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July XX, 2020

Ms. Laura Scott
Power Supply & Rates Administrator
Concord Municipal Light Plant
1175 Elm Street
Concord, MA 01742

Dear Ms. Scott:

Baker Tilly Virchow Krause, LLP (Baker Tilly) is pleased to submit this electric cost of service and rate study draft report to Concord Municipal Light Plant (CMLP) for presentation to the CMLP oversight Board.

This report forecasts CMLP's revenue requirement and cost of service to provide electric service for five years ending December 31, 2025 and proposes rates for each customer class. The report also details the assumptions used in arriving at our conclusions and recommendations. The changes in this report include:

1. Inclusion of the REC surcharge in the energy rate
2. The change in the Summer Residential Time of Use Rates to three periods (Off, Mid-peak and Peak)
3. Change in the Winter Residential Time of Use period to 4-8 PM from 4-9 PM
4. Additional of distribution charge to the ETS rate
5. Reduction in the GS-1 rate
6. Change in the methodology of the EV rate

We will wait to make any further changes to this report, the supporting information and the rate model until after the Board meeting presentation. Any edits will then be incorporated into the final report.

Please contact Russ Hissom (608 240 2361 / russ.hissom@bakertilly.com) or me (608 240 2469 / jodi.dobson@bakertilly.com) to discuss any study questions or to comment. We appreciate the opportunity to be of service!

Sincerely,

BAKER TILLY VIRCHOW KRAUSE, LLP

Jodi Dobson, Partner, CPA
Enclosures

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August XX, 2020

Baker Tilly Virchow Krause, LLP
Ten Terrace Court
P.O. Box 7398
Madison, WI 53707-7398

In connection with electric cost of service and rate design study as of August XX, 2020, we make the following representations:

1. The financial forecast presents our assumptions and, to the best of our knowledge and belief, the expected results of operations for the analysis period.
2. The financial forecast is based on our judgment, considering present circumstances as of August XX, 2020.
3. We have made available to you all significant information that we believe is relevant to the forecast.
4. We believe the assumptions used in the forecast are reasonable and appropriate.
5. The report and accompanying forecast were prepared to provide management with information regarding costs to provide service to customers and will not be used for any other purpose.
6. Some of the assumptions may not materialize and unanticipated events and circumstances may occur. The actual results achieved during the forecast period will vary and these variations may be material. Baker Tilly Virchow Krause, LLP, as consultants, do not have responsibility to update the report for events and circumstances occurring after the date of the report.

_____
Official Signature

_____
Title

_____
Dated

CONCORD MUNICIPAL LIGHT PLANT

REPORT ON FORECASTED COST OF SERVICE STUDY AND RATE DESIGN

August XX, 2020

DRAFT – For internal review only

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INDEPENDENT ACCOUNTANTS' COMPILATION REPORT

Concord Municipal Light Plant
Concord, MA

Management is responsible for the accompanying forecasted Schedules 1 through 12 ("Schedules") as identified in the table of contents of Concord Municipal Light Plant, Contents for the years ending December 31, 2020 - 2025, including the related summaries of significant assumptions and accounting policies ("Attachments") in accordance with guidelines for the presentation of a forecast established by the American Institute of Certified Public Accountants (AICPA). We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not examine or review the forecasted Schedules nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on this forecasted Schedules.

There will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

The accompanying supplementary information, identified as historical financial information for the years ending December 31, 2020 - 2025 and non-financial information, contained in the Schedules is presented for purposes of additional analysis and is not a required part of the forecast. Such information is the responsibility of management. The supplementary information was subject to our compilation engagement. We have not examined or reviewed the supplementary information and do not express an opinion, a conclusion nor provide any assurance on such information.

Madison, Wisconsin
August XX, 2020

Executive Summary

CMLP's Rate Strategy and the Impact of Utility Rates on CMLP's Strategic Initiatives

Every utility has a story to tell, both where it's been and its plans for the future. The story that CMLP has to tell is detailed in the CMLP's Strategic Plan vision statement – "We will partner with our customers, civic institutions, and employees to foster a vital community, in the near and in the long term, in which to live, raise a family, work, and operate a business". This strategy is focused around these main goals:

Table 1 – CMLP Strategic Plan Overall Goals

Goal	Target Value
1. Maintain system reliability	No change in customer rating (95.2%)
2. Maintain or increase customer satisfaction/perception of value	Greater than or equal to 85.8%
3. Provide energy related services to as many customers as possible	25% residential participant, 50% commercial participation
4. Increase revenue	0% to 5%
5. Increase net operating income	0% to 5%
6. Reduce GHG emissions	100% of 35% goal for 2025

Customer rates are the driving force in a utility and fund the utility's strategic initiatives, support economic growth and a solid economic environment for its customers through the delivery of a reliable power supply to support their customers' homes, jobs and businesses.

The cost structure of the utility that is needed to serve customers changes over time as utility operations, infrastructure and power supply mix change. These changes make it prudent for a utility to undergo a periodic analysis of its cost structure and the costs to serve each of its customer classes. CMLP has adopted this practice and prior to this study its most recent electric cost of service analysis was in 2014. Regular reviews of the CMLP cost and rate structure will help in keeping rates close to the cost to serve customer classes, funding strategic initiatives and avoiding customer rate shocks or customer class cross-subsidies.

Rate strategy is an integral part of CMLP's strategic initiatives. The plan includes these areas of focus:

Table 2 – CMLP Strategic Plan Rate Goals

Area	Goal/Discussion
1. Time of use rates	Sending a price signal to customers to shift their consumption to off-peak periods
2. Higher fixed charges/lower variable rates	Increasing residential and general service fixed charges, while lowering variable rates will send a clearer price signal to customers and grid services providers about the value of the connection they are using and more closely align rate recovery with actual costs
3. Beneficial electrification for transportation, space and water heating and cooling	Mechanisms needed to ensure that charging is done off-peak where feasible, including participation in TOU rates or controlled charging programs

This study ensures these focuses and strategies are an integral part of this study's analysis of CMLP's cost structure and the proposed rate design.

Study Approach

Concord Municipal Light Plant (CMLP) retained Baker Tilly Virchow Krause, LLP (Baker Tilly) to prepare a revenue requirement study, analyze the cost of service, design electric rates and make other recommendations. The forecasted revenues and customer usage are based on data provided by CMLP to Baker Tilly.

The project tasks are summarized as:

Table 3 – Study Approach and Links to Project Tasks and Discussion

This report is organized by project tasks. Each task has details, calculations and an expanded discussion of the topic for that task.

Project Task	Description	Report Link
	Executive Summary and recommendations	Summary Recommendations
1	Prepare the revenue requirement and cost of service study	Revenue Requirement Analysis Cost of Service Analysis Task 1
2	Recommend rate classes	Task 2
3	Advise CMLP on industry-accepted methodologies for allocating costs to the various customer classes	Task 3
4	Recommend which costs should be recovered through fixed charges and variable charges	Task 4
5	Propose rate tariffs that meet the following objectives:	Task 5
a	An opt out time of use rate as the default for all residential customers	Rate Scenario 2
b	Model the time of use rate with and without inclining blocks	Rate Scenario 3
c	Design the residential opt-out rate following the principles of cost-causation	Rate Scenario 2 Rate Scenario 3 Task 8
d	Both residential and commercial solar net metering rates that fairly (1) assign utility costs, (2) compensate for the value provided, and (3) encourage further solar adoption	Net Metering Rate Discussion
e	Explore the benefits of residential demand billing	Rate Scenario 2 Rate Scenario 3 Task 8
f	Review the history of the Electric Thermal Storage (ETS) rate and determine if the objectives of this rate will be met by a residential opt-out time of use rate	Residential Electric Thermal Storage Rate
g	Encourage adoption of heat pump technology and electric vehicles including designing a fixed fee subscription service for EV drivers	Residential Service – Electric Resistance & Heat Pump Rate Electric Vehicle Charging Rate
h	CMLP's 2017-2025 Strategic plan	Executive Summary and throughout the study
6	Provide guidance on whether time of use rates will result in CMLP's meeting its load management objectives	Task 6
7	Summarize proposed rate tariffs and compare to the cost of service	Task 7

Project Task	Description	Report Link
8	Prepare a rate transition plan for rate classes with substantial differences between current rates and the cost of service	Task 8
9	Provide illustrative examples of proposed rates if appropriate	Task 9

The report reader can use the links in Table 0-3 for easier navigation in the report; or click on the links in the Table of Contents, Index Table, or the bookmarks in the Navigation bar (to the left of your screen in the pdf version of this report).

Summary Recommendations and Observations

Our summary recommendations are shown in Table 0 – 4 and discussed in the pertinent section of the report.

Table 4 – Summary Recommendations and Observations

Item	Recommendation/Observation	Report Link for More Detail
1	Revenues from customers at current rates approximate the cost of service.	Cost of Service Analysis
2	Some customer classes are over or under their cost of service based on load data provided by CMLP.	Cost of Service Analysis
3	Tiered rate structures may or may not promote customer conservation. Approximately 20% of the residential customer usage is in the top rate tier, meaning that these customers subsidize customer with less usage. An opt out time of use rate may change this situation. Rates in this study are designed with a tiered structure in the same classes as presently provided for in CMLP's rate tariffs.	Opt-Out Residential Time of Use Rate
4	CMLP should obtain more data from a larger customer study group to determine usage patterns that will evolve with an Opt-out Residential Time of Use rate. This data will become readily available for analysis as CMLP installs more smart meters.	Opt-Out Residential Time of Use Rate
5	As CMLP installs more smart meters, a Residential Demand Rate should become part of CMLP's rate structure in order to send price signals to customers on their electricity usage.	Opt Out Residential TOU Rate
6	CMLP should move to winter/summer rate schedules due to differences in winter and summer day ahead and real time pricing in the ISO-New England. The winter/summer periods should mirror the ISO-New England periods which are: • Winter – October 1 – May 31 • Summer – June 1 – September 30	Winter and Summer rate considerations Winter and Summer Rates - Customer Impacts
7	Incorporating the ETS Rate with the new Opt-out Residential Time of Use rate may be practical, giving customers the choice of when to charge their equipment. Further analysis should be done by CMLP in this area for customer feedback.	ETS Rate Evaluation
8	To avoid rate shock, a transition plan should be used to move customer rate classes to their cost of service.	Task 8 – Rate Transition Plan Recommendations
9	As CMLP develops more data from smart metering, in future rate adjustments CMLP should consider establishing time-of-use rates for all general service customers.	Opt-Out Residential Time of Use Rate And all general service rate classes

Item	Recommendation/Observation	Report Link for More Detail
9	CMLP should perform frequent (annual or bi-annual) cost of service studies to determine trends in customer class usage and system demand and to make course adjustments to rate transition plans	Throughout the report

The reader can click on the links in Table 0-4 to move to the report section that discusses the detail of each recommendation.

Tasks 1 and 3 – Revenue Requirement and Cost of Service Study

Revenue Requirement

The revenue requirement determines the revenues required from customers to operate the utility based on these cost components:

Revenue Requirement Component	Purpose
Operation and maintenance expenses	Provides funds for utility labor and operating expenses
Depreciation expense	Provides funds for replacement of current utility plant in service
Rate of return on ratebase	Provides funds for future payment of annual principal and interest payments The return is also a component of the cost recovery of replacement of utility plant

This analysis also reviews the impact of recommended rates on the utility's cash flow for operations, capital improvements and debt service.

Baker Tilly used CMLP's management's forecast of costs, sales, revenues, and capital improvements for fiscal years 2020 – 2025. The summary of revenue requirement for 2020 is shown in the following table

Table 5 – CMLP Revenue Requirement – 2020

Revenue Requirement Category	Amount
Power supply expenses	$17,706,079
REC purchases	2,141,982
Transmission expenses	87,409
Distribution expenses	977,889
Customer accounts expenses	1,368,250
Administrative and general expenses	3,971,877
Smart grid operations	46,123
Depreciation expense	2,067,795
PILOT	448,753
Return on ratebase	1,022,490
Total Revenue Requirement	**$29,838,647**

Cost of Service Analysis

The 2020 Revenue Requirement was assigned to CMLP's customer classes through the cost of service study. The allocations of cost were based on the historical load data of CMLP's customer classes for 2018. The load curves used in most cases are those of a similar utility, applied to CMLP's actual data. However, specific load curves for CMLP's residential time of use, electric vehicle and electric thermal storage classes are also used for analysis. Cost allocators were based on industry standard allocations.

The results are summarized in the following table, comparing the cost of service to computed revenues at current rates.

Table 6 – CMLP Cost of Service Summary Compared to Computed Revenues at Current Rates by Customer Class

Customer Class	Cost of Service	Forecasted Revenues at Current Rates	$ Over/(Under) Cost of Service	% Over/(Under) Cost of Service
Residential	$ 14,158,305	$ 12,386,743	$ (1,771,562)	-14.3%
Residential Assistance	235,613	98,615	(136,998)	-138.9%
Residential TOU	46,754	22,728	(24,026)	-105.7%
Residential Heating	75,714	51,811	(23,903)	-46.1%
Residential Controlled Water Heating	868,553	691,381	(177,172)	-25.6%
Residential Net Metering	-	34,502	34,502	100.0%
ETS Off Peak	269,986	231,487	(38,499)	-16.6%
Small General Service	2,604,221	2,794,181	189,960	6.8%
Medium General Service	4,119,756	5,041,465	921,709	18.3%
Large General Service	7,286,490	8,685,669	1,399,179	16.1%
General Service Net Metering	-	-	-	0.0%
Street Lights	173,463	62,620	(110,843)	-177.0%
Totals	**$ 29,838,855**	**$ 30,101,202**	**$ 262,347**	**0.9%**

A negative number means that revenues from current rates for that customer class is less than the cost to serve that class. A positive number means that revenues from current rates for that customer class is greater than the cost to serve that class.

This analysis shows differences between revenues at current rates compared to the currently calculated cost of service. We recommend that CMLP perform an annual or biennial cost of service analysis to determine class trends based on the most recent historical load patterns for each customer class. As CMLP installs more customer smart meters, data should become more readily available for analysis.

Task 2 – Recommended Rate Classes

Rate Schedules

Customer rate classes will evolve over time due to factors such as changes in customer mix, power usage, technology that can refine usage readings, desire to motivate customers to change their usage behavior to save money and for the utility to lower its power costs, or beneficial electrification goals. The following table shows CMLP's current rate schedules and comments on each.

These recommendations are made based on our discussions with CMLP and current trends in the utility industry:

Table 7 – CMLP Rate Classes

Current CMLP Rate Schedule	Comments/Recommendations
1. Residential	Establishing a residential time-of-use opt out rate has been discussed with the CMLP rate study project manager. The existing Residential R-1 service rate would be the opt-out option. A summer/winter rate structure should be established.
2. Residential Farm Rider	This rate should continue if it meets management's objectives for these customers.
3. Controlled Water Heating Rider	The current credit was designed in the 2014 study based on the avoided costs of capacity and transmission according to ISO-NE market rules. The credit is recalculated in this study based on that methodology.
4. Residential Time of Use	Establishing a residential time-of-use opt out rate has been discussed with the CMLP rate study project manager and is part of this study. This would become the default rate option for all residential customers. A summer/winter rate structure should be established. ***For purposes of this study, a framework has been recommended for the design of an opt out rate, but the recommendation should in no way be the final rate without analysis of more current data.***
5. Electric Resistance Heat Pump Heating	This rate should continue but the billing period should mirror the ISO-NE winter period (October 1 – May 31).
6. Electric Thermal Storage Off-Peak	Management has indicated a desire to encourage customers to adopt this technology. As an example, the following is a link to an electric cooperative that provides rebates to customers on purchase of qualifying units. https://www.unitedpower.com/ets The attractive off-peak/kWh rate and programs such as this can provide an incentive to customers to utilize the technology. Incorporating the ETS Rate with the Residential Time of Use rate may be practical, giving customers the choice of when they charge their equipment. CMLP should perform further analysis in this area, seeking customer feedback on a change in the rate structure.
7. Residential Assistance Rider	This rate should continue if it meets management's objectives for these customers. A summer/winter rate structure should be established that follows the current R-1 Residential rate structure.
8. Net Metering with Banking	As CMLP utilizes the Real Time market to adjust its power needs for net metering sales, the rate should use the average Real Time market

Current CMLP Rate Schedule	Comments/Recommendations
	pricing for the billing period, compared to using the current Day Ahead market pricing.
9. Power Cost Adjustment Clause	In a rate adjustment the PCAC is reset to zero, as base rates will be set at the base cost of power. The methodology of the calculation used by CMLP mirrors industry best practices.
10. NYPA Adjustment Clause	This rate should continue if it meets management's objectives.
11. Underground Utilities Charge	This rate should continue if it meets management's objectives.
12. CARES Program Charge	This rate funds the CMLP Conservation and Renewable Energy Services program.
13. Private Area Lighting	This rate should continue. Our understanding is that these arrangements are slowly being phased out.
14. Adopt-a-Light	This rate appears to have been discontinued.
15. Small General	This rate should continue. A summer/winter rate structure should be established.
16. Medium General	This rate should continue. A summer/winter rate structure should be established.
17. Large General	This rate should continue. A summer/winter rate structure should be established.
18. General Service Net Metering	This rate should continue. A summer/winter rate structure should be established.
19. General Electric Thermal Service	Incorporating the ETS Rate with a Time of Use rate may be practical, giving customers the choice of when they charge their equipment. CMLP should perform further analysis in this area, seeking customer feedback on a change in the rate structure.

As shown in more detail under Task 9, we review and comment on specific rate structures offered by utilities, including public power, cooperatives and investor-owned, some peer to CMLP and others not. Some rates to consider by CMLP in this and future rate adjustments include:

Table 8 – Rate Classes for Consideration by CMLP

Rate Schedule	Comments/Recommendations
1. Residential Time-of Use Opt Out Rate	Establishing a residential time-of-use opt out rate has been discussed with the CMLP rate study project manager. The existing R-1 Residential service rate would be the opt-out option. The rate should include a kW demand charge to recover fixed power supply costs. This study includes a rate design for a Residential Time-of-Use Opt Out Rate with a customer demand charge.
2. Residential Rate	This would be the opt out option if a customer chooses to not utilize the Residential Time-of-Use Rate.
3. Electric Vehicle Charging Rate	CMLP currently offers an EV Miles program, which provides bill credits for customers charging their vehicles off-peak. According to CMLP, the program is slated to end in 2020. The residential time of use rate by its nature would encourage off-peak charging. Management has also discussed a fixed fee subscription service for EV users and an EV subscription rate design is included in this study.
4. General Service Time-of-Use demand rates	As CMLP develops more data from smart metering, in future rate adjustments CMLP should consider establishing time-of-use demand rates for all general service customers.

Task 4 – Recovery of Fixed and Variable Costs

The cost of service analysis examines the breakdown of all costs by their functional cost components, including:

- **Demand (or Fixed)** – Demand or Fixed Costs are those associated with providing the customer with the use of electric facilities and entitlements to meet the peak demands placed on the utility's system
- **Energy (or Variable)** – Energy or Variable costs associated with the consumption of electricity over a period of time
- **Customer** – Costs incurred to serve customers without regard to usage (meter reading, billing and collections, meters and service lines)
- **Direct Assignment**: – Cost incurred to serve specific customers
- **Sub-allocators** – Costs are further allocated based on class or cost-type specific detail

Selected Residential Monthly Fixed Charges

As background information on this study, Baker Tilly reviewed the monthly residential fixed charge of various public power and investor-owned utilities. This information is not part of a statistical survey, but was assembled through our review of utility rate structures for information provided in Task 9 of this report. These are shown in the following table:

Table 9 – Selected Monthly Residential Customer Charge

Utility	Monthly Residential Customer Charge
1. Burlington Electric Department	$8.21
2. Cedar Falls, IA Electric Utility	$17.00
3. Colorado Springs Utilities	$15.30
4. CPS Energy	$8.75
5. Eversource Energy	$7.00
6. Gainesville, FL Regional Utilities	$14.25
7. Holyoke Gas and Electric	$5.55
8. Modesto Irrigation District	$20.00
9. North Attleborough Electric Department	$10.30
10. Peabody Municipal Light Plant	$6.00
11. Reading Municipal Light Plant	$5.12
12. Sacramento Municipal Utility District	$21.05
13. Taunton Municipal Light Plant	$9.70

As one of CMLP's strategic goals is to increase customer monthly fixed charges, this is useful information in performing comparables to other utilities.

Task 5 – Proposed Rate Tariffs

Overall Approach Used

This report contains details on four rate scenarios. They are as follows:

1. Scenario 1 – Current rate classes using a Winter/Summer rate, adding some variations in credits and adding an electric vehicle subscription rate
    a. These rates are included in Task 5
2. Scenario 2 – Current rate classes as shown in Scenario 1, adding a Residential Opt-out Time of Use Rate framework with a customer demand charge
    a. These rates are included in Task 5
3. Scenario 3 – The same rates as in Scenario 2, adding an inclining block rate to the Residential Opt-out Time of Use rate option
    a. These rates are included in the Appendix to this report
4. Scenario 4 – Presenting a Five-Year Transition Plan to move customer rates to their current cost of service, using the rate framework found in Scenario 2
    a. These rates are included in Task 5

As stated above, the Scenario 1 and 2 rates are the rates that are presented in this section for Task 5.

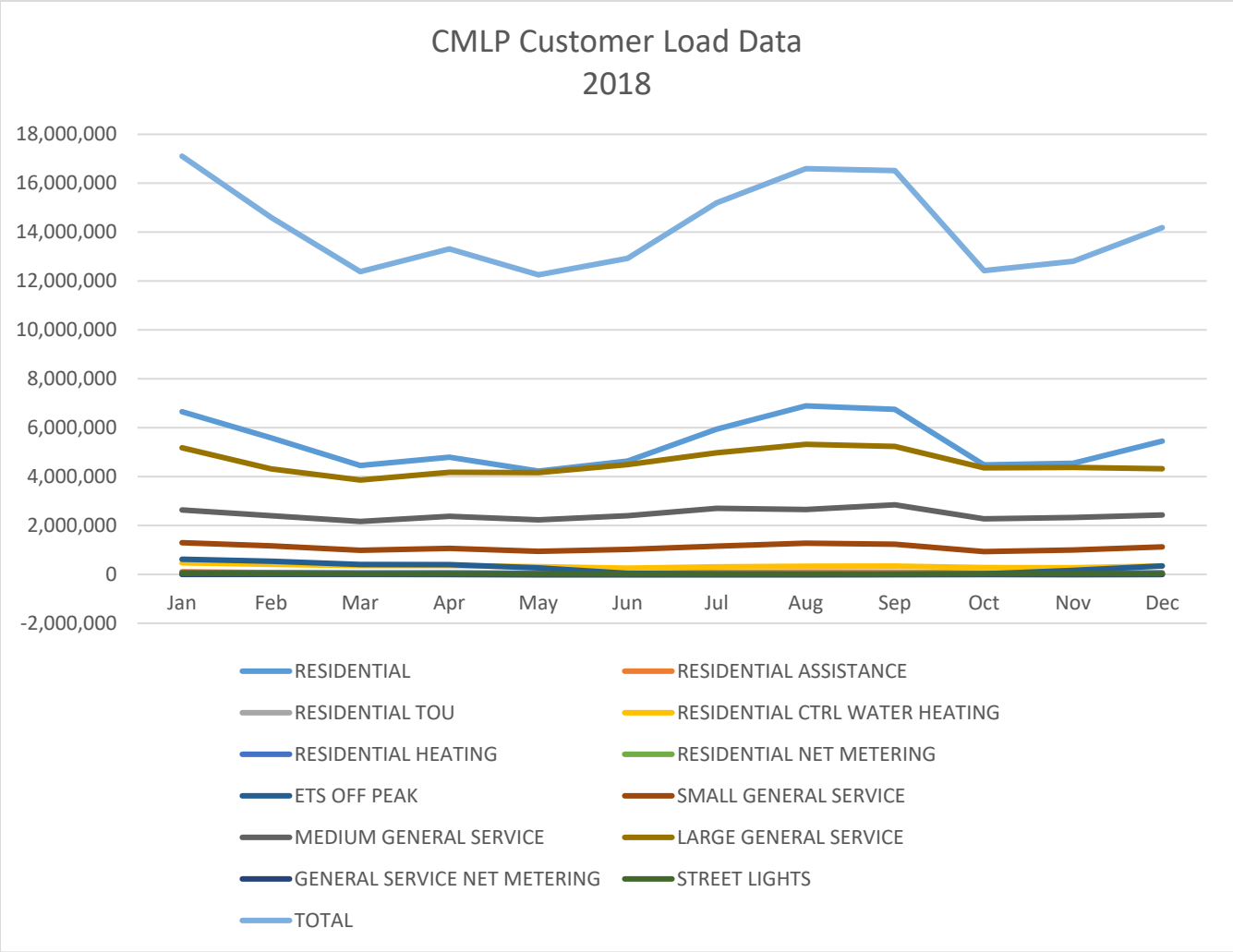
Rate Design

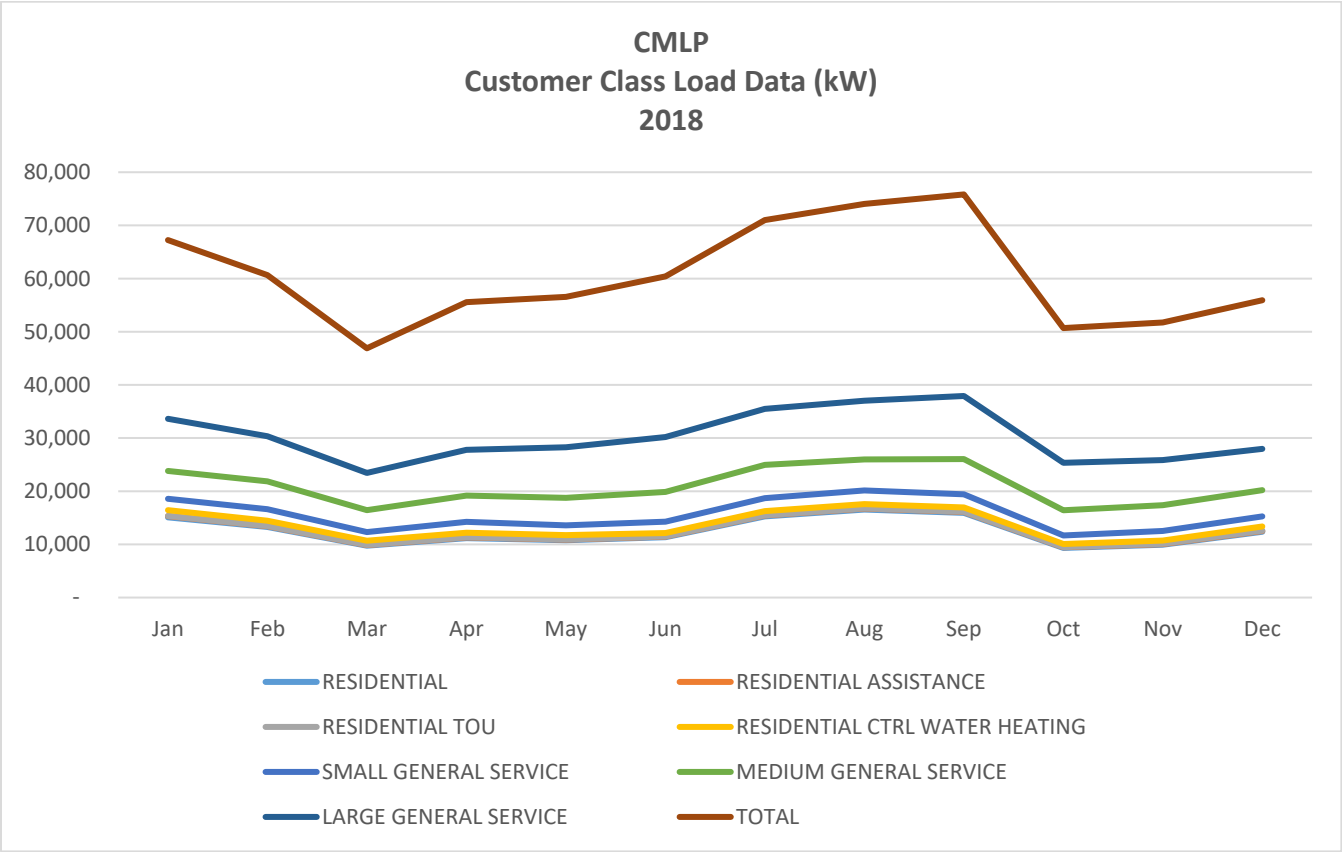
Introduction

The recommended rates for each customer class are based on the overall forecasted kWh sales and kW for each customer class. The forecast is based on customer billing details provided by CMLP to Baker Tilly.

The billed kWh and kW profile of CMLP is shown in the following illustration along with the contribution of each customer class:

Illustration 1 – CMLP kWh and kW Profile





General rate classes

The general parameters and a discussion on rate development for each class are discuss in this section.

Winter and Summer Rates

The major generation source in New England is natural gas. According to ISO-New England, "inadequate infrastructure to transport natural gas has at times affected the ability of natural-gas-fired plants to get the fuel they need to perform."[1] This in turn, leads to higher LMP pricing in the winter months. For example, the monthly average LMP in the ISO-New England winter period (October 1 – May 31) vs. the summer period (June 1 – September 30) for the latest 12 months[2] is shown in the following illustration:

Illustration 2 – ISO-New England Average LMP Prices – February 2019 – January 2020

Hub/Zone/Ext. Node **NEMA**

All intervals

	Avg DA LMP ($/mWh)	Avg RT LMP ($/mWh)	Min DA LMP ($/mWh)	Min RT LMP ($/mWh)	Max DA LMP ($/mWh)	Max RT LMP ($/mWh)
February, 2019	35.90	37.26	13.25	(25.57)	83.98	172.13
March, 2019	38.22	37.13	18.40	(25.54)	99.02	252.22
April, 2019	27.03	26.92	16.38	-	59.23	247.89
May, 2019	24.42	23.09	12.50	(67.24)	44.74	91.95
June, 2019	22.32	22.63	8.31	(28.00)	36.96	266.27
July,2019	31.08	29.61	15.48	(152.05)	99.83	166.52
August, 2019	26.09	23.89	11.21	(68.01)	61.73	112.62
September, 2019	21.35	20.67	10.54	(97.90)	47.36	211.56
October, 2019	20.93	20.55	9.79	(26.40)	35.27	83.61
November, 2019	32.52	34.52	12.81	(54.20)	77.78	374.92
December, 2019	41.22	42.98	13.94	(42.77)	154.60	282.02
January, 2020	26.65	26.40	10.78	(25.57)	72.57	157.22
12 Month Average	**$ 28.98**	**$ 28.80**	**$ 12.78**	**$ (51.10)**	**$ 72.76**	**$ 201.58**
Summer average	**$ 25.21**	**$ 24.20**	**$ 11.39**	**$ (86.49)**	**$ 61.47**	**$ 189.24**
Winter average	**$ 30.86**	**$ 31.11**	**$ 13.48**	**$ (33.41)**	**$ 78.40**	**$ 207.75**

Note: The summer period is highlighted in yellow

The winter average Day Ahead (DA) and Real Time (RT) LMP prices are 22% and 29% higher, respectively, than the summer average in the ISO-NE.

[1] https://www.iso-ne.com/about/what-we-do/in-depth/natural-gas-infrastructure-constraints

[2] https://www.iso-ne.com/markets-operations/market-performance/performance-reports#related-documents (Monthly market report for each month)

Contrasting this with the forecasted power costs for CMLP for 2020, finds the winter/summer differential is less as shown in the following illustration:

Illustration 3 – Forecasted CMLP Winter/Summer Energy Prices

	Forecasted 2020 Total Average Energy Cost ($/mWh)
January	$ 55.17
February	$ 53.76
March	$ 51.74
April	$ 50.46
May	$ 48.53
June	$ 47.91
July	$ 45.51
August	$ 45.22
September	$ 45.49
October	$ 49.57
November	$ 49.65
December	$ 51.93
12 Month Average	**$ 49.58**
Summer average	**$ 46.03**
Winter average	**$ 51.35**
Winter/Summer Differential	**11.6%**

Based on these price differentials, we recommend that CMLP incorporate winter and summer rates. The rates designed in this study for capacity and transmission are winter/summer rates and are based on the ISO-New England periods. These rates will result in higher customer rates in the winter months and lower in the summer months based on the same kWh usage. If CMLP moves to this type of rate structure, there may be differences in actual results due to customer usage patterns and weather-related impacts on pricing.

A customer education program is recommended to inform customers of the changes prior to implementation. We also recommend that CMLP revisit this rate design after one calendar year to determine actual customer impacts and if modifications are needed to the rates and rate design structure for consistency and equitability.

Customer rates

After review of the cost of service study, the CMLP oversight board directed Baker Tilly to design rates using these parameters:

1. Design Residential Rates (Classes R-1 and RTOUR), keeping the current percentage difference between the forecasted revenues and the cost to serve the residential customer class
2. Reduce General Service G-1 rates to a level that would make a customer bill for 3,000 kWh approximately $488, or approximately a 20% reduction in rates
3. Design General Service G-2 and G-3 rates, keeping the current difference between the forecasted revenues and the cost to serve the G-2 and G-3 customer classes
4. Move the remaining rate tariffs towards the cost to serve each customer class over a five year transition period

Overall, Baker Tilly followed these parameters in designing the various rate tariffs. The rates for each tariff also include changes for the percentage increase or decrease in the revenue requirement each year.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

The forecasted revenues from customer rates by customer class and rate type designed in this study are as follows:

Table 10 – Rate Scenario 2 – Revenues by Customer Class and Rate Type

		Proposed Rates											
		Base Year - 2020		2021		2022		2023		2024		2025	
Customer Class	Current Rates	Revenues	% Change	Revenues	% Change	Revenues	% Change	Revenues	% Change	Revenues	% Change	Revenues	% Change
Residential Service Rates													
Residential	$ 12,379,951	$ 515,479	-95.8%	$ 539,613	4.7%	$ 556,502	3.1%	$ 553,753	-0.5%	$ 560,828	1.3%	$ 573,396	2.2%
Controlled Water Heating Rider	691,381	683,348	-1.2%	750,564	9.8%	808,633	7.7%	842,151	4.1%	888,799	5.5%	935,064	5.2%
Residential Time of Use	22,728	11,886,972	52201.6%	12,494,689	5.1%	12,878,092	3.1%	12,784,129	-0.7%	12,953,125	1.3%	13,195,967	1.9%
Electric Resistance Heat Pump Heating	51,811	51,803	0.0%	59,039	14.0%	65,518	11.0%	70,114	7.0%	75,734	8.0%	81,804	8.0%
Electric Thermal Storage Off Peak	231,487	235,354	1.7%	257,212	9.3%	277,517	7.9%	276,561	-0.3%	290,746	5.1%	300,543	3.4%
Residential Assistance Rider	98,615	104,487	6.0%	113,629	8.7%	120,535	6.1%	120,546	0.0%	123,741	2.7%	128,721	4.0%
Net Metering with Banking	34,502	35,076	1.7%	36,919	5.3%	38,310	3.8%	38,146	-0.4%	38,632	1.3%	39,494	2.2%
Private Area Lighting	6,792	6,835	0.6%	7,184	5.1%	7,501	4.4%	7,689	2.5%	7,946	3.3%	8,002	0.7%
											5%		
General Service Rates													
Small General	2,794,181	2,793,582	0.0%	2,234,112	-20.0%	2,321,938	3.9%	2,311,274	-0.5%	2,341,008	1.3%	2,392,192	2.2%
Medium General	5,041,465	5,048,096	0.1%	5,288,203	4.8%	5,464,831	3.3%	5,431,700	-0.6%	5,495,811	1.2%	5,608,574	2.1%
Large General	8,685,669	8,697,266	0.1%	9,116,823	4.8%	9,412,747	3.2%	9,356,028	-0.6%	9,465,687	1.2%	9,658,573	2.0%
General Service Net Metering	0												
General Electric Thermal Service Off-Peak	-	-											
Electric Vehicle Subscription	-	2,576		2,697	4.7%	2,788	3.4%	2,771	-0.6%	2,807	1.3%	2,869	2.2%
Street Lighting	62,620	62,620	0.0%	66,955	6.9%	70,978	6.0%	72,258	1.8%	74,255	2.8%	76,643	3.2%
Total Revenues	**$ 30,101,200**	**$ 30,123,494**	**0.1%**	**$ 30,967,639**	**2.8%**	**$ 32,025,890**	**3.4%**	**$ 31,867,121**	**-0.5%**	**$ 32,319,118**	**1.4%**	**$ 33,001,843**	**2.1%**
Total Revenue Requirement (Cost of Service)	**$ 29,839,000**	**$ 29,839,000**		**$ 31,261,000**		**$ 32,318,000**		**$ 32,113,000**		**$ 32,525,000**		**$ 33,238,000**	
Difference - Revenues Over/(Under) Cost of Service	**$ 262,200**	**$ 284,494**		**$ (293,361)**		**$ (292,110)**		**$ (245,879)**		**$ (205,882)**		**$ (236,157)**	
% Different - Revenues Over/(Under) Cost of Service	**0.9%**	**1.0%**		**-0.9%**		**-0.9%**		**-0.8%**		**-0.6%**		**-0.7%**	

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

	Current Rates		Base Year - 2020		2021		2022		2023		2024		2025	
Cost Type	Current Rates	% of Total Revs	Revenues	% of Total Revs	Revenues	% of Total Revs	Revenues	% of Total Revs	Revenues	% of Total Revs	Revenues	% of Total Revs	Revenues	% of Total Revs
Meter charges	$ 1,354,533	4.50%	$ 1,717,696	5.70%	$ 1,788,135	5.77%	$ 1,870,204	5.84%	$ 1,956,720	6.14%	$ 2,046,580	6.33%	$ 2,140,265	6.49%
Demand charges (kW)	1,843,026	6.12%	2,466,106	8.19%	2,531,770	8.18%	2,608,653	8.15%	2,693,410	8.45%	2,779,768	8.60%	2,867,805	8.69%
Total Fixed Charges	3,197,558	10.62%	4,183,802	13.89%	4,319,904	13.95%	4,478,857	13.99%	4,650,130	14.59%	4,826,347	14.93%	5,008,070	15.18%
Energy:														
Capacity and transmission	8,762,355	29.11%	4,726,257	15.69%	3,702,067	11.95%	3,071,221	9.59%	2,848,948	8.94%	2,840,039	8.79%	2,878,437	8.72%
Distribution	4,418,842	14.68%	8,516,169	28.27%	8,920,294	28.81%	9,192,171	28.70%	9,133,919	28.66%	9,251,095	28.62%	9,453,911	28.65%
Energy	13,597,787	45.17%	12,109,348	40.20%	13,439,371	43.40%	14,681,922	45.84%	14,621,601	45.88%	14,768,963	45.70%	15,006,237	45.47%
Total Energy	26,778,983	88.96%	25,351,774	84.16%	26,061,732	84.16%	26,945,314	84.14%	26,604,468	83.49%	26,860,097	83.11%	27,338,586	82.84%
Discounts:														
Farm discount	(2,000)	-0.01%	(2,000)	-0.01%	(2,000)	-0.01%	(2,000)	-0.01%	(2,000)	-0.01%	(2,000)	-0.01%	(2,000)	-0.01%
Residential assistance discount	(67,800)	-0.23%	(73,736)	-0.24%	(73,736)	-0.24%	(73,736)	-0.23%	(73,736)	-0.23%	(73,736)	-0.23%	(73,736)	-0.22%
Water heater discount	(56,863)	-0.19%	(75,180)	-0.25%	(75,180)	-0.24%	(75,180)	-0.23%	(75,180)	-0.24%	(75,180)	-0.23%	(75,180)	-0.23%
PASNY	(306,774)	-1.02%	(312,399)	-1.04%	(312,399)	-1.01%	(312,399)	-0.98%	(312,399)	-0.98%	(312,399)	-0.97%	(312,399)	-0.95%
Total Discounts	(433,437)	-1.44%	(463,316)	-1.54%	(463,316)	-1.50%	(463,316)	-1.45%	(463,316)	-1.45%	(463,316)	-1.43%	(463,316)	-1.40%
Electric vehicle monthly subscription		0.00%	2,576	0.01%	2,697	0.01%	2,788	0.01%	2,771	0.01%	2,807	0.01%	2,869	0.01%
UUC	402,844	1.34%	395,773	1.31%	393,048	1.27%	395,516	1.23%	392,608	1.23%	398,672	1.23%	408,213	1.24%
CARES charge	155,251	0.52%	652,884	2.17%	653,573	2.11%	666,731	2.08%	680,459	2.14%	694,509	2.15%	707,421	2.14%
Total Revenues	**$ 30,101,200**	**100.00%**	**$ 30,123,494**	**100.00%**	**$ 30,967,639**	**100.00%**	**$ 32,025,890**	**100.00%**	**$ 31,867,121**	**100.00%**	**$ 32,319,118**	**100.00%**	**$ 33,001,843**	**100.00%**

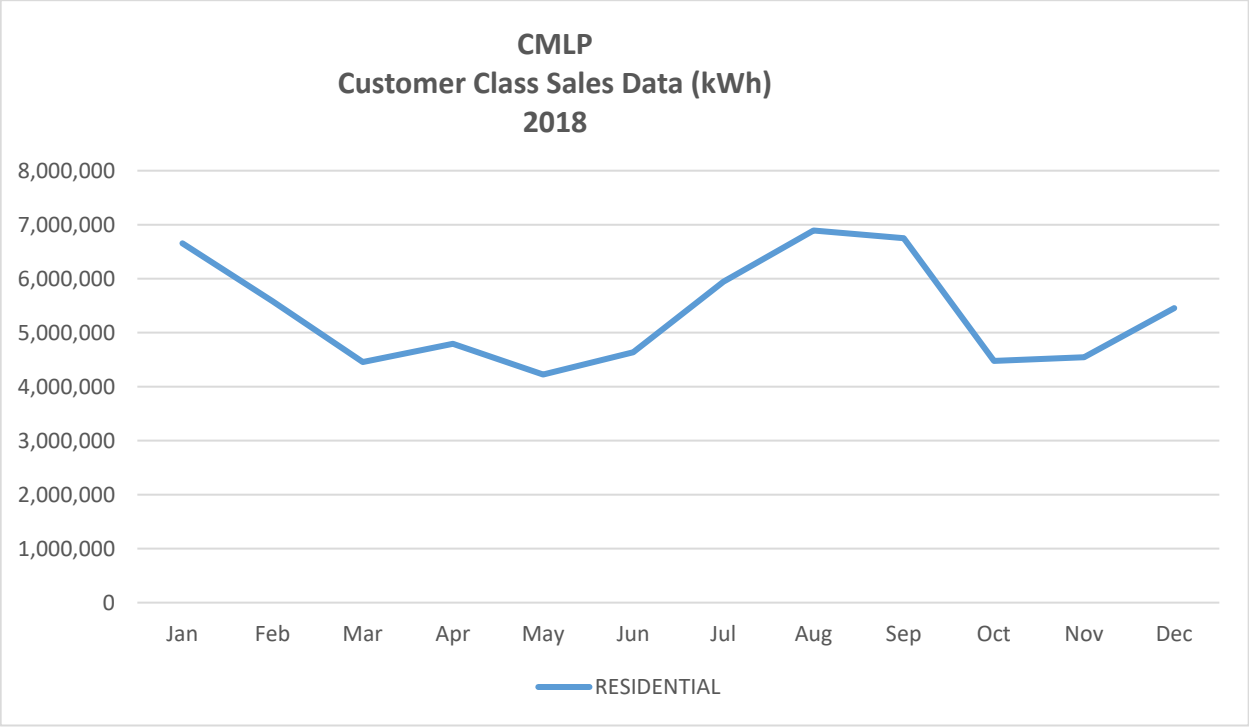
The individual rate class rates details follows in the remainder of this section.

