Are Consumers Benefiting from Competition?

An Analysis of the Individual Residential Electric Supply Market in Massachusetts



MASSACHUSETTS ATTORNEY GENERAL'S OFFICE COMMONWEALTH OF MASSACHUSETTS AUGUST 2019 UPDATE Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts

> A Report by the Massachusetts Attorney General's Office Prepared by Susan M. Baldwin August 2019 Update

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Glossary of Terms

Basic service: For those consumers who do not receive their electric supply from a competitive supplier, their electric company purchases their electricity on their behalf, providing them supply services that are known as "basic service."

Electric company (this is also referred to as an "electric distribution company" or "EDC"): In Massachusetts the electric companies are Western Massachusetts Electric Company d/b/a Eversource Energy ("WMECo"); NSTAR Electric Company d/b/a Eversource Energy ("NSTAR"); Massachusetts Electric Company d/b/a National Grid ("MECo"); Nantucket Electric Company d/b/a National Grid ("MECo"); Nantucket Company d/b/a National Grid ("Nantucket"); and Fitchburg Gas and Electric Light Company d/b/a Unitil ("Fitchburg"). See Appendix 1A for a map of the Massachusetts electric companies' non-overlapping service territories.

Individual residential electric supply market: In this report, we use this term to describe the market in which residential consumers may choose to purchase electric service directly from a company other than their electric company.

kWh: A kilowatt hour describes energy used over a period of time, specifically, 1,000 watts per hour.

Low-income: In this report, the term "low-income" refers to consumers that receive subsidized electricity rates. In order to qualify for such rate, a consumer's annual income may not exceed 60 percent of the median income in Massachusetts. For a family of four, this would translate to a household income of \$68,289 or less in fiscal year 2019.¹ The report's analysis of low-income consumers does not encompass those consumers who may be eligible for subsidized rates but who have not enrolled in the program for subsidized rates.

Municipal aggregation and municipal aggregation suppliers: Municipal aggregations are programs, created pursuant to G.L. c. 164, § 134, where a municipality or a group of municipalities aggregate the electrical load of participating residents and businesses in the respective community. This report refers to competitive suppliers that serve municipal aggregations as "municipal aggregation suppliers." Consumers residing in towns and cities with municipal aggregations programs also may choose to be served directly by a competitive supplier other than the one that serves the municipal aggregation.

Municipal light plants: A municipal light plant is a municipality-owned distribution company responsible for the transmission and supply of electricity to the residents and businesses in the municipality.

Participation rate: As used in this report, the participation rate is the ratio of the number of consumers participating in the individual residential electric supply market to the total number of electric consumers. The total number of electric consumers includes those purchasing electricity from any of these three sources: competitive suppliers, electric companies, and municipal aggregations. Consumers served by municipal light plants are not included in the analyses contained in this report.

Premium: This term is used in the report to denote the difference between the average residential competitive supply rate and the average basic service rate. It could also be referred to as a "mark-up."

Renewable Energy Certificate: The Massachusetts Renewable Energy Portfolio Standard ("RPS") requires retail electricity suppliers (both regulated distribution utilities and competitive suppliers) to obtain a percentage of the electricity they serve to their customers from qualifying renewable energy facilities. Suppliers meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified renewable energy certificates ("RECs") that are created, traded, and tracked at the New England Power Pool ("NEPOOL").

Restructuring: In 1997, the Massachusetts Legislature restructured the electricity industry, creating a competitive market for the supply of electricity ("Restructuring"). The purpose of Restructuring was to reduce electricity costs through the new competitive market. In restructuring the electricity industry, the Legislature recognized that "electricity service is essential to the health and well-being of all residents of the commonwealth." St. 1997, c. 164, § 1(a).

Executive Summary

In March of 2018, the Massachusetts Attorney General's Office ("AGO") issued the first comprehensive analysis of the individual residential electric supply market² in Massachusetts ("*Massachusetts 2018 Report*).³ Analyzing data from July 2015 through June 2017, that report specifically undertook to answer the questions whether (1) residential consumers in Massachusetts pay more or less for their electric supply when they buy it directly from a competitive supplier rather than through their electric company (such as National Grid, Eversource, and Unitil); and (2) if so, what remedies might be warranted.⁴

The Massachusetts 2018 Report found that, between July 2015 and June 2017, Massachusetts consumers paid \$176.8 million more for individual residential electric supply than they would have paid for basic service from their utilities.

This new report, also commissioned by the AGO ("*Massachusetts 2019 Update*"), updates the original report to include new data for the one-year period beginning in July 2017 and ending in June 2018. Using the same types of data and analytical methodology, the *Massachusetts 2019 Update* shows that Massachusetts consumers in the individual residential electric supply market paid **\$253 million** more than they would have paid if they had received electric supply from their electric company during the three-year period from July 2015 to June 2018. As Table ES.1 below shows, the net consumer loss continues to be substantial.

Table ES.1 Net Consumer Loss from Participation in the Individual ResidentialElectric Supply Market Compared to the Electric Company's Basic Service

				Three-Year
	July 2015 -	July 2016 -	July 2017 -	Total Net
	June 2016	June 2017	June 2018	Loss
Total Net				
Consumer Loss				
(millions)	\$65.4 m	\$111.4 m	\$76.2 m	\$253.0 m

As discussed in Section 2.2, *infra*, the decline in the annual net consumer loss between the second and third years can be attributed to several factors, including (1) decline in average usage; and (2) generally higher basic service rates.

Low-income consumers still make up a disproportionately large share of the individual residential electric supply market. Figure ES.1, below, shows that low-income households continue to participate in the individual residential electric supply market at approximately twice the rate of non-low-income households.⁵



Figure ES.1 Low-Income and Non-Low-Income Consumer Participation Rates

My analysis also shows that these low-income consumers pay especially high prices in the individual residential electric supply market. Figure ES.2, below, shows that, assuming an average monthly usage of 600 kWh across both income groups,⁶ the annual consumer loss for low-income participants is \$192, which is 25 percent higher than the annual consumer loss of \$153 for non-low-income participants.





Additionally, I analyzed the impact of the individual residential electric supply market on residential consumers by zip code. My analysis shows that, in June of 2018, in 99 percent of the Commonwealth's towns and cities that were open to competition, residents who had signed up directly with a supplier experienced net consumer loss. For example, Worcester residents collectively experienced \$259,315 in net losses for June 2018, more than any other town or city in the Commonwealth.

I also analyzed the impact of the individual residential electric supply market based on the demographics of the Commonwealth's various communities. My analysis shows that competitive suppliers *charged higher rates* to residents in communities with the following demographics:

- Communities with low median incomes; and
- Communities with high percentages of minority households.⁸

Further, regression analysis of zip code-level data for the month of June 2018 provides findings—for a second year in a row—that are consistent with disparate targeting of low-income consumers for enrollment to competitive supply accounts. Put simply, a consumer who resides in a low-income community is more likely to participate in the individual residential electric supply market, even if that particular consumer is not a low-income consumer herself.

Conclusion

The *Massachusetts 2019 Update* demonstrates that individual residential consumers have suffered large financial losses by directly signing contracts for their electric supply with individual residential electric suppliers. The size of the harm to consumers, the significant loss in all three years of the study, and the continuing loss from one year to the next, strongly suggest that consumer harm will continue.

The scope of this report is limited to the individual residential electric supply marketplace. I do not analyze the commercial and industrial market, where, as a general rule, sophisticated consumers are often expert at purchasing electric supply for their businesses (and have greater negotiating power than an individual residential consumer) and have therefore benefited from competition in the electric supply market. I also have not analyzed the Commonwealth's various municipal aggregations.

Introduction

The AGO has commissioned the *Massachusetts 2019 Update* as part of the AGO's ongoing effort to provide greater transparency regarding the operation of the individual residential electric supply market in Massachusetts.

This Massachusetts 2019 Update is organized as follows:

- In Section 1, I describe my methodology for computing the consumer loss associated with participation in the individual residential electric supply market. My methodology is unchanged from the *Massachusetts 2018 Report*.
- In Section 2, I discuss my findings relative to the entire residential class (with the exception of households participating in a municipal aggregation and those households served by municipal light plants).
- In Section 3, I discuss the experience of low-income households in the individual residential electric supply market, including analyses regarding suppliers' possible targeting of low-income populations. I also discuss analyses regarding suppliers' presence among the Commonwealth's communities, including analyses regarding suppliers' possible targeting of vulnerable populations.
- Appendices provide additional information and analyses. I have updated many, but not all of, the appendices included in the *Massachusetts 2018 Report*.

1. Data examined

The three electric companies that serve Massachusetts provided the AGO with detailed supplierspecific data separately for three consecutive twelve-month time periods: July 2015 – June 2016; July 2016 – June 2017; and July 2017 – June 2018. These data include monthly information specific to each of the five service territories of Massachusetts' electric companies:

- Western Massachusetts Electric Company d/b/a Eversource Energy ("WMECo");
- NSTAR Electric Company d/b/a Eversource Energy ("NSTAR");
- Massachusetts Electric Company d/b/a National Grid ("MECo");
- Nantucket Electric Company d/b/a National Grid ("Nantucket"); and
- Fitchburg Gas and Electric Light Company d/b/a Unitil ("Fitchburg").⁹

In the course of analyzing the data from the electric companies, my principal question was whether or not residential consumers are saving money by directly purchasing their electric supply from competitive suppliers.¹⁰ I provide an update to this analysis in Section 2 of my report.

Based on the electric companies' datasets, I was able to deduce a number of statistics concerning the size and scope of the Massachusetts individual residential electric supply market. My review of the updated supplier billing data (July 2017 – June 2018) shows that the number of participants has changed negligibly from the prior 12-month period:¹¹

- Suppliers, in the aggregate, billed Massachusetts consumers more than \$465 million.
- Suppliers issued 5,916,177 monthly bills to Massachusetts residential consumers during a twelve-month period, suggesting that suppliers serve an average of 493,015 households in Massachusetts, of which 98,902 are low-income households.¹²
- Low-income households make up 20 percent of the individual residential electric supply market yet make up only 12 percent of the market for all electric consumers.¹³
- Over one-third (35 percent) of *all* low-income consumers take service from a competitive electric supplier.
- More than 60 different suppliers are active in the Massachusetts market.¹⁴
- The average monthly usage for all households that participated in the individual residential electric supply market during the study period was 579 kWh.¹⁵

Figure 1.1, Figure 1.2, and Figure 1.3, below, show the participation rates separately for all consumers, low-income consumers, and non-low-income consumers, respectively. Figure 1.1 shows that approximately 493,000 consumers (20 percent of all residential consumers) participate in the individual residential electric supply market in Massachusetts. The average

monthly numbers of consumers shown in these three figures correspond with the average of twelve months of data for the period spanning July 2017 through June 2018.

Figure 1.1 Average Monthly Numbers of Households Purchasing from Competitive Suppliers, Electric Companies, and Municipal Aggregations



Figure 1.2 and Figure 1.3 show comparable information separately for low-income consumers (as defined by receiving subsidized electricity rates) and non-low-income consumers. Low-income consumers and non-low-income consumers have participation rates of 35 percent and 18 percent, respectively.

Figure 1.2 Average Numbers of Low-Income Households Purchasing from Competitive Suppliers, Electric Companies, and Municipal Aggregation



Figure 1.3 Average Numbers of Non-Low-Income Households Purchasing from Competitive Suppliers, Electric Companies, and Municipal Aggregation



The electric companies also provided supplier-specific data disaggregated to the zip code level for the most recent month of the third twelve-month study period (June 2018), as well as electric company-specific counts of bills for both low-income and all other residential consumers at the zip code level.¹⁶ I used these geographically granular data to examine competitive suppliers' presence among the Commonwealth's communities and to compare participation in the individual residential electric supply market between low-income consumers and all other

residential consumers. I discuss my findings based on my zip code analysis in Section 3, below, and provide more detailed findings in the corresponding appendices. I found patterns of apparent targeting of economically disadvantaged communities and households by suppliers consistent with those shown by my analysis of corresponding zip code data for June 2016 and June 2017.

2. Are residential consumers benefiting from participation in the electric supply market in Massachusetts?

2.1 Introduction

In this section, I summarize my findings about the price of participation in the individual residential electric supply market.

For the purposes of this Section 2, I analyzed suppliers' billing data in order to:

- (1) Compute the total annual consumer gain or loss associated with the participation by households in the individual residential electric supply market in Massachusetts;
- (2) Analyze average consumer loss, when expressed on a per-household basis; and
- (3) Analyze the range of average rates charged by suppliers.

2.2 What is the annual consumer gain or loss associated with households' participation in the individual residential electric supply market?

Massachusetts residential electricity consumers who took service directly from a competitive supplier paid a total of \$253 million more than they would have paid if they had received basic service from their electric company over the course of the three study periods. Specifically, consumers overpaid by \$65.4 million during the 2015–2016 study period, by \$111.4 million during the 2016–2017 study period, and \$76.2 million during the 2017–2018 study period. My analysis shows that substantial consumer losses continue to characterize this market.

One of the reasons for the decline in annual net consumer loss between the second and third study years was the decline in average usage. In the twelve months spanning July 2016 to June 2017, average monthly usage among low-income households participating in the individual residential electric supply market was 552 kWh; this average usage declined to 518 kWh in the most recent time period. Similarly, the average monthly usage of 621 kWh among non-low-income households in the 2016–2017 time period declined to 595 kWh in the most recent time period. This decline in average demand for electricity explains approximately \$3.3 million (less than 10 percent) of the decline in annual net consumer loss.¹⁷ Another factor to consider when examining the decline in annual net consumer loss is the basic service rates. During the most recent time period, basic service rates increased across the board, narrowing the gap between basic service rates and competitive supply rates.

These overall losses translate into an average annual household loss of \$134 during the 2015–2016 study period, an average household loss of \$226 during the 2016–2017 study period, and an average household loss of \$155 during the 2017–2018 study period.

The size of the individual residential electric supply market has been relatively stable during these three years, while the weighted average basic service rate provided through the electric companies has varied significantly. I summarize these findings in Table 2.1, below.

Table 2.1 Overview of Individual R	Residential E	lectric Supply I	Market – '	Fhree-Year
Comparison				

	Year 1	Year 2	Year 3
	July 2015 -	July 2016 -	July 2017 -
Attribute of Market	June 2016	June 2017	June 2018
Total Bills Rendered	5,860,037	5,920,193	5,916,177
Average Number of Customers Per Month	488,336	493,275	493,015
Total Supply (kWh)	3,581,962,995	3,593,084,986	3,426,659,398
Total Charges	\$ 450,704,148	\$ 437,948,033	\$ 465,139,973
Weighted Average Competitive Supplier Rate	\$ 0.12583	\$ 0.12189	\$ 0.13574
Weighted Average Electric Company Rate	\$ 0.10757	\$ 0.09047	\$ 0.11350
Average Premium to Participate (Per kWh - All Incomes)	\$ 0.01826	\$ 0.03141	\$ 0.02224
Average Annual Usage Per Household (kWh)	7,335	7,284	6,950
Statewide Total Net Consumer Loss	\$ 65,406,644	\$ 111,400,843	\$ 76,208,703
Statewide Total Net Consumer Loss - Low-Income	\$ 17,400,000	\$ 23,562,438	\$ 16,375,489
Average Net Consumer Loss Per Household	\$ 134	\$ 226	\$ 155
Average Net Consumer Loss Per Household - Low-Income	\$ 145	\$ 231	\$ 166

Figure 2.1, below, shows that competitive supply consumers continued to pay a premium during the twelve months spanning July 2017 through June 2018 (consistent with the pattern shown in the *Massachusetts 2018 Report* for the prior two 12-month periods). That is, consumers continued to pay a higher average rate per kWh to competitive suppliers than the average rate per kWh they would have paid had they purchased basic service through their electric company.¹⁸ Moreover, Figure 2.1 shows that low-income participants in the individual residential electric supply market consistently pay more for electricity than do other participants in the individual residential electric supply market. On average, low-income consumers paid a premium of \$0.02665 per kWh, approximately a half-penny more than the \$0.02128 per kWh premium paid by non-low-income consumers of competitive suppliers.

Figure 2.1 Gap Between Average Rate Paid to Competitive Suppliers and Rate Had Participants Purchased from Electric Companies (July 2017 – June 2018)



My methodology remains the same as described on pages 8–9 of the *Massachusetts 2018 Report*, and Appendix 2B of that report. Appendix 2A-2019 Update provides the basic service rates in effect during the study period July 2017 – June 2018. Appendix 2B-2019 Update shows, separately by municipality for all households, the average number of households participating in the individual residential electric supply market, the average per-household net consumer loss, and the aggregate consumer loss for June 2018. Appendix 2C-2019 Update shows the same information for low-income households. In Section 3, below, Table 3.2 shows the ten municipalities and neighborhoods with the highest aggregate net consumer loss in June 2018 (the most recent month of the study period).

2.3 Minority of suppliers who provided limited consumer gains

Approximately one in four bills paid by consumers of all incomes reflect competitive supply rates that would provide savings relative to the basic service rates charged through the electric company. As seen in further detail in Appendix 2D-2019 Update, during the course of the twelve-month period between July 2017 and June 2018, suppliers provided savings of \$14,941,054. Those savings were offset by losses of \$91,149,757 during the same time period, for a total net loss of \$76,208,703.

A minority of the suppliers—whose customers represent approximately 14 percent of the total supplier customer base—provided *net savings* to their customers, collectively \$2,745,213 in net savings. Meanwhile, a majority of suppliers—whose customers represent approximately 86 percent of the total supplier customer base—provided *net losses* to their customers, collectively \$78,953,916 in net losses.

Moreover, the net savings associated with electricity supplied by the minority of suppliers was small. The average gain per consumer, expressed on an annual basis, was \$40.72, and the average rate paid by this group of consumers was \$0.1091 per kWh. By comparison, the average loss per consumer (for the approximate 86 percent of the total supplier customer base who experienced net losses), expressed on an annual basis, was \$185.51, and the average rate paid by this group of consumers was \$0.1397 per kWh.

2.4 Consumer loss examined at the supplier level

I computed net consumer loss and average premiums separately by supplier. Because some may consider this information competitively sensitive, I provide a summary of my analysis without reference to specific suppliers' names. I reviewed data for a total of 64 suppliers.

Table 2.2, below, shows the ten suppliers¹⁹ (with their identities withheld) who charged the highest average premium over basic service during the 2017–2018 study period.²⁰ In short, Table 2.2 shows which suppliers charged the most, relative to the corresponding basic service rates charged through the electric companies, for electric supply on average during the 2017–2018 study period. Table 2.2 shows that one supplier charged, on average, more than \$0.05 per kWh more than the corresponding electric company rate, and eight suppliers charged, on average, greater than \$0.04 per kWh *more* (the premiums paid by any individual consumer could be greatly higher than that amount). Because electric company rates vary throughout the Commonwealth, I rank suppliers based on the premiums they charge relative to the electric companies' rates rather than ranking them based on the suppliers' rates. Four suppliers that were in the top ten ranking for premiums during the 2016–2017 study period are no longer in the top ten. Four other suppliers are in the "top-ten-premium" for the first time.

