THE COMMONWEALTH OF MASSACHUSETTS
OFFICE OF THE ATTORNEY GENERAL
ONE ASHBURTON PLACE
BOSTON, MASSACHUSETTS 02108

MAURA HEALEY
ATTORNEY GENERAL

(617) 727-2200
(617) 727-4765 TTY
www.mass.gov/ago

March 8, 2019

Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

Re: Investigation by the Department of Public Utilities into Initiatives to Promote and Protect Consumer Interests in the Retail Electric Competitive Supply Market, D.P.U. 19-07

Dear Secretary Marini:

On January 18, 2019, the Department of Public Utilities (the "Department") issued an order opening an investigation into initiatives to promote and protect consumer interests in the retail electric competitive supply market (the "Order"). In its Order, the Department determined that it could potentially "improve the protections provided to residential customers" who participate in the competitive supply market by strengthening the market in three specific areas. Specifically, the Department seeks to improve the market as follows:

(1) Increase customer awareness of the electric competitive supply market and the value these markets can provide, thus allowing customers to make well-informed decisions;
(2) Improve the Department's ability to oversee and investigate competitive suppliers' marketing practices; and
(3) Investigate initiatives that would improve the operational efficiency of the electric competitive supply market to optimize the value that the market provides to customers.

Order, at 4–5. The Department requested stakeholder input on these issues and others, and the Office of the Attorney General (the "AGO") submits this correspondence as its comments.[1]

[1] Discussion by the AGO of any business practice by competitive suppliers in the context of the Department's investigation, or the silence of the AGO as to any such practice, should not be interpreted as an admission that such practice complies with G.L. c. 93A or the regulations promulgated thereunder.

EXECUTIVE SUMMARY

The AGO has called for an end to the individual residential electric supply market based on the findings contained in the AGO's March 2018 report, *Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts* ("Report")*.*[2] The Report analyzed rates actually charged to individual residential consumers in Massachusetts by competitive electric suppliers and found that, between July 2015 and June 2017, those consumers paid $176.8 million more for competitive supply than they would have paid for basic service from their utilities.[3] The AGO recently analyzed data for a third year, and found additional consumer losses of $76.2 million, bringing the three-year total to $253 million in losses.[4] In many instances, consumer losses can be attributed to competitive electric supplier bait and switch tactics.[5]

Those losses have unfortunately had a particularly egregious impact on economically vulnerable consumers. The Report found that the individual residential electric supply market has a disproportionately negative effect on low-income consumers and Massachusetts' most economically disadvantaged communities, many of which are also predominantly communities of color, and/or have a large number of residents who face language barriers. For example, low-income consumers participate in the market at twice the rate of non-low-income consumers.[6] Suppliers also consistently charge low-income consumers higher rates than non-low-income consumers.[7] Moreover, statistical analysis revealed findings that suggest that some suppliers specifically target low-income neighborhoods for enrollment in competitive supply.[8]

---

[2] Massachusetts Attorney General's Office, *Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts*, prepared by Susan M. Baldwin (March 2018) (the "*Massachusetts 2018 Report*"), Attachment A.

[3] *Id.*, at viii. All references in these comments to "utilities" or "utility" in the context of Massachusetts specifically refer to electric distribution companies, or "EDCs."

[4] The AGO's analysis of data for July 2017 – June 2018 will be produced in a forthcoming supplemental report.

[5] *See generally Massachusetts 2018 Report*, at 39; Susan M. Baldwin and Frank A. Felder, *Residential Energy Supply Market: Unmet Promises and Needed Reforms*, 32 ELECTRICITY J., Apr. 2019, at 31, 32 ("Although regulatory and legislative frameworks differ from state to state, the patterns of many suppliers' marketing practices and prices . . . are similar. Many consumers complain about deceptive and aggressive marketing practices and unexpected spikes in their utility bills.").

[6] All references in these comments to the "competitive supply market" or "market" specifically refer to the "individual residential electric supply market," unless otherwise noted.

[7] *Id.*, at 18.

[8] Specifically, a consumer who resides in a low-income community is more likely to participate in the competitive supply market, even if that particular consumer is not low-income herself. *Id.*, at 33–34. For example, a low-income customer from Dorchester or Roxbury is much more likely to participate in the market as compared to a low-income customer from Beacon Hill or the Seaport. *See Massachusetts 2018 Report*, Figure 3.13 (displaying zip codes for Boston, Worcester, and Springfield, including: 02121 - Dorchester; 02119 - Roxbury; 02114 - Beacon Hill; and 02110 - Seaport).

The Report's findings are alarming. The market is not benefiting consumers—rather, the market is harming consumers, especially those who live in vulnerable communities where the greatest losses occur. Moreover, based on the experiences of other states that have attempted to address the harm created by this market, there is no evidence that additional consumer protection measures will do anything other than mitigate the damage, as various regulatory interventions have proven unable to cure the fundamental misalignment of market incentives.[9] Thus, the AGO believes the best way forward is to end the individual residential electric supply market.[10]

Until the Legislature passes legislation ending the individual residential electric supply in Massachusetts, the AGO will support any efforts that are likely to mitigate some of the harm it causes to Massachusetts consumers. The AGO welcomes the opportunity to work with the Department and other stakeholders to strengthen consumer protection measures in the Commonwealth's competitive supply market.

In these comments, the AGO outlines specific initiatives the Department can take to most effectively mitigate consumer harm. Accordingly, the AGO makes the following proposals for the Department's consideration:

I. The Department should update the Competitive Supply Website to provide much greater transparency in the competitive supply market, including:

   A. Posting a consumer advisory on the Website's home page;
   B. Making historical rate information by supplier public and easily accessible to consumers; and
   C. Publishing complaint data by supplier.

II. The Department should take a more active role as gatekeeper for the competitive supply market in Massachusetts:

   A. The Department should publicly and actively investigate suppliers who may be engaging in misconduct and penalize suppliers, as appropriate;
   B. The Department should hold public proceedings for its reviews of competitive supplier applications for new licenses and license renewals;
   C. The Department should require suppliers to provide detailed data regarding the types of marketing channels through which they have signed up customers because the aggregated data will likely allow the Department and other stakeholders to tailor consumer education programs and target enforcement accordingly; and

[9] *See Massachusetts 2018 Report*, at 41 (discussing in more detail the fundamental misalignment of incentives in the individual residential electric supply market).
[10] In January 2019, the Attorney General filed legislation that would prohibit suppliers from entering into contracts with individual residential electric customers after January 1, 2020. *See An Act Relative to Protecting Residential Electric Customers* (S. 195 and H. 311).

D. The Department should not expand the role of third-party verification calls, because third-party verification calls do not effectively prevent harm to consumers.

III. The Department should further investigate how the competitive supply market creates inefficiencies in the low-income assistance programs, including: the low-income discount rate, the Arrearage Management Programs, and the low-income accounts protected from shut-off due to a qualifying hardship.

A. The Department should determine appropriate measures to provide greater protections to low-income ratepayers in the competitive supply market; and

B. The Department should not eliminate the requirement for a customer account number for enrollment purposes.

Finally, the AGO provides several suggestions regarding how the Department and stakeholders can begin assessing what protections may be appropriate for small C&I customers and customers of the gas competitive supply market.[11]

I. THE DEPARTMENT SHOULD USE THE WEBSITE TO MAKE THE COMPETITIVE SUPPLY MARKET IN MASSACHUSETTS MORE TRANSPARENT.

(Questions 1 and 4) Until the Legislature passes legislation ending the individual residential electric supply in Massachusetts, the AGO supports efforts to improve consumer education through the use of the Department's Competitive Supply Website. However, in order to ensure the Website adequately informs consumers about the competitive supply market, the Department should make several significant changes, including: (1) updating the Website's home page to include a consumer advisory; (2) posting the rates actually charged by each supplier, on a monthly basis; and (3) posting complaint data by supplier.[12] By making these changes, the Department will bring some much-needed transparency to the market, which may help to mitigate

[11] Several of the issues raised by the Department in its Order have been addressed by the AGO elsewhere, either as part of the AGO's *Massachusetts 2018 Report*, specifically the recommendations contained in pages 40–45, or in comments submitted by the AGO in *Investigation by the Department of Public Utilities on its Own Motion to Establish Interim Guidelines for Competitive Supply Formal Investigations and Proceedings*, D.P.U. 16-156 and *Investigation by the Department of Public Utilities on its Own Motion into Initiatives to Improve the Retail Electric Competitive Supply Market*, D.P.U. 14-140. *See, e.g.*, *Comments of the Attorney General*, D.P.U. 14-140, March 4, 2015; May 15, 2015; August 28, 2015; September 18, 2015; October 2, 2015; December 8, 2015; December 22, 2015; February 29, 2016; April 12, 2016; July 22, 2016; and July 18, 2017 (addressing a myriad of consumer protection issues, including door-to-door marketing standards; auto-renewal; and Department authority under statute to enact rules and regulations).

[12] As part of its Order, the Department requested "input on additional initiatives that may increase customers' awareness of the competitive supply market." Order, at 7.

the losses caused by the competitive supply market.

A. Add a Consumer Advisory to the Home Page.

As acknowledged by the Department in its Order, the recent reports published by the AGO and the National Consumer Law Center ("NCLC") demonstrate that Massachusetts consumers are being harmed by the competitive supply market.[13] The complaints described by both NCLC and the AGO reflect the reality that many suppliers use misleading and aggressive sales tactics to enroll new residential customers.[14] Furthermore, the data analysis contained in the AGO's Report confirms that most consumers do not save money with competitive supply.[15] At minimum, consumers who enter the competitive supply market should be provided with information that could help them avoid the harm experienced by most Massachusetts consumers who receive competitive electric supply. Accordingly, the Department should add a consumer advisory to the Website's home page.[16]

The consumer advisory could take many forms based on what the Department determines is necessary following this investigation. As an initial matter, the advisory could provide certain basic facts about the market, such as: (1) the current basic service rates, when the current basic service term ends, future basic service rates (if known), and when the new basic service rates will go into effect; (2) generally, that the basic service rates consumers receive from the utility are more expensive in winter; (3) that a consumer is not required to sign up with a competitive supplier; (4) that consumers who do not sign up with a competitive supplier will continue to receive their utility's fixed basic service rate; and (5) that a consumer who signs up with a supplier enters into a contract.

The consumer advisory could also include cautionary language, including: (1) the consumer's utility would never go door-to-door or call consumers about supply rates; (2) consumers should not provide their account number to an agent of a supplier unless they are prepared to enroll with the supplier; (3) most supplier contracts auto-renew, and unless the consumer takes affirmative action at the end of the contract term, the consumer will likely be charged higher rates following such auto-renewal; and (4) consumers should be aware that

---

[13] *See Massachusetts 2018 Report*; National Consumer Law Center, *Competing to Overcharge Consumers: The Competitive Electric Supplier Market in Massachusetts,* by Jen Bosco (April 2018) ("*NCLC April 2018 Report*"), *available at* http://www.nclc.org/images/pdf/pr-reports/competitive-energy-supply-report.pdf; *Still No Relief for Massachusetts Consumers Tricked by Competitive Electric Supply Companies* (October 2018) ("*NCLC October 2018 Report*"), *available at* https://www.nclc.org/images/pdf/energy_utility_telecom/electric_and_gas/ib-ma-consumers-tricked-competitive-electric-supply-oct2018.pdf.

[14] *Massachusetts 2018 Report*, at 39; *NCLC April 2018 Report*, at 7–10.

[15] *See, e.g., Massachusetts 2018 Report*, Table 2.1 (providing an overview of the competitive supply market).

[16] The New York Public Service Commission's Power to Choose website, http://documents.dps.ny.gov/PTC/home, requires visitors to scroll through a consumer advisory before entering the site. *See* Attachment B.

suppliers typically do not provide overall savings. The Department could also provide clear information on how consumers can contact the Department either with general questions about the market or to report concerns in connection with a specific supplier. Finally, if the Department decides to publish historical rate information and complaint data by supplier, as the AGO recommends below, the consumer advisory could also inform consumers that this data is available and should be researched prior to enrollment with a supplier.

B. Publish the Rates Charged by Each Supplier.

Publicly-filed, historical rate information can help mitigate the losses caused by the individual residential electric supply market: it will help consumers more fully understand what they can expect from suppliers; it will increase transparency and accountability, discouraging suppliers from charging exorbitant prices; and it will allow for a more transparent market as the participants will know the rates ultimately charged by their competitors. Although the Department's Website currently provides various offers by competitive suppliers, the listing of these offers is not sufficient, on its own, to provide consumers with robust and complete information about the types of rates a consumer should expect if he or she elects to enter the individual residential electric supply market.

For instance, while it is not uncommon to find offers on the Department's website that are initially lower than the current basic service price, this initial comparison does not accurately represent the typical customer experience over the length of his or her contract.[17] Rather, it is a common occurrence that initial customer savings translate into long-term customer losses. In each state where an analysis has been conducted based on the rates actually charged to consumers in the competitive supply market, the findings show that consumers have lost tens of millions of dollars per year as compared to the utility's basic service rate:

- Individual residential consumers in Massachusetts on competitive electric supply between July 2015 and June 2018 paid **$253 million more** than they would have paid if they had stayed with their basic service, according to the AGO. One of the Commonwealth's largest competitive suppliers charged its customers rates that were, on average, 5.46 cents per kWh *more* than basic service between July 2017 and June 2018.[18]
- Connecticut residential consumers on competitive supply between November 2017 and October 2018 paid **$38,685,116 more** than they would have paid if they

[17] *Cf.* Intelometry, Inc., *Comments on the Massachusetts Attorney General's Office Report Titled Are Consumers Benefiting from Competition? Prepared on Behalf of the Retail Energy Supply Association (RESA)*, at 17, Attachment C (concluding that, based on the offers on the Department's Website, Massachusetts customers could have saved $92.7 million in the first four months of 2018). Intelometry's conclusions that the market provides savings to customers do not survive the scrutiny of the AGO's expert, who analyzed the rates actually charged by suppliers between July 2017 and June 2018—including the rates charged in the first four months of 2018—and found that Massachusetts customers paid $72.6 million *more* to competitive suppliers than they would have paid for basic service.

[18] *Massachusetts 2018 Report*, at viii; Table 2.3.

had stayed with their utility's Standard Offer service, according to the Connecticut Office of Consumer Counsel.[19]

- Rhode Island consumers on competitive supply paid **$55 million more** over five years than they would have paid if they had been on Standard Offer service, according to the Rhode Island Division of Public Utilities & Carriers.[20]
- New York residential consumers on competitive electric and gas supply paid **$1.2 billion more** between 2014-2016 than they would have paid with their default utility service, according to the New York Public Service Commission.[21]
- Illinois residential consumers on competitive supply paid **$195 million more** between June 2017 and May 2018 than they would have paid with the utility's default service, according to the Illinois Commerce Commission.[22]

Thus, there is a significant difference between the potential "savings" represented by offers on a website and the actual losses experienced by competitive supply customers as revealed by the actual rates the suppliers charge their customers.

Recent developments in Texas further illustrate the problems inherent in relying upon the offers provided by suppliers on a website for the purpose of providing consumers with complete and accurate information about the market. Texas created a state-run website, Power to Choose, when the competitive electricity market opened in 2002.[23] Texas consumer advocates and the public have complained for years that suppliers have been consistently "gaming the system," *i.e.* providing offers for the website that look attractive upon first glance, but turn out to be much pricier after accounting for the "fine print."[24] According to the Texas Public Utilities Commission, plans that "appeared cheap" would "cost customers four or five times as much as

---

[19] Connecticut Office of Consumer Counsel ("OCC"), *OCC Fact Sheet: Electric Supplier Market, November 2017 through October 2018* (Dec. 18, 2018), *available at* https://www.ct.gov/occ/lib/occ/fact_sheet_electric_supplier_market_october_2018.pdf.

[20] State of Rhode Island, Division of Public Utilities & Carriers ("DPUC"), *Press Release: DPUC Enacts New Rules for Competitive Electricity Suppliers, Initiates Review of Competitive Supply Marketplace* (May 8, 2018), Attachment D.

[21] State of New York Public Service Commission, *In the Matter of Eligibility Criteria for Energy Service Companies,* Case 15-M-0127, et al., Initial Brief of the New York Department of Public Service Staff, at 2 (March 30, 2018) ("Evidence proves that, on an aggregated basis, ESCOs are charging mass market customers significantly more than those customers would have been charged if they instead remained as full service utility customers."), Attachment E.

[22] Illinois Commerce Commission, *Office of Retail Market Development ("ORMD") 2018 Annual Report*, at 27-32 (June 29, 2018) (providing a breakdown of how residential customers who sign up with an Alternative Retail Electric Supplier ("ARES") fare in Illinois), *available at* https://www.icc.illinois.gov/reports/report.aspx?rt=22.

[23] *See* Jeff Mosier, *Texas to Scrutinize "Misleading" Electricity Plans on Power to Choose Website*, DALLAS MORNING NEWS, June 29, 2018, https://www.dallasnews.com/business/energy/2018/06/29/texas-officials-say-look-electricity-plans-misleadingly-low-rates.

[24] *Id.*

promoted."[25] Despite multiple "fixes" to the manner in which offers can be displayed on the website, suppliers in Texas continue to find ways to provide misleading offers.[26] As a result, a bill was recently introduced in the Texas Legislature to effectively end the use of a state-run website to provide electric supply offers.[27]

Accordingly, to avoid the pitfalls presented by the provision of website offers *only*, the historical rates charged by each electric supplier should be published by the Department to allow for a more complete picture of the individual residential electric supply market for those consumers who choose to take part in it. The rates could appear either on the Competitive Supply Website or in a public docket in the Department's file room, similar to how supplier rates are published monthly in Connecticut under PURA Docket No. 06-10-22.[28]

The Department has the necessary authority under current law to make public the rates charged by suppliers. The Restructuring Act, specifically those provisions codified at G.L. c. 164, § 1F, provides the Department with broad oversight authority in connection with the deregulated electricity market. For example, the statute clearly contemplates that rates charged by suppliers will be treated as public information:

> Before service is initiated by a . . . supplier to any customer, the . . . supplier ***shall disclose information on rates and other information*** to a customer in a written statement . . . The department shall promulgate rules and regulations prescribing the form, content, and distribution of such information to be disclosed, which shall include, ***but not be limited to***, the following: the disclosure of the rate to be charged . . . any other fees, charges, or penalties; and the methods by which a consumer shall be notified of any changes to any of these items.[29]

---

[25] Jeff Mosier, *Texas Regulators Improve Power to Choose Website but Threaten to Scrap It If Changes Don't Work*, DALLAS MORNING NEWS, Aug. 9, 2018, https://www.dallasnews.com/business/energy/2018/08/09/texas-regulators-improve-power-choose-website-threaten-scrap-changes-dont-work.