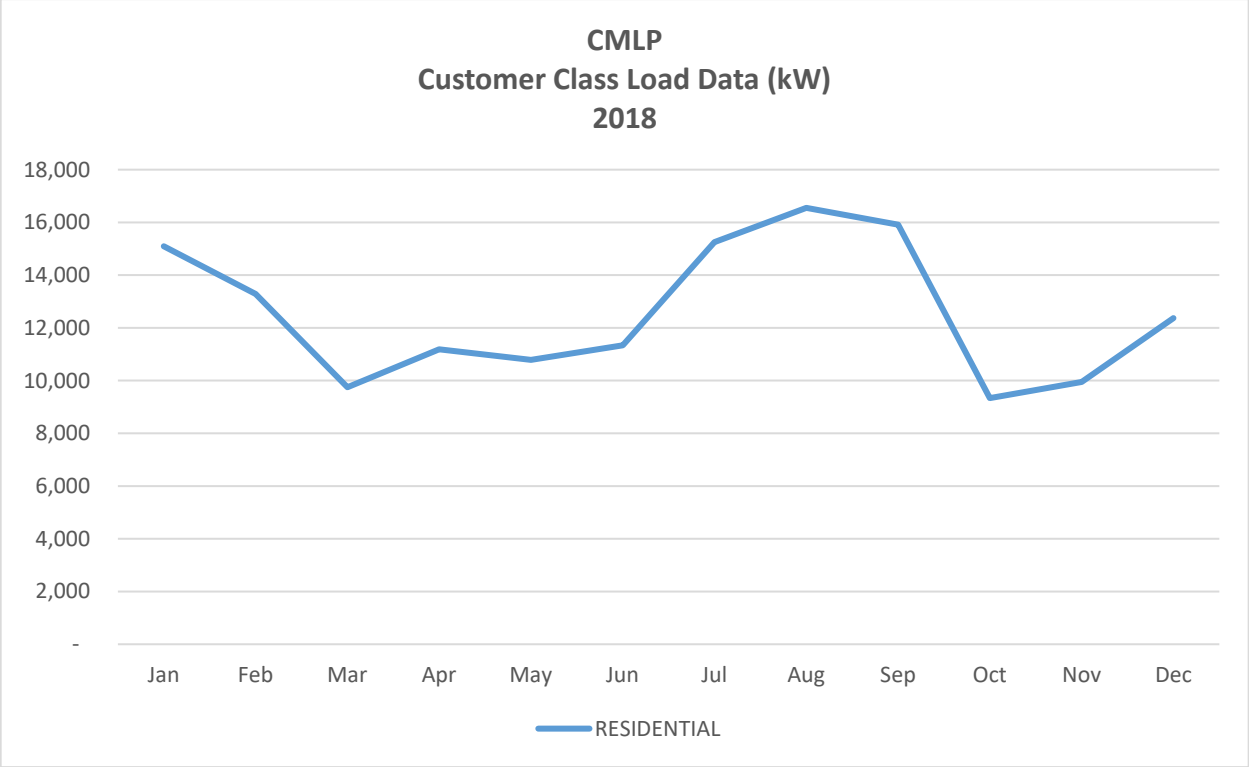
Residential Service Rates

Residential Service Rate – R-1

The residential customer class is the largest class served by CMLP. Approximately 6,400 customers are served and the forecasted kWh billing is based on 67 million kWh. The profile of this customer class is shown in the following illustration:

Illustration 4 – Residential kWh sales by Month and kW load by Month





Due to heating and air conditioning needs and its number of customers, this class is a significant driver of the winter and summer peaks of CMLP. As an incentive for customers to shift their usage, CMLP offers customers a time-of-use rate, discussed later in this report.

Management of CMLP has discussed making the default rate class for residential customers a time-of-use (TOU) opt out rate. So, the R-1 rate then becomes the residential opt out option. Management does not have a projection of customers that might "opt-out" of this rate and there are not a large number of industry studies that show a standard "opt out" percentage, as "opt-out" rates are new to the industry and not in wide-spread use (although they are gaining traction with utilities as they implement smart meters). Baker Tilly used a study performed by the Sacramento Municipal Utility District (SMUD) that showed that 4% of their customers opted out of a similar rate when the move was made to make the time-of-use rate "opt-out" rather than "opt-in". Baker Tilly used the SMUD 4% opt out percentage in developing a proposed opt-out rate design in Scenario 2 and Scenario 3 in this study.

As CMLP deploys more smart meters and more customers move to the current CMLP Residential Time-of-Use class it will have a larger customer sample group and data to forecast a predicted load curve of customers that would be part of the time-of-use class. A customer information campaign or surveys may also provide insights into a potential opt out percentage of customers for an opt-out time of use rate. We recommend that CMLP use that data to make a decision on a final rate design. ***For purposes of this study, a framework has been recommended for the design of an opt out rate, but the recommendation should in no way be the final rate without analysis of more current data.***

The billing determinants, proposed rates and an average bill comparison for the *Residential Service Rate – R-1* rate schedule are shown in the following table.

Table 11 – Proposed Residential Service Rate – R-1

	Residential (R-1)						
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
Farm Credit	-10%	-10%	-10%	-10%	-10%	-10%	-10%
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - 1,000 kWh							
Winter	$ 175.47	$ 185.29	$ 194.22	$ 200.58	$ 199.53	$ 202.00	$ 206.42
% change from prior period			4.82%	3.27%	-0.52%	1.24%	2.19%
Summer	$ 175.47	$ 183.77	$ 192.76	$ 199.22	$ 198.21	$ 200.68	$ 205.08
% change from prior period			4.89%	3.35%	-0.51%	1.25%	2.19%

Rate Setting Considerations

Meter Charge

The monthly meter charge per customer includes depreciation expense on the fixed plant in service costs to serve this customer class and the costs of customer billing. Not all of these costs are recovered in the meter charge and the unrecovered costs become part of the energy (kWh) charge.

Capacity and Transmission Charge, Distribution Charge and Energy Charge

The energy costs are allocated to the customer class based on the load profile and customer characteristics of the class. The costs include the remaining fixed costs not recovered through the meter charge, variable capacity and transmission costs, energy costs, costs of operation and maintenance expenses on plant in service, allocated administrative and general expenses and the return on ratebase. Fluctuations in the kWh unit cost of energy from budgeted energy costs are recovered through the application of the Power Cost Adjustment Clause (PCAC).

Rate Development Comments

The proposed rates are based on the winter/summer price differential in forecasted CMLP monthly power costs. The rate tiers are adjusted from the current levels to reflect changes in customer usage patterns, modified to achieve rate continuity.

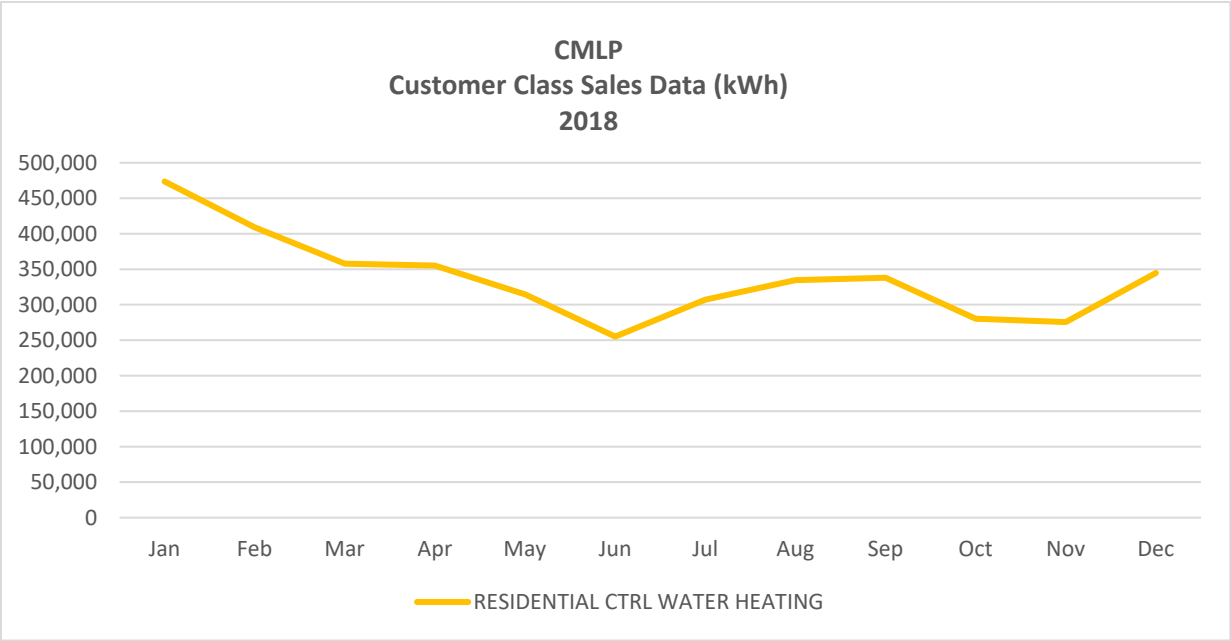
Residential and General Service – Farm Discount Rider

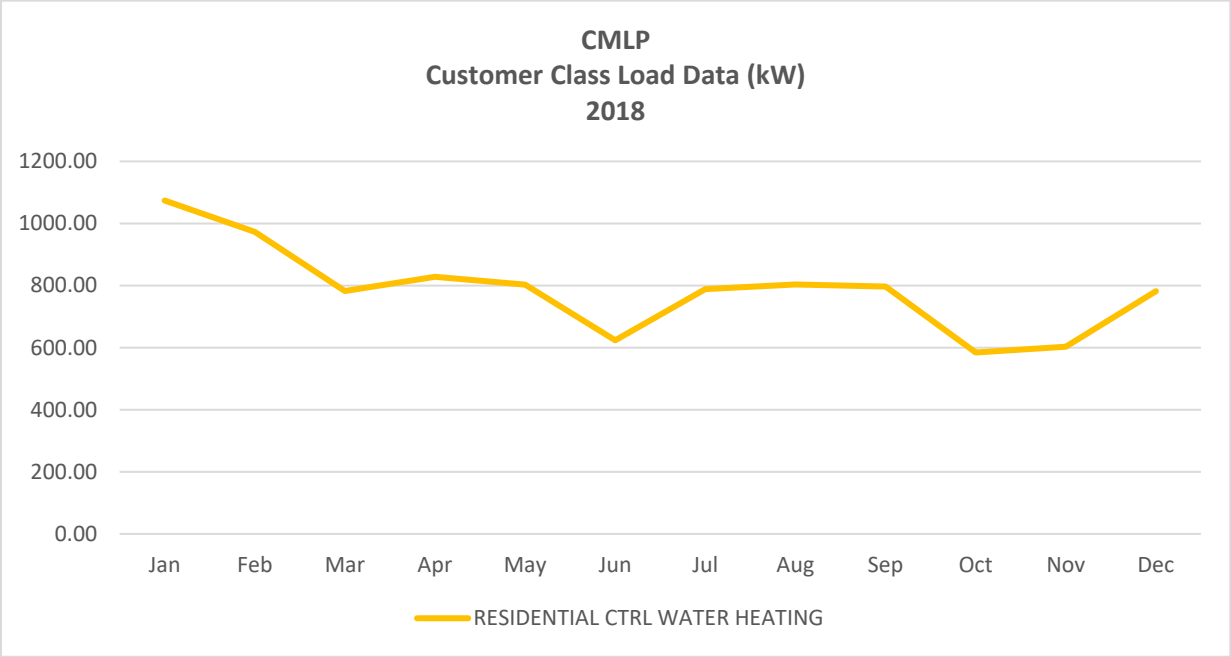
The Farm Discount Rider is currently 10% applied to all billings under the Residential R-1 Rate. Continuing the discount at a rate of 10% has been factored into the overall recommended rate structure in this study.

Controlled Water Heating Credit Rider

The controlled water heating credit rate class provides a credit calculated in the latest CMLP rate study based on the avoided cost of capacity and transmission. The profile of this customer class is shown in the following illustration:

Illustration 5 – Controlled Water Heating kWh sales by Month and kW load by Month





Controlled Water Heating Credit Rider customers are currently billed at the Residential R-1 rate and then the credit is applied to the calculated bill.

The billing determinants, proposed rates and an average bill comparison for the proposed *Controlled Water Heating Credit Rider* are shown in the following table:

Table 12 – Proposed Controlled Water Heating Credit Rider

Controlled Water Heating Credit Rider

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Total Capacity and Transmission Charge:							
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.04505	$ 0.04866	$ 0.05498	$ 0.06213	$ 0.06834
Next 178 kWh		$ 0.05231	$ 0.05859	$ 0.06327	$ 0.07150	$ 0.08079	$ 0.08887
All in excess of 835 kWh		$ 0.07548	$ 0.08454	$ 0.09130	$ 0.10317	$ 0.11659	$ 0.12825
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.04368	$ 0.04717	$ 0.05331	$ 0.06024	$ 0.06626
Next 178 kWh		$ 0.05072	$ 0.05680	$ 0.06135	$ 0.06932	$ 0.07833	$ 0.08617
All in excess of 835 kWh		$ 0.07319	$ 0.08197	$ 0.08853	$ 0.10003	$ 0.11304	$ 0.12434
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Controlled Water Heating Credit	$ (14.87)						
Winter (October 1 - May 31)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
Summer (June 1 - September 30)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

How can the summer bill be higher than the winter bill?

Average Bill Comparison - 1,000 kWh							
Winter	$ 164.13	$ 169.08	$ 178.16	$ 185.18	$ 193.71	$ 204.29	$ 214.22
% change from prior period			5.37%	3.94%	4.61%	5.46%	4.86%
Summer	$ 164.13	$ 167.56	$ 184.31	$ 198.36	$ 206.27	$ 217.35	$ 228.40
% change from prior period			9.99%	7.62%	3.99%	5.37%	5.08%

Refer to Summary of Significant Assumptions and Accounting Policies.

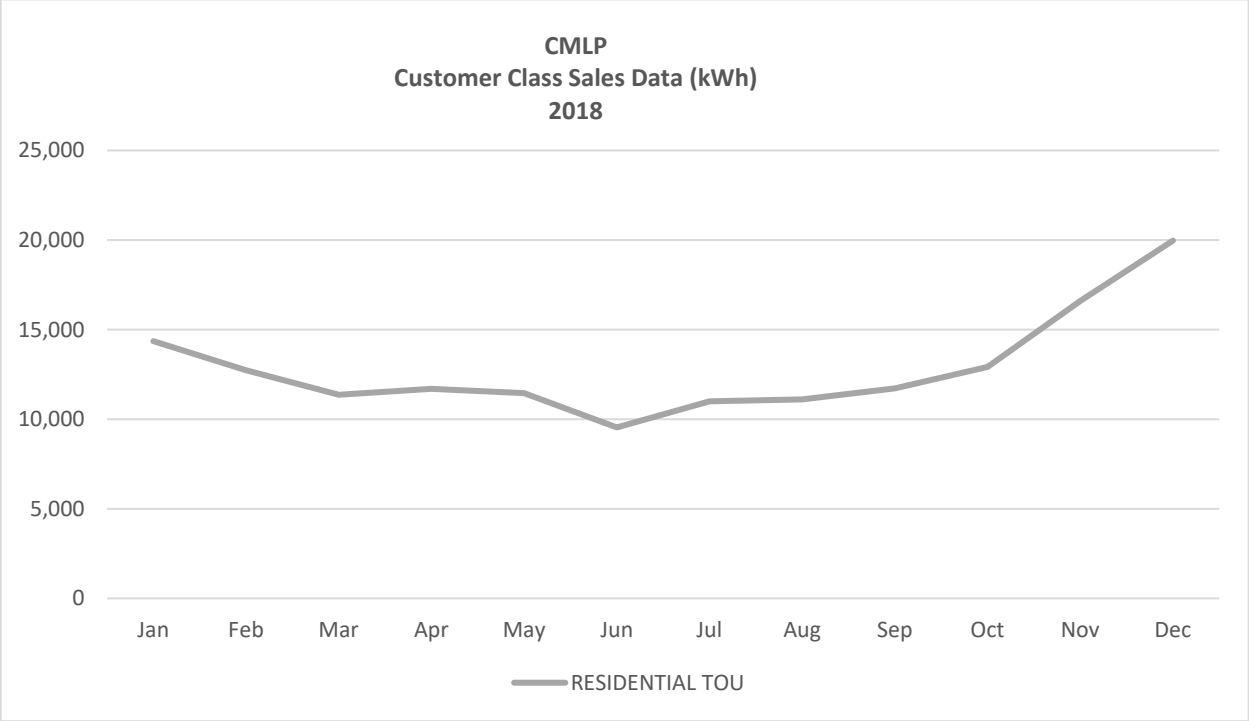
Residential Time of Use Rate - Rate R-1 Tour

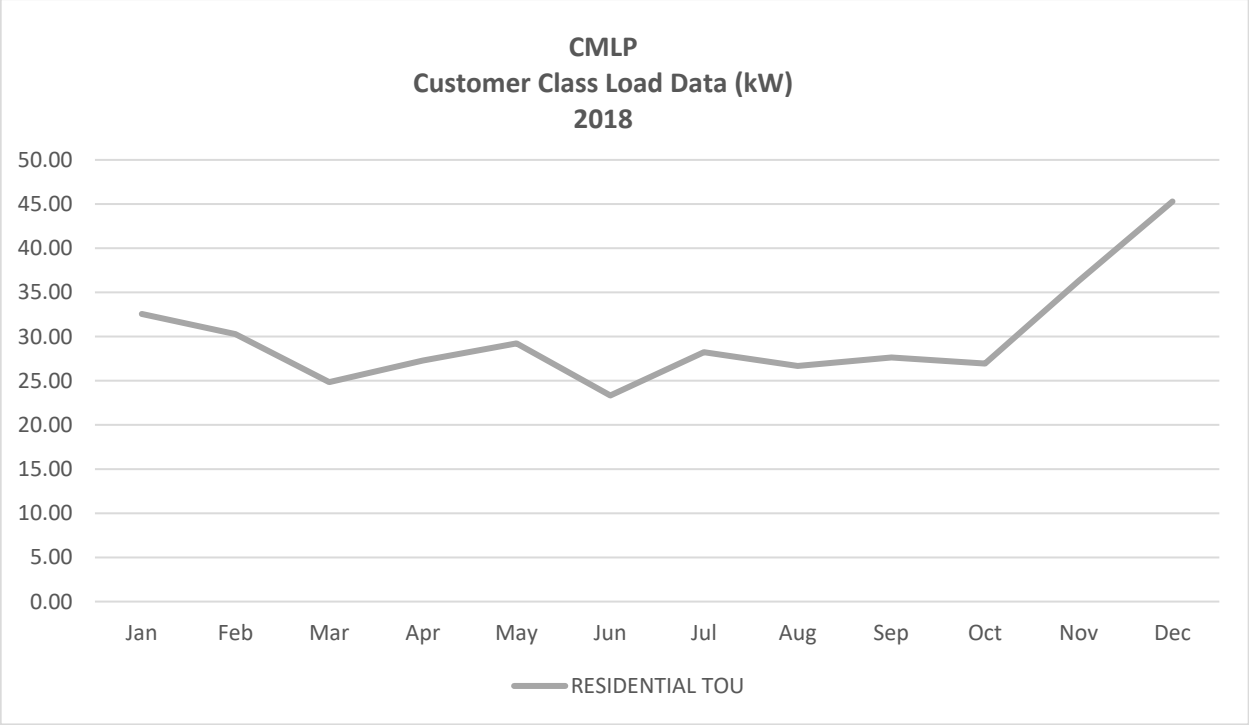
The residential time of use rate is designed to encourage customers to move some of their kWh usage to off-peak periods, to reflect CMLP's lower cost of obtaining energy during those hours. The on and off-peak hours are as follows:

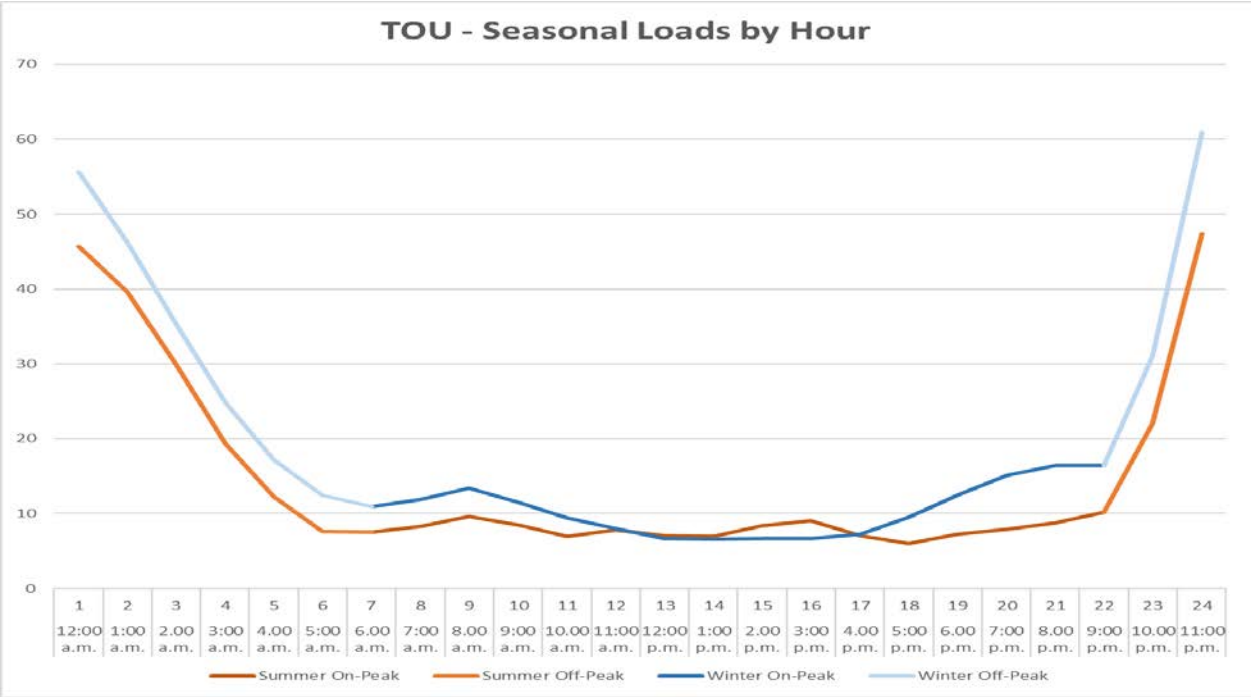
Rate Period	On-Peak	Mid-Peak	Off-Peak
Winter	4 PM – 8 PM	NA	8 PM – 4 PM
Summer	4 PM – 8 PM	8 AM – 4 PM, 8 PM – 12 AM	12 PM – 8 AM

The annual profile and average daily profile of this customer class is shown in the following illustration:

Illustration 6 – Residential Time of Use kWh sales by Month, kW load by Month and Seasonal Loads by Hour







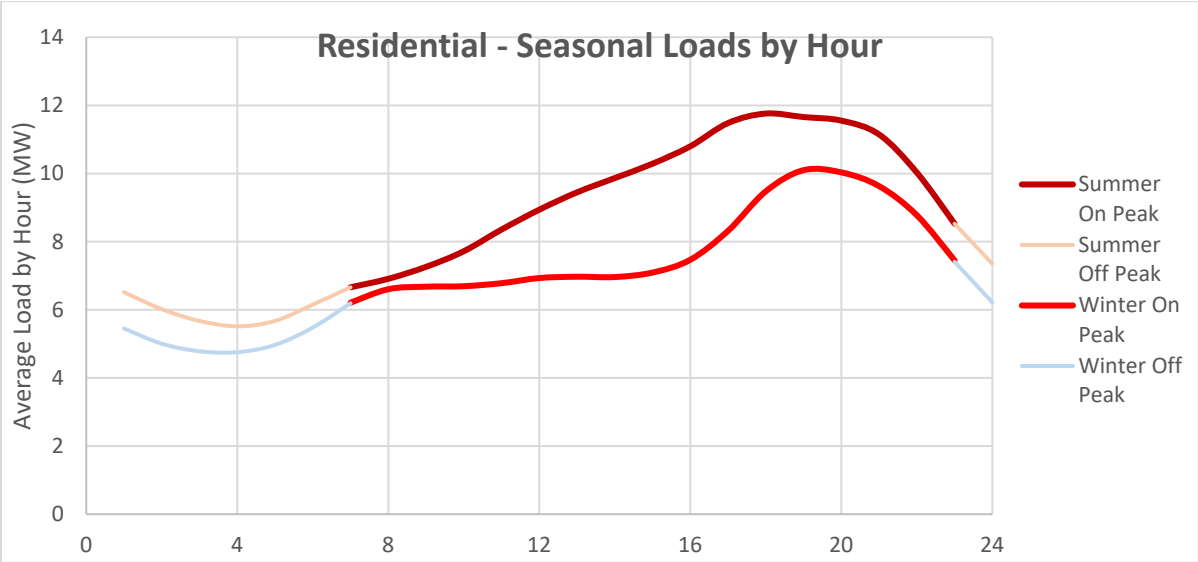
The current customers in the Residential Tour class appear to adhere very well to the on/off peak periods, meaning that the pricing signals of the rate are respected by the users in attempting to reduce their electric bills.

Opt-Out Residential Time of Use Rate

The current Residential Tour class has just over 40 customers. The goal of this class is to move customer usage more towards off-peak hours and these customers are achieving that goal.

Below is a contrast of the graph in Illustration 6 – *Seasonal Loads by Hour* of residential customers with the average hourly usage by winter and summer periods. This graph is developed from residential load data of Eversource, an investor-owned utility that serves the Boston area. CMLP's residential load data will be somewhat different, but this gives an idea of the contrast in usage patterns:

Illustration 7 – Residential Seasonal Load Curves by Hour



The highlighted peaks are the on-peak periods for ISO-NE.

The time-of-use rate designed in Scenario 2 and Scenario 3 of this study is based on an estimated opt-out rate of 4% (as discussed in the section on the Residential R-1 rate development). The differences in rates in each period are based on these parameters:

Rate Period	On-Peak	Mid-Peak	Off-Peak
Winter	4.0 x off-peak rate	NA	NA
Summer	4.0 x off-peak rate	1.5 x off-peak rate	NA

As CMLP deploys more smart meters and more customers move to the current CMLP Residential Time-of-Use class it will have a larger customer sample group and data to forecast a predicted load curve of customers that would be part of this class. A customer information campaign or surveys may also provide insights into a potential opt out percentage of customers for an opt-out time of use rate. We recommend that CMLP use that data to make a decision on a final rate design. For purposes of this study, a framework has been recommended for the design of an opt out rate, ***but the recommendation should in no way be the final rate without analysis of more current data.***

The billing determinants, proposed rates and an average bill comparison for the *Opt-out Residential Time of Use Rate - Rate R-1 Tour* rate schedule are shown in the following table.

Table 13 – Proposed Opt-out Residential Time of Use Rate - Rate R-1 Tour

	Residential Time of Use - Rate R-1 Tour						
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Demand Charge per kW	N/A	$ 4.00	$ 4.20	$ 4.41	$ 4.63	$ 4.86	$ 5.11
On-peak (all kWhs)	$ 0.14683						
Off-peak (all kWhs)	$ 0.03088						
Winter (October 1 - May 31)							
All kWhs:							
On-peak (4 PM - 8 PM)		$ 0.08800	$ 0.08272	$ 0.07197	$ 0.06621	$ 0.06488	$ 0.06359
Off-peak (8 PM - 4 PM)		$ 0.02200	$ 0.02068	$ 0.01799	$ 0.01655	$ 0.01622	$ 0.01590
Summer (June 1 - September 30)							
All kWhs:							
Peak (4 PM - 8 PM)		$ 0.06907	$ 0.06493	$ 0.05649	$ 0.05197	$ 0.05093	$ 0.04991
Mid-peak (8 AM - 4 PM, 8 PM - 12 AM)		$ 0.02590	$ 0.02435	$ 0.02118	$ 0.01949	$ 0.01910	$ 0.01872
Off-peak (12 PM - 8 AM)		$ 0.01727	$ 0.01623	$ 0.01412	$ 0.01299	$ 0.01273	$ 0.01248
Distribution Charge (all kWhs)		$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (all kWhs)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - 1,000 kWh, 2 kW							
Winter	$ 145.34	$ 180.74	$ 189.86	$ 195.46	$ 193.78	$ 196.16	$ 199.68
% change from prior period			5.05%	2.95%	-0.86%	1.23%	1.79%
Summer	$ 145.34	$ 173.27	$ 182.85	$ 189.37	$ 188.16	$ 190.66	$ 194.29
% change from prior period			5.52%	3.57%	-0.64%	1.33%	1.90%

Residential Service – Electric Resistance & Heat Pump Heating Systems/DHW – Rate R-7

Billings on this class are based on a separate meter that is in series with the normal billing meter that records the usage of the electric resistance and/or heat pump space heating system. The billing period is October 1 – May 1. As the winter billing period for ISO-NE is October 1 – May 31, we recommend that this rate class' billing period also be October 1 – May 31. The proposed rate is based on that period.

The proposed rate for the *Electric Resistance & Heat Pump Heating Systems/DHW – Rate R-7* rate schedule is shown in the following table.

Table 14 – Proposed Electric Resistance & Heat Pump Heating Systems/DHW – Rate R-7

Residential Service - Resistance Heat Pump Heating Rate - R-7

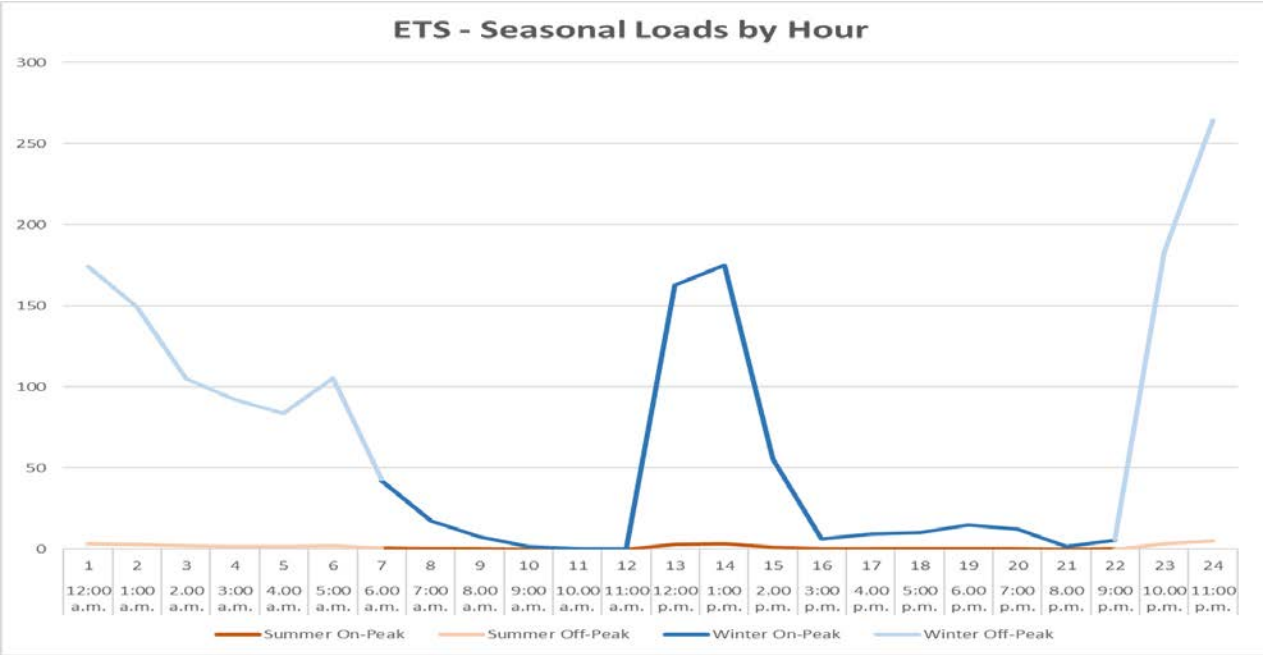
Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
All kWh's - October 1 - May 31	$ 0.15071	$ 0.13723	$ 0.15644	$ 0.17365	$ 0.18581	$ 0.20067	$ 0.21673
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%

Residential Service – Off Peak – Electric Thermal Storage (ETS) – Rate R-3

Electric Thermal Storage is a technology that allows users to convert electricity to heat during off-peak hours, storing it within high density ceramic bricks and then releasing it for heating purposes. As part of this project, we evaluated the potential of incorporating this rate class into the Opt-out Residential Time of Use rate class. This may offer customers choice as to when they charge their equipment and may be a practical rate to use (Residential Time of Use). We recommend that CMLP obtain customer feedback in this area and evaluate a potential move to a time of use rate for this class.

The ETS units are heated initially with off-peak power, the heat is released, then the units are reheated and the cycle continues. CMLP controls this activity. This activity results in a customer hourly load curve as shown in the following illustration:

Illustration 8 – Electric Thermal Storage (ETS) Hourly Customer Usage



The billing determinants, proposed rates and an average bill comparison for the *Residential Service – Off Peak – Electric Thermal Storage (ETS) – Rate R-3* rate schedule are discussed in the following table.

Table 15 – Proposed Residential Service – Off Peak – Electric Thermal Storage (ETS) – Rate R-3

Residential Service - Off Peak - Electric Thermal Storage (ETS) - Rate R-3							
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
All kWh's	$ 0.07918						
Meter Charge		$ -	$ -	$ -	$ -	$ -	$ -
Capacity and Transmission and Distribution Charge							
Winter (October 1 - May 31)							
All kWhs:		$ -	$ -	$ -	$ -	$ -	$ -
Summer (June 1 - September 30)							
All kWhs:		$ -	$ -	$ -	$ -	$ -	$ -
Energy Charge (per kWh)		$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Distribution Charge (per kWh)		$ 0.01012	$ 0.01000	$ 0.01000	$ 0.01000	$ 0.01400	$ 0.01600
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison							
Winter - 2,800 kWh	$ 225.55	$ 229.32	$ 250.62	$ 270.40	$ 269.47	$ 283.29	$ 292.84
% change from prior period			9.29%	7.89%	-0.34%	5.13%	3.37%
Summer - 148 kWh	$ 11.92	$ 12.12	$ 13.25	$ 14.29	$ 14.24	$ 14.97	$ 15.48
% change from prior period			9.29%	7.89%	-0.34%	5.13%	3.37%

There is not a capacity and transmission rate for this class, as the energy and distribution charge recover the costs involved with transition to the cost of service.

Residential Service – Rate Assistance Rider

The Residential Service – Rate Assistance Rider is set at a credit of $0.10/kWh applied to the first 657 kWh of customer usage. Customer bills are based on the Residential R-1 rates.

The billing determinants, proposed rates and an average bill comparison for the *Residential Service – Rate Assistance Rider* rate schedule are shown in the following table.

Table 16 – Proposed Residential Service – Rate Assistance Rider

Residential Service - Rate Assistance Rider							
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Rate Assistance Credit (based on first 600 kWh)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)
Average Bill Comparison - 500 kWh							
Winter	$ 37.00	$ 44.13	$ 49.17	$ 53.06	$ 53.11	$ 54.82	$ 57.47
% change from prior period			11.43%	7.91%	0.09%	3.23%	4.82%
Summer	$ 37.00	$ 43.49	$ 48.56	$ 52.49	$ 52.56	$ 54.27	$ 56.91
% change from prior period			11.66%	8.10%	0.12%	3.26%	4.85%

Residential Service Rider – Net Metering with Banking Rate

Under the current Net Metering with Banking Rate structure, CMLP will calculate a monthly credit for a customer whose generated energy is greater than purchases. The credit is calculated based on the avoided average monthly Day Ahead locational marginal price (DA-LMP) per kWh applicable to CMLP for wholesale power purchased from ISO-NE. The credit calculation period is 9 AM – 4 PM.

Our understanding is that CMLP attempts to clear 100% of its known energy imbalance in the Day Ahead (DA) market, but the only volumes subject to Real Time (RT) are the variances between forecasted supply and demand and the actual supply and demand, which includes distributed generation (DG). Since the RT market is used to fill the gaps caused by DG and the energy generated by the customer is not necessarily predictable or schedulable, it may be appropriate to utilize the RT average pricing for ISO-NE to calculate the credit. This would match the market and pricing for CMLP's avoided cost.

For example, the average DA and RT monthly pricing for a recent 12-month period is shown in the following illustration:

Illustration 9 – Average Day Ahead and Real Time Prices – ISO-NE - On and Off-Peak

	On-peak intervals	
	Avg DA LMP ($/mWh)	Avg RT LMP ($/mWh)
February, 2019	38.71	39.54
March, 2019	40.83	37.64
April, 2019	29.54	28.65
May, 2019	27.05	25.88
June, 2019	25.42	24.94
July,2019	35.15	30.62
August, 2019	31.07	26.61
September, 2019	24.32	23.68
October, 2019	23.86	23.05
November, 2019	36.94	39.47
December, 2019	46.39	52.12
January, 2020	29.84	27.78
12 Month Average	**$ 32.43**	**$ 31.67**
Summer average	**$ 28.99**	**$ 26.46**
Winter average	**$ 34.15**	**$ 34.27**

	Off-peak intervals	
	Avg DA LMP ($/mWh)	Avg RT LMP ($/mWh)
February, 2019	33.34	35.18
March, 2019	36.07	36.71
April, 2019	24.62	25.27
May, 2019	22.07	20.58
June, 2019	19.84	20.79
July,2019	27.42	28.70
August, 2019	21.62	21.45
September, 2019	18.98	18.25
October, 2019	18.06	18.10
November, 2019	29.00	30.58
December, 2019	36.97	35.45
January, 2020	23.78	25.16
12 Month Average	**$ 25.98**	**$ 26.35**
Summer average	**$ 21.97**	**$ 22.30**
Winter average	**$ 27.99**	**$ 28.38**

CMLP calculates the average based on daily/hourly amounts, so the calculation would be more refined, but approximate to the pricing differential shown in the illustration.

Customers in this rate class are also billed a monthly fixed charge based on their installed generation capacity. This charge is designed to cover a portion of their fixed costs for connecting to the CMLP system.

As the installed generation charge was designed in a separate study prior to this Baker Tilly study, in this study we did not alter the generation capacity rates (except for cost of service transition rates) or method used.

The proposed rates for the *Residential Service Rider – Net Metering with Banking Rate* schedule are shown in the following table.

Table 17 – Proposed Residential Service Rider – Net Metering with Banking Rate

Residential Service Rider - Net Metering with Banking Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Distribution Charge:							
Installed generation capacity equal or greater than and less than:							
Greater than 2 kW but less than 4 kW AC	$ 3.60	$ 3.60	$ 3.80	$ 3.90	$ 3.90	$ 4.00	$ 4.10
Greater than 4 kW but less than 7 kW AC	$ 6.60	$ 6.60	$ 6.90	$ 7.10	$ 7.10	$ 7.20	$ 7.40
Greater than 7 kW but less than 10 kW AC	$ 10.20	$ 10.20	$ 10.70	$ 11.10	$ 11.00	$ 11.10	$ 11.30
Greater than 10 kW but less than 13 kW AC	$ 13.80	$ 13.80	$ 14.50	$ 15.00	$ 14.90	$ 15.10	$ 15.40
Greater than 13 kW but less than 16 kW AC	$ 17.40	$ 17.40	$ 18.20	$ 18.80	$ 18.70	$ 18.90	$ 19.30
Greater than 16 kW but less than 19 kW AC	$ 21.00	$ 21.00	$ 22.00	$ 22.70	$ 22.60	$ 22.90	$ 23.40
Greater than 19 kW but less than 22 kW AC	$ 24.60	$ 24.60	$ 25.80	$ 26.70	$ 26.50	$ 26.80	$ 27.40
Greater than 22 kW but less than 25 kW AC	$ 28.20	$ 28.20	$ 29.50	$ 30.50	$ 30.30	$ 30.70	$ 31.40
Greater than 25 kW but less than 28 kW AC	$ 31.80	$ 31.80	$ 33.30	$ 34.40	$ 34.20	$ 34.60	$ 35.40
Greater than 28 kW but less than 31 kW AC	$ 35.40	$ 35.40	$ 37.10	$ 38.40	$ 38.20	$ 38.70	$ 39.50
Greater than 31 kW but less than 34 kW AC	$ 39.00	$ 39.00	$ 40.90	$ 42.30	$ 42.00	$ 42.50	$ 43.40
Greater than 34 kW but less than 37 kW AC	$ 42.20	$ 42.20	$ 44.20	$ 45.70	$ 45.40	$ 46.00	$ 47.00
Greater than 37 kW but less than 40 kW AC	$ 46.20	$ 46.20	$ 48.40	$ 50.00	$ 49.70	$ 50.30	$ 51.40
Greater than 40 kW but less than 46 kW AC	$ 53.40	$ 53.40	$ 55.90	$ 57.80	$ 57.40	$ 58.10	$ 59.40
Greater than 46 kW but less than 58 kW AC	$ 67.80	$ 67.80	$ 71.00	$ 73.40	$ 72.90	$ 73.80	$ 75.40
Greater than 58 kW but less than 82 kW AC	$ 96.60	$ 96.60	$ 101.20	$ 104.60	$ 103.90	$ 105.20	$ 107.50
Greater than 82 kW but less than 130 kW AC	$ 154.20	$ 154.20	$ 161.50	$ 167.00	$ 165.90	$ 168.00	$ 171.70
Greater than 130 kW but less than 167 kW AC	$ 198.60	$ 198.60	$ 208.10	$ 215.10	$ 213.70	$ 216.40	$ 221.10
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Industry Standard Approaches to Net Metering Compensation

The method used by CMLP is one of the industry standard approaches to compensating net metering customers for their kWh output and charging a fixed fee for distribution cost recovery. CMLP's approach is based on a separate study.

Another standard approach by some utilities is to pay net metering customers a standard amount per kWh, calculated annually as the dollar value of expected avoided generation and production-related costs divided by the expected net metering annual energy sales[3][4][5].

In this approach, in some instances the utility pays for the two-way meter, in others the customer pays for the cost of the metering. The monthly fixed charge to the customer is based on the applicable rate for their level of service and the per kWh rate is fixed in the tariff.

A method used by a utility in CMLP's area – Eversource – uses the same method as CMLP in compensating net generation customers, i.e. based on the average clearing price in the ISO-NE. The compensation is based on the average monthly clearing price at the ISO-NE (after deduction of Eversource charges for basic service, distribution, transmission and transition costs per kWh)[6].

The reimbursement percentage is based on the size of the customer's solar panel system:

Customer Class	Solar Panel System Size	Reimbursement Percentage
Class I	60 kW or less	100%
Class II	60 kW-1,000 kW	60%
Class III	1,000 kW – 2,000 kW	60%

In our opinion, the current method used by CMLP is reflective of CMLP's avoided cost and we do not recommend a change, except perhaps to using the RT average rate.

Power Cost Adjustment Clause – Rate Schedule PCA

The Power Cost Adjustment Clause is currently calculated based on a base cost of power supply of $0.112500. Revenue adjustments are made through the factor to reflect the difference between the actual cost of power supply and the base cost. The resulting factor, either positive or negative, is applied to the rate classes where a PCA is included in the calculation of a customer's bill. This is a common method used by utilities and we recommend no change to the application of the factor.

New York Power Authority Adjustment Clause – Rate Schedule NYPA

The *New York Power Authority Adjustment Clause – Rate Schedule NYPA* is calculated based on the savings resulting from the use of NYPA power and energy each month. It is applied to the first 75 kWh of usage for various customer classes. We have made no adjustment to this rate in this study.

[3] SMUD net metering policy https://bit.ly/2WZYfZ0
[4] SMUD net metering rate/kWh history https://bit.ly/344h7Y3
[5] Modesto Irrigation District net metering tariff https://bit.ly/2X4Xf5T
[6] Eversource net metering tariff https://bit.ly/2JuIuRS

Underground Utilities Charge – Rate UUC

The *Underground Utilities Charge – Rate – UUC* is a surcharged used to convert overhead facilities to underground facilities. The rate is 1.5% of the customer bill, excluded the CARES charge.

This rate meets management's objectives for accumulating funds for overhead to underground conversions.

Conservation and Renewable Energy Services Charge - Rate CARES

This charge covers the cost of Conservation and Renewable Energy Services Programs (CARES) required by the Commonwealth of Massachusetts amounting to not less than one quarter of one percent of an electric utility's total annual revenues.
The proposed rate is based on the budgeted CARES costs divided by revenues applicable to the CARES computation. The current and recommended *Conservation and Renewable Energy Services Charge – Rate CARES* is shown in the following table.

Table 18 – Conservation and Renewable Energy Services Charge – Rate CARES

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Private Area Lighting

Private area lighting bills are embedded in various customer classes and energy usage is billed at the customer's rate in their customer class. The customer count of these customers is minimal, and per management the customers using this option are phasing out and there is a plan to convert existing fixtures to LED bulbs. Due to the small number of installations in this rate class the recommendation is to continue with the current rate methodology.

The *Private Area Lighting Rate Schedule* is shown in the following table.