					Loss	Gain	Net		
	Average		Average	Share of	with High	with Low	Consumer	Share of	Share of
Supplier ID	Rate	# of Bills	Premium	Accounts	Prices	Prices	Loss	Loss	Gain
Supplier #1	\$ 0.1713	43,710	\$0.0577	0.74%	\$ 1,508,006	\$ (41,425)	\$ 1,466,581	1.65%	0.28%
Supplier #25	\$ 0.1682	180,743	\$0.0496	3.06%	\$ 3,777,207	\$ (35,287)	\$ 3,741,920	4.14%	0.24%
Supplier #24	\$ 0.1609	69,243	\$0.0480	1.17%	\$ 1,823,024	\$ (51,110)	\$ 1,771,914	2.00%	0.34%
Supplier #47	\$ 0.1611	165,711	\$0.0469	2.80%	\$ 4,039,011	\$ (436,701)	\$ 3,602,309	4.43%	2.92%
Supplier #18	\$ 0.1536	89,495	\$0.0462	1.51%	\$ 2,645,067	\$ (350,301)	\$ 2,294,767	2.90%	2.34%
Supplier #12	\$ 0.1561	321,469	\$0.0432	5.43%	\$ 6,214,683	\$ (8,143)	\$ 6,206,540	6.82%	0.05%
Supplier #57	\$ 0.1705	779	\$0.0432	0.01%	\$ 13,304	\$ (408)	\$ 12,897	0.01%	0.00%
Supplier #51	\$ 0.1609	22,899	\$0.0421	0.39%	\$ 443,924	\$ (14,160)	\$ 429,765	0.49%	0.09%
Supplier #39	\$ 0.1552	30,086	\$0.0419	0.51%	\$ 651,985	\$ (25,908)	\$ 626,077	0.72%	0.17%
Supplier #46	\$ 0.1451	23,935	\$0.0419	0.40%	\$ 487,435	\$ (15,710)	\$ 471,725	0.53%	0.11%
Total associate	d with top 10	948,070		16%	\$21,603,646	\$ (979,151)	\$ 20,624,495	24%	7%

 Table 2.2. Ten Suppliers with the Highest Average Premium – All Households (ranked by premium)

Table 2.3, below, shows the ten suppliers for which electric companies rendered the most bills. These ten suppliers account for 60 percent of the bills rendered in the individual residential electric supply market. The bills rendered on behalf of these ten suppliers included instances of prices above electric company rates (resulting in \$55.9 million in loss) and instances of prices below electric company rates (resulting in gains of \$8.6 million).

Table 2.3. Ten Suppliers with the Highest Number of Bills – All Households (ranked by number of bills)

						Loss	Gain	Not		
	А	verage		Average	Share of	with High	with Low	Consumer	Share of	Share of
Supplier ID		Rate	# of Bills	Premium	Accounts	Prices	Prices	Loss	Loss	Gain
Supplier #37	\$	0.1526	527,966	\$ 0.0391	8.92%	\$12,702,026	\$ (337,538)	\$ 12,364,487	13.94%	2.26%
Supplier #42	\$	0.1307	509,664	\$ 0.0159	8.61%	\$ 6,160,958	\$ (1,208,575)	\$ 4,952,383	6.76%	8.09%
Supplier #41	\$	0.1424	467,358	\$ 0.0408	7.90%	\$11,157,908	\$ (557,813)	\$ 10,600,096	12.24%	3.73%
Supplier #32	\$	0.1349	460,600	\$ 0.0221	7.79%	\$ 7,148,611	\$ (566,557)	\$ 6,582,054	7.84%	3.79%
Supplier #34	\$	0.1111	378,558	\$(0.0028)	6.40%	\$ 1,680,567	\$ (2,414,823)	\$ (734,256)	1.84%	16.16%
Supplier #12	\$	0.1561	321,469	\$ 0.0432	5.43%	\$ 6,214,683	\$ (8,143)	\$ 6,206,540	6.82%	0.05%
Supplier #23	\$	0.1284	235,110	\$ 0.0142	3.97%	\$ 2,224,276	\$ (435,418)	\$ 1,788,858	2.44%	2.91%
Supplier #6	\$	0.1472	229,817	\$ 0.0331	3.88%	\$ 4,762,748	\$ (492,092)	\$ 4,270,656	5.23%	3.29%
Supplier #9	\$	0.1089	219,505	\$(0.0072)	3.71%	\$ 1,302,681	\$ (2,350,885)	\$ (1,048,205)	1.43%	15.73%
Supplier #43	\$	0.1284	207,940	\$ 0.0197	3.51%	\$ 2,532,468	\$ (255,707)	\$ 2,276,761	2.78%	1.71%
Total associate	d wi	th top 10	3,557,987		60%	\$55,886,925	\$ (8,627,552)	\$ 47,259,374	61%	58%

Table 2.4, below, shows the ten suppliers responsible for the largest absolute consumer loss in Massachusetts. In aggregate, they account for \$61 million of the bills attributable to overpayment and \$4 million of the bills attributable to underpayment, with Supplier #37 accountable for the greatest portion of consumer loss.

						Loss	Gain			
						Associated	Associated	Net		
	Α	verage		Average	Share of	with High	with Low	Consumer	Share of	Share of
Supplier ID		Rate	# of Bills	Premium	Accounts	Prices	Prices	Loss	Loss	Gain
Supplier #37	\$	0.1526	527,966	\$ 0.0391	8.92%	\$12,702,026	\$ (337,538)	\$ 12,364,487	13.94%	2.26%
Supplier #41	\$	0.1424	467,358	\$ 0.0408	7.90%	\$11,157,908	\$ (557,813)	\$ 10,600,096	12.24%	3.73%
Supplier #32	\$	0.1349	460,600	\$ 0.0221	7.79%	\$ 7,148,611	\$ (566,557)	\$ 6,582,054	7.84%	3.79%
Supplier #12	\$	0.1561	321,469	\$ 0.0432	5.43%	\$ 6,214,683	\$ (8,143)	\$ 6,206,540	6.82%	0.05%
Supplier #42	\$	0.1307	509,664	\$ 0.0159	8.61%	\$ 6,160,958	\$ (1,208,575)	\$ 4,952,383	6.76%	8.09%
Supplier #6	\$	0.1472	229,817	\$ 0.0331	3.88%	\$ 4,762,748	\$ (492,092)	\$ 4,270,656	5.23%	3.29%
Supplier #25	\$	0.1682	180,743	\$ 0.0496	3.06%	\$ 3,777,207	\$ (35,287)	\$ 3,741,920	4.14%	0.24%
Supplier #47	\$	0.1611	165,711	\$ 0.0469	2.80%	\$ 4,039,011	\$ (436,701)	\$ 3,602,309	4.43%	2.92%
Supplier #15	\$	0.1439	174,017	\$ 0.0319	2.94%	\$ 2,646,252	\$ (104,568)	\$ 2,541,684	2.90%	0.70%
Supplier #18	\$	0.1536	89,495	\$ 0.0462	1.51%	\$ 2,645,067	\$ (350,301)	\$ 2,294,767	2.90%	2.34%
Total associate	d wi	th top 10	3,126,840		53%	\$61,254,471	\$ (4,097,575)	\$ 57,156,895	67%	27%

Table 2.4.	Ten Suppliers Resp	onsible for the Great	est Aggregate Net	t Consumer Loss – All
Household	ls (ranked by net cor	nsumer loss) ²¹		

2.5 Residential consumers still do not benefit from direct participation in the electric supply market.

My examination of updated competitive supplier data shows that residential consumers continue to suffer large net losses as a result of the individual residential electric supply market. Specifically, consumers during the 2017–2018 study period paid *an additional* \$76.2 million over the year as a result of participation in this market. The consumer losses during the three study periods are net of the relatively small gains that a minority of consumers experienced. In addition, based on the analysis found in Section 2.6 of the *Massachusetts 2018 Report*, I continue to believe it is unlikely that these consumers' overpayment is a fair exchange for some additional benefit, such as the "green power" marketed by suppliers, because it is still the case that renewable energy is not a major driver of sales of electric supply contracts, as a review of the offers on the EnergySwitchMa.gov website (operated by the Massachusetts Department of Public Utilities) reflects that, as recently as April 29, 2019, only 37 percent (21 out of 57) of the product offerings included renewable energy content above the amount required under law.

3. What is the consumer loss associated with low-income households' participation in the individual residential electric supply market?

3.1 Introduction

Section 2 discussed my findings regarding the individual residential electric supply market as a whole. In this section, I discuss various attributes of a subset of this market, specifically households that receive a low-income rate from their electric companies.

I analyzed suppliers' billing data to (1) quantify the consumer loss (or gain) associated with the participation by low-income households in the individual residential electric supply market in Massachusetts; (2) compare average rates charged to low-income consumers with those charged all other residential consumers; and (3) assess whether there is any evidence of competitive suppliers targeting low-income households. Appendix 3A-2019 Update includes detailed supplier-specific information for low-income consumers who are served by competitive suppliers.

As I demonstrate in Section 3.2, below, living in low-income communities increases the probability of participation in the over-priced individual residential electric supply market, and also increases the size of the premium for such participation, an association also identified and discussed in the *Massachusetts 2018 Report*.

3.2 What is the consumer loss associated with low-income households' participation in the individual residential electric supply market?

The annual consumer loss associated with competitive suppliers' charges to, on average, 98,900 low-income consumers was \$16.4 million during the 2017–2018 study period. Expressed on a per-household basis, the annual loss was \$166 (in comparison with \$231 in the 2016–2017 study period and \$145 in 2015–2016 study period). Individual consumers' experiences vary widely. The average annual net loss for the approximately 165 consumers served by Supplier #1 was \$368 and the average annual net loss for those low-income consumers served by the supplier that served the greatest number of low-income consumers (Supplier #12) was \$246. The average loss for the consumers served by the second-ranked and ninth-ranked suppliers (based on number of bills rendered) was \$261 (Supplier #41) and \$263 (Supplier #47), respectively. Moreover, these losses are averaged across each of the suppliers' customer base and so individual consumers' losses could be higher.

3.3 What is the consumer harm to low-income households that purchase electricity directly from competitive suppliers?

Massachusetts low-income households, on average, paid significantly more directly to competitive suppliers than if they had taken service from their respective electric companies. Specifically, low-income consumers paid an average premium of \$0.02665 per kWh over what they would have paid for basic service electric supply during the 2017–2018 study period.

Moreover, the average premium that low-income consumers paid for competitive service was 25 *percent higher* than the average premium that non-low-income consumers paid during the same period (non-low-income consumers paid a premium of "only" \$0.02128 per kWh). Across all incomes, the average premium was \$0.02224 per kWh.

Accordingly, low-income households *pay an extra 25 percent* to participate, and therefore, unlike other households, low-income households pay a larger premium to purchase electricity in the individual residential electric supply market. These higher rates translate, on an annual basis (and accounting for differing average kWh usage), to an average premium of \$231 for low-income consumers to participate in the individual residential electric supply market as compared to an average annual premium of \$224 for non-low-income consumers.²² Notably, this premium reflects those who saved money as well as those who were charged rates higher than those that the electric companies would have charged for basic service.

Of the 40 suppliers which, on average, each served more than 100 low-income consumers during the twelve-month period (meaning that more than 1,200 bills were rendered to low-income consumers on each supplier's behalf),²³ only five suppliers showed average net gains across their respective customer bases, and, in aggregate, served only 5 percent of low-income consumers. Among these five suppliers, Supplier #9 served the most low-income consumers (an average of 3,575 in any given month, with a 12-month total of 42,901 bills rendered for Supplier #9) and the annual net gain per household for these consumers was \$38.

Among suppliers serving at least 100 low-income consumers over all 12 months of the study period, 21 distinct suppliers had average markups (rates above what consumers would have paid for basic service) exceeding \$0.02/kWh, a premium that corresponds to a \$10 loss per monthly bill at a typical usage of 500 kWh. Of that group, ten suppliers charged low-income consumers, on average, rates over \$0.04/kWh in excess of the basic rate in effect at the time.

The number of suppliers charging low-income consumers high rates far exceeds the number of suppliers who save consumers money. Among the 40 suppliers operating throughout the study period serving more than 100 low-income consumers (meaning that at least 1,200 bills were rendered on their behalf), 30 suppliers had average rates at least \$0.01/kWh over the basic service rates charged by the electric companies, together serving about 86,000 low-income consumers monthly (corresponding with more than a million bills rendered to low-income consumers during the twelve-month study period).

Savings Estimates

As described in Section 2, above, most suppliers in the individual residential electric supply market did not provide savings on average to residential households during the study periods. The suppliers who did provide savings provided savings that were relatively insignificant—approximately \$40.62 per year, or about \$3.39 per month—as compared to the massive losses inflicted by a majority of suppliers. The same dynamic also holds true for low-income households specifically.

Approximately one in five bills are associated with rates per kWh that were lower than the corresponding electric company rates for the same time period. As seen in further detail in Appendix 3A-2019 Update, during the course of the twelve-month period between July 2017 and June 2018, low-income consumers suffered a total net loss of approximately \$16.4 million.

A minority of suppliers—whose customers represent only 5 percent of the total supplier lowincome customer base—provided *net savings* to their customers (significantly fewer than the overall 14 percent for all residential customers of suppliers, as described in Section 2 above), collectively \$226,377 in net savings. Meanwhile, a majority of suppliers—whose customers represent approximately 95% of the total supplier low-income customer base—provided *net losses* to their customers, collectively \$16,601,866 in net losses.

Moreover, the net savings associated with electricity supplied by these suppliers was small. The average gain per consumer, expressed on an annual basis, was \$44.62, and the average rate paid by this group of consumers was \$0.1082 per kWh.

3.4 Low-income consumers are overrepresented in the individual residential electric supply market.

My analysis demonstrates that low-income households continue to be overrepresented in the individual residential electric supply market relative to their representation in the general population of households receiving electricity.

Low-income households, on average, represent only 12 percent of all electric consumers. However, according to data received from the electric companies, low-income households represented 20 percent of all competitive supply customers during the 2017–2018 study period. This measure changed only slightly from the prior study year, when the corresponding numbers were 12 percent and 21 percent.

The electric companies' data also shows that 35 percent—more than a third of *all* Massachusetts low-income households—participated in the individual residential electric supply market (the remaining 66 percent received basic service or participated in a municipal aggregation) during the 2017–2018 study period. By contrast, only 18 percent of Massachusetts non-low-income households participated in the individual residential electric supply market—*half* of the participation rate of low-income households. These results are substantially similar to the pattern shown for the previous 12-month study period (36 percent for low-income consumers and 18 percent for non-low-income consumers).

Although, on average, both low-income and non-low-income consumers suffer harm as a result of the individual residential electric supply market, my analysis suggests that the individual residential electric supply market has a disproportionate impact on low-income consumers. As discussed above, during the 2017–2018 study period, low-income households paid a premium of 25 percent relative to other households.

Section 3.5, below, analyzes other demographic aspects of the individual residential electric supply market.

3.5 Potential targeting of vulnerable communities.

I also examined whether the electric companies' billing data provides demographic evidence that competitive suppliers have targeted certain demographic populations in Massachusetts. I examined data at the geographically granular level²⁴ corresponding with zip codes,²⁵ paying special attention to demographics such as the percent designated as minority,²⁶ and the median income.

As part of my analyses of various demographic characteristics, I also assessed participation rates by (1) all households; (2) low-income households;²⁷ and (3) non-low-income households. Also, because the participation rate in municipalities that are served by municipal aggregation suppliers is approximately the same as that in municipalities without municipal aggregations,²⁸ I included those towns as well (excluding from my analysis those consumers served by municipal aggregation suppliers).

I found that participation rates are significantly higher (and thus consumer harm disproportionately occurring) in areas with certain demographics (or overlapping combinations of these demographics). Specifically, as is shown in Appendix 3B-2019 Update and Appendix 3C-2019 Update, respectively, communities with majority-minority populations and with low median incomes correlate with higher rates of participation in the individual residential market for electric supply. Conversely, Appendix 3D-2019 Update shows that communities with higher median incomes tended to have significantly lower participation rates than more economically disadvantaged communities.

Appendix 3B-2019 Update shows that, regardless of a household's income, participation rates in communities of color are significantly higher than in the rest of the Commonwealth. Moreover, not only are participation rates significantly higher in communities of color, but also the premiums that residents in these communities pay as a result of choosing competitive suppliers is greater than in other areas of Massachusetts. Therefore, these communities are harmed not only as a result of disproportionately higher levels of participation in the individual residential market for electric supply, but also as a result of paying larger premiums for their participation. These results are consistent with the results that I discuss in the *Massachusetts 2018 Report*.

Table 3.1, below, summarizes the information that is provided on a community-specific basis in Appendix 3B-2019 Update (the Commonwealth's majority-minority communities), Appendix 3C-2019 Update (the Commonwealth's poorest communities), and Appendix 3D-2019 Update (the Commonwealth's most affluent communities).

	Participation			Premium	
		Non-Low-			
Communities vs. Rest of State	All	Income	Low-Income		All
Majority-Minority	29%	25%	43%	\$	0.0274
Rest of State	19%	18%	32%	\$	0.0222
Bottom 20 Median Incomes	32%	26%	44%	\$	0.0298
Rest of State	20%	18%	34%	\$	0.0227
Top 20 Median Incomes	14%	14%	17%	\$	0.0160
Rest of State	21%	19%	35%	\$	0.0234

 Table 3.1 Participation Rates and Premiums Paid Based on Communities' Demographics

 (June 2018)²⁹

Another way to consider community harm is to compute the aggregate municipal loss (realizing that, among other things, population affects the magnitude of the harm). Table 3.2 below shows the ten municipalities and neighborhoods with the highest aggregate net consumer monthly loss.

Table 3.2 Ten Municipalities	with the Highest Agg	gregate Net Consume	r Loss - All Incomes
(monthly loss (June 2018)) ³⁰			

		Total	Ave	erage Per	% of Households			
	С	onsumer	Нс	ousehold	Participating in	# Competitive		
		Loss in		Loss	Competitive	Supply		
Municipality		Month	(N	/lonthly)	Supply Market	Accounts		
Worcester	\$	259,315	\$	14.58	26%	17,786		
Springfield	\$	233,765	\$	15.39	28%	15,189		
Lowell	\$	173,458	\$	16.02	28%	10,826		
Brockton	\$	171,872	\$	15.59	33%	11,028		
Lynn	\$	153,087	\$	15.65	30%	9,785		
Fall River	\$	148,926	\$	13.42	28%	11,101		
Lawrence	\$	140,404	\$	18.01	30%	7,795		
Dorchester	\$	102,735	\$	6.32	33%	16,260		
Haverhill	\$	81,493	\$	16.70	19%	4,880		
Weymouth	\$	74,321	\$	15.84	20%	4,691		

In fact, as shown in Appendix 2B-2019 Update (All Households) and Appendix 2C-Update (Low-Income Households), the vast majority of municipalities experienced net consumer loss in June 2018. Specifically, 99% of municipalities experienced net consumer loss in June 2018 and 96% of municipalities experienced net consumer loss when examining only low-income households.

3.6 Statistical analysis shows negative correlation between income and participation.

Participation rates in the individual residential electric supply market vary substantially across Massachusetts. Following last year's analysis, I re-analyzed whether any observable characteristics of individual zip codes predict participation rates with statistical significance.

Previous findings

Using zip code-level data from June 2017, I found a negative relationship between a zip code's typical income level—as measured by either median household income, or the proportion of all accounts that are not low-income—and its participation in the individual residential electric supply market. In other words, neighborhoods with lower incomes tend to have higher rates of participation in the individual residential electric supply market among *both* low-income consumers *and* all other consumers. These findings are described in the *Massachusetts 2018 Report*.

Approach

Individual residential electric supply market participation rates are defined as the number of accounts billed by competitive suppliers (excluding suppliers serving municipal aggregations) divided by the total number of accounts, and correspondingly for just the subset of low-income accounts. The approach replicates the previous analysis, using updated zip code- and municipality-specific participation rates derived from June 2018 data.

I considered socio-demographic characteristics of zip codes as possible predictors of participation rates. For each zip code, the median household income approximates the income of a typical consumer. An additional indicator for neighborhood affluence (or poverty) is the share of all electric accounts that are identified by the electric company as low-income; in general, more affluent neighborhoods have higher median incomes and lower shares of low-income accounts. Zip code-level variation in minority residents (households identifying as non-white and/or Hispanic) was also considered.

Findings

Using June 2018 data, I found no substantive change from last year's analysis. There continues to be a strong and statistically significant association of lower household incomes with higher market participation rates. Variation in the shares of low-income accounts alone continues to predict approximately one third of the variation in how many low-income households participate in the individual residential electric supply market at the zip code level (r-squared = 0.3).

Again, this finding—that the share of low-income consumers in a zip code predicts the rate at which consumers participate in the competitive market—is not causal; the data do not allow us to determine what drives consumers to enter the individual residential electric supply market. However, it merits investigation, since the observed and persistent pattern is consistent with (but not proof of) suppliers targeting economically disadvantaged areas for marketing and advertising, which may drive higher sign-ups.