[26] *Id.* ("'We've been here before,' said PUC commissioner Arthur D'Andrea. 'The commission thought we fixed this website, and now here we are again . . . I don't want to be back here in two years doing the same thing.' In response, commission chairwoman DeAnn Walker said, 'Unfortunately, I think we may be because they [retail electric providers] adjust . . . I had a REP [Retail Electric Provider] visit with me yesterday saying that people are already trying to figure out how to get around these.'").

[27] Paul Ring, *Texas Bill Would Require End to Retail Electric Offer Listings on PUC's Power to Choose Website*, ENERGY CHOICE MATTERS, Feb. 6, 2019, http://www.energychoicematters.com/stories/20190206qa.html.

[28] *See* Letter from the State of Connecticut Public Utilities Regulatory Authority ("PURA") to Northeast Utilities Service Company and The United Illuminating Company, Nov. 20, 2014, Attachment F.

[29] G.L. c. 164, § 1F(5)(i) (emphasis added).

There is no limitation in the language cited above regarding the type of "rates and other information" to be disclosed—*e.g.*, it specifically does not limit the disclosure of rate information to the rate *offered* to the customer as part of a solicitation.[30] Moreover, the statute delegates to the Department the determination of "the form, content, and distribution of such information to be disclosed," which gives the Department the latitude to require that historical information regarding rates be made available on a public website.[31]

Additional subsections of §1F support the interpretation that the statute provides the Department with the authority to make historical rate information public, including:

> The department shall promulgate uniform labeling regulations which shall be applicable to all suppliers as a condition of licensure pursuant to paragraph (1). ***Such information to be required by regulation in said labeling shall include price data, information on price variability . . . The department shall require that such an electricity information label provide prospective and existing customers with adequate information by which to readily evaluate power supply options available in the market***. Electricity suppliers shall be required to present such information . . . in conformance with department requirements as to form and substance, and shall comply with federal and state laws governing unfair advertising and labeling.[32]

In this case, the statute specifically contemplates the provision of pricing information to *prospective* customers, so that they may "readily evaluate power supply options available in the market"—not simply those customers who have already signed up for service with a supplier.[33] Moreover, the language cited above does not limit the type of information to be disclosed to rates offered by the supplier, it only prescribes that such information shall include "price data" and "information on price variability."[34] Historical pricing data in the form of rates charged by each supplier would provide exactly the type of "information on price variability" that would allow "prospective" customers to "readily evaluate" the market.[35]

The plain language of G.L. c. 164, § 1F is further supported by the instruction in the preamble of §1F for the Department to "promulgate rules and regulations to provide retail customers with the utmost consumer protections contained in law," and by the direction in §1F(3)(i) for the Department to establish rules and regulations to promote "effective competition." Taken as a whole, G.L. c. 164, §1 F reflects a clear legislative intent to delegate to the Department a broad authority that gives the Department the flexibility to determine how best to provide effective oversight to what was—in 1997 when the statute passed—a then-unknown

---

[30] *See id.*
[31] *See id.*
[32] G.L. c. 164, § 1F(6) (emphasis added).
[33] *Id.*
[34] *See id.*
[35] *See id.*

competitive supply market. The Department should, therefore, promulgate rules that require publication of historical rate information to protect consumers, promote competition, and provide "adequate information" to prospective and existing customers who wish to evaluate the market.[36, 37]

C. Publish Complaint Data by Supplier.

(Question 14) Until such time as the Legislature passes legislation ending the individual residential electric supply in Massachusetts, the AGO agrees with the Department that the publication of complaint data by supplier will provide value.[38] Consumers should be able to view the number of complaints for each supplier, broken down by category of complaint, *e.g.*, unauthorized switching, billing practices, advertising or sales representations, customer service, etc. The complaint data by supplier should also include links to any proceedings opened by the Department to investigate the supplier, and links to the dockets for the supplier's annual licensure application review, as recommended by the AGO below.[39] Ideally, a link provided under the supplier's name in each offer will take the consumer to a web page that gives this type of complaint and supplier history data.

Additionally, for suppliers whose offers do not appear on the Website, the Department could provide one central webpage with information regarding all suppliers licensed to do business in the Commonwealth. Next to each supplier's name, the Department could provide data on complaints regarding the supplier as well as links to dockets regarding the supplier, such

---

[36] The Department could take a similar approach to the Connecticut PURA, where the PURA instructed the EDCs to file:

> For each calendar month, for Residential and Business customers separately: an Excel worksheet listing all the electric suppliers listed alphabetically (names unmasked), all the rates billed by each supplier in ascending order, and the total number of customers under each rate billed.

See Attachment F. Accordingly, the EDCs have provided this monthly supplier rate information for publication under Docket No. 06-10-22 for at least the past four years. Many of the Connecticut suppliers whose rates are published on a monthly basis are also suppliers in Massachusetts.

[37] New York also publishes historical rate information by supplier. Again, many of the suppliers in Massachusetts are also present in New York. The New York Public Service Commission's Power to Choose website, http://documents.dps.ny.gov/PTC/home, provides a column for each supplier's offer that includes a link to the supplier's historic average rates by quarter, with helpful graphics comparing the average estimated cost of the supplier's variable and fixed competitive supply rates with the average estimated cost of the default utility rate.

[38] The AGO is aware of at least three states that provide complaint data by supplier: Connecticut, New York, and Illinois.

[39] Connecticut provides this type of information on its EnergizeCT website: next to the supplier's offer, you can click on a link, "More About Supplier," which will take you to a central listing of complaints and docket proceedings for the supplier.

as formal investigations or the routine, annual licensure application review.

II. THE DEPARTMENT SHOULD TAKE A MORE ACTIVE ROLE AS THE GATEKEEPER FOR THE COMPETITIVE SUPPLY MARKET IN MASSACHUSETTS.

The AGO views the Department's Order as the first step towards more rigorous Department oversight of the competitive supply market until the Legislature passes legislation ending the individual residential electric supply in Massachusetts. The AGO encourages the Department to use its statutory licensing authority—an authority which makes the Department the gatekeeper for the Commonwealth's competitive supply market—to monitor and penalize, as appropriate, suppliers who violate the law and cause consumer harm.[40] Although the AGO has been able to use its authority under G.L. c. 93A and G.L. c. 164, § 102C(a) to pursue investigations of certain suppliers, the AGO cannot, on its own, address all the consumer harm that occurs as a result of this market.[41] Most importantly, the AGO cannot restrict a supplier's access to Massachusetts consumers absent a court order or settlement agreement—both of which typically require several years' worth of costly investigation and litigation. The Department, however, can take licensure action in the case of egregious misconduct or a pattern of misconduct by a supplier.[42] The Department can revoke a license; suspend a license; or place a supplier's license on probation for problematic behavior.[43] Based on the findings in the recent reports published by the AGO and the NCLC, there is an acute need for the Department to use the unique tools at its disposal and take a more active role in its oversight of the competitive supply market.

A. The Department Should Bring Formal Investigations Against Suppliers with Significant Consumer Issues.

(Questions 8, 10 and 13) When the Department issued its *Order Establishing Final Interim Guidelines for Competitive Supply Investigations and Proceedings*, it explained that, as long as the Department conducts a hearing in compliance with G.L. c. 30A, "the Department is authorized to investigate and take licensure action or levy civil penalties against a competitive supply company that has significant consumer issues or has committed violations of Department regulations."[44] Thus, the Department need not establish additional standards of conduct before it can begin investigating suppliers who engage in wrongdoing. Instead, the Department should begin a formal investigation into a supplier's license whenever the Department observes that a supplier has a problematic pattern of consumer complaints—especially where those complaint

[40] *See* G.L. c. 164, § 1F; D.P.U. 16-156-A (July 6, 2017).
[41] Of the 46 suppliers the AGO Report identified as active in the Massachusetts competitive supply market, 19 suppliers have a history of state investigations and class action lawsuits alleging violations of consumer protection laws. *Massachusetts 2018 Report,* Appendix 4A.
[42] 220 C.M.R. 11.07(4)(c)(1).
[43] *Id*.; D.P.U. 16-156-A, at 1 ("[T]he Department is authorized to investigate and take licensure action or levy civil penalties against a competitive supply company that has significant consumer issues or has committed violations of Department regulations.").
[44] D.P.U. 16-156-A, at 1.

patterns are consistent with the supplier's alleged conduct in other states.

The evidence presented in the AGO and the NCLC reports strongly suggests that there are suppliers in Massachusetts whose misconduct warrants a formal Department investigation. In particular, the NCLC's reports found that the Department received over 2,000 complaints regarding suppliers from August 1, 2015 – July 31, 2018.[45] Moreover, the AGO's Report found that at least 19 of the suppliers licensed in the Commonwealth were the subject of investigations or lawsuits in other states for consumer protection issues.[46]

Initiating investigations into suppliers with problematic patterns of consumer complaints is well within the Department's authority and consistent with the actions of other states. The AGO's research revealed there are 14 jurisdictions with an individual residential electric supply market, and in 12 of those jurisdictions—all except Rhode Island and Massachusetts—the PUCs actively investigate and penalize suppliers for reports of potential misconduct.[47] Indeed, just last week, Connecticut's Public Utilities Regulatory Authority (PURA) fined a supplier $1.5 million for misleading marketing practices; the PURA also prohibited the supplier from enrolling new customers for a six-month period and required the supplier to submit to auditing by the PURA for one year following the six-month prohibition period.[48] If necessary, the Department can look to the PUCs in these other states—especially Connecticut, Maryland, Pennsylvania, and New York—for guidance on investigating suppliers who may be engaging in misconduct in Massachusetts.

B. Department Reviews of License Applications and Renewals Should Be Public Proceedings.

(Question 13) The Department should also change the manner by which it reviews applications for supplier licenses or license renewals. Presently, all licensure reviews occur outside of the public view. As a result, it is not clear whether the Department provides any level of scrutiny to suppliers who present red flags during a licensure review. Going forward, the Department should place each licensure review on the public docket and provide public notice of the review so that the AGO or other interested parties may, when necessary, intervene and object to the license or license renewal. Opening a docket for a licensure review would allow the Department to collect evidence from other parties—including, possibly, regulators from other states—regarding the activities of the supplier, thus creating a more complete record for decision-making purposes. The record created during the licensure review will also establish a foundation for the Department to rely upon if, in the future, the supplier's conduct results in an investigation into potential licensure action.

C. Supplier Data on Marketing Channels Would Be Extremely Useful.

[45] *NCLC April 2018 Report*, at 9-10; *NCLC October 2018 Report*, at 1.
[46] *Massachusetts 2018 Report,* Appendix 4A.
[47] *See id.*
[48] Connecticut Public Utilities Regulatory Authority, *PURA Investigation into Direct Energy Services, LLC's Trade Practices*, Docket No. 13-01-17, Proposed Final Decision (Feb. 27, 2019).

(Questions 12 and 13) The AGO strongly supports the Department's proposal to require competitive suppliers to periodically provide the Department with data on the types of marketing channels through which they have signed up customers. For each marketing channel—door-to-door; telemarketing; direct mail; online; and any other marketing channel—each supplier should identify, on a quarterly basis: (1) how many customers enrolled via that channel; (2) the geographic locations of those customers; and (3) the rates charged to those customers. The Department should aggregate the data and publish it, either on the Website or in a publicly available report. This type of data will help the Department, the AGO, and other stakeholders identify where to target consumer education efforts. For example, if the data shows that a significant number of customers in certain neighborhoods of Worcester enroll with suppliers via door-to-door sales, stakeholders can develop community outreach programs specifically for the neighborhoods affected (*e.g.*, communities with a large immigrant population or limited English-speaking population). The data will also allow the Department and others to more easily identify problematic areas of the market and provide focused oversight accordingly (*e.g.*, developing regulations to require suppliers marketing in these neighborhoods to use agents that can speak to these prospective customers in their native language).

D. Third-Party Verification Calls Are Not Reliable for Compliance Purposes.

(Question 11) Regarding the Department's proposal to expand the role of Third-Party Verification ("TPV"): in the AGO's experience, TPV calls are prone to manipulation by suppliers and/or agents of the supplier—especially with regards to customers who have trouble understanding the substance of the transaction due to advanced age or a language barrier—and therefore are not particularly effective and should not be relied upon as an indicia of compliance.

III. THE DEPARTMENT SHOULD INVESTIGATE THE INEFFICIENCIES IN THE LOW-INCOME ASSISTANCE PROGRAMS CREATED BY THE COMPETITIVE SUPPLY MARKET.

In response to the Department's request to provide input on "additional barriers that may detract from the value that the market provides to residential customers," the AGO submits that the disproportionate participation of low-income households, and the disproportionately high rates charged to those households, significantly contributes to the negative impact of the competitive market on individual residential electric consumers.[49] As the AGO Report details, 36 percent of all low-income ratepayers receive competitive supply—101,935 households out of 285,267 low-income households in EDC territories.[50] Low-income households tend to pay higher rates—17 percent higher, on average—than non-low-income households.[51] Overall, between July 2016 and June 2017, the AGO found that households receiving a low-income rate paid $23.6 million more to competitive electric suppliers than they would have paid for basic service.[52] On a more granular level, analysis of specific suppliers found that low-income

[49] Order, at 13.
[50] *Massachusetts 2018 Report*, Figure 1.2.
[51] *Id.*, at 17.
[52] *Id.*, at 19.

customers of one supplier paid, *on average*, $541 more per year than if they had purchased basic service.[53]

The high rates that suppliers charge to low-income consumers affect both low-income and non-low-income ratepayers. For example, households who qualify for a low-income rate receive a subsidy in the form of a reduced electricity distribution rate, or discount. All other ratepayers fund the subsidy through the Residential Assistance Adjustment Factor, or "RAAF."[54] The discount provided applies to the total charges—distribution and supply—reflected on the electric bill.[55] The amount of the discount varies by EDC, from 25 percent (Fitchburg Gas & Electric) to 36 percent (Eversource).[56] The actual amount of the subsidy thus increases if the low-income ratepayer has a higher bill because a supplier charges him or her a higher rate. Accordingly, higher supply rates for low-income ratepayers *also* result in higher distribution rates for non-low-income ratepayers. Additionally, where a low-income ratepayer pays significantly more per month for electric supply with a supplier, the overall purpose of the subsidy—to make the bills more affordable—is effectively undermined.

Moreover, an additional subsidy—specifically, the Arrearage Management Programs ("AMPs")—has also likely increased due to the especially high rates that suppliers charge to low-income ratepayers. Pursuant to statute and Department rules, each distribution company must administer an AMP to assist low-income ratepayers who fall behind in paying their bills.[57] The AMPs "provide low-income utility consumers an opportunity to have all or a portion of an arrearage forgiven in exchange for payments of an amount and on a schedule designed individually for each participant . . . In exchange for compliance with these terms consumers are forgiven all or a portion of the arrearage by the utility company . . ."[58] The amounts forgiven by the distribution companies under the AMPs are recovered from ratepayers through the RAAF.[59] Many low-income ratepayers on competitive supply likely have much larger arrearages than if they had stayed with basic service. Once again, the purpose of the subsidy—to provide "affordability of essential

---

[53] *Id.*, at 17.

[54] *See, e.g., Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid*, D.P.U. 18-RAAF-09, Exh. MJP-1, at 3 (2018) ("Each RAAF is comprised of a base factor for the recovery of estimated Rate R-2 [low-income] discounts and arrears forgiveness for the upcoming 12 months, and a reconciliation factor to credit the prior periods' over-recoveries.").

[55] *See, e.g.*, Massachusetts Electric Service Rates, https://www.nationalgridus.com/MA-Home/Rates/Service-Rates ("Eligible customers will now receive a credit based on 29 percent of the total charges reflected on their bill.").

[56] *See Boston Gas Company and Colonial Gas Company, each d/b/a National Grid*, D.P.U. 17-170, Exh. Network-1-8 (March 12, 2018) (providing a list of low-income discount rates by distribution company).

[57] *See* St. 2005, c. 140, § 17; *Order Expanding Low-Income Consumer Protection and Assistance*, D.P.U. 08-4 (2008).

[58] D.P.U. 08-4, at 4.

[59] *See, e.g.*, D.P.U. 18-RAAF-09, Exh. MJP-1, at 3 ("Each RAAF is comprised of a base factor for the recovery of estimated Rate R-2 [low-income] discounts and arrears forgiveness for the upcoming 12 months, and a reconciliation factor to credit the prior periods' over-recoveries.").

energy needs"—is undermined by the high rates charged by suppliers.[60]

Furthermore, it is also quite possible that hardship protected accounts receivable balances have increased due to the fact that some of these consumers have signed up for competitive supply.[61] [62] Hardship protected accounts receivable that are significantly overdue are ultimately recovered from ratepayers.[63] These are not trivial costs to the ratepayer—in National Grid Electric's last rate case, the Department allowed National Grid to recover the test year balance of hardship protected accounts receivable in the amount of $40,607,637, amortized over five years, for an annual expense charged to ratepayers of $8,121,527.[64]

Accordingly, because of the disproportionate impact of the competitive supply market on low-income ratepayers who receive subsidies, the competitive supply market has affected the distribution rates paid by all other ratepayers—even those ratepayers who did not choose to participate in the market. The Department should further investigate to determine the effects of the competitive supply market on these subsidies, including: (1) exactly how much the discounts provided to low-income ratepayers have increased; (2) how much the arrearages forgiven under the AMPs have grown; and (3) what portion of the hardship protected accounts receivable balances ultimately recovered from ratepayers are attributable to high rates charged by competitive suppliers.

---

[60] D.P.U. 08-4, at 4.

[61] "Hardship protected accounts are residential accounts that are protected from shut-off by the utility for nonpayment. To qualify for protected status from service termination, customers must demonstrate that they have a financial hardship and meet certain other requirements, such as a household member suffering from a serious illness or residing with a child under twelve months of age." *Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid*, D.P.U. 15-155, at 246-247 (2016) (citations omitted).

[62] The Connecticut Consumer Counsel found that "during September 2018, 35 percent of hardship customers purchased electricity from third-party suppliers, as opposed to 27 percent of non-hardship customers. Using U.S. Census data, the report finds that in some of Connecticut's poorest areas—such as communities in Waterbury, Bridgeport, and Hartford—approximately 50 percent of hardship customers purchase their electricity from third-party suppliers . . ." *See* Connecticut OCC, *Press Release: Consumer Counsel Elin Swanson Katz Releases Report Showing that Hardship Customers Pay More for Electricity with Third-Party Suppliers* (Feb. 27, 2019), Attachment G.