Table 19 – Private Area Lighting – Rate PAL

Private Area Lighting - Rate Schedule PAL

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Lamp charge	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522

Other charges

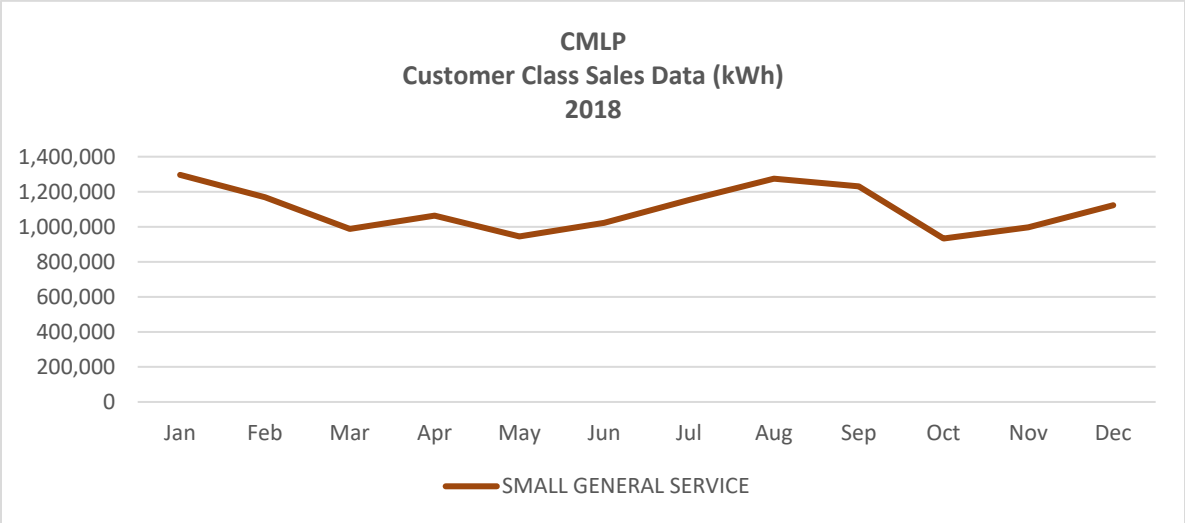
Billing Item	Current Rate	Proposed Rate
Monthly charges:		
Pole set charge	$4.00	$4.00
Overhead wiring charge (per 100'/month)	$5.00	$5.00
Underground wiring charge (per 100'/month)	$4.00	$4.00

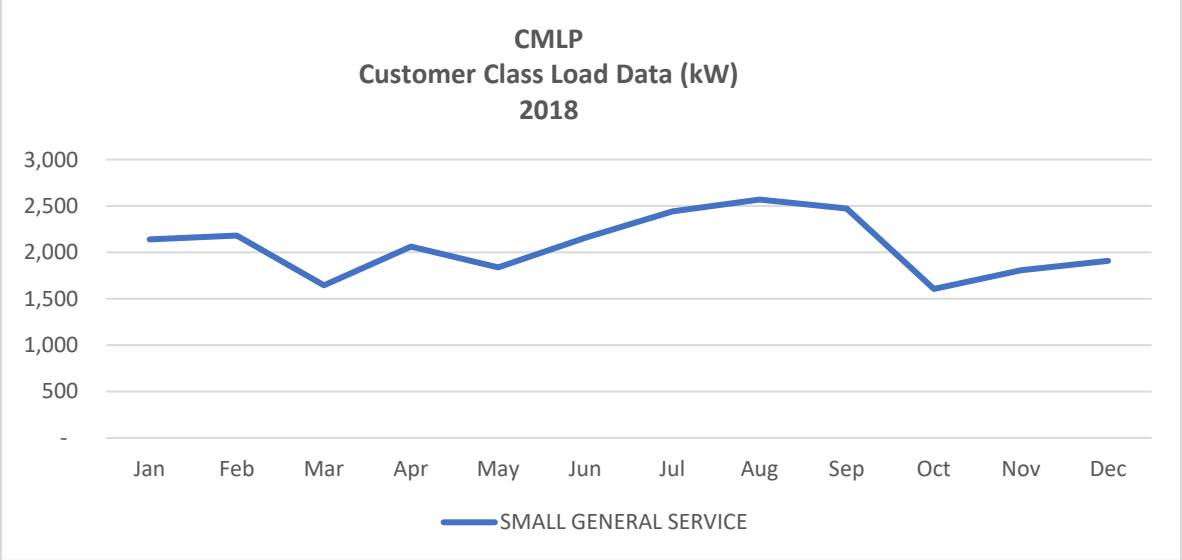
Commercial Service Rates

Small General Service – Rate G-1

The load profile of this customer class is shown in the following illustration:

Illustration 10 – Small General Service kWh sales by Month and kW load by Month





For competitive rate purposes, the CMLP oversight board directed that rates should be designed in this class so that an approximate 20% rate decrease was enacted.

The billing determinants, proposed rates and an average bill comparison for the *Small General Service – Rate G-1* rate schedule are shown in the following table.

Table 20 – Proposed Small General Service – Rate G-1

Small General Service - Rate G-1

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 12.00	$ 12.00	$ 12.60	$ 13.20	$ 13.90	$ 14.60
Capacity and Transmission Charge (per kWh)	$ 0.08185						
Winter (October 1 - May 31)							
All kWhs		$ 0.07240	$ 0.02172	$ 0.01890	$ 0.01814	$ 0.01814	$ 0.01869
Summer (June 1 - September 30)							
All kWhs		$ 0.07020	$ 0.02106	$ 0.01832	$ 0.01759	$ 0.01759	$ 0.01812
Distribution Charge (per kWh)	$ 0.03228	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - 3,000 kWh							
Winter	$ 603.21	$ 605.11	$ 477.78	$ 496.18	$ 492.51	$ 497.75	$ 507.82
% change from prior period			-21.04%	3.85%	-0.74%	1.06%	2.02%
Summer	$ 603.21	$ 598.25	$ 475.72	$ 494.39	$ 490.80	$ 496.03	$ 506.05
% change from prior period			-20.48%	3.92%	-0.73%	1.07%	2.02%

this should be $0.02908

Rate Setting Considerations

Meter Charge

The monthly meter charge per customer includes depreciation expense on the fixed plant in service costs to serve this customer class and the costs of customer billing. Not all of these costs are recovered in the meter charge and the unrecovered costs become part of the energy (kWh) charge.

Capacity and Transmission Charge, Distribution Charge and Energy Charge

The energy costs are allocated to the customer class based on the load profile and customer characteristics of the class. The costs include the remaining fixed costs not recovered through the meter charge, variable capacity and transmission costs, energy costs, costs of operation and maintenance expenses on plant in service, allocated administrative and general expenses and the return on ratebase. Fluctuations in the kWh unit cost of energy from budgeted energy costs are recovered through the application of the Power Cost Adjustment Clause (PCAC).

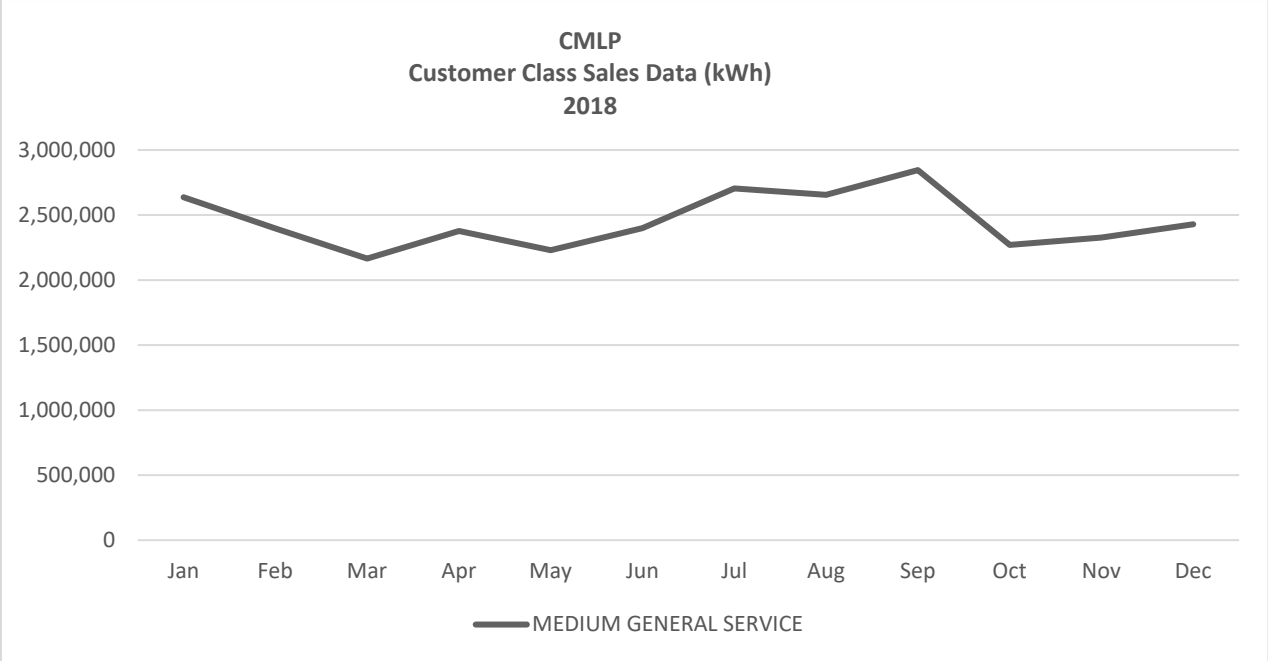
Rate Development Comments

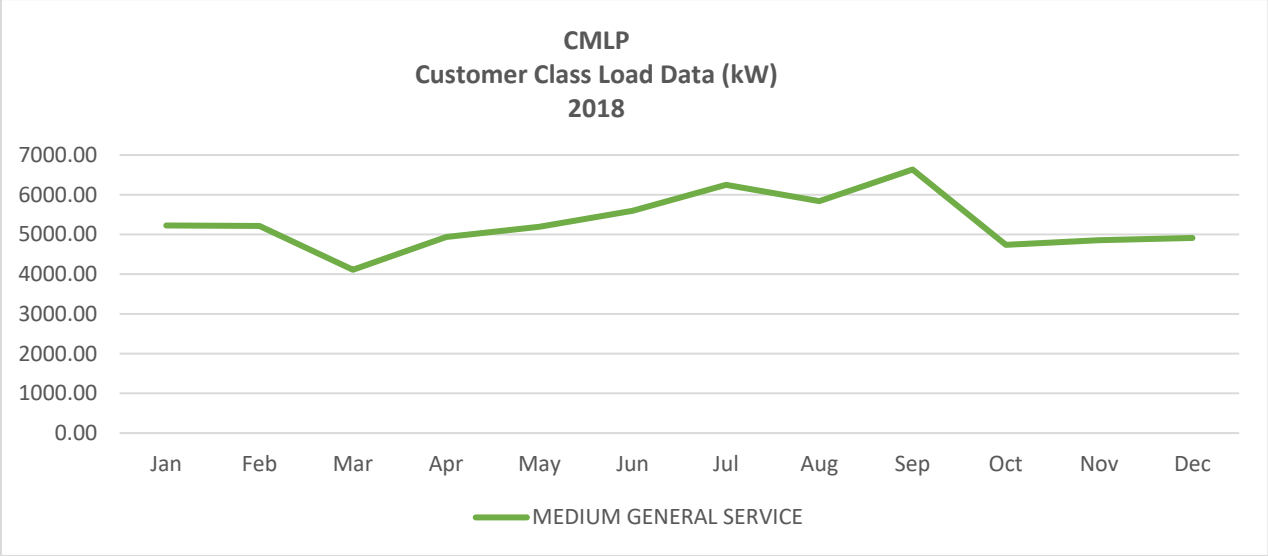
The proposed rates are based on the winter/summer price differential in forecasted CMLP monthly power costs. The rate tiers are adjusted from the current levels to reflect changes in customer usage patterns, modified to achieve rate continuity.

Medium General Service – Rate G-2

The load profile of this customer class is shown in the following illustration:

Illustration 11 – Medium General Service kWh sales by Month and kW load by Month




CMLP
Customer Class Load Data (kW)
2018
7000.00
6000.00
5000.00
4000.00
3000.00
2000.00
1000.00
0.00
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
MEDIUM GENERAL SERVICE

The billing determinants, proposed rates and an average bill comparison for the *Medium General Service – Rate G-2* rate schedule are discussed in the following table.

Table 21 – Proposed Medium General Service – Rate G-2

Medium General Service - Rate G-2

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge (Single Phase)	$ 44.00	$ 50.00	$ 51.50	$ 53.00	$ 54.60	$ 56.20	$ 57.90
Meter Charge (Three Phase)	$ 60.00	$ 68.00	$ 70.00	$ 72.10	$ 74.30	$ 76.50	$ 78.80
Demand Rate (per kW)	$ 10.85	$ 12.00	$ 12.40	$ 12.60	$ 12.90	$ 13.20	$ 13.50
Capacity and Transmission Charge (per kWh)	$ 0.03507						
Winter (October 1 - May 31) - All kWhs		$ 0.01650	$ 0.01353	$ 0.01015	$ 0.00893	$ 0.00881	$ 0.00925
Summer (June 1 - September 30) - All kWhs		$ 0.01600	$ 0.01312	$ 0.00984	$ 0.00866	$ 0.00854	$ 0.00896
Distribution Charge (per kWh)	$ 0.02571	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - Winter (16,200 kWh, 29 kW); Summer (14,300 kWh, 37 kW)							
Winter	$ 2,675.40	$ 2,673.88	$ 2,801.46	$ 2,895.59	$ 2,875.47	$ 2,908.43	$ 2,967.94
% change from prior period			4.77%	3.36%	-0.69%	1.15%	2.05%
Summer	$ 2,493.09	$ 2,500.81	$ 2,619.60	$ 2,706.72	$ 2,693.33	$ 2,726.24	$ 2,782.33
% change from prior period			4.75%	3.33%	-0.49%	1.22%	2.06%

Rate Setting Considerations

Meter Charge

The monthly meter charge per customer includes depreciation expense on the fixed plant in service costs to serve this customer class and the costs of customer billing. Not all of these costs are recovered in the meter charge and portions of the unrecovered costs become part of the energy (kWh) charge.

Demand Charge

Demand charges are based on the allocation of budgeted fixed transmission and distribution costs of the customer class. Not all of these costs are recovered in the demand charge and portions of the unrecovered costs become part of the energy (kWh) charge.

Capacity and Transmission Charge, Distribution Charge and Energy Charge

The energy costs are allocated to the customer class based on the load profile and customer characteristics of the class. The costs include the remaining fixed costs not recovered through the meter charge, variable capacity and transmission costs, energy costs, costs of operation and maintenance expenses on plant in service, allocated administrative and general expenses and the return on ratebase. Fluctuations in the kWh unit cost of energy from budgeted energy costs are recovered through the application of the Power Cost Adjustment Clause (PCAC).

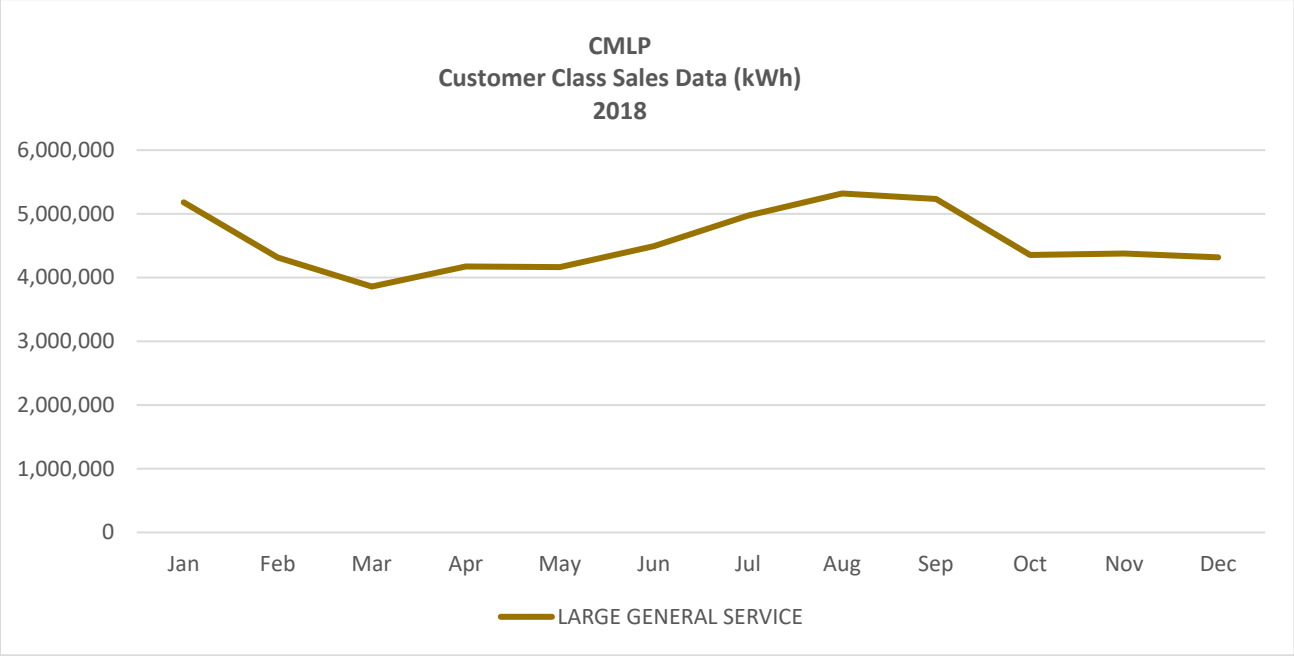
Rate Development Comments

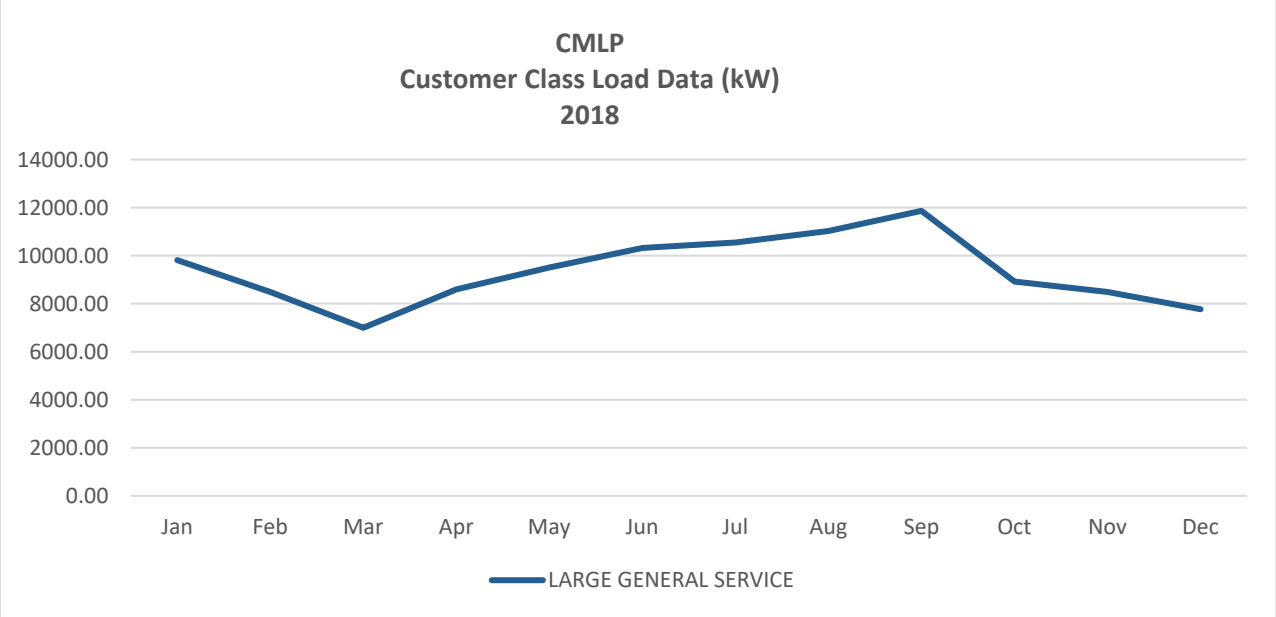
The proposed rates are based on the winter/summer price differential in forecasted CMLP monthly power costs. The rate tiers are adjusted from the current levels to reflect changes in customer usage patterns, modified to achieve rate continuity.

Large General Service – Rate G-3

The load profile of this customer class is shown in the following illustration:

Illustration 12 – Large General Service kWh sales by Month and kW load by Month





The billing determinants, proposed rates and an average bill comparison for the *Large General Service – Rate G-3* rate schedule are discussed in the following table.

Table 22 – Proposed Large General Service – Rate G-3

Large General Service - Rate G-3							
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Meter Charge (Single or Three Phase)	$ 380.00	$ 380.00	$ 381.90	$ 384.80	$ 390.00	$ 390.00	$ 390.00
Demand Rate (per kW)	$ 9.97	$ 10.00	$ 10.10	$ 10.40	$ 10.70	$ 11.00	$ 11.30
Capacity and Transmission Charge (per kWh)	$ 0.03094						
Winter (October 1 - May 31) - All kWhs		$ 0.01083	$ 0.00812	$ 0.00406	$ 0.00305	$ 0.00289	$ 0.00318
Summer (June 1 - September 30) - All kWhs		$ 0.01050	$ 0.00788	$ 0.00394	$ 0.00295	$ 0.00281	$ 0.00309
Distribution Charge (per kWh)	$ 0.02125	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - Winter (164,000 kWh, 319 kW); Summer (191,000 kWh, 413 kW)							
Winter	$ 25,575.33	$ 25,627.78	$ 26,862.44	$ 27,726.11	$ 27,552.49	$ 27,872.40	$ 28,439.34
% change from prior period			4.82%	3.22%	-0.63%	1.16%	2.03%
Summer	$ 30,144.01	$ 30,147.06	$ 31,605.10	$ 32,647.74	$ 32,463.86	$ 32,850.31	$ 33,521.74
% change from prior period			4.84%	3.30%	-0.56%	1.19%	2.04%

Rate Setting Considerations

Meter Charge

The monthly meter charge per customer includes depreciation expense on the fixed plant in service costs to serve this customer class and the costs of customer billing. Not all of these costs are recovered in the meter charge and portions of the unrecovered costs become part of the energy (kWh) charge.

Demand Charge

Demand charges are based on the allocation of budgeted fixed transmission and distribution costs of the customer class. Not all of these costs are recovered in the demand charge and portions of the unrecovered costs become part of the energy (kWh) charge.

Rate Development Comments

The proposed rates are based on the winter/summer price differential in forecasted CMLP monthly power costs. The rate tiers are adjusted from the current levels to reflect changes in customer usage patterns, modified to achieve rate continuity.

General Service – Net Metering Rate

Under the current General Service Net Metering Rate structure, CMLP will calculate a monthly credit for a customer whose generated energy is great than purchases. The credit is calculated based on the avoided average monthly Day Ahead locational marginal price (DA-LMP) per kWh applicable to CMLP for wholesale power purchased from ISO-NE. The credit calculation period is 9 AM – 4 PM.

Our understanding is that CMLP attempts to clear 100% of its known energy imbalance in the Day Ahead (DA) market, but the only volumes subject to Real Time (RT) are the variances between forecasted supply and demand and the actual supply and demand, which includes distributed generation (DG). Since the RT market is used to fill the gaps caused by DG, it may be appropriate to utilize the RT average pricing for ISO-NE. This would match the market and pricing for CMLP's avoided cost.

The current rate bills the meter, distribution, demand, capacity and transmission and energy charges based on the customer's current rate class. We recommend that approach continue for the proposed rates and that the rate paid to the customer is based on the average real-time price for that day in the ISO-NE market.

General Service – Off Peak ETS Heating – Rate GS ETS

We propose that the rate charged to this rate class be the same as for the Residential Service ETS rate.

Municipal Street Lighting Rate

Massachusetts General Law 164, Section 58 states that "the gas and electricity used by the municipality for street lighting shall be charged for at a cost to be determined as follows:

(All street lighting operating expenses + interest on the outstanding debt for street lights + depreciation on street lights)/kWhs = rate/kWh charged

Based on Massachusetts General Law 164, Section 58, CMLP uses an option to charge for street lighting based on the average energy cost per kWh. Using this method does not recover the fixed costs of street lighting (depreciation and the rate of return on street lights), maintenance on street lighting or an allocation of billing and administrative expenses.

Forecasted revenues for street lighting are $62,620 based on the CMLP 2020 budget. This is $107,000 less than the cost of service. This difference between the street lighting cost of service and the forecasted revenues is subsidized by the other customer classes and has been allocated to the Residential and Small, Medium and Large General Service classes. This is not uncommon in public power utilities such as CMLP, but is information that is useful in evaluating operating costs and in setting customer rates.

The billing determinants, proposed rates and an average bill comparison for the *Street Lighting* rate schedule are discussed in the following table.

Table 23 – Proposed Rate – Municipal Street Lighting Rate

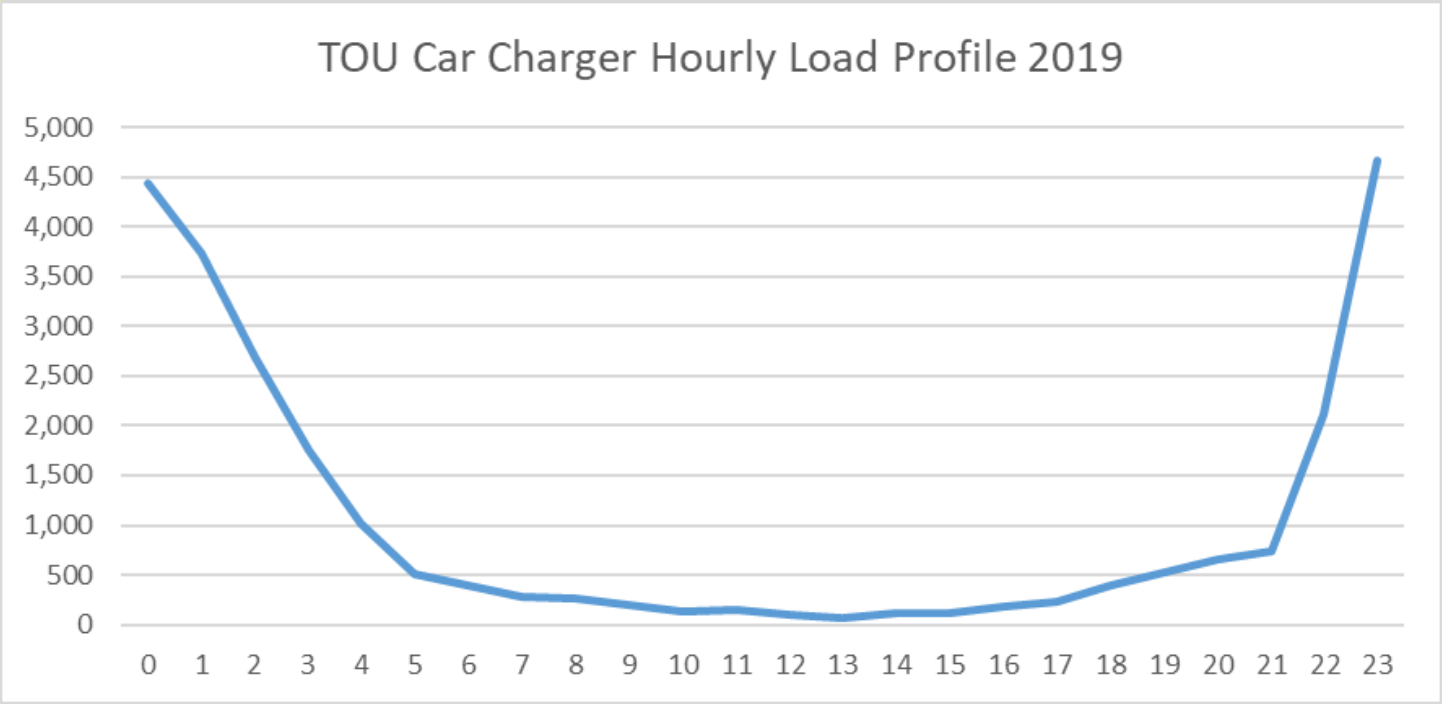
	Street Lighting						
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Lamp charge							
Capacity and Transmission Charge:							
All kWhs (average to get to budgeted amount)	$ 0.10893	$ 0.09023	$ 0.10133	$ 0.10133	$ 0.10133	$ 0.10133	$ 0.10133
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Annual Revenues		$ 62,620	$ 66,955	$ 70,978	$ 72,258	$ 74,255	$ 76,643
% change from prior period			6.9%	6.0%	1.8%	2.8%	3.2%

Electric Vehicle Charging Rate

One of management's strategic objectives is to encourage the use of electric vehicles. One of the key costs of ownership is the cost of vehicle charging. Encouraging vehicle charging during the off-peak period is beneficial to both the consumer and CMLP. The proposed rate offers customers a discount for charging vehicles registered with CMLP during off-peak hours.

Currently, electric vehicle charging customer use the Residential Time of Use (Tour) rate for charging. The load curve for these customers is shown in the following illustration:

Illustration 13 – Electric Vehicle Time of Use Charging Load Profile



Management indicated a desire to develop a potential electric vehicle monthly subscription charging rate, where the customer could charge as much as desired as long as the charging was done at off-peak hours.

Mirroring the above load curve, the CMLP proposed time of use rates, the current number of customers and data provided to Baker Tilly on the charging characteristics on this number of customers, a potential rate could be as shown in the following table:

Table 24 – Proposed Rate – Monthly Electric Vehicle Subscription Charging Rate

Electric Vehicle Charging Subscription Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Charge	NA	$ 42.00	$ 44.00	$ 45.49	$ 45.20	$ 45.78	$ 46.78
CARES	N/A	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

As more customers use this rate, CMLP should regularly review customer kWhs charged and load patterns compared to the calculation above and make rate adjustments as needed.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

The following table contains a summary of all proposed rates. The rates include Winter/Summer seasonal rates and an opt-out Residential Time-of-Use rate with a customer demand (kW) charge.

Table 25 – Summary of Proposed Rates

	Residential (R-1)						
Description	**Current Rates**	**Base Rates**	**2021**	**2022**	**2023**	**2024**	**2025**
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
Farm Credit	-10%	-10%	-10%	-10%	-10%	-10%	-10%
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - 1,000 kWh							
Winter	$ 175.47	$ 185.29	$ 194.22	$ 200.58	$ 199.53	$ 202.00	$ 206.42
% change from prior period			4.82%	3.27%	-0.52%	1.24%	2.19%
Summer	$ 175.47	$ 183.77	$ 192.76	$ 199.22	$ 198.21	$ 200.68	$ 205.08
% change from prior period			4.89%	3.35%	-0.51%	1.25%	2.19%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Controlled Water Heating Credit Rider

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Total Capacity and Transmission Charge:							
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.04505	$ 0.04866	$ 0.05498	$ 0.06213	$ 0.06834
Next 178 kWh		$ 0.05231	$ 0.05859	$ 0.06327	$ 0.07150	$ 0.08079	$ 0.08887
All in excess of 835 kWh		$ 0.07548	$ 0.08454	$ 0.09130	$ 0.10317	$ 0.11659	$ 0.12825
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.04368	$ 0.04717	$ 0.05331	$ 0.06024	$ 0.06626
Next 178 kWh		$ 0.05072	$ 0.05680	$ 0.06135	$ 0.06932	$ 0.07833	$ 0.08617
All in excess of 835 kWh		$ 0.07319	$ 0.08197	$ 0.08853	$ 0.10003	$ 0.11304	$ 0.12434
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Controlled Water Heating Credit	$ (14.87)						
Winter (October 1 - May 31)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
Summer (June 1 - September 30)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Average Bill Comparison - 1,000 kWh							
Winter	$ 164.13	$ 169.08	$ 178.16	$ 185.18	$ 193.71	$ 204.29	$ 214.22
% change from prior period			5.37%	3.94%	4.61%	5.46%	4.86%
Summer	$ 164.13	$ 167.56	$ 184.31	$ 198.36	$ 206.27	$ 217.35	$ 228.40
% change from prior period			9.99%	7.62%	3.99%	5.37%	5.08%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Residential Time of Use - Rate R-1 Tour

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Demand Charge per kW	N/A	$ 4.00	$ 4.20	$ 4.41	$ 4.63	$ 4.86	$ 5.11
On-peak (all kWhs)	$ 0.14683						
Off-peak (all kWhs)	$ 0.03088						
Winter (October 1 - May 31)							
All kWhs:							
On-peak (4 PM - 8 PM)		$ 0.08800	$ 0.08272	$ 0.07197	$ 0.06621	$ 0.06488	$ 0.06359
Off-peak (8 PM - 4 PM)		$ 0.02200	$ 0.02068	$ 0.01799	$ 0.01655	$ 0.01622	$ 0.01590
Summer (June 1 - September 30)							
All kWhs:							
Peak (4 PM - 8 PM)		$ 0.06907	$ 0.06493	$ 0.05649	$ 0.05197	$ 0.05093	$ 0.04991
Mid-peak (8 AM - 4 PM, 8 PM - 12 AM)		$ 0.02590	$ 0.02435	$ 0.02118	$ 0.01949	$ 0.01910	$ 0.01872
Off-peak (12 PM - 8 AM)		$ 0.01727	$ 0.01623	$ 0.01412	$ 0.01299	$ 0.01273	$ 0.01248
Distribution Charge (all kWhs)		$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (all kWhs)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Average Bill Comparison - 1,000 kWh, 2 kW							
Winter	$ 145.34	$ 180.74	$ 189.86	$ 195.46	$ 193.78	$ 196.16	$ 199.68
% change from prior period			5.05%	2.95%	-0.86%	1.23%	1.79%
Summer	$ 145.34	$ 173.27	$ 182.85	$ 189.37	$ 188.16	$ 190.66	$ 194.29
% change from prior period			5.52%	3.57%	-0.64%	1.33%	1.90%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Residential Service - Resistance Heat Pump Heating Rate - R-7

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
All kWh's - October 1 - May 31	$ 0.15071	$ 0.13723	$ 0.15644	$ 0.17365	$ 0.18581	$ 0.20067	$ 0.21673
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%

Residential Service - Off Peak - Electric Thermal Storage (ETS) - Rate R-3

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
All kWh's	$ 0.07918						
Meter Charge		$ -	$ -	$ -	$ -	$ -	$ -
Capacity and Transmission and Distribution Charge							
Winter (October 1 - May 31)							
All kWhs:		$ -	$ -	$ -	$ -	$ -	$ -
Summer (June 1 - September 30)							
All kWhs:		$ -	$ -	$ -	$ -	$ -	$ -
Energy Charge (per kWh)		$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Distribution Charge (per kWh)		$ 0.01012	$ 0.01000	$ 0.01000	$ 0.01000	$ 0.01400	$ 0.01600
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Average Bill Comparison							
Winter - 2,800 kWh	$ 225.55	$ 229.32	$ 250.62	$ 270.40	$ 269.47	$ 283.29	$ 292.84
% change from prior period			9.29%	7.89%	-0.34%	5.13%	3.37%
Summer - 148 kWh	$ 11.92	$ 12.12	$ 13.25	$ 14.29	$ 14.24	$ 14.97	$ 15.48
% change from prior period			9.29%	7.89%	-0.34%	5.13%	3.37%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Residential Service - Rate Assistance Rider

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Rate Assistance Credit (based on first 600 kWh)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)
Average Bill Comparison - 500 kWh							
Winter	$ 37.00	$ 44.13	$ 49.17	$ 53.06	$ 53.11	$ 54.82	$ 57.47
% change from prior period			11.43%	7.91%	0.09%	3.23%	4.82%
Summer	$ 37.00	$ 43.49	$ 48.56	$ 52.49	$ 52.56	$ 54.27	$ 56.91
% change from prior period			11.66%	8.10%	0.12%	3.26%	4.85%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Residential Service Rider - Net Metering with Banking Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Distribution Charge:							
Installed generation capacity equal or greater than and less than:							
Greater than 2 kW but less than 4 kW AC	$ 3.60	$ 3.60	$ 3.80	$ 3.90	$ 3.90	$ 4.00	$ 4.10
Greater than 4 kW but less than 7 kW AC	$ 6.60	$ 6.60	$ 6.90	$ 7.10	$ 7.10	$ 7.20	$ 7.40
Greater than 7 kW but less than 10 kW AC	$ 10.20	$ 10.20	$ 10.70	$ 11.10	$ 11.00	$ 11.10	$ 11.30
Greater than 10 kW but less than 13 kW AC	$ 13.80	$ 13.80	$ 14.50	$ 15.00	$ 14.90	$ 15.10	$ 15.40
Greater than 13 kW but less than 16 kW AC	$ 17.40	$ 17.40	$ 18.20	$ 18.80	$ 18.70	$ 18.90	$ 19.30
Greater than 16 kW but less than 19 kW AC	$ 21.00	$ 21.00	$ 22.00	$ 22.70	$ 22.60	$ 22.90	$ 23.40
Greater than 19 kW but less than 22 kW AC	$ 24.60	$ 24.60	$ 25.80	$ 26.70	$ 26.50	$ 26.80	$ 27.40
Greater than 22 kW but less than 25 kW AC	$ 28.20	$ 28.20	$ 29.50	$ 30.50	$ 30.30	$ 30.70	$ 31.40
Greater than 25 kW but less than 28 kW AC	$ 31.80	$ 31.80	$ 33.30	$ 34.40	$ 34.20	$ 34.60	$ 35.40
Greater than 28 kW but less than 31 kW AC	$ 35.40	$ 35.40	$ 37.10	$ 38.40	$ 38.20	$ 38.70	$ 39.50
Greater than 31 kW but less than 34 kW AC	$ 39.00	$ 39.00	$ 40.90	$ 42.30	$ 42.00	$ 42.50	$ 43.40
Greater than 34 kW but less than 37 kW AC	$ 42.20	$ 42.20	$ 44.20	$ 45.70	$ 45.40	$ 46.00	$ 47.00
Greater than 37 kW but less than 40 kW AC	$ 46.20	$ 46.20	$ 48.40	$ 50.00	$ 49.70	$ 50.30	$ 51.40
Greater than 40 kW but less than 46 kW AC	$ 53.40	$ 53.40	$ 55.90	$ 57.80	$ 57.40	$ 58.10	$ 59.40
Greater than 46 kW but less than 58 kW AC	$ 67.80	$ 67.80	$ 71.00	$ 73.40	$ 72.90	$ 73.80	$ 75.40
Greater than 58 kW but less than 82 kW AC	$ 96.60	$ 96.60	$ 101.20	$ 104.60	$ 103.90	$ 105.20	$ 107.50
Greater than 82 kW but less than 130 kW AC	$ 154.20	$ 154.20	$ 161.50	$ 167.00	$ 165.90	$ 168.00	$ 171.70
Greater than 130 kW but less than 167 kW AC	$ 198.60	$ 198.60	$ 208.10	$ 215.10	$ 213.70	$ 216.40	$ 221.10
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Small General Service - Rate G-1

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 12.00	$ 12.00	$ 12.60	$ 13.20	$ 13.90	$ 14.60
Capacity and Transmission Charge (per kWh)	$ 0.08185						
Winter (October 1 - May 31)							
All kWhs		$ 0.07240	$ 0.02172	$ 0.01890	$ 0.01814	$ 0.01814	$ 0.01869
Summer (June 1 - September 30)							
All kWhs		$ 0.07020	$ 0.02106	$ 0.01832	$ 0.01759	$ 0.01759	$ 0.01812
Distribution Charge (per kWh)	$ 0.03228	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - 3,000 kWh							
Winter	$ 603.21	$ 605.11	$ 477.78	$ 496.18	$ 492.51	$ 497.75	$ 507.82
% change from prior period			-21.04%	3.85%	-0.74%	1.06%	2.02%
Summer	$ 603.21	$ 598.25	$ 475.72	$ 494.39	$ 490.80	$ 496.03	$ 506.05
% change from prior period			-20.48%	3.92%	-0.73%	1.07%	2.02%

Medium General Service - Rate G-2

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge (Single Phase)	$ 44.00	$ 50.00	$ 51.50	$ 53.00	$ 54.60	$ 56.20	$ 57.90
Meter Charge (Three Phase)	$ 60.00	$ 68.00	$ 70.00	$ 72.10	$ 74.30	$ 76.50	$ 78.80
Demand Rate (per kW)	$ 10.85	$ 12.00	$ 12.40	$ 12.60	$ 12.90	$ 13.20	$ 13.50
Capacity and Transmission Charge (per kWh)	$ 0.03507						
Winter (October 1 - May 31) - All kWhs		$ 0.01650	$ 0.01353	$ 0.01015	$ 0.00893	$ 0.00881	$ 0.00925
Summer (June 1 - September 30) - All kWhs		$ 0.01600	$ 0.01312	$ 0.00984	$ 0.00866	$ 0.00854	$ 0.00896
Distribution Charge (per kWh)	$ 0.02571	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%
Average Bill Comparison - Winter (16,200 kWh, 29 kW); Summer (14,300 kWh, 37 kW)							
Winter	$ 2,675.40	$ 2,673.88	$ 2,801.46	$ 2,895.59	$ 2,875.47	$ 2,908.43	$ 2,967.94
% change from prior period			4.77%	3.36%	-0.69%	1.15%	2.05%
Summer	$ 2,493.09	$ 2,500.81	$ 2,619.60	$ 2,706.72	$ 2,693.33	$ 2,726.24	$ 2,782.33
% change from prior period			4.75%	3.33%	-0.49%	1.22%	2.06%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Large General Service - Rate G-3

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge (Single or Three Phase)	$ 380.00	$ 380.00	$ 381.90	$ 384.80	$ 390.00	$ 390.00	$ 390.00
Demand Rate (per kW)	$ 9.97	$ 10.00	$ 10.10	$ 10.40	$ 10.70	$ 11.00	$ 11.30
Capacity and Transmission Charge (per kWh)	$ 0.03094						
Winter (October 1 - May 31) - All kWhs		$ 0.01083	$ 0.00812	$ 0.00406	$ 0.00305	$ 0.00289	$ 0.00318
Summer (June 1 - September 30) - All kWhs		$ 0.01050	$ 0.00788	$ 0.00394	$ 0.00295	$ 0.00281	$ 0.00309
Distribution Charge (per kWh)	$ 0.02125	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Average Bill Comparison - Winter (164,000 kWh, 319 kW); Summer (191,000 kWh, 413 kW)							
Winter	$ 25,575.33	$ 25,627.78	$ 26,862.44	$ 27,726.11	$ 27,552.49	$ 27,872.40	$ 28,439.34
% change from prior period			4.82%	3.22%	-0.63%	1.16%	2.03%
Summer	$ 30,144.01	$ 30,147.06	$ 31,605.10	$ 32,647.74	$ 32,463.86	$ 32,850.31	$ 33,521.74
% change from prior period			4.84%	3.30%	-0.56%	1.19%	2.04%

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

General Service - Off Peak ETS Heating - Rate GS ETS

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Energy Rate	$ 0.07418						
Capacity and Transmission and Distribution Charge:							
Winter (October 1 - May 31)		$ -	$ -	$ -	$ -	$ -	$ -
Summer (June 1 - September 30)		$ -	$ -	$ -	$ -	$ -	$ -
UUC	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
CARES	0.52%	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Private Area Lighting - Rate Schedule PAL

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Lamp charge	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04022	$ 0.03862	$ 0.03591	$ 0.03483	$ 0.03483	$ 0.03553
Next 178 kWh		$ 0.05231	$ 0.05022	$ 0.04670	$ 0.04530	$ 0.04530	$ 0.04621
All in excess of 835 kWh		$ 0.07548	$ 0.07246	$ 0.06739	$ 0.06537	$ 0.06537	$ 0.06668
Summer (June 1 - September 30)							
First 657 kWh		$ 0.03900	$ 0.03744	$ 0.03482	$ 0.03377	$ 0.03377	$ 0.03445
Next 178 kWh		$ 0.05072	$ 0.04869	$ 0.04528	$ 0.04392	$ 0.04392	$ 0.04480
All in excess of 835 kWh		$ 0.07319	$ 0.07026	$ 0.06534	$ 0.06338	$ 0.06338	$ 0.06465
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522

Refer to Summary of Significant Assumptions and Accounting Policies.

CONCORD MUNICIPAL LIGHT PLANT

Report on Forecasted Cost of Service Study and Rate Design

TASK 5 – PROPOSED RATE TARIFFS

Street Lighting

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Lamp charge							
Capacity and Transmission Charge:							
All kWhs (average to get to budgeted amount)	$ 0.10893	$ 0.09023	$ 0.10133	$ 0.10133	$ 0.10133	$ 0.10133	$ 0.10133
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.05157	$ 0.05331	$ 0.05297	$ 0.05365	$ 0.05483
Energy Charge (per kWh)	$ 0.07918	$ 0.06906	$ 0.07664	$ 0.08355	$ 0.08318	$ 0.08393	$ 0.08522
Annual Revenues		$ 62,620	$ 66,955	$ 70,978	$ 72,258	$ 74,255	$ 76,643
% change from prior period			6.9%	6.0%	1.8%	2.8%	3.2%

Electric Vehicle Charging Subscription Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Charge	NA	$ 42.00	$ 44.00	$ 45.49	$ 45.20	$ 45.78	$ 46.78
CARES	N/A	2.22%	2.16%	2.13%	2.19%	2.20%	2.20%

Refer to Summary of Significant Assumptions and Accounting Policies.