Figure 3.1, below, is a scatter plot showing how zip codes with greater shares of low-income households tend to also have higher rates of participation in the individual residential electric supply market within Boston, Springfield, and Worcester.³¹

Figure 3.1 Boston, Springfield, and Worcester Zip Codes by Share of Low-Income Consumers and Rate of Participation in the Individual Residential Electric Supply Market (June 2018)



Finally, my regression analysis shows that neither the magnitude of the higher rates charged in the individual residential electric supply market nor the number of suppliers operating in a given zip code was strongly predicted by zip code incomes or anything else in the set of demographic variables considered. However, although neither the income or any other demographic variable associated with a zip code predicts the size of the premium to participate in the individual residential electric supply market in that particular zip code, my analysis of rates paid shows that, on average, low-income households pay more to participate in the market than do non-low-income households.

3.7 Consumer loss examined at the supplier level

I also computed net loss and average premiums for low-income consumers separately by each of the 56 suppliers that serve low-income consumers.³² I analyzed various attributes of the competitive suppliers serving low-income households: their average premiums (weighted by usage), the number and percent of bills associated with each supplier, and the amount and percent of consumer loss (or gain) associated with each supplier.³³

Table 3.3 below shows the ten suppliers (with their identities concealed) who charged the highest premiums during the 2017–2018 study period. One supplier charged a premium of almost \$0.07 per kWh; two other suppliers charged premiums above \$0.05 per kWh and the other seven charged premiums above \$0.04 per kWh to low-income households.

Table 3.3 Ten Suppliers with the Highest Average Premium – Low-Income Households (ranked by premium)

							Loss	Gain					
						A	ssociated	Associated		Net			
	A	verage		Average	Share of	1	with High	۱	with Low	C	Consumer	Share of	Share of
Supplier ID		Rate	# of Bills	Premium	Accounts		Prices		Prices	Loss		Loss	Gain
Supplier #18	\$	0.1692	15,319	\$0.0681	1.29%	\$	526,658	\$	(27,547)	\$	499,110	2.86%	1.37%
Supplier #1	\$	0.1674	1,977	\$0.0569	0.17%	\$	62,643	\$	(1,969)	\$	60,674	0.34%	0.10%
Supplier #39	\$	0.1604	6,346	\$0.0502	0.53%	\$	172,530	\$	(2,181)	\$	170,349	0.94%	0.11%
Supplier #25	\$	0.1644	27,992	\$0.0469	2.36%	\$	519,152	\$	(3 <i>,</i> 652)	\$	515,500	2.82%	0.18%
Supplier #57	\$	0.1750	290	\$0.0462	0.02%	\$	5,119	\$	(58)	\$	5,062	0.03%	0.00%
Supplier #24	\$	0.1558	16,159	\$0.0454	1.36%	\$	362,903	\$	(8,452)	\$	354,451	1.97%	0.42%
Supplier #47	\$	0.1563	51,221	\$0.0445	4.32%	\$	1,278,467	\$	(153,783)	\$	1,124,684	6.95%	7.65%
Supplier #12	\$	0.1553	105,279	\$0.0440	8.87%	\$	2,160,870	\$	(2,484)	\$	2,158,386	11.75%	0.12%
Supplier #51	\$	0.1619	7,519	\$0.0427	0.63%	\$	157,269	\$	(5 <i>,</i> 035)	\$	152,234	0.86%	0.25%
Supplier #41	\$	0.1421	102,921	\$0.0424	8.67%	\$	2,331,997	\$	(96,667)	\$	2,235,330	12.68%	4.81%
Total associated with top 10		335,023		28%	\$	7,577,608	\$	(301,827)	\$	7,275,781	41%	15%	

Table 3.4 below shows the ten suppliers for which electric companies rendered the most bills to low-income households. These ten suppliers account for 61 percent of the bills rendered in the individual residential electric supply market, and viewed separately, each of them charges prices that lead to an aggregate net consumer loss for their customers.

						A	Loss Associated	А	Gain ssociated		Net		
	A	verage		Average	Share of	,	with High	with Low		Consumer		Share of	Share of
Supplier ID	Rate		ate # of Bills		Accounts	Prices		Prices		Loss		Loss	Gain
Supplier #12	\$	0.1553	105,279	\$ 0.0440	8.87%	\$	2,160,870	\$	(2,484)	\$	2,158,386	11.75%	0.12%
Supplier #41	\$	0.1421	102,921	\$ 0.0424	8.67%	\$	2,331,997	\$	(96 <i>,</i> 667)	\$	2,235,330	12.68%	4.81%
Supplier #42	\$	0.1360	95,772	\$ 0.0206	8.07%	\$	1,213,532	\$	(116,200)	\$	1,097,332	6.60%	5.78%
Supplier #27	\$	0.1360	88,403	\$ 0.0220	7.45%	\$	1,030,257	\$	(100,973)	\$	929,285	5.60%	5.02%
Supplier #15	\$	0.1446	66,189	\$ 0.0337	5.58%	\$	1,050,987	\$	(23,634)	\$	1,027,352	5.72%	1.18%
Supplier #6	\$	0.1448	57,964	\$ 0.0330	4.88%	\$	1,108,915	\$	(82,912)	\$	1,026,003	6.03%	4.12%
Supplier #43	\$	0.1312	55,154	\$ 0.0228	4.65%	\$	746,620	\$	(33,707)	\$	712,913	4.06%	1.68%
Supplier #32	\$	0.1360	52,983	\$ 0.0244	4.46%	\$	827,812	\$	(51,344)	\$	776,468	4.50%	2.55%
Supplier #47	\$	0.1563	51,221	\$ 0.0445	4.32%	\$	1,278,467	\$	(153,783)	\$	1,124,684	6.95%	7.65%
Supplier #29	\$	0.1365	48,878	\$ 0.0232	4.12%	\$	563,288	\$	(62,745)	\$	500,543	3.06%	3.12%
Total associate	d wi	th top 10	724,764		61%	\$	12,312,745	\$	(724,449)	\$	11,588,296	67%	36%

Table 3.4 Ten Suppliers with the Highest Number of Bills – Low-Income Households (ranked by number of bills)

Table 3.5 below shows the ten suppliers responsible for the largest absolute net low-income consumer loss in Massachusetts. More than one in seven low-income households are served by the top two suppliers.

Table 3.5	Ten Suppliers Responsible for the Greatest Aggregate Net Consumer Loss -
Low-Incor	ne Households (ranked by net consumer loss)

						4	Loss Associated	Δ	Gain Associated		Net		
	A	verage		Average	Share of	,	with High		with Low		Consumer	Share of	Share of
Supplier ID		Rate	# of Bills	Premium	Accounts		Prices		Prices		Loss	Loss	Gain
Supplier #41	\$	0.1421	102,921	\$ 0.0424	8.67%	\$	2,331,997	\$	(96,667)	\$	2,235,330	12.68%	4.81%
Supplier #12	\$	0.1553	105,279	\$ 0.0440	8.87%	\$	2,160,870	\$	(2,484)	\$	2,158,386	11.75%	0.12%
Supplier #47	\$	0.1563	51,221	\$ 0.0445	4.32%	\$	1,278,467	\$	(153,783)	\$	1,124,684	6.95%	7.65%
Supplier #42	\$	0.1360	95,772	\$ 0.0206	8.07%	\$	1,213,532	\$	(116,200)	\$	1,097,332	6.60%	5.78%
Supplier #15	\$	0.1446	66,189	\$ 0.0337	5.58%	\$	1,050,987	\$	(23,634)	\$	1,027,352	5.72%	1.18%
Supplier #6	\$	0.1448	57,964	\$ 0.0330	4.88%	\$	1,108,915	\$	(82,912)	\$	1,026,003	6.03%	4.12%
Supplier #27	\$	0.1360	88,403	\$ 0.0220	7.45%	\$	1,030,257	\$	(100,973)	\$	929,285	5.60%	5.02%
Supplier #37	\$	0.1497	43,349	\$ 0.0391	3.65%	\$	950,063	\$	(23,170)	\$	926,893	5.17%	1.15%
Supplier #32	\$	0.1360	52,983	\$ 0.0244	4.46%	\$	827,812	\$	(51,344)	\$	776,468	4.50%	2.55%
Supplier #43	\$	0.1312	55,154	\$ 0.0228	4.65%	\$	746,620	\$	(33,707)	\$	712,913	4.06%	1.68%
Total associate	d wi	th top 10	719,235		61%	\$	12,699,519	\$	(684,873)	\$	12,014,646	69%	34%

3.8 Conclusions about the low-income market

Based on my examination of competitive supplier data, I found that, on average, 98,902 lowincome households paid \$16.4 million more during the July 2017 – June 2018 study period than they would have paid if they had not contracted with competitive suppliers and instead paid the electric company's fixed basic service rates. The average low-income household on direct competitive supply lost \$166 over the course of the year.

The evidence of harm to low-income households is overwhelming—the participation rate is double that of all other households, and low-income households pay a larger premium to participate because the rates they are charged by suppliers are higher than the rates charged by suppliers to non-low-income households.

4. Conclusion

The updated data analyzed in this report shows that Massachusetts residential consumers continue to lose tens of millions of dollars per year buying electric supply directly from competitive suppliers; low-income customers continue to be disproportionately affected; and communities with low median incomes and high percentages of minority households continue to be charged higher rates than more affluent communities.

Endnotes

² Other terms that are used in other states include energy service companies, third-party suppliers and alternative retail energy suppliers.

³ "Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts," Susan M. Baldwin, prepared for the Massachusetts Attorney General's Office, March 29, 2018 ("*Massachusetts 2018 Report*").

⁴ Sarah M. Bosley, who has been active in utility regulation since 1999, contributed to this report. See Exhibit ES1-2019 Update for Ms. Baldwin's experience and qualifications.

⁵ During the prior 12-month period, 35 percent of low-income consumers participated in the individual residential electric supply market in comparison with 18 percent of non-low-income consumers. Moreover, because the utilities' billing data captures only those consumers who participate in energy assistance programs, these participation rates do not reflect the participation by low-income households who may qualify for but not participate in energy assistance programs, nor does it reflect the participation of the working poor.

⁶ Based on the actual billing data, the average usage for low-income consumers was 518 kWh per month and it was 595 kWh per month for non-low-income consumers.

⁷ Actual consumer losses depend on consumers' usage, their choice of supplier, and the rate that the supplier charges (individual suppliers charge a wide range of rates to their various consumers).

⁸ My updated analyses of communities with majority-minority in Appendix 3B-2019 Update (meaning the majority of the households in the communities are minority households); lowest median income in Appendix 3C-2019 Update; and highest median income in Appendix 3D-2019 Update provide ample evidence of disparate participation by the Commonwealth's most vulnerable populations in the individual residential electric supply market. I did not update the analysis that is included in the *Massachusetts 2018 Report* regarding participation levels and premiums paid in communities with relatively higher percentages of African-Americans, Hispanics, limited English proficiency and participation in low-income programs. I have no reason to believe, however, that if these analyses were updated, the pattern would differ from that described in my *Massachusetts 2018 Report*, especially because of the high overlap between these demographics and the demographics that I did analyze in this update.

⁹ Although three electric companies serve Massachusetts, the billing data correspond with five non-overlapping territories because some mergers within the industry retained the separate billing of the acquired utilities.

¹⁰ The electric companies' monthly billing data show separately for each supplier (and for the most recent two twelve-month periods, the electric companies provided information separately for each of the different rates that the supplier charged its consumer base during the month): the number of bills rendered, the total amount charged, and the total kWh associated with each distinct rate. I was able to isolate those bills with charges greater than if the usage had been billed at EDC rates from those bills with charges less than if the usage had been billed at electric company rates.

¹¹ All data in the bulleted list below is based on the 2017–2018 study period unless otherwise noted. These data can be compared with the corresponding data for the 2016–2017 study period in the *Massachusetts 2018 Report*.

¹² The 5,916,177 bills correspond with the total number of bills rendered over a twelve-month period to residential customers of all incomes. Assuming a customer receives twelve bills each year gives an estimated average of at least 493,015 customers participating (5,915,177 divided by twelve). Some customers may discontinue service with a supplier during the twelve-month study period and other customers may sign up at some point during that time period – that is, customers come and go. Therefore, it is likely that more than 493,015 different customers participated during the study period, and that some percentage of customers participated for only part of the study period. EDCs are able to separately identify the bills they render on behalf of low-income customers, and the estimate of 98,902 low-income customers was computed similarly (based on total bills rendered to low-income

¹https://www.mass.gov/files/documents/2018/10/30/FY%202019%20LIHEAP%20Income%20Eligibility%20and%20Benefit%20Chart%20October%2099%20percent%20alocation.pdf.

customers during the same period), with the same caveat that the actual number could be higher if some customers exited the market and different customers entered the market during the twelve-month study period.

¹³ Low-income households can apply for reduced electricity distribution rates. Eligibility for the discount rates is based upon verification of a low-income consumer's receipt of any means-tested public benefit, or verification of eligibility for the low-income home energy assistance program, or its successor program, for which eligibility does not exceed 60 percent of the state median income for the size of the household. G.L. c. 164, § 1F(4); http://www.mass.gov/hed/docs/dhcd/cd/liheap/liheapbenefit.pdf. Thus, "any household that receives help from an income-tested government assistance program — whether Food Stamps, public housing, Medicaid, free school lunch, etc. — and whose income is at or below 60% of median income qualifies for the discount rates." Charlie Harak, Utility Advocacy for Low-Income Households in Massachusetts (National Consumer Law Center 3rd ed. 2013), available at https://www.nclc.org/images/pdf/energy_utility_telecom/stay%20connected/utility-handbook-2d-ed.pdf.

The low-income rate provides a discount of approximately 25 percent to 35 percent off the entire electric bill, which includes both distribution and supply charges. *See* https://www.eversource.com/Content/docs/default-source/rates-tariffs/ema-greater-boston-rates.pdf?sfvrsn=10; https://www9.nationalgridus.com/masselectric/home/rates/4_res.asp. The electricity consumption for income-qualified households is billed at distribution rates that are lower than distribution rates for other residential consumers. However, as described above, they receive a subsidy calculated as a percentage of the consumer's total bill. The consumer's total bill includes the consumer's supply charge, regardless of whether the consumer receives basic service or competitive supply.

¹⁴ Because, in some instances, the electric companies' billing records show slightly different spellings of suppliers' names, I had to make assumptions about whether similar, but not identical, names likely corresponded with the same supplier. As a general rule, if the first five letters were the same, I treated the suppliers as the same.

¹⁵ Average monthly usage among low-income households participating in the individual residential electric supply market is 518 kWh in comparison with average monthly usage of 595 kWh among non-low-income households— this difference affects the calculation of annual average per-household losses for the two groups. In Figure ES.2, I assume monthly usage of 600 kWh for both low-income and non-low-income households to illustrate the effect of the differential premium more accurately.

¹⁶ The AGO requested granular data for June 2018 because this was the most recent data point at the time of the request. The geographically granular zip code level analysis that I discuss in the *Massachusetts 2018 Report* is based on corresponding data for June 2017.

¹⁷ This number is the result of multiplying the premium per kWh paid during the 2017-2018 time period by the decline in average monthly kWh purchased and by the number of bills rendered during the 2017-2018 time period. For low-income consumers, this explains approximately \$1.1 million of the decline in net loss and for non-low-income consumers, this explains approximately \$2.2 million of the decline in net loss. During the prior 12-month period, 36 percent of low-income consumers participated in the retail energy supply market in comparison with 18% of non-low-income consumers. Moreover, because the utilities' billing data captures only those consumers who participate in energy assistance programs, these participate in energy assistance programs, nor does it reflect the participation of the working poor.

¹⁸ The electric company basic service rate shown is a statewide average computed based on the competitive suppliers' customers' actual usage and the rates that their respective electric companies would have charged in each of the months for that usage.

¹⁹Appendix 2D-2019 Update provides complete information for all suppliers for which electric companies rendered bills to residential consumers between July 2017 and June 2018.

²⁰ See Section 3 for a parallel analysis of suppliers and low-income households.

²¹ I do not disclose the identity of the individual suppliers because suppliers in Massachusetts have kept this information confidential through agreements with the distribution companies. In sharp contrast with the treatment of supplier information in Massachusetts, there is far greater transparency in Connecticut, and among other things, the Connecticut Office of Consumer Counsel (OCC) distributes an annual fact sheet with supplier-specific consumer gains and losses. *See* "OCC Fact Sheet: Electric Supplier Market, November 2017 through October 2018," Office of Consumer Counsel, updated on December 17, 2018,

https://www.ct.gov/occ/lib/occ/fact_sheet_electric_supplier_market_october_2018.pdf

²² Average monthly usage among low-income households participating in the individual residential electric supply market is 518 kWh in comparison with average monthly usage of 595 kWh among non-low-income households, which affects the calculation of annual average per-household losses for the two groups.

²³ This analysis excludes 16 suppliers, each of which served fewer than 100 low-income consumers (i.e., for which fewer than 1,200 bills were rendered during the 12-month study period).

²⁴ The electric companies provided data with rate and usage information corresponding with approximately 500,000 bills rendered on behalf of competitive suppliers during June 2018 disaggregated to the geographically granular level corresponding with zip codes.

²⁵ Zip code shapefiles are from MassGIS (<u>http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/zipcodes.html</u>), to which Census data at the ZCTA level was joined using a publicly available crosswalk (<u>https://www.udsmapper.org/zcta-crosswalk.cfm</u>).

²⁶ Using the same data, "percent minority" was constructed as the percentage of the population who are not both White *and* non-Hispanic, so this group captures non-White races and/or Hispanic ethnicities.

²⁷ For the purpose of comparing participation rates, low-income corresponds with those households receiving discounted electricity rates. For the purpose of identifying the 20 town-zip code areas with the lowest incomes, I examined municipalities' median incomes.

²⁸ Participation rates in municipalities with aggregators: 20.57%. Participation rates in municipalities without aggregators: 20.54%.

²⁹ See Appendixes 3B-2019 Update, 3C-2019 Update, and 3D-2019 Update for community-specific information.

³⁰ See Appendix 2C-2019 Update (all households) and Appendix 2D-2019 Update (low-income households) for a complete list of municipalities and associated net consumer losses.

³¹ The results are consistent with those shown in Figure 3.13 in the *Massachusetts 2018 Report*.

³² See Section 2.5, above, for the corresponding analysis for all residential consumers.

³³ Appendix 3A-2019 Update provides complete information for all suppliers for which electric companies rendered bills to low-income residential consumers during the 2017–2018 study period.
Appendix ES1

Experience and Qualifications of Susan M. Baldwin

Experience and Qualifications of Susan M. Baldwin

Susan M. Baldwin has forty-one years of experience in public policy, which includes five years analyzing solar energy and energy efficiency for local, state and regional agencies, one year analyzing low-income issues for the budget office of a state welfare agency, and, most recently, 35 years analyzing the economics and regulation of the telecommunications and energy industries. She served as the Director of the Telecommunications Division for the Massachusetts Department of Public Utilities (which was subsequently reorganized), as a Senior Vice President for a consulting firm, and, since 2001, has been an independent consultant.

Since 2013, in addition to her ongoing contributions to state and federal telecommunications policy, Ms. Baldwin has assisted consumer advocate agencies with analyzing the customer service of electric and gas utilities and with in-depth analyses of residential and small business retail energy supply markets. In her capacity as an independent consultant, Ms. Baldwin sponsors expert testimony and reports submitted in state and federal regulatory proceedings, contributes to the policy-making by state legislatures, and writes detailed reports on telecommunications and energy policy. She has testified before 23 state public utility commissions in more than 60 regulatory proceedings as well as before five state legislative committees. She has submitted expert reports in four state taxation proceedings, and has contributed to dozens of comments and declarations filed in Federal Communications Commission proceedings.

Ms. Baldwin earned her Master of Economics from Boston University, her Master of Public Policy from the Harvard Kennedy School, and her Bachelor of Arts degree in Mathematics and English from Wellesley College.