[63] This includes outstanding balances billed by a competitive supplier. Under the Purchase of Receivables ("POR") program, if a customer on competitive supply is unable to pay his or her bill, the utility picks up the tab. The POR program implemented by the Department in 2014 "mitigate[s] the risk that competitive suppliers bear regarding nonpayment by their customers, thus avoiding the need for suppliers to undertake costly credit screening and selective enrollment processes, particularly for small commercial and residential customers." *Investigation by the Department of Public Utilities regarding Purchase of Receivables pursuant to G.L. c. 164, § 1D and G.L. c. 164, § 76*, D.P.U. 10-53-B/C/D/E, at 4 (2014).

[64] *See* D.P.U. 15-155, at 250–51.

A. The Department Should Implement Greater Protections for Low-Income Ratepayers.

(Question 17) In connection with this investigation, the Department should create additional protections for low-income ratepayers to ensure the integrity of the low-income assistance programs. Protections for low-income ratepayers could include rules that require suppliers to provide guaranteed savings as compared to the fixed basic service rate to any low-income ratepayer who signs up to receive individual competitive electric supply.[65] As discussed above, the Department has broad statutory authority to implement rules and regulations—especially if it finds that specific rules to protect low-income ratepayers are necessary to "provide retail customers with the utmost consumer protections contained in law," and the finding is supported by a developed record showing the need for such rules.[66]

B. The Department Should Not Eliminate the Customer Account Number Requirement.

(Question 16) The AGO strongly disagrees with the proposal to eliminate the need for a customer account number to enroll in competitive electric supply. Making it easier to enroll customers will, in turn, make it easier to switch customers to competitive electric supply without

---

[65] *See, e.g.*, State of New York Public Service Commission, *Proceeding on the Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State*, Case 12-M-0476, Order Adopting a Prohibition on Service to Low-Income Customers by Energy Service Companies (Dec. 16, 2016) ("In light of the persistent ESCO failure to address (or even apparently to acknowledge) the problem of overcharges to [low-income] customers and the resulting diminution of financial assistance to those customers, by this Order, the moratorium on ESCO service to [low-income] customers directed in the July and September Orders is converted to a permanent prohibition on ESCO service to [low-income ratepayers]."); Paul Ring, "*NY Court Upholds PSC Ban on ESCO Service to Low-Income Customers*," ENERGY CHOICE MATTERS, June 30, 2017, http://www.energychoicematters.com/stories/20170630z.html (describing a court order which allows implementation of the New York PSC's order, thus allowing the PSC to prohibit suppliers from serving low-income ratepayers except where the PSC approves a waiver for a product that provides guaranteed savings); Connecticut Public Utilities Regulatory Authority, *Review of Feasibility, Costs, and Benefits of Placing Certain Customers on Standards Service Pursuant to Conn. Gen. State. § 16-245o(m)*, Docket No. 18-06-02, Notice of Proceeding (July 11, 2018) (presenting an overview of the intended investigation into the impact of competitive supply on low-income ratepayers and the feasibility of transferring all low-income ratepayers to standards service); Pennsylvania Public Utilities Commission, *Press Release: PUC Seeks Comment on a Proposed Policy Statement Setting Guidelines for CAP Customers Shopping for Electric Generation* (Feb. 28, 2019), *available at*: http://www.puc.state.pa.us/about_puc/press_releases.aspx?ShowPR=4165 (proposing various protections for low-income ratepayers, including guaranteed savings products).

[66] G.L. c. 164, § 1F. If the Department determines it does not have the statutory authority, but that action is necessary to protect low-income ratepayers, the Department should request such authority from the Legislature.

their authorization. NCLC's report reveals that unauthorized switching already generates significant complaints to the Department. Rather than eliminate the account number requirement, the Department should implement rules that make it more difficult to switch a customer without that customer's authorization.[67]

IV. THE DEPARTMENT SHOULD EXPAND ITS INVESTIGATION TO INCLUDE SMALL C&I CUSTOMERS AND THE GAS COMPETITIVE SUPPLY MARKET.

(Question 20) The AGO also receives complaints of supplier misconduct from small C&I customers, who often report marketing misconduct that is similar to the supplier misconduct that residential customers report. Accordingly, the AGO recommends that the Department include small C&I customers in its investigation. A first step would be to investigate the impact of the market on the small C&I customer class further. For example, the Department should find out how many small C&I customers sign up with suppliers; the rates charged by suppliers; the usage of each customer; and the variety of energy products for small C&I customers and how they may differ from energy products offered to residential customers.

(Question 21) Finally, based on experiences in other markets, such as New York and Illinois, it appears likely that if suppliers decide to pursue gas customers on a more consistent basis in Massachusetts, they will also increasingly employ misleading marketing practices targeted at gas customers. Accordingly, the AGO believes the Department should investigate these issues as they relate to the gas market for residential customers. The Department could begin the investigation by gathering data regarding how many suppliers market gas supply to residential customers; the marketing channels used to market gas supply; how many residential customers are on competitive gas supply; and what the typical contract looks like for competitive gas supply.

CONCLUSION

Addressing the numerous consumer protection issues presented by the competitive supply market will require the Department to make significant changes to its historical approach to the competitive supply market. The AGO appreciates the Department's consideration of the initiatives proposed herein and looks forward to working with the Department and other stakeholders to further develop these initiatives, as well as any other consumer protection measures the Department decides to pursue.

[67] *NCLC April 2018 Report*, at 10.

Respectfully submitted,

MAURA HEALEY
ATTORNEY GENERAL

By: */s/ Elizabeth A. Anderson*

Elizabeth A. Anderson
Assistant Attorney General
Massachusetts Attorney General
Office of Ratepayer Advocacy
One Ashburton Place
Boston, MA 02108
(617) 727-2200

cc: Greggory Wade, Hearing Officer

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

Investigation by the Department of Public Utilities Regarding the Retail Electric Competitive Supply Market	**D.P.U. 19-07**

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all parties of record in this proceeding in accordance with the requirements of 220 C.M.R. 1.05(1) (Department's Rules of Practice and Procedure). Dated at Boston this 8th day of March, 2019.

/s/ Elizabeth A. Anderson
Elizabeth A. Anderson
Assistant Attorney General
Massachusetts Attorney General
Office of Ratepayer Advocacy
One Ashburton Place
Boston, MA 02108
(617) 727-2200

Are Consumers Benefiting from Competition?

An Analysis of the Individual Residential Electric Supply Market in Massachusetts

MASSACHUSETTS ATTORNEY GENERAL'S OFFICE
COMMONWEALTH OF MASSACHUSETTS

MARCH 2018

Analysis of the Individual Residential Electric Supply Market in Massachusetts: Are Consumers Benefiting from Competition?

A Report by the Massachusetts Attorney General's Office
Prepared by Susan M. Baldwin
March 2018

Table of Contents

Glossary of Terms ..... **vi**

Executive Summary ..... **viii**

Introduction **1**

1. Data examined **3**

2. Are residential consumers benefiting from competition in the electric supply market in Massachusetts? **6**

2.1 Introduction 6

2.2 What is the annual consumer gain or loss associated with households' participation in the competitive supply market? 6

2.3 What is the consumer harm to individual households that purchase electricity from competitive suppliers? 9

2.4 Minority of suppliers who provided limited consumer gains 10

2.5 Consumer loss examined at the supplier level 11

2.6 Do other benefits from competitive supply contracts account for the consumer loss? 14

2.7 Residential customers are not benefiting from electric supply competition 15

3. What is the consumer loss associated with low-income households' participation in the competitive supply market? **16**

3.1 Introduction 16

3.2 What is the consumer loss associated with low-income households' participation in the competitive supply market? 16

3.3 What is the consumer harm to low-income households that purchase electricity from competitive suppliers? 17

3.4 Low-income customers are overrepresented in the competitive supply market. 18

3.5 Potential targeting of vulnerable communities 27

3.6 Statistical analysis shows correlation between income and participation 33

3.7 Consumer loss examined at the supplier level 35

3.8 Conclusions about the low-income market 38

4. Reports of Unfair or Deceptive Acts or Practices **39**

5. Remedies **40**

5.1 End the individual residential market for electric supply 40

5.2 If the market continues to operate, take action to address imbalances. 42

5.2.1 Well-functioning markets require transparency and informed decision-making. 42

5.2.2 Adequate oversight and enforcement are essential 44

5.2.3 The Legislature should strongly consider more targeted remedies. 45

5.3 Summary 45

6. Conclusion **46**

List of Tables

Executive Summary

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

Section 2

Table 2.1 Overview of Competitive Supply Market – Two-Year Comparison

Table 2.2 Ten Suppliers with the Highest Average Premium – All Households

Table 2.3. Ten Suppliers with the Highest Number of Bills – All Households

Table 2.4. Ten Suppliers Responsible for the Greatest Aggregate Consumer Loss – All Households

Table 2.5 A comparison between renewable and non-renewable 12-month fixed-rate contracts at www.energyswitchma.gov

Section 3

Table 3.1 Ten Municipalities and Neighborhoods with the Highest Aggregate Net Consumer Loss (all incomes, monthly loss (June 2017))

Table 3.2 Participation Rates Based on Various Demographics: All Households

Table 3.3 Participation Rates Based on Various Demographics: Low-Income Households

Table 3.4 Participation Rates Based on Various Demographics: Non-Low-Income Households

Table 3.5 Premium Paid for Participation in Competitive Supply Market Based on Various Demographics

Table 3.6 Ten Suppliers with the Highest Average Premium – Low-Income Households

Table 3.7 Ten Suppliers with the Highest Number of Bills – Low-Income Households

Table 3.8 Ten Suppliers Responsible for the Greatest Aggregate Consumer Loss – Low-Income Households

List of Figures

Executive Summary

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

Figure ES.2 Low-Income and Non-Low-Income Customer Average Annual Loss

Section 1

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

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

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

Section 2

Figure 2.1 Gap Between Average Rate Paid to Competitive Suppliers and Rate Had Participants Purchased from Electric Companies

Figure 2.2 Frequency of varying levels of premium paid: all households

Figure 2.3 Frequency of varying levels of consumer loss: all households

Section 3

Figure 3.1 Participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

Figure 3.2 Participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

Figure 3.3 Participation in the individual residential market for electric supply, June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply

Figure 3.4 Boston-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

Figure 3.5 Boston-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

Figure 3.6 Boston-area participation in the individual residential market for electric supply, June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply

Figure 3.7 Springfield-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

Figure 3.8 Springfield-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

Figure 3.9 Springfield-area participation in the individual residential market for electric supply, June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply

Figure 3.10 Worcester-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

Figure 3.11 Worcester-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

Figure 3.12 Worcester-area participation in the individual residential market for electric supply, June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply

Figure 3.13 Boston, Springfield, and Worcester Zip Codes by Share of Low-Income Customers and Rate of Participation in the Competitive Supply Market (June 2017)

List of Appendices

Appendix ES1 Experience and Qualifications of Susan M. Baldwin

Appendix 1A Map of EDC service areas and municipal light plant towns

Appendix 2A EDC rates during study period: July 2015 – June 2016 and July 2016 – June 2017

Appendix 2B Methodology for computing consumer loss

Appendix 2C Consumer loss by municipality – aggregate and average per-household

Appendix 2D Supplier-specific information (share of market, average premium, etc.) for all households

Appendix 3A Supplier-specific information (share of market, average premium, etc.) for low-income households

Appendix 3B Zip code and municipality participation in the competitive supply market, June 2017: Majority-Minority Vs. Rest of State

Appendix 3C Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent African American Vs. Rest of State

Appendix 3D Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Hispanic Vs. Rest of State

Appendix 3E Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Limited English Proficiency Vs. Rest of State

Appendix 3F Zip code and municipality participation in the market for competitive electric supply, June 2017: Bottom 20 Median Income Vs. Rest of State

Appendix 3G Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Participating in Low-Income Program Vs. Rest of State

Appendix 3H Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Median Income Vs. Rest of State

Appendix 3I 40 zip-municipalities with the highest premium relative to basic rates

Appendix 4A State Investigations and Class Action Lawsuits Alleging Unfair or Deceptive Acts or Practices by Suppliers Licensed to Operate in the Commonwealth of Massachusetts

Appendix 5A Connecticut Office of Consumer Counsel "Fact Sheet: Electric Supplier Market, January 2017 through December 2017

Appendix 5B "State Urged to Probe Abusive Electricity Suppliers," Gregory B. Hladky, *Hartford Courant*, January 31, 2017

Appendix 5C Illustrative report filed by an EDC in Connecticut pursuant to PURA Docket 06-10-22 (Eversource for January 2017)

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 ("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.

Competitive supply market: In this report, we use this term to describe the individual residential electric supply market, the market in which residential customers may choose to purchase electric service 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 customers that receive subsidized electricity rates. In order to qualify for such rate, a customer'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 $66,115 or less in fiscal year 2018.[1] The report's analysis of low-income customers does not encompass those customers 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 where towns or cities enter into contracts with competitive suppliers for those suppliers to provide electricity supply services to participating residents and businesses in the respective community. This report refers to competitive suppliers that serve municipal aggregations as "municipal aggregation suppliers." Customers residing in towns and cities with municipal aggregations programs can also 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 customers participating in the competitive supply market to the total number of electric customers. The total number of electric customers includes those purchasing electricity from any of these three sources: competitive suppliers, electric companies, and municipal aggregations. Customers 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

The Massachusetts Attorney General's Office ("AGO") commissioned this report to (1) determine whether residential consumers in Massachusetts pay more or less for their electric supply when they buy it from the competitive marketplace rather than their electric company (such as National Grid, Eversource, and Unitil); and (2) identify remedies if warranted. [2]

My analysis shows that Massachusetts consumers in the competitive supply market paid **$176.8 million** more than they would have paid if they had received electric supply from their electric company during the two-year period from July 2015 to June 2017.

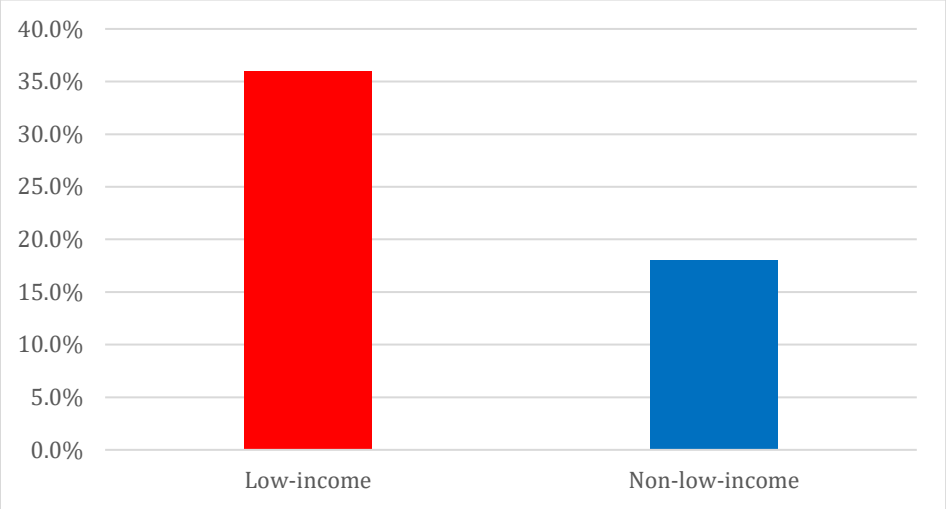
Table ES.1 Net Consumer Loss from Participation in the Individual Residential Electric Supply Market Compared to the Electric Company's Basic Service

	July 2015 – June 2016	July 2016 – June 2017	Two-Year Total Net Loss
Total Net Consumer Loss (millions)	$65.4 m	$111.4 m	**$176.8 m**

Total net consumer loss increased significantly between the first year of the study (July 2015–June 2016) and the second year (July 2016–June 2017) because the gap between the average basic service rate and the average competitive supply rate increased by 72 percent. During the study period, basic service rates decreased by almost 16 percent, while the loss experienced by low-income customers on competitive supply increased by 35 percent.

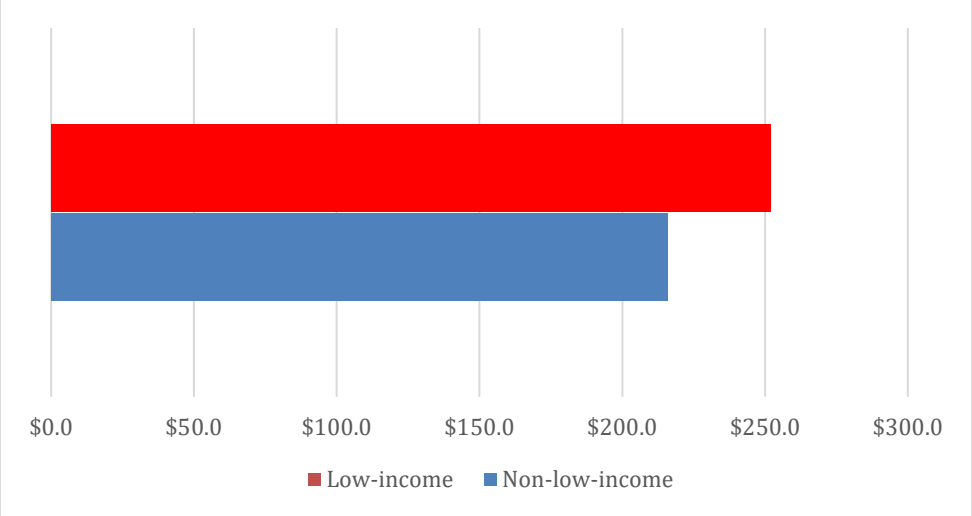
Low-income customers make up a disproportionately large share of the competitive supply market. Figure ES.1, below, shows that low-income households participate in the competitive supply market at twice the rate as non-low-income households.

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



My analysis also shows that these low-income customers pay especially high prices in the competitive supply market. Figure ES.2, below, shows that, assuming an average monthly usage of 600 kWh across both income groups, the annual consumer loss for low-income participants is $252, which is 17 percent higher than the annual consumer loss of $216 for non-low-income participants.

Figure ES.2 Low-Income and Non-Low-Income Customer Average Annual Loss[3]



Moreover, my analysis of the impact of the competitive supply market on each municipality in the Commonwealth served by an electric company shows that *every* municipality experienced, on average, a net consumer loss in the competitive supply market in June of 2017.