Task 6 – Time of Use Rates and CMLP's Load Management Objectives

CMLP requested in Task 6 that we provide guidance on whether time of use rates will result in CMLP's meeting its load management objectives. This discussion can fall in two areas – (1) Changing customer behavior and (2) CMLP controlled load programs.

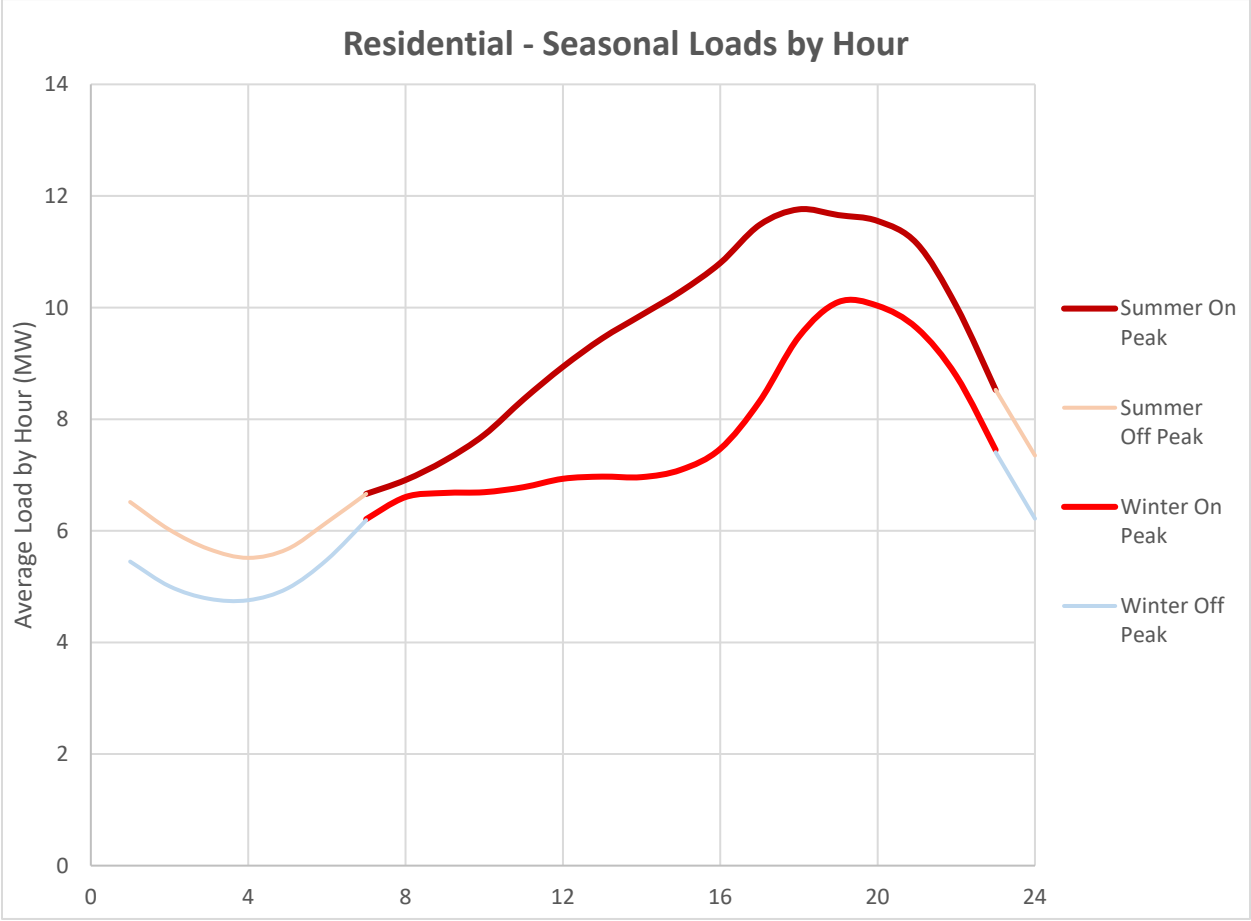
Changing customer behavior

Some of the following information is discussed under the discussion on the Residential Time of Use Rate R-1 (Tour) rate, but additional analysis is provided here.

One of the goals of CMLP is to utilize the benefits of smart meters to record more detailed customer consumption to control its peak periods and encourage customers to move load to off-peak periods through higher pricing signals. The current CMLP time of use rate is designed to encourage that effort.

The current residential (non-time of use) load curve is shown in the following illustration:

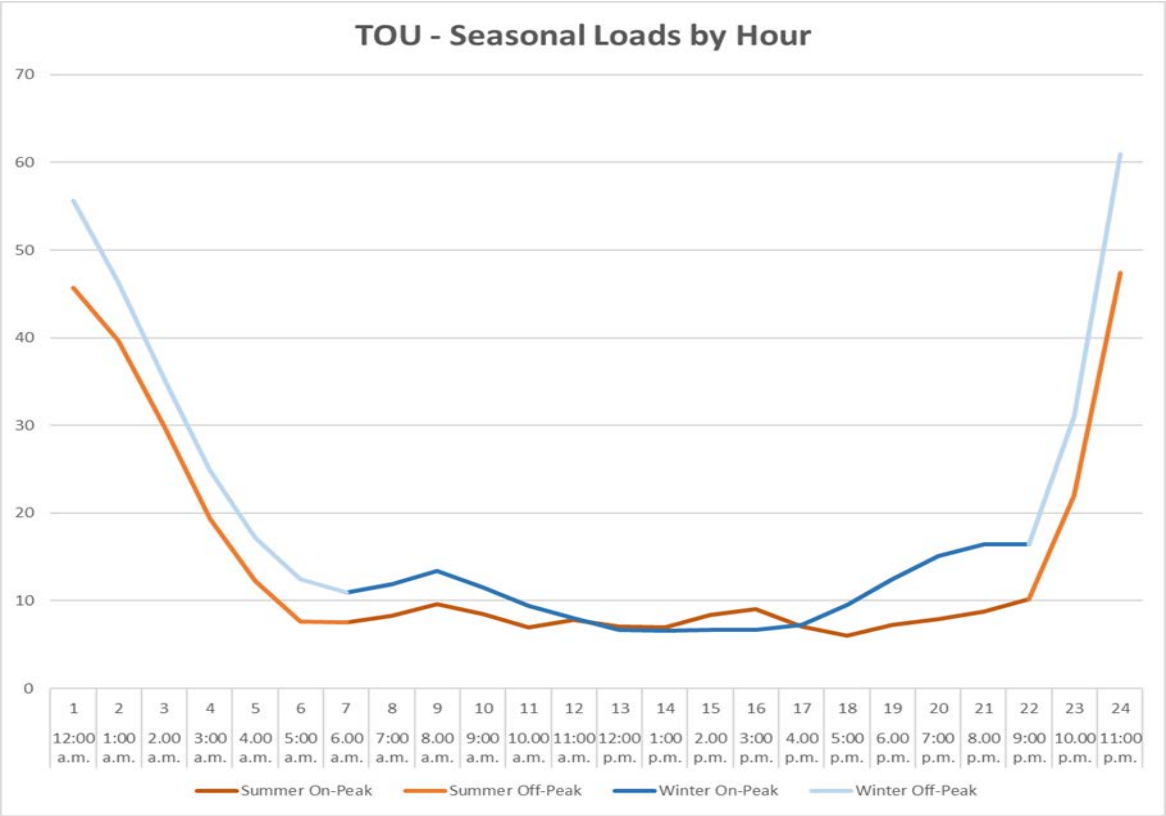
Illustration 14 – Residential Seasonal Load Curves by Hour



The highlighted peaks are the on-peak periods for ISO-NE.

Contrast Illustration 6-1 with the current load curve for the Residential Time of Use (R-1 Tour) rate, shown in the following illustration:

Illustration 15 – Residential Time of Use Seasonal Loads by Hour



Based on those two curves, it appears that customers in the time of use class pay close attention to the on and off-peak hours in order to save on their electric bills. There are approximately 40 customers in this class, so projecting this usage behavior to the entire Residential customer class (approximately 6,400 customers) is not possible.

Bake Tilly gives no opinion on whether a wide introduction of time of use rates will result in CMLP meeting its load management objectives. But, CMLP can look to the experience of other utilities in introducing time of use rates and in its own experience with its time of use rates on customer behavior of their household load management.

Utilities in general that have a time of use rate can report changes in customer usage patterns due to the impact of the differential between on and off-peak rates. So, one can surmise that in general, greater participation in a time of use rate by CMLP customers, or in a time of use rate that requires them to "opt out" of the rate will result in a shift in the residential load curve to more off-peak usage and a flattening of the curve. Baker Tilly makes no prediction on how long that transition will take.

As CMLP deploys more smart meters and more customers move to the current CMLP Residential Time-of-Use class it will have a larger customer sample group and data to forecast a predicted load curve of customers that would be part of this class. On introduction of an opt-out time of use rate, CMLP should regularly (at least annually) review customer load patterns to determine if adjustments are needed in the rate based on actual results. For purposes of this study, a framework has been recommended in Scenario 2 and Scenario 3 for the design of an opt out rate, but the recommendation should in no way be the final rate without analysis of more current data.

CMLP controlled load programs

CMLP currently controls customer loads in the water heating and ETS programs. These two classes comprise approximately $1 million of CMLP's revenues. Management controls the customer usage/charging periods of the related equipment. There is some variability in the timing of the control used by CMLP based on weather and pricing.

One can find examples of similar programs in other utilities and electric cooperatives and also examples of utilities using rate design to drive customer behavior.

In order to develop rates for the ETS rate class, CMLP would need to develop a time of use rate that follows the current CMLP controlled load profile and recovers the cost of service for the customer class. Then, after the rate had been implemented and used for a period of time (a year) an analysis should be made as to customer behavior within the parameters of the rate and the rate then adjusted as needed. The customer behavior and cost recovery should be reviewed and adjusted regularly. A similar process could be used for the controlled water heating rate class. Developing these rates is outside of the scope of this engagement, but could be considered for review by CMLP as it moves forward on rate initiatives.

In the meantime, the control process seems to work well for CMLP and is part of the rates designed in this report.

Task 7 – Summary of Proposed Rate Tariffs Compared to the Cost of Service

The forecasted revenues at the proposed rates by customer class compared to the computed cost of service based on the load data used is shown in the table below.

Table 26 – Total Forecasted Revenues by Customer Class Computed at Proposed Rates

Customer Class	Cost of Service	Forecasted Revenues at Current Rates	$ Over/(Under) Cost of Service	% Over/(Under) Cost of Service
Residential	$ 14,157,150	$ 12,729,732	$ (1,427,418)	-11.2%
Residential Assistance	235,597	104,310	(131,287)	-125.9%
Residential TOU	46,946	23,596	(23,350)	-99.0%
Residential Heating	75,707	51,120	(24,587)	-48.1%
Residential Controlled Water Heating	868,484	713,007	(155,477)	-21.8%
Residential Net Metering	-	33,994	33,994	100.0%
ETS Off Peak	272,729	250,385	(22,344)	-8.9%
Small General Service	2,603,993	2,856,775	252,782	8.8%
Medium General Service	4,119,247	5,198,653	1,079,406	20.8%
Large General Service	7,285,544	8,988,255	1,702,711	18.9%
General Service Net Metering	-	-	-	0.0%
Street Lights	173,458	62,620	(110,838)	-177.0%
Totals	**$ 29,838,855**	**$ 31,012,447**	**$ (1,173,592)**	**-3.8%**

A transition plan for moving rates in each customer class to their cost of service is discussed in Task 8. We recommend that CMLP perform regular cost of service studies to determine changes in the cost of service and that any transition plans used remain on track.

Task 8 – Rate Transition Plan Recommendations

The CMLP request for proposal and work plan for this project requested a recommendation on a rate transition plan to move each customer class to their cost of service under a Task 8. During the project the CMLP oversight Board directed Baker Tilly to keep all Residential and General Service G-2 and G-3 rates at their current level, reduce the General Service G-1 rates by 20% and move all other rate classes towards their cost of service.

We recommend that CMLP perform regular cost of service studies to determine any changes in the cost of service in order to keep any transition plans on track. This would include evaluating the transition annually and adjusting the transition as needed.

The transition plan and proposed annual rates are included in Task 5 at this link and in this summary table.

Task 9 – Illustrative Examples of Rate Implementation

Baker Tilly reviewed various rate structures in public power and investor-owned utilities that have been implemented or might be considered by CMLP. Our review is shown in Illustration 9-1:

Table 27 – Review of Various Rate Structures in Select Public Power and Investor-Owned Utilities

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
1. Burlington, VT. Electric Department	Public Power	Residential Rate	Residential service	Rate is tiered at 100 kWh	BED serves mainly residential load BED generates most of its power and has purchases through bi-lateral contracts and market purchases
2. Burlington, VT. Electric Department	Public Power	Residential Time-of-Use	Load shifting to off-peak periods	**On-Peak periods:** *Winter* – 6 AM – 10 PM *Summer* – Noon – 6 PM **Rate differentials:** (Peak/Off-peak) = 2.00x In on-peak periods the first 100 kWh are charged at the off-peak rate **Customer charge:** The customer charge in this rate class is approximately 1.67x standard residential class rate	BED serves mainly residential load BED generates most of its power and has purchases through bi-lateral contracts and market purchases

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
3. Colorado Springs Utilities	Public Power	Residential Time-of-Day	Load shifting to off-peak periods	**On-Peak periods:** *Winter* – 4 – 10 PM, (Weekdays) *Summer* – 3 – 7 PM (Weekdays) **Rate differentials:** (Peak/Off-peak) = 3.50x Rate includes System Infrastructure Fixed Monthly Charge - $15.00	CSU generates its own power needs and purchases hydro power CSU's customer base is heavily residential and military
4. ConEdison	Investor-owned	Electric Vehicle Charging Rate	Encourage customers to charge vehicles off-peak	Utility has summer and winter rates, with peak period of 8 AM – Midnight Rates range from $0.0155/kWh (off-peak) to $0.21.97/kWh (summer on-peak)	ConEdison is a state regulated utility
5. CPS Energy	Public Power	Residential Rate	Residential Service	Rate is flat in winter Summer rate includes tiered rate ($0.0198/kWh) for usage over 600 kWh	CPS generates its power needs CPS serves San Antonio, customer mix is heavy residential and industry San Antonio average temps in July: High - 92 Low – 58

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
6. CPS Energy	Public Power	Residential All-electric Rate	Residential Service for electric only homes	Rate is tiered in winter for usage over 600 kWh Summer rate is flat with a surcharge of ($0.0198/kWh) for usage over 600 kWh	
7. Duke Energy – North Carolina (Progress)	Investor-owned	Residential Time-of-Use	Load shifting to off-peak periods	Rate is a summer/winter on and off-peak kWh with a customer charge and an on-peak demand (kW) charge The on and off-peak rate differential is 1.25x **On-Peak periods:** *Winter* – 1 – 4 PM and 9 PM – 6 AM, (Weekdays) *Summer* – 9 PM – 10 AM (Weekdays) Duke also offers a residential time-of-use rate without a demand charge and a standard residential rate with a flat kWh charge with summer/winter rates	Duke is a state regulated utility
8. Eversource	Investor-owned	Residential and General Rates	Residential and general service	Rate is a flat rate for all usage Rates consist of separate per kWh charges for distribution, transition, transmission, revenue decoupling, distributed solar, energy efficiency and renewable energy	Eversource is a state regulated utility

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
				General service rates contain time-of-use classes General service has summer/winter rates	
9. Eversource	Investor-owned	Electric Vehicles	Controlled EV charging	Does not have a separate rate, but offers a $300 rebate for a 3 year contract for purchasing eligible EV charger Charger will charge more slowly during peak periods	Eversource is a state regulated utility
10. Flathead Electric Cooperative (Montana)	Cooperative	All residential rates - customer demand charge	Load shifting to reduce peak and pass along fixed generation costs	Customer charge - $23.71/month Energy charge: $0.065/kWh (first 600 kWh/mo) $0.0784/kWh (601-3,500 kWh/mo) $0.1130 kWh (over 3.501 kWh/mo) Demand Charge: $0.26/kW during peak hours Peak hours – M-F 7=10 AM, 5-8 PM weekdays	Flathead is a cooperative and purchases power from the Bonneville Power Administration It serves 53,000 customers

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
11. Holyoke Gas and Electric	Public Power	Residential Rate	Residential service	Rate is a flat rate for all usage	HG&E is an MMWEC member and also makes market purchases HG&E serves residential, general service and large industrial customers Rate classes other than residential are tiered
12. Indianapolis Power and Light	Investor-owned	Electric Vehicle Charging Rate	Encourage customers to charge vehicles off-peak	Utility has summer and winter rates, with peak period of 2 – 7 PM (weekdays) Rates range from $0.02331/kWh (off-peak) to $0.1215/kWh (summer on-peak)	IP&L is a state regulated utility
13. Modesto, CA Irrigation District	Public Power	Residential Service	Residential Service	Rate is a tiered rate for usage over 500 kWh Rate is summer and winter	MID serves the City of Modesto (mostly residential) Irrigation customers have an interruptible rate

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
14. Modesto, CA Irrigation District	Public Power	Net metering	Utilize customer generation	Credit is based on a per kWh amount that includes amounts for fixed distribution costs Net metering credit is given annually	MID serves the City of Modesto (mostly residential)
15. Muscatine, IA Power and Water	Public Power	Residential Rate	Residential service	Rate is a flat rate for all usage	Muscatine generates and purchases power Muscatine's customers are a mix of residential and several large industries Industrial rates are tiered
16. North Attleborough Electric Department	Public Power	Residential Rate	Residential service	Rate is a flat rate for all usage	NAED participates in MMWEC projects and has other bi-lateral contracts and market purchases NAED serves mainly residential customers

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
17. Pacific Gas & Electric	Investor-owned	Electric Vehicle Charging Rate	Encourage customers to charge vehicles off-peak	Utility has 2 plans: 1. EV charging is included on home meter – Off-peak period is Midnight – 3 PM (off-peak rate is $0.17/kWh, on-peak rate graduates to $0.48/kWh) 2. EV is on a separate meter – Off-peak period is 11 PM – 7 AM (off-peak rate is $0.14/kWh, on-peak rate graduates to $0.54/kWh)	PG&E is a state regulated utility
18. Peabody Municipal Light Plant	Public Power	Residential Rate	Residential service	Rate is tiered at 100 kWh Rate is a declining block	PMLP serves residential, commercial and industrial load PMLP is an MMWEC member and also makes market purchases
19. Peabody Municipal Light Plant	Public Power	Industrial Rate	Industrial service – designed to encourage moving load to off-peak hours	Rate includes On and Off-Peak demand and energy rates **On-Peak periods:** 8 AM – 8 PM, (Weekdays)	PMLP serves residential, commercial and industrial load PMLP is an MMWEC member and also makes market purchases

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
20. Reading Municipal Light Plant	Public Power	Residential Time-of-Use	Load shifting to off-peak periods	**On-Peak periods:** Noon – 7 PM (Weekdays) *Summer* – Noon – 6 PM **Rate differentials:** TOU rate is $8.00 per month plus $0.04022/kWh for all kWh's Regular residential rate is $5.12 per month plus $0.06711/kWh for all kWh's	RMLP serves residential, commercial and industrial load RMLP participates in MMWEC projects and has other bi-lateral contracts and market purchases
21. Sacramento Municipal Utility District	Public Power	Residential Time-of-Day	Load shifting to off-peak periods	**Off/Mid-Peak periods:** *Winter* – Off-peak – Midnight-5 PM, 8 PM – Midnight (Weekdays) *Summer* – Mid-peak – Noon-5 PM, 8 PM – Midnight (Weekdays) *Summer* – Off-peak – Midnight-noon (Weekdays) **Rate differentials:** *Winter* – (Peak/Off-peak) = 1.38x *Summer* – (Peak/Mid-peak) = 1.76x Summer – (Peak/Off-peak) = 2.43 Rate includes System Infrastructure Fixed Monthly Charge - $21.05	SMUD generates its own power needs and purchases hydro power SMUD's customer base is heavily residential Sacramento average temps in July: High - 92 Low – 58

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
22. Sacramento Municipal Utility District	Public Power	Residential Fixed Rate	Encourage customers to use TOU rate	Summer - $0.1711/kWh Winter - $.1071/kWh Rate is 4% above TOU rate	
23. Sacramento Municipal Utility District	Public Power	Electric Vehicle Charging Discount	Encourage customers to charge vehicles off-peak	Rate is a $0.015/kWh discount for all electric usage between midnight-6 AM Vehicle must be registered with utility	
24. Sacramento Municipal Utility District	Public Power	Net metering	Utilize customer generation	Credit is based on a per kWh amount that includes amounts for fixed distribution costs Net metering credit is given annually	
25. San Diego Gas and Electric	Investor-owned	Residential Time-of-Use	Load shifting to off-peak periods	Rate is winter/summer (3 options) Rates include on-peak, off-peak and super-off peak	SDG&E generates its power and is regulated by the State of CA
26. San Diego Gas and Electric	Investor-owned	Electric Vehicle Charging Discount	Encourage customers to charge vehicles off-peak	Rate includes winter/summer Rates include on-peak ($0.54/kWh), off-peak ($0.30/kWh) and super off-peak ($0.09/kWh) On-peak – 4-9 PM (everyday) Super off-peak – Midnight-6AM weekdays and Midnight – 2 PM weekends Off-peak – all other hours	SDG&E generates its power and is regulated by the State of CA

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
27. Taylor Electric Cooperative	Electric Cooperative	ETS	Reduce purchased power	Includes a monthly customer charge for distribution costs Rate is flat rate summer/winter	TEC purchases power from Dairyland G&T Power
28. Taunton Municipal Light Plant	Public Power	Residential Rate	Residential service	Rate is tiered at 600 kWh Rate is an inclining block	TMLP serves residential, commercial and industrial load TMLP has bi-lateral contracts and makes market purchases
29. Tuscon Electric Power	Investor-owned	Residential Time-of-Use	Load shifting to off-peak periods	Rate is a three tiered winter/summer (3 options) Rates include all days Customer charge is $10/mo	TEP is regulated by the state of AZ
30. Tuscon Electric Power	Investor-owned	Optional TOU and customer demand charge	Load shifting to off-peak periods	Rate options include: 1. Customer charge, energy charge (winter/summer flat rate), demand charge based on monthly peak (up to 7 kW and over 7 kW) 2. Customer charge, energy charge (winter/summer on and off-peak rates), demand charge based on monthly peak (up to 7 kW and over 7 kW)	TEP is regulated by the state of AZ

Utility	Utility Type	Rate	Objectives	Rate Elements	Characteristics/ Comments
31. United Power	Electric Cooperative	Residential TOU and customer demand charge	Load shifting to off-peak periods	Rate option includes a $2/kW on-peak demand charge Rate is used by ETS customers UP offers rebates to ETS customers for purchase of approved equipment	UP purchases power from Tri-State G&T in CO

Other Rate Comments

A number of the utilities whose rate structures we reviewed include time-of-use and summer/winter rates for general service and industrial customers. Those of note include:

- Colorado Springs Utilities
- CPS Energy
- Peabody MLP
- Reading MLP
- Sacramento Municipal Utility District
- All of the investor-owned utilities reviewed

Information Technology

All of the major ERP software platforms (including SAP, Oracle, and PeopleSoft) bill all types of utility rates. Many mid-tier and best of breed billing electric billing software platforms also bill time-of-use rates as well as all common electric utility rate tariffs. CMLP should discuss specifics with its software provider on the ability for its system to bill the the billing determinants of the various rate classes. CMLP should also discuss interface requirements with software provider for smart meters and its billing platform.

Success Stories and Lessons Learned

Successful Residential TOU Implementation in Fort Collins, CO

The move towards more time-of-day rates and other newer rate classes in recent years has a combination of success stories and areas to be aware of for utilities to consider in planning for a successful implementation.

A recent success story comes from the public power utility in Fort Collins, CO. In the utility's report to the city council in October, 2019 on the one-year anniversary of implementing a residential time-of-use rate showed the following:

- 65% of residential accounts showed a decrease in annual electric bills compared to the prior rate schedule
- The average monthly bill was $1.38 with TOD pricing
- Overall revenue collected was 2.3% lower under the TOD rate
- Energy consumption was 1.9% lower
- Reduced electricity use from TOD saved over 15,800 metric tons of carbon emissions
- On-peak hour electricity use was 7.5% lower than in the prior year

There were 620 Fort Collins customers enrolled in this program. More program details can be found at https://www.coloradoan.com/story/news/2020/02/12/fort-collins-time-day-electricity-rates-saving-people-money/4715310002/.

The Move Towards Opt-Out Residential TOU Rates at a Southern California Utility

Southern California Edison's TOU Rates

In March of 2019, Southern California Edison (SCE) implemented a new Time of Use rate structure. SCE's TOU rates began as a voluntary opt-in rate and will become the default in October 2020.

Controversy with Solar

SCE's rates, however, were controversial with solar advocates. Solar advocates argue that with this newest rate structure, the on-peak window is shifted from 12-6pm to 4-9pm. The old on-peak window used to benefit solar customers because the time frame is when solar can be the most productive. However, the later on-peak window means that solar savings are no longer what they used to be. The California Public Utilities Commission grandfathered existing solar homeowners into the new system to protect their savings, but it still weakens Solar's cost-benefit.

Emergence of Energy Storage Systems (ESS)

Along with the new TOU rate structure implemented by SCE, there is also a rate designed specifically for homeowners with Energy Storage Systems (ESS) called TOU-D-PRIME. This rate differentiates between summer and winter ($0.24/kWh and $0.21/kWh respectively) and is available all seven days of the week. This rate allows customers with ESS to charge on the off-peak and discharge on the on-peak, saving customers money. In addition, off-peak hours are aligned with daylight (8am-4pm) so ESS can charge from Solar PV and discharge when energy consumption is high.

Summary

SCE was able to incentivize energy savings through the combination of Solar, ESS, and TOU rates. While the TOU rates implemented were detrimental to Solar, the TOU-D-PRIME rates allowed for solar to be productive in conjunction with ESS. These three elements incentivize customers to use sustainable energy sources while spreading the load to off-peak hours.

Electric Thermal Storage in Nova Scotia:

Study Overview

Canadian engineer Ali Syed completed a study regarding ETS savings in Nova Scotia, Canada. The study states that "Nova Scotia Power (NS Power) offers an incentive to the owners of electrically heated houses in Nova Scotia to switch from conventional electric baseboard heaters to electric thermal storage (ETS) systems and enjoy the rebated time-of-day (TOD) electric rates." The study found that an "ETS heating system can save 41-48% in heating costs on an annual basis", paying for itself in less than 8 years of use.

Existing Rate Structure

NS Power uses a base charge over an entire year with a TOD, or a time-of-use (TOU), rate tariff that breaks down into winter and non-winter months. Winter months have four different rates for four different time windows while "non-winter" has only two time windows. Saturdays, Sundays, and holidays also have a separate rate.

Savings Analysis

Syed completed a cost analysis of the existing rate structure to charging ETS units for 8 hours during off peak times and 12 hours during off-peak times. Syed found that charging ETS units for 8 hours in Nova Scotia can save 41% in costs over the course of a year while a 12 hour charge could save 48%. Considering the costs of installation, this translates to a break-even period of 7.6 years for customers with ETS systems. NS Power offers financing for ETS units from 5-10 years to incentivize these units.

Overall Comments on a Successful Rate Implementation

From our experience in successfully implementing rate structures, we have found the following commonalities:

1. Management buy-in is critical
2. Presentations to the Board outlining the benefits of new rates is necessary
    a. These presentations should be made at advertised public meetings to engage ratepayers in the process
    b. Holding special town hall meetings on rate specific areas
3. An initial informational campaign should include these areas:
    a. Utility website
    b. Information should be included with monthly customer bills on new rate structures and the intended ratepayer benefits is useful
    c. Social media advertising
    d. Signage and postings in customer service areas/pay stations
    e. Town hall meetings
    f. Local media
4. Once rate structures are implemented, the tools used in #3 should be ongoing sources of information to all customers to garner attention and show results (see the Fort Collins example above).

Summary of Significant Assumptions

Introduction

This section outlines the procedures and significant assumptions that were used to develop the rate study for CMLP.

Forecasted Revenue Requirement

Forecasted expenses, depreciation expense, capital expenditures and the return on ratebase were based on CMLP's management approved budget for years 2020 – 2025 and an analysis of historical trends.

Load Data

Load data, containing customer counts, demand and energy statistics, was provided from CMLP's billing system for 2018, and was multiplied by current rates to compare to actual revenues recorded in the financial records. The reconciliation helps confirm the validity of customer demand and energy statistics used in the study.

Data used in hourly and seasonal load curves and in the calculation of proposed rates was provided by CMLP and is based on data downloaded from the CMLP load management system.

Allocators

Assets and expenses are allocated to the customer classes based on cost drivers (allocators). A description of industry standard allocators that are available for use in the study are shown in Appendix D.

Summary of Significant Accounting Policies

The statements made in the following *Summary of Significant Accounting Policies* is language required by the American Institute of Certified Public Accountants for the preparation of a financial forecast.

Nature of Forecast

The financial forecast presents, to the best of CMLP management's knowledge belief, the expected results of Electric Utility operations for the forecast period. Accordingly, the forecast reflects its judgment as of August XX, 2020, the date of this forecast, of the expected conditions and its expected course of action. The assumptions disclosed herein are those that management believes are significant to the forecast. There will usually be differences between the forecasted and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material.

Nature of Operations

CMLP is a component unit of the Town of Concord, MA. Concord Municipal Light Plant accounts for the cost of electric operations on a continuing basis and is managed by the Town Board. The utility is subject to regulation by the Board in the matters of rates, financial reporting, and other procedures.

Revenue Recognition

Electric revenues are recorded for service rendered based on meter readings, with billings made to customers monthly.

Expenses

Historical operation and maintenance expenses are reported on an accrual basis as well as the forecasted 2020 - 2025 expenses.

Capital Expenses

Additions to and replacement of utility plant are recorded at original cost, which includes material, labor, overhead, and an allowance for the cost of funds used during construction when significant. The cost of property replaced, retired or otherwise disposed of, is deducted from plant accounts.

Appendix A – Rate Scenario 1: Revenue Requirement, Cost of Service and Proposed Rate Detail based on Current Rate Structure, Transitioning to Residential Opt-Out Time of Use Rate with Customer Demand Charge

The rate design for this scenario is in Task 5

The cost of service analysis schedules are included in the remainder of Appendix A

Customer Load Data Definitions

1. Load Factor (LF) – Measures the relation of peak demand to total consumption for electric customers as a percentage.

2. Non-Coincidence Peak (NCP) – Arithmetic sum of electricity demand for each customer in a class, not necessarily at the peak time for the class overall. This study uses the term Individual NCP.

3. Group Coincidence Factor –The peak demand for a customer class may be less than the arithmetic sum of individual customer peaks because all customers do not peak at the same time. Group coincidence factor measures the tendency of customers within a class to peak at different times.

4. System Coincidence Factor – The peak demand for the system overall may be less than the arithmetic sum of individual customer class peaks because all classes do not peak at the same time. System coincidence factor measures the tendency of a customer class peak to differ in time from the overall system peak.

5. NCP at meter for group – Peak customer class electric demand at the meter.

6. NCP at Primary for group – Peak customer class electric demand at the primary.

7. NCP at input for group – Peak customer class electric demand plus all transmission and distribution losses.

8. Coincidence peak at input voltage – Generating capacity demanded by the customer class during the system peak.

9. kWh's at input voltage – The number of kWh's needed to serve the customer class demand and distribution and transmission losses.

10. LF Group – The relationship between peak demand and total energy consumption for a class.

Calculations:

Load Factor =

$$\frac{\text{kWh's}}{\text{Peak (kW) } \mathbf{X} \text{ hours}}$$

Non-Coincidence Peak =

$$\frac{\text{kWh's}}{\text{Load Factor } \mathbf{X} \text{ hours}}$$

Coincidence Peak @ input = NCP @ input for group **X** system coincidence factor

Allocators

Allocator	Description
Billing.wgt	Number of customers adjusted by the time it takes to bill each customer in the class
CP-12	Average of customer peaks with system peaks during each month of the year. (Used to allocate demand related purchase power expenses).
Customer	Total number of customers in each class.
Cust.Sec	Weighted average number of customers served at the secondary voltage level
Cust.Wgt	Number of customers in each class adjusted by a weighting factor to compensate for the additional time and expense to serve each customer class
Direct.SL	Costs allocated directly to street light class.
Energy	Total energy used by each customer class.
Energy Non-Res	Total energy used by non-residential classes.
Energy Res	Total energy used by residential classes.
Expense	Blended allocator based on all non-fuel expenses.
Meter.rd.wgt	Number of customers adjusted for the time it takes to read each type of meter.
Meters.wgt	Number of customers adjusted for the cost to purchase meters and associated equipment.
NBV	Net Book Value blended allocator based on net plant values.
NCP-Input	Peak of each customer class, adjusted for system losses.
NCP-Sec	Peak of each customer class, adjusted for losses occurring in the secondary distribution system.
Off-Peak Energy	Total off-peak energy used by customer class.
On-Peak Energy	Total on-peak energy used by customer class.
Rev	Allocator based on annual revenue from the class.

Concord Municipal Light Plant

Draft Electric Rate Study Report

Schedule 1.1: Revenue Requirement Summary

	Forecasted 2020	Forecasted 2021	Forecasted 2022	Forecasted 2023	Forecasted 2024	Forecasted 2025	Years 2020 - 2025
Operating Revenues							
Electric Sales	$ 26,264,379	$ 26,273,572	$ 26,282,767	$ 26,291,966	$ 26,301,168	$ 26,310,374	$ 157,724,226
Base Revenues	232,657	232,658	232,659	232,660	232,661	232,662	1,395,957
PCA, Rate Stabilization and Renewable Rate Surcharge Revenues	290,651	0	0	0	0	0	290,651
REC Purchases Surcharge	2,141,982	3,332,337	4,182,878	4,183,453	4,184,029	4,184,604	22,209,282
Other Revenues	921,109	951,136	925,630	906,440	887,025	869,236	5,460,576
Total Operating Revenues	**29,850,778**	**30,789,702**	**31,623,934**	**31,614,519**	**31,604,883**	**31,596,876**	**187,080,692**
Operating Expenses							
Purchased Power Costs	$ 17,706,079	$ 17,591,255	$ 17,621,979	$ 17,248,035	$ 17,504,770	$ 17,933,306	$ 105,605,424
REC Purchases	2,141,982	3,332,337	4,182,878	4,183,453	4,184,029	4,184,604	22,209,282
Transmission Expense	87,409	89,143	90,912	92,715	94,555	96,430	551,164
Distribution Expense	977,889	993,918	1,010,265	1,044,887	1,061,889	1,079,229	6,168,078
Customer Accounts Expense	1,368,250	1,395,395	1,423,078	1,451,311	1,480,103	1,509,467	8,627,604
Administrative & General Expense	3,971,877	4,030,080	4,110,033	4,191,572	4,274,729	4,359,535	24,937,827
SMART Grid Expenses	46,123	47,038	47,971	48,923	49,894	50,883	290,832
Total Operating Expenses	**26,299,609**	**27,479,166**	**28,487,116**	**28,260,896**	**28,649,968**	**29,213,456**	**168,390,210**
Other Operating Expenses							
Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	$ 448,911	$ 449,069	$ 449,228	$ 449,386	$ 449,544	$ 2,694,892
Annual Depreciation of Plant In Service	2,067,795	2,211,057	2,248,917	2,272,185	2,295,921	2,389,245	13,485,121
Total Other Operating Expenses	**2,516,548**	**2,659,968**	**2,697,987**	**2,721,413**	**2,745,307**	**2,838,789**	**16,180,012**
Net Operating Income (Loss)	**$ 1,034,621**	**$ 650,568**	**$ 438,831**	**$ 632,211**	**$ 209,608**	**$ (455,369)**	**$ 2,510,470**

Refer to Summary of Significant Assumptions and Accounting Policies.

Tab Name: 3.1 Historical Load
Purpose: Show load data from 0.2 Load Inputs and calculate monthly peaks
Where do numbers come from: 0.1 General Inputs, 0.2 Load Inputs, 0.4 Misc Controls, 11.7 2015 Customer Revenue, 11.10 Service Charge
Where do numbers go from here: 3.2 Forecasted Load
Directions: Compare total coincident peaks in summary section to actual system peaks for the historical period. Peaks should reconcile closely.

Concord Municipal Light Plant
Electric Rate Study
Schedule 3.1: Historical Customer Loads

1 **RESIDENTIAL**	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	77,571	6,433	6,433	6,477	6,455	6,466	6,498	6,463	6,490	6,434	6,492	6,458	6,473	77,571
RESIDEN Energy at Meter	64,413,025	6,656,458	5,582,838	4,456,135	4,793,737	4,224,786	4,636,592	5,943,344	6,892,286	6,749,891	4,476,946	4,546,026	5,453,987	64,413,025
RESIDEN Revenue	$ 11,327,689	$ 1,409,679	$ 938,156	$ 743,603	$ 805,078	$ 712,126	$ 782,439	$ 1,009,198	$ 1,174,243	$ 1,209,498	$ 786,166	$ 796,543	$ 960,960	11,327,689
RESIDEN Load Factor	44.43%	59.27%	62.53%	61.44%	59.52%	52.65%	56.79%	52.37%	55.97%	58.91%	64.46%	63.48%	59.26%	
RESIDEN Demand kW	150,810	15,095	13,286	9,748	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,370	150,810
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	77.65%	88%	91%	86%	82%	76%	77%	70%	75%	84%	95%	88%	81%	
RESIDEN Individual NCP	16,551	15,095	13,286	9,748	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,370	16,551
RESIDEN NCP at Meter for Group	16,551	15,095	13,286	9,748	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,370	16,551
RESIDEN NCP at Primary for Group	16,799	15,321	13,485	9,894	11,354	10,947	11,509	15,482	16,799	16,153	9,476	10,095	12,556	16,799
RESIDEN NCP at Input for Group	17,062	15,562	13,697	10,049	11,532	11,119	11,690	15,725	17,062	16,406	9,624	10,254	12,753	17,062
RESIDEN Coincidence Peak at Input Voltage	12,851	13,644	12,460	8,692	9,501	8,450	8,965	11,068	12,851	13,796	9,118	9,002	10,292	13,796
RESIDEN kWh at Input Voltage	66,405,180	6,862,328	5,755,503	4,593,953	4,941,997	4,355,449	4,779,992	6,127,159	7,105,449	6,958,651	4,615,408	4,686,625	5,622,666	66,405,180
RESIDEN CP4 Calculator	46,680.15	-	-	-	-	-	8,964.59	11,068.48	12,850.81	13,796.27	-	-	-	46,680

2 **RESIDENTIAL ASSISTANCE**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	1,880	157	163	156	149	152	151	161	163	162	159	159	148	1,880
RESIDEN Energy at Meter	876,192	106,480	73,964	58,983	60,577	54,115	62,123	85,771	94,925	92,640	59,571	60,519	66,524	876,192
RESIDEN Revenue	$ 85,687	$ 12,817	$ 7,079	$ 5,348	$ 5,752	$ 4,781	$ 5,891	$ 8,604	$ 9,557	$ 9,251	$ 5,089	$ 5,357	$ 6,161	85,687
RESIDEN Load Factor	41.87%	59.92%	70.24%	61.36%	58.22%	63.02%	61.00%	61.19%	64.29%	64.03%	63.51%	66.16%	52.58%	
RESIDEN Demand kW	1,937	239	157	129	144	115	141	188	198	201	126	127	170	1,937
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	71.22%	74%	87%	77%	73%	84%	79%	75%	83%	85%	87%	78%	62%	
RESIDEN Individual NCP	239	239	157	129	144	115	141	188	198	201	126	127	170	239
RESIDEN NCP at Meter for Group	239	239	157	129	144	115	141	188	198	201	126	127	170	239
RESIDEN NCP at Primary for Group	242	242	159	131	147	117	144	191	201	204	128	129	173	242
RESIDEN NCP at Input for Group	246	246	162	133	149	119	146	194	205	207	130	131	175	246
RESIDEN Coincidence Peak at Input Voltage	170	183	141	103	109	100	115	146	170	176	113	102	109	183
RESIDEN kWh at Input Voltage	903,291	109,773	76,252	60,807	62,451	55,789	64,044	88,424	97,861	95,505	61,413	62,391	68,581	903,291
RESIDEN CP4 Calculator	606.87	-	-	-	-	-	114.58	145.69	170.13	176.48	-	-	-	607

3 **RESIDENTIAL TOU**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Energy at Meter	154,433	14,355	12,726	11,360	11,694	11,451	9,540	10,999	11,107	11,717	12,918	16,597	19,969	154,433
RESIDEN Revenue	$ 17,042	$ 1,512	$ 1,315	$ 1,139	$ 1,214	$ 1,156	$ 995	$ 1,136	$ 1,207	$ 1,335	$ 1,574	$ 1,993	$ 2,466	17,042
RESIDEN Load Factor	10.37%	16.35%	13.66%	16.62%	11.79%	12.15%	11.20%	12.11%	9.88%	13.66%	12.03%	15.26%	15.78%	
RESIDEN Demand kW	1,589	118	139	92	138	127	118	122	151	119	144	151	170	1,589
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	5.11%	14%	11%	12%	14%	8%	6%	7%	6%	6%	6%	9%	10%	
RESIDEN Individual NCP	170	118	139	92	138	127	118	122	151	119	144	151	170	170
RESIDEN NCP at Meter for Group	170	118	139	92	138	127	118	122	151	119	144	151	170	170
RESIDEN NCP at Primary for Group	173	120	141	93	140	129	120	124	153	121	146	153	173	173
RESIDEN NCP at Input for Group	175	122	143	95	142	131	122	126	156	123	149	156	175	175
RESIDEN Coincidence Peak at Input Voltage	9	17	15	11	20	10	7	8	9	7	8	14	17	20
RESIDEN kWh at Input Voltage	159,209	14,799	13,120	11,711	12,056	11,805	9,835	11,339	11,451	12,079	13,318	17,110	20,587	159,209
RESIDEN CP4 Calculator	30.66	-	-	-	-	-	6.76	8.30	8.69	6.91	-	-	-	31

4 **RESIDENTIAL HEATING**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Energy at Meter	370,165	82,586	67,041	50,823	55,596	32,904	207	369	748	928	726	25,436	52,801	370,165
RESIDEN Revenue	$ 52,532	$ 11,505	$ 9,339	$ 7,080	$ 7,801	$ 4,617	$ 29	$ 52	$ 105	$ 139	$ 109	$ 3,823	$ 7,932	52,532
RESIDEN Load Factor	22.73%	59.72%	62.89%	59.48%	51.07%	68.67%	67.15%	64.50%	64.36%	67.48%	64.67%	63.24%	54.03%	
RESIDEN Demand kW	868	186	159	115	151	64	0	1	2	2	2	56	131	868
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	0.72%	70%	71%	69%	61%	89%	86%	81%	83%	91%	87%	75%	60%	
RESIDEN Individual NCP	186	186	159	115	151	64	0	1	2	2	2	56	131	186
RESIDEN NCP at Meter for Group	186	186	159	115	151	64	0	1	2	2	2	56	131	186
RESIDEN NCP at Primary for Group	189	189	161	117	153	65	0	1	2	2	2	57	133	189
RESIDEN NCP at Input for Group	192	192	164	118	156	66	0	1	2	2	2	58	135	192
RESIDEN Coincidence Peak at Input Voltage	1	134	117	81	94	59	0	1	1	2	1	43	81	134
RESIDEN kWh at Input Voltage	381,613	85,140	69,114	52,395	57,315	33,922	213	380	771	957	748	26,223	54,434	381,613
RESIDEN CP4 Calculator	4.15	-	-	-	-	-	0.38	0.64	1.34	1.79	-	-	-	

RESIDENTIAL CTRL WATER

5 **HEATING**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	3,824	322	321	322	317	317	318	323	316	315	316	317	320	3,824
RESIDEN Energy at Meter	4,045,236	473,576	409,002	357,774	355,014	314,490	255,082	307,180	334,531	337,996	280,240	275,616	344,735	4,045,236
RESIDEN Revenue	$ 631,476	$ 75,761	$ 64,298	$ 55,008	$ 55,014	$ 47,588	$ 37,269	$ 46,497	$ 51,580	$ 55,433	$ 44,058	$ 42,959	$ 56,011	631,476
RESIDEN Load Factor	43.00%	59.27%	62.53%	61.44%	59.52%	52.65%	56.79%	52.37%	55.97%	58.91%	64.46%	63.48%	59.26%	
RESIDEN Demand kW	9,443	1,074	973	783	828	803	624	788	803	797	584	603	782	9,443
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	58.08%	88%	91%	86%	82%	76%	77%	70%	75%	84%	95%	88%	81%	
RESIDEN Individual NCP	1,074	1,074	973	783	828	803	624	788	803	797	584	603	782	1,074
RESIDEN NCP at Meter for Group	1,074	1,074	973	783	828	803	624	788	803	797	584	603	782	1,074
RESIDEN NCP at Primary for Group	1,090	1,090	988	794	841	815	633	800	815	809	593	612	794	1,090
RESIDEN NCP at Input for Group	1,107	1,107	1,003	807	854	828	643	813	828	822	602	622	806	1,107
RESIDEN Coincidence Peak at Input Voltage	624	971	913	698	704	629	493	572	624	691	571	546	651	971
RESIDEN kWh at Input Voltage	4,170,346	488,223	421,652	368,839	365,994	324,216	262,971	316,680	344,877	348,449	288,907	284,140	355,397	4,170,346
RESIDEN CP4 Calculator	2,379.84	-	-	-	-	-	493.19	572.07	623.74	690.84	-	-	-	

6 **RESIDENTIAL NET METERING**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
RESIDEN Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Energy at Meter	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Revenue	$ 33,917	$ 2,666	$ 2,706	$ 2,743	$ 2,753	$ 2,798	$ 2,802	$ 2,849	$ 2,893	$ 2,900	$ 2,920	$ 2,926	$ 2,960	33,917
RESIDEN Load Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
RESIDEN Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDEN System Coincidence Factor	0.00%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
RESIDEN Individual NCP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN NCP at Meter for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN NCP at Primary for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN NCP at Input for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN Coincidence Peak at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN kWh at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDEN CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	

7 **ETS OFF PEAK**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
ETS OFF Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-
ETS OFF Energy at Meter	2,838,190	620,269	538,559	407,028	400,045	268,422	45,215	17,114	5,905	4,865	19,239	165,224	346,305	2,838,190
ETS OFF Revenue	$ 174,593	$ 36,708	$ 31,872	$ 24,088	$ 24,075	$ 16,154	$ 2,721	$ 1,030	$ 355	$ 341	$ 1,350	$ 11,595	$ 24,304	174,593
ETS OFF Load Factor	33.03%	85.00%	85.00%	85.00%	85.00%	60.00%	70.00%	70.00%	70.00%	70.00%	85.00%	90.00%	90.00%	
ETS OFF Demand kW	4,724	981	943	644	654	601	90	-	-	10	30	255	517	4,724
ETS OFF Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
ETS OFF System Coincidence Factor	0.00%	3%	3%	3%	0%	2%	1%	0%	0%	1%	3%	2%	2%	
ETS OFF Individual NCP	981	981	943	644	654	601	90	33	11	10	30	255	517	981
ETS OFF NCP at Meter for Group	981	981	943	644	654	601	90	33	11	10	30	255	517	981
ETS OFF NCP at Primary for Group	996	996	957	653	663	610	91	33	12	10	31	259	525	996
ETS OFF NCP at Input for Group	1,011	1,011	972	664	674	620	92	34	12	10	31	263	533	1,011
ETS OFF Coincidence Peak at Input Voltage	-	34	32	19	2	11	1	-	-	0	1	6	10	34
ETS OFF kWh at Input Voltage	2,925,969	639,453	555,215	419,616	412,418	276,724	46,613	17,643	6,088	5,015	19,834	170,334	357,015	2,925,969
ETS OFF CP4 Calculator	0.60	-	-	-	-	-	0.52	-	-	0.07	-	-	-	

8 **SMALL GENERAL SERVICE**	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SMALL GI Number of Customers	13,279	1,094	1,094	1,100	1,099	1,110	1,114	1,098	1,118	1,116	1,109	1,117	1,110	13,279
SMALL GI Energy at Meter	13,194,212	1,296,256	1,168,293	987,553	1,063,121	944,581	1,022,819	1,153,200	1,274,752	1,230,670	932,944	996,710	1,123,313	13,194,212
SMALL GI Revenue	$ 2,592,098	$ 322,578	$ 216,477	$ 184,749	$ 199,122	$ 178,208	$ 192,422	$ 215,459	$ 237,260	$ 241,915	$ 185,950	$ 196,799	$ 221,160	2,592,098
SMALL GI Load Factor	58.63%	81.41%	79.68%	80.66%	71.58%	69.05%	65.87%	63.50%	66.69%	69.14%	78.09%	76.64%	79.13%	
SMALL GI Demand kW	24,828	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	24,828
SMALL GI Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
SMALL GI System Coincidence Factor	71.58%	90%	88%	85%	71%	71%	69%	66%	69%	74%	86%	90%	92%	
SMALL GI Individual NCP	2,569	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	2,569
SMALL GI NCP at Meter for Group	2,569	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	2,569
SMALL GI NCP at Primary for Group	2,608	2,172	2,215	1,670	2,094	1,866	2,189	2,478	2,608	2,509	1,630	1,833	1,937	2,608
SMALL GI NCP at Input for Group	2,649	2,206	2,249	1,697	2,127	1,896	2,223	2,516	2,649	2,549	1,655	1,862	1,967	2,649
SMALL GI Coincidence Peak at Input Voltage	1,839	1,981	1,972	1,445	1,510	1,352	1,524	1,650	1,839	1,897	1,423	1,679	1,818	1,981
SMALL GI kWh at Input Voltage	13,602,280	1,336,346	1,204,426	1,018,096	1,096,001	973,795	1,054,453	1,188,866	1,314,177	1,268,732	961,798	1,027,536	1,158,055	13,602,280
SMALL GI CP4 Calculator	6,909.82	-	-	-	-	-	1,523.52	1,650.22	1,839.01	1,897.08	-	-	-	

Refer to Summary of Significant Assumptions and Accounting Policies.