Appendix 1A

Map of EDC Service Areas and Municipal Light Plant Towns



Map of EDC Areas and Municipal Light Plant Towns

Appendix 2A

EDC Rates During Study Period: July 2015 – June 2016, July 2016 – June 2017, and July 2017 – June 2018

EDC Rates During Study Period: July 2015 – June 2016; July 2016 – June 2017; and July 2017 – June 2018

		Rate									
Months	Number of	July 2015 -	Ju	ly 2016 -	July 2017-						
	Wonths	June 2016	Ju	ne 2017	J	une 2018					
	National	Grid (MECo and	Nant	ucket)							
July - Sept	3	\$0.09257	\$	0.08042	\$	0.09432					
Oct	1	\$0.09257	\$	0.08084	\$	0.09432					
Nov - April	6	\$0.13038	\$	0.09787	\$	0.12673					
May - June	2	\$0.08042	\$	0.09432	\$	0.10870					
Nstar											
July - Dec	6	\$0.10050	\$	0.08208	\$	0.10759					
Jan - June	6	\$0.10844	\$	0.10318	\$	0.12881					
		WMECo									
July - Dec	6	\$0.09767	\$	0.07708	\$	0.08653					
Jan	1	\$0.10426	\$	0.09126	\$	0.10486					
Feb - June	5	\$0.10426	\$	0.09126	\$	0.10503					
		Fitchburg									
July - Nov	5	\$0.07878	\$	0.07878	\$	0.09934					
Dec - May	6	\$0.12239	\$	0.09704	\$	0.12340					
June	1	\$0.11191	\$	0.09934	\$	0.10556					

Appendix 2B

Consumer Loss, Premium, and Participation by Municipality – All Households

Appendix 2D	Ар	pen	dix	2B
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Appendix 2B												
Consumer Loss, Premium, and Participation by Municipality - All Households												
			(Sort	ted Alpha	beti	cally)						
Municipality	Consi in	Total umer Loss Month	Ave Hou (Mo	rage Per usehold Loss onthly)	Pr (pe	emium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts				
Abington	\$	21,751	\$	18.78	\$	0.0302	18%	1,158				
Acton	\$	7,730	\$	6.39	\$	0.0123	14%	1,210				
Acushnet	\$	5,214	\$	6.45	\$	0.0152	19%	809				
Adams	\$	5 <i>,</i> 330	\$	9.96	\$	0.0271	21%	535				
Agawam	\$	16,041	\$	12.30	\$	0.0244	18%	1,304				
Alford	\$	1,895	\$	23.39	\$	0.0339	22%	81				
Allston	\$	9,441	\$	5.17	\$	0.0180	19%	1,826				
Amesbury	\$	18,623	\$	16.85	\$	0.0347	15%	1,105				
Amherst	\$	15,081	\$	11.11	\$	0.0272	13%	1,357				
Andover	\$	38,054	\$	19.68	\$	0.0275	15%	1,934				
Aquinnah	\$	698	\$	9.70	\$	0.0208	15%	72				
Arlington	\$	14,172	\$	5.48	\$	0.0131	13%	2,585				
Ashby	\$	2,543	\$	1.84	\$	0.0042	49%	1,386				
Ashfield	\$	1,672	\$	12.67	\$	0.0276	14%	132				
Ashland	\$	8,397	\$	7.47	\$	0.0136	15%	1,124				
Assonet	\$	1,696	\$	6.60	\$	0.0098	17%	257				
Athol	\$	21,419	\$	16.60	\$	0.0305	25%	1,290				
Attleboro	\$	59 <i>,</i> 958	\$	17.36	\$	0.0317	19%	3,454				
Auburn	\$	21,680	\$	15.62	\$	0.0283	21%	1,388				
Auburndale	\$	3,026	\$	10.12	\$	0.0208	13%	299				
Avon	\$	18	\$	3.06	\$	0.0203	18%	6				
Ayer	\$	10,479	\$	14.16	\$	0.0279	21%	740				
Barnstable	\$	1,761	\$	7.46	\$	0.0142	21%	236				
Barre	\$	7,167	\$	13.40	\$	0.0259	25%	535				
Bass River	\$	545	\$	1.89	\$	0.0054	16%	289				
Becket	\$	2,363	\$	10.46	\$	0.0236	13%	226				
Bedford	\$	3,358	\$	4.10	\$	0.0079	15%	819				
Belchertown	\$	20,026	\$	15.48	\$	0.0263	21%	1,294				
Bellingham	\$	17,958	\$	13.31	\$	0.0224	21%	1,349				
Belmont	NA		NA		NA		0%	-				
Berlin	\$	4,520	\$	21.02	\$	0.0270	18%	215				
Bernardston	\$	1,965	\$	2.47	\$	0.0043	48%	794				
Beverly	\$	46,240	\$	16.57	\$	0.0316	17%	2,791				
Billerica	\$	43,720	\$	18.84	\$	0.0328	16%	2,321				

Municipality	Con i	Total Isumer Loss n Month	Av Ho (N	verage Per ousehold Loss Aonthly)	Р (Г	Premium Der kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Blackstone	\$	11,698	\$	11.73	\$	0.0219	27%	997
Blandford	\$	953	\$	12.38	\$	0.0218	12%	77
Bolton	\$	7,544	\$	22.79	\$	0.0259	18%	331
Boston	\$	34,765	\$	4.64	\$	0.0108	11%	7,490
Bourne	\$	2,346	\$	4.41	\$	0.0099	20%	532
Boxford	\$	13,615	\$	30.19	\$	0.0301	16%	451
Brant Rock	\$	279	\$	9.29	\$	0.0189	13%	30
Brewster	\$	7,889	\$	5.07	\$	0.0117	19%	1,557
Bridgewater	\$	30,831	\$	21.07	\$	0.0306	16%	1,463
Brighton	\$	16,570	\$	5.62	\$	0.0165	15%	2,951
Brimfield	\$	5,947	\$	15.29	\$	0.0260	24%	389
Brockton	\$	171,872	\$	15.59	\$	0.0326	33%	11,028
Brookfield	\$	7,491	\$	15.84	\$	0.0274	30%	473
Brookline	\$	21,231	\$	8.96	\$	0.0191	11%	2,370
Buckland	\$	1,863	\$	14.33	\$	0.0322	15%	130
Burlington	\$	12,523	\$	7.91	\$	0.0142	16%	1,584
Buzzards Bay	\$	1,818	\$	4.82	\$	0.0115	21%	377
Cambridge	\$	34,591	\$	10.14	\$	0.0276	11%	3,411
Canton	\$	12,081	\$	8.65	\$	0.0140	16%	1,397
Carlisle	\$	1,062	\$	3.77	\$	0.0046	15%	282
Carver	\$	4,149	\$	6.12	\$	0.0101	16%	678
Cataumet	\$	874	\$	7.28	\$	0.0144	16%	120
Centerville	\$	7,236	\$	5.74	\$	0.0107	21%	1,261
Charlemont	\$	2,159	\$	16.87	\$	0.0382	19%	128
Charlestown	\$	9,436	\$	9.01	\$	0.0148	14%	1,047
Charlton	\$	20,775	\$	17.67	\$	0.0242	23%	1,176
Chatham	\$	4,616	\$	6.95	\$	0.0172	17%	664
Chelmsford	\$	33,868	\$	17.33	\$	0.0333	14%	1,954
Chelsea	\$	25,463	\$	5.72	\$	0.0151	34%	4,454
Cheshire	\$	4,066	\$	11.20	\$	0.0253	23%	363
Chester	\$	142	\$	14.17	\$	0.0425	16%	10
Chesterfield	\$	1,763	\$	25.19	\$	0.0433	11%	70
Chestnut Hill	\$	9,351	\$	9.72	\$	0.0157	14%	962
Chicopee	\$	24	\$	24.32	\$	0.0520	20%	1
Chilmark	\$	1,911	\$	10.68	\$	0.0180	11%	179
Clarksburg	\$	1,744	\$	11.71	\$	0.0250	20%	149
Clinton	\$	21,510	\$	12.56	\$	0.0288	26%	1,713
Cohasset	\$	10,710	\$	24.74	\$	0.0300	13%	433

Municipality	Cons in	Total sumer Loss Month	Ave Hou (Ma	rage Per usehold Loss onthly)	Pr (pe	emium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Colrain	\$	2,631	\$	16.14	\$	0.0313	19%	163
Concord	\$	49	\$	24.25	\$	0.0391	10%	2
Conway	\$	1,442	\$	11.44	\$	0.0231	15%	126
Cotuit	\$	3,136	\$	7.63	\$	0.0136	17%	411
Cummaquid	\$	821	\$	6.46	\$	0.0121	25%	127
Cummington	\$	570	\$	8.90	\$	0.0184	12%	64
Dalton	\$	6 <i>,</i> 985	\$	3.52	\$	0.0070	45%	1,987
Dartmouth	\$	10	\$	10.15	\$	0.0356	50%	1
Dedham	\$	16,595	\$	10.16	\$	0.0192	17%	1,634
Deerfield	\$	580	\$	8.05	\$	0.0123	13%	72
Dennis	\$	3,466	\$	6.05	\$	0.0135	18%	573
Dennis Port	\$	2,348	\$	4.13	\$	0.0125	12%	568
Dighton	\$	8,251	\$	19.55	\$	0.0313	17%	422
Dorchester	\$	102,735	\$	6.32	\$	0.0174	33%	16,260
Douglas	\$	12,054	\$	17.29	\$	0.0269	19%	697
Dover	\$	2,537	\$	8.87	\$	0.0071	14%	286
Dracut	\$	33,726	\$	16.56	\$	0.0303	17%	2,037
Dudley	\$	15,495	\$	13.49	\$	0.0246	25%	1,149
Dunstable	\$	4,158	\$	19.07	\$	0.0251	18%	218
Duxbury	\$	5,822	\$	6.94	\$	0.0094	14%	839
E Cambridge	\$	6 <i>,</i> 830	\$	8.25	\$	0.0214	12%	828
EHarwich	\$	2,552	\$	6.02	\$	0.0126	21%	424
E. Bridgewater	\$	20,052	\$	18.45	\$	0.0273	21%	1,087
E. Brookfield	\$	3,927	\$	14.82	\$	0.0262	27%	265
E. Longmeadow	\$	24,351	\$	18.75	\$	0.0307	22%	1,299
East Boston	\$	28,327	\$	7.13	\$	0.0202	26%	3,971
East Dennis	\$	1,644	\$	6.16	\$	0.0124	15%	267
East Falmouth	\$	13,519	\$	7.59	\$	0.0139	21%	1,781
East Freetown	\$	1,697	\$	5.73	\$	0.0097	15%	296
East Longmeadow	NA		NA		NA		0%	-
East Orleans	\$	1,512	\$	7.75	\$	0.0154	14%	195
East Otis	\$	889	\$	10.10	\$	0.0293	9%	88
East Sandwich	\$	2,429	\$	4.62	\$	0.0077	19%	526
East Walpole	\$	2,350	\$	10.88	\$	0.0167	12%	216
East Wareham	\$	2,9 <mark>68</mark>	\$	5.88	\$	0.0136	25%	505
Eastham	\$	3,299	\$	5.71	\$	0.0147	17%	578
Easthampton	\$	16,841	\$	14.09	\$	0.0269	15%	1,195
Easton	\$	41,423	\$	25.12	\$	0.0312	19%	1,649

Municipality	Con i	Total Isumer Loss n Month	Ал Н (Г	Average Per Household Loss (Monthly)		Premium Der kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Edgartown	\$	6,756	\$	8.32	\$	0.0114	16%	812
Egremont	\$	4,307	\$	24.06	\$	0.0381	18%	179
Erving	\$	2,601	\$	19.41	\$	0.0290	18%	134
Essex	\$	4,713	\$	19.56	\$	0.0341	14%	241
Everett	\$	65,780	\$	13.50	\$	0.0348	30%	4,871
Fairhaven	\$	6,870	\$	5.93	\$	0.0155	16%	1,159
Fall River	\$	148,926	\$	13.42	\$	0.0356	28%	11,101
Falmouth	\$	7,165	\$	7.49	\$	0.0176	18%	957
Feeding Hills	\$	10,091	\$	12.50	\$	0.0209	17%	807
Fitchburg	\$	35,302	\$	9.04	\$	0.0272	21%	3,905
Florida-Drury	\$	751	\$	11.21	\$	0.0270	18%	67
Forestdale	\$	1,338	\$	4.34	\$	0.0076	20%	308
Foxboro	\$	22,828	\$	20.62	\$	0.0314	15%	1,107
Framingham	\$	47,810	\$	7.63	\$	0.0156	24%	6,263
Franklin	\$	42,122	\$	18.43	\$	0.0285	19%	2,286
Gardner	\$	27,320	\$	13.33	\$	0.0317	23%	2,050
Gill	\$	1,107	\$	11.65	\$	0.0245	15%	95
Gloucester	\$	46,286	\$	15.95	\$	0.0329	20%	2,902
Goshen	\$	729	\$	11.95	\$	0.0276	10%	61
Grafton	\$	23,149	\$	17.37	\$	0.0274	17%	1,333
Granby	\$	10,117	\$	17.84	\$	0.0303	23%	567
Granville	\$	1,689	\$	11.73	\$	0.0210	21%	144
Green Harbor	\$	133	\$	6.65	\$	0.0164	9%	20
Greenfield	\$	(353)	\$	(0.05)	\$	(0.0001)	49%	6,755
Gt. Barrington	\$	12,101	\$	15.57	\$	0.0300	22%	777
Hadley	\$	3,646	\$	11.72	\$	0.0240	13%	311
Halifax	\$	9,696	\$	16.46	\$	0.0268	19%	589
Hamilton	\$	15,344	\$	29.06	\$	0.0333	18%	528
Hampden	\$	9,005	\$	20.94	\$	0.0278	22%	430
Hancock	\$	733	\$	7.64	\$	0.0175	13%	96
Hanover	\$	17,205	\$	21.97	\$	0.0290	16%	783
Hanson	\$	12,395	\$	18.07	\$	0.0288	18%	686
Hardwick	\$	3,808	\$	14.82	\$	0.0301	20%	257
Harvard	\$	6,114	\$	19.59	\$	0.0254	15%	312
Harwich	\$	2,596	\$	3.26	\$	0.0085	20%	796
Harwich Port	\$	2,463	\$	7.16	\$	0.0180	15%	344
Hatfield	\$	2,225	\$	15.35	\$	0.0308	12%	145
Haverhill	\$	81,493	\$	16.70	\$	0.0339	19%	4,880

Municipality	Con i	Total sumer Loss n Month	Av He	verage Per ousehold Loss Monthly)	P (p	remium ber kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Hawley	\$	525	\$	11.94	\$	0.0204	22%	44
Heath	\$	1,712	\$	17.83	\$	0.0382	17%	96
Hingham	\$	103	\$	20.55	\$	0.0465	17%	5
Hinsdale	\$	1,742	\$	11.16	\$	0.0217	13%	156
Holbrook	\$	16,858	\$	17.08	\$	0.0350	23%	987
Holland	\$	5,154	\$	15.62	\$	0.0232	23%	330
Holliston	\$	4,449	\$	5.67	\$	0.0108	14%	785
Hopedale	\$	9,187	\$	16.92	\$	0.0263	25%	543
Hopkinton	\$	6,359	\$	8.01	\$	0.0113	13%	794
Hubbardston	\$	5,987	\$	15.04	\$	0.0253	22%	398
Humarock	\$	245	\$	4.15	\$	0.0134	9%	59
Huntington	\$	2,159	\$	18.93	\$	0.0339	11%	114
Hyannis	\$	5,272	\$	2.26	\$	0.0049	32%	2,333
Hyannis Port	\$	129	\$	2.81	\$	0.0040	12%	46
Hyde Park	\$	26,542	\$	7.04	\$	0.0186	31%	3,769
Indian Orchard	\$	15,331	\$	15.45	\$	0.0307	26%	992
Jamaica Plain	\$	15,773	\$	5.73	\$	0.0175	18%	2,755
Kingston	\$	5,199	\$	7.06	\$	0.0110	14%	736
Lake Pleasant	\$	20	\$	2.28	\$	0.0038	10%	9
Lakeville	\$	416	\$	5.94	\$	0.0104	16%	70
Lancaster	\$	8,083	\$	18.20	\$	0.0288	16%	444
Lanesborough	\$	2,052	\$	1.75	\$	0.0034	47%	1,174
Lawrence	\$	140,404	\$	18.01	\$	0.0394	30%	7,795
Lee	\$	4,980	\$	10.51	\$	0.0225	16%	474
Leicester	\$	15,529	\$	14.27	\$	0.0242	26%	1,088
Lenox	\$	4,752	\$	16.56	\$	0.0316	14%	287
Lenoxdale	\$	320	\$	2.04	\$	0.0050	41%	157
Leominster	\$	62,333	\$	14.24	\$	0.0287	25%	4,376
Leverett	\$	1,769	\$	13.61	\$	0.0287	15%	130
Lexington	\$	13,939	\$	8.89	\$	0.0142	13%	1,568
Leyden	\$	709	\$	13.90	\$	0.0265	14%	51
Lincoln	\$	4,922	\$	13.27	\$	0.0167	16%	371
Longmeadow	\$	20,545	\$	19.95	\$	0.0271	18%	1,030
Lowell	\$	173,458	\$	16.02	\$	0.0353	28%	10,826
Ludlow	\$	18,990	\$	14.06	\$	0.0258	16%	1,351
Lunenburg	\$	(1,208)	\$	(0.26)	\$	(0.0005)	47%	4,629
Lynn	\$	153,087	\$	15.65	\$	0.0362	30%	9,785
Malden	\$	71,037	\$	13.01	\$	0.0346	22%	5,461

Municipality	Con iı	Total sumer Loss n Month	AV He	verage Per ousehold Loss Monthly)	P (p	remium ber kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Manchester	\$	7,811	\$	23.18	\$	0.0370	14%	337
Manomet	\$	302	\$	8.16	\$	0.0176	12%	37
Marion	\$	2,714	\$	6.78	\$	0.0135	15%	400
Marlboro	\$	57,518	\$	16.21	\$	0.0330	21%	3,549
Marshfield	\$	11,347	\$	6.84	\$	0.0120	16%	1,660
Marshfld HIs	\$	260	\$	14.43	\$	0.0239	12%	18
Marstons MIs	\$	4,623	\$	6.63	\$	0.0104	21%	697
Mashpee	\$	10,466	\$	4.91	\$	0.0095	20%	2,133
Mattapan	\$	21,847	\$	6.92	\$	0.0183	39%	3,155
Mattapoisett	\$	3,129	\$	6.62	\$	0.0134	14%	473
Maynard	\$	4,796	\$	6.96	\$	0.0155	15%	689
Medfield	\$	8,432	\$	13.85	\$	0.0166	14%	609
Medford	\$	60,384	\$	14.82	\$	0.0344	17%	4,075
Medway	\$	6,283	\$	8.46	\$	0.0125	16%	743
Melrose	\$	20,191	\$	14.98	\$	0.0362	11%	1,348
Mendon	\$	8,641	\$	19.42	\$	0.0239	20%	445
Methuen	\$	63,792	\$	16.30	\$	0.0302	21%	3,913
Middleboro	\$	6	\$	5.96	\$	0.0080	50%	1
Middlefield	\$	295	\$	9.21	\$	0.0252	11%	32
Milford	\$	44,574	\$	15.58	\$	0.0284	25%	2,861
Millbury	\$	17,835	\$	14.05	\$	0.0262	22%	1,269
Millers Falls	\$	634	\$	11.97	\$	0.0229	14%	53
Millis	\$	3,441	\$	6.92	\$	0.0114	15%	497
Millville	\$	4,202	\$	14.34	\$	0.0237	25%	293
Milton	\$	12,893	\$	8.32	\$	0.0148	16%	1,550
Monroe	\$	142	\$	8.36	\$	0.0239	22%	17
Monson	\$	11,990	\$	15.43	\$	0.0263	22%	777
Montague	\$	1,902	\$	13.68	\$	0.0309	14%	139
Monterey	\$	2,414	\$	21.75	\$	0.0386	13%	111
Montgomery	\$	830	\$	13.60	\$	0.0240	17%	61
Monument Bch	\$	1,117	\$	7.25	\$	0.0153	18%	154
Mt.washington	\$	549	\$	18.32	\$	0.0266	19%	30
N Cambridge	\$	9,986	\$	9.48	\$	0.0275	12%	1,053
N Dartmouth	\$	5,891	\$	6.08	\$	0.0127	14%	969
N Falmouth	\$	3,259	\$	7.89	\$	0.0158	16%	413
N. Adams	\$	18,447	\$	12.82	\$	0.0315	24%	1,439
N. Andover	\$	31,421	\$	16.78	\$	0.0266	16%	1,872
N. Brookfield	\$	7,255	\$	14.66	\$	0.0259	24%	495