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

- Communities with low median incomes;
- Communities with high percentages of households receiving subsidized low-income rates;
- Communities with high percentages of minority households; and
- Communities with high percentages of households with limited English proficiency.

Further, regression analysis of zip code-level data for the month of June 2017 provides findings that are consistent with disparate targeting of low-income customers for enrollment to competitive supply accounts. Put simply, a consumer who resides in a low-income community is more likely to participate in the competitive market, even if that particular consumer is not a low-income customer herself.

Conclusion and Recommendations

My analysis demonstrates that individual residential customers have suffered large financial losses in the competitive supply market. The size of the harm to consumers, the significant loss in both years of the study, and the increasing loss from one year to the next, strongly suggest that consumer harm is likely to continue.

Although a regulatory environment with stronger consumer protection measures would be preferable to the status quo, experience in Massachusetts and in other states demonstrates that stronger consumer protection measures are insufficient to transform the competitive supply market from one that causes significant net harm to one that provides net benefits.

Accordingly, I strongly recommend that legislators in Massachusetts consider eliminating the electric supply market for individual residential consumers.

The scope of this report is limited to the individual residential electric supply marketplace. I do not analyze or make any recommendations regarding the commercial and industrial market, where, as a general rule, customers are more sophisticated and have benefited from competition in the electric supply market; nor do I analyze or make recommendations regarding the Commonwealth's various municipal aggregations.

Introduction

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). Massachusetts was one of several states that restructured the generation portion of their electric markets, replacing the previously vertically integrated electric utilities with electric utilities that provide distribution and transmission services and that purchase electricity from generation in the competitive marketplace.

Following Restructuring, all Massachusetts electric companies continue to deliver electricity to all Massachusetts electric consumers. For these services, Massachusetts electric companies charge distribution rates to electric consumers. The electric companies' distribution rates are highly regulated and are set by the Department of Public Utilities (the "Department"). Although consumers cannot choose the electric company that provides them with distribution services, Restructuring created a new electric supply market to allow consumers to choose their electric supplier. Accordingly, all Massachusetts electricity consumers pay two rates when they pay their electricity bill: one rate for distribution and one rate for electric supply.

The entities that market and sell electric supply directly to Massachusetts electric consumers are called "competitive suppliers." Competitive suppliers generally do not generate electricity themselves. Rather, they buy electric supply on the wholesale market and sell it to retail consumers. The Department does not regulate the supply rates charged by competitive suppliers. However, competitive suppliers must be licensed by the Department and are subject to certain additional regulations designed to protect consumers.

Electricity consumers taking service from a competitive supplier receive their electric supply from a supplier, but continue to have that electricity delivered to them by their electric company. The electricity delivered to the consumer is exactly the same whether purchased from a supplier or the electric company.[4] Additionally, most, if not all, competitive electric suppliers opt to bill their consumers through the electric company, so to an unknowing consumer it can appear as if the supply is being provided by the electric company.

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 now known as "basic service." Residential consumers are automatically placed on the "fixed" basic service rate, which changes once every six months.[5] Basic service is procured through a competitive process in which each electric company solicits and receives bids to provide electric supply to its consumers for certain pre-appointed periods of the year. For example, NSTAR Electric Company, which does business as Eversource Energy, purchases its residential basic service electric supply for the two periods including January 1–June 30 and July 1–December 31.

The Legislature took action to open the electric supply market to competition in 1997, yet competition in the residential electric supply market remained relatively inactive for the first decade. Starting around 2011, the AGO began to receive numerous complaints from consumers about competitive suppliers going door-to-door and conducting telemarketing campaigns. Following an investigation pursuant to Chapter 93A, the Commonwealth's consumer protection law, the AGO entered into an Assurance of Discontinuance with a competitive supplier that was the subject of consumer complaints, Just Energy (2014). The settlement included restitution for consumers that were affected by Just Energy's allegedly misleading representations. The AGO continues to receive a large number of complaints concerning competitive electric suppliers, and as a result the AGO has undertaken additional investigations of other suppliers. From January 1, 2014 through December 31, 2017, the AGO received more than 700 complaints from residential consumers regarding various competitive suppliers. Due to the high number of complaints from consumers, the AGO is concerned that the market as a whole might not be operating as intended by the Legislature.

Accordingly, the AGO commissioned this report to determine whether the competitive supply market does, in fact, lead to reduced electricity costs for Massachusetts consumers. The AGO also commissioned this report to identify legislative and regulatory remedies to protect consumers from market abuses, to enable consumers to make better-informed purchasing decisions, and to increase suppliers' accountability for their practices to the Legislature, regulators, and the general public.

This report is organized as follows:

- In Section 1, I describe my methodology for computing the consumer loss associated with competition in the competitive supply market ("competitive supply market").

- In Section 2, I discuss my findings relative to the entire residential class (with the exception of households participating in a municipal aggregation).

- In Section 3, I discuss the experience of low-income households in the competitive 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.

- In Section 4, I discuss complaints that the AGO has received and also briefly describe its enforcement actions in the competitive supply market.

- Based on my conclusion that competition is harming residential consumers, in Section 5, I propose legislative and regulatory remedies to address the harm that otherwise will likely continue.

- Section 6 concludes my report.

- Appendices provide additional information and analyses.

1. Data examined

The three electric companies that serve Massachusetts provided the AGO with detailed supplier-specific data separately for the two consecutive twelve-month time periods spanning July 2015 – June 2016 and July 2016 – June 2017. 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").[6]

In the course of analyzing the data from the electric companies, my principal question was whether or not residential consumers are saving money by purchasing their electric supply in Massachusetts' competitive market.[7] I provide this analysis in Section 2 of my report.

Based on the electric companies' dataset, I was able to deduce a number of statistics concerning the size and scope of the Massachusetts competitive supply market:[8]

- Suppliers, in the aggregate, bill Massachusetts customers more than $430 million annually.

- Suppliers issued 5,920,193 monthly bills to all Massachusetts residential customers during a twelve-month period, suggesting that suppliers serve an average of approximately 493,349 households in Massachusetts, of which approximately 102,000 are low-income households.

- Low-income households make up approximately 21 percent of the residential competitive supply market, yet make up only 12 percent of the market for all electric customers.[9]

- Over one-third (36 percent) of *all* low-income customers take service from a competitive electric supplier.

- More than 50 different suppliers are active in the Massachusetts market.[10]

- The average usage for all households that participated in the competitive supply market during the study period was 607 kWh.[11]

Figure 1.1, Figure 1.2, and Figure 1.3, below, show the participation rates separately for all customers, low-income customers, and non-low-income customers, respectively. Figure 1.1 shows that approximately 493,000 customers (20 percent of all residential customers) participate in the competitive supply market in Massachusetts. The average monthly numbers of customers shown in these three figures correspond with the average of twelve months of data for the period spanning July 2016 through June 2017.

Figure 1.1 Average Monthly Numbers of Households Purchasing from Competitive Suppliers, Electric Companies, and Municipal Aggregations[12]

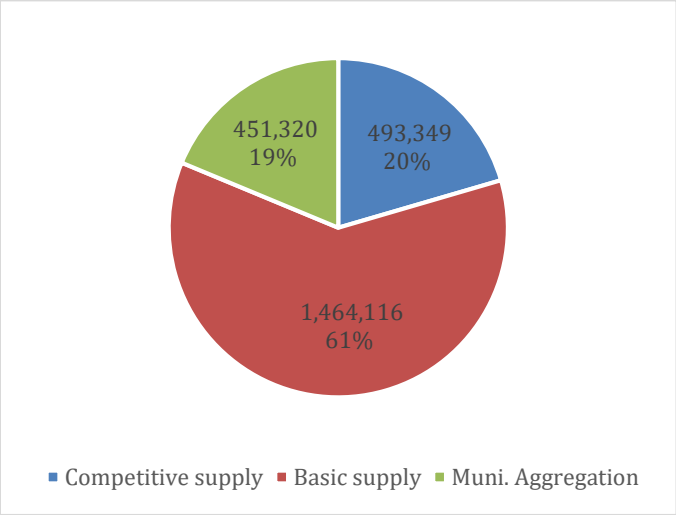


Figure 1.2 and Figure 1.3 show comparable information separately for low-income customers (as defined by receiving subsidized electricity rates) and non-low-income customers. Low-income customers and non-low income customers have participation rates of 36 percent and 18 percent, respectively.

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

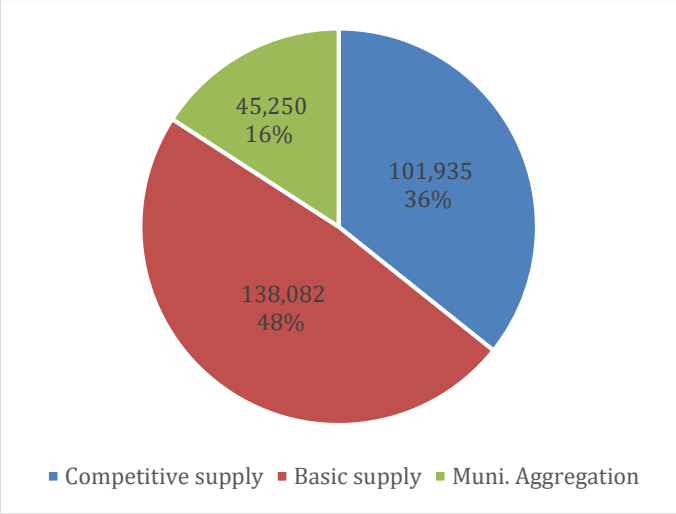
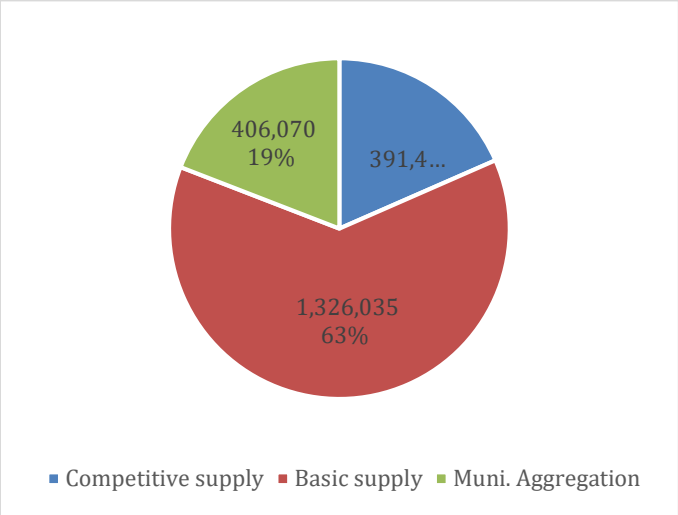


Figure 1.3 Average Numbers of Non-Low-Income Households Purchasing from Competitive Suppliers, Electric Companies, and Municipal Aggregation



The electric companies also provided supplier-specific data disaggregated to the zip code level for the most recent month of the second twelve-month study period (June 2017), as well as electric company-specific counts of bills for both low-income and all other residential consumers at the zip code level.[13] I used these geographically granular data to examine competitive suppliers' presence among the Commonwealth's communities and to compare participation in the competitive 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.

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

2.1 Introduction

In this section, I summarize my findings about the price of competition in the competitive 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 competitive supply market in Massachusetts;[14]

(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 competitive supply market?

Massachusetts residential electricity consumers who took service from a competitive supplier paid a total of $176.8 million more than they would have paid if they had received basic service from their electric company over the course of the two study periods. Specifically, customers overpaid by $65.4 million during the 2015–2016 study period and by $111.4 million during the 2016–2017 study period. The increase in losses from the 2015–2016 study period to the 2016–2017 study period suggests that customer losses are getting worse and not better.

These losses translate into an average household loss of $134 during the 2015–2016 study period and an average household loss of $226 during the 2016–2017 study period.

The size of the competitive supply market was relatively stable between the two study periods. The number of average customers participating in the market increased by approximately 1.0 percent and the total amount of electricity served to residential competitive supply customers increased by only 0.3 percent.

By contrast, the difference between the average residential competitive supply rate and the average basic service rate—which I also refer to as the "premium"—increased by 72 percent between the 12-month period spanning July 2015 to June 2016 and the following 12-month period, spanning July 2016 to June 2017. Accordingly, the increase in the total loss between the two study periods is almost entirely due to suppliers charging higher premiums for their electricity, rather than suppliers simply providing service to more customers. The gap between the rates that consumers pay suppliers and the rates that they would have paid their electric companies for the same usage occurring in the same time periods has increased significantly. During the 2016–2017 study period, the average rate that suppliers charged all of their consumers in the Commonwealth was $0.1219 per kWh, which was 35 percent higher than the

average rate of $0.0905 that these same consumers would have paid for the same usage had they taken service from their electric companies.

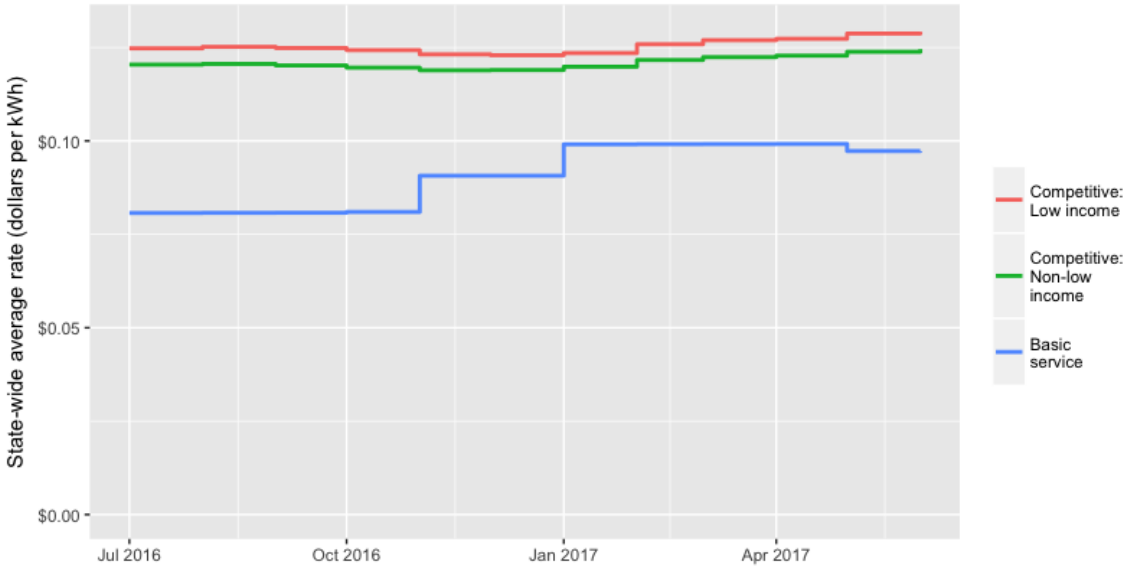
I summarize these findings in Table 2.1, below.

Table 2.1 Overview of Competitive Supply Market – Two-Year Comparison

Attribute of Market	July 2015 - June 2016	July 2016 - June 2017	Absolute Change	Percent Change
Average number of customers per month	488,336	493,275	4,939	1.0%
Total supply (kWh)	3,581,962,995	3,593,084,986	11,121,991	0.3%
Total charges	$450,704,148	$437,948,033	$(12,756,115)	-2.8%
Weighted Average Competitive Supplier Rate	$0.12583	$0.12189	$(0.0039)	-3.1%
Weighted Average electric company Rate	$0.10757	$0.09047	$(0.0171)	-15.9%
Average premium to participate (per kWh) (rounded to 1/100th of penny)	$0.0183	$0.0314	$0.0132	72.0%
Average Annual Premium to participate per HH	$134	$226	$92	68.5%
Statewide Total Net Consumer Loss	$65,406,644	$111,400,843	$45,994,199	70.3%
Statewide Total Net Consumer Loss - Low-Income	$17,400,000	$23,562,438	$6,162,438	35.4%

Figure 2.1, below, shows that the gap between the average monthly rate paid to competitive suppliers and the average monthly rate assuming the customers had purchased electric companies' service[15] was sustained during each of the twelve months spanning July 2016 through June 2017. Moreover, Figure 2.1 shows that low-income participants in the competitive supply market consistently pay more for electricity than do other participants in the competitive supply market.

Figure 2.1 Gap Between Average Rate Paid to Competitive Suppliers and Rate Had Participants Purchased from Electric Companies



Methodology

In order to compute the impact on consumers of their participation in the competitive supply market, I compared the rates consumers paid to suppliers with the rates they would have paid had they taken service from their electric companies,[16] accounting for the fact that electric companies charge different rates for basic service during any given 12-month period.[17] Because the electric companies provided monthly data regarding competitive supply rates, I was able to compare each competitive supply rate with the actual electric company basic service rate that was then in effect. Because I also had granular, monthly consumption data, I was able to calculate what all customers of a given competitive supplier would have paid if they had paid their electric companies' basic service rates instead of the supplier's rates.[18] Finally, after calculating the total loss or gain over the two-year period for each supplier, I aggregated all gains and losses to calculate the total net consumer loss.

During the twelve-month time period, it is of course possible that a single consumer might have had, for example, three months with savings and nine months with losses. For the first year, because supplier-specific data was aggregated across all customers, I cannot precisely determine how many consumers paid too much during a given year and how many consumers saved by participating in the competitive supply market. The data for the second year were more granular, however, which permits a calculation of the number of bills rendered to customers who saved money, and, in this report, I discuss the results of this more disaggregated analysis of the consumer impact of the competitive supply market. In Appendix 2B, I describe my methodology for computing net consumer loss for the two study years in more detail.

Appendix 2C shows, separately by municipality, the average number of households participating in the competitive supply market, the average per-household net consumer loss, and the aggregate consumer loss for June 2017. This information is shown for all households and also separately for low-income households. In Section 3, below, Table 3.1 shows the ten municipalities and neighborhoods with the highest aggregate net consumer loss in June 2017 (the most recent month of the study period).

2.3 What is the consumer harm to individual households that purchase electricity from competitive suppliers?

Individual suppliers' average rates per kWh vary widely (and so, too, subsequently, do the average supplier-specific consumer losses and gains), as do the numbers of consumers that they serve.

During the test period, some suppliers charged extremely high rates; some suppliers served a much larger share of the market than did others; some suppliers charged low rates; and some suppliers served few consumers. Also, suppliers do not charge uniform rates. Indeed, they charge a wide range of rates to their various customers.

Although individual consumer harm (measured as consumer loss) and gains vary significantly, the vast majority of consumers lost money during the two study periods. On average, throughout the year, 88 percent of households participating in the competitive supply market lost money, and 90 percent of low-income households participating in the competitive supply market lost money.