9 **MEDIUM GENERAL SERVICE**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
MEDIUM (	Number of Customers	1,977	159	166	164	167	166	168	166	162	164	166	164	165	1,977
MEDIUM (	Energy at Meter	29,437,776	2,637,208	2,397,653	2,165,258	2,376,889	2,230,019	2,399,676	2,704,529	2,655,376	2,845,603	2,270,389	2,326,739	2,428,437	29,437,776
MEDIUM (	Revenue	$ 4,835,882	$ 429,240	$ 379,548	$ 348,996	$ 378,532	$ 362,794	$ 389,644	$ 433,010	$ 424,172	$ 479,116	$ 400,619	$ 398,748	$ 411,463	4,835,882
MEDIUM (	Load Factor	50.65%	68.04%	68.41%	70.79%	66.86%	57.73%	59.57%	58.16%	61.13%	59.57%	64.38%	66.56%	66.44%	
MEDIUM (	Demand kW	63,492	5,209	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	63,492
MEDIUM (	Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MEDIUM (	System Coincidence Factor	55.12%	69%	70%	66%	57%	54%	60%	58%	61%	60%	63%	75%	75%	
MEDIUM (	Individual NCP	6,635	5,209	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	6,635
MEDIUM (	NCP at Meter for Group	6,635	5,209	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	6,635
MEDIUM (	NCP at Primary for Group	6,734	5,287	5,294	4,173	5,012	5,270	5,679	6,344	5,926	6,734	4,811	4,928	4,986	6,734
MEDIUM (	NCP at Input for Group	6,840	5,370	5,377	4,238	5,091	5,353	5,768	6,443	6,019	6,840	4,887	5,005	5,065	6,840
MEDIUM (	Coincidence Peak at Input Voltage	3,657	3,731	3,787	2,784	2,915	2,872	3,450	3,754	3,657	4,096	3,082	3,732	3,785	4,096
MEDIUM (	kWh at Input Voltage	30,348,222	2,718,771	2,471,807	2,232,225	2,450,401	2,298,989	2,473,893	2,788,174	2,737,501	2,933,611	2,340,607	2,398,700	2,503,543	30,348,222
MEDIUM (	CP4 Calculator	14,956.76	-	-	-	-	-	3,450.17	3,754.11	3,656.78	4,095.71	-	-	-	

10 **LARGE GENERAL SERVICE**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
LARGE G	Number of Customers	321	29	27	26	26	26	26	26	27	27	27	27	27	321
LARGE G	Energy at Meter	54,760,420	5,180,049	4,315,211	3,859,166	4,174,609	4,163,503	4,492,706	4,971,775	5,319,858	5,233,337	4,355,071	4,376,611	4,318,524	54,760,420
LARGE G	Revenue	$ 7,940,621	712,644	604,568	551,306	586,522	591,724	639,064	702,542	748,739	794,202	684,640	670,856	653,813	7,940,621
LARGE G	Load Factor	52.68%	70.92%	75.66%	74.11%	67.43%	58.86%	60.45%	63.37%	64.83%	61.25%	65.61%	71.60%	74.71%	
LARGE G	Demand kW	112,351	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	112,351
LARGE G	Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
LARGE G	System Coincidence Factor	60.21%	72%	76%	70%	61%	55%	59%	62%	63%	60%	64%	78%	81%	
LARGE G	Individual NCP	11,866	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	11,866
LARGE G	NCP at Meter for Group	11,866	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	11,866
LARGE G	NCP at Primary for Group	12,044	9,964	8,614	7,104	8,727	9,650	10,477	10,703	11,195	12,044	9,055	8,617	7,885	12,044
LARGE G	NCP at Input for Group	12,233	10,120	8,749	7,215	8,864	9,802	10,642	10,871	11,370	12,233	9,197	8,752	8,009	12,233
LARGE G	Coincidence Peak at Input Voltage	7,145	7,241	6,693	5,078	5,385	5,418	6,293	6,741	7,145	7,333	5,896	6,831	6,474	7,333
LARGE G	kWh at Input Voltage	56,454,041	5,340,257	4,448,671	3,978,522	4,303,721	4,292,271	4,631,656	5,125,541	5,484,390	5,395,193	4,489,764	4,511,970	4,452,087	56,454,041
LARGE G	CP4 Calculator	27,512.01	-	-	-	-	-	6,292.83	6,741.49	7,144.51	7,333.17	-	-	-	

11 **GENERAL SERVICE NET METERING**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
GENERAL	Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	Energy at Meter	(96,444)	-	-	-	(4,176)	(14,773)	(14,965)	(15,984)	(16,539)	(10,950)	(7,722)	(8,684)	(2,651)	(96,444)
GENERAL	Revenue	$ (10,363)	-	-	-	(128)	(1,875)	(1,554)	(1,665)	(1,710)	(1,250)	(884)	(984)	(312)	(10,363)
GENERAL	Load Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
GENERAL	Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
GENERAL	System Coincidence Factor	0.00%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
GENERAL	Individual NCP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	NCP at Meter for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	NCP at Primary for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	NCP at Input for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	Coincidence Peak at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL	kWh at Input Voltage	(99,427)	-	-	-	(4,305)	(15,230)	(15,428)	(16,478)	(17,051)	(11,289)	(7,961)	(8,953)	(2,733)	(99,427)
GENERAL	CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	

12 **STREET LIGHTS**		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
STREET L	Number of Customers	12	1	1	1	1	1	1	1	1	1	1	1	1	12
STREET L	Energy at Meter	296,617	38,707	32,261	26,313	25,027	22,025	19,439	16,929	18,197	20,594	22,655	26,453	28,017	296,617
STREET L	Revenue	$ 43,648	5,696	4,747	3,872	3,683	3,241	2,861	2,491	2,678	3,030	3,334	3,893	4,123	43,648
STREET L	Load Factor	31.74%	50.00%	45.00%	40.00%	35.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	45.00%	50.00%	
STREET L	Demand kW	632	104	107	88	99	-	-	-	-	-	76	82	75	632
STREET L	Group Coincidence Factor	100%	1	1	1	1	1	1	1	1	1	1	1	1	
STREET L	System Coincidence Factor	0.00%	99%	98%	98%	100%	0%	0%	0%	0%	0%	99%	92%	99%	
STREET L	Individual NCP	107	104	107	88	99	-	-	-	-	-	76	82	75	107
STREET L	NCP at Meter for Group	107	104	107	88	99	-	-	-	-	-	76	82	75	107
STREET L	NCP at Primary for Group	108	106	108	90	101	-	-	-	-	-	77	83	76	108
STREET L	NCP at Input for Group	110	107	110	91	102	-	-	-	-	-	78	84	78	110
STREET L	Coincidence Peak at Input Voltage	-	106	108	89	102	-	-	-	-	-	77	77	77	108
STREET L	kWh at Input Voltage	305,791	39,904	33,259	27,127	25,801	22,706	20,040	17,453	18,760	21,231	23,356	27,271	28,884	305,791
STREET L	CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 3.1: Historical Customer Loads

Summary	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
Number of Customers	98,864	8,195	8,205	8,246	8,214	8,238	8,276	8,238	8,277	8,219	8,270	8,243	8,244	98,864
Energy at Meter	170,289,821	17,105,944	14,597,548	12,380,393	13,312,133	12,251,523	12,928,434	15,195,226	16,591,146	16,517,291	12,422,977	12,807,247	14,179,961	170,289,821
Revenue	27,724,822	$ 3,020,805	$ 2,260,105	$ 1,927,933	$ 2,069,417	$ 1,923,312	$ 2,054,582	$ 2,421,202	$ 2,651,080	$ 2,795,910	$ 2,114,924	$ 2,134,510	$ 2,351,042	$ 27,724,822
Load Factor	$ 40	3	4	3	3	3	3	3	3	3	4	4	3	
Demand kW	8.33%	34,963	31,647	24,354	28,800	29,034	30,388	35,589	37,141	38,016	25,566	26,371	28,806	370,674
Group Coincidence Factor	84	7	7	7	7	7	7	7	7	7	7	7	7	
System Coincidence Factor	332%	3	4	3	3	3	3	3	3	4	4	3	3	
Individual NCP	44992.57%	34,963	31,647	24,354	28,800	29,034	30,388	35,622	37,153	38,016	25,566	26,371	28,806	38,016
NCP at Meter for Group	38,016	34,963	31,647	24,354	28,800	29,034	30,388	35,622	37,153	38,016	25,566	26,371	28,806	38,016
NCP at Primary for Group	38,586	35,487	32,122	24,719	29,232	29,470	30,843	36,156	37,710	38,586	25,949	26,766	29,238	38,586
NCP at Input for Group	39,192	36,044	32,626	25,107	29,691	29,932	31,327	36,724	38,302	39,192	26,356	27,186	29,697	39,192
Coincidence Peak at Input Voltage	28,041	28,041	26,238	19,000	20,341	18,902	20,847	23,941	26,295	27,998	20,291	22,034	23,313	28,041
kWh at Input Voltage	17,104,274	17,634,993	15,049,019	12,763,291	13,723,848	12,630,436	13,328,282	15,665,181	17,104,274	17,028,135	12,807,193	13,203,347	14,618,516	175,556,516
CP4 Calculator	99,081	-	-	-	-	-	20,847	23,941	26,295	27,998	-	-	-	
Reconciliation														
Energy at Meter		17,105,944	14,597,548	12,380,393	13,312,133	12,251,523	12,928,434	15,195,226	16,591,146	16,517,291	12,422,977	12,807,247	14,179,961	170,289,821
Coincidence Peak at Input Voltage		28,041	26,238	19,000	20,341	18,902	20,847	23,941	26,295	27,998	20,291	22,034	23,313	277,242

Refer to Summary of Significant Assumptions and Accounting Policies.

Tab Name: 3.2 Forecasted Load
Purpose: Take the loads from 3.1 Historical Load and forecast them into a future year.
Where do numbers come from: 0.1 General Inputs, 0.2 Load Inputs, 3.1 Historical Load, 11.7 2015 Customer Revenue, 11.10 Service Charge
Where do numbers go from here: 4.1 Allocators
Directions: No input is needed on this tab.

Concord Municipal Light Plant
Electric Rate Study
Schedule 3.2: Forecasted Loads

1 **RESIDENTIAL**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	77,572	6,433	6,433	6,477	6,455	6,466	6,498	6,463	6,490	6,434	6,492	6,458	6,473	77,572
RESIDENT Energy at Meter	67,633,676	6,989,281	5,861,980	4,678,941	5,033,424	4,436,025	4,868,422	6,240,511	7,236,900	7,087,386	4,700,793	4,773,327	5,726,686	67,633,676
RESIDENT Revenue	$ 11,327,689	$ 1,409,679	$ 938,156	$ 743,603	$ 805,078	$ 712,126	$ 782,439	$ 1,009,198	$ 1,174,243	$ 1,209,498	$ 786,166	$ 796,543	$ 960,960	11,327,689
RESIDENT Load Factor	46.65%	59.27%	62.53%	61.44%	59.52%	52.65%	56.79%	52.37%	55.97%	58.91%	64.46%	63.48%	59.26%	
RESIDENT Demand kW	150,812	15,095	13,286	9,749	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,371	150,812
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	77.65%	88%	91%	86%	82%	76%	77%	70%	75%	84%	95%	88%	81%	
RESIDENT Individual NCP	16,551	15,095	13,286	9,749	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,371	16,551
RESIDENT NCP at Meter for Group	16,551	15,095	13,286	9,749	11,186	10,785	11,339	15,253	16,551	15,914	9,336	9,946	12,371	16,551
RESIDENT NCP at Primary for Group	16,799	15,321	13,485	9,895	11,354	10,947	11,509	15,482	16,799	16,153	9,476	10,095	12,557	16,799
RESIDENT NCP at Input for Group	17,062	15,562	13,697	10,050	11,532	11,119	11,690	15,725	17,062	16,406	9,624	10,254	12,754	17,062
RESIDENT Coincidence Peak at Input Voltage	12,851	13,644	12,460	8,693	9,501	8,450	8,965	11,068	12,851	13,796	9,118	9,002	10,293	13,796
RESIDENT kWh at Input Voltage	69,725,439	7,205,444	6,043,278	4,823,651	5,189,097	4,573,222	5,018,992	6,433,516	7,460,722	7,306,584	4,846,178	4,920,956	5,903,800	69,725,439
RESIDENT CP4 Calculator	46,680	-	-	-	-	-	8,965	11,068	12,851	13,796	-	-	-	46,680

2 **RESIDENTIAL ASSISTANCE**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	1,880	157	163	156	149	152	151	161	163	162	159	159	148	1,880
RESIDENT Energy at Meter	920,002	111,804	77,662	61,932	63,606	56,821	65,229	90,060	99,671	97,272	62,550	63,545	69,850	920,002
RESIDENT Revenue	$ 85,687	$ 12,817	$ 7,079	$ 5,348	$ 5,752	$ 4,781	$ 5,891	$ 8,604	$ 9,557	$ 9,251	$ 5,089	$ 5,357	$ 6,161	85,687
RESIDENT Load Factor	43.97%	59.92%	70.24%	61.36%	58.22%	63.02%	61.00%	61.19%	64.29%	64.03%	63.51%	66.16%	52.58%	
RESIDENT Demand kW	1,937	239	157	129	144	115	141	188	198	201	126	127	170	1,937
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	71.22%	74%	87%	77%	73%	84%	79%	75%	83%	85%	87%	78%	62%	
RESIDENT Individual NCP	239	239	157	129	144	115	141	188	198	201	126	127	170	239
RESIDENT NCP at Meter for Group	239	239	157	129	144	115	141	188	198	201	126	127	170	239
RESIDENT NCP at Primary for Group	242	242	159	131	147	117	144	191	201	204	128	129	173	242
RESIDENT NCP at Input for Group	246	246	162	133	149	119	146	194	205	207	130	131	175	246
RESIDENT Coincidence Peak at Input Voltage	170	183	141	103	-	100	115	146	170	176	113	102	109	183
RESIDENT kWh at Input Voltage	948,456	115,262	80,064	63,847	65,573	58,578	67,246	92,845	102,754	100,280	64,485	65,510	72,010	948,456
RESIDENT CP4 Calculator	607	-	-	-	-	-	115	146	170	176	-	-	-	607

3 **RESIDENTIAL TOU**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Energy at Meter	156,361	14,534	12,885	11,502	11,840	11,594	9,659	11,136	11,246	11,863	13,079	16,804	20,219	156,361
RESIDENT Revenue	$ 17,042	$ 1,512	$ 1,315	$ 1,139	$ 1,214	$ 1,156	$ 995	$ 1,136	$ 1,207	$ 1,335	$ 1,574	$ 1,993	$ 2,466	17,042
RESIDENT Load Factor	10.37%	16.35%	13.66%	16.62%	11.79%	12.15%	11.20%	12.11%	9.88%	13.66%	12.03%	15.26%	15.78%	
RESIDENT Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	5.11%	14%	11%	12%	14%	8%	6%	7%	6%	6%	6%	9%	10%	
RESIDENT Individual NCP	172	120	140	93	139	128	120	124	153	121	146	153	172	172
RESIDENT NCP at Meter for Group	172	120	140	93	139	128	120	124	153	121	146	153	172	172
RESIDENT NCP at Primary for Group	175	121	142	94	142	130	122	125	155	122	148	155	175	175
RESIDENT NCP at Input for Group	178	123	145	96	144	132	123	127	158	124	151	158	178	178
RESIDENT Coincidence Peak at Input Voltage	9	18	16	11	20	10	7	8	9	7	9	14	18	20
RESIDENT kWh at Input Voltage	161,197	14,984	13,284	11,858	12,206	11,953	9,958	11,480	11,594	12,230	13,484	17,324	20,844	161,197
RESIDENT CP4 Calculator	31	-	-	-	-	-	7	8	9	7	-	-	-	31

4 **RESIDENTIAL HEATING**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Energy at Meter	374,792	83,618	67,879	51,458	56,291	33,315	210	374	757	940	735	25,754	53,461	374,792
RESIDENT Revenue	$ 52,532	$ 11,505	$ 9,339	$ 7,080	$ 7,801	$ 4,617	$ 29	$ 52	$ 105	$ 139	$ 109	$ 3,823	$ 7,932	52,532
RESIDENT Load Factor	22.73%	59.72%	62.89%	59.48%	51.07%	68.67%	67.15%	64.50%	64.36%	67.48%	64.67%	63.24%	54.03%	
RESIDENT Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	0.72%	70%	71%	69%	61%	89%	86%	81%	83%	91%	87%	75%	60%	
RESIDENT Individual NCP	188	188	161	116	153	65	0	1	2	2	2	57	133	188
RESIDENT NCP at Meter for Group	188	188	161	116	153	65	0	1	2	2	2	57	133	188
RESIDENT NCP at Primary for Group	191	191	163	118	155	66	0	1	2	2	2	57	135	191
RESIDENT NCP at Input for Group	194	194	166	120	158	67	0	1	2	2	2	58	137	194
RESIDENT Coincidence Peak at Input Voltage	1	135	118	83	96	60	0	1	1	2	1	44	82	135
RESIDENT kWh at Input Voltage	386,384	86,204	69,978	53,049	58,032	34,345	216	386	780	969	758	26,551	55,114	386,384
RESIDENT CP4 Calculator	4	-	-	-	-	-	0	1	1	2	-	-	-	4

5 **RESIDENTIAL CTRL WATER HEATING**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	3,824	322	321	322	317	317	318	323	316	315	316	317	320	3,824
RESIDENT Energy at Meter	4,095,803	479,496	414,115	362,246	359,452	318,421	258,271	311,020	338,713	342,221	283,743	279,061	349,044	4,095,803
RESIDENT Revenue	$ 631,476	$ 75,761	$ 64,298	$ 55,008	$ 55,014	$ 47,588	$ 37,269	$ 46,497	$ 51,580	$ 55,433	$ 44,058	$ 42,959	$ 56,011	631,476
RESIDENT Load Factor	43.54%	59.27%	62.53%	61.44%	59.52%	52.65%	56.79%	52.37%	55.97%	58.91%	64.46%	63.48%	59.26%	
RESIDENT Demand kW	9,443	1,074	973	783	828	803	624	788	803	797	584	603	782	9,443
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	58.08%	88%	91%	86%	82%	76%	77%	70%	75%	84%	95%	88%	81%	
RESIDENT Individual NCP	1,074	1,074	973	783	828	803	624	788	803	797	584	603	782	1,074
RESIDENT NCP at Meter for Group	1,074	1,074	973	783	828	803	624	788	803	797	584	603	782	1,074
RESIDENT NCP at Primary for Group	1,090	1,090	988	794	841	815	633	800	815	809	593	612	794	1,090
RESIDENT NCP at Input for Group	1,107	1,107	1,003	807	854	828	643	813	828	822	602	622	806	1,107
RESIDENT Coincidence Peak at Input Voltage	624	971	913	698	704	629	493	572	624	691	571	546	651	971
RESIDENT kWh at Input Voltage	4,222,477	494,326	426,923	373,449	370,569	328,269	266,259	320,639	349,189	352,805	292,519	287,692	359,839	4,222,477
RESIDENT CP4 Calculator	2,380	-	-	-	-	-	493	572	624	691	-	-	-	2,380

6 **RESIDENTIAL NET METERING**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
RESIDENT Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Energy at Meter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Revenue	$ 33,917	$ 2,666	$ 2,706	$ 2,743	$ 2,753	$ 2,798	$ 2,802	$ 2,849	$ 2,893	$ 2,900	$ 2,920	$ 2,926	$ 2,960	33,917
RESIDENT Load Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
RESIDENT Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
RESIDENT System Coincidence Factor	0.00%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
RESIDENT Individual NCP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT NCP at Meter for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT NCP at Primary for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT NCP at Input for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT Coincidence Peak at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT kWh at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RESIDENT CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	-

7 **ETS OFF PEAK**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
ETS OFF P Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ETS OFF P Energy at Meter	2,873,667	628,022	545,291	412,116	405,046	271,777	45,780	17,328	5,979	4,926	19,479	167,289	350,634	2,873,667
ETS OFF P Revenue	$ 174,593	$ 36,708	$ 31,872	$ 24,088	$ 24,075	$ 16,154	$ 2,721	$ 1,030	$ 355	$ 341	$ 1,350	$ 11,595	$ 24,304	174,593
ETS OFF P Load Factor	33.03%	85.00%	85.00%	85.00%	85.00%	60.00%	70.00%	70.00%	70.00%	70.00%	85.00%	90.00%	90.00%	
ETS OFF P Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ETS OFF P Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
ETS OFF P System Coincidence Factor	0.00%	3%	3%	3%	0%	2%	1%	0%	0%	1%	3%	2%	2%	
ETS OFF P Individual NCP	993	993	955	652	662	609	91	33	11	10	31	258	524	993
ETS OFF P NCP at Meter for Group	993	993	955	652	662	609	91	33	11	10	31	258	524	993
ETS OFF P NCP at Primary for Group	1,008	1,008	969	661	672	618	92	34	12	10	31	262	532	1,008
ETS OFF P NCP at Input for Group	1,024	1,024	984	672	682	628	94	34	12	10	32	266	540	1,024
ETS OFF P Coincidence Peak at Input Voltage	-	34	33	19	2	12	1	-	-	0	1	7	11	34
ETS OFF P kWh at Input Voltage	2,962,543	647,445	562,156	424,862	417,573	280,182	47,196	17,864	6,164	5,078	20,081	172,463	361,478	2,962,543
ETS OFF P CP4 Calculator	1	-	-	-	-	-	1	-	-	0	-	-	-	1

8 **SMALL GENERAL SERVICE**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
SMALL GE Number of Customers	13,279	1,094	1,094	1,100	1,099	1,110	1,114	1,098	1,118	1,116	1,109	1,117	1,110	13,279
SMALL GE Energy at Meter	13,359,137	1,312,459	1,182,897	999,897	1,076,410	956,388	1,035,604	1,167,615	1,290,686	1,246,053	944,606	1,009,168	1,137,354	13,359,137
SMALL GE Revenue	$ 2,592,098	$ 322,578	$ 216,477	$ 184,749	$ 199,122	$ 178,208	$ 192,422	$ 215,459	$ 237,260	$ 241,915	$ 185,950	$ 196,799	$ 221,160	2,592,098
SMALL GE Load Factor	59.36%	81.41%	79.68%	80.66%	71.58%	69.05%	65.87%	63.50%	66.69%	69.14%	78.09%	76.64%	79.13%	
SMALL GE Demand kW	24,828	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	24,828
SMALL GE Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
SMALL GE System Coincidence Factor	71.58%	90%	88%	85%	71%	71%	69%	66%	69%	74%	86%	90%	92%	
SMALL GE Individual NCP	2,569	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	2,569
SMALL GE NCP at Meter for Group	2,569	2,140	2,182	1,646	2,063	1,839	2,157	2,441	2,569	2,472	1,606	1,806	1,908	2,569
SMALL GE NCP at Primary for Group	2,608	2,172	2,215	1,670	2,094	1,866	2,189	2,478	2,608	2,509	1,630	1,833	1,937	2,608
SMALL GE NCP at Input for Group	2,649	2,206	2,249	1,697	2,127	1,896	2,223	2,516	2,649	2,549	1,655	1,862	1,967	2,649
SMALL GE Coincidence Peak at Input Voltage	1,839	1,981	1,972	1,445	1,510	1,352	1,524	1,650	1,839	1,897	1,423	1,679	1,818	1,981
SMALL GE kWh at Input Voltage	13,772,306	1,353,051	1,219,481	1,030,822	1,109,701	985,967	1,067,633	1,203,727	1,330,604	1,284,591	973,821	1,040,379	1,172,530	13,772,306
SMALL GE CP4 Calculator	6,910	-	-	-	-	-	1,524	1,650	1,839	1,897	-	-	-	6,910

9 **MEDIUM GENERAL SERVICE**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
MEDIUM G Number of Customers	1,977	159	166	164	167	166	168	166	162	164	166	164	165	1,977
MEDIUM G Energy at Meter	29,805,748	2,670,173	2,427,624	2,192,324	2,406,600	2,257,894	2,429,672	2,738,336	2,688,568	2,881,173	2,298,769	2,355,823	2,458,792	29,805,748
MEDIUM G Revenue	$ 4,835,882	$ 429,240	$ 379,548	$ 348,996	$ 378,532	$ 362,794	$ 389,644	$ 433,010	$ 424,172	$ 479,116	$ 400,619	$ 398,748	$ 411,463	4,835,882
MEDIUM G Load Factor	51.28%	68.04%	68.41%	70.79%	66.86%	57.73%	59.57%	58.16%	61.13%	59.57%	64.38%	66.56%	66.44%	
MEDIUM G Demand kW	63,508	5,226	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	63,508
MEDIUM G Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MEDIUM G System Coincidence Factor	55.12%	69%	70%	66%	57%	54%	60%	58%	61%	60%	63%	75%	75%	
MEDIUM G Individual NCP	6,635	5,226	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	6,635
MEDIUM G NCP at Meter for Group	6,635	5,226	5,216	4,111	4,938	5,192	5,595	6,250	5,838	6,635	4,740	4,855	4,913	6,635
MEDIUM G NCP at Primary for Group	6,734	5,304	5,294	4,173	5,012	5,270	5,679	6,344	5,926	6,734	4,811	4,928	4,986	6,734
MEDIUM G NCP at Input for Group	6,840	5,387	5,377	4,238	5,091	5,353	5,768	6,443	6,019	6,840	4,887	5,005	5,065	6,840
MEDIUM G Coincidence Peak at Input Voltage	3,657	3,743	3,787	2,784	2,915	2,872	3,450	3,754	3,657	4,096	3,082	3,732	3,785	4,096
MEDIUM G kWh at Input Voltage	30,727,575	2,752,756	2,502,705	2,260,128	2,481,031	2,327,726	2,504,816	2,823,027	2,771,720	2,970,281	2,369,865	2,428,684	2,534,837	30,727,575
MEDIUM G CP4 Calculator	14,957	-	-	-	-	-	3,450	3,754	3,657	4,096	-	-	-	14,957

10 **LARGE GENERAL SERVICE**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
LARGE GE Number of Customers	321	29	27	26	26	26	26	26	27	27	27	27	27	321
LARGE GE Energy at Meter	55,444,927	5,244,800	4,369,151	3,907,406	4,226,792	4,215,547	4,548,865	5,033,922	5,386,356	5,298,754	4,409,509	4,431,319	4,372,506	55,444,927
LARGE GE Revenue	$ 7,940,621	$ 712,644	$ 604,568	$ 551,306	$ 586,522	$ 591,724	$ 639,064	$ 702,542	$ 748,739	$ 794,202	$ 684,640	$ 670,856	$ 653,813	7,940,621
LARGE GE Load Factor	53.34%	70.92%	75.66%	74.11%	67.43%	58.86%	60.45%	63.37%	64.83%	61.25%	65.61%	71.60%	74.71%	
LARGE GE Demand kW	112,351	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	112,351
LARGE GE Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
LARGE GE System Coincidence Factor	60.21%	72%	76%	70%	61%	55%	59%	62%	63%	60%	64%	78%	81%	
LARGE GE Individual NCP	11,866	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	11,866
LARGE GE NCP at Meter for Group	11,866	9,817	8,487	6,999	8,598	9,508	10,323	10,545	11,029	11,866	8,921	8,490	7,769	11,866
LARGE GE NCP at Primary for Group	12,044	9,964	8,614	7,104	8,727	9,650	10,477	10,703	11,195	12,044	9,055	8,617	7,885	12,044
LARGE GE NCP at Input for Group	12,233	10,120	8,749	7,215	8,864	9,802	10,642	10,871	11,370	12,233	9,197	8,752	8,009	12,233
LARGE GE Coincidence Peak at Input Voltage	7,145	7,241	6,693	5,078	5,385	5,418	6,293	6,741	7,145	7,333	5,896	6,831	6,474	7,333
LARGE GE kWh at Input Voltage	57,159,719	5,407,010	4,504,279	4,028,254	4,357,518	4,345,925	4,689,552	5,189,610	5,552,944	5,462,633	4,545,886	4,568,370	4,507,738	57,159,719
LARGE GE CP4 Calculator	27,512	-	-	-	-	-	6,293	6,741	7,145	7,333	-	-	-	27,512

11 **GENERAL SERVICE NET METERING**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
GENERAL Number of Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL Energy at Meter	(97,651)	-	-	-	(4,228)	(14,958)	(15,152)	(16,184)	(16,746)	(11,087)	(7,819)	(8,793)	(2,684)	(97,651)
GENERAL Revenue	$ (10,363)	$ -	$ -	$ -	$ (128)	$ (1,875)	$ (1,554)	$ (1,665)	$ (1,710)	$ (1,250)	$ (884)	$ (984)	$ (312)	(10,363)
GENERAL Load Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
GENERAL Demand kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL Group Coincidence Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
GENERAL System Coincidence Factor	0.00%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
GENERAL Individual NCP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL NCP at Meter for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL NCP at Primary for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL NCP at Input for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL Coincidence Peak at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GENERAL kWh at Input Voltage	(100,671)	-	-	-	(4,359)	(15,421)	(15,621)	(16,685)	(17,264)	(11,430)	(8,061)	(9,065)	(2,767)	(100,671)
GENERAL CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	-

12 **STREET LIGHTS**	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
STREET L Number of Customers	12	1	1	1	1	1	1	1	1	1	1	1	1	12
STREET L Energy at Meter	300,324	39,191	32,664	26,642	25,340	22,300	19,682	17,141	18,424	20,851	22,938	26,784	28,367	300,324
STREET L Revenue	$ 43,648	$ 5,696	$ 4,747	$ 3,872	$ 3,683	$ 3,241	$ 2,861	$ 2,491	$ 2,678	$ 3,030	$ 3,334	$ 3,893	$ 4,123	43,648
STREET L Load Factor	32.14%	50.00%	45.00%	40.00%	35.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	45.00%	50.00%	
STREET L Demand kW	632	104	107	88	99	-	-	-	-	-	76	82	75	632
STREET L Group Coincidence Factor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
STREET L System Coincidence Factor	0.00%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
STREET L Individual NCP	107	104	107	88	99	-	-	-	-	-	76	82	75	107
STREET L NCP at Meter for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STREET L NCP at Primary for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STREET L NCP at Input for Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STREET L Coincidence Peak at Input Voltage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STREET L kWh at Input Voltage	309,612	40,403	33,674	27,466	26,124	22,990	20,291	17,671	18,994	21,496	23,647	27,612	29,244	309,612
STREET L CP4 Calculator	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Summary	**Total**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Total**
Number of Customers	98,865	8,195	8,205	8,246	8,214	8,238	8,276	8,238	8,277	8,219	8,270	8,243	8,244	98,865
Energy at Meter	174,866,786	17,573,378	14,992,148	12,704,464	13,660,573	12,565,124	13,266,242	15,611,259	17,060,554	16,980,352	12,748,382	13,140,081	14,564,229	174,866,786
Revenue	27,724,822	3,020,805	2,260,105	1,927,933	2,069,417	1,923,312	2,054,582	2,421,202	2,651,080	2,795,910	2,114,924	2,134,510	2,351,042	27,724,822
Load Factor	$ 40	3	4	3	3	3	3	3	3	3	4	4	3	
Demand kW	8.32%	33,694	30,407	23,504	27,858	28,242	30,179	35,466	36,989	37,885	25,389	25,909	27,988	363,511
Group Coincidence Factor	84	7	7	7	7	7	7	7	7	7	7	7	7	
System Coincidence Factor	332%	3	4	3	3	3	3	3	3	4	4	3	3	
Individual NCP	46263.55%	34,995	31,663	24,365	28,812	29,044	30,390	35,624	37,155	38,017	25,568	26,377	28,817	38,017
NCP at Meter for Group	38,017	34,891	31,556	24,277	28,713	29,044	30,390	35,624	37,155	38,017	25,492	26,295	28,742	38,017
NCP at Primary for Group	38,588	35,415	32,030	24,641	29,143	29,480	30,846	36,158	37,712	38,588	25,874	26,689	29,173	38,588
NCP at Input for Group	39,193	35,970	32,532	25,028	29,601	29,942	31,330	36,726	38,304	39,193	26,280	27,108	29,631	39,193
Coincidence Peak at Input Voltage	27,998	27,949	26,133	18,913	20,132	18,903	20,847	23,941	26,295	27,998	20,214	21,957	23,239	27,998
kWh at Input Voltage	17,588,200	18,116,885	15,455,823	13,097,386	14,083,065	12,953,736	13,676,538	16,094,081	17,588,200	17,505,518	13,142,662	13,546,475	15,014,669	180,275,037
CP4 Calculator	99,081	-	-	-	-	-	20,847	23,941	26,295	27,998	-	-	-	99,081

Reconciliation													
Energy at Meter	17,573,378	14,992,148	12,704,464	13,660,573	12,565,124	13,266,242	15,611,259	17,060,554	16,980,352	12,748,382	13,140,081	14,564,229	174,866,786
Coincidence Peak at Input Voltage	27,949	26,133	18,913	20,132	18,903	20,847	23,941	26,295	27,998	20,214	21,957	23,239	276,521

Hours												
	744	672	744	720	744	720	744	744	720	744	720	744

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Operations and Maintenance Expenses				
	Energy				
5550320	Canton Mtn	$ 365,911	Purchase-Power-Energy		Energy
5551000	Financial Settlements	$ -	Purchase-Power-Energy		Energy
5550330	Granite Wind	$ 166,612	Purchase-Power-Energy		Energy
5550060	ISO Invoice (Energy)	$ 709,042	Purchase-Power-Energy		Energy
5550160	Kearsage Solar Project	$ 148,256	Purchase-Power-Energy		Energy
5550310	Kearsage2 Solar Project	$ 420,866	Purchase-Power-Energy		Energy
5550080	Miller Hydro Energy	$ 273,279	Purchase-Power-Energy		Energy
5550180	New Bedford Landfill	$ 166,389	Purchase-Power-Energy		Energy
5550420	NextEra (Shaped Seabrook)	$ 179,501	Purchase-Power-Energy		Energy
5550140	Nextera Rise Energy	$ 1,280,949	Purchase-Power-Energy		Energy
5550190	Nugen Capital	$ 90,413	Purchase-Power-Energy		Energy
5550020	NYPA	$ 33,194	Purchase-Power-Energy		Energy
5550150	Saddleback Energy	$ 479,893	Purchase-Power-Energy		Energy
5550170	Shell Purchase	$ 3,276,502	Purchase-Power-Energy		Energy
5550430	Shepaug	$ 216,809	Purchase-Power-Energy		Energy
5550300	Solect Solar Project	$ 44,023	Purchase-Power-Energy		Energy
5550120	Spruce Mtn Energy	$ 577,030	Purchase-Power-Energy		Energy
5550440	Stevenson	$ 105,643	Purchase-Power-Energy		Energy
5550040	Watson Energy	$ -	Purchase-Power-Energy		Energy
		$ -			

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Forward Capacity Market Costs	$ -			
5550321	Canton Capacity	$ -	Purchase-Power-Dept		CP-1
5550061	ISO FCM Cost	$ 3,714,434	Purchase-Power-Dept		CP-1
5551001	Net Resource Payment by LP	$ (947,991)	Purchase-Power-Dept		CP-1
5550141	Nextera Rise Capacity	$ 331,320	Purchase-Power-Dept		CP-1
5550021	NYPA Capacity	$ 55,189	Purchase-Power-Dept		CP-1
5550151	Saddleback Capacity	$ -	Purchase-Power-Dept		CP-1
5550121	Spruce Mtn Capacity	$ -	Purchase-Power-Dept		CP-1
5550041	Watson Capacity	$ -	Purchase-Power-Dept		CP-1
		$ -			
	Transmission Costs	$ -			
5570072	Eversource Category B	$ 30,072	Purchase-Power-Dept		CP-12
5571012	Eversource HQ ICC Capacity	$ -	Purchase-Power-Dept		CP-12
5572012	Eversource HQ Phase 2	$ 115,154	Purchase-Power-Dept		CP-12
5573012	Eversource HQ Use Rights	$ (58,510)	Purchase-Power-Dept		CP-12
5574012	Eversource LNS	$ 3,648	Purchase-Power-Dept		CP-12
5575012	Eversource Support Charges	$ 63,600	Purchase-Power-Dept		CP-12
5570042	ISO Transmission	$ 3,595,727	Purchase-Power-Dept		CP-12
5572032	National Grid - NEH-HQII	$ 504	Purchase-Power-Energy		Energy
5571032	National Grid - NEPAC-HQII	$ 5,952	Purchase-Power-Energy		Energy
5570032	National Grid - NHH-HQII	$ 15,420	Purchase-Power-Energy		Energy
5570022	NYPA Transmission	$ 134,556	Purchase-Power-Dept		CP-12
		$ -			