Municipality	Con i	Total sumer Loss n Month	Av He	verage Per ousehold Loss Monthly)	P (p	Premium Der kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Nahant	\$	4,344	\$	16.27	\$	0.0383	16%	267
Nantucket	\$	8,945	\$	13.27	\$	0.0187	6%	674
Natick	\$	22,107	\$	8.66	\$	0.0173	17%	2,553
Needham	\$	21,348	\$	13.61	\$	0.0190	14%	1,568
New Ashford	\$	123	\$	1.23	\$	0.0021	50%	100
New Bedford	\$	35,334	\$	3.69	\$	0.0112	24%	9,584
New Braintree	\$	1,233	\$	16.01	\$	0.0252	18%	77
New Marlboro	\$	2,441	\$	19.68	\$	0.0322	11%	124
New Salem	\$	1,301	\$	15.13	\$	0.0285	18%	86
Newbury	\$	8 <i>,</i> 658	\$	20.42	\$	0.0345	14%	424
Newburyport	\$	18,053	\$	14.54	\$	0.0336	15%	1,242
Newton	\$	7,160	\$	9.19	\$	0.0172	15%	779
Newton Center	\$	11,935	\$	11.84	\$	0.0167	15%	1,008
Newton Hlds	\$	5,724	\$	13.50	\$	0.0234	15%	424
Newton L F	\$	546	\$	8.15	\$	0.0185	14%	67
Newton U F	\$	1,666	\$	10.89	\$	0.0240	12%	153
Newtonvlle	\$	6,004	\$	10.98	\$	0.0205	15%	547
Norfolk	\$	3,726	\$	7.44	\$	0.0096	14%	501
North Carver	\$	63	\$	1.81	\$	0.0028	16%	35
North Chatham	\$	1,438	\$	7.37	\$	0.0158	18%	195
North Eastham	\$	1,905	\$	4.86	\$	0.0124	15%	392
North Easton	\$	42	\$	41.91	\$	0.0709	20%	1
North Hatfield	\$	302	\$	27.49	\$	0.0529	7%	11
North Truro	\$	1,578	\$	7.51	\$	0.0182	12%	210
Northampton	\$	32,142	\$	14.76	\$	0.0346	17%	2,177
Northboro	\$	19,260	\$	18.90	\$	0.0270	17%	1,019
Northfield	\$	2,692	\$	14.47	\$	0.0270	13%	186
Norton	\$	21,349	\$	17.43	\$	0.0272	18%	1,225
Norwell	\$	15,106	\$	24.76	\$	0.0305	16%	610
Oak Bluffs	\$	5 <i>,</i> 886	\$	8.29	\$	0.0134	17%	710
Oakham	\$	3,908	\$	16.35	\$	0.0253	28%	239
Ocean Bluff	\$	34	\$	1.69	\$	0.0047	12%	20
Onset	\$	2,189	\$	5.06	\$	0.0129	18%	433
Orange	\$	14,991	\$	17.66	\$	0.0329	24%	849
Orleans	\$	3,918	\$	6.18	\$	0.0132	20%	634
Osterville	\$	4,667	\$	9.68	\$	0.0123	17%	482
Otis	\$	727	\$	7.19	\$	0.0138	11%	101
Oxford	\$	19,466	\$	14.01	\$	0.0238	25%	1,389

Municipality	Con iı	Total sumer Loss n Month	Av Ho (N	verage Per ousehold Loss Monthly)	P (p	remium ber kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Palmer-3rivers	\$	17,934	\$	14.47	\$	0.0272	22%	1,239
Pelham	\$	961	\$	10.68	\$	0.0164	15%	90
Pembroke	\$	24,778	\$	21.16	\$	0.0301	18%	1,171
Pepperell	\$	16,428	\$	19.44	\$	0.0286	19%	845
Peru	\$	710	\$	10.93	\$	0.0226	15%	65
Petersham	\$	1,479	\$	11.38	\$	0.0210	22%	130
Phillipston	\$	3,320	\$	21.28	\$	0.0330	19%	156
Pittsfield	\$	11,076	\$	0.64	\$	0.0015	50%	17,363
Plainfield	\$	779	\$	11.80	\$	0.0253	18%	66
Plainville	\$	14,236	\$	21.31	\$	0.0329	16%	668
Plymouth	\$	23,080	\$	5.58	\$	0.0099	16%	4,137
Plympton	\$	784	\$	5.09	\$	0.0065	14%	154
Pocasset	\$	3,244	\$	6.93	\$	0.0164	20%	468
Provincetown	\$	2,775	\$	4.20	\$	0.0134	14%	661
Quincy	\$	73,878	\$	13.42	\$	0.0322	18%	5,504
Randolph	\$	49,810	\$	14.20	\$	0.0316	29%	3,508
Rehoboth	\$	15,984	\$	20.68	\$	0.0289	17%	773
Revere	\$	69,680	\$	14.19	\$	0.0321	24%	4,911
Richmond	\$	1,388	\$	11.67	\$	0.0217	13%	119
Rochester	\$	1,259	\$	3.87	\$	0.0070	15%	325
Rockland	\$	30,928	\$	19.06	\$	0.0340	23%	1,623
Rockport	\$	9,237	\$	15.68	\$	0.0332	13%	589
Roslindale	\$	18,667	\$	6.43	\$	0.0185	25%	2,901
Rowe	\$	666	\$	13.87	\$	0.0310	22%	48
Roxbry Xng	\$	8,758	\$	7.32	\$	0.0186	25%	1,196
Roxbury	\$	23,846	\$	6.57	\$	0.0176	36%	3,630
Royalston	\$	1,489	\$	13.66	\$	0.0284	17%	109
Russell	\$	348	\$	19.34	\$	0.0274	9%	18
Rutland	\$	12,428	\$	16.06	\$	0.0252	23%	774
S Boston	\$	(523)	\$	(3.76)	\$	(0.0043)	3%	139
S Dartmouth	\$	4,267	\$	5.25	\$	0.0106	14%	813
S Wellfleet	\$	1,108	\$	7.06	\$	0.0189	15%	157
S Yarmouth	\$	3,586	\$	3.26	\$	0.0075	23%	1,100
Sagamore	\$	466	\$	4.05	\$	0.0100	20%	115
Sagamore Bch	\$	1,098	\$	4.24	\$	0.0089	18%	259
Salem	\$	47,529	\$	15.17	\$	0.0374	17%	3,134
Salisbury	\$	9,333	\$	13.14	\$	0.0276	15%	710
Sandisfield	\$	(70)	\$	(0.11)	\$	(0.0003)	50%	611

Municipality	Cons in	Total sumer Loss Month	Ave Hou (M	rage Per usehold Loss onthly)	Pr (pe	emium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Sandwich	\$	4,852	\$	4.73	\$	0.0082	20%	1,026
Saugus	\$	31,990	\$	16.00	\$	0.0298	19%	2,000
Savoy	\$	625	\$	8.45	\$	0.0183	20%	74
Scituate	\$	25,771	\$	20.37	\$	0.0320	17%	1,265
Seekonk	\$	17,218	\$	17.59	\$	0.0317	17%	979
Sharon	\$	6 <i>,</i> 957	\$	8.50	\$	0.0123	13%	818
Sheffield	\$	6,796	\$	21.17	\$	0.0369	18%	321
Shelburne	\$	272	\$	9.39	\$	0.0243	13%	29
Shelburne Fls	\$	1,409	\$	12.25	\$	0.0286	15%	115
Sherborn	\$	2,667	\$	12.40	\$	0.0149	14%	215
Shirley	\$	8,478	\$	15.97	\$	0.0274	20%	531
Shutesbury	\$	1,974	\$	14.00	\$	0.0281	16%	141
Somerset	\$	25,557	\$	15.65	\$	0.0348	22%	1,633
Somerville	\$	31,855	\$	7.86	\$	0.0215	17%	4,052
South Boston	\$	12,247	\$	8.77	\$	0.0221	9%	1,396
South Carver	\$	290	\$	5.57	\$	0.0099	11%	52
South Chatham	\$	1,220	\$	6.56	\$	0.0209	13%	186
South Deerfield	\$	2,484	\$	10.57	\$	0.0222	13%	235
South Dennis	\$	3 <i>,</i> 897	\$	5.85	\$	0.0142	18%	666
South Harwich	\$	597	\$	6.15	\$	0.0157	16%	97
South Lee	\$	162	\$	20.30	\$	0.0307	13%	8
South Orleans	\$	1,021	\$	7.73	\$	0.0155	17%	132
South Walpole	\$	380	\$	11.51	\$	0.0157	10%	33
Southampton	\$	5,231	\$	15.80	\$	0.0221	14%	331
Southboro	\$	12,492	\$	17.90	\$	0.0218	19%	698
Southborough	NA		NA		NA		0%	-
Southbridge	\$	34,392	\$	14.05	\$	0.0261	34%	2,447
Southwick	\$	12,479	\$	18.63	\$	0.0277	17%	670
Spencer	\$	19,519	\$	13.70	\$	0.0239	27%	1,425
Springfield	\$	233,765	\$	15.39	\$	0.0317	28%	15,189
Stockbridge	\$	4,574	\$	19.63	\$	0.0348	15%	233
Stoneham	\$	11,229	\$	7.61	\$	0.0141	15%	1,475
Stoughton	\$	41,235	\$	17.03	\$	0.0340	22%	2,421
Stow	NA		NA		NA		0%	-
Sturbridge	\$	16,360	\$	15.76	\$	0.0230	25%	1,038
Sudbury	\$	10,056	\$	12.16	\$	0.0132	13%	827
Sunderland	\$	2,129	\$	10.81	\$	0.0258	10%	197
Sutton	\$	13,780	\$	19.44	\$	0.0262	19%	709

Municipality	Con i	Total sumer Loss n Month	А\ Н(verage Per ousehold Loss Monthly)	P (r	remium ber kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Swampscott	\$	15,589	\$	17.82	\$	0.0326	15%	875
Swansea	\$	21,909	\$	16.13	\$	0.0341	20%	1,358
Teaticket	\$	2,870	\$	6.48	\$	0.0140	21%	443
Tewksbury	\$	35,456	\$	20.13	\$	0.0329	15%	1,761
Tolland	\$	479	\$	5.20	\$	0.0099	18%	92
Topsfield	\$	8,037	\$	23.78	\$	0.0348	15%	338
Townsend	\$	2,741	\$	9.82	\$	0.0257	7%	279
Truro	\$	1,656	\$	7.17	\$	0.0180	16%	231
Turners Falls	\$	3,864	\$	8.74	\$	0.0222	17%	442
Tyngsboro	\$	15,030	\$	19.67	\$	0.0290	17%	764
Tyringham	\$	160	\$	7.60	\$	0.0091	7%	21
Upton	\$	11,087	\$	19.52	\$	0.0276	19%	568
Uxbridge	\$	20,916	\$	16.55	\$	0.0249	23%	1,264
Vineyard Hvn	\$	5,114	\$	8.80	\$	0.0159	19%	581
Vlg Nag Wd	\$	301	\$	8.60	\$	0.0166	13%	35
W Barnstable	\$	2,520	\$	8.16	\$	0.0132	23%	309
W Hyannisprt	\$	463	\$	3.74	\$	0.0079	17%	124
W Somerville	\$	7,367	\$	7.42	\$	0.0223	10%	993
W. Bridgewater	\$	9,272	\$	19.60	\$	0.0290	17%	473
W. Brookfield	\$	5,269	\$	12.64	\$	0.0241	24%	417
W. Newbury	\$	4,881	\$	17.01	\$	0.0246	17%	287
W.stockbridge	\$	3,080	\$	20.13	\$	0.0355	17%	153
Waban	\$	4,307	\$	13.89	\$	0.0173	13%	310
Wakefield	\$	(32)	\$	(16.19)	\$	(0.0150)	9%	2
Wales	\$	1,811	\$	8.23	\$	0.0137	24%	220
Walpole	\$	10,193	\$	10.45	\$	0.0158	14%	975
Waltham	\$	34,046	\$	6.74	\$	0.0162	20%	5,049
Waquoit	\$	1,302	\$	5.09	\$	0.0095	21%	256
Ware	\$	15,499	\$	13.34	\$	0.0245	26%	1,162
Wareham	\$	6,387	\$	4.45	\$	0.0101	22%	1,435
Warren	\$	6,242	\$	11.19	\$	0.0192	26%	558
Warwick	\$	1,207	\$	12.57	\$	0.0342	22%	96
Washington	\$	685	\$	15.92	\$	0.0362	14%	43
Watertown	\$	14,473	\$	5.81	\$	0.0152	15%	2,492
Wayland	\$	9,283	\$	12.13	\$	0.0144	15%	765
Webster	\$	28,707	\$	14.00	\$	0.0278	26%	2,051
Wellesley	\$	(9)	\$	(2.98)	\$	(0.0065)	60%	3
Wellfleet	\$	2,955	\$	6.20	\$	0.0187	15%	477

Municipality	Con ir	Total sumer Loss n Month	Ave Ho	erage Per usehold Loss Ionthly)	P (p	remium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Wendall	\$	3,352	\$	25.98	\$	0.0336	28%	129
Wenham	\$	4,712	\$	24.16	\$	0.0316	16%	195
West Chatham	\$	391	\$	3.49	\$	0.0095	12%	112
West Dennis	\$	1,715	\$	5.45	\$	0.0147	14%	315
West Falmouth	\$	1,652	\$	10.94	\$	0.0198	15%	151
West Harwich	\$	1,358	\$	6.50	\$	0.0161	14%	209
West Hatfield	\$	484	\$	11.01	\$	0.0254	13%	44
West Newton	\$	6,826	\$	10.31	\$	0.0161	15%	662
West Roxbury	\$	15,366	\$	7.13	\$	0.0181	19%	2,154
West Springfield	\$	30,297	\$	13.41	\$	0.0271	20%	2,260
West Tisbury	\$	4,178	\$	12.43	\$	0.0181	15%	336
West Townsend	NA		NA		NA	١	0%	-
West Wareham	\$	1,687	\$	4.79	\$	0.0096	23%	352
West Yarmouth	\$	5,152	\$	3.99	\$	0.0098	21%	1,291
Westboro	\$	18,971	\$	19.10	\$	0.0317	14%	993
Westford	\$	22,510	\$	19.73	\$	0.0290	13%	1,141
Westhampton	\$	1,821	\$	14.92	\$	0.0265	15%	122
Westminster	\$	9 <i>,</i> 065	\$	15.93	\$	0.0269	18%	569
Weston	\$	8,245	\$	13.74	\$	0.0113	15%	600
Westport	\$	15,392	\$	11.47	\$	0.0226	18%	1,342
Westport Pt	\$	363	\$	10.36	\$	0.0251	14%	35
Westwood	\$	6,871	\$	9.72	\$	0.0131	13%	707
Weymouth	\$	74,321	\$	15.84	\$	0.0313	20%	4,691
Whately	\$	1,409	\$	20.71	\$	0.0307	10%	68
Whitinsville	\$	24,883	\$	16.44	\$	0.0302	23%	1,514
Whitman	\$	24,271	\$	20.03	\$	0.0308	21%	1,212
Wht Horse Bch	\$	36	\$	2.43	\$	0.0062	7%	15
Wilbraham	\$	23,202	\$	19.16	\$	0.0250	22%	1,211
Williamsburg	\$	2,716	\$	14.07	\$	0.0308	15%	193
Williamstown	\$	6,738	\$	14.10	\$	0.0306	16%	478
Winchendon	\$	13,174	\$	16.24	\$	0.0303	20%	811
Winchester	\$	12,083	\$	12.97	\$	0.0189	12%	932
Windsor	\$	919	\$	11.64	\$	0.0254	16%	79
Winthrop	\$	20,558	\$	15.77	\$	0.0358	17%	1,304
Woburn	\$	22,446	\$	7.57	\$	0.0146	18%	2,967
Woods Hole	\$	817	\$	7.50	\$	0.0159	13%	109
Worcester	\$	259,315	\$	14.58	\$	0.0308	26%	17,786
Woronoco	\$	131	\$	6.57	\$	0.0120	17%	20

Municipality	Total Consumer Loss in Month		Av Ho (N	Average Per Household Loss (Monthly)		remium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Worthington	\$	1,372	\$	12.03	\$	0.0290	17%	114
Wrentham	\$	19,231	\$	24.28	\$	0.0296	19%	792
Yarmouth Port	\$	4,518	\$	5.53	\$	0.0109	22%	817

Appendix 2C

Consumer Loss, Premium, and Participation by Municipality – Low-Income Households

Appendix 2C										
Consumer Los	s, Pren	nium, and	Parti	cipation k	by M	unicipalit	y - Low-Income H	ouseholds		
			(Sor	ted Alpha	abeti	cally)				
Municipality	Total Consumer Loss in Month		Ave Ho (M	Average Per Household Premi Loss (per kV (Monthly)		emium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts		
Abington	\$	2,197	\$	18.31	\$	0.0314	26%	120		
Acton	\$	401	\$	4.56	\$	0.0115	23%	88		
Acushnet	\$	717	\$	5.23	\$	0.0152	26%	137		
Adams	\$	1,971	\$	10.83	\$	0.0299	31%	182		
Agawam	\$	3,284	\$	13.86	\$	0.0270	27%	237		
Alford	\$	73	\$	18.21	\$	0.0387	40%	4		
Allston	\$	831	\$	5.23	\$	0.0191	28%	159		
Amesbury	\$	2,599	\$	17.44	\$	0.0407	24%	149		
Amherst	\$	2,605	\$	13.64	\$	0.0336	25%	191		
Andover	\$	1,096	\$	14.81	\$	0.0345	17%	74		
Aquinnah	\$	35	\$	17.72	\$	0.0494	11%	2		
Arlington	\$	1,265	\$	6.11	\$	0.0209	24%	207		
Ashby	\$	211	\$	1.37	\$	0.0042	49%	154		
Ashfield	\$	345	\$	11.12	\$	0.0307	36%	31		
Ashland	\$	563	\$	7.41	\$	0.0149	19%	76		
Assonet	\$	199	\$	6.62	\$	0.0131	25%	30		
Athol	\$	8,708	\$	21.24	\$	0.0354	34%	410		
Attleboro	\$	12,307	\$	18.34	\$	0.0370	32%	671		
Auburn	\$	2,752	\$	17.09	\$	0.0316	24%	161		
Auburndale	\$	116	\$	7.71	\$	0.0174	19%	15		
Avon	\$	2	\$	2.33	\$	0.0112	33%	1		
Ayer	\$	1,418	\$	13.01	\$	0.0305	35%	109		
Barnstable	\$	73	\$	9.08	\$	0.0152	30%	8		
Barre	\$	1,248	\$	13.13	\$	0.0260	34%	95		
Bass River	\$	56	\$	2.22	\$	0.0061	26%	25		
Becket	\$	502	\$	14.78	\$	0.0284	20%	34		
Bedford	\$	469	\$	12.69	\$	0.0248	16%	37		
Belchertown	\$	3,940	\$	17.06	\$	0.0322	33%	231		
Bellingham	\$	1,555	\$	12.96	\$	0.0234	27%	120		
Belmont	NA		NA		NA		NA	-		
Berlin	\$	238	\$	15.87	\$	0.0220	25%	15		
Bernardston	\$	441	\$	5.37	\$	0.0081	43%	82		
Beverly	\$	5,848	\$	16.34	\$	0.0388	28%	358		
Billerica	\$	4,759	\$	22.66	\$	0.0391	27%	210		