Figure 2.2, below shows the frequency of various increments of the differential between the electric company rates and the competitive suppliers' rates (i.e., the premium), with the frequency measured by kWh purchased in the market.

Figure 2.2 Frequency of varying levels of premium paid: all households

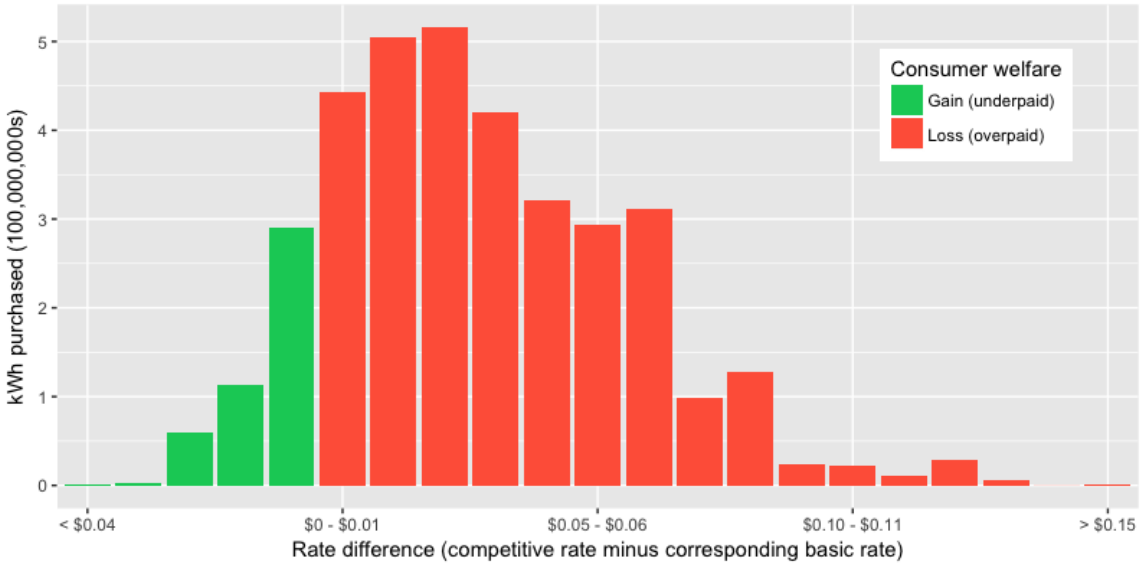
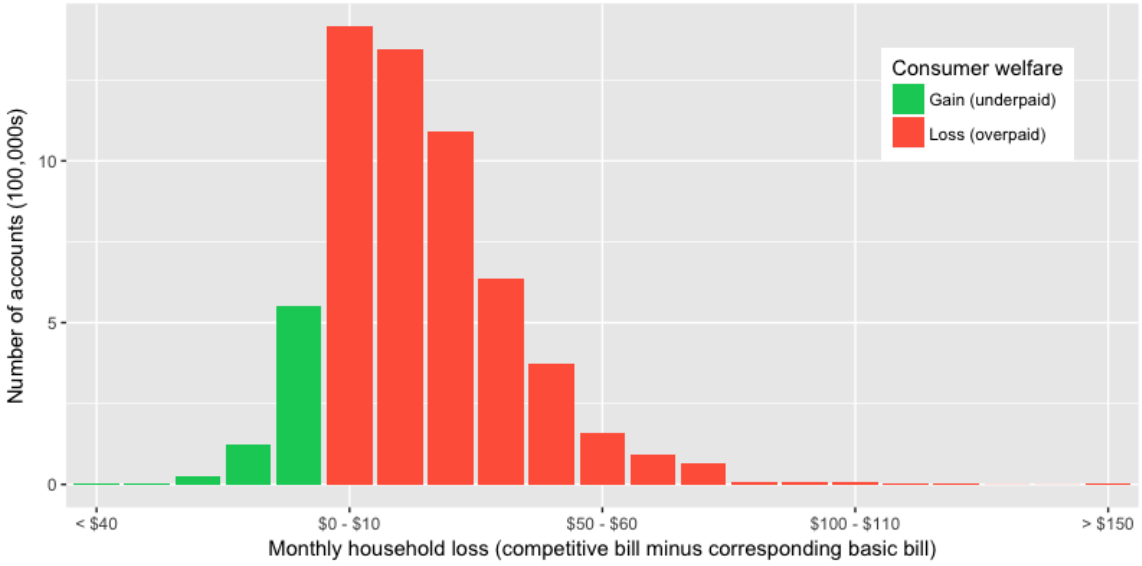


Figure 2.3, below, shows the frequency of various increments of consumer loss (and in some instances savings) that customers experience, expressed on a monthly, per-household basis.

Figure 2.3 Frequency of varying levels of consumer loss: all households



2.4 Minority of suppliers who provided limited consumer gains

Twelve percent of bills are associated with competitive suppliers who charged rates that would provide savings relative to the electric company rates. For this small group of customers, savings are, on average, $74.56 per year, or less than a third of the average annual overpayment of $269.[19]

These numbers suggest that the "upside" of participation in the competitive supply market is very limited. Specifically, the numbers suggest that a customer who participates in the competitive supply market has relatively low odds of saving a small amount of money and relatively high odds of paying significantly more money.

Moreover, many of the customers who experienced savings during the two study periods may not save long-term. Some consumers pay less than electric company rates for some of the time but these lower rates may be "teaser" rates, meaning that the rates may start low and then increase in subsequent months.[20] Accordingly, it is possible that a significant portion of the customers who take service from suppliers who charged less than basic service during the two study periods will ultimately pay more than basic service in the future.

2.5 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 56 suppliers.

Table 2.2, below, shows the ten suppliers[21] (with their identities withheld) who charged the highest average premium over basic service during the 2016–2017 study period.[22] In short, Table 2.2 shows which suppliers charged the most for electric supply on average during the 2016–2017 study period. Table 2.2 shows that the three suppliers with the highest rankings charged premiums of more than $0.0650 per kWh and charged average rates of more than $0.1500 per kWh. 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.

Table 2.2. Ten Suppliers with the Highest Average Premium – All Households.

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #1	$0.1697	58,892	$0.0797	1.00%	$2,799,826	2.51%
Supplier #18	$0.1571	130,806	$0.0657	2.21%	$4,443,744	3.99%
Supplier #47	$0.1561	108,393	$0.0657	1.83%	$3,751,646	3.37%
Supplier #39	$0.1452	38,021	$0.0552	0.64%	$1,079,459	0.97%
Supplier #37	$0.1450	611,891	$0.0546	10.35%	$20,571,677	18.47%
Supplier #12	$0.1417	362,897	$0.0511	6.14%	$8,763,432	7.87%
Supplier #41	$0.1382	462,750	$0.0484	7.83%	$12,970,332	11.64%
Supplier #25	$0.1449	61,886	$0.0477	1.05%	$1,104,503	0.99%
Supplier #15	$0.1376	213,518	$0.0458	3.61%	$4,648,970	4.17%
Supplier #6	$0.1282	284,867	$0.0381	4.82%	$6,237,222	5.60%
Total associated with top 10		2,333,921		39%	$66,370,811	60%

Table 2.3, below, shows the ten suppliers for which electric companies rendered the most bills. These ten suppliers account for 67 percent of the bills rendered in the competitive supply market and 74 percent of the net consumer loss.

Table 2.3. Ten Suppliers with the Highest Number of Bills – All Households.

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #32	$0.1196	623,020	$0.0290	10.54%	$12,035,815	10.81%
Supplier #37	$0.1450	611,891	$0.0546	10.35%	$20,571,677	18.47%
Supplier #42	$0.1082	573,887	$0.0170	9.71%	$6,429,872	5.77%
Supplier #41	$0.1382	462,750	$0.0484	7.83%	$12,970,332	11.64%
Supplier #12	$0.1417	362,897	$0.0511	6.14%	$8,763,432	7.87%
Supplier #23	$0.1109	338,309	$0.0203	5.72%	$3,778,146	3.39%
Supplier #34	$0.1079	295,967	$0.0168	5.01%	$3,379,955	3.03%
Supplier #6	$0.1282	284,867	$0.0381	4.82%	$6,237,222	5.60%
Supplier #29	$0.1240	213,923	$0.0341	3.62%	$3,596,144	3.23%
Supplier #15	$0.1376	213,518	$0.0458	3.61%	$4,648,970	4.17%
Total associated with top 10		3,981,029		67%	$82,411,565	74%

Table 2.4, below, shows the ten suppliers responsible for the largest absolute consumer loss in Massachusetts. In aggregate, they account for 75 percent of the net consumer loss, with some suppliers accounting disproportionately for consumer loss. For example, Table 2.4, below, shows that approximately 10 percent of all bills are rendered on behalf of Supplier #37, and yet Supplier #37's consumers account for 18 percent of net consumer loss in the Commonwealth.

Table 2.4. Ten Suppliers Responsible for the Greatest Aggregate Consumer Loss – All Households.

Supplier ID	Average Rate	Number of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #37	$0.1450	611,891	$0.0546	10.35%	$20,571,677	18.47%
Supplier #41	$0.1382	462,750	$0.0484	7.83%	$12,970,332	11.64%
Supplier #32	$0.1196	623,020	$0.0290	10.54%	$12,035,815	10.81%
Supplier #12	$0.1417	362,897	$0.0511	6.14%	$8,763,432	7.87%
Supplier #42	$0.1082	573,887	$0.0170	9.71%	$6,429,872	5.77%
Supplier #6	$0.1282	284,867	$0.0381	4.82%	$6,237,222	5.60%
Supplier #15	$0.1376	213,518	$0.0458	3.61%	$4,648,970	4.17%
Supplier #18	$0.1571	130,806	$0.0657	2.21%	$4,443,744	3.99%
Supplier #23	$0.1109	338,309	$0.0203	5.72%	$3,778,146	3.39%
Supplier #47	$0.1561	108,393	$0.0657	1.83%	$3,751,646	3.37%
Total associated with Top 10		3,710,338		63%	$83,630,855	75%

2.6 Do other benefits from competitive supply contracts account for the consumer loss?

Other benefits may accrue from competition in the competitive supply market that my calculations exclude. For example, some suppliers offer gift cards, rebates, or rewards programs.[23] I am unaware of any evidence that would demonstrate that these "additional products and services" would offset annual average losses of $226, nor losses that can exceed $500, depending on a consumer's supplier.[24]

I have also considered whether suppliers' reliance on renewable energy may explain the large gap between electric companies' basic service rates and those of many suppliers. Some suppliers offer contracts that obligate them to purchase and retire renewable energy certificates in excess of renewable energy purchases dictated by Massachusetts' Renewable Energy Portfolio Standard. Existing law does not require suppliers to report this "extra" renewable energy (also known as the suppliers' "voluntary demand") and, to the best of my knowledge, no reliable statistics or information on these purchases exists for suppliers in Massachusetts.

Some customers may pay rates that are higher than the electric companies' rates because they are willing to pay a premium for greener, cleaner energy. However, it seems highly unlikely that the purchase of "green power" accounts for the large premiums that Massachusetts customers pay for competitive supply.

First, it appears unlikely that all or even most customers taking service from a competitive supplier receive a "green product." For example, a search on Massachusetts' Shopping for Competitive Supply website, energyswitchma.gov, showed that, as of December 2017, only approximately 27 percent of offers include an additional green element.[25]

Moreover, a comparison between comparable "renewable" and "non-renewable" offers in Massachusetts makes clear that a renewable energy "premium" cannot account for the large premiums charged by most suppliers in Massachusetts. Massachusetts' Shopping for Competitive Supply website, energyswitchma.gov, shows that, as of March 2017, three companies offered both a renewable and a non-renewable product at a fixed rate for twelve months. The following table presents the comparison:

Table 2.5. A comparison between non-renewable and renewable 12-month fixed-rate contracts at www.energyswitchma.gov [26]

Supplier	Non-Renewable (cents/kWh)	Renewable (cents/kWh)	Renewable Premium (cents/kWh)
Constellation Energy	$0.1099	$0.1089	($0.0010)
Discount Power	$0.1200	$0.1250	$0.0050
Ambit Energy	$0.0950	$0.1150	$0.0200

The low premium that suppliers appear to place on their own "renewable"[27] offerings strongly suggests that the renewable content of competitive suppliers' service has little to nothing to do with the high rates that they charge to customers. Tables 2.2 through 2.4 above show differentials relative to basic service rates that are much higher than a hypothetical half-cent ($0.0050 per kWh) renewable energy premium and many also exceed even a hypothetical two-cent ($0.0200 per kWh) renewable energy premium. Indeed, the average premium for the 2016–2017 study period, as seen in Table 2.1, was $0.0314 per kWh.

Accordingly, I believe it is reasonable to assume that the $176.8-million net overpayment during the two-study periods is mostly pure consumer loss.

2.7 Residential customers are not benefiting from electric supply competition.

Based on my examination of competitive supplier data, I conclude that, when viewed in the aggregate, residential consumers suffer large net losses as a result of electric supply competition. Specifically, customers during the 2016–2017 study period paid *an additional* $111.4 million per year as a result of competitive choice, a substantial increase relative to the net consumer loss of $65.4 million during the prior twelve-month study period. Although competitive supply, as a share of the total market of electric customers in Massachusetts, has grown relatively slowly, the premium for participation increased by about two-thirds. In other words, the gap between the rates paid to competitive suppliers and electric companies' basic service rates has increased. These consumer losses during the study periods are net of the relatively small gains that a minority of consumers experienced. In addition, it is unlikely that these consumers' overpayment is a fair exchange for some additional benefit, such as the "green power" marketed by suppliers.

Unlike the commercial and industrial market, where sophisticated buyers with demands for large volumes are likely able to negotiate more favorable rates, individual residential consumers are not getting a bargain.

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

3.1 Introduction

Section 2 discussed my findings regarding the residential competitive supply market as a whole (with the exception of households participating in a municipal aggregation and those customers located in towns served by municipal light plants[28]). 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.

The rates that low-income households pay for electricity, an essential service,[29] significantly affect these households. Low-income households' monthly electricity expenditure represents monies that they cannot allocate to other goods and services (housing, food, transportation, etc.). Due to these customers' severe budget constraints, high electricity costs could have direct and serious consequences on their well-being and quality of life.

Additionally, increased costs for low-income consumers also have implications for non-low-income residential ratepayers. The electric bills for low-income ratepayers are subsidized by all of the electric companies' ratepayers. Because the electric companies calculate the size of each low-income consumer's subsidy by taking a percentage of the consumer's total bill (which includes any rates and charges from competitive suppliers), higher electricity bills for low-income consumers also result in higher subsidies paid by all other residential electricity consumers—including those who do not participate in the competitive supply market. Moreover, due to a purchase of receivables program established in 2014, the electric companies' ratepayers must also subsidize a significant portion of any billed amounts that consumers of competitive suppliers are unable to pay.[30]

I analyzed suppliers' billing data to (1) quantify the consumer loss (or gain) associated with the participation by low-income households in the competitive 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.

As I demonstrate in Section 3.2, below, living in low-income communities increases the probability of participation in the over-priced competitive supply market, and also increases the size of the premium for such participation.

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

The annual consumer loss associated with competitive suppliers' electricity sales to low-income consumers was $23.6 million during the 2016–2017 study period.

The total annual loss increased by approximately 40 percent relative to the $17 million net consumer loss in the competitive supply market for low-income households in the previous twelve-month period (spanning July 2015 to June 2016).

The competitive supply market in Massachusetts for low-income households experienced only small growth between the two study periods.[31] However, the gap between the rates that consumers pay suppliers and the rates that they would have paid their electric companies for the same usage occurring in the same time periods has increased significantly. The cost of participation—the premium—for low-income consumers has increased substantially between the twelve-month period spanning July 2015 to June 2016 and the following twelve-month period, spanning July 2016 to June 2017. The average annual consumer loss for low-income households was $231 in the 2016–2017 study period and the average annual consumer loss for all low-income households was $145 in 2015–2016 study period.

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

Massachusetts low-income households, on average, paid significantly more to competitive suppliers than if they had taken service from their respective electric companies. Specifically, low-income customers paid an average premium of $0.035 per kWh over what they would have paid for basic service electric supply during the 2016–2017 study period. Moreover, the average premium that low-income customers paid for competitive service was higher than the average premium that non-low-income customers paid during the same period (non-low-income customers paid a premium of "only" $0.030 per kWh).

Accordingly, low-income households *pay an extra 17 percent* to participate, and therefore, unlike other households, low-income households pay a larger premium to purchase electricity in the competitive 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 competitive supply market as compared to an average annual premium of $224 for non-low-income consumers.[32] 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.

I examined losses at a supplier-specific level and determined that the highest *average* supplier-specific annual loss for low-income consumers was $541 (compared with $538 in the preceding 12-month study period). In other words, low-income customers served by one of the suppliers paid, on average, $541 *more* per year than if they had purchased the electric company's basic service. Only two out of 40 suppliers charged rates yielding annual savings (low-income customers served by the other 38 suppliers all experienced net consumer losses), and the average annual savings for those two suppliers were only $16 and $26, respectively.

Savings Estimates

As described in Section 2, above, most suppliers did not provide savings on average to residential competitive electric households during the study periods, and those that did provided relatively small average savings. The same dynamic also holds true for low-income households specifically.

Ten percent of bills are associated with charges that yield savings relative to the electric company rates that would have applied had the low-income households not taken service from a competitive electric supplier. These savings are, on average, $69 per year, or approximately one-fourth of the average annual overpayment of $265 that correspond with above-electric company rates.[33] The consequence is that, on balance, low-income consumers paid $23.6 million more as a result of competition than they would pay if the competitive supply market were not an option.

3.4 Low-income customers are overrepresented in the competitive supply market.

My analysis demonstrates that low-income households are overrepresented in the competitive supply market relative to their representation in the general population of households receiving electricity.

Low-income households, on average, represent only 12 percent of electric customers. However, according to data received from the electric companies, low-income households represented 21 percent of all competitive supply customers during the 2016–2017 study period.

The electric companies' data also shows that 36 percent—more than a third of *all* Massachusetts low-income households—participated in the competitive supply market (the remaining 64 percent received basic service or participated in a municipal aggregation) during the 2016–2017 study period. By contrast, only 18 percent of Massachusetts non-low-income households participated in the competitive supply market—*half* of the participation rate of low-income households.

Although, on average, both low-income and non-low-income customers suffer harm as a result of the competitive supply market, my analysis suggests that the competitive supply market has a disproportionate impact on low-income customers. As discussed in Section 3.2 above, during the 2016–2017 study period, low-income households paid a premium of 17 percent relative to other households.

