 kWh	1500 kWh	2000 kWh
Present	\$144.97	\$217.46	\$289.94
Proposed	\$147.76	\$221.64	\$295.53
Difference	\$2.79	\$4.18	\$5.59
% Change	1.92%	1.92%	1.93%
Cost per kWh Present	\$0.14497	\$0.14497	\$0.14497
Cost per kWh Proposed	\$0.14776	\$0.14776	\$0.14777

Residential Time of Use Low Income

	1000 kWh	1500 kWh	2000 kWh
Present	\$134.84	\$202.27	\$269.69
Proposed	\$137.08	\$205.62	\$274.15
Difference	\$2.24	\$3.35	\$4.46
% Change	1.66%	1.66%	1.65%
Cost per kWh Present	\$0.13484	\$0.13485	\$0.13485
Cost per kWh Proposed	\$0.13708	\$0.13708	\$0.13708

Commercial

	Small	Medium	Large
Present	\$2,256.13	\$11,768.70	\$52,364.62
Proposed	\$2,292.38	\$11,973.29	\$53,155.58
Difference	\$36.25	\$204.59	\$790.96
% Change	1.61%	1.74%	1.51%
Cost per kWh Present	\$0.13608	\$0.14102	\$0.13269
Cost per kWh Proposed	\$0.14385	\$0.14928	\$0.14012

Industrial Time of Use

	Small	Medium	Large
Present	\$34,248.89	\$87,159.59	\$842,177.64
Proposed	\$34,481.58	\$88,804.65	\$839,115.85
Difference	\$232.69	\$1,645.06	-\$3,061.79
% Change	0.68%	1.89%	-0.36%
Cost per kWh Present	\$0.10834	\$0.11761	\$0.10508
Cost per kWh Proposed	\$0.11406	\$0.12405	\$0.11059

School Rate

	Small	Medium	Large
Present	\$4,345.86	\$12,608.99	\$26,933.48
Proposed	\$4,418.28	\$12,874.42	\$27,498.06
Difference	\$72.42	\$265.43	\$564.58
% Change	1.67%	2.11%	2.10%
Cost per kWh Present	\$0.12822	\$0.12055	\$0.12025
Cost per kWh Proposed	\$0.13469	\$0.12623	\$0.12589

Note: Proposed Rate Structure to Take Effect July 1, 2018. All Rate Classes Include the Fifteen Percent Prompt Payment Discount