Municipality	Total Consumer Loss in Month		Ave Hou (M	Average Per Household Loss (Monthly)		emium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Blackstone	\$	1,619	\$	14.99	\$	0.0291	33%	108
Blandford	\$	181	\$	13.92	\$	0.0272	23%	13
Bolton	\$	349	\$	29.09	\$	0.0426	30%	12
Boston	\$	5,699	\$	4.49	\$	0.0166	29%	1,269
Bourne	\$	245	\$	4.70	\$	0.0105	22%	52
Boxford	\$	66	\$	11.06	\$	0.0227	12%	6
Brant Rock	\$	20	\$	3.95	\$	0.0058	28%	5
Brewster	\$	350	\$	4.49	\$	0.0100	22%	78
Bridgewater	\$	3,485	\$	21.00	\$	0.0359	27%	166
Brighton	\$	1,423	\$	5.81	\$	0.0175	25%	245
Brimfield	\$	911	\$	20.69	\$	0.0378	25%	44
Brockton	\$	55 <i>,</i> 996	\$	16.70	\$	0.0356	44%	3,353
Brookfield	\$	1,292	\$	13.90	\$	0.0261	37%	93
Brookline	\$	484	\$	5.57	\$	0.0199	14%	87
Buckland	\$	402	\$	16.75	\$	0.0326	20%	24
Burlington	\$	750	\$	5.86	\$	0.0137	24%	128
Buzzards Bay	\$	207	\$	6.09	\$	0.0132	20%	34
Cambridge	\$	3,133	\$	6.68	\$	0.0202	28%	469
Canton	\$	1,018	\$	7.33	\$	0.0150	21%	139
Carlisle	\$	45	\$	7.55	\$	0.0130	21%	6
Carver	\$	558	\$	4.77	\$	0.0086	23%	117
Cataumet	\$	(27)	\$	(13.66)	\$	(0.0360)	8%	2
Centerville	\$	121	\$	1.76	\$	0.0035	20%	69
Charlemont	\$	568	\$	20.29	\$	0.0441	25%	28
Charlestown	\$	186	\$	6.89	\$	0.0198	20%	27
Charlton	\$	2,003	\$	20.23	\$	0.0274	27%	99
Chatham	\$	46	\$	1.63	\$	0.0044	27%	28
Chelmsford	\$	3,123	\$	16.79	\$	0.0355	27%	186
Chelsea	\$	6,395	\$	5.67	\$	0.0156	43%	1,128
Cheshire	\$	1,003	\$	11.94	\$	0.0282	33%	84
Chester	\$	31	\$	15.66	\$	0.0433	50%	2
Chesterfield	\$	145	\$	13.21	\$	0.0315	19%	11
Chestnut Hill	\$	234	\$	8.66	\$	0.0208	16%	27
Chicopee	NA		NA		NA		NA	-
Chilmark	NA		NA		NA		0%	-
Clarksburg	\$	586	\$	16.73	\$	0.0309	27%	35
Clinton	\$	4,045	\$	13.53	\$	0.0304	41%	299
Cohasset	\$	312	\$	19.49	\$	0.0321	20%	16

Municipality	Cor Loss i	Total nsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Colrain	\$	530	\$	16.55	\$	0.0321	26%	32
Concord	NA		NA		NA		NA	-
Conway	\$	142	\$	12.91	\$	0.0325	20%	11
Cotuit	\$	167	\$	6.98	\$	0.0124	24%	24
Cummaquid	\$	5	\$	1.16	\$	0.0024	24%	4
Cummington	\$	70	\$	13.99	\$	0.0203	14%	5
Dalton	\$	1,292	\$	5.07	\$	0.0104	45%	255
Dartmouth	NA		NA		NA		NA	-
Dedham	\$	1,425	\$	8.85	\$	0.0198	23%	161
Deerfield	\$	30	\$	7.52	\$	0.0109	12%	4
Dennis	\$	44	\$	2.60	\$	0.0050	18%	17
Dennis Port	\$	272	\$	5.23	\$	0.0128	24%	52
Dighton	\$	788	\$	20.20	\$	0.0374	21%	39
Dorchester	\$	36,375	\$	5.85	\$	0.0158	47%	6,213
Douglas	\$	1,234	\$	16.03	\$	0.0271	30%	77
Dover	\$	37	\$	18.61	\$	0.0075	11%	2
Dracut	\$	4,805	\$	17.54	\$	0.0334	26%	274
Dudley	\$	2,675	\$	15.46	\$	0.0302	32%	173
Dunstable	\$	271	\$	33.85	\$	0.0515	27%	8
Duxbury	\$	173	\$	5.25	\$	0.0117	14%	33
E Cambridge	\$	890	\$	7.88	\$	0.0230	29%	113
EHarwich	\$	100	\$	4.01	\$	0.0088	27%	25
E. Bridgewater	\$	2,109	\$	17.01	\$	0.0248	29%	124
E. Brookfield	\$	831	\$	20.78	\$	0.0368	41%	40
E. Longmeadow	\$	2,225	\$	16.98	\$	0.0385	25%	131
East Boston	\$	4,958	\$	5.27	\$	0.0153	40%	941
East Dennis	\$	98	\$	12.26	\$	0.0260	24%	8
East Falmouth	\$	835	\$	5.22	\$	0.0092	28%	160
East Freetown	\$	146	\$	3.65	\$	0.0061	24%	40
East Longmeadow	NA		NA		NA		0%	-
East Orleans	\$	28	\$	7.02	\$	0.0096	16%	4
East Otis	\$	31	\$	6.15	\$	0.0090	17%	5
East Sandwich	\$	134	\$	4.45	\$	0.0125	23%	30
East Walpole	\$	(1)	\$	(0.04)	\$	(0.0001)	15%	13
East Wareham	\$	932	\$	5.32	\$	0.0131	37%	175
Eastham	\$	208	\$	9.43	\$	0.0215	19%	22
Easthampton	\$	3,561	\$	13.49	\$	0.0294	26%	264
Easton	\$	3,218	\$	20.49	\$	0.0311	31%	157

Municipality	Co Loss	Total nsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Edgartown	\$	(77)	\$	(2.75)	\$	(0.0041)	18%	28
Egremont	\$	93	\$	6.66	\$	0.0232	27%	14
Erving	\$	636	\$	17.19	\$	0.0274	26%	37
Essex	\$	349	\$	19.40	\$	0.0418	24%	18
Everett	\$	13,637	\$	13.66	\$	0.0343	39%	998
Fairhaven	\$	1,236	\$	6.83	\$	0.0176	19%	181
Fall River	\$	56 <i>,</i> 454	\$	13.59	\$	0.0373	39%	4,153
Falmouth	\$	230	\$	4.12	\$	0.0120	26%	56
Feeding Hills	\$	2,385	\$	13.40	\$	0.0255	27%	178
Fitchburg	\$	15,557	\$	7.14	\$	0.0315	46%	2,180
Florida-Drury	\$	359	\$	18.90	\$	0.0436	21%	19
Forestdale	\$	85	\$	3.16	\$	0.0045	23%	27
Foxboro	\$	2,046	\$	17.19	\$	0.0353	28%	119
Framingham	\$	5,645	\$	6.31	\$	0.0144	34%	894
Franklin	\$	2,819	\$	16.78	\$	0.0335	29%	168
Gardner	\$	7,807	\$	14.40	\$	0.0360	32%	542
Gill	\$	174	\$	21.79	\$	0.0344	12%	8
Gloucester	\$	8,833	\$	17.25	\$	0.0408	28%	512
Goshen	\$	146	\$	18.24	\$	0.0364	22%	8
Grafton	\$	1,710	\$	17.81	\$	0.0313	30%	96
Granby	\$	895	\$	15.43	\$	0.0240	27%	58
Granville	\$	39	\$	3.27	\$	0.0061	27%	12
Green Harbor	NA		NA		NA		0%	-
Greenfield	\$	2,669	\$	1.98	\$	0.0048	51%	1,351
Gt. Barrington	\$	1,714	\$	14.77	\$	0.0321	32%	116
Hadley	\$	405	\$	9.21	\$	0.0277	23%	44
Halifax	\$	1,424	\$	16.56	\$	0.0336	29%	86
Hamilton	\$	635	\$	24.42	\$	0.0300	26%	26
Hampden	\$	928	\$	25.79	\$	0.0289	28%	36
Hancock	\$	72	\$	14.37	\$	0.0210	13%	5
Hanover	\$	801	\$	19.07	\$	0.0358	22%	42
Hanson	\$	515	\$	11.70	\$	0.0195	18%	44
Hardwick	\$	674	\$	12.71	\$	0.0293	27%	53
Harvard	\$	37	\$	9.24	\$	0.0240	16%	4
Harwich	\$	119	\$	2.09	\$	0.0051	24%	57
Harwich Port	\$	15	\$	1.24	\$	0.0044	22%	12
Hatfield	\$	133	\$	13.32	\$	0.0375	15%	10
Haverhill	\$	23,277	\$	18.30	\$	0.0385	32%	1,272

Municipality	Cor Loss i	Total nsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Hawley	\$	222	\$	27.72	\$	0.0436	33%	8
Heath	\$	520	\$	25.99	\$	0.0403	33%	20
Hingham	NA		NA		NA		0%	-
Hinsdale	\$	310	\$	10.01	\$	0.0196	19%	31
Holbrook	\$	2,847	\$	16.75	\$	0.0360	31%	170
Holland	\$	893	\$	20.76	\$	0.0253	31%	43
Holliston	\$	168	\$	3.44	\$	0.0095	20%	49
Hopedale	\$	849	\$	19.74	\$	0.0356	32%	43
Hopkinton	\$	109	\$	3.29	\$	0.0058	15%	33
Hubbardston	\$	543	\$	13.25	\$	0.0282	32%	41
Humarock	\$	4	\$	3.73	\$	0.0330	10%	1
Huntington	\$	286	\$	13.63	\$	0.0305	17%	21
Hyannis	\$	1,586	\$	3.25	\$	0.0071	39%	488
Hyannis Port	NA		NA		NA		0%	-
Hyde Park	\$	5,691	\$	5.77	\$	0.0152	38%	987
Indian Orchard	\$	9,083	\$	16.60	\$	0.0324	38%	547
Jamaica Plain	\$	2,080	\$	5.29	\$	0.0174	36%	393
Kingston	\$	249	\$	3.24	\$	0.0055	21%	77
Lake Pleasant	\$	3	\$	1.53	\$	0.0012	13%	2
Lakeville	\$	15	\$	3.72	\$	0.0084	18%	4
Lancaster	\$	575	\$	15.98	\$	0.0277	26%	36
Lanesborough	\$	360	\$	2.69	\$	0.0048	48%	134
Lawrence	\$	67,341	\$	19.39	\$	0.0410	39%	3,473
Lee	\$	567	\$	9.00	\$	0.0231	20%	63
Leicester	\$	2,740	\$	19.30	\$	0.0330	31%	142
Lenox	\$	343	\$	14.29	\$	0.0389	23%	24
Lenoxdale	\$	2	\$	0.28	\$	0.0009	33%	8
Leominster	\$	13,224	\$	15.20	\$	0.0326	37%	870
Leverett	\$	245	\$	18.84	\$	0.0363	19%	13
Lexington	\$	336	\$	6.00	\$	0.0163	15%	56
Leyden	\$	57	\$	18.90	\$	0.0406	11%	3
Lincoln	\$	(1)	\$	(0.11)	\$	(0.0002)	13%	9
Longmeadow	\$	715	\$	13.25	\$	0.0349	20%	54
Lowell	\$	60,166	\$	18.25	\$	0.0381	43%	3,297
Ludlow	\$	4,246	\$	17.47	\$	0.0316	22%	243
Lunenburg	\$	50	\$	0.08	\$	0.0003	50%	647
Lynn	\$	44,137	\$	15.93	\$	0.0396	42%	2,771
Malden	\$	14,520	\$	14.14	\$	0.0369	34%	1,027

Municipality	Co Loss	Total nsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Manchester	\$	90	\$	14.97	\$	0.0275	11%	6
Manomet	\$	36	\$	17.90	\$	0.0360	15%	2
Marion	\$	132	\$	5.49	\$	0.0137	13%	24
Marlboro	\$	7,338	\$	15.61	\$	0.0350	34%	470
Marshfield	\$	781	\$	6.40	\$	0.0159	20%	122
Marshfld HIs	NA		NA		NA		0%	-
Marstons Mls	\$	(80)	\$	(2.34)	\$	(0.0037)	16%	34
Mashpee	\$	772	\$	4.08	\$	0.0090	27%	189
Mattapan	\$	6,931	\$	6.50	\$	0.0161	47%	1,067
Mattapoisett	\$	99	\$	3.65	\$	0.0076	19%	27
Maynard	\$	365	\$	4.74	\$	0.0099	28%	77
Medfield	\$	143	\$	7.16	\$	0.0150	14%	20
Medford	\$	5,137	\$	14.51	\$	0.0327	27%	354
Medway	\$	126	\$	3.32	\$	0.0056	19%	38
Melrose	\$	1,611	\$	13.32	\$	0.0362	21%	121
Mendon	\$	524	\$	15.88	\$	0.0285	35%	33
Methuen	\$	12,806	\$	17.30	\$	0.0359	31%	740
Middleboro	\$	6	\$	5.96	\$	0.0080	100%	1
Middlefield	\$	32	\$	4.51	\$	0.0124	37%	7
Milford	\$	5,490	\$	15.91	\$	0.0326	39%	345
Millbury	\$	2,450	\$	16.33	\$	0.0322	31%	150
Millers Falls	\$	160	\$	10.03	\$	0.0168	19%	16
Millis	\$	111	\$	3.48	\$	0.0060	17%	32
Millville	\$	429	\$	17.86	\$	0.0316	22%	24
Milton	\$	649	\$	8.01	\$	0.0171	21%	81
Monroe	\$	11	\$	5.27	\$	0.0184	29%	2
Monson	\$	1,938	\$	17.62	\$	0.0309	29%	110
Montague	\$	145	\$	9.09	\$	0.0238	18%	16
Monterey	\$	127	\$	31.77	\$	0.0356	14%	4
Montgomery	\$	9	\$	9.20	\$	0.0247	5%	1
Monument Bch	\$	155	\$	11.89	\$	0.0239	29%	13
Mt.washington	\$	61	\$	15.21	\$	0.0210	44%	4
N Cambridge	\$	935	\$	6.73	\$	0.0204	28%	139
N Dartmouth	\$	1,112	\$	6.95	\$	0.0154	20%	160
N Falmouth	\$	(5)	\$	(0.43)	\$	(0.0010)	20%	12
N. Adams	\$	8,226	\$	15.85	\$	0.0357	33%	519
N. Andover	\$	1,587	\$	12.91	\$	0.0306	20%	123
N. Brookfield	\$	1,179	\$	16.15	\$	0.0261	28%	73

Municipality	Cor Loss i	Total nsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Nahant	\$	292	\$	16.21	\$	0.0398	26%	18
Nantucket	\$	176	\$	10.98	\$	0.0174	10%	16
Natick	\$	1,014	\$	5.54	\$	0.0144	21%	183
Needham	\$	353	\$	8.40	\$	0.0156	16%	42
New Ashford	\$	38	\$	3.76	\$	0.0065	56%	10
New Bedford	\$	13,379	\$	3.68	\$	0.0114	31%	3,637
New Braintree	\$	288	\$	36.05	\$	0.0464	22%	8
New Marlboro	\$	112	\$	16.05	\$	0.0185	10%	7
New Salem	\$	171	\$	17.06	\$	0.0305	24%	10
Newbury	\$	594	\$	23.75	\$	0.0385	18%	25
Newburyport	\$	1,498	\$	14.54	\$	0.0443	24%	103
Newton	\$	589	\$	10.33	\$	0.0277	26%	57
Newton Center	\$	255	\$	8.22	\$	0.0186	17%	31
Newton Hlds	\$	72	\$	2.76	\$	0.0060	18%	26
Newton L F	\$	49	\$	9.83	\$	0.0324	17%	5
Newton U F	\$	108	\$	7.73	\$	0.0259	23%	14
Newtonvlle	\$	112	\$	5.32	\$	0.0159	18%	21
Norfolk	\$	58	\$	5.83	\$	0.0077	11%	10
North Carver	\$	(35)	\$	(5.85)	\$	(0.0065)	25%	6
North Chatham	\$	17	\$	5.80	\$	0.0183	17%	3
North Eastham	\$	87	\$	4.81	\$	0.0115	21%	18
North Easton	NA		NA		NA		NA	-
North Hatfield	NA		NA		NA		0%	-
North Truro	\$	37	\$	6.21	\$	0.0251	10%	6
Northampton	\$	5,711	\$	15.48	\$	0.0388	29%	369
Northboro	\$	1,193	\$	18.08	\$	0.0309	28%	66
Northfield	\$	292	\$	8.83	\$	0.0192	23%	33
Norton	\$	2,226	\$	13.91	\$	0.0269	25%	160
Norwell	\$	141	\$	14.06	\$	0.0381	13%	10
Oak Bluffs	\$	127	\$	4.39	\$	0.0054	24%	29
Oakham	\$	651	\$	29.58	\$	0.0491	29%	22
Ocean Bluff	\$	(17)	\$	(17.36)	\$	(0.0290)	33%	1
Onset	\$	271	\$	3.82	\$	0.0087	32%	71
Orange	\$	6 <i>,</i> 307	\$	20.88	\$	0.0365	32%	302
Orleans	\$	234	\$	6.69	\$	0.0153	19%	35
Osterville	\$	83	\$	5.93	\$	0.0153	18%	14
Otis	\$	158	\$	17.50	\$	0.0374	16%	9
Oxford	\$	3,372	\$	16.45	\$	0.0287	33%	205

Municipality	Total Consumer Loss in Month		Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Palmer-3rivers	\$	4,732	\$	16.26	\$	0.0300	28%	291
Pelham	\$	48	\$	9.63	\$	0.0102	14%	5
Pembroke	\$	1,783	\$	19.17	\$	0.0297	23%	93
Pepperell	\$	1,643	\$	17.29	\$	0.0354	28%	95
Peru	\$	197	\$	16.38	\$	0.0289	20%	12
Petersham	\$	90	\$	9.02	\$	0.0228	21%	10
Phillipston	\$	1,074	\$	42.95	\$	0.0461	30%	25
Pittsfield	\$	9,030	\$	2.38	\$	0.0055	54%	3,800
Plainfield	\$	203	\$	15.65	\$	0.0233	31%	13
Plainville	\$	2,133	\$	24.52	\$	0.0420	27%	87
Plymouth	\$	1,910	\$	4.20	\$	0.0086	22%	455
Plympton	\$	13	\$	3.32	\$	0.0078	9%	4
Pocasset	\$	265	\$	6.98	\$	0.0223	30%	38
Provincetown	\$	304	\$	5.84	\$	0.0177	24%	52
Quincy	\$	13,390	\$	13.69	\$	0.0330	35%	978
Randolph	\$	10,586	\$	14.76	\$	0.0326	35%	717
Rehoboth	\$	1,396	\$	17.90	\$	0.0300	31%	78
Revere	\$	13,545	\$	16.22	\$	0.0358	32%	835
Richmond	\$	25	\$	4.11	\$	0.0101	16%	6
Rochester	\$	168	\$	5.80	\$	0.0098	25%	29
Rockland	\$	4,217	\$	21.51	\$	0.0378	31%	196
Rockport	\$	624	\$	16.00	\$	0.0402	16%	39
Roslindale	\$	4,522	\$	7.88	\$	0.0208	36%	574
Rowe	\$	90	\$	22.60	\$	0.0489	24%	4
Roxbry Xng	\$	2,846	\$	7.59	\$	0.0197	47%	375
Roxbury	\$	9,481	\$	6.28	\$	0.0172	48%	1,509
Royalston	\$	283	\$	16.64	\$	0.0318	22%	17
Russell	\$	(13)	\$	(12.66)	\$	(0.0200)	8%	1
Rutland	\$	1,189	\$	15.85	\$	0.0296	38%	75
S Boston	\$	49	\$	8.21	\$	0.0207	13%	6
S Dartmouth	\$	345	\$	2.95	\$	0.0082	19%	117
S Wellfleet	\$	41	\$	4.59	\$	0.0145	23%	9
S Yarmouth	\$	529	\$	3.89	\$	0.0103	30%	136
Sagamore	\$	52	\$	4.70	\$	0.0203	17%	11
Sagamore Bch	\$	128	\$	5.80	\$	0.0149	29%	22
Salem	\$	11,381	\$	16.28	\$	0.0435	32%	699
Salisbury	\$	2,198	\$	21.77	\$	0.0370	24%	101
Sandisfield	\$	93	\$	2.75	\$	0.0048	49%	34