Participation rates vary among municipalities and across income groups. I include three maps below that show statewide participation rates. I also include maps that show participation rates across income groups for the Boston area, the Springfield area, and the Worcester area. All twelve maps are based on information for June 2017. Each set of three maps shows participation rates for:

- All households;
- Low-income households; and
- Non-low-income households.

The twelve maps below reflect the higher participation rates by low-income households and also show those households' varying levels of participation throughout the state. The competitive supply market is equally active in towns with municipal aggregations.[34] The gray areas generally correspond with municipalities that are served by municipal light plants.[35]

Figure 3.1 shows participation rates for all residential customers throughout the state. This figure shows that the levels of participation in the competitive supply market vary significantly among the Commonwealth's various communities.

Figure 3.1 Participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply.

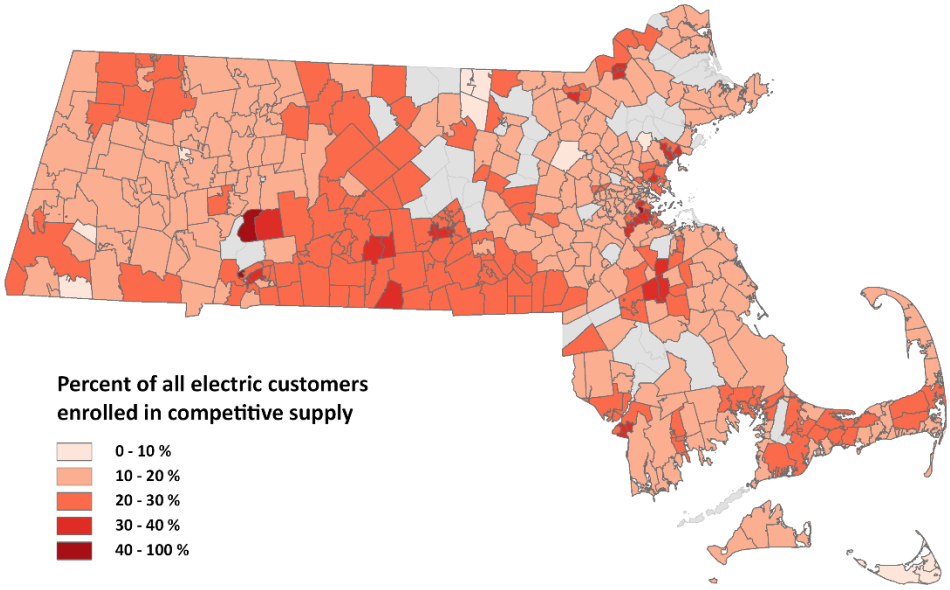


Figure 3.2 below shows statewide participation rates just for low-income households, and Figure 3.3 below shows statewide participation rates just for non-low-income households. Comparing these two maps shows the stark difference in participation rates, depending on household incomes, with much higher concentrations of participation by low-income household than by non-low-income households.

Figure 3.2 Participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

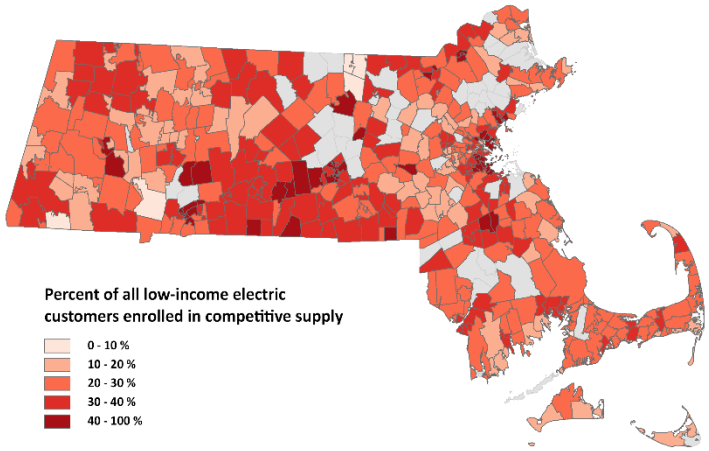
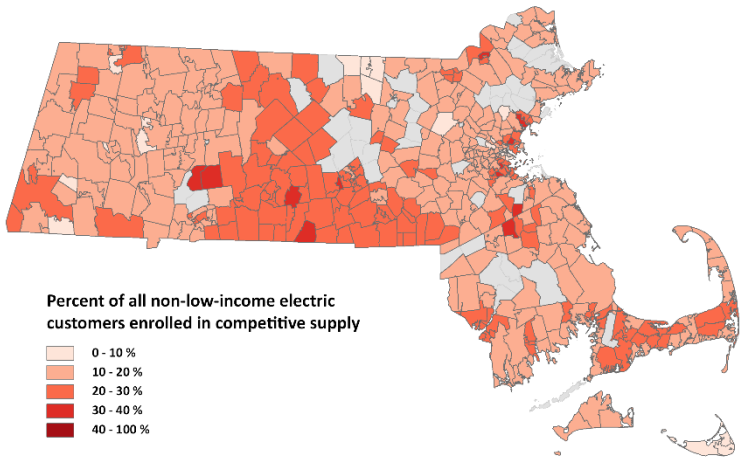


Figure 3.3 Participation in the individual residential market for electric supply, June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply



Participation in the Boston area

Figure 3.4 shows participation rates across all incomes for the Boston area and shows varying levels of participation.

Figure 3.4 Boston-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

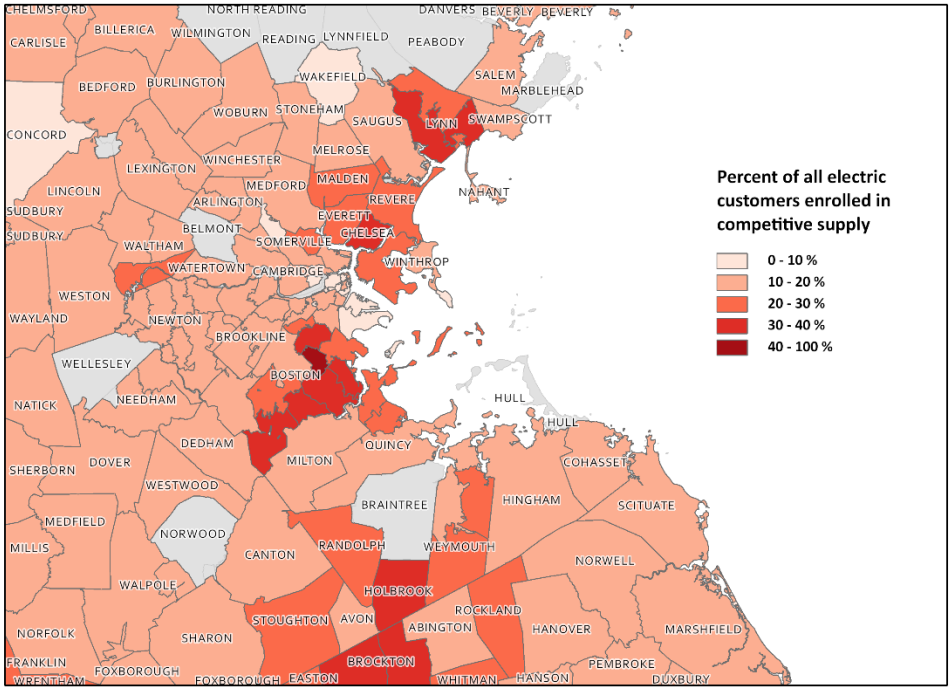


Figure 3.5 shows Boston area participation rates just for low-income households, and Figure 3.6 below shows Boston-area participation rates for non-low-income households. Comparing these two maps shows the stark difference in participation rates between high- and low-income communities.

Figure 3.5 Boston-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

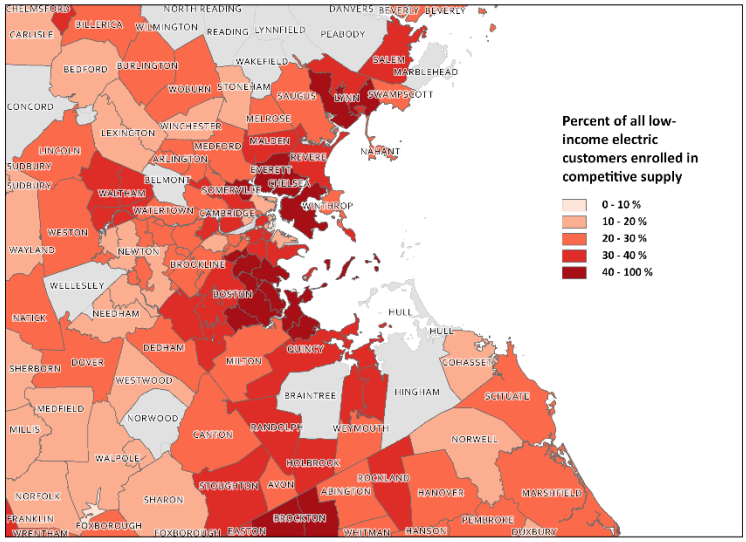
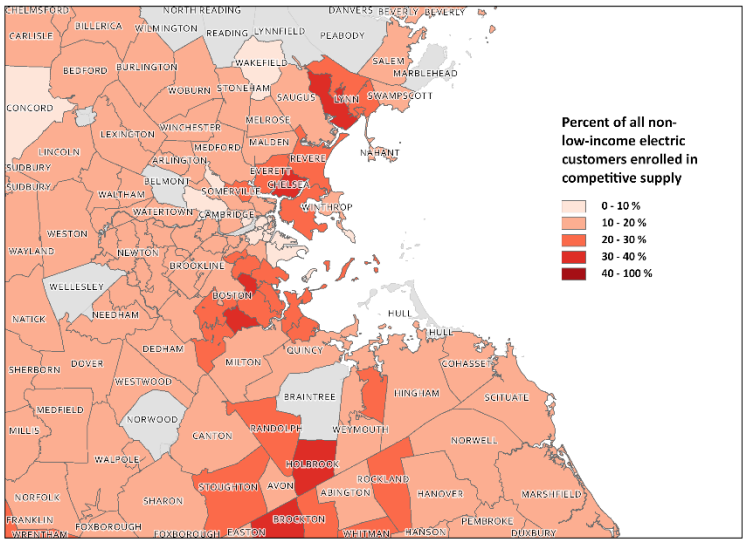


Figure 3.6 Boston-area participation in the individual residential market for electric supply June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply



Participation in the Springfield area

Figure 3.7 shows participation rates across all incomes for the Springfield area and shows varying levels of participation.

Figure 3.7 Springfield-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

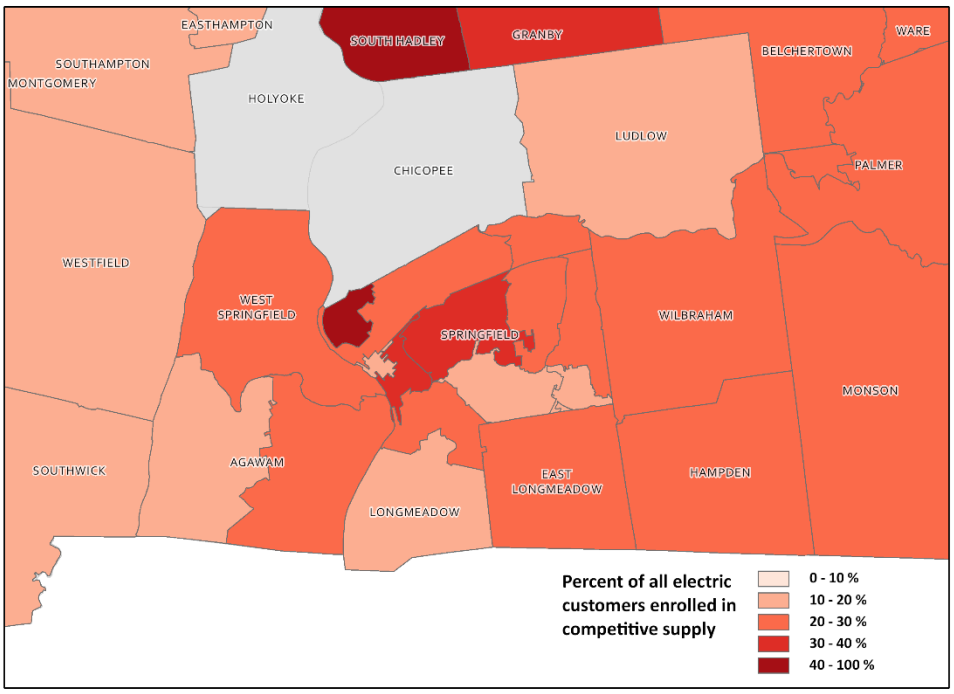


Figure 3.8 shows Springfield area participation rates just for low-income households, and Figure 3.9 below shows Springfield-area participation rates for non-low-income households. Comparing these two maps shows that the stark difference in participation rates between high- and low-income communities holds true in Springfield as well.

Figure 3.8 Springfield-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

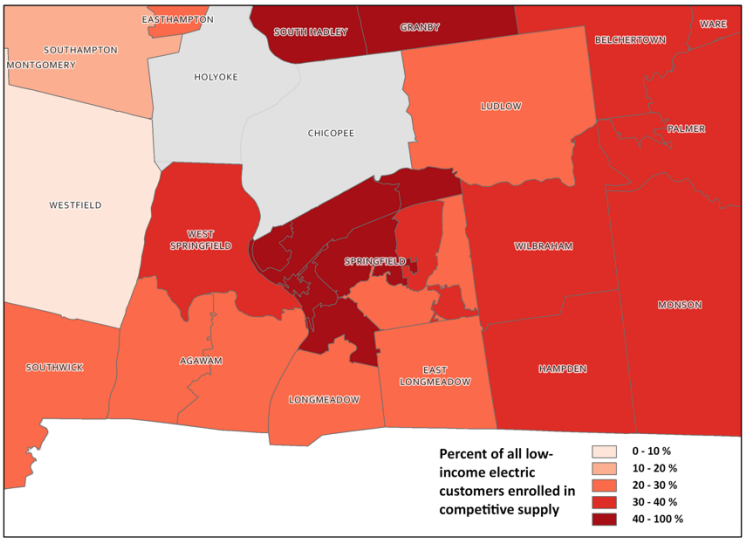
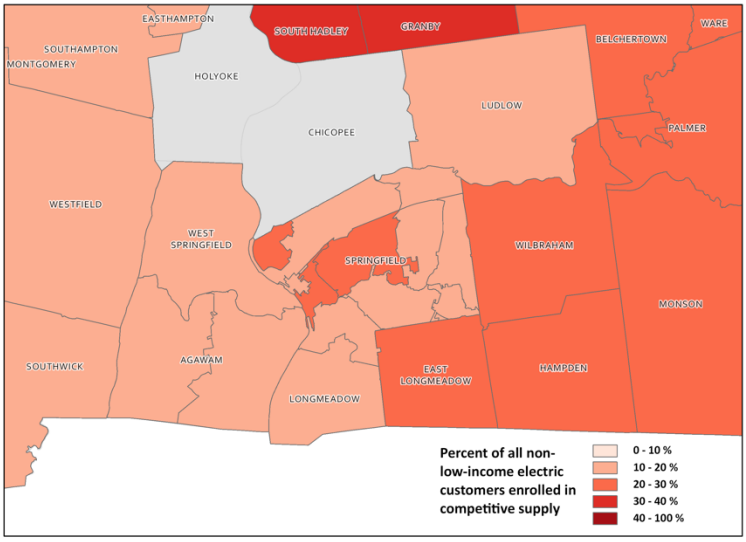


Figure 3.9 Springfield-area participation in the individual residential market for electric supply June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply



Participation in the Worcester area

Figure 3.10 shows participation rates across all incomes for the Worcester area and shows varying levels of participation.

Figure 3.10 Worcester-area participation in the individual residential market for electric supply, June 2017: Percent of all electric consumers enrolled in competitive supply

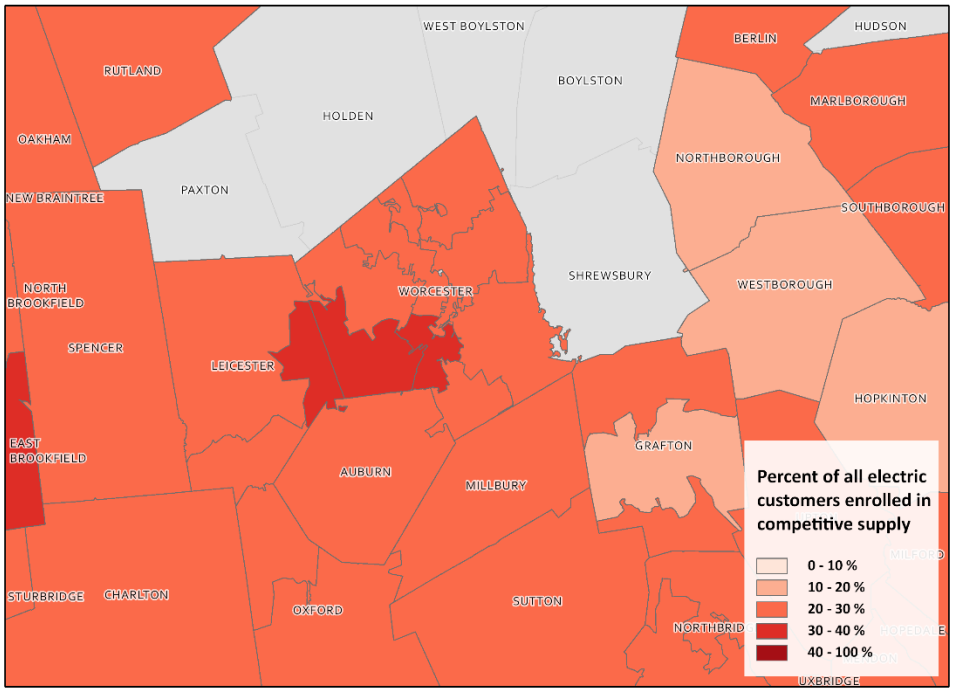


Figure 3.11 shows Worcester area participation rates just for low-income households, and Figure 3.12 below shows Worcester-area participation rates for non-low-income households. As in the Boston and Springfield areas, participation rates in the Worcester area by low-income households are substantially higher than by non-low-income households.