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Fixed and Other Costs	$ -			
5570053	ENE Admin Fee	$ -			
5571053	Energy	$ 70,907	Purchase-Power-Energy		Energy
5572053	Customer	$ 70,907	Purchase-Power-Energy		Customer
5550063	ISO Ancillary Cost	$ 306,424	Purchase-Power-Energy		Energy
5551063	ISO Schedule Charges	$ -	Purchase-Power-Energy		Energy
5550143	Nextera Rise Fix	$ 471,900	Purchase-Power-Dept		CP-1
5550023	NYPA Fixed Costs	$ -	Purchase-Power-Dept		CP-1
5550043	Watson Fixed Costs	$ 845,539	Purchase-Power-Dept		CP-1
5551043	Watson O+M	$ 347,016	Purchase-Power-Dept		CP-1
		$ -			
	Total Purchase Power Expenses (w/o RECs)	$ 17,706,079			
		$ -			
	Transmission Costs (non-PPW)	$ -			
5610004	Trans Load Dispatching	$ -	Transmission-Variable		NCP-Input
5620004	Trans Station Expense	$ -			
5621004	Demand	$ 12,472	Transmission-Dept		NCP-Input
5622004	Customer	$ 8,315	Transmission-Dept		Cust-wgt
5700004	Maintenance of Station Equipment	$ -			
5701004	Demand	$ 1,813	Transmission-Dept		NCP-Input
5702004	Customer	$ 1,209	Transmission-Dept		Cust-wgt
5700014	Subtrans Maint of Station Equipment	$ -			
5701014	Demand	$ -	Transmission-Dept		NCP-Input
5702014	Customer	$ -	Transmission-Dept		Cust-wgt
5700024	Maint of Station Equipment - Eversourc	$ -			
5701024	Demand	$ 38,160	Transmission-Variable		NCP-Input
5702024	Customer	$ 25,440	Transmission-Dept		Cust-wgt
5720004	Trans Maint UG Lines	$ -			
5721004	Demand	$ -	Transmission-Dept		NCP-Input
5722004	Customer	$ -	Transmission-Dept		Cust-wgt
	Total				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Distribution Costs	$ -			
5810005	Line and Station Supplies and Expenses	$ 171,894	Distribution-System-Dept		NCP-Input
5820005	Station Expenses	$ -			
5821005	Demand	$ 606	Substation-Variable		NCP-Input
5822005	Customer	$ 404	Substation-Customer-Dept		Cust-wgt
5830005	Overhead Line Expense	$ -			
5831005	Demand	$ 16,256	Distribution-System-Dept		NCP-Input
5832005	Customer	$ 10,837	Distribution-Customer-Dept		Cust-wgt
5840005	UG Operations Line Expense	$ -			
5841005	Demand	$ -	Distribution-System-Dept		NCP-Input
5842005	Customer	$ -	Distribution-Customer-Dept		Cust-wgt
5860005	Meter Expense	$ 45,353	Meters-Dept		Meters-Wgt
5890005	Rent Expense - MBTA	$ 10,073	Distribution-System-Dept		NCP-Input
5900005	Maintenance Supervision	$ 65,159	Distribution-System-Dept		NCP-Input
5910005	Maintenance of Structures	$ -	Substation-Customer-Dept		NCP-Input
5920005	Maintenance of Station Equipment	$ -			
5921005	Demand	$ 6,530	Substation-Customer-Dept		NCP-Input
5922005	Customer	$ 4,353	Substation-Customer-Dept		Cust-wgt
5930005	Maintenance of Overhead Lines	$ -			
5931005	Demand	$ 157,411	Distribution-System-Dept		NCP-Input
5932005	Customer	$ 104,941	Distribution-Customer-Dept		Cust-wgt
5930015	Maint OH Lines - Tree Triming	$ -			
5931015	Demand	$ 101,951	Distribution-System-Dept		NCP-Input
5932015	Customer	$ 67,967	Distribution-Customer-Dept		Cust-wgt
5930025	Maint OH Lines - Damages	$ -			
5931025	Demand	$ 2,987	Distribution-System-Dept		NCP-Input
5932025	Customer	$ 1,992	Distribution-Customer-Dept		Cust-wgt
5940005	Maintenance of Underground Lines	$ -			
5941005	Demand	$ 111,448	Distribution-System-Dept		NCP-Input
5942005	Customer	$ 74,298	Distribution-Customer-Dept		Cust-wgt
5950005	Maintenance of Transformers	$ -			
5951005	Demand	$ -	Distribution-System-Dept		NCP-Input
5952005	Customer	$ -	Transformer-Customer-Fixed		Cust-wgt
5950015	Transformer Disposal	$ -			
5951015	Demand	$ 943	Distribution-System-Dept		NCP-Sec
5952015	Customer	$ 60	Transformer-Customer-Fixed		Cust-wgt
5960005	Maintenance of Street Lights	$ 21,000	Direct-Dept		Direct.sl
5970005	Maintenance of Meters	$ -	Meters-Dept		Meters-Wgt
5980005	Maint of Customer LTD Mgt Switches	$ 1,425	Meters-Dept		Meters-Wgt
	Total				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Customer Accounts Costs	$ -			
9010006	Supervision	$ 67,272	Meterreading-Dept		Meter.rd.wgt
9020006	Meter Reading	$ 39,884	Meterreading-Dept		Meter.rd.wgt
9030006	Accounting, Collection Expense	$ 252,397	Billing-Dept		Cust-wgt
9040006	Uncollectable Accounts	$ 17,500	Billing-Dept		billing.wgt
9040016	Small Balance Write Off	$ -	Billing-Dept		billing.wgt
9060006	Customer Service and Informational	$ 111,983	Billing-Dept		Customer
9080006	Customer Education	$ 64,108	Services-Dept		Customer
9080016	SmartHub Sign Up Credit	$ 75	Services-Dept		Customer
9090006	Informational & Instructional	$ 101,343	Services-Dept		Customer
9090016	Appliance Rebate	$ 519	Services-Dept		Customer
9090026	Lighting Rebate	$ 3,500	Services-Dept		Customer
9090036	ETS Rebate	$ -	Services-Dept		Customer
9090056	CARES expenses	$ 662,295	Services-Dept		Customer
9090086	Cool Concord Rebate CMLP	$ 8,744	Services-Dept		Customer
9090096	Cooler Concord Rebates - TH	$ -	Services-Dept		Customer
9090306	Electric Vehicle Level 2 Expense	$ 12,000	Services-Dept		Customer
9090316	Electric Vehicle Miles Expense	$ 25,530	Services-Dept		Customer
9100006	Energy Conservation	$ 1,100	Services-Dept		Customer
	Total				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	Administrative + General Costs	$ -			
4160007	M&J Operating Expenses	$ 100,000	A&G-Fixed		Expense
9200007	Administration & General Salaries	$ 1,150,896	A&G-Fixed		Expense
9200017	G & A Town House Transfer	$ 434,282	A&G-Fixed		Expense
9200027	G & A IS Dept Transfer	$ 111,295	A&G-Fixed		Expense
9210007	Office Supplies & Expenses	$ 193,591	A&G-Fixed		Expense
9230007	Misc Outside Services	$ 79,337	A&G-Fixed		Expense
9230017	Outside SVS Engineering	$ 30,000	A&G-Fixed		Expense
9230027	Outside SVS Legal	$ 94,866	A&G-Fixed		Expense
9240007	Property Insurance	$ 55,519	A&G-Fixed		Expense
9250007	Employee Injuries & Damages	$ 22,594	A&G-Fixed		Expense
9260007	Employee Pension & Benefits	$ 824,654	A&G-Fixed		Expense
9260017	Employee Sick Leave	$ 111,437	A&G-Fixed		Expense
9260027	Employee Vacation & Holiday	$ 331,741	A&G-Fixed		Expense
9260037	Employee Benefits Training	$ 71,879	A&G-Fixed		Expense
9300007	Misc General Expense	$ 36,089	A&G-Fixed		Expense
9310007	Contribution to the Town	$ 26,396	A&G-Fixed		Expense
9320007	Maint General Plant	$ 295,517	A&G-Fixed		Expense
9330007	Transportation Expense	$ -	A&G-Fixed		Expense
9340007	Inventory Adjustment	$ 1,784	A&G-Fixed		Expense
9350007	Maint of General Plant	$ -	A&G-Fixed		Expense
	Total				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator
	SMART Grid Operations	$ -			
5822008	SG - Station Expenses	$ -			
5822108	Demand	$ 903	Substation-Customer-Dept		NCP-Input
5822208	Customer	$ 602	Substation-Customer-Dept		Cust-wgt
5862008	SG - Meter Expense	$ 612	Meters-Dept		Meters-Wgt
5932008	SG - Maint OH lines	$ -			
5932108	Demand	$ 5,400	Distribution-System-Dept		NCP-Input
5932208	Customer	$ 3,600	Distribution-Customer-Dept		Cust-wgt
5942008	SG - Maint UG Lines	$ -			
5942108	Demand	$ 1,320	Distribution-System-Dept		NCP-Input
5942208	Customer	$ 880	Distribution-Customer-Dept		Cust-wgt
5962008	SG - Maint St Lights	$ 5,472	Direct-Dept		Direct.sl
9022008	SG - Meter Reading	$ 5,559	Meterreading-Dept		Meter.rd.wgt
9032008	SG - Accounting, Collection Expense	$ 1,382	Billing-Dept		Customer
9202008	SG - General Salaries	$ -	A&G-Fixed		Expense
9232008	SG - Outside SVS	$ 6,300	A&G-Fixed		Expense
9322008	SG - Maintenance	$ 14,093	A&G-Fixed		Expense
	Total				
	Other Revenue and Expenses				
O1	REC Surcharges	$ 2,141,982	Purchase-Power-Energy		Energy
O2	Return on Rate Base	$ 1,022,490	A&G-Fixed		NBV
O3	Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	Purchase-Power-Energy		Energy
O4	REV_REC Surcharge	$ -	Purchase-Power-Energy		Energy

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Operations and Maintenance Expenses							
	Energy							
5550320	Canton Mtn	$ 365,911	Purchase-Power-Energy		Energy	141,652	1,927	300
5551000	Financial Settlements	$ -	Purchase-Power-Energy		Energy	-	-	-
5550330	Granite Wind	$ 166,612	Purchase-Power-Energy		Energy	64,499	877	137
5550060	ISO Invoice (Energy)	$ 709,042	Purchase-Power-Energy		Energy	274,485	3,734	581
5550160	Kearsage Solar Project	$ 148,256	Purchase-Power-Energy		Energy	57,393	781	122
5550310	Kearsage2 Solar Project	$ 420,866	Purchase-Power-Energy		Energy	162,926	2,216	345
5550080	Miller Hydro Energy	$ 273,279	Purchase-Power-Energy		Energy	105,792	1,439	224
5550180	New Bedford Landfill	$ 166,389	Purchase-Power-Energy		Energy	64,413	876	136
5550420	NextEra (Shaped Seabrook)	$ 179,501	Purchase-Power-Energy		Energy	69,489	945	147
5550140	Nextera Rise Energy	$ 1,280,949	Purchase-Power-Energy		Energy	495,882	6,745	1,050
5550190	Nugen Capital	$ 90,413	Purchase-Power-Energy		Energy	35,001	476	74
5550020	NYPA	$ 33,194	Purchase-Power-Energy		Energy	12,850	175	27
5550150	Saddleback Energy	$ 479,893	Purchase-Power-Energy		Energy	185,777	2,527	393
5550170	Shell Purchase	$ 3,276,502	Purchase-Power-Energy		Energy	1,268,403	17,254	2,686
5550430	Shepaug	$ 216,809	Purchase-Power-Energy		Energy	83,931	1,142	178
5550300	Solect Solar Project	$ 44,023	Purchase-Power-Energy		Energy	17,042	232	36
5550120	Spruce Mtn Energy	$ 577,030	Purchase-Power-Energy		Energy	223,380	3,039	473
5550440	Stevenson	$ 105,643	Purchase-Power-Energy		Energy	40,897	556	87
5550040	Watson Energy	$ -	Purchase-Power-Energy		Energy	-	-	-
		$ -						

Concord Municipal Light Plant

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Forward Capacity Market Costs	$ -						
5550321	Canton Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550061	ISO FCM Cost	$ 3,714,434	Purchase-Power-Dept		CP-1	1,837,556	24,430	2,692
5551001	Net Resource Payment by LP	$ (947,991)	Purchase-Power-Dept		CP-1	(468,978)	(6,235)	(687)
5550141	Nextera Rise Capacity	$ 331,320	Purchase-Power-Dept		CP-1	163,906	2,179	240
5550021	NYPA Capacity	$ 55,189	Purchase-Power-Dept		CP-1	27,302	363	40
5550151	Saddleback Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550121	Spruce Mtn Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550041	Watson Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
		$ -						
	Transmission Costs	$ -						
5570072	Eversource Category B	$ 30,072	Purchase-Power-Dept		CP-12	12,413	159	132
5571012	Eversource HQ ICC Capacity	$ -	Purchase-Power-Dept		CP-12	-	-	-
5572012	Eversource HQ Phase 2	$ 115,154	Purchase-Power-Dept		CP-12	47,532	611	507
5573012	Eversource HQ Use Rights	$ (58,510)	Purchase-Power-Dept		CP-12	(24,151)	(310)	(258)
5574012	Eversource LNS	$ 3,648	Purchase-Power-Dept		CP-12	1,506	19	16
5575012	Eversource Support Charges	$ 63,600	Purchase-Power-Dept		CP-12	26,252	337	280
5570042	ISO Transmission	$ 3,595,727	Purchase-Power-Dept		CP-12	1,484,199	19,064	15,832
5572032	National Grid - NEH-HQII	$ 504	Purchase-Power-Energy		Energy	195	3	0
5571032	National Grid - NEPAC-HQII	$ 5,952	Purchase-Power-Energy		Energy	2,304	31	5
5570032	National Grid - NHH-HQII	$ 15,420	Purchase-Power-Energy		Energy	5,969	81	13
5570022	NYPA Transmission	$ 134,556	Purchase-Power-Dept		CP-12	55,540	713	592
		$ -						

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Fixed and Other Costs	$ -						
5570053	ENE Admin Fee	$ -						
5571053	Energy	$ 70,907	Purchase-Power-Energy		Energy	27,449	373	58
5572053	Customer	$ 70,907	Purchase-Power-Energy		Customer	55,642	1,349	-
5550063	ISO Ancillary Cost	$ 306,424	Purchase-Power-Energy		Energy	118,623	1,614	251
5551063	ISO Schedule Charges	$ -	Purchase-Power-Energy		Energy	-	-	-
5550143	Nextera Rise Fix	$ 471,900	Purchase-Power-Dept		CP-1	233,452	3,104	342
5550023	NYPA Fixed Costs	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550043	Watson Fixed Costs	$ 845,539	Purchase-Power-Dept		CP-1	418,294	5,561	613
5551043	Watson O+M	$ 347,016	Purchase-Power-Dept		CP-1	171,671	2,282	251
		$ -						
	Total Purchase Power Expenses (w/o RECs)	$ 17,706,079						
		$ -						
	Transmission Costs (non-PPW)	$ -						
5610004	Trans Load Dispatching	$ -	Transmission-Variable		NCP-Input	-	-	-
5620004	Trans Station Expense	$ -						
5621004	Demand	$ 12,472	Transmission-Dept		NCP-Input	5,124	74	53
5622004	Customer	$ 8,315	Transmission-Dept		Cust-wgt	5,775	140	-
5700004	Maintenance of Station Equipment	$ -						
5701004	Demand	$ 1,813	Transmission-Dept		NCP-Input	745	11	8
5702004	Customer	$ 1,209	Transmission-Dept		Cust-wgt	840	20	-
5700014	Subtrans Maint of Station Equipment	$ -						
5701014	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5702014	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
5700024	Maint of Station Equipment - Eversourc	$ -						
5701024	Demand	$ 38,160	Transmission-Variable		NCP-Input	15,677	226	163
5702024	Customer	$ 25,440	Transmission-Dept		Cust-wgt	17,669	428	-
5720004	Trans Maint UG Lines	$ -						
5721004	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5722004	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Distribution Costs	$ -						
5810005	Line and Station Supplies and Expenses	$ 171,894	Distribution-System-Dept		NCP-Input	70,617	1,019	735
5820005	Station Expenses	$ -						
5821005	Demand	$ 606	Substation-Variable		NCP-Input	249	4	3
5822005	Customer	$ 404	Substation-Customer-Dept		Cust-wgt	281	7	-
5830005	Overhead Line Expense	$ -						
5831005	Demand	$ 16,256	Distribution-System-Dept		NCP-Input	6,678	96	69
5832005	Customer	$ 10,837	Distribution-Customer-Dept		Cust-wgt	7,527	182	-
5840005	UG Operations Line Expense	$ -						
5841005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5842005	Customer	$ -	Distribution-Customer-Dept		Cust-wgt	-	-	-
5860005	Meter Expense	$ 45,353	Meters-Dept		Meters-Wgt	31,500	763	-
5890005	Rent Expense - MBTA	$ 10,073	Distribution-System-Dept		NCP-Input	4,138	60	43
5900005	Maintenance Supervision	$ 65,159	Distribution-System-Dept		NCP-Input	26,769	386	279
5910005	Maintenance of Structures	$ -	Substation-Customer-Dept		NCP-Input	-	-	-
5920005	Maintenance of Station Equipment	$ -						
5921005	Demand	$ 6,530	Substation-Customer-Dept		NCP-Input	2,683	39	28
5922005	Customer	$ 4,353	Substation-Customer-Dept		Cust-wgt	3,024	73	-
5930005	Maintenance of Overhead Lines	$ -						
5931005	Demand	$ 157,411	Distribution-System-Dept		NCP-Input	64,668	933	673
5932005	Customer	$ 104,941	Distribution-Customer-Dept		Cust-wgt	72,887	1,766	-
5930015	Maint OH Lines - Tree Triming	$ -						
5931015	Demand	$ 101,951	Distribution-System-Dept		NCP-Input	41,884	604	436
5932015	Customer	$ 67,967	Distribution-Customer-Dept		Cust-wgt	47,207	1,144	-
5930025	Maint OH Lines - Damages	$ -						
5931025	Demand	$ 2,987	Distribution-System-Dept		NCP-Input	1,227	18	13
5932025	Customer	$ 1,992	Distribution-Customer-Dept		Cust-wgt	1,383	34	-
5940005	Maintenance of Underground Lines	$ -						
5941005	Demand	$ 111,448	Distribution-System-Dept		NCP-Input	45,785	661	476
5942005	Customer	$ 74,298	Distribution-Customer-Dept		Cust-wgt	51,604	1,251	-
5950005	Maintenance of Transformers	$ -						
5951005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5952005	Customer	$ -	Transformer-Customer-Fixed		Cust-wgt	-	-	-
5950015	Transformer Disposal	$ -						
5951015	Demand	$ 943	Distribution-System-Dept		NCP-Sec	387	6	4
5952015	Customer	$ 60	Transformer-Customer-Fixed		Cust-wgt	42	1	-
5960005	Maintenance of Street Lights	$ 21,000	Direct-Dept		Direct.sl	-	-	-
5970005	Maintenance of Meters	$ -	Meters-Dept		Meters-Wgt	-	-	-
5980005	Maint of Customer LTD Mgt Switches	$ 1,425	Meters-Dept		Meters-Wgt	990	24	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Customer Accounts Costs	$ -						
9010006	Supervision	$ 67,272	Meterreading-Dept		Meter.rd.wgt	46,724	1,132	-
9020006	Meter Reading	$ 39,884	Meterreading-Dept		Meter.rd.wgt	27,701	671	-
9030006	Accounting, Collection Expense	$ 252,397	Billing-Dept		Cust-wgt	175,303	4,249	-
9040006	Uncollectable Accounts	$ 17,500	Billing-Dept		billing.wgt	12,155	295	-
9040016	Small Balance Write Off	$ -	Billing-Dept		billing.wgt	-	-	-
9060006	Customer Service and Informational	$ 111,983	Billing-Dept		Customer	87,875	2,130	-
9080006	Customer Education	$ 64,108	Services-Dept		Customer	50,307	1,219	-
9080016	SmartHub Sign Up Credit	$ 75	Services-Dept		Customer	59	1	-
9090006	Informational & Instructional	$ 101,343	Services-Dept		Customer	79,526	1,927	-
9090016	Appliance Rebate	$ 519	Services-Dept		Customer	407	10	-
9090026	Lighting Rebate	$ 3,500	Services-Dept		Customer	2,747	67	-
9090036	ETS Rebate	$ -	Services-Dept		Customer	-	-	-
9090056	CARES expenses	$ 662,295	Services-Dept		Customer	519,717	12,596	-
9090086	Cool Concord Rebate CMLP	$ 8,744	Services-Dept		Customer	6,862	166	-
9090096	Cooler Concord Rebates - TH	$ -	Services-Dept		Customer	-	-	-
9090306	Electric Vehicle Level 2 Expense	$ 12,000	Services-Dept		Customer	9,417	228	-
9090316	Electric Vehicle Miles Expense	$ 25,530	Services-Dept		Customer	20,034	486	-
9100006	Energy Conservation	$ 1,100	Services-Dept		Customer	863	21	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	Administrative + General Costs	$ -						
4160007	M&J Operating Expenses	$ 100,000	A&G-Fixed		Expense	64,908	1,456	124
9200007	Administration & General Salaries	$ 1,150,896	A&G-Fixed		Expense	747,023	16,761	1,426
9200017	G & A Town House Transfer	$ 434,282	A&G-Fixed		Expense	281,884	6,325	538
9200027	G & A IS Dept Transfer	$ 111,295	A&G-Fixed		Expense	72,239	1,621	138
9210007	Office Supplies & Expenses	$ 193,591	A&G-Fixed		Expense	125,656	2,819	240
9230007	Misc Outside Services	$ 79,337	A&G-Fixed		Expense	51,496	1,155	98
9230017	Outside SVS Engineering	$ 30,000	A&G-Fixed		Expense	19,472	437	37
9230027	Outside SVS Legal	$ 94,866	A&G-Fixed		Expense	61,576	1,382	118
9240007	Property Insurance	$ 55,519	A&G-Fixed		Expense	36,036	809	69
9250007	Employee Injuries & Damages	$ 22,594	A&G-Fixed		Expense	14,665	329	28
9260007	Employee Pension & Benefits	$ 824,654	A&G-Fixed		Expense	535,266	12,010	1,022
9260017	Employee Sick Leave	$ 111,437	A&G-Fixed		Expense	72,332	1,623	138
9260027	Employee Vacation & Holiday	$ 331,741	A&G-Fixed		Expense	215,326	4,831	411
9260037	Employee Benefits Training	$ 71,879	A&G-Fixed		Expense	46,655	1,047	89
9300007	Misc General Expense	$ 36,089	A&G-Fixed		Expense	23,425	526	45
9310007	Contribution to the Town	$ 26,396	A&G-Fixed		Expense	17,133	384	33
9320007	Maint General Plant	$ 295,517	A&G-Fixed		Expense	191,814	4,304	366
9330007	Transportation Expense	$ -	A&G-Fixed		Expense	-	-	-
9340007	Inventory Adjustment	$ 1,784	A&G-Fixed		Expense	1,158	26	2
9350007	Maint of General Plant	$ -	A&G-Fixed		Expense	-	-	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU
	SMART Grid Operations	$ -						
5822008	SG - Station Expenses	$ -						
5822108	Demand	$ 903	Substation-Customer-Dept		NCP-Input	371	5	4
5822208	Customer	$ 602	Substation-Customer-Dept		Cust-wgt	418	10	-
5862008	SG - Meter Expense	$ 612	Meters-Dept		Meters-Wgt	425	10	-
5932008	SG - Maint OH lines	$ -						
5932108	Demand	$ 5,400	Distribution-System-Dept		NCP-Input	2,218	32	23
5932208	Customer	$ 3,600	Distribution-Customer-Dept		Cust-wgt	2,500	61	-
5942008	SG - Maint UG Lines	$ -						
5942108	Demand	$ 1,320	Distribution-System-Dept		NCP-Input	542	8	6
5942208	Customer	$ 880	Distribution-Customer-Dept		Cust-wgt	611	15	-
5962008	SG - Maint St Lights	$ 5,472	Direct-Dept		Direct.sl	-	-	-
9022008	SG - Meter Reading	$ 5,559	Meterreading-Dept		Meter.rd.wgt	3,861	94	-
9032008	SG - Accounting, Collection Expense	$ 1,382	Billing-Dept		Customer	1,084	26	-
9202008	SG - General Salaries	$ -	A&G-Fixed		Expense	-	-	-
9232008	SG - Outside SVS	$ 6,300	A&G-Fixed		Expense	4,089	92	8
9322008	SG - Maintenance	$ 14,093	A&G-Fixed		Expense	9,147	205	17
	Total							
	Other Revenue and Expenses							
O1	REC Surcharges	$ 2,141,982	Purchase-Power-Energy		Energy	829,206	11,279	1,756
O2	Return on Rate Base	$ 1,022,490	A&G-Fixed		NBV	453,029	6,728	1,485
O3	Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	Purchase-Power-Energy		Energy	173,722	2,363	368
O4	REV_REC Surcharge	$ -	Purchase-Power-Energy		Energy	-	-	-

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Operations and Maintenance Expenses							
	Energy							
5550320	Canton Mtn	$ 365,911	Purchase-Power-Energy		Energy	785	8,578	-
5551000	Financial Settlements	$ -	Purchase-Power-Energy		Energy	-	-	-
5550330	Granite Wind	$ 166,612	Purchase-Power-Energy		Energy	357	3,906	-
5550060	ISO Invoice (Energy)	$ 709,042	Purchase-Power-Energy		Energy	1,521	16,622	-
5550160	Kearsage Solar Project	$ 148,256	Purchase-Power-Energy		Energy	318	3,476	-
5550310	Kearsage2 Solar Project	$ 420,866	Purchase-Power-Energy		Energy	903	9,867	-
5550080	Miller Hydro Energy	$ 273,279	Purchase-Power-Energy		Energy	586	6,407	-
5550180	New Bedford Landfill	$ 166,389	Purchase-Power-Energy		Energy	357	3,901	-
5550420	NextEra (Shaped Seabrook)	$ 179,501	Purchase-Power-Energy		Energy	385	4,208	-
5550140	Nextera Rise Energy	$ 1,280,949	Purchase-Power-Energy		Energy	2,748	30,030	-
5550190	Nugen Capital	$ 90,413	Purchase-Power-Energy		Energy	194	2,120	-
5550020	NYPA	$ 33,194	Purchase-Power-Energy		Energy	71	778	-
5550150	Saddleback Energy	$ 479,893	Purchase-Power-Energy		Energy	1,029	11,250	-
5550170	Shell Purchase	$ 3,276,502	Purchase-Power-Energy		Energy	7,029	76,813	-
5550430	Shepaug	$ 216,809	Purchase-Power-Energy		Energy	465	5,083	-
5550300	Solect Solar Project	$ 44,023	Purchase-Power-Energy		Energy	94	1,032	-
5550120	Spruce Mtn Energy	$ 577,030	Purchase-Power-Energy		Energy	1,238	13,528	-
5550440	Stevenson	$ 105,643	Purchase-Power-Energy		Energy	227	2,477	-
5550040	Watson Energy	$ -	Purchase-Power-Energy		Energy	-	-	-
		$ -						

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Forward Capacity Market Costs	$ -						
5550321	Canton Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550061	ISO FCM Cost	$ 3,714,434	Purchase-Power-Dept		CP-1	18,025	129,288	-
5551001	Net Resource Payment by LP	$ (947,991)	Purchase-Power-Dept		CP-1	(4,600)	(32,997)	-
5550141	Nextera Rise Capacity	$ 331,320	Purchase-Power-Dept		CP-1	1,608	11,532	-
5550021	NYPA Capacity	$ 55,189	Purchase-Power-Dept		CP-1	268	1,921	-
5550151	Saddleback Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550121	Spruce Mtn Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550041	Watson Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
		$ -						
	Transmission Costs	$ -						
5570072	Eversource Category B	$ 30,072	Purchase-Power-Dept		CP-12	72	777	-
5571012	Eversource HQ ICC Capacity	$ -	Purchase-Power-Dept		CP-12	-	-	-
5572012	Eversource HQ Phase 2	$ 115,154	Purchase-Power-Dept		CP-12	277	2,976	-
5573012	Eversource HQ Use Rights	$ (58,510)	Purchase-Power-Dept		CP-12	(141)	(1,512)	-
5574012	Eversource LNS	$ 3,648	Purchase-Power-Dept		CP-12	9	94	-
5575012	Eversource Support Charges	$ 63,600	Purchase-Power-Dept		CP-12	153	1,644	-
5570042	ISO Transmission	$ 3,595,727	Purchase-Power-Dept		CP-12	8,653	92,931	-
5572032	National Grid - NEH-HQII	$ 504	Purchase-Power-Energy		Energy	1	12	-
5571032	National Grid - NEPAC-HQII	$ 5,952	Purchase-Power-Energy		Energy	13	140	-
5570032	National Grid - NHH-HQII	$ 15,420	Purchase-Power-Energy		Energy	33	361	-
5570022	NYPA Transmission	$ 134,556	Purchase-Power-Dept		CP-12	324	3,478	-
		$ -						

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Fixed and Other Costs	$ -						
5570053	ENE Admin Fee	$ -						
5571053	Energy	$ 70,907	Purchase-Power-Energy		Energy	152	1,662	-
5572053	Customer	$ 70,907	Purchase-Power-Energy		Customer	-	2,743	-
5550063	ISO Ancillary Cost	$ 306,424	Purchase-Power-Energy		Energy	657	7,184	-
5551063	ISO Schedule Charges	$ -	Purchase-Power-Energy		Energy	-	-	-
5550143	Nextera Rise Fix	$ 471,900	Purchase-Power-Dept		CP-1	2,290	16,425	-
5550023	NYPA Fixed Costs	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550043	Watson Fixed Costs	$ 845,539	Purchase-Power-Dept		CP-1	4,103	29,431	-
5551043	Watson O+M	$ 347,016	Purchase-Power-Dept		CP-1	1,684	12,079	-
		$ -						
	Total Purchase Power Expenses (w/o RECs)	$ 17,706,079						
		$ -						
	Transmission Costs (non-PPW)	$ -						
5610004	Trans Load Dispatching	$ -	Transmission-Variable		NCP-Input	-	-	-
5620004	Trans Station Expense	$ -						
5621004	Demand	$ 12,472	Transmission-Dept		NCP-Input	58	332	-
5622004	Customer	$ 8,315	Transmission-Dept		Cust-wgt	-	356	-
5700004	Maintenance of Station Equipment	$ -						
5701004	Demand	$ 1,813	Transmission-Dept		NCP-Input	8	48	-
5702004	Customer	$ 1,209	Transmission-Dept		Cust-wgt	-	52	-
5700014	Subtrans Maint of Station Equipment	$ -						
5701014	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5702014	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
5700024	Maint of Station Equipment - Eversourc	$ -						
5701024	Demand	$ 38,160	Transmission-Variable		NCP-Input	178	1,017	-
5702024	Customer	$ 25,440	Transmission-Dept		Cust-wgt	-	1,089	-
5720004	Trans Maint UG Lines	$ -						
5721004	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5722004	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Distribution Costs	$ -						
5810005	Line and Station Supplies and Expenses	$ 171,894	Distribution-System-Dept		NCP-Input	803	4,582	-
5820005	Station Expenses	$ -						
5821005	Demand	$ 606	Substation-Variable		NCP-Input	3	16	-
5822005	Customer	$ 404	Substation-Customer-Dept		Cust-wgt	-	17	-
5830005	Overhead Line Expense	$ -						
5831005	Demand	$ 16,256	Distribution-System-Dept		NCP-Input	76	433	-
5832005	Customer	$ 10,837	Distribution-Customer-Dept		Cust-wgt	-	464	-
5840005	UG Operations Line Expense	$ -						
5841005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5842005	Customer	$ -	Distribution-Customer-Dept		Cust-wgt	-	-	-
5860005	Meter Expense	$ 45,353	Meters-Dept		Meters-Wgt	-	1,941	-
5890005	Rent Expense - MBTA	$ 10,073	Distribution-System-Dept		NCP-Input	47	269	-
5900005	Maintenance Supervision	$ 65,159	Distribution-System-Dept		NCP-Input	304	1,737	-
5910005	Maintenance of Structures	$ -	Substation-Customer-Dept		NCP-Input	-	-	-
5920005	Maintenance of Station Equipment	$ -						
5921005	Demand	$ 6,530	Substation-Customer-Dept		NCP-Input	31	174	-
5922005	Customer	$ 4,353	Substation-Customer-Dept		Cust-wgt	-	186	-
5930005	Maintenance of Overhead Lines	$ -						
5931005	Demand	$ 157,411	Distribution-System-Dept		NCP-Input	735	4,196	-
5932005	Customer	$ 104,941	Distribution-Customer-Dept		Cust-wgt	-	4,491	-
5930015	Maint OH Lines - Tree Triming	$ -						
5931015	Demand	$ 101,951	Distribution-System-Dept		NCP-Input	476	2,718	-
5932015	Customer	$ 67,967	Distribution-Customer-Dept		Cust-wgt	-	2,909	-
5930025	Maint OH Lines - Damages	$ -						
5931025	Demand	$ 2,987	Distribution-System-Dept		NCP-Input	14	80	-
5932025	Customer	$ 1,992	Distribution-Customer-Dept		Cust-wgt	-	85	-
5940005	Maintenance of Underground Lines	$ -						
5941005	Demand	$ 111,448	Distribution-System-Dept		NCP-Input	521	2,971	-
5942005	Customer	$ 74,298	Distribution-Customer-Dept		Cust-wgt	-	3,180	-
5950005	Maintenance of Transformers	$ -						
5951005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5952005	Customer	$ -	Transformer-Customer-Fixed		Cust-wgt	-	-	-
5950015	Transformer Disposal	$ -						
5951015	Demand	$ 943	Distribution-System-Dept		NCP-Sec	4	25	-
5952015	Customer	$ 60	Transformer-Customer-Fixed		Cust-wgt	-	3	-
5960005	Maintenance of Street Lights	$ 21,000	Direct-Dept		Direct.sl	-	-	-
5970005	Maintenance of Meters	$ -	Meters-Dept		Meters-Wgt	-	-	-
5980005	Maint of Customer LTD Mgt Switches	$ 1,425	Meters-Dept		Meters-Wgt	-	61	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Customer Accounts Costs	$ -						
9010006	Supervision	$ 67,272	Meterreading-Dept		Meter.rd.wgt	-	2,879	-
9020006	Meter Reading	$ 39,884	Meterreading-Dept		Meter.rd.wgt	-	1,707	-
9030006	Accounting, Collection Expense	$ 252,397	Billing-Dept		Cust-wgt	-	10,802	-
9040006	Uncollectable Accounts	$ 17,500	Billing-Dept		billing.wgt	-	749	-
9040016	Small Balance Write Off	$ -	Billing-Dept		billing.wgt	-	-	-
9060006	Customer Service and Informational	$ 111,983	Billing-Dept		Customer	-	4,332	-
9080006	Customer Education	$ 64,108	Services-Dept		Customer	-	2,480	-
9080016	SmartHub Sign Up Credit	$ 75	Services-Dept		Customer	-	3	-
9090006	Informational & Instructional	$ 101,343	Services-Dept		Customer	-	3,920	-
9090016	Appliance Rebate	$ 519	Services-Dept		Customer	-	20	-
9090026	Lighting Rebate	$ 3,500	Services-Dept		Customer	-	135	-
9090036	ETS Rebate	$ -	Services-Dept		Customer	-	-	-
9090056	CARES expenses	$ 662,295	Services-Dept		Customer	-	25,620	-
9090086	Cool Concord Rebate CMLP	$ 8,744	Services-Dept		Customer	-	338	-
9090096	Cooler Concord Rebates - TH	$ -	Services-Dept		Customer	-	-	-
9090306	Electric Vehicle Level 2 Expense	$ 12,000	Services-Dept		Customer	-	464	-
9090316	Electric Vehicle Miles Expense	$ 25,530	Services-Dept		Customer	-	988	-
9100006	Energy Conservation	$ 1,100	Services-Dept		Customer	-	43	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Administrative + General Costs	$ -						
4160007	M&J Operating Expenses	$ 100,000	A&G-Fixed		Expense	135	3,644	-
9200007	Administration & General Salaries	$ 1,150,896	A&G-Fixed		Expense	1,559	41,939	-
9200017	G & A Town House Transfer	$ 434,282	A&G-Fixed		Expense	588	15,825	-
9200027	G & A IS Dept Transfer	$ 111,295	A&G-Fixed		Expense	151	4,056	-
9210007	Office Supplies & Expenses	$ 193,591	A&G-Fixed		Expense	262	7,054	-
9230007	Misc Outside Services	$ 79,337	A&G-Fixed		Expense	107	2,891	-
9230017	Outside SVS Engineering	$ 30,000	A&G-Fixed		Expense	41	1,093	-
9230027	Outside SVS Legal	$ 94,866	A&G-Fixed		Expense	128	3,457	-
9240007	Property Insurance	$ 55,519	A&G-Fixed		Expense	75	2,023	-
9250007	Employee Injuries & Damages	$ 22,594	A&G-Fixed		Expense	31	823	-
9260007	Employee Pension & Benefits	$ 824,654	A&G-Fixed		Expense	1,117	30,050	-
9260017	Employee Sick Leave	$ 111,437	A&G-Fixed		Expense	151	4,061	-
9260027	Employee Vacation & Holiday	$ 331,741	A&G-Fixed		Expense	449	12,089	-
9260037	Employee Benefits Training	$ 71,879	A&G-Fixed		Expense	97	2,619	-
9300007	Misc General Expense	$ 36,089	A&G-Fixed		Expense	49	1,315	-
9310007	Contribution to the Town	$ 26,396	A&G-Fixed		Expense	36	962	-
9320007	Maint General Plant	$ 295,517	A&G-Fixed		Expense	400	10,769	-
9330007	Transportation Expense	$ -	A&G-Fixed		Expense	-	-	-
9340007	Inventory Adjustment	$ 1,784	A&G-Fixed		Expense	2	65	-
9350007	Maint of General Plant	$ -	A&G-Fixed		Expense	-	-	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	SMART Grid Operations	$ -						
5822008	SG - Station Expenses	$ -						
5822108	Demand	$ 903	Substation-Customer-Dept		NCP-Input	4	24	-
5822208	Customer	$ 602	Substation-Customer-Dept		Cust-wgt	-	26	-
5862008	SG - Meter Expense	$ 612	Meters-Dept		Meters-Wgt	-	26	-
5932008	SG - Maint OH lines	$ -						
5932108	Demand	$ 5,400	Distribution-System-Dept		NCP-Input	25	144	-
5932208	Customer	$ 3,600	Distribution-Customer-Dept		Cust-wgt	-	154	-
5942008	SG - Maint UG Lines	$ -						
5942108	Demand	$ 1,320	Distribution-System-Dept		NCP-Input	6	35	-
5942208	Customer	$ 880	Distribution-Customer-Dept		Cust-wgt	-	38	-
5962008	SG - Maint St Lights	$ 5,472	Direct-Dept		Direct.sl	-	-	-
9022008	SG - Meter Reading	$ 5,559	Meterreading-Dept		Meter.rd.wgt	-	238	-
9032008	SG - Accounting, Collection Expense	$ 1,382	Billing-Dept		Customer	-	53	-
9202008	SG - General Salaries	$ -	A&G-Fixed		Expense	-	-	-
9232008	SG - Outside SVS	$ 6,300	A&G-Fixed		Expense	9	230	-
9322008	SG - Maintenance	$ 14,093	A&G-Fixed		Expense	19	514	-
	Total							
	Other Revenue and Expenses							
O1	REC Surcharges	$ 2,141,982	Purchase-Power-Energy		Energy	4,595	50,216	-
O2	Return on Rate Base	$ 1,022,490	A&G-Fixed		NBV	2,729	28,291	-
O3	Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	Purchase-Power-Energy		Energy	963	10,520	-
O4	REV_REC Surcharge	$ -	Purchase-Power-Energy		Energy	-	-	-

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Operations and Maintenance Expenses								
	Energy								
5550320	Canton Mtn	$ 365,911	Purchase-Power-Energy		Energy	5,512	27,979	62,425	116,124
5551000	Financial Settlements	$ -	Purchase-Power-Energy		Energy	-	-	-	-
5550330	Granite Wind	$ 166,612	Purchase-Power-Energy		Energy	2,510	12,740	28,424	52,875
5550060	ISO Invoice (Energy)	$ 709,042	Purchase-Power-Energy		Energy	10,681	54,217	120,964	225,018
5550160	Kearsage Solar Project	$ 148,256	Purchase-Power-Energy		Energy	2,233	11,336	25,293	47,050
5550310	Kearsage2 Solar Project	$ 420,866	Purchase-Power-Energy		Energy	6,340	32,181	71,801	133,564
5550080	Miller Hydro Energy	$ 273,279	Purchase-Power-Energy		Energy	4,117	20,896	46,622	86,727
5550180	New Bedford Landfill	$ 166,389	Purchase-Power-Energy		Energy	2,506	12,723	28,386	52,804
5550420	NextEra (Shaped Seabrook)	$ 179,501	Purchase-Power-Energy		Energy	2,704	13,726	30,623	56,966
5550140	Nextera Rise Energy	$ 1,280,949	Purchase-Power-Energy		Energy	19,296	97,948	218,532	406,516
5550190	Nugen Capital	$ 90,413	Purchase-Power-Energy		Energy	1,362	6,913	15,425	28,693
5550020	NYPA	$ 33,194	Purchase-Power-Energy		Energy	500	2,538	5,663	10,534
5550150	Saddleback Energy	$ 479,893	Purchase-Power-Energy		Energy	7,229	36,695	81,871	152,297
5550170	Shell Purchase	$ 3,276,502	Purchase-Power-Energy		Energy	49,356	250,537	558,977	1,039,815
5550430	Shepaug	$ 216,809	Purchase-Power-Energy		Energy	3,266	16,578	36,988	68,805
5550300	Solect Solar Project	$ 44,023	Purchase-Power-Energy		Energy	663	3,366	7,510	13,971
5550120	Spruce Mtn Energy	$ 577,030	Purchase-Power-Energy		Energy	8,692	44,123	98,442	183,123
5550440	Stevenson	$ 105,643	Purchase-Power-Energy		Energy	1,591	8,078	18,023	33,526
5550040	Watson Energy	$ -	Purchase-Power-Energy		Energy	-	-	-	-
		$ -							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Forward Capacity Market Costs	$ -							
5550321	Canton Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-	-
5550061	ISO FCM Cost	$ 3,714,434	Purchase-Power-Dept		CP-1	-	263,796	487,055	951,594
5551001	Net Resource Payment by LP	$ (947,991)	Purchase-Power-Dept		CP-1	-	(67,325)	(124,305)	(242,864)
5550141	Nextera Rise Capacity	$ 331,320	Purchase-Power-Dept		CP-1	-	23,530	43,444	84,880
5550021	NYPA Capacity	$ 55,189	Purchase-Power-Dept		CP-1	-	3,919	7,237	14,139
5550151	Saddleback Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-	-
5550121	Spruce Mtn Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-	-
5550041	Watson Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-	-
		$ -							
	Transmission Costs	$ -							
5570072	Eversource Category B	$ 30,072	Purchase-Power-Dept		CP-12	-	2,044	5,227	9,247
5571012	Eversource HQ ICC Capacity	$ -	Purchase-Power-Dept		CP-12	-	-	-	-
5572012	Eversource HQ Phase 2	$ 115,154	Purchase-Power-Dept		CP-12	-	7,825	20,016	35,410
5573012	Eversource HQ Use Rights	$ (58,510)	Purchase-Power-Dept		CP-12	-	(3,976)	(10,170)	(17,992)
5574012	Eversource LNS	$ 3,648	Purchase-Power-Dept		CP-12	-	248	634	1,122
5575012	Eversource Support Charges	$ 63,600	Purchase-Power-Dept		CP-12	-	4,322	11,055	19,557
5570042	ISO Transmission	$ 3,595,727	Purchase-Power-Dept		CP-12	-	244,344	625,012	1,105,692
5572032	National Grid - NEH-HQII	$ 504	Purchase-Power-Energy		Energy	8	39	86	160
5571032	National Grid - NEPAC-HQII	$ 5,952	Purchase-Power-Energy		Energy	90	455	1,015	1,889
5570032	National Grid - NHH-HQII	$ 15,420	Purchase-Power-Energy		Energy	232	1,179	2,631	4,894
5570022	NYPA Transmission	$ 134,556	Purchase-Power-Dept		CP-12	-	9,144	23,389	41,376
		$ -							

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Fixed and Other Costs	$ -							
5570053	ENE Admin Fee	$ -							
5571053	Energy	$ 70,907	Purchase-Power-Energy		Energy	1,068	5,422	12,097	22,503
5572053	Customer	$ 70,907	Purchase-Power-Energy		Customer	-	9,525	1,418	230
5550063	ISO Ancillary Cost	$ 306,424	Purchase-Power-Energy		Energy	4,616	23,431	52,277	97,245
5551063	ISO Schedule Charges	$ -	Purchase-Power-Energy		Energy	-	-	-	-
5550143	Nextera Rise Fix	$ 471,900	Purchase-Power-Dept		CP-1	-	33,514	61,878	120,895
5550023	NYPA Fixed Costs	$ -	Purchase-Power-Dept		CP-1	-	-	-	-
5550043	Watson Fixed Costs	$ 845,539	Purchase-Power-Dept		CP-1	-	60,049	110,871	216,617
5551043	Watson O+M	$ 347,016	Purchase-Power-Dept		CP-1	-	24,645	45,502	88,901
		$ -							
	Total Purchase Power Expenses (w/o RECs)	$ 17,706,079							
		$ -							
	Transmission Costs (non-PPW)	$ -							
5610004	Trans Load Dispatching	$ -	Transmission-Variable		NCP-Input	-	-	-	-
5620004	Trans Station Expense	$ -							
5621004	Demand	$ 12,472	Transmission-Dept		NCP-Input	307	795	2,054	3,674
5622004	Customer	$ 8,315	Transmission-Dept		Cust-wgt	-	1,483	442	119
5700004	Maintenance of Station Equipment	$ -							
5701004	Demand	$ 1,813	Transmission-Dept		NCP-Input	45	116	299	534
5702004	Customer	$ 1,209	Transmission-Dept		Cust-wgt	-	216	64	17
5700014	Subtrans Maint of Station Equipment	$ -							
5701014	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-	-
5702014	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-	-
5700024	Maint of Station Equipment - Eversourc	$ -							
5701024	Demand	$ 38,160	Transmission-Variable		NCP-Input	941	2,433	6,284	11,240
5702024	Customer	$ 25,440	Transmission-Dept		Cust-wgt	-	4,537	1,351	366
5720004	Trans Maint UG Lines	$ -							
5721004	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-	-
5722004	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-	-
	Total								

Refer to Summary of Significant Assumptions and Accounting Policies.