Municipality	Co Loss	Total onsumer in Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Sandwich	\$	68	\$	1.00	\$	0.0018	24%	68
Saugus	\$	4,206	\$	20.13	\$	0.0361	23%	209
Savoy	\$	103	\$	4.90	\$	0.0116	32%	21
Scituate	\$	1,136	\$	20.29	\$	0.0351	24%	56
Seekonk	\$	2,208	\$	17.38	\$	0.0322	26%	127
Sharon	\$	117	\$	3.25	\$	0.0074	16%	36
Sheffield	\$	1,195	\$	21.73	\$	0.0369	26%	55
Shelburne	\$	41	\$	10.21	\$	0.0296	27%	4
Shelburne Fls	\$	203	\$	11.91	\$	0.0297	18%	17
Sherborn	\$	(26)	\$	(8.68)	\$	(0.0113)	11%	3
Shirley	\$	1,150	\$	11.98	\$	0.0246	32%	96
Shutesbury	\$	188	\$	13.45	\$	0.0262	18%	14
Somerset	\$	3,503	\$	15.37	\$	0.0368	29%	228
Somerville	\$	4,781	\$	6.44	\$	0.0184	39%	742
South Boston	\$	1,517	\$	7.82	\$	0.0201	29%	194
South Carver	\$	1	\$	0.37	\$	0.0005	11%	4
South Chatham	\$	69	\$	6.87	\$	0.0198	31%	10
South Deerfield	\$	261	\$	7.06	\$	0.0197	25%	37
South Dennis	\$	316	\$	4.27	\$	0.0085	27%	74
South Harwich	\$	11	\$	2.68	\$	0.0103	31%	4
South Lee	\$	(4)	\$	(3.92)	\$	(0.0058)	17%	1
South Orleans	\$	5	\$	2.49	\$	0.0080	11%	2
South Walpole	\$	6	\$	6.43	\$	0.0210	6%	1
Southampton	\$	331	\$	13.24	\$	0.0206	16%	25
Southboro	\$	398	\$	23.39	\$	0.0383	28%	17
Southborough	NA		NA		NA		NA	-
Southbridge	\$	12,902	\$	16.58	\$	0.0294	44%	778
Southwick	\$	2,489	\$	28.95	\$	0.0377	24%	86
Spencer	\$	3,825	\$	14.33	\$	0.0256	37%	267
Springfield	\$	134,617	\$	16.23	\$	0.0332	44%	8,292
Stockbridge	\$	223	\$	11.15	\$	0.0454	26%	20
Stoneham	\$	548	\$	4.42	\$	0.0117	19%	124
Stoughton	\$	5,474	\$	17.83	\$	0.0373	28%	307
Stow	NA		NA		NA		NA	-
Sturbridge	\$	1,387	\$	11.96	\$	0.0242	31%	116
Sudbury	\$	327	\$	9.61	\$	0.0198	18%	34
Sunderland	\$	362	\$	10.64	\$	0.0259	27%	34
Sutton	\$	795	\$	20.93	\$	0.0283	23%	38

Municipality	Cor Loss i	Total nsumer 'n Month	Average Per Household Loss (Monthly)		Premium (per kWh)		% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Swampscott	\$	860	\$	14.83	\$	0.0379	24%	58
Swansea	\$	3,816	\$	15.51	\$	0.0353	31%	246
Teaticket	\$	227	\$	4.29	\$	0.0078	34%	53
Tewksbury	\$	3,275	\$	21.83	\$	0.0371	25%	150
Tolland	\$	7	\$	2.17	\$	0.0020	20%	3
Topsfield	\$	107	\$	21.31	\$	0.0491	15%	5
Townsend	\$	463	\$	8.27	\$	0.0376	16%	56
Truro	\$	69	\$	6.24	\$	0.0126	31%	11
Turners Falls	\$	1,609	\$	10.19	\$	0.0278	27%	158
Tyngsboro	\$	1,891	\$	19.70	\$	0.0342	29%	96
Tyringham	\$	18	\$	17.91	\$	0.0640	14%	1
Upton	\$	569	\$	15.39	\$	0.0341	26%	37
Uxbridge	\$	1,754	\$	14.03	\$	0.0230	32%	125
Vineyard Hvn	\$	145	\$	3.62	\$	0.0059	25%	40
Vlg Nag Wd	\$	(21)	\$	(10.59)	\$	(0.0259)	50%	2
W Barnstable	\$	139	\$	8.69	\$	0.0205	26%	16
W Hyannisprt	\$	12	\$	1.53	\$	0.0044	30%	8
W Somerville	\$	434	\$	6.29	\$	0.0162	23%	69
W. Bridgewater	\$	1,016	\$	15.39	\$	0.0282	28%	66
W. Brookfield	\$	914	\$	14.52	\$	0.0274	32%	63
W. Newbury	\$	71	\$	10.18	\$	0.0124	15%	7
W.stockbridge	\$	192	\$	15.98	\$	0.0353	17%	12
Waban	\$	63	\$	5.70	\$	0.0161	20%	11
Wakefield	NA		NA		NA		NA	-
Wales	\$	463	\$	10.07	\$	0.0167	37%	46
Walpole	\$	132	\$	3.06	\$	0.0065	14%	43
Waltham	\$	3,232	\$	6.44	\$	0.0167	30%	502
Waquoit	\$	184	\$	5.76	\$	0.0121	26%	32
Ware	\$	5,430	\$	16.50	\$	0.0284	34%	329
Wareham	\$	1,313	\$	4.56	\$	0.0098	35%	288
Warren	\$	1,499	\$	12.49	\$	0.0226	31%	120
Warwick	\$	271	\$	11.77	\$	0.0372	34%	23
Washington	\$	174	\$	24.80	\$	0.0532	26%	7
Watertown	\$	1,231	\$	5.13	\$	0.0157	25%	240
Wayland	\$	128	\$	5.35	\$	0.0093	18%	24
Webster	\$	7,768	\$	14.94	\$	0.0327	36%	520
Wellesley	NA		NA		NA		NA	-
Wellfleet	\$	6	\$	0.32	\$	0.0006	17%	19

Municipality	Cor Loss i	Total nsumer in Month	Ave Hou (M	rage Per usehold Loss onthly)	Pi (p	remium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts
Wendall	\$	998	\$	23.75	\$	0.0328	43%	42
Wenham	\$	66	\$	22.03	\$	0.0410	10%	3
West Chatham	\$	(3)	\$	(2.93)	\$	(0.0070)	5%	1
West Dennis	\$	96	\$	7.39	\$	0.0236	18%	13
West Falmouth	\$	9	\$	4.32	\$	0.0220	29%	2
West Harwich	\$	24	\$	2.17	\$	0.0036	18%	11
West Hatfield	\$	76	\$	8.41	\$	0.0250	22%	9
West Newton	\$	189	\$	8.22	\$	0.0186	14%	23
West Roxbury	\$	984	\$	4.55	\$	0.0141	29%	216
West Springfield	\$	8,807	\$	12.34	\$	0.0265	36%	714
West Tisbury	\$	(123)	\$	(12.33)	\$	(0.0174)	14%	10
West Townsend	NA		NA		NA		NA	-
West Wareham	\$	243	\$	3.12	\$	0.0061	32%	78
West Yarmouth	\$	635	\$	4.47	\$	0.0084	28%	142
Westboro	\$	828	\$	17.25	\$	0.0344	22%	48
Westford	\$	1,081	\$	18.02	\$	0.0366	19%	60
Westhampton	\$	126	\$	21.06	\$	0.0405	15%	6
Westminster	\$	949	\$	22.08	\$	0.0388	22%	43
Weston	\$	(44)	\$	(2.95)	\$	(0.0071)	21%	15
Westport	\$	2,378	\$	10.91	\$	0.0230	31%	218
Westport Pt	NA		NA		NA		0%	-
Westwood	\$	144	\$	7.59	\$	0.0145	11%	19
Weymouth	\$	10,149	\$	17.77	\$	0.0372	30%	571
Whately	\$	81	\$	11.62	\$	0.0278	15%	7
Whitinsville	\$	3,325	\$	16.38	\$	0.0346	27%	203
Whitman	\$	3,350	\$	22.95	\$	0.0385	26%	146
Wht Horse Bch	NA		NA		NA		0%	-
Wilbraham	\$	2,284	\$	17.17	\$	0.0276	32%	133
Williamsburg	\$	215	\$	15.39	\$	0.0280	14%	14
Williamstown	\$	712	\$	12.49	\$	0.0280	28%	57
Winchendon	\$	3,838	\$	19.39	\$	0.0318	32%	198
Winchester	\$	71	\$	2.95	\$	0.0058	15%	24
Windsor	\$	163	\$	12.51	\$	0.0246	30%	13
Winthrop	\$	2,129	\$	16.50	\$	0.0439	23%	129
Woburn	\$	2,729	\$	7.56	\$	0.0157	28%	361
Woods Hole	\$	10	\$	10.03	\$	0.0711	20%	1
Worcester	\$	78,812	\$	16.05	\$	0.0346	39%	4,911
Woronoco	\$	52	\$	17.47	\$	0.0303	20%	3

Municipality	Co Loss	Total nsumer in Month	Av Ho (N	verage Per ousehold Loss Monthly)	P (p	remium er kWh)	% of Households Participating in Competitive Supply Market	#Competitive Supply Accounts	
Worthington	\$	303	\$	27.56	\$	0.0408	20%	11	
Wrentham	\$	1,114	\$	25.33	\$	0.0352	25%	44	
Yarmouth Port	\$	272	\$	5.33	\$	0.0105	28%	51	

Appendix 2D

Supplier-Specific Information – All Households

Appendix 2D													
Supplier-Specific Information All Households (Ranked by Weighted Average Premium)													
Supplier ID	Average Rate	# of Bills	A Pi	verage remium	Share of Accounts	Ne	et Consumer Loss		Loss		Gain	Share of Loss	Share of Gain
Supplier #1	\$ 0.1713	43,710	\$	0.0577	0.7%	\$	1,466,581	\$	1,508,006	\$	(41,425)	1.7%	0.3%
Supplier #25	\$ 0.1682	180,743	\$	0.0496	3.1%	\$	3,741,920	\$	3,777,207	\$	(35,287)	4.1%	0.2%
Supplier #24	\$ 0.1609	69,243	\$	0.0480	1.2%	\$	1,771,914	\$	1,823,024	\$	(51,110)	2.0%	0.3%
Supplier #47	\$ 0.1611	165,711	\$	0.0469	2.8%	\$	3,602,309	\$	4,039,011	\$	(436,701)	4.4%	2.9%
Supplier #18	\$ 0.1536	89,495	\$	0.0462	1.5%	\$	2,294,767	\$	2,645,067	\$	(350,301)	2.9%	2.3%
Supplier #12	\$ 0.1561	321,469	\$	0.0432	5.4%	\$	6,206,540	\$	6,214,683	\$	(8,143)	6.8%	0.1%
Supplier #57	\$ 0.1705	779	\$	0.0432	0.0%	\$	12,897	\$	13,304	\$	(408)	0.0%	0.0%
Supplier #51	\$ 0.1609	22,899	\$	0.0421	0.4%	\$	429,765	\$	443,924	\$	(14,160)	0.5%	0.1%
Supplier #39	\$ 0.1552	30,086	\$	0.0419	0.5%	\$	626,077	\$	651,985	\$	(25,908)	0.7%	0.2%
Supplier #46	\$ 0.1451	23,935	\$	0.0419	0.4%	\$	471,725	\$	487,435	\$	(15,710)	0.5%	0.1%
Supplier #41	\$ 0.1424	467,358	\$	0.0408	7.9%	\$	10,600,096	\$	11,157,908	\$	(557,813)	12.2%	3.7%
Supplier #37	\$ 0.1526	527,966	\$	0.0391	8.9%	\$	12,364,487	\$	12,702,026	\$	(337,538)	13.9%	2.3%
Supplier #48	\$ 0.1542	50,506	\$	0.0371	0.9%	\$	1,181,691	\$	1,224,809	\$	(43,118)	1.3%	0.3%
Supplier #6	\$ 0.1472	229,817	\$	0.0331	3.9%	\$	4,270,656	\$	4,762,748	\$	(492,092)	5.2%	3.3%
Supplier #35	\$ 0.1430	96,866	\$	0.0327	1.6%	\$	2,092,279	\$	2,203,286	\$	(111,006)	2.4%	0.7%
Supplier #15	\$ 0.1439	174,017	\$	0.0319	2.9%	\$	2,541,684	\$	2,646,252	\$	(104,568)	2.9%	0.7%
Supplier #32	\$ 0.1349	460,600	\$	0.0221	7.8%	\$	6,582,054	\$	7,148,611	\$	(566,557)	7.8%	3.8%
Supplier #43	\$ 0.1284	207,940	\$	0.0197	3.5%	\$	2,276,761	\$	2,532,468	\$	(255,707)	2.8%	1.7%
Supplier #22	\$ 0.1361	127,620	\$	0.0197	2.2%	\$	1,491,213	\$	1,905,106	\$	(413 <i>,</i> 893)	2.1%	2.8%
Supplier #4	\$ 0.1307	97,464	\$	0.0192	1.6%	\$	980,824	\$	1,150,705	\$	(169,880)	1.3%	1.1%
Supplier #30	\$ 0.1168	132	\$	0.0192	0.0%	\$	1,436	\$	1,568	\$	(133)	0.0%	0.0%
Supplier #27	\$ 0.1337	206,405	\$	0.0191	3.5%	\$	1,934,905	\$	2,205,909	\$	(271,004)	2.4%	1.8%
Supplier #55	\$ 0.1372	6,321	\$	0.0187	0.1%	\$	55,038	\$	57,689	\$	(2,651)	0.1%	0.0%
Supplier #29	\$ 0.1296	165,772	\$	0.0166	2.8%	\$	1,416,227	\$	1,812,542	\$	(396,315)	2.0%	2.7%
Supplier #42	\$ 0.1307	509,664	\$	0.0159	8.6%	\$	4,952,383	\$	6,160,958	\$	(1,208,575)	6.8%	8.1%
Supplier #20	\$ 0.1307	28,373	\$	0.0151	0.5%	\$	234,874	\$	288,563	\$	(53,689)	0.3%	0.4%

Supplier ID	Average Rate	# of Bills	P	Average remium	Share of Accounts	Ne	et Consumer Loss	Loss			Gain	Share of Loss	Share of Gain
Supplier #13	\$ 0.1252	83,617	\$	0.0151	1.4%	\$	752,510	\$	844,168	\$	(91,658)	0.9%	0.6%
Supplier #60	\$ 0.1347	27,625	\$	0.0150	0.5%	\$	163,483	\$	207,027	\$	(43,544)	0.2%	0.3%
Supplier #23	\$ 0.1284	235,110	\$	0.0142	4.0%	\$	1,788,858	\$	2,224,276	\$	(435,418)	2.4%	2.9%
Supplier #36	\$ 0.1240	107,912	\$	0.0127	1.8%	\$	811,752	\$	1,261,019	\$	(449,267)	1.4%	3.0%
Supplier #31	\$ 0.1258	97,689	\$	0.0118	1.7%	\$	693 <i>,</i> 930	\$	1,151,738	\$	(457,808)	1.3%	3.1%
Supplier #7	\$ 0.1210	152,761	\$	0.0089	2.6%	\$	916,735	\$	1,418,977	\$	(502,242)	1.6%	3.4%
Supplier #44	\$ 0.1023	22,189	\$	0.0084	0.4%	\$	107,109	\$	125,302	\$	(18,193)	0.1%	0.1%
Supplier #49	\$ 0.1158	45	\$	0.0041	0.0%	\$	74	\$	109	\$	(35)	0.0%	0.0%
Supplier #10	\$ 0.1175	17,446	\$	0.0041	0.3%	\$	74,592	\$	206,231	\$	(131,639)	0.2%	0.9%
Supplier #45	\$ 0.1054	13	\$	0.0027	0.0%	\$	21	\$	46	\$	(25)	0.0%	0.0%
Supplier #14	\$ 0.1187	15,370	\$	0.0025	0.3%	\$	24,050	\$	74,989	\$	(50,939)	0.1%	0.3%
Supplier #54	\$ 0.1208	1,361	\$	0.0024	0.0%	\$	1,461	\$	4,336	\$	(2 <i>,</i> 875)	0.0%	0.0%
Supplier #19	\$ 0.1153	19,264	\$	0.0009	0.3%	\$	10,793	\$	105,844	\$	(95,051)	0.1%	0.6%
Supplier #3	\$ 0.1144	21,919	\$	0.0005	0.4%	\$	7,439	\$	181,182	\$	(173,743)	0.2%	1.2%
Supplier #26	\$ 0.1120	69,358	\$	(0.0022)	1.2%	\$	(97,931)	\$	292,130	\$	(390,062)	0.3%	2.6%
Supplier #21	\$ 0.1112	3,070	\$	(0.0022)	0.1%	\$	(5,822)	\$	30,893	\$	(36,715)	0.0%	0.2%
Supplier #34	\$ 0.1111	378,558	\$	(0.0028)	6.4%	\$	(734,256)	\$	1,680,567	\$	(2,414,823)	1.8%	16.2%
Supplier #59	\$ 0.1061	1,079	\$	(0.0037)	0.0%	\$	(3,206)	\$	3,441	\$	(6,647)	0.0%	0.0%
Supplier #11	\$ 0.1106	8,591	\$	(0.0037)	0.1%	\$	(27,565)	\$	60,276	\$	(87 <i>,</i> 840)	0.1%	0.6%
Supplier #2	\$ 0.0965	33,225	\$	(0.0038)	0.6%	\$	(83,114)	\$	41,943	\$	(125,057)	0.0%	0.8%
Supplier #38	\$ 0.1113	4,359	\$	(0.0041)	0.1%	\$	(20,252)	\$	34,526	\$	(54,778)	0.0%	0.4%
Supplier #28	\$ 0.1097	27,199	\$	(0.0052)	0.5%	\$	(162,015)	\$	190,850	\$	(352 <i>,</i> 864)	0.2%	2.4%
Supplier #9	\$ 0.1089	219,505	\$	(0.0072)	3.7%	\$	(1,048,205)	\$	1,302,681	\$	(2,350,885)	1.4%	15.7%
Supplier #64	\$ 0.0977	31,693	\$	(0.0108)	0.5%	\$	(209,053)	\$	95,288	\$	(304,341)	0.1%	2.0%
Supplier #5	\$ 0.0996	980	\$	(0.0115)	0.0%	\$	(5 <i>,</i> 086)	\$	444	\$	(5 <i>,</i> 531)	0.0%	0.0%
Supplier #16	\$ 0.1064	485	\$	(0.0123)	0.0%	\$	(10,608)	\$	999	\$	(11,606)	0.0%	0.1%
Supplier #61	\$ 0.1097	9,341	\$	(0.0138)	0.2%	\$	(66,670)	\$	1,151	\$	(67,821)	0.0%	0.5%
Supplier #8	\$ 0.1024	15,557	\$	(0.0140)	0.3%	\$	(164,099)	\$	40,315	\$	(204,414)	0.0%	1.4%
Supplier #33	\$ 0.0991	2,219	\$	(0.0141)	0.0%	\$	(29,859)	\$	2,446	\$	(32,305)	0.0%	0.2%

Supplier ID	Average Rate	# of Bills	Average Premium		Share of Accounts	Net Consumer Loss		Loss		Gain		Share of Loss	Share of Gain
Supplier #63	\$ 0.0981	1,398	\$	(0.0162)	0.0%	\$	(19,525)	\$	1,342	\$	(20,868)	0.0%	0.1%
Supplier #53	\$ 0.0943	53	\$	(0.0178)	0.0%	\$	(167)	\$	-	\$	(167)	0.0%	0.0%
Supplier #50	\$ 0.0968	11	\$	(0.0219)	0.0%	\$	(271)	\$	16	\$	(287)	0.0%	0.0%
Supplier #40	\$ 0.0820	21	\$	(0.0229)	0.0%	\$	(3,474)	\$	-	\$	(3,474)	0.0%	0.0%
Supplier #58	\$ 0.0930	243	\$	(0.0260)	0.0%	\$	(4 <i>,</i> 595)	\$	57	\$	(4,652)	0.0%	0.0%
Supplier #62	\$ 0.0990	2	\$	(0.0278)	0.0%	\$	5	\$	87	\$	(81)	0.0%	0.0%
Supplier #52	\$ 0.0942	1,889	\$	(0.0297)	0.0%	\$	(26,649)	\$	-	\$	(26,649)	0.0%	0.2%
Supplier #17	\$ 0.0827	113	\$	(0.0318)	0.0%	\$	(16,538)	\$	271	\$	(16,809)	0.0%	0.1%
Supplier #56	\$ 0.0830	16	\$	(0.0328)	0.0%	\$	(6,252)	\$	-	\$	(6,252)	0.0%	0.0%
All Suppliers		5,916,177			100%	\$7	6,208,703	\$9	1,149,757	\$(14,941,054)	100%	100%
Appendix 3A