Figure 3.11 Worcester-area participation in the individual residential market for electric supply, June 2017: Percent of all low-income electric consumers enrolled in competitive supply

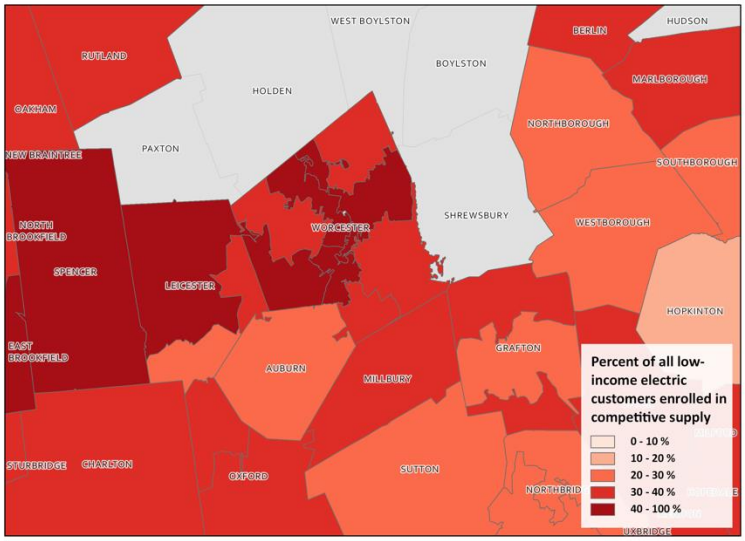
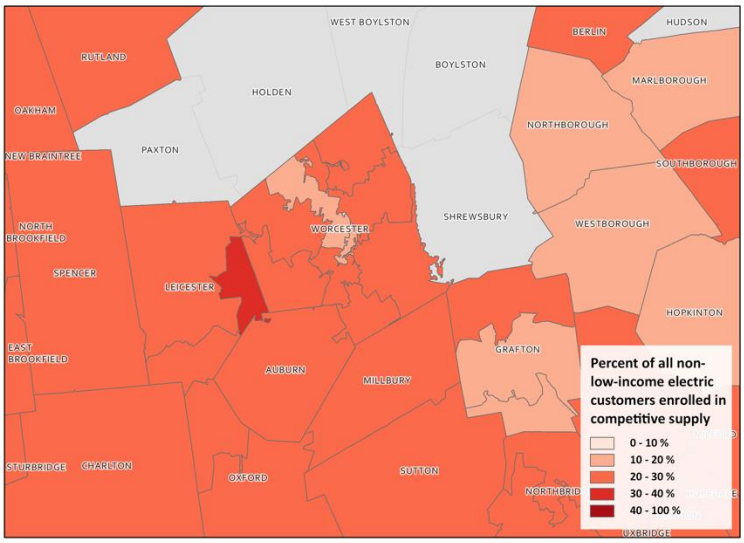


Figure 3.12 Worcester-area participation in the individual residential market for electric supply June 2017: Percent of all non-low-income electric consumers enrolled in competitive supply



In summary, the four sets of maps viewed side-by-side clearly show a pattern of higher participation by low-income households than by other households. This differential is especially concerning given the larger premium paid by low-income households who participate in the competitive supply market, as detailed in Section 3.3 above.

Section 3.5, below, analyzes other demographic aspects of the competitive 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 level[36] corresponding with zip codes,[37] paying special attention to demographics such as the prevalence of households with limited English proficiency,[38] the percent designated as minority,[39] and the percent of low-income customers.

As part of my analyses of various demographic characteristics, I also assessed participation rates by (1) all households; (2) low-income households;[40] 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,[41] 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, a community's percentage of minority households; African American households; Hispanic households; households with limited English proficiency; and low-income households correlates with higher rates of participation in the individual residential market for electric supply. Conversely, communities with higher median incomes tended to have significantly lower participation rates than more economically disadvantaged communities.

Not only are participation rates significantly higher in communities with five of the six demographic attributes I analyzed, 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.

Table 3.1 below shows the ten municipalities and neighborhoods with the highest aggregate net consumer monthly loss.

Table 3.1 Ten Municipalities with the Highest Aggregate Net Consumer Loss (all incomes, monthly loss (June 2017))[42]

Municipality/ Neighborhood	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Worcester	$274,749	$14.42	28%	19,055
Springfield	$273,201	$17.74	28%	15,403
Dorchester	$208,823	$12.69	33%	16,461
Brockton	$180,573	$16.24	33%	11,122
Lynn	$167,567	$15.48	32%	10,823
Lowell	$163,967	$15.72	26%	10,430
Lawrence	$153,228	$17.26	35%	8,878
Fall River	$151,610	$13.92	28%	10,888
Quincy	$134,899	$14.52	21%	9,288
New Bedford	$108,881	$11.15	24%	9,765

In fact, as shown in Appendix 2C, all municipalities experienced net consumer loss in June 2017.

Table 3.2, below, summarizes the participation rates for the demographics discussed above for households of all incomes. Table 3.2 shows higher percentage participation rates in the individual residential supply market in communities with certain demographic attributes. Generally, these communities participate significantly more in the competitive supply market and pay higher premiums than do other communities. For example, communities with the highest percentage of Hispanic households have a participation rate in the competitive supply market of 33 percent across all incomes, and the average premium paid by consumers in these communities is $0.0352, which is 18 percent higher than the premium of $0.0299 paid in the Commonwealth's other communities. Isolating other demographics using the filters described above produces similar results, as seen in Appendices 3B-3I.

Table 3.2 Participation Rates Based on Various Demographics: All Households [43]

Participation Rates - All Households		
Demographics	**Demographic-Specific Communities**	**All Other Communities**
Majority-Minority	30%	19%
African American – Top 20	32%	20%
Hispanic – Top 20	33%	20%
Limited English Proficiency – Top 20	30%	20%
Bottom 20 Median Income	31%	20%
Percent receiving low-income subsidy – Top 20	32%	20%
Top 20 Median Income	15%	21%

Statewide, across all demographic groups, the participation rates for low-income households and non-low-income households are 36 percent and 18 percent respectively.

Table 3.3, below, shows that the participation rates for low-income households located in communities with certain demographic attributes range between 44 percent and 47 percent, significantly higher than the low-income participation rate in other communities in Massachusetts. For example, Table 3.3 shows that in the 20 communities with the highest levels of limited English proficiency, the participation by low-income households in the individual residential supply market is 45% whereas the participation by low-income households in all other Massachusetts communities is 34%.

Table 3.3 Participation Rates Based on Various Demographics: Low-Income Households

Participation Rates – Low-Income		
Demographics	**Demographic-Specific Communities**	**All Other Communities**
Majority-Minority	45%	31%
African American – Top 20	46%	33%
Hispanic – Top 20	47%	33%
Limited English Proficiency – Top 20	45%	34%
Bottom 20 Median Income	44%	34%
Percent receiving low-income subsidy – Top 20	44%	34%
Top 20 Median Income	18%	35%

Table 3.4, below, shows that the pattern of substantially higher participation rates in minority communities persists for both low-income and non-low-income electric customers. For example, the participation rate by non-low-income households in the twenty communities with the highest percentages of African Americans is 27 percent whereas the participation rate by non-low-income households in the rest of the state is 18 percent.

Table 3.4 Participation Rates Based on Various Demographics: Non-Low-Income Households

Participation Rates – Non-Low-Income		
Demographics	**Demographic-Specific Communities**	**All Other Communities**
Majority-Minority	25%	17%
African American – Top 20	27%	18%
Hispanic – Top 20	27%	18%
Limited English Proficiency – Top 20	25%	18%
Bottom 20 Median Income	25%	18%
Percent receiving low-income subsidy – Top 20	25%	18%
Top 20 Median Income	15%	19%

Table 3.5, below, summarizes the premiums for the demographic groups discussed above. Table 3.5 shows that some communities and households pay higher premiums than do others. As reflected in Table 3.5, it is generally more expensive to participate in the competitive supply market for households that are located in communities that have a majority of minority households, have relatively higher numbers of households with limited English proficiency, and with relatively higher percentages of low-income people.

Table 3.5 Premium paid for participation in competitive supply market based on various demographics

	Premium		
Demographics	**Demographic-Specific Communities**	**All Other Communities**	**Demographic Premium**
Majority-Minority	$0.03328	$0.02953	13%
African American – Top 20	$0.03220	$0.03010	7%
Hispanic – Top 20	$0.03521	$0.02986	18%
Limited English Proficiency – Top 20	$0.03442	$0.02990	15%
Bottom 20 Median Income	$0.03427	$0.03000	14%
Percent receiving low-income subsidy – Top 20	$0.03487	$0.02999	16%
Top 20 Median Income	$0.02933	$0.03034	-3%

3.6 Statistical analysis shows correlation between income and participation.

Participation rates in the competitive supply market vary substantially across Massachusetts. Following this report's findings of substantial consumer loss from competitive supply, I analyzed whether any observable characteristics of individual zip codes predict higher participation rates with statistical significance.

Approach

Competitive supply participation rates are defined as the number of accounts billed by competitive suppliers divided by the total number of accounts, and correspondingly for just the subset of low-income accounts. These rates are zip code- and municipality-specific and were derived from June 2017 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 customer. An additional indicator for neighborhood affluence (or poverty) is the share of all electric accounts that are identified as low-income; in general, more affluent neighborhoods have higher median incomes and lower shares of low-income accounts.

Zip code-level variation in race and English proficiency were also considered in the analysis. Regressions controlled for the total number of accounts in each zip code and whether a municipal aggregator was available to consumers. They included electric company-level fixed effects to account for regional differences in average consumer behavior and standard errors were clustered at the municipality.

Findings

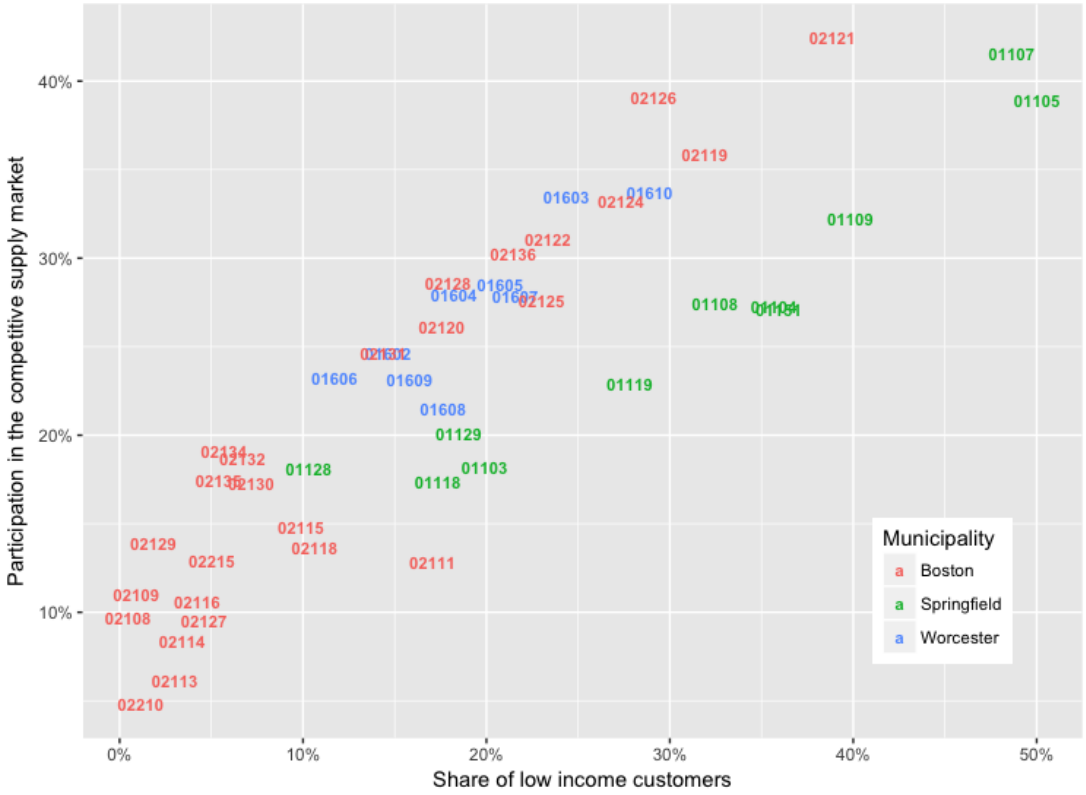
Analysis of the zip code-level data for the month of June 2017 provides findings that are consistent with disparate targeting of low-income customers for enrollment in competitive supply accounts. There is a negative relationship between a zip code's typical income level—as measured by either median household income, or the proportion of all accounts that are low-income—and its participation in the competitive supply market. In other words, neighborhoods with lower incomes tend to have higher rates of participation in the competitive supply market among *both* low-income customers *and* all other customers.

This association between greater low-income populations and market participation rates is supported by multiple regression analysis, including as additional covariates (a covariate is a variable that is possibly predictive of the outcome under study) the total number of accounts in a zip code, differences in levels of participation among the different electric company service areas, and the presence of a municipal aggregator. Variation in the shares of low-income accounts alone predicts approximately one third of the variation in how many low-income households participate in the competitive supply market at the zip code level (r-squared = 0.3).

This finding—that the share of low-income customers 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 customers to enter the market for competitive supply. However, it merits further investigation, since the observed pattern is consistent with suppliers targeting economically disadvantaged areas for marketing and advertising, which may drive higher sign-ups. (Conversely, if suppliers targeted all areas of Massachusetts equally, one would not necessarily expect a low-income customer in Dover, a high-income community, to be more or less likely to purchase electricity from a competitive supplier than a low-income customer in Springfield.)

Figure 3.13, below, is a scatter plot that shows that as the percentage of low-income households in a zip code increases, so, too, does the level of participation in the competitive supply market.

Figure 3.13 Boston, Springfield, and Worcester Zip Codes by Share of Low-Income Customers and Rate of Participation in the Competitive Supply Market (June 2017)



Finally, my regression analysis shows that neither the magnitude of the higher rates charged in the competitive 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 competitive 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 customers separately by supplier.[44] 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.[45]

Table 3.6 below shows the ten suppliers (with their identities concealed), for which at least 100 total bills were rendered to low-income consumers, who charged the highest premiums during the 2016–2017 study period.[46]

Table 3.6 Ten suppliers with the highest average premium – low-income households

Masked Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #1	$0.1671	2,635	$0.0778	0.22%	$118,919	0.50%
Supplier #18	$0.1648	34,096	$0.0738	2.79%	$1,229,851	5.22%
Supplier #47	$0.1547	36,739	$0.0648	3.01%	$1,327,411	5.63%
Supplier #39	$0.1471	10,720	$0.0580	0.88%	$355,810	1.51%
Supplier #12	$0.1416	136,009	$0.0516	11.13%	$3,449,749	14.64%
Supplier #41	$0.1391	105,476	$0.0502	8.63%	$2,862,367	12.15%
Supplier #37	$0.1394	56,781	$0.0502	4.65%	$1,644,197	6.98%
Supplier #15	$0.1391	88,406	$0.0476	7.24%	$2,034,689	8.64%
Supplier #25	$0.1404	9,600	$0.0436	0.79%	$157,136	0.67%
Supplier #29	$0.1282	74,480	$0.0394	6.10%	$1,448,851	6.15%
Total associated with top 10		554,942		45%	$14,628,982	62%

Table 3.7 below shows the ten suppliers for which electric companies rendered the most bills to low-income households. These ten suppliers account for 67 percent of the bills rendered in the competitive supply market and 74 percent of the net consumer loss. The ten suppliers and their respective rankings differs from those shown in Table 2.6 above, which corresponds with all households.

Table 3.7 Ten suppliers with the highest number of bills – low-income households

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #12	$0.1416	136,009	$0.0516	11.13%	$3,449,749	14.64%
Supplier #42	$0.1108	106,105	$0.0191	8.69%	$1,187,957	5.04%
Supplier #41	$0.1391	105,476	$0.0502	8.63%	$2,862,367	12.15%
Supplier #15	$0.1391	88,406	$0.0476	7.24%	$2,034,689	8.64%
Supplier #32	$0.1225	82,977	$0.0328	6.79%	$1,696,511	7.20%
Supplier #6	$0.1264	76,048	$0.0364	6.23%	$1,554,980	6.60%
Supplier #29	$0.1282	74,480	$0.0394	6.10%	$1,448,851	6.15%
Supplier #37	$0.1394	56,781	$0.0502	4.65%	$1,644,197	6.98%
Supplier #34	$0.1081	48,707	$0.0178	3.99%	$527,076	2.24%
Supplier #43	$0.1273	45,184	$0.0351	3.70%	$939,809	3.99%
Total associated with top 10		820,173		67%	$17,346,187	74%

Table 3.8 below shows the ten suppliers responsible for the largest absolute net low-income consumer loss in Massachusetts. In the aggregate, they account for 78 percent of the net consumer low-income loss although they account for only 65 percent of the bills rendered to households receiving subsidized rates on behalf of competitive suppliers. The column "Ratio of % Loss to % of Accounts" shows that many of the suppliers' shares of net consumer loss greatly exceed their corresponding shares of bills. For example, Table 3.8 shows that approximately 11 percent of all bills are rendered on behalf of Supplier #12, and yet Supplier #12's consumers account for 15 percent of net consumer loss.

Table 3.8 Ten suppliers responsible for the greatest aggregate consumer loss: low-income households

Supplier ID	Average Rate	Number of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss	Ratio of % Loss to % of Accounts
Supplier #12	$0.1416	136,009	$0.0516	11.13%	$3,449,749	14.64%	132%
Supplier #41	$0.1391	105,476	$0.0502	8.63%	$2,862,367	12.15%	141%
Supplier #15	$0.1391	88,406	$0.0476	7.24%	$2,034,689	8.64%	119%
Supplier #32	$0.1225	82,977	$0.0328	6.79%	$1,696,511	7.20%	106%
Supplier #37	$0.1394	56,781	$0.0502	4.65%	$1,644,197	6.98%	150%
Supplier #6	$0.1264	76,048	$0.0364	6.23%	$1,554,980	6.60%	106%
Supplier #29	$0.1282	74,480	$0.0394	6.10%	$1,448,851	6.15%	101%
Supplier #47	$0.1547	36,739	$0.0648	3.01%	$1,327,411	5.63%	187%
Supplier #18	$0.1648	34,096	$0.0738	2.79%	$1,229,851	5.22%	187%
Supplier #42	$0.1108	106,105	$0.0191	8.69%	$1,187,957	5.04%	58%
Total associated with top 10		797,117		65%	$18,436,565	78%	120%

3.8 Conclusions about the low-income market

Based on my examination of competitive supplier data, I found that, on average, 101,922 low-income households paid $23.6 million more over the July 2016 – June 2017 study period than they would have paid if they had paid their electric companies' fixed basic service rates. The average low-income household on competitive supply lost $231 over the course of the year. Some households lost more than $541.