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Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Distribution Costs	$ -							
5810005	Line and Station Supplies and Expenses	$ 171,894	Distribution-System-Dept		NCP-Input	4,237	10,962	28,309	50,630
5820005	Station Expenses	$ -							
5821005	Demand	$ 606	Substation-Variable		NCP-Input	15	39	100	178
5822005	Customer	$ 404	Substation-Customer-Dept		Cust-wgt	-	72	21	6
5830005	Overhead Line Expense	$ -							
5831005	Demand	$ 16,256	Distribution-System-Dept		NCP-Input	401	1,037	2,677	4,788
5832005	Customer	$ 10,837	Distribution-Customer-Dept		Cust-wgt	-	1,933	575	156
5840005	UG Operations Line Expense	$ -							
5841005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-	-
5842005	Customer	$ -	Distribution-Customer-Dept		Cust-wgt	-	-	-	-
5860005	Meter Expense	$ 45,353	Meters-Dept		Meters-Wgt	-	8,088	2,408	652
5890005	Rent Expense - MBTA	$ 10,073	Distribution-System-Dept		NCP-Input	248	642	1,659	2,967
5900005	Maintenance Supervision	$ 65,159	Distribution-System-Dept		NCP-Input	1,606	4,155	10,731	19,192
5910005	Maintenance of Structures	$ -	Substation-Customer-Dept		NCP-Input	-	-	-	-
5920005	Maintenance of Station Equipment	$ -							
5921005	Demand	$ 6,530	Substation-Customer-Dept		NCP-Input	161	416	1,075	1,923
5922005	Customer	$ 4,353	Substation-Customer-Dept		Cust-wgt	-	776	231	63
5930005	Maintenance of Overhead Lines	$ -							
5931005	Demand	$ 157,411	Distribution-System-Dept		NCP-Input	3,880	10,038	25,924	46,364
5932005	Customer	$ 104,941	Distribution-Customer-Dept		Cust-wgt	-	18,715	5,573	1,508
5930015	Maint OH Lines - Tree Triming	$ -							
5931015	Demand	$ 101,951	Distribution-System-Dept		NCP-Input	2,513	6,501	16,790	30,029
5932015	Customer	$ 67,967	Distribution-Customer-Dept		Cust-wgt	-	12,122	3,609	977
5930025	Maint OH Lines - Damages	$ -							
5931025	Demand	$ 2,987	Distribution-System-Dept		NCP-Input	74	191	492	880
5932025	Customer	$ 1,992	Distribution-Customer-Dept		Cust-wgt	-	355	106	29
5940005	Maintenance of Underground Lines	$ -							
5941005	Demand	$ 111,448	Distribution-System-Dept		NCP-Input	2,747	7,107	18,354	32,826
5942005	Customer	$ 74,298	Distribution-Customer-Dept		Cust-wgt	-	13,251	3,946	1,068
5950005	Maintenance of Transformers	$ -							
5951005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-	-
5952005	Customer	$ -	Transformer-Customer-Fixed		Cust-wgt	-	-	-	-
5950015	Transformer Disposal	$ -							
5951015	Demand	$ 943	Distribution-System-Dept		NCP-Sec	23	60	155	278
5952015	Customer	$ 60	Transformer-Customer-Fixed		Cust-wgt	-	11	3	1
5960005	Maintenance of Street Lights	$ 21,000	Direct-Dept		Direct.sl	-	-	-	-
5970005	Maintenance of Meters	$ -	Meters-Dept		Meters-Wgt	-	-	-	-
5980005	Maint of Customer LTD Mgt Switches	$ 1,425	Meters-Dept		Meters-Wgt	-	254	76	20
	Total								

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Customer Accounts Costs	$ -							
9010006	Supervision	$ 67,272	Meterreading-Dept		Meter.rd.wgt	-	11,997	3,572	967
9020006	Meter Reading	$ 39,884	Meterreading-Dept		Meter.rd.wgt	-	7,113	2,118	573
9030006	Accounting, Collection Expense	$ 252,397	Billing-Dept		Cust-wgt	-	45,013	13,403	3,627
9040006	Uncollectable Accounts	$ 17,500	Billing-Dept		billing.wgt	-	3,121	929	251
9040016	Small Balance Write Off	$ -	Billing-Dept		billing.wgt	-	-	-	-
9060006	Customer Service and Informational	$ 111,983	Billing-Dept		Customer	-	15,043	2,240	364
9080006	Customer Education	$ 64,108	Services-Dept		Customer	-	8,612	1,282	208
9080016	SmartHub Sign Up Credit	$ 75	Services-Dept		Customer	-	10	1	0
9090006	Informational & Instructional	$ 101,343	Services-Dept		Customer	-	13,613	2,027	329
9090016	Appliance Rebate	$ 519	Services-Dept		Customer	-	70	10	2
9090026	Lighting Rebate	$ 3,500	Services-Dept		Customer	-	470	70	11
9090036	ETS Rebate	$ -	Services-Dept		Customer	-	-	-	-
9090056	CARES expenses	$ 662,295	Services-Dept		Customer	-	88,967	13,245	2,151
9090086	Cool Concord Rebate CMLP	$ 8,744	Services-Dept		Customer	-	1,175	175	28
9090096	Cooler Concord Rebates - TH	$ -	Services-Dept		Customer	-	-	-	-
9090306	Electric Vehicle Level 2 Expense	$ 12,000	Services-Dept		Customer	-	1,612	240	39
9090316	Electric Vehicle Miles Expense	$ 25,530	Services-Dept		Customer	-	3,429	511	83
9100006	Energy Conservation	$ 1,100	Services-Dept		Customer	-	148	22	4
	Total								

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Administrative + General Costs	$ -							
4160007	M&J Operating Expenses	$ 100,000	A&G-Fixed		Expense	715	12,717	7,195	9,106
9200007	Administration & General Salaries	$ 1,150,896	A&G-Fixed		Expense	8,225	146,358	82,805	104,800
9200017	G & A Town House Transfer	$ 434,282	A&G-Fixed		Expense	3,104	55,227	31,246	39,546
9200027	G & A IS Dept Transfer	$ 111,295	A&G-Fixed		Expense	795	14,153	8,007	10,135
9210007	Office Supplies & Expenses	$ 193,591	A&G-Fixed		Expense	1,384	24,619	13,928	17,628
9230007	Misc Outside Services	$ 79,337	A&G-Fixed		Expense	567	10,089	5,708	7,224
9230017	Outside SVS Engineering	$ 30,000	A&G-Fixed		Expense	214	3,815	2,158	2,732
9230027	Outside SVS Legal	$ 94,866	A&G-Fixed		Expense	678	12,064	6,825	8,638
9240007	Property Insurance	$ 55,519	A&G-Fixed		Expense	397	7,060	3,994	5,056
9250007	Employee Injuries & Damages	$ 22,594	A&G-Fixed		Expense	161	2,873	1,626	2,057
9260007	Employee Pension & Benefits	$ 824,654	A&G-Fixed		Expense	5,894	104,870	59,332	75,093
9260017	Employee Sick Leave	$ 111,437	A&G-Fixed		Expense	796	14,171	8,018	10,147
9260027	Employee Vacation & Holiday	$ 331,741	A&G-Fixed		Expense	2,371	42,187	23,868	30,208
9260037	Employee Benefits Training	$ 71,879	A&G-Fixed		Expense	514	9,141	5,172	6,545
9300007	Misc General Expense	$ 36,089	A&G-Fixed		Expense	258	4,589	2,597	3,286
9310007	Contribution to the Town	$ 26,396	A&G-Fixed		Expense	189	3,357	1,899	2,404
9320007	Maint General Plant	$ 295,517	A&G-Fixed		Expense	2,112	37,581	21,262	26,910
9330007	Transportation Expense	$ -	A&G-Fixed		Expense	-	-	-	-
9340007	Inventory Adjustment	$ 1,784	A&G-Fixed		Expense	13	227	128	162
9350007	Maint of General Plant	$ -	A&G-Fixed		Expense	-	-	-	-
	Total								

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	SMART Grid Operations	$ -							
5822008	SG - Station Expenses	$ -							
5822108	Demand	$ 903	Substation-Customer-Dept		NCP-Input	22	58	149	266
5822208	Customer	$ 602	Substation-Customer-Dept		Cust-wgt	-	107	32	9
5862008	SG - Meter Expense	$ 612	Meters-Dept		Meters-Wgt	-	109	32	9
5932008	SG - Maint OH lines	$ -							
5932108	Demand	$ 5,400	Distribution-System-Dept		NCP-Input	133	344	889	1,591
5932208	Customer	$ 3,600	Distribution-Customer-Dept		Cust-wgt	-	642	191	52
5942008	SG - Maint UG Lines	$ -							
5942108	Demand	$ 1,320	Distribution-System-Dept		NCP-Input	33	84	217	389
5942208	Customer	$ 880	Distribution-Customer-Dept		Cust-wgt	-	157	47	13
5962008	SG - Maint St Lights	$ 5,472	Direct-Dept		Direct.sl	-	-	-	-
9022008	SG - Meter Reading	$ 5,559	Meterreading-Dept		Meter.rd.wgt	-	991	295	80
9032008	SG - Accounting, Collection Expense	$ 1,382	Billing-Dept		Customer	-	186	28	4
9202008	SG - General Salaries	$ -	A&G-Fixed		Expense	-	-	-	-
9232008	SG - Outside SVS	$ 6,300	A&G-Fixed		Expense	45	801	453	574
9322008	SG - Maintenance	$ 14,093	A&G-Fixed		Expense	101	1,792	1,014	1,283
	Total								
	Other Revenue and Expenses								
O1	REC Surcharges	$ 2,141,982	Purchase-Power-Energy		Energy	32,266	163,786	365,426	679,769
O2	Return on Rate Base	$ 1,022,490	A&G-Fixed		NBV	8,581	81,156	154,987	283,415
O3	Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	Purchase-Power-Energy		Energy	6,760	34,314	76,558	142,414
O4	REV_REC Surcharge	$ -	Purchase-Power-Energy		Energy	-	-	-	-

Refer to Summary of Significant Assumptions and Accounting Policies.

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Operations and Maintenance Expenses							
	Energy							
5550320	Canton Mtn	$ 365,911	Purchase-Power-Energy		Energy	-	629	365,911
5551000	Financial Settlements	$ -	Purchase-Power-Energy		Energy	-	-	-
5550330	Granite Wind	$ 166,612	Purchase-Power-Energy		Energy	-	286	166,612
5550060	ISO Invoice (Energy)	$ 709,042	Purchase-Power-Energy		Energy	-	1,219	709,042
5550160	Kearsage Solar Project	$ 148,256	Purchase-Power-Energy		Energy	-	255	148,256
5550310	Kearsage2 Solar Project	$ 420,866	Purchase-Power-Energy		Energy	-	723	420,866
5550080	Miller Hydro Energy	$ 273,279	Purchase-Power-Energy		Energy	-	470	273,279
5550180	New Bedford Landfill	$ 166,389	Purchase-Power-Energy		Energy	-	286	166,389
5550420	NextEra (Shaped Seabrook)	$ 179,501	Purchase-Power-Energy		Energy	-	309	179,501
5550140	Nextera Rise Energy	$ 1,280,949	Purchase-Power-Energy		Energy	-	2,202	1,280,949
5550190	Nugen Capital	$ 90,413	Purchase-Power-Energy		Energy	-	155	90,413
5550020	NYPA	$ 33,194	Purchase-Power-Energy		Energy	-	57	33,194
5550150	Saddleback Energy	$ 479,893	Purchase-Power-Energy		Energy	-	825	479,893
5550170	Shell Purchase	$ 3,276,502	Purchase-Power-Energy		Energy	-	5,632	3,276,502
5550430	Shepaug	$ 216,809	Purchase-Power-Energy		Energy	-	373	216,809
5550300	Solect Solar Project	$ 44,023	Purchase-Power-Energy		Energy	-	76	44,023
5550120	Spruce Mtn Energy	$ 577,030	Purchase-Power-Energy		Energy	-	992	577,030
5550440	Stevenson	$ 105,643	Purchase-Power-Energy		Energy	-	182	105,643
5550040	Watson Energy	$ -	Purchase-Power-Energy		Energy	-	-	-
		$ -						

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Forward Capacity Market Costs	$ -						
5550321	Canton Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550061	ISO FCM Cost	$ 3,714,434	Purchase-Power-Dept		CP-1	-	-	3,714,434
5551001	Net Resource Payment by LP	$ (947,991)	Purchase-Power-Dept		CP-1	-	-	(947,991)
5550141	Nextera Rise Capacity	$ 331,320	Purchase-Power-Dept		CP-1	-	-	331,320
5550021	NYPA Capacity	$ 55,189	Purchase-Power-Dept		CP-1	-	-	55,189
5550151	Saddleback Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550121	Spruce Mtn Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550041	Watson Capacity	$ -	Purchase-Power-Dept		CP-1	-	-	-
		$ -						
	Transmission Costs	$ -						
5570072	Eversource Category B	$ 30,072	Purchase-Power-Dept		CP-12	-	-	30,072
5571012	Eversource HQ ICC Capacity	$ -	Purchase-Power-Dept		CP-12	-	-	-
5572012	Eversource HQ Phase 2	$ 115,154	Purchase-Power-Dept		CP-12	-	-	115,154
5573012	Eversource HQ Use Rights	$ (58,510)	Purchase-Power-Dept		CP-12	-	-	(58,510)
5574012	Eversource LNS	$ 3,648	Purchase-Power-Dept		CP-12	-	-	3,648
5575012	Eversource Support Charges	$ 63,600	Purchase-Power-Dept		CP-12	-	-	63,600
5570042	ISO Transmission	$ 3,595,727	Purchase-Power-Dept		CP-12	-	-	3,595,727
5572032	National Grid - NEH-HQII	$ 504	Purchase-Power-Energy		Energy	-	1	504
5571032	National Grid - NEPAC-HQII	$ 5,952	Purchase-Power-Energy		Energy	-	10	5,952
5570032	National Grid - NHH-HQII	$ 15,420	Purchase-Power-Energy		Energy	-	27	15,420
5570022	NYPA Transmission	$ 134,556	Purchase-Power-Dept		CP-12	-	-	134,556
		$ -						

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Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Fixed and Other Costs	$ -						
5570053	ENE Admin Fee	$ -						
5571053	Energy	$ 70,907	Purchase-Power-Energy		Energy	-	122	70,907
5572053	Customer	$ 70,907	Purchase-Power-Energy		Customer	-	9	70,915
5550063	ISO Ancillary Cost	$ 306,424	Purchase-Power-Energy		Energy	-	527	306,424
5551063	ISO Schedule Charges	$ -	Purchase-Power-Energy		Energy	-	-	-
5550143	Nextera Rise Fix	$ 471,900	Purchase-Power-Dept		CP-1	-	-	471,900
5550023	NYPA Fixed Costs	$ -	Purchase-Power-Dept		CP-1	-	-	-
5550043	Watson Fixed Costs	$ 845,539	Purchase-Power-Dept		CP-1	-	-	845,539
5551043	Watson O+M	$ 347,016	Purchase-Power-Dept		CP-1	-	-	347,016
		$ -						
	Total Purchase Power Expenses (w/o RECs)	$ 17,706,079						
		$ -						
	Transmission Costs (non-PPW)	$ -						
5610004	Trans Load Dispatching	$ -	Transmission-Variable		NCP-Input	-	-	-
5620004	Trans Station Expense	$ -						
5621004	Demand	$ 12,472	Transmission-Dept		NCP-Input	-	-	12,472
5622004	Customer	$ 8,315	Transmission-Dept		Cust-wgt	-	1	8,316
5700004	Maintenance of Station Equipment	$ -						
5701004	Demand	$ 1,813	Transmission-Dept		NCP-Input	-	-	1,813
5702004	Customer	$ 1,209	Transmission-Dept		Cust-wgt	-	0	1,209
5700014	Subtrans Maint of Station Equipment	$ -						
5701014	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5702014	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
5700024	Maint of Station Equipment - Eversourc	$ -						
5701024	Demand	$ 38,160	Transmission-Variable		NCP-Input	-	-	38,160
5702024	Customer	$ 25,440	Transmission-Dept		Cust-wgt	-	3	25,443
5720004	Trans Maint UG Lines	$ -						
5721004	Demand	$ -	Transmission-Dept		NCP-Input	-	-	-
5722004	Customer	$ -	Transmission-Dept		Cust-wgt	-	-	-
	Total							

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Distribution Costs	$ -						
5810005	Line and Station Supplies and Expenses	$ 171,894	Distribution-System-Dept		NCP-Input	-	-	171,894
5820005	Station Expenses	$ -						
5821005	Demand	$ 606	Substation-Variable		NCP-Input	-	-	606
5822005	Customer	$ 404	Substation-Customer-Dept		Cust-wgt	-	0	404
5830005	Overhead Line Expense	$ -						
5831005	Demand	$ 16,256	Distribution-System-Dept		NCP-Input	-	-	16,256
5832005	Customer	$ 10,837	Distribution-Customer-Dept		Cust-wgt	-	1	10,838
5840005	UG Operations Line Expense	$ -						
5841005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5842005	Customer	$ -	Distribution-Customer-Dept		Cust-wgt	-	-	-
5860005	Meter Expense	$ 45,353	Meters-Dept		Meters-Wgt	-	5	45,358
5890005	Rent Expense - MBTA	$ 10,073	Distribution-System-Dept		NCP-Input	-	-	10,073
5900005	Maintenance Supervision	$ 65,159	Distribution-System-Dept		NCP-Input	-	-	65,159
5910005	Maintenance of Structures	$ -	Substation-Customer-Dept		NCP-Input	-	-	-
5920005	Maintenance of Station Equipment	$ -						
5921005	Demand	$ 6,530	Substation-Customer-Dept		NCP-Input	-	-	6,530
5922005	Customer	$ 4,353	Substation-Customer-Dept		Cust-wgt	-	0	4,354
5930005	Maintenance of Overhead Lines	$ -						
5931005	Demand	$ 157,411	Distribution-System-Dept		NCP-Input	-	-	157,411
5932005	Customer	$ 104,941	Distribution-Customer-Dept		Cust-wgt	-	11	104,952
5930015	Maint OH Lines - Tree Triming	$ -						
5931015	Demand	$ 101,951	Distribution-System-Dept		NCP-Input	-	-	101,951
5932015	Customer	$ 67,967	Distribution-Customer-Dept		Cust-wgt	-	7	67,975
5930025	Maint OH Lines - Damages	$ -						
5931025	Demand	$ 2,987	Distribution-System-Dept		NCP-Input	-	-	2,987
5932025	Customer	$ 1,992	Distribution-Customer-Dept		Cust-wgt	-	0	1,992
5940005	Maintenance of Underground Lines	$ -						
5941005	Demand	$ 111,448	Distribution-System-Dept		NCP-Input	-	-	111,448
5942005	Customer	$ 74,298	Distribution-Customer-Dept		Cust-wgt	-	8	74,306
5950005	Maintenance of Transformers	$ -						
5951005	Demand	$ -	Distribution-System-Dept		NCP-Input	-	-	-
5952005	Customer	$ -	Transformer-Customer-Fixed		Cust-wgt	-	-	-
5950015	Transformer Disposal	$ -						
5951015	Demand	$ 943	Distribution-System-Dept		NCP-Sec	-	-	943
5952015	Customer	$ 60	Transformer-Customer-Fixed		Cust-wgt	-	0	60
5960005	Maintenance of Street Lights	$ 21,000	Direct-Dept		Direct.sl	-	21,000	21,000
5970005	Maintenance of Meters	$ -	Meters-Dept		Meters-Wgt	-	-	-
5980005	Maint of Customer LTD Mgt Switches	$ 1,425	Meters-Dept		Meters-Wgt	-	0	1,425
	Total							

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Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Customer Accounts Costs	$ -						
9010006	Supervision	$ 67,272	Meterreading-Dept		Meter.rd.wgt	-	7	67,279
9020006	Meter Reading	$ 39,884	Meterreading-Dept		Meter.rd.wgt	-	4	39,888
9030006	Accounting, Collection Expense	$ 252,397	Billing-Dept		Cust-wgt	-	27	252,424
9040006	Uncollectable Accounts	$ 17,500	Billing-Dept		billing.wgt	-	2	17,502
9040016	Small Balance Write Off	$ -	Billing-Dept		billing.wgt	-	-	-
9060006	Customer Service and Informational	$ 111,983	Billing-Dept		Customer	-	14	111,997
9080006	Customer Education	$ 64,108	Services-Dept		Customer	-	8	64,116
9080016	SmartHub Sign Up Credit	$ 75	Services-Dept		Customer	-	0	75
9090006	Informational & Instructional	$ 101,343	Services-Dept		Customer	-	12	101,355
9090016	Appliance Rebate	$ 519	Services-Dept		Customer	-	0	519
9090026	Lighting Rebate	$ 3,500	Services-Dept		Customer	-	0	3,500
9090036	ETS Rebate	$ -	Services-Dept		Customer	-	-	-
9090056	CARES expenses	$ 662,295	Services-Dept		Customer	-	80	662,375
9090086	Cool Concord Rebate CMLP	$ 8,744	Services-Dept		Customer	-	1	8,745
9090096	Cooler Concord Rebates - TH	$ -	Services-Dept		Customer	-	-	-
9090306	Electric Vehicle Level 2 Expense	$ 12,000	Services-Dept		Customer	-	1	12,001
9090316	Electric Vehicle Miles Expense	$ 25,530	Services-Dept		Customer	-	3	25,533
9100006	Energy Conservation	$ 1,100	Services-Dept		Customer	-	0	1,100
	Total							

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Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Administrative + General Costs	$ -						
4160007	M&J Operating Expenses	$ 100,000	A&G-Fixed		Expense	-	1,096	101,096
9200007	Administration & General Salaries	$ 1,150,896	A&G-Fixed		Expense	-	12,618	1,163,514
9200017	G & A Town House Transfer	$ 434,282	A&G-Fixed		Expense	-	4,761	439,043
9200027	G & A IS Dept Transfer	$ 111,295	A&G-Fixed		Expense	-	1,220	112,515
9210007	Office Supplies & Expenses	$ 193,591	A&G-Fixed		Expense	-	2,122	195,713
9230007	Misc Outside Services	$ 79,337	A&G-Fixed		Expense	-	870	80,207
9230017	Outside SVS Engineering	$ 30,000	A&G-Fixed		Expense	-	329	30,329
9230027	Outside SVS Legal	$ 94,866	A&G-Fixed		Expense	-	1,040	95,906
9240007	Property Insurance	$ 55,519	A&G-Fixed		Expense	-	609	56,128
9250007	Employee Injuries & Damages	$ 22,594	A&G-Fixed		Expense	-	248	22,842
9260007	Employee Pension & Benefits	$ 824,654	A&G-Fixed		Expense	-	9,041	833,695
9260017	Employee Sick Leave	$ 111,437	A&G-Fixed		Expense	-	1,222	112,659
9260027	Employee Vacation & Holiday	$ 331,741	A&G-Fixed		Expense	-	3,637	335,378
9260037	Employee Benefits Training	$ 71,879	A&G-Fixed		Expense	-	788	72,667
9300007	Misc General Expense	$ 36,089	A&G-Fixed		Expense	-	396	36,485
9310007	Contribution to the Town	$ 26,396	A&G-Fixed		Expense	-	289	26,685
9320007	Maint General Plant	$ 295,517	A&G-Fixed		Expense	-	3,240	298,757
9330007	Transportation Expense	$ -	A&G-Fixed		Expense	-	-	-
9340007	Inventory Adjustment	$ 1,784	A&G-Fixed		Expense	-	20	1,804
9350007	Maint of General Plant	$ -	A&G-Fixed		Expense	-	-	-
	Total							

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant

Electric Rate Study

Schedule 4.1: Allocation of Expenses, Depreciation, and Other Expenses and Revenues

Account Number	Account Description	2020 Expenses	Cost Function	Fuel/PP	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	SMART Grid Operations	$ -						
5822008	SG - Station Expenses	$ -						
5822108	Demand	$ 903	Substation-Customer-Dept		NCP-Input	-	-	903
5822208	Customer	$ 602	Substation-Customer-Dept		Cust-wgt	-	0	602
5862008	SG - Meter Expense	$ 612	Meters-Dept		Meters-Wgt	-	0	612
5932008	SG - Maint OH lines	$ -						
5932108	Demand	$ 5,400	Distribution-System-Dept		NCP-Input	-	-	5,400
5932208	Customer	$ 3,600	Distribution-Customer-Dept		Cust-wgt	-	0	3,600
5942008	SG - Maint UG Lines	$ -						
5942108	Demand	$ 1,320	Distribution-System-Dept		NCP-Input	-	-	1,320
5942208	Customer	$ 880	Distribution-Customer-Dept		Cust-wgt	-	0	880
5962008	SG - Maint St Lights	$ 5,472	Direct-Dept		Direct.sl	-	5,472	5,472
9022008	SG - Meter Reading	$ 5,559	Meterreading-Dept		Meter.rd.wgt	-	1	5,560
9032008	SG - Accounting, Collection Expense	$ 1,382	Billing-Dept		Customer	-	0	1,382
9202008	SG - General Salaries	$ -	A&G-Fixed		Expense	-	-	-
9232008	SG - Outside SVS	$ 6,300	A&G-Fixed		Expense	-	69	6,369
9322008	SG - Maintenance	$ 14,093	A&G-Fixed		Expense	-	155	14,248
	Total							
	Other Revenue and Expenses							
O1	REC Surcharges	$ 2,141,982	Purchase-Power-Energy		Energy	-	3,682	2,141,982
O2	Return on Rate Base	$ 1,022,490	A&G-Fixed		NBV	-	2,089	1,022,490
O3	Payment in lieu of Taxes (P.I.L.O.T.)	$ 448,753	Purchase-Power-Energy		Energy	-	771	448,753
O4	REV_REC Surcharge	$ -	Purchase-Power-Energy		Energy	-	-	-

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
	Intangible Plant					
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ 25,714	$ 371
	Transmission Plant					
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ 24,657	$ 356
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ 2,606	$ 38
353000	Trans Station Equipment	$ -				
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ 20,516	$ 296
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ 13,677	$ 197
353011	Subtrans - Station Equipment	$ -				
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ 9,569	$ 138
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ 6,379	$ 92
357000	Trans Underground Conduit	$ -				
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ 3,119	$ 45
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ 2,079	$ 30
357011	Subtrans - Underground Conduit	$ -				
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ 20,927	$ 302
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ 13,951	$ 201
358000	Trans Underground Conductors	$ -				
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ 3,607	$ 52
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ 2,404	$ 35
358011	Subtrans - Underground Conductors	$ -				
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ 14,793	$ 213
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ 9,862	$ 142

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
	Distribution Plant					
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ 9,659	$ 139
362000	Distribution Station Equipment	$ -				
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 3,429	$ 49
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 3,864	$ 94
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 3,429	$ 49
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 3,864	$ 94
364000	Poles, Towers & Fixtures	$ -				
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 5,050	$ 73
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 5,692	$ 138
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 5,050	$ 73
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 5,692	$ 138
364001	Distribution JO Poles	$ -				
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ (0)
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ (0)
364002	Distribution JO Anchors & Guys	$ -				
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 1,010	$ 15
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 1,139	$ 28
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 1,010	$ 15
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 1,139	$ 28

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
364003	Plant Anchors & Guys Plant	$ -				
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (146)	$ (2)
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (164)	$ (4)
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (146)	$ (2)
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (164)	$ (4)
364004	Distribution Plant Poles	$ -				
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 146	$ 2
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 164	$ 4
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 146	$ 2
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 164	$ 4
365000	Overhead Conductors & Devices	$ -				
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 13,714	$ 198
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 15,457	$ 375
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 13,714	$ 198
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 15,457	$ 375

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
366000	Distribution UG Conduit	$ -				
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 48,587	$ 701
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 54,762	$ 1,327
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 48,587	$ 701
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 54,762	$ 1,327
367000	UG Conductors/FO	$ -				
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ 30,976	$ 447
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ 34,913	$ 846
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ 30,976	$ 447
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ 39,445	$ 956
368000	Distribution Line Xformer	$ -				
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 17,175	$ 248
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 19,358	$ 469
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 17,175	$ 248
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 19,358	$ 469
369000	Distribution - Services	$ -				
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 3,096	$ 45
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 12,215	$ 296
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 3,096	$ 45
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 12,215	$ 296

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
369001	Distr Svs - Conversions	$ -				
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 1,134	$ 16
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 4,473	$ 108
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 1,134	$ 16
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 4,473	$ 108
369002	Distr Services - House Service Reim	$ -				
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ 32,436	$ 786
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ 911	$ 13
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL	RESIDENTIAL ASSISTANCE
	General Plant					
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ 88,207	$ 1,310
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ 3,585	$ 53
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ 8,555	$ 127
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ 44	$ 1
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ 89	$ 1
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ 33,468	$ 497
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ 1,933	$ 29
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ 1,823	$ 27
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ 2,254	$ 33
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ 1,267	$ 19
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ 901	$ 13
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ 8,537	$ 127
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ 3,175	$ 47
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ 1,441	$ 21
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ 59,365	$ 882
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ 1,392	$ 21
	TOTAL DEPRECIATION EXPENSE	2,067,795				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
	Intangible Plant					
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ 268	$ 292
	Transmission Plant					
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ 257	$ 280
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ 27	$ 30
353000	Trans Station Equipment	$ -				
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ 213	$ 233
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ 142	$ 156
353011	Subtrans - Station Equipment	$ -				
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ 100	$ 109
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ 66	$ 73
357000	Trans Underground Conduit	$ -				
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ 32	$ 35
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ 22	$ 24
357011	Subtrans - Underground Conduit	$ -				
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ 218	$ 238
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ 145	$ 159
358000	Trans Underground Conductors	$ -				
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ 38	$ 41
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ 25	$ 27
358011	Subtrans - Underground Conductors	$ -				
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ 154	$ 168
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ 103	$ 112

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
	Distribution Plant					
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ 100	$ 110
362000	Distribution Station Equipment	$ -				
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 36	$ 39
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ -
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 36	$ 39
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ -
364000	Poles, Towers & Fixtures	$ -				
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 53	$ 57
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 53	$ 57
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364001	Distribution JO Poles	$ -				
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364002	Distribution JO Anchors & Guys	$ -				
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 11	$ 11
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 11	$ 11
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
364003	Plant Anchors & Guys Plant	$ -				
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (2)	$ (2)
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (2)	$ (2)
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364004	Distribution Plant Poles	$ -				
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 2	$ 2
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 2	$ 2
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
365000	Overhead Conductors & Devices	$ -				
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 143	$ 156
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 143	$ 156
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
366000	Distribution UG Conduit	$ -				
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 506	$ 553
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 506	$ 553
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
367000	UG Conductors/FO	$ -				
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ 322	$ 352
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ 322	$ 352
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ -	$ -
368000	Distribution Line Xformer	$ -				
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 179	$ 195
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ -
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 179	$ 195
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ -
369000	Distribution - Services	$ -				
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 32	$ 35
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 32	$ 35
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
369001	Distr Svs - Conversions	$ -				
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 12	$ 13
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 12	$ 13
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369002	Distr Services - House Service Reim	$ -				
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ -	$ -
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ 9	$ 10
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL TOU	RESIDENTIAL HEATING
	General Plant					
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ 289	$ 531
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ 12	$ 22
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ 28	$ 52
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ 0	$ 0
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ 0	$ 1
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ 110	$ 202
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ 6	$ 12
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ 6	$ 11
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ 7	$ 14
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ 4	$ 8
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ 3	$ 5
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ 28	$ 51
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ 10	$ 19
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ 5	$ 9
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ 195	$ 358
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ 5	$ 8
	TOTAL DEPRECIATION EXPENSE	2,067,795				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Intangible Plant					
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ 1,669	$ -
	Transmission Plant					
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ 1,600	$ -
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ 169	$ -
353000	Trans Station Equipment	$ -				
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ 1,331	$ -
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ 887	$ -
353011	Subtrans - Station Equipment	$ -				
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ 621	$ -
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ 414	$ -
357000	Trans Underground Conduit	$ -				
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ 202	$ -
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ 135	$ -
357011	Subtrans - Underground Conduit	$ -				
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ 1,358	$ -
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ 905	$ -
358000	Trans Underground Conductors	$ -				
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ 234	$ -
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ 156	$ -
358011	Subtrans - Underground Conductors	$ -				
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ 960	$ -
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ 640	$ -

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	Distribution Plant					
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ 627	$ -
362000	Distribution Station Equipment	$ -				
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 222	$ -
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 238	$ -
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 222	$ -
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 238	$ -
364000	Poles, Towers & Fixtures	$ -				
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 328	$ -
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 351	$ -
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 328	$ -
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 351	$ -
364001	Distribution JO Poles	$ -				
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ -
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ -
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ -
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ -
364002	Distribution JO Anchors & Guys	$ -				
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 66	$ -
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 70	$ -
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 66	$ -
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 70	$ -

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
364003	Plant Anchors & Guys Plant	$ -				
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (9)	$ -
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (10)	$ -
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (9)	$ -
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (10)	$ -
364004	Distribution Plant Poles	$ -				
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 9	$ -
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 10	$ -
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 9	$ -
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 10	$ -
365000	Overhead Conductors & Devices	$ -				
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 890	$ -
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 952	$ -
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 890	$ -
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 952	$ -

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
366000	Distribution UG Conduit	$ -				
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 3,153	$ -
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 3,374	$ -
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 3,153	$ -
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 3,374	$ -
367000	UG Conductors/FO	$ -				
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ 2,010	$ -
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ 2,151	$ -
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ 2,010	$ -
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ 1,944	$ -
368000	Distribution Line Xformer	$ -				
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 1,114	$ -
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 1,193	$ -
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 1,114	$ -
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 1,193	$ -
369000	Distribution - Services	$ -				
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 201	$ -
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 753	$ -
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 201	$ -
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 753	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
369001	Distr Svs - Conversions	$ -				
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 74	$ -
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 276	$ -
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 74	$ -
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 276	$ -
369002	Distr Services - House Service Reim	$ -				
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ 1,999	$ -
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ 59	$ -
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING
	General Plant					
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ 5,508	$ -
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ 224	$ -
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ 534	$ -
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ 3	$ -
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ 6	$ -
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ 2,090	$ -
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ 121	$ -
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ 114	$ -
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ 141	$ -
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ 79	$ -
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ 56	$ -
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ 533	$ -
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ 198	$ -
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ 90	$ -
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ 3,707	$ -
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ 87	$ -
	TOTAL DEPRECIATION EXPENSE	2,067,795				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
	Intangible Plant					
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ 1,543	$ 3,991
	Transmission Plant					
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ 1,479	$ 3,827
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ 156	$ 405
353000	Trans Station Equipment	$ -				
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ 1,231	$ 3,185
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ 821	$ 2,123
353011	Subtrans - Station Equipment	$ -				
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ 574	$ 1,485
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ 383	$ 990
357000	Trans Underground Conduit	$ -				
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ 187	$ 484
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ 125	$ 323
357011	Subtrans - Underground Conduit	$ -				
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ 1,256	$ 3,248
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ 837	$ 2,166
358000	Trans Underground Conductors	$ -				
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ 216	$ 560
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ 144	$ 373
358011	Subtrans - Underground Conductors	$ -				
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ 888	$ 2,296
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ 592	$ 1,531

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
	Distribution Plant					
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ 580	$ 1,499
362000	Distribution Station Equipment	$ -				
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 206	$ 532
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ 992
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 206	$ 532
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ 992
364000	Poles, Towers & Fixtures	$ -				
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 303	$ 784
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1,462
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 303	$ 784
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1,462
364001	Distribution JO Poles	$ -				
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)
364002	Distribution JO Anchors & Guys	$ -				
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 61	$ 157
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 292
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 61	$ 157
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 292

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
364003	Plant Anchors & Guys Plant	$ -				
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (9)	$ (23)
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (42)
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (9)	$ (23)
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (42)
364004	Distribution Plant Poles	$ -				
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 9	$ 23
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 42
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 9	$ 23
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 42
365000	Overhead Conductors & Devices	$ -				
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 823	$ 2,129
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 3,969
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 823	$ 2,129
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 3,969

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
366000	Distribution UG Conduit	$ -				
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 2,915	$ 7,542
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 14,062
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 2,915	$ 7,542
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 14,062
367000	UG Conductors/FO	$ -				
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ 1,859	$ 4,808
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 8,965
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ 1,859	$ 4,808
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ -	$ 6,752
368000	Distribution Line Xformer	$ -				
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 1,031	$ 2,666
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ 4,971
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 1,031	$ 2,666
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ 4,971
369000	Distribution - Services	$ -				
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 186	$ 481
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 3,137
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 186	$ 481
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 3,137

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
369001	Distr Svs - Conversions	$ -				
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 68	$ 176
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1,149
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 68	$ 176
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1,149
369002	Distr Services - House Service Reim	$ -				
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ -	$ 8,329
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ 55	$ 141
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	ETS OFF PEAK	SMALL GENERAL SERVICE
	General Plant					
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ 1,671	$ 15,801
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ 68	$ 642
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ 162	$ 1,532
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ 1	$ 8
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ 2	$ 16
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ 634	$ 5,996
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ 37	$ 346
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ 35	$ 327
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ 43	$ 404
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ 24	$ 227
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ 17	$ 161
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ 162	$ 1,529
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ 60	$ 569
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ 27	$ 258
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ 1,125	$ 10,635
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ 26	$ 249
	TOTAL DEPRECIATION EXPENSE	2,067,795				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Intangible Plant					
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ 10,308	$ 18,436
	Transmission Plant					
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ 9,884	$ 17,678
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ 1,045	$ 1,869
353000	Trans Station Equipment	$ -				
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ 8,224	$ 14,709
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ 5,483	$ 9,806
353011	Subtrans - Station Equipment	$ -				
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ 3,836	$ 6,860
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ 2,557	$ 4,573
357000	Trans Underground Conduit	$ -				
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ 1,250	$ 2,236
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ 834	$ 1,491
357011	Subtrans - Underground Conduit	$ -				
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ 8,389	$ 15,004
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ 5,593	$ 10,003
358000	Trans Underground Conductors	$ -				
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ 1,446	$ 2,586
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ 964	$ 1,724
358011	Subtrans - Underground Conductors	$ -				
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ 5,930	$ 10,606
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ 3,953	$ 7,071

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	Distribution Plant					
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ 3,872	$ 6,925
362000	Distribution Station Equipment	$ -				
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 1,374	$ 2,458
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 295	$ 80
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ 1,374	$ 2,458
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ 295	$ 80
364000	Poles, Towers & Fixtures	$ -				
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 2,024	$ 3,621
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 435	$ 118
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ 2,024	$ 3,621
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ 435	$ 118
364001	Distribution JO Poles	$ -				
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ (0)
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ (0)	$ (0)
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ (0)	$ (0)
364002	Distribution JO Anchors & Guys	$ -				
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 405	$ 724
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 87	$ 24
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ 405	$ 724
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ 87	$ 24

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
364003	Plant Anchors & Guys Plant	$ -				
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (58)	$ (104)
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (13)	$ (3)
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ (58)	$ (104)
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ (13)	$ (3)
364004	Distribution Plant Poles	$ -				
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 58	$ 104
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 13	$ 3
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ 58	$ 104
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ 13	$ 3
365000	Overhead Conductors & Devices	$ -				
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 5,498	$ 9,832
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 1,182	$ 320
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ 5,498	$ 9,832
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ 1,182	$ 320

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
366000	Distribution UG Conduit	$ -				
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 19,477	$ 34,835
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 4,187	$ 1,133
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ 19,477	$ 34,835
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ 4,187	$ 1,133
367000	UG Conductors/FO	$ -				
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ 12,417	$ 22,208
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ 2,669	$ 722
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ 12,417	$ 22,208
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ 1,005	$ 163
368000	Distribution Line Xformer	$ -				
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 6,885	$ 12,314
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 1,480	$ 401
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ 6,885	$ 12,314
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ 1,480	$ 401
369000	Distribution - Services	$ -				
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 1,241	$ 2,220
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 934	$ 253
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ 1,241	$ 2,220
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ 934	$ 253

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
369001	Distr Svs - Conversions	$ -				
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 455	$ 813
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 342	$ 93
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ 455	$ 813
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ 342	$ 93
369002	Distr Services - House Service Reim	$ -				
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ 2,480	$ 671
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ 365	$ 653
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE
	General Plant					
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ 30,177	$ 55,182
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ 1,227	$ 2,243
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ 2,927	$ 5,352
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ 15	$ 27
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ 30	$ 56
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ 11,450	$ 20,938
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ 661	$ 1,209
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ 624	$ 1,140
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ 771	$ 1,410
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ 433	$ 793
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ 308	$ 564
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ 2,921	$ 5,341
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ 1,086	$ 1,987
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ 493	$ 901
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ 20,310	$ 37,139
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ 476	$ 871
	TOTAL DEPRECIATION EXPENSE	2,067,795				

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Intangible Plant						
303000	Misc Intangible Plant	$ 62,592	Distribution-System-Fixed	NCP-Input	$ -	$ -	62,592
	Transmission Plant						
340000	LAND & LAND RIGHTS GENERATION	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -	-
350000	Land & Land Rights	$ -	Transmission-Fixed	NCP-Input	$ -	$ -	-
352000	Trans Structures & Improvements	$ 60,018	Transmission-Fixed	NCP-Input	$ -	$ -	60,018
352011	Subtrans - Structures & Improvement	$ 6,344	Transmission-Fixed	NCP-Input	$ -	$ -	6,344
353000	Trans Station Equipment	$ -					
353100	Demand Primary Voltage	$ 49,939	Transmission-Fixed	NCP-Input	$ -	$ -	49,939
353200	Customer Primary Voltage	$ 33,292	Transmission-Fixed	NCP-Input	$ -	$ -	33,292
353011	Subtrans - Station Equipment	$ -					
353111	Demand Secondary Voltage	$ 23,291	Transmission-Fixed	NCP-Input	$ -	$ -	23,291
353211	Customer Secondary Voltage	$ 15,528	Transmission-Fixed	NCP-Input	$ -	$ -	15,528
357000	Trans Underground Conduit	$ -					
357100	Demand Primary Voltage	$ 7,592	Transmission-Fixed	NCP-Input	$ -	$ -	7,592
357200	Customer Primary Voltage	$ 5,062	Transmission-Fixed	NCP-Input	$ -	$ -	5,062
357011	Subtrans - Underground Conduit	$ -					
357111	Demand Secondary Voltage	$ 50,940	Transmission-Fixed	NCP-Input	$ -	$ -	50,940
357211	Customer Secondary Voltage	$ 33,960	Transmission-Fixed	NCP-Input	$ -	$ -	33,960
358000	Trans Underground Conductors	$ -					
358100	Demand Primary Voltage	$ 8,779	Transmission-Fixed	NCP-Input	$ -	$ -	8,779
358200	Customer Primary Voltage	$ 5,853	Transmission-Fixed	NCP-Input	$ -	$ -	5,853
358011	Subtrans - Underground Conductors	$ -					
358111	Demand Secondary Voltage	$ 36,008	Transmission-Fixed	NCP-Input	$ -	$ -	36,008
358211	Customer Secondary Voltage	$ 24,005	Transmission-Fixed	NCP-Input	$ -	$ -	24,005

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Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	Distribution Plant						
360000	Distribution Land & Land Rights	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -	-
361000	Distribution Structures & Improveme	$ 23,511	Substation-Fixed	NCP-Input	$ -	$ -	23,511
362000	Distribution Station Equipment	$ -					
362100	Demand Primary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ -	$ -	8,346
362200	Customer Primary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ 1	5,564
362300	Demand Secondary Voltage	$ 8,346	Substation-Fixed	NCP-Input	$ -	$ -	8,346
362400	Customer Secondary Voltage	$ 5,564	Substation-Customer-Fixed	Cust-wgt	$ -	$ 1	5,564
364000	Poles, Towers & Fixtures	$ -					
364100	Demand Primary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ -	$ -	12,292
364200	Customer Primary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1	8,196
364300	Demand Secondary Voltage	$ 12,292	Distribution-System-Fixed	NCP-Input	$ -	$ -	12,292
364400	Customer Secondary Voltage	$ 8,195	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1	8,196
364001	Distribution JO Poles	$ -					
364101	Demand Primary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ -	$ -	(0)
364201	Customer Primary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)	(0)
364301	Demand Secondary Voltage	$ (0)	Distribution-System-Fixed	NCP-Input	$ -	$ -	(0)
364401	Customer Secondary Voltage	$ (0)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)	(0)
364002	Distribution JO Anchors & Guys	$ -					
364102	Demand Primary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ -	$ -	2,459
364202	Customer Primary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 0	1,640
364302	Demand Secondary Voltage	$ 2,459	Distribution-System-Fixed	NCP-Input	$ -	$ -	2,459
364402	Customer Secondary Voltage	$ 1,640	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 0	1,640

Refer to Summary of Significant Assumptions and Accounting Policies.