Supplier-Specific Information – Low-Income Households

2019 Update

Appendix	3A
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Appendix 3A												
Supplier-Specific Information - Low-Income Households (Ranked by Weighted Average Premium)												
Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net C	Consumer Loss		Loss		Gain	Share of Loss	Share of Gain
Supplier #18	\$ 0.1692	15,319	\$ 0.0681	1.3%	\$	499,110	\$	526,658	\$	(27,547)	2.9%	1.4%
Supplier #1	\$ 0.1674	1,977	\$ 0.0569	0.2%	\$	60,674	\$	62,643	\$	(1,969)	0.3%	0.1%
Supplier #39	\$ 0.1604	6,346	\$ 0.0502	0.5%	\$	170,349	\$	172,530	\$	(2,181)	0.9%	0.1%
Supplier #25	\$ 0.1644	27,992	\$ 0.0469	2.4%	\$	515,500	\$	519,152	\$	(3,652)	2.8%	0.2%
Supplier #57	\$ 0.1750	290	\$ 0.0462	0.0%	\$	5,062	\$	5,119	\$	(58)	0.0%	0.0%
Supplier #24	\$ 0.1558	16,159	\$ 0.0454	1.4%	\$	354,451	\$	362,903	\$	(8,452)	2.0%	0.4%
Supplier #47	\$ 0.1563	51,221	\$ 0.0445	4.3%	\$1	,124,684	\$	1,278,467	\$	(153,783)	7.0%	7.6%
Supplier #12	\$ 0.1553	105,279	\$ 0.0440	8.9%	\$2	2,158,386	\$	2,160,870	\$	(2,484)	11.8%	0.1%
Supplier #51	\$ 0.1619	7,519	\$ 0.0427	0.6%	\$	152,234	\$	157,269	\$	(5,035)	0.9%	0.3%
Supplier #41	\$ 0.1421	102,921	\$ 0.0424	8.7%	\$2	2,235,330	\$	2,331,997	\$	(96,667)	12.7%	4.8%
Supplier #46	\$ 0.1430	11,945	\$ 0.0422	1.0%	\$	244,327	\$	252,027	\$	(7,700)	1.4%	0.4%
Supplier #48	\$ 0.1558	7,505	\$ 0.0392	0.6%	\$	150,526	\$	153,194	\$	(2,667)	0.8%	0.1%
Supplier #37	\$ 0.1497	43,349	\$ 0.0391	3.7%	\$	926,893	\$	950,063	\$	(23,170)	5.2%	1.2%
Supplier #35	\$ 0.1436	19,107	\$ 0.0348	1.6%	\$	420,386	\$	438,401	\$	(18,015)	2.4%	0.9%
Supplier #15	\$ 0.1446	66,189	\$ 0.0337	5.6%	\$1	.,027,352	\$	1,050,987	\$	(23,634)	5.7%	1.2%
Supplier #6	\$ 0.1448	57,964	\$ 0.0330	4.9%	\$1	,026,003	\$	1,108,915	\$	(82,912)	6.0%	4.1%
Supplier #32	\$ 0.1360	52,983	\$ 0.0244	4.5%	\$	776,468	\$	827,812	\$	(51,344)	4.5%	2.6%
Supplier #22	\$ 0.1378	20,208	\$ 0.0234	1.7%	\$	281,465	\$	331,980	\$	(50,515)	1.8%	2.5%
Supplier #29	\$ 0.1365	48,878	\$ 0.0232	4.1%	\$	500,543	\$	563,288	\$	(62,745)	3.1%	3.1%
Supplier #43	\$ 0.1312	55,154	\$ 0.0228	4.6%	\$	712,913	\$	746,620	\$	(33,707)	4.1%	1.7%
Supplier #27	\$ 0.1360	88,403	\$ 0.0220	7.4%	\$	929,285	\$	1,030,257	\$	(100,973)	5.6%	5.0%
Supplier #42	\$ 0.1360	95,772	\$ 0.0206	8.1%	\$1	.,097,332	\$	1,213,532	\$	(116,200)	6.6%	5.8%
Supplier #4	\$ 0.1301	31,005	\$ 0.0196	2.6%	\$	314,141	\$	364,177	\$	(50,036)	2.0%	2.5%
Supplier #55	\$ 0.1366	1,581	\$ 0.0189	0.1%	\$	13 <i>,</i> 837	\$	14,621	\$	(783)	0.1%	0.0%
Supplier #20	\$ 0.1326	5,959	\$ 0.0179	0.5%	\$	52,713	\$	59 <i>,</i> 597	\$	(6 <i>,</i> 885)	0.3%	0.3%
Supplier #31	\$ 0.1313	23,771	\$ 0.0176	2.0%	\$	227,139	\$	278,400	\$	(51,261)	1.5%	2.5%
Supplier #3	\$ 0.1262	3,869	\$ 0.0172	0.3%	\$	35,434	\$	51,091	\$	(15,657)	0.3%	0.8%
Supplier #10	\$ 0.1281	231	\$ 0.0166	0.0%	\$	3,146	\$	3,681	\$	(535)	0.0%	0.0%
Supplier #60	\$ 0.1351	11,653	\$ 0.0158	1.0%	\$	77,138	\$	96,675	\$	(19,537)	0.5%	1.0%

Are Residential Consumers Benefiting from Electric Supply Competition? 2019 Update

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Ne	t Consumer Loss	Loss			Gain	Share of Loss	Share of Gain
Supplier #45	\$ 0.1099	2	\$ 0.0156	0.0%	\$	26	\$	26	\$	-	0.0%	0.0%
Supplier #23	\$ 0.1276	16,144	\$ 0.0151	1.4%	\$	123,436	\$	140,364	\$	(16,928)	0.8%	0.8%
Supplier #13	\$ 0.1193	19,485	\$ 0.0123	1.6%	\$	136,444	\$	154,842	\$	(18,398)	0.8%	0.9%
Supplier #36	\$ 0.1223	15,532	\$ 0.0115	1.3%	\$	100,493	\$	164,658	\$	(64,165)	0.9%	3.2%
Supplier #30	\$ 0.1123	36	\$ 0.0113	0.0%	\$	290	\$	406	\$	(116)	0.0%	0.0%
Supplier #33	\$ 0.1185	5	\$ 0.0064	0.0%	\$	9	\$	13	\$	(4)	0.0%	0.0%
Supplier #7	\$ 0.1176	29,308	\$ 0.0061	2.5%	\$	91,721	\$	187,923	\$	(96,202)	1.0%	4.8%
Supplier #44	\$ 0.1026	2,228	\$ 0.0052	0.2%	\$	5,522	\$	11,811	\$	(6,290)	0.1%	0.3%
Supplier #26	\$ 0.1180	11,529	\$ 0.0048	1.0%	\$	28,901	\$	59,452	\$	(30,551)	0.3%	1.5%
Supplier #19	\$ 0.1173	4,912	\$ 0.0043	0.4%	\$	12,747	\$	29,264	\$	(16,517)	0.2%	0.8%
Supplier #49	\$ 0.1161	15	\$ 0.0037	0.0%	\$	13	\$	20	\$	(7)	0.0%	0.0%
Supplier #34	\$ 0.1137	46,194	\$ 0.0004	3.9%	\$	9,443	\$	226,678	\$	(217,235)	1.2%	10.8%
Supplier #14	\$ 0.1170	2,719	\$ (0.0002)	0.2%	\$	(315)	\$	10,910	\$	(11,224)	0.1%	0.6%
Supplier #38	\$ 0.1149	27	\$ (0.0030)	0.0%	\$	(34)	\$	57	\$	(92)	0.0%	0.0%
Supplier #8	\$ 0.1112	1,743	\$ (0.0037)	0.1%	\$	(4,288)	\$	9,512	\$	(13,799)	0.1%	0.7%
Supplier #59	\$ 0.1049	136	\$ (0.0039)	0.0%	\$	(498)	\$	335	\$	(833)	0.0%	0.0%
Supplier #28	\$ 0.1108	298	\$ (0.0046)	0.0%	\$	(1,238)	\$	1,250	\$	(2,488)	0.0%	0.1%
Supplier #9	\$ 0.1099	42,901	\$ (0.0053)	3.6%	\$	(134,238)	\$	248,909	\$	(383,147)	1.4%	19.1%
Supplier #64	\$ 0.0989	6,858	\$ (0.0079)	0.6%	\$	(31,129)	\$	22,769	\$	(53 <i>,</i> 898)	0.1%	2.7%
Supplier #11	\$ 0.1060	22	\$ (0.0116)	0.0%	\$	(259)	\$	3	\$	(261)	0.0%	0.0%
Supplier #2	\$ 0.0986	4,003	\$ (0.0163)	0.3%	\$	(24,158)	\$	3,412	\$	(27,570)	0.0%	1.4%
Supplier #63	\$ 0.0956	119	\$ (0.0207)	0.0%	\$	(1,545)	\$	225	\$	(1,770)	0.0%	0.1%
Supplier #54	\$ 0.1266	395	\$ (0.0217)	0.0%	\$	(2,703)	\$	-	\$	(2,703)	0.0%	0.1%
Supplier #58	\$ 0.0927	26	\$ (0.0287)	0.0%	\$	(536)	\$	-	\$	(536)	0.0%	0.0%
Supplier #53	\$ 0.0829	11	\$ (0.0307)	0.0%	\$	(15)	\$	-	\$	(15)	0.0%	0.0%
Supplier #61	\$ 0.1097	1,089	\$ (0.0380)	0.1%	\$	(16,022)	\$	-	\$	(16,022)	0.0%	0.8%
Supplier #52	\$ 0.0939	541	\$ (0.0496)	0.0%	\$	(9,400)	\$	-	\$	(9,400)	0.0%	0.5%
Total		1,186,827		100%	\$	16,375,489	\$	18,385,763	\$	(2,010,274)	100%	100%

Appendix 3B

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Majority-Minority vs. Rest of State

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Majority-Minority Vs. Rest of State											
Zip	Municipality	Percent nonwhite and/or Hispanic	Total accounts	Percent low Total income accounts accounts		verage narkup er basic	Percent of accounts in competitive supply: All Low income Non - L.I.				
Maior	ity Minority	68%	352.965	24%	Ś	0.0274	29%	43%	25%		
Res	t of State	18%	2,104,507	9%	\$	0.0222	19%	32%	18%		
02121	Dorchester	97%	9,793	39%	\$	0.0191	42%	50%	37%		
02126	Mattapan	96%	8,051	28%	\$	0.0183	39%	47%	36%		
01840	Lawrence	91%	2,402	41%	\$	0.0450	30%	42%	23%		
02119	Roxbury	90%	10,195	31%	\$	0.0176	36%	48%	30%		
01107	Springfield	88%	4,354	48%	\$	0.0499	44%	55%	34%		
01841	Lawrence	86%	14,310	38%	\$	0.0390	32%	39%	28%		
01841	Methuen	86%	56	38%	\$	0.0313	30%	33%	29%		
01105	Springfield	85%	4,939	39%	\$	0.0346	41%	42%	39%		
02124	Dorchester	83%	17,244	26%	\$	0.0161	33%	45%	28%		
01561	Lancaster	82%	350	7%	\$	0.0274	13%	15%	13%		
01103	Springfield	80%	1,105	14%	\$	0.0116	5%	7%	4%		
01109	Springfield	78%	10,346	43%	\$	0.0258	30%	50%	15%		
02150	Chelsea	76%	12,980	20%	\$	0.0151	34%	43%	32%		
01608	Worcester	75%	1,529	12%	\$	0.0331	14%	40%	11%		
01843	Lawrence	75%	8,855	28%	\$	0.0388	28%	37%	24%		
02136	Hyde Park	74%	12,158	21%	\$	0.0186	31%	38%	29%		
02125	Dorchester	69%	13,228	22%	\$	0.0193	29%	44%	24%		
02122	Dorchester	68%	8,996	22%	\$	0.0149	30%	51%	24%		
01902	Lynn	68%	16,115	23%	\$	0.0373	32%	43%	28%		
01104	Springfield	68%	10,456	39%	\$	0.0351	42%	54%	35%		
02128	East Boston	68%	15,522	15%	\$	0.0202	26%	40%	23%		
01901	Lynn	67%	1,313	36%	\$	0.0421	25%	34%	20%		
01108	Springfield	66%	9,302	33%	\$	0.0195	17%	31%	10%		

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		Percent nonwhite and/or Total		Percent low Average otal income markup		verage narkup	Percent of accounts in competitive supply:				
Zip	Municipality	пізрапіс	accounts	accounts	ov	er basic	All	Low income	Non - L.I.		
Major	ity Minority	68%	352,965	24%	\$	0.0274	29%	43%	25%		
Res	t of State	18%	2,104,507	9%	\$	0.0222	19%	32%	18%		
01905	Lynn	65%	8,577	21%	\$	0.0362	32%	44%	29%		
02366	South Carver	64%	491	7%	\$	0.0099	11%	11%	11%		
02368	Randolph	63%	12,274	17%	\$	0.0316	29%	35%	27%		
02301	Brockton	63%	22,129	23%	\$	0.0328	34%	45%	31%		
01610	Worcester	61%	7,820	28%	\$	0.0341	32%	45%	27%		
01151	Indian Orchard	60%	3,766	38%	\$	0.0307	26%	38%	19%		
01151	Springfield	60%	24	25%		NA	0%	17%	-6%		
01851	Lowell	60%	10,384	20%	\$	0.0333	32%	48%	28%		
02120	Roxbry Xng	60%	4,700	17%	\$	0.0186	25%	47%	21%		
02111	Boston	60%	4,468	17%	\$	0.0055	12%	32%	8%		
01605	Worcester	54%	8,465	19%	\$	0.0295	25%	40%	22%		
02118	Boston	53%	12,174	10%	\$	0.0114	13%	33%	11%		
02148	Malden	53%	25,026	12%	\$	0.0346	22%	34%	20%		
01119	Springfield	53%	4,890	36%	\$	0.0249	16%	40%	3%		
01854	Lowell	53%	8,582	19%	\$	0.0339	26%	43%	23%		
02302	Brockton	52%	11,375	22%	\$	0.0324	31%	41%	28%		
02131	Roslindale	51%	11,759	14%	\$	0.0185	25%	36%	23%		
02142	Cambridge	50%	2,462	3%	\$	0.0297	5%	20%	5%		

Source: Basic supply providers and ZCTA data from the U.S. Census 2015 American Community Survey

Appendix 3C

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Bottom 20 Median Income vs. Rest of State

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Bottom 20 Median Income vs. Rest of State										
		л	Median	-	Percent low	A	verage	Demost		
7:	N /1	ho	busehold	Total	Income	n	narkup	Percent of act	counts in competit	live supply:
۷ID	iviunicipality	-	ncome	accounts	accounts	OV		All	Low income	INON - L.I.
Bottom 20	: med. income	\$	28,736	120,702	32%	\$	0.0298	32%	44%	26%
Rest	of State	\$	74,155	2,327,261	10%	\$	0.0227	20%	34%	18%
01103	Springfield	\$	15,558	1,105	14%	\$	0.0116	5%	7%	4%
01105	Springfield	\$	16,845	4,939	39%	\$	0.0346	41%	42%	39%
01094	Hardwick	\$	17,708	166	37%	\$	0.0326	19%	24%	15%
01840	Lawrence	\$	18,291	2,402	41%	\$	0.0450	30%	42%	23%
01901	Lynn	\$	21,605	1,313	36%	\$	0.0421	25%	34%	20%
01107	Springfield	\$	22,288	4,354	48%	\$	0.0499	44%	55%	34%
01608	Worcester	\$	22,789	1,529	12%	\$	0.0331	14%	40%	11%
02121	Dorchester	\$	26,150	9,793	39%	\$	0.0191	42%	50%	37%
02746	New Bedford	\$	26,705	6,242	36%	\$	0.0076	29%	35%	26%
01104	Springfield	\$	28,858	10,456	39%	\$	0.0351	42%	54%	35%
02119	Roxbury	\$	28,885	10,195	31%	\$	0.0176	36%	48%	30%
02721	Fall River	\$	29,684	11,457	31%	\$	0.0357	31%	42%	26%
02120	Roxbry Xng	\$	30,487	4,700	17%	\$	0.0186	25%	47%	21%
02724	Fall River	\$	30,688	7,598	30%	\$	0.0358	30%	39%	26%
01610	Worcester	\$	31,019	7,820	28%	\$	0.0341	32%	45%	27%
02047	Humarock	\$	31,302	694	1%	\$	0.0134	9%	10%	8%
02744	New Bedford	\$	31,709	5,061	36%	\$	0.0140	26%	34%	21%
02115	Boston	\$	31,737	9,722	10%	\$	0.0131	15%	26%	13%
02723	Fall River	\$	32,275	6,846	30%	\$	0.0361	30%	42%	25%
01841	Lawrence	\$	32,928	14310	38%	\$	0.0390	32%	39%	28%

Source: Basic supply providers and ZCTA data from the U.S. Census 2015 American Community Survey

Appendix 3D

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Top 20 Median Income vs. Rest of State

Zip Code and Municipality Participation in the Competitive Supply Market, June 2018: Top 20 Median Income vs. Rest of State										
		h	Median ousehold	Total	Percent low income	A n	verage narkup	Percent of	itive supply:	
Zip	Municipality		income	accounts	accounts	ov	er basic	All	Low income	Non - L.I.
Top 20:	med. income	\$	152,574	72,814	3%	\$	0.0160	14%	17%	14%
Rest	of State	\$	69,442	2,375,149	12%	\$	0.0234	21%	35%	19%
02493	Weston	\$	199,519	3,919	2%	\$	0.0113	15%	21%	15%
02468	Waban	\$	196,250	2,317	2%	\$	0.0173	13%	20%	13%
02030	Dover	\$	185,542	2,087	1%	\$	0.0071	14%	11%	14%
01467	Harvard	\$	183,750	71	3%	\$	0.0060	18%	50%	17%
01741	Carlisle	\$	166,111	1,893	2%	\$	0.0046	15%	21%	15%
01776	Sudbury	\$	165,745	6,278	3%	\$	0.0132	13%	18%	13%
01770	Sherborn	\$	155 <i>,</i> 956	1,579	2%	\$	0.0149	14%	11%	14%
01773	Lincoln	\$	153 <i>,</i> 438	2,252	3%	\$	0.0167	16%	13%	17%
02420	Lexington	\$	151,607	5,464	3%	\$	0.0157	14%	17%	14%
01740	Bolton	\$	147,446	1,874	2%	\$	0.0259	18%	30%	17%
02421	Lexington	\$	147,335	6,365	3%	\$	0.0129	13%	14%	13%
01772	Southboro	\$	145,179	3,532	2%	\$	0.0213	19%	29%	19%
01778	Wayland	\$	143,616	5,092	3%	\$	0.0144	15%	18%	15%
01890	Winchester	\$	143,017	7,703	2%	\$	0.0189	12%	15%	12%
02056	Norfolk	\$	141,278	3,549	3%	\$	0.0096	14%	11%	14%
02492	Needham	\$	140,734	6,831	2%	\$	0.0186	15%	17%	15%
02461	Newton Hlds	\$	140,733	2,847	5%	\$	0.0234	15%	18%	15%
01921	Boxford	\$	140,268	94	2%	\$	0.0401	15%	0%	15%
01748	Hopkinton	\$	140,268	2,793	2%	\$	0.0298	16%	13%	16%
02052	Medfield	\$	138,551	6,274	3%	\$	0.0113	13%	15%	13%

Source: Basic supply providers and ZCTA data from the U.S. Census 2015 American Community Survey