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Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
364003	Plant Anchors & Guys Plant	$ -					
364103	Demand Primary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ -	$ -	(354)
364203	Customer Primary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)	(236)
364303	Demand Secondary Voltage	$ (354)	Distribution-System-Fixed	NCP-Input	$ -	$ -	(354)
364403	Customer Secondary Voltage	$ (236)	Distribution-Customer-Fixed	Cust-wgt	$ -	$ (0)	(236)
364004	Distribution Plant Poles	$ -					
364104	Demand Primary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ -	$ -	354
364204	Customer Primary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 0	236
364304	Demand Secondary Voltage	$ 354	Distribution-System-Fixed	NCP-Input	$ -	$ -	354
364404	Customer Secondary Voltage	$ 236	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 0	236
365000	Overhead Conductors & Devices	$ -					
365100	Demand Primary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ -	$ -	33,382
365200	Customer Primary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 2	22,257
365300	Demand Secondary Voltage	$ 33,382	Distribution-System-Fixed	NCP-Input	$ -	$ -	33,382
365400	Customer Secondary Voltage	$ 22,255	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 2	22,257

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
366000	Distribution UG Conduit	$ -					
366100	Demand Primary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ -	$ -	118,269
366200	Customer Primary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 8	78,854
366300	Demand Secondary Voltage	$ 118,269	Distribution-System-Fixed	NCP-Input	$ -	$ -	118,269
366400	Customer Secondary Voltage	$ 78,846	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 8	78,854
367000	UG Conductors/FO	$ -					
367100	Demand Primary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Input	$ -	$ -	75,400
367200	Customer Primary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 5	50,272
367300	Demand Secondary Voltage	$ 75,400	Distribution-System-Fixed	NCP-Sec	$ -	$ -	75,400
367400	Customer Secondary Voltage	$ 50,266	Distribution-Customer-Fixed	Cust-Sec	$ -	$ 6	50,273
368000	Distribution Line Xformer	$ -					
368100	Demand Primary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ -	$ -	41,806
368200	Customer Primary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ 3	27,874
368300	Demand Secondary Voltage	$ 41,806	Transformers-Fixed	NCP-Input	$ -	$ -	41,806
368400	Customer Secondary Voltage	$ 27,871	Transformers-Fixed	Cust-wgt	$ -	$ 3	27,874
369000	Distribution - Services	$ -					
369100	Demand Primary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ -	$ -	7,537
369200	Customer Primary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 2	17,589
369300	Demand Secondary Voltage	$ 7,537	Distribution-System-Fixed	NCP-Input	$ -	$ -	7,537
369400	Customer Secondary Voltage	$ 17,587	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 2	17,589

Refer to Summary of Significant Assumptions and Accounting Policies.

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Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
369001	Distr Svs - Conversions	$ -					
369101	Demand Primary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ -	$ -	2,760
369201	Customer Primary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1	6,441
369301	Demand Secondary Voltage	$ 2,760	Distribution-System-Fixed	NCP-Input	$ -	$ -	2,760
369401	Customer Secondary Voltage	$ 6,440	Distribution-Customer-Fixed	Cust-wgt	$ -	$ 1	6,441
369002	Distr Services - House Service Reim	$ -					
369102	Demand Primary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -	-
369202	Customer Primary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -	-
369302	Demand Secondary Voltage	$ -	Distribution-System-Fixed	NCP-Input	$ -	$ -	-
369402	Customer Secondary Voltage	$ -	Distribution-Customer-Fixed	Cust-wgt	$ -	$ -	-
370000	Dist - Meters	$ 46,701	Meters-Fixed	Meters-Wgt	$ -	$ 5	46,706
371000	Install Customers Premises	$ 2,217	Distribution-System-Fixed	NCP-Input	$ -	$ -	2,217
373000	Street Lighting & Signal System	$ 42,738	Direct-Fixed	Direct.SL	$ -	$ 42,738	42,738

Refer to Summary of Significant Assumptions and Accounting Policies.

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Schedule 4.2: Allocation of Capital Expenses

Account Number	Account Description	2020 Depreciation Expenses	Cost Function	Allocator	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
	General Plant						
390000	General Plant - Structure & Improve	$ 199,084	A&G-Fixed	NBV	$ -	$ 407	199,084
391000	Office Furniture & Equipment	$ 8,092	A&G-Fixed	NBV	$ -	$ 17	8,092
391001	Computer Equipment & Software	$ 19,308	A&G-Fixed	NBV	$ -	$ 39	19,308
391020	SG Office & Equipment	$ 99	A&G-Fixed	NBV	$ -	$ 0	99
391021	SG Computer Equipment	$ 201	A&G-Fixed	NBV	$ -	$ 0	201
392000	Transportation Equipment	$ 75,539	A&G-Fixed	NBV	$ -	$ 154	75,539
393000	General Plant - Store Equipment	$ 4,362	A&G-Fixed	NBV	$ -	$ 9	4,362
394000	Tools, Shop & Garage Equipment	$ 4,114	A&G-Fixed	NBV	$ -	$ 8	4,114
395000	Laboratory Equipment	$ 5,088	A&G-Fixed	NBV	$ -	$ 10	5,088
396000	Power Operated Equipment	$ 2,859	A&G-Fixed	NBV	$ -	$ 6	2,859
397000	Communication Equipment	$ 2,034	A&G-Fixed	NBV	$ -	$ 4	2,034
397002	Fiber Optics-Town Loop Comm Equip	$ 19,268	A&G-Fixed	NBV	$ -	$ 39	19,268
397004	Comm Equip FO School	$ 7,167	A&G-Fixed	NBV	$ -	$ 15	7,167
397005	Comm Equip -Telephone	$ 3,252	A&G-Fixed	NBV	$ -	$ 7	3,252
397006	Comm Smart Grid	$ 133,988	A&G-Fixed	NBV	$ -	$ 274	133,988
398000	Misc Equip - General Plant	$ 3,141	A&G-Fixed	NBV	$ -	$ 6	3,141
	TOTAL DEPRECIATION EXPENSE	2,067,795					

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 6.3: Overall Cost Summary

Cost Component	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE	GENERAL SERVICE NET METERING	STREET LIGHTS	Total
Power Supply Costs	$ 8,503,417	$ 114,311	$ 30,040	$ 57,446	$ 540,979	$ -	$ 173,596	$ 1,496,804	$ 3,274,322	$ 6,086,087	$ -	$ 19,819	$ 20,296,823
Distribution Costs													
Substation Costs	65,839	1,194	426	466	4,191	-	2,458	12,746	18,322	29,882	-	4	135,528
Distribution System Costs	2,146,030	40,716	11,987	13,101	135,053	-	69,127	427,454	533,898	845,266	-	154	4,222,786
Transformer Costs	142,992	2,807	699	764	9,031	-	4,031	29,896	32,725	49,729	-	12	272,684
Meter Operation & Maintenance Costs	149,773	3,630	-	-	9,229	-	-	38,458	11,451	3,099	-	23	215,664
Services Costs	1,809,857	43,863	-	-	89,219	-	-	309,817	46,126	7,489	-	280	2,306,651
Meter Reading Costs	205,362	4,977	-	-	12,654	-	-	52,732	15,702	4,249	-	32	295,708
Billing System Costs	725,103	17,573	-	-	41,805	-	-	166,214	43,545	11,140	-	112	1,005,492
Direct Costs	-	-	-	-	-	-	-	-	-	-	-	153,018	153,018
Subtotal Distribution Costs	5,244,958	114,761	13,112	14,330	301,183	-	75,615	1,037,316	701,769	950,854	-	153,635	8,607,532
Transmission Costs	$ 409,930	$ 6,541	$ 3,602	$ 3,937	$ 26,392	$ -	$ 20,775	$ 70,101	$ 143,665	$ 249,549	$ -	$ 10	$ 934,500
Total Cost of Service	$ 14,158,305	$ 235,613	$ 46,754	$ 75,714	$ 868,553	$ -	$ 269,986	$ 2,604,221	$ 4,119,756	$ 7,286,490	$ -	$ 173,463	$ 29,838,855

Refer to Summary of Significant Assumptions and Accounting Policies.

Concord Municipal Light Plant
Electric Rate Study
Schedule 6.4: Unbundled Rate Summary

	RESIDENTIAL	RESIDENTIAL ASSISTANCE	RESIDENTIAL TOU	RESIDENTIAL HEATING	RESIDENTIAL CTRL WATER HEATING	RESIDENTIAL NET METERING	ETS OFF PEAK	SMALL GENERAL SERVICE	MEDIUM GENERAL SERVICE	LARGE GENERAL SERVICE	GENERAL SERVICE NET METERING	STREET LIGHTS
Fixed Cost Components												
Substation	0.84	0.63	-	-	1.08	-	-	0.95	9.14	91.63	-	0.32
Distribution	27.67	21.66	-	-	35.32	-	-	32.19	270.05	2,633.23	-	12.81
Transformer	1.84	1.49	-	-	2.36	-	-	2.25	16.55	154.92	-	0.98
Meter Operation & Maintenance	1.93	1.93	-	-	2.41	-	-	2.90	5.79	9.65	-	1.93
Services	23.33	23.33	-	-	23.33	-	-	23.33	23.33	23.33	-	23.33
Meter Reading	2.65	2.65	-	-	3.31	-	-	3.97	7.94	13.24	-	2.65
Billing System	9.35	9.35	-	-	10.93	-	-	12.52	22.03	34.70	-	9.35
Direct	-	-	-	-	-	-	-	-	-	-	-	12,751.54
Generation	51.39	27.81	-	-	70.10	-	-	45.64	661.02	7,565.65	-	-
Total Fixed Costs divided by customers-month ($/mo)	**$ 119.00**	**$ 88.85**	**$ -**	**$ -**	**$ 148.84**	**$ -**	**$ -**	**$ 123.75**	**$ 1,015.85**	**$ 10,526.35**	**$ -**	**$ 12,802.91**
Variable Cost Components - Energy												
Substation	0.00001	0.00001	0.00004	0.00002	0.00001	-	0.00001	0.00001	0.00001	0.00001	-	-
Distribution	-	-	-	-	-	-	-	-	-	-	-	-
Transformer	-	-	-	-	-	-	-	-	-	-	-	-
Generation - Energy	-	-	-	-	-	-	-	-	-	-	-	-
Generation - Demand	-	-	-	-	-	-	-	-	-	-	-	-
Transmission	0.00061	0.00065	0.00274	0.00125	0.00065	-	0.00086	0.00048	0.00055	0.00053	-	-
Purchased Power	0.12573	0.12425	0.19212	0.15327	0.13208	-	0.06041	0.11204	0.10986	0.10977	-	0.06599
Total Variable Costs divided by energy ($/kWh)	**$ 0.12635**	**$ 0.12491**	**$ 0.19490**	**$ 0.15454**	**$ 0.13274**	**$ -**	**$ 0.06128**	**$ 0.11253**	**$ 0.11042**	**$ 0.11031**	**$ -**	**$ 0.06599**
Variable Cost Components - Demand												
Generation - Demand	-	-	-	-	-	-	-	-	-	-	-	-
Variable Costs divided by peak demand ($/kW)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Refer to Summary of Significant Assumptions and Accounting Policies.

Appendix B – Rate Scenario 2: Residential Opt-out Time of Use Rate Framework with Flat Rate

Scenario 2 includes an opt-out time of use rate with an opt-out rate of 4%, flat rate charges for winter and summer rates and a customer demand charge. The methodology is discussed at Opt-Out Residential Time of Use Rate.

Residential (R-1)

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04734	$ 0.04334	$ 0.04299	$ 0.04382	$ 0.04176	$ 0.04231
Next 178 kWh		$ 0.06156	$ 0.05636	$ 0.05591	$ 0.05698	$ 0.05431	$ 0.05502
All in excess of 835 kWh		$ 0.08884	$ 0.08133	$ 0.08068	$ 0.08223	$ 0.07837	$ 0.07940
Summer (June 1 - September 30)							
First 657 kWh		$ 0.04590	$ 0.04202	$ 0.04169	$ 0.04249	$ 0.04049	$ 0.04102
Next 178 kWh		$ 0.05969	$ 0.05465	$ 0.05421	$ 0.05525	$ 0.05265	$ 0.05335
All in excess of 835 kWh		$ 0.08613	$ 0.07886	$ 0.07823	$ 0.07973	$ 0.07598	$ 0.07698
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
Farm Credit	-10%	-10%	-10%	-10%	-10%	-10%	-10%
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Average Bill Comparison - 1,000 kWh							
Winter		$ 176.46	$ 173.30	$ 174.58	$ 179.50	$ 175.84	$ 180.22
% change from prior period			-1.79%	0.74%	2.82%	-2.04%	2.49%
Summer		$ 174.69	$ 171.68	$ 172.97	$ 177.86	$ 174.28	$ 178.64
% change from prior period			-1.72%	0.75%	2.83%	-2.01%	2.50%

Controlled Water Heating Credit Rider

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Total Capacity and Transmission Charge:							
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04734	$ 0.05005	$ 0.05630	$ 0.06342	$ 0.06839	$ 0.07529
Next 178 kWh		$ 0.06156	$ 0.06508	$ 0.07322	$ 0.08247	$ 0.08894	$ 0.09791
All in excess of 835 kWh		$ 0.08884	$ 0.09392	$ 0.10566	$ 0.11900	$ 0.12835	$ 0.14128
Summer (June 1 - September 30)							
First 657 kWh		$ 0.04590	$ 0.04853	$ 0.05459	$ 0.06149	$ 0.06631	$ 0.07300
Next 178 kWh		$ 0.05969	$ 0.06310	$ 0.07099	$ 0.07996	$ 0.08624	$ 0.09493
All in excess of 835 kWh		$ 0.08613	$ 0.09106	$ 0.10244	$ 0.11538	$ 0.12444	$ 0.13698
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
Controlled Water Heating Credit	$ (14.87)						
Winter (October 1 - May 31)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
Summer (June 1 - September 30)		$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)	$ (19.66)
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%

Average Bill Comparison - 1,000 kWh							
Winter		$ 160.55	$ 165.16	$ 174.13	$ 185.17	$ 191.36	$ 202.10
% change from prior period			2.87%	5.43%	6.34%	3.34%	5.61%
Summer		$ 158.78	$ 163.75	$ 172.90	$ 185.27	$ 190.09	$ 202.00
% change from prior period			3.13%	5.59%	7.15%	2.60%	6.26%

Residential Time of Use - Rate R-1 Tour

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Demand Charge per kW	N/A	$ -	$ -	$ -	$ -	$ -	$ -
On-peak (all kWhs)	$ 0.14683						
Off-peak (all kWhs)	$ 0.03088						
Winter (October 1 - May 31)							
All kWhs:							
On-peak (4 PM - 9 PM)		$ 0.06579	$ 0.05964	$ 0.05901	$ 0.06010	$ 0.05701	$ 0.05769
Off-peak (9 PM - 4 PM)		$ 0.05392	$ 0.04888	$ 0.04837	$ 0.04926	$ 0.04672	$ 0.04728
Summer (June 1 - September 30)							
All kWhs:							
On-peak (1 PM to 9 PM)		$ 0.05585	$ 0.05062	$ 0.05009	$ 0.05102	$ 0.04839	$ 0.04897
Off-peak (9 PM to 1 PM)		$ 0.04232	$ 0.03837	$ 0.03796	$ 0.03867	$ 0.03667	$ 0.03711
Distribution Charge (all kWhs)	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (all kWhs)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%

Average Bill Comparison - 1,000 kWh, 2 kW						
Winter	$ 176.89	$ 173.16	$ 174.31	$ 179.19	$ 175.31	$ 179.61
% change from prior period		-2.10%	0.66%	2.80%	-2.17%	2.46%
Summer	$ 167.54	$ 164.69	$ 165.92	$ 170.65	$ 167.20	$ 171.41
% change from prior period		-1.70%	0.75%	2.85%	-2.02%	2.52%

Residential Service - Resistance Heat Pump Heating Rate - R-7

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
All kWh's - October 1 - May 31	$ 0.15071	$ 0.13723	$ 0.14702	$ 0.16039	$ 0.17661	$ 0.18617	$ 0.20197

Residential Service - Off Peak - Electric Thermal Storage (ETS) - Rate R-3

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
All kWh's	$ 0.07418						
Meter Charge		$ -	$ -	$ -	$ -	$ -	$ -
Capacity and Transmission and Distribution Charge							
Winter (October 1 - May 31)							
All kWhs:		$ 0.01877	$ 0.01956	$ 0.02230	$ 0.02544	$ 0.02765	$ 0.03072
Summer (June 1 - September 30)							
All kWhs:		$ 0.01820	$ 0.01896	$ 0.02162	$ 0.02467	$ 0.02680	$ 0.02978
Energy Charge (per kWh)		$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Average Bill Comparison - 1,000 kWh							
Winter		$ 208.80	$ 212.41	$ 221.50	$ 234.92	$ 238.16	$ 250.95
% change from prior period			1.73%	4.28%	6.06%	1.38%	5.37%
Summer		$ 10.95	$ 11.14	$ 11.60	$ 12.30	$ 12.46	$ 13.12
% change from prior period			1.71%	4.20%	5.99%	1.31%	5.31%

Residential Service - Rate Assistance Rider

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 16.00	$ 16.80	$ 17.64	$ 18.52	$ 19.45	$ 20.42
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04734	$ 0.04334	$ 0.04299	$ 0.04382	$ 0.04176	$ 0.04231
Next 178 kWh		$ 0.06156	$ 0.05636	$ 0.05591	$ 0.05698	$ 0.05431	$ 0.05502
All in excess of 835 kWh		$ 0.08884	$ 0.08133	$ 0.08068	$ 0.08223	$ 0.07837	$ 0.07940
Summer (June 1 - September 30)							
First 657 kWh		$ 0.04590	$ 0.04202	$ 0.04169	$ 0.04249	$ 0.04049	$ 0.04102
Next 178 kWh		$ 0.05969	$ 0.05465	$ 0.05421	$ 0.05525	$ 0.05265	$ 0.05335
All in excess of 835 kWh		$ 0.08613	$ 0.07886	$ 0.07823	$ 0.07973	$ 0.07598	$ 0.07698
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)	$ (0.05)
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Rate Assistance Credit (based on first 600 kWh)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)	$ (0.10000)
Average Bill Comparison - 500 kWh							
Winter		$ 39.74	$ 38.98	$ 40.09	$ 42.91	$ 41.77	$ 44.40
% change from prior period			-1.92%	2.84%	7.05%	-2.65%	6.30%
Summer		$ 39.01	$ 38.31	$ 39.42	$ 42.23	$ 41.12	$ 43.74
% change from prior period			-1.80%	2.90%	7.14%	-2.62%	6.37%

Residential Service Rider - Net Metering with Banking Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Distribution Charge:							
Installed generation capacity equal or greater than and less than:							
Greater than 2 kW but less than 4 kW AC	$ 3.60	$ 3.60	$ 3.60	$ 3.60	$ 3.70	$ 3.60	$ 3.70
Greater than 4 kW but less than 7 kW AC	$ 6.60	$ 6.60	$ 6.70	$ 6.70	$ 6.90	$ 6.80	$ 7.00
Greater than 7 kW but less than 10 kW AC	$ 10.20	$ 10.20	$ 10.30	$ 10.40	$ 10.70	$ 10.50	$ 10.80
Greater than 10 kW but less than 13 kW AC	$ 13.80	$ 13.80	$ 13.90	$ 14.00	$ 14.40	$ 14.10	$ 14.50
Greater than 13 kW but less than 16 kW AC	$ 17.40	$ 17.40	$ 17.50	$ 17.60	$ 18.10	$ 17.70	$ 18.10
Greater than 16 kW but less than 19 kW AC	$ 21.00	$ 21.00	$ 21.20	$ 21.40	$ 22.00	$ 21.60	$ 22.10
Greater than 19 kW but less than 22 kW AC	$ 24.60	$ 24.60	$ 24.80	$ 25.00	$ 25.70	$ 25.20	$ 25.80
Greater than 22 kW but less than 25 kW AC	$ 28.20	$ 28.20	$ 28.40	$ 28.60	$ 29.40	$ 28.80	$ 29.50
Greater than 25 kW but less than 28 kW AC	$ 31.80	$ 31.80	$ 32.10	$ 32.30	$ 33.20	$ 32.50	$ 33.30
Greater than 28 kW but less than 31 kW AC	$ 35.40	$ 35.40	$ 35.70	$ 36.00	$ 37.00	$ 36.20	$ 37.10
Greater than 31 kW but less than 34 kW AC	$ 39.00	$ 39.00	$ 39.30	$ 39.60	$ 40.70	$ 39.90	$ 40.90
Greater than 34 kW but less than 37 kW AC	$ 42.20	$ 42.20	$ 42.60	$ 42.90	$ 44.10	$ 43.20	$ 44.30
Greater than 37 kW but less than 40 kW AC	$ 46.20	$ 46.20	$ 46.60	$ 46.90	$ 48.20	$ 47.20	$ 48.40
Greater than 40 kW but less than 46 kW AC	$ 53.40	$ 53.40	$ 53.80	$ 54.20	$ 55.70	$ 54.60	$ 56.00
Greater than 46 kW but less than 58 kW AC	$ 67.80	$ 67.80	$ 68.40	$ 68.90	$ 70.80	$ 69.40	$ 71.10
Greater than 58 kW but less than 82 kW AC	$ 96.60	$ 96.60	$ 97.40	$ 98.10	$ 100.90	$ 98.80	$ 101.30
Greater than 82 kW but less than 130 kW AC	$ 154.20	$ 154.20	$ 155.50	$ 156.70	$ 161.10	$ 157.80	$ 161.80
Greater than 130 kW but less than 167 kW AC	$ 198.60	$ 198.60	$ 200.30	$ 201.80	$ 207.50	$ 203.30	$ 208.40
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%

Small General Service - Rate G-1

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge	$ 12.00	$ 12.00	$ 12.00	$ 12.60	$ 13.20	$ 13.90	$ 14.60
Capacity and Transmission Charge (per kWh)	$ 0.08185						
Winter (October 1 - May 31)							
All kWhs		$ 0.08225	$ 0.05346	$ 0.05324	$ 0.05526	$ 0.05257	$ 0.05420
Summer (June 1 - September 30)							
All kWhs		$ 0.07975	$ 0.05184	$ 0.05162	$ 0.05358	$ 0.05097	$ 0.05255
Distribution Charge (per kWh)	$ 0.03228	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Average Bill Comparison - 3,000 kWh							
Winter		$ 582.20	$ 496.55	$ 498.99	$ 514.83	$ 501.00	$ 514.84
% change from prior period			-14.71%	0.49%	3.18%	-2.69%	2.76%
Summer		$ 574.51	$ 491.55	$ 494.01	$ 509.67	$ 496.08	$ 509.77
% change from prior period			-14.44%	0.50%	3.17%	-2.67%	2.76%

Medium General Service - Rate G-2

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge (Single Phase)	$ 44.00	$ 50.00	$ 51.50	$ 53.00	$ 54.60	$ 56.20	$ 57.90
Meter Charge (Three Phase)	$ 60.00	$ 68.00	$ 70.00	$ 72.10	$ 74.30	$ 76.50	$ 78.80
Demand Rate (per kW)	$ 10.85	$ 12.00	$ 12.40	$ 12.80	$ 13.20	$ 13.60	$ 14.00
Capacity and Transmission Charge (per kWh)	$ 0.03507						
Winter (October 1 - May 31) - All kWhs		$ 0.02617	$ 0.02131	$ 0.02071	$ 0.02128	$ 0.01911	$ 0.01949
Summer (June 1 - September 30) - All kWhs		$ 0.02537	$ 0.02066	$ 0.02008	$ 0.02064	$ 0.01853	$ 0.01890
Distribution Charge (per kWh)	$ 0.02571	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Average Bill Comparison - Winter (16,200 kWh, 29 kW); Summer (14,300 kWh, 37 kW)							
Winter		$ 2,554.73	$ 2,502.54	$ 2,519.60	$ 2,591.27	$ 2,534.78	$ 2,598.60
% change from prior period			-2.04%	0.68%	2.84%	-2.18%	2.52%
Summer		$ 2,389.53	$ 2,350.51	$ 2,370.73	$ 2,438.58	$ 2,394.70	$ 2,455.72
% change from prior period			-1.63%	0.86%	2.86%	-1.80%	2.55%

Large General Service - Rate G-3

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Meter Charge (Single or Three Phase)	$ 380.00	$ 400.00	$ 412.00	$ 424.40	$ 440.00	$ 450.00	$ 460.00
Demand Rate (per kW)	$ 9.97	$ 13.00	$ 13.40	$ 13.80	$ 14.20	$ 14.60	$ 15.00
Capacity and Transmission Charge (per kWh)	$ 0.03094						
Winter (October 1 - May 31) - All kWhs		$ 0.01427	$ 0.00971	$ 0.00910	$ 0.00939	$ 0.00758	$ 0.00774
Summer (June 1 - September 30) - All kWhs		$ 0.01384	$ 0.00941	$ 0.00883	$ 0.00910	$ 0.00734	$ 0.00751
Distribution Charge (per kWh)	$ 0.02125	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%
Average Bill Comparison - Winter (164,000 kWh, 319 kW); Summer (191,000 kWh, 413 kW)							
Winter		$ 24,395.99	$ 23,922.91	$ 24,101.89	$ 24,789.25	$ 24,280.51	$ 24,893.48
% change from prior period			-1.94%	0.75%	2.85%	-2.05%	2.52%
Summer		$ 28,812.18	$ 28,303.48	$ 28,530.54	$ 29,343.67	$ 28,777.74	$ 29,505.90
% change from prior period			-1.77%	0.80%	2.85%	-1.93%	2.53%

General Service - Off Peak ETS Heating - Rate GS ETS

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Energy Rate	$ 0.07418						
Capacity and Transmission and Distribution Charge:							
Winter (October 1 - May 31)		$ 0.01877	$ 0.01956	$ 0.02230	$ 0.02544	$ 0.02765	$ 0.03072
Summer (June 1 - September 30)		$ 0.01820	$ 0.01896	$ 0.02162	$ 0.02467	$ 0.02680	$ 0.02978
CARES	0.52%	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%

Private Area Lighting - Rate Schedule PAL

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Lamp charge	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57	$ 25.57
Capacity and Transmission Charge:							
First 600 kWh	$ 0.04853						
Next 316 kWh	$ 0.06311						
All in excess of 916 kWh's	$ 0.09107						
Winter (October 1 - May 31)							
First 657 kWh		$ 0.04734	$ 0.04334	$ 0.04299	$ 0.04382	$ 0.04176	$ 0.04231
Next 178 kWh		$ 0.06156	$ 0.05636	$ 0.05591	$ 0.05698	$ 0.05431	$ 0.05502
All in excess of 835 kWh		$ 0.08884	$ 0.08133	$ 0.08068	$ 0.08223	$ 0.07837	$ 0.07940
Summer (June 1 - September 30)							
First 657 kWh		$ 0.04590	$ 0.04202	$ 0.04169	$ 0.04249	$ 0.04049	$ 0.04102
Next 178 kWh		$ 0.05969	$ 0.05465	$ 0.05421	$ 0.05525	$ 0.05265	$ 0.05335
All in excess of 835 kWh		$ 0.08613	$ 0.07886	$ 0.07823	$ 0.07973	$ 0.07598	$ 0.07698
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671

Street Lighting

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Lamp charge							
Capacity and Transmission Charge:							
All kWhs (average to get to budgeted amount)	$ 0.10893	$ 0.10523	$ 0.10633	$ 0.10633	$ 0.10633	$ 0.10633	$ 0.10633
Distribution Charge	$ 0.02800	$ 0.04922	$ 0.04963	$ 0.05000	$ 0.05141	$ 0.05037	$ 0.05163
Energy Charge (per kWh)	$ 0.07418	$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
Annual Revenues		$ 62,620	$ 63,606	$ 65,454	$ 68,041	$ 69,164	$ 71,834
% change from prior period			1.6%	2.9%	4.0%	1.6%	3.9%

Electric Vehicle Charging Subscription Rate

Description	Current Rates	Base Rates	2021	2022	2023	2024	2025
Monthly Charge		$ 15.00	$ 15.13	$ 15.24	$ 15.67	$ 15.35	$ 15.73
Energy Charge (per kWh)		$ 0.05406	$ 0.05451	$ 0.05491	$ 0.05647	$ 0.05532	$ 0.05671
CARES	N/A	2.39%	2.42%	2.45%	2.43%	2.53%	2.51%

Concord Municipal Light Plant
Current and Proposed Electric Rates
Schedule 8.4 B Rate Summary by Customer Class and Cost Type -
5-Year Rate Plan - TOUR Rate without Demand Charge

		Proposed Rates												
		Base Year - 2020		2021		2022		2023		2024		2025	
Customer Class	**Current Rates**	**Revenues**	**% Change**	**Revenues**	**% Change**	**Revenues**	**% Change**	**Revenues**	**% Change**	**Revenues**	**% Change**	**Revenues**	**% Change**
Residential Service Rates													
Residential	$ 11,872,987	$ 493,283	-95.8%	$ 484,043	-1.9%	$ 487,763	0.8%	$ 501,656	2.8%	$ 491,623	-2.0%	$ 504,017	2.5%
Controlled Water Heating Rider	661,544	649,317	-1.8%	670,166	3.2%	709,054	5.8%	761,313	7.4%	782,141	2.7%	832,443	6.4%
Residential Time of Use	21,649	11,401,279	52563.9%	11,188,211	-1.9%	11,273,050	0.8%	11,595,103	2.9%	11,362,273	-2.0%	11,649,679	2.5%
Electric Resistance Heat Pump Heating	51,120	51,120	0.0%	54,765	7.1%	59,749	9.1%	65,789	10.1%	69,349	5.4%	75,236	8.5%
Electric Thermal Storage Off Peak	214,277	214,251	0.0%	217,954	1.7%	227,274	4.3%	241,039	6.1%	244,365	1.4%	257,483	5.4%
Residential Assistance Rider	92,751	102,766	10.8%	100,979	-1.7%	103,013	2.0%	108,334	5.2%	106,068	-2.1%	111,004	4.7%
Net Metering with Banking	33,994	34,627	1.9%	34,993	1.1%	35,189	0.6%	36,201	2.9%	35,569	-1.7%	36,557	2.8%
Private Area Lighting	6,702	6,691	-0.2%	6,835	2.1%	7,052	3.2%	7,340	4.1%	7,495	2.1%	7,553	0.8%
											5%		
General Service Rates													
Small General	2,688,917	2,688,869	0.0%	2,311,731	-14.0%	2,328,091	0.7%	2,403,747	3.2%	2,348,993	-2.3%	2,416,709	2.9%
Medium General	4,824,144	4,823,988	0.0%	4,734,016	-1.9%	4,770,028	0.8%	4,906,082	2.9%	4,807,432	-2.0%	4,929,117	2.5%
Large General	8,291,589	8,291,710	0.0%	8,136,304	-1.9%	8,198,835	0.8%	8,432,604	2.9%	8,263,475	-2.0%	8,472,269	2.5%
General Service Net Metering	0												
General Electric Thermal Service Off-Peak	-	-											
Electric Vehicle Subscription	-	1,918		1,934	0.9%	1,949	0.8%	2,004	2.8%	1,965	-1.9%	2,014	2.5%
Street Lighting	62,620	62,620	0.0%	63,606	1.6%	65,454	2.9%	68,041	4.0%	69,164	1.6%	71,834	3.9%
Total Revenues	**$ 28,822,294**	**$ 28,822,439**	**0.0%**	**$ 28,005,538**	**-2.8%**	**$ 28,266,502**	**0.9%**	**$ 29,129,252**	**3.1%**	**$ 28,589,912**	**-1.9%**	**$ 29,365,916**	**2.7%**
Total Revenue Requirement	**$ 27,697,000**	**$ 27,697,000**		**$ 27,928,000**		**$ 28,135,000**		**$ 28,930,000**		**$ 28,341,000**		**$ 29,054,000**	
Difference - Revenues Over/(Under) Cost of Service	**$ 1,125,294**	**$ 1,125,439**		**$ 77,538**		**$ 131,502**		**$ 199,252**		**$ 248,912**		**$ 311,916**	
% Different - Revenues Over/(Under) Cost of Service	**4.1%**	**4.1%**		**0.3%**		**0.5%**		**0.7%**		**0.9%**		**1.1%**	

Cost Type	Current Rates	Base Year - 2020 Revenues	Base Year - 2020 % Change	2021 Revenues	2021 % Change	2022 Revenues	2022 % Change	2023 Revenues	2023 % Change	2024 Revenues	2024 % Change	2025 Revenues	2025 % Change
Meter charges	$ 1,354,533	$ 1,724,116	27.3%	$ 1,797,797	4.3%	$ 1,882,916	4.7%	$ 1,972,770	4.8%	$ 2,065,840	4.7%	$ 2,162,735	4.7%
Demand charges (kW)	1,843,026	2,222,666	20.6%	2,293,010	3.2%	2,363,353	3.1%	2,433,697	3.0%	2,504,041	2.9%	2,574,385	2.8%
Total Fixed Charges	3,197,558	3,946,782	23.4%	4,090,806	3.6%	4,246,269	3.8%	4,406,467	3.8%	4,569,881	3.7%	4,737,120	3.7%
Energy:													
Capacity and transmission	8,749,488	6,672,866	-23.7%	5,570,525	-16.5%	5,522,999	-0.9%	5,690,108	3.0%	5,350,460	-6.0%	5,476,502	2.4%
Distribution	4,418,842	8,487,085	92.1%	8,557,935	0.8%	8,621,294	0.7%	8,864,927	2.8%	8,684,510	-2.0%	8,903,090	2.5%
Energy	12,739,124	9,490,233	-25.5%	9,572,603	0.9%	9,648,132	0.8%	9,925,107	2.9%	9,727,936	-2.0%	9,976,813	2.6%
Total Energy	25,907,454	24,650,184	-4.9%	23,701,063	-3.9%	23,792,425	0.4%	24,480,142	2.9%	23,762,907	-2.9%	24,356,406	2.5%
Discounts:													
Farm discount	(2,000)	(2,000)	0.0%	(2,000)	0.0%	(2,000)	0.0%	(2,000)	0.0%	(2,000)	0.0%	(2,000)	0.0%
Residential assistance discount	(67,800)	(67,800)	0.0%	(67,800)	0.0%	(67,800)	0.0%	(67,800)	0.0%	(67,800)	0.0%	(67,800)	0.0%
Water heater discount	(56,863)	(75,180)	32.2%	(75,180)	0.0%	(75,180)	0.0%	(75,180)	0.0%	(75,180)	0.0%	(75,180)	0.0%
PASNY	(306,774)	(312,399)	1.8%	(312,399)	0.0%	(312,399)	0.0%	(312,399)	0.0%	(312,399)	0.0%	(312,399)	0.0%
Total Discounts	(433,437)	(457,379)	5.5%	(457,379)	0.0%	(457,379)	0.0%	(457,379)	0.0%	(457,379)	0.0%	(457,379)	0.0%
Electric vehicle monthly subscription		1,918		1,934	0.9%	1,949	0.8%	2,004	2.8%	1,965	-1.9%	2,014	2.5%
CARES charge	150,720	680,935	351.8%	669,114	-1.7%	683,238	2.1%	698,018	2.2%	712,538	2.1%	727,756	2.1%
Total Revenues	**$ 28,822,295**	**$ 28,822,439**	**0.0%**	**$ 28,005,538**	**-2.8%**	**$ 28,266,502**	**0.9%**	**$ 29,129,252**	**3.1%**	**$ 28,589,912**	**-1.9%**	**$ 29,365,916**	**2.7%**

Appendix C – Rate Scenario 3: Residential Opt-out Time of Use Rate Framework with Inclining Block Rates

Scenario 3 includes a residential opt-out time of use rate with a forecasted opt-out percentage of 4%, two rate tiers with winter and summer rates and a customer demand charge. The methodology is discussed at Opt-Out Residential Time of Use Rate.

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Residential (R-1)

Description	Current Rate	Proposed Rate
Meter Charge	$ 12.00	$ 16.00
Capacity and Transmission Charge:		
First 600 kWh	$ 0.04853	
Next 316 kWh	$ 0.06311	
All in excess of 916 kWh's	$ 0.09107	
Winter (October 1 - May 31)		
First 657 kWh		$ 0.04151
Next 178 kWh		$ 0.05398
All in excess of 835 kWh		$ 0.07790
Summer (June 1 - September 30)		
First 657 kWh		$ 0.03391
Next 178 kWh		$ 0.04410
All in excess of 835 kWh		$ 0.06363
Distribution Charge	$ 0.02800	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)
Farm Credit	-10%	-10%
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -

Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Controlled Water Heating Credit Rider

Description	Current Rate	Proposed Rate
Meter Charge	$ 12.00	$ 16.00
Capacity and Transmission Charge:		
First 600 kWh	$ 0.04853	
Next 316 kWh	$ 0.06311	
All in excess of 916 kWh's	$ 0.09107	
Total Capacity and Transmission Charge:		
Winter (October 1 - May 31)		
First 869 kWh		$ 0.06329
Next 232 kWh		$ 0.08230
All in excess of 1,101 kWh		$ 0.11876
Summer (June 1 - September 30)		
First 802 kWh		$ 0.05170
Next 169 kWh		$ 0.06723
All in excess of 971 kWh		$ 0.09702
Distribution Charge	$ 0.02800	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551
Controlled Water Heating Credit	$ (14.87)	
Winter (October 1 - May 31)		$ (24.47)
Summer (June 1 - September 30)		$ (21.89)
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Residential Time of Use - Rate R-1 Tour

Description	Current Rate	Proposed Rate
Meter Charge	$ 12.00	$ 16.00
Demand Charge per kW	N/A	$ 6.00
On-peak (all kWhs)	$ 0.14683	
Off-peak (all kWhs)	$ 0.03088	
Winter (October 1 - May 31)		
Up to 657 kWhs:		
On-peak (4 PM - 9 PM)		$ 0.15133
Off-peak (9 PM - 4 PM and weekends, holidays)		$ 0.04729
Over 657 kWhs:		
On-peak (4 PM - 9 PM)		$ 0.18160
Off-peak (9 PM - 4 PM and weekends, holidays)		$ 0.05675
Summer (June 1 - September 30)		
Up to 657 kWhs:		
On-peak (12 noon to 10 PM)		$ 0.12611
Off-peak (10 PM to 12 noon)		$ 0.03941
Over 657 kWhs:		
On-peak (12 noon to 10 PM)		$ 0.15133
Off-peak (10 PM to 12 noon)		$ 0.04729
Energy Charge (all kWhs)	$ 0.07418	$ 0.05551
PASNY (applied to first 75 kWh)	$ (0.05)	$ (0.05)
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Residential Service - Off Peak - Electric Thermal Storage (ETS) - Rate R-3

Description	Current Rate	Proposed Rate
All kWh's	$ 0.07418	
Meter Charge		$ -
Capacity and Transmission and Distribution Charge		
Winter (October 1 - May 31)		
All kWhs:		
On-peak (6 AM - 10 PM)		$ 0.16085
Off-peak (10PM - 6 AM)		$ 0.03383
Summer (June 1 - September 30)		
All kWhs:		
On-peak (6 AM - 10 PM)		$ 0.13404
Off-peak (10PM - 6 AM)		$ 0.02819
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Residential Service - Rate Assistance Rider

Description		Current Rate		Proposed Rate
Meter Charge	$	12.00	$	16.00
Capacity and Transmission Charge:				
First 600 kWh	$	0.04853		
Next 316 kWh	$	0.06311		
All in excess of 916 kWh's	$	0.09107		
Winter (October 1 - May 31)				
First 657 kWh			$	0.04151
Next 178 kWh			$	0.05398
All in excess of 835 kWh			$	0.07790
Summer (June 1 - September 30)				
First 411 kWh			$	0.03391
Next 115 kWh			$	0.04410
All in excess of 527 kWh's			$	0.06363
Distribution Charge	$	0.02800	$	0.04702
Energy Charge (per kWh)	$	0.07418	$	0.05551
PASNY (applied to first 75 kWh)	$	-	$	(0.05)
CARES		0.52%		2.32%
Rate Assistance Credit (based on first 600 kWh)	$	(0.10000)	$	(0.09500)

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Residential Service Rider - Net Metering with Banking Rate

Description	Current Rate	Proposed Rate
Monthly Distribution Charge:		
Installed generation capacity equal or greater than and less than:		
Greater than 2 kW but less than 4 kW AC	$ 3.60	$ 3.60
Greater than 4 kW but less than 7 kW AC	$ 6.60	$ 6.60
Greater than 7 kW but less than 10 kW AC	$ 10.20	$ 10.20
Greater than 10 kW but less than 13 kW AC	$ 13.80	$ 13.80
Greater than 13 kW but less than 16 kW AC	$ 17.40	$ 17.40
Greater than 16 kW but less than 19 kW AC	$ 21.00	$ 21.00
Greater than 19 kW but less than 22 kW AC	$ 24.60	$ 24.60
Greater than 22 kW but less than 25 kW AC	$ 28.20	$ 28.20
Greater than 25 kW but less than 28 kW AC	$ 31.80	$ 31.80
Greater than 28 kW but less than 31 kW AC	$ 35.40	$ 35.40
Greater than 31 kW but less than 34 kW AC	$ 39.00	$ 39.00
Greater than 34 kW but less than 37 kW AC	$ 42.20	$ 42.20
Greater than 37 kW but less than 40 kW AC	$ 46.20	$ 46.20
Greater than 40 kW but less than 46 kW AC	$ 53.40	$ 53.40
Greater than 46 kW but less than 58 kW AC	$ 67.80	$ 67.80
Greater than 58 kW but less than 82 kW AC	$ 96.60	$ 96.60
Greater than 82 kW but less than 130 kW AC	$ 154.20	$ 154.20
Greater than 130 kW but less than 167 kW AC	$ 198.60	$ 198.60
Total Distribution Charges		
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Small General Service - Rate G-1

Description	Current Rate	Proposed Rate
Meter Charge	$ 12.00	$ 16.00
Capacity and Transmission Charge (per kWh)	$ 0.08185	
Winter (October 1 - May 31)		
All kWhs		$ 0.08367
Summer (June 1 - September 30)		
All kWhs		$ 0.06835
Distribution Charge (per kWh)	$ 0.03228	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Medium General Service - Rate G-2

Description	Current Rate	Proposed Rate
Meter Charge (Single Phase)	$ 44.00	$ 50.00
Meter Charge (Three Phase)	$ 60.00	$ 68.00
Demand Rate (per kW)	$ 10.85	$ 12.00
Capacity and Transmission Charge (per kWh)	$ 0.03507	
Winter (October 1 - May 31) - All kWhs		$ 0.02858
Summer (June 1 - September 30) - All kWhs		$ 0.02335
Distribution Charge (per kWh)	$ 0.02571	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551
CARES	0.52%	2.32%

Large General Service - Rate G-3

Description	Current Rate	Proposed Rate
Meter Charge (Single or Three Phase)	$ 380.00	$ 400.00
Demand Rate (per kW)	$ 9.97	$ 14.00
Capacity and Transmission Charge (per kWh)	$ 0.03094	
Winter (October 1 - May 31) - All kWhs		$ 0.01376
Summer (June 1 - September 30) - All kWhs		$ 0.01124
Distribution Charge (per kWh)	$ 0.02125	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551
CARES	0.52%	2.32%

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

General Service - Off Peak ETS Heating - Rate GS ETS

Description	Current Rate	Proposed Rate
Energy Rate	$ 0.07418	
Capacity and Transmission and Distribution Charge:		
Winter (October 1 - May 31)		
On-peak (6 AM - 10 PM)		$ 0.16085
Off-peak (10PM - 6 AM)		$ 0.03383
Summer (June 1 - September 30)		
On-peak (6 AM - 10 PM)		$ 0.13404
Off-peak (10PM - 6 AM)		$ 0.02819
CARES	0.52%	2.32%

Private Area Lighting - Rate Schedule PAL

Description	Current Rate	Proposed Rate
Lamp charge	$ 25.57	$ 25.57
Capacity and Transmission Charge:		
First 600 kWh	$ 0.04853	
Next 316 kWh	$ 0.06311	
All in excess of 916 kWh's	$ 0.09107	
Winter (October 1 - May 31)		
First 657 kWh		$ 0.04151
Next 178 kWh		$ 0.05398
All in excess of 835 kWh		$ 0.07790
Summer (June 1 - September 30)		
First 657 kWh		$ 0.03391
Next 178 kWh		$ 0.04410
All in excess of 835 kWh		$ 0.06363
Distribution Charge	$ 0.02800	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551

Concord Municipal Light Plant

Current and Proposed Electric Rates

Schedule 8.3 C Current and Proposed Rates -
Including Time-of-Use Opt Out Rate with Inclining Blocks and Demand Charge

Street Lighting

Description	Current Rate	Proposed Rate
Lamp charge	$ 25.57	$ 25.57
Capacity and Transmission Charge:		
All kWhs (average to get to budgeted amount)	$ 0.10893	$ 0.10858
Distribution Charge	$ 0.02800	$ 0.04702
Energy Charge (per kWh)	$ 0.07418	$ 0.05551

Electric Vehcle Charging Subscription Rate

Description	Current Rate	Proposed Rate
Monthly Charge	$ -	$ 24.00
CARES	N/A	2.32%