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 are higher than the rates charged to non-low-income households. These results are particularly alarming due to the disproportionate real-world impact of consumer loss in connection with the payment of an essential service—electricity—for these households with limited incomes where expenditures on utilities represent a larger share of the household budget.

4. Reports of Unfair or Deceptive Acts or Practices

Complaints regarding the practices of competitive suppliers have increased significantly in recent years. In the seven years from 2006 to 2013, the AGO received approximately 215 complaints about competitive suppliers. Since 2014, however, the AGO has received more than 700 complaints regarding competitive suppliers. The complaints often allege a variety of unfair or deceptive acts or practices, many times alleging more than one type of misconduct per complaint.

The complaints typically include one or more of the following common allegations:

- the competitive supplier promised savings, but the consumer ultimately pays substantially more for electric supply than he or she did before;
- the competitive supplier falsely represented an affiliation with the consumer's electric company;
- the competitive supplier falsely represented that it was "with" a state program (or the electric company) and contacted the consumer in order to "reduce" the consumer's electricity bill;
- the competitive supplier, once provided with the consumer's account number, switched the consumer's account to the supplier without the consumer's affirmative consent;
- the competitive supplier took advantage of the consumer's age, disability, or language barrier in order to sign the consumer up for the supplier's product;
- competitive suppliers employing high-pressure, aggressive sales tactics, including harassing consumers by coming to their door or calling their phone over and over again in a short time span;
- the competitive supplier solicited the consumer on the phone, even where the consumer is on the "Do Not Call" list;
- competitive suppliers going door-to-door ignore "No Solicitation" signs;
- the competitive supplier's lack of customer service makes it difficult or impossible for a consumer to cancel their contract;
- the competitive supplier requires a high termination fee to cancel the contract;
- the competitive supplier promised a certain rate, but the consumer was charged a higher rate instead; and
- the competitive supplier made misleading claims about the sources and amounts of renewable energy it provides to its customers.

These allegations are not just common in Massachusetts, but across the fourteen states and jurisdictions in which the electric supply market was deregulated for residential consumers (the "deregulated states"). A perfunctory internet search indicates that in the last five years, thirteen of the fourteen deregulated states have launched investigations regarding unfair or deceptive acts or practices by electric suppliers who also are licensed to do business in Massachusetts. This includes at least 35 investigations or lawsuits by state public utility commissions and state attorneys general and/or consumer advocates. Moreover, suppliers who are licensed to do business in Massachusetts have been the subject of at least 59 class action lawsuits, as well as numerous individual lawsuits—all alleging unfair and deceptive acts and practices consistent with the types of complaints regularly received by the AGO.[47] Unfortunately, the investigations and lawsuits appear to have little deterrent effect—rather, they seem to be borne by the suppliers as a mere cost of doing business.

5. Remedies

5.1 End the individual residential market for electric supply[48]

My analysis shows that almost 500,000 Massachusetts consumers overpaid $176.8 million over a two-year period for electricity, an essential service. The impact of this overpayment is disproportionately felt by low-income customers, economically disadvantaged communities, and other vulnerable populations. Moreover, as discussed in Sections 2 and 3, above, the benefits that these customers received from the additional amounts paid to competitive suppliers are small to non-existent.

Accordingly, I find that the individual residential market for electric supply causes significant net harm to Massachusetts consumers, and I strongly recommend that the Legislature end the individual residential market for electric supply.[49]

I also believe that implementing stronger consumer protection measures, although preferable to the status quo, would be insufficient to prevent further substantial net harm to Massachusetts consumers. Based on the experiences of other restructured states, as well as the basic economics of the individual residential market, I believe that it is not possible to transform the individual residential market from one that causes significant net harm to Massachusetts consumers to one that provides net benefits.

Other restructured states have implemented a variety of strict legislative and regulatory measures, but consumer harm continues to occur. In its February 2016 Order (discussed in Section 5.2.3, below), the New York Public Service Commission ("NYPSC") noted that an earlier attempt to strengthen rules regarding competitive supplier (referred to in New York as "ESCOs" or energy supply companies) business practices had not reduced complaints:

> Despite the [NYPSC]'s recent modifications to the [Uniform Business Practices] to strengthen and enhance customer protections through changes in the marketing standards and customer enrollment procedures that ESCOs and their representatives must follow, abuses continue. These abuses lead to customer complaints filed with the [NYPSC], which have been steadily increasing. The total number of initial complaints received by the [NYPSC] against ESCOs in 2015 was 5,044.[50]

In December 2016, the NYPSC issued a notice launching an investigation into whether competitive suppliers should continue to market to residential and small business consumers.[51]

In Connecticut, the legislature and Public Utility Regulatory Authority ("PURA") strengthened consumer protection through the adoption of a number of comprehensive measures, including a ban on variable rates.[52] However, these measures have merely mitigated the loss and not transformed the market into one that provides net benefits. Before these measures were adopted, I computed a *net* monthly "overpayment" of $13.7 million by Connecticut's households, or as much as $164 million *annually* in 2014.[53] After substantial regulatory and legislative effort to establish additional consumer safeguards, the consumer loss in Connecticut declined to "only" $58 million during 2015[54] and $46 million during 2017.[55]

Moreover, as recently as January 2017, the Connecticut Consumer Counsel called for an investigation into abusive and deceptive marketing practices by competitive electric suppliers who target vulnerable consumers,[56] although PURA has thus far declined to open an investigation.

In Maryland, the Public Service Commission has found that some suppliers fail to comply with the provisions of Maryland's Door-to-Door Sales Act. In its 2014 decision fining one supplier for various violations, the Commission stated, among other things: "we conclude that [the supplier] committed at least hundreds of violations of the Door-to-Door Sales Act by not providing consumers with contracts that contain the required language in that Act" and "there is no dispute that [the supplier's] door-to-door solicitations were in violation of this Act over many months. Considering how significantly [the supplier] relied upon this type of solicitation to attract new consumers, its ongoing failure to comply with this law is remarkable. . . . The record clearly establishes that these violations of Maryland law were an ongoing practice in [the supplier's] door-to-door solicitations."[57]

Complaints and issues with marketing practices across jurisdictions, as seen in further detail in Appendix 4, are so consistent because the economics of the competitive supply market suggest that the market will always fail individual residential consumers:

- Suppliers compete with the electric companies' basic service, which is a wholesale price that tracks current wholesale market prices relatively closely and is bought in bulk without any profit mark-up.

- The electricity delivered to the consumer is exactly the same whether purchased from a supplier or the electric company.

- Suppliers have significant expenses for overhead (marketing, multiple employees).

- Due to these structural disadvantages, suppliers cannot, on average, "beat" basic service long-term.

- Suppliers, however, have a high level of sophistication relative to residential consumers regarding the relatively complex energy supply markets.

These factors create a harmful combination that results in consumers overpaying for sometimes absolutely no benefit.[58] And, as discussed in detail in Section 2.5 above, when suppliers claim to offer benefits, those benefits are rarely, if ever, commensurate with the premium charged by those suppliers.

Rather than wait for more consumers to be harmed, the Massachusetts Legislature should seriously consider whether the competitive supply market lends itself to competition. The large and growing annual consumer losses (which disproportionately harm low-income and minority communities) suggest that suppliers have found Massachusetts markets to be attractive precisely because they are able to charge high rates.

Moreover, the end of the competitive supply market would not end or even harm consumer choice. Those consumers interested in paying variable rates that follow approximate monthly market prices can elect the variable basic service rate. Consumers who have an interest in fixing their rate for a year's time can participate in their electric companies' budget billing programs. Finally, consumers who would like to purchase "green" or renewable energy can elect to purchase renewable energy through a "green button" program whereby they send their consumption to a third-party that will then bill them for REC (renewable energy certificate) purchases, or they may participate in any town-run green program.

Accordingly, because consumer harm—and especially consumer harm to vulnerable populations—is likely to continue even with the most stringent legislative and regulatory measures and oversight, I recommend that the Legislature end the practice of marketing and selling electric supply to residential consumers on an individual basis (*i.e.*, those residential consumers who do not participate in a municipal aggregation or other group-buying collaborative).

5.2 If the market continues to operate, take action to address imbalances.

Although my primary recommendation is that the Legislature end the practice of marketing and selling electric supply to residential consumers on an individual basis, I have also considered ways to enhance consumer safeguards that may mitigate the consumer harm that would result if the competitive supply market were to continue.

My research and analysis shows that Massachusetts lacks several consumer protection measures that have been implemented in other states. I recommend that regulators and legislators implement consumer protection safeguards to deter, mitigate, and prevent further consumer harm. I discuss these safeguards below. Moreover, as I demonstrate below, it is essential to allocate and fund sufficient resources to enforce consumer protection safeguards.

5.2.1 Well-functioning markets require transparency and informed decision-making.

It seems improbable that if consumers fully understood the options available to them, they would choose to pay, on balance, tens of millions of dollars more each year for electricity than they would if they stayed with electric companies. Going forward, it is critically important that suppliers be fully accountable to the Legislature, the Department, and consumers for the prices they charge and the practices they use to market and sell electricity. As regulators in another state aptly observed: "In a deregulated market, a consumer's ability to make rational, well-informed choices among competing suppliers – and indeed the stability and growth of the supplier marketplace itself – is directly undermined by deceptive misrepresentations . . . ."[59]

Prior to this report, it was largely unknown what, if any, benefits the competitive electric supply marketplace delivered to Massachusetts consumers. As currently constructed, the Massachusetts market operates largely in a "black box." This lack of transparency makes it infinitely more difficult to hold bad actors in the marketplace accountable for their abuses. Accordingly, going forward, critical information about the market should be publicly provided. The information should be clear, accurate, comprehensive, and easily accessible.

I recommend, at minimum, making publicly available (ideally in one location) the following information about the competitive supply market:

- Each supplier's historical rates by product for the prior 24 months;
- The current and historical residential fixed basic service rates for each electric company for the last 24 months.[60] This disclosure should also include key information about residential fixed basic service, which most consumers do not know, but which is critical to assessing the viability of many long-term, fixed rate product offers—the pattern of basic service rates in the summer and winter months.[61]
- Aggregated complaint data for each supplier based on complaints received by the Department, the AGO, and the electric companies.

Additionally, each electric company should be required to submit a monthly report for publication on the Department's website (either in a Department docket or elsewhere), which details the following:

- All suppliers in each electric company's service territory who billed consumers for the prior month;
- All the rates charged by each supplier for the prior month; and
- The number of residential consumers charged per supplier, per rate.[62]

I recommend implementing monthly reports because this will enable those charged with oversight of the market to regularly assess and report on the current state of the market. Reports such as the Electric Supplier Market Fact Sheets generated in Connecticut by the Office of Consumer Counsel provide the type of transparency needed for the competitive supply marketplace.[63] The most recent Connecticut report shows that, in the aggregate, Connecticut consumers paid $46 million more during 2017 to suppliers than if they were served by their electric companies. The Connecticut fact sheet (included as Appendix 5A) also disaggregates this amount to show, by supplier, the annual payment that the suppliers' consumers paid either above or below what they would have paid if they stayed with the electric companies' basic service. Massachusetts policy makers and consumers merit the same level of accountability and information as are provided policy makers and consumers in Connecticut.

The Legislature and the Department should also take steps to ensure that the Commonwealth's most vulnerable consumers are not taken advantage of by suppliers. Among other things, electric companies should report semi-annually to the Department and the AGO the numbers of low-income consumers and all other residential consumers by supplier, and by electric company, separately by zip code. This information should help the Department and the AGO monitor whether any particular suppliers are targeting vulnerable populations. Appendix 2C shows household participation in the competitive supply market by zip code-municipality and Appendix 3B through 3I shows household participation separately for all households, low-income households, and non-low-income households for certain municipalities.

The disproportionately higher participation by low-income households in the competitive supply market merits scrutiny. Moreover, it may be appropriate for municipal leaders, local agencies, and community organizations to monitor suppliers' practices in those communities with particularly high levels of consumer participation. I recommend that the Department maintain a page on its Shopping for Competitive Supply website, energyswitchma.gov, that shows which suppliers are active in which communities based on billing data provided by electric companies.

5.2.2 Adequate oversight and enforcement are essential

Currently, competitive electric suppliers must comply with various consumer protection laws and regulations in Massachusetts, including G.L. c. 164, § 1F and G.L. c. 102C; Department regulations at 220 CMR 11.00; and AGO regulations at 940 CMR 19.00.[64] However, the mere existence of regulations and laws is insufficient to protect consumers. Although I support the implementation of stronger legislative and regulatory measures, I also caution legislators and regulators that significant consumer harm likely will continue. As discussed in Section 6.1, above, the existence of Maryland's Door-to-Door Sales Act did not prevent deceptive sales practices or consumer harm, nor did the measures implemented by the NY PSC or the CT PURA.

As some competitive suppliers continue to operate in violation of existing laws and regulations, strong and timely enforcement via supplier-specific investigations is needed to ensure compliance. The experience of consumer advocates and regulators in Massachusetts and in other states demonstrates that it is time-consuming and resource-intensive to investigate suppliers that may engage in deceptive and aggressive sales practices, representing yet more costs of competition for taxpayer-funded public agencies with limited budgets.

In order to allow for more efficient and timely investigations and enforcement measures, the Legislature should consider legislation that authorizes the Department to assess all suppliers for the purposes of establishing an enforcement fund for regulators to dedicate a team to enforce applicable laws and regulations.[65]

Finally, last year the Department issued an order in a proceeding, D.P.U. 16-156, which I believe should allow for more rigorous oversight of competitive suppliers. The Department adopted interim guidelines for formal investigations and proceedings regarding competitive suppliers ("Interim Guidelines"). The intent of these Interim Guidelines is to provide a process and procedure that will be uniformly implemented when a competitive supplier has allegedly violated the Department's regulations, and will apply to all competitive supply proceedings that require compliance with G.L. c. 30A. Under G.L. c. 164, § 1F and, more specifically, 220 CMR § 11.07(4)(c), the Department has the authority to assess penalties in connection with violations of its regulations, as well as the authority to revoke or place conditions on a supplier's license for non-compliance.

In summary, if competition in the competitive supply market is permitted to continue, I recommend the establishment of a dedicated enforcement team funded by competitive suppliers.

5.2.3 The Legislature should strongly consider more targeted remedies.

My analysis shows that consumers overpaid by $176.8 million from July 2015—June 2017 for an essential service. Other states have found that residential customers who receive competitive supply in their states pay more than default service but do not necessarily derive any (or derive negligible) value from some of these products. Accordingly, the Legislature may want to consider enacting some of the targeted remedies proposed or enacted elsewhere, such as in New York[66] and Connecticut, which require that competitive suppliers who do not guarantee savings provide something of actual value to the consumer.

The New York PSC, in addition to considering whether suppliers should be completely prohibited from serving their current products to mass-market consumers, issued an order prohibiting service to low-income customers by competitive suppliers in December 2016.[67]

In Connecticut, the legislature and PURA prohibited suppliers from charging variable rates due to findings that variable rates caused significant harm to consumers.[68] As detailed in Section 4 above, many Massachusetts consumer complaints concern suppliers that offer low introductory rates to consumers and then subsequently increase them significantly, often without warning. Low initial rates attract consumers who may not understand or have been informed adequately that the rates are variable and may increase. The Legislature should thus consider prohibiting variable rates.

Another source of consumer complaints concerns slamming—the practice of switching a consumer to a supplier without the consumer's explicit authorization to do so. Slamming can occur when a sales representative acquires the consumer's account number from the consumer or the consumer's bill. All electric companies should be required to develop plans to implement a "do not switch" option for consumers to block their accounts from unauthorized switching from basic service, including a robust program to educate consumers about the availability of the no-switch option.

5.3 Summary

Absent legislative and regulatory intervention, the existing competitive supply market will continue to lead to substantial and unwarranted consumer harm. Implementing strong consumer measures and enforcing these measures are time-consuming and resource-intensive. These costs should not be overlooked when weighing the costs and benefits of residential electric supply competition. Until such time as the Commonwealth's policy makers take steps to protect consumers, annual consumer losses in the tens of millions likely will continue and low-income consumers will continue to spend millions more for an essential service than they would have if they had stayed with their electric companies.

6. Conclusion

The goal of a competitive supply market should be to encourage efficient suppliers to stay in the market and inefficient ones to exit the market. However, the typical scenario experienced by other states is one in which there is substantial consumer harm prompting extensive regulatory and legislative intervention, only to see consumer harm continue. The most effective action, therefore, would be to end the competitive supply market.

If, on the other hand, competitive suppliers were to continue to operate in the competitive supply market, timely action is necessary to mitigate consumer harm in Massachusetts. Such action would include taking steps to monitor whether any particular suppliers are targeting vulnerable populations through increased transparency and oversight. Public accountability is essential. Information regarding suppliers' rates and complaints by supplier and by category should be easily accessible. Finally, regulations without sufficient enforcement are meaningless. Accordingly, the Legislature should ensure that regulators are provided with the authority and resources necessary to pursue those suppliers who violate Massachusetts law.

Endnotes

[1] https://www.mass.gov/files/documents/2018/01/05/FY2018LIHEAPIncomeEligibility.pdf.

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

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

[4] In some instances, the competitive supplier may offer "green" or "renewable" electricity, which entails both the purchase of electricity from the grid as well as Renewable Energy Certificates that may "offset" some or all of the consumer's electricity use.

[5] Residential consumers also have the choice to sign up for a variable basic service rate.

[6] 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.

[7] The electric companies' monthly billing data show separately for each supplier (and for the most recent twelve-month period, 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.

[8] All data in the bulleted list below is based on the 2016–2017 study period unless otherwise noted.

[9] Low-income households can apply for reduced electricity distribution rates. Eligibility for the discount rates is based upon verification of a low-income customer'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 customers. However, as described above, they receive a subsidy calculated as a percentage of the customer's total bill. The customer's total bill includes the customer's supply charge, regardless of whether the customer receives basic service or competitive supply.

[10] 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.

[11] Average monthly usage among low-income households participating in the competitive supply market is 552 kWh in comparison with average monthly usage of 621 kWh among non-low-income households—this difference affects the calculation of annual average per-household losses for the two groups.

[12] Municipalities with municipal aggregations do not have trivial participation in the individual residential electric supply market. For this group in June 2017, the participation rate in the individual residential electric supply market is 20 percent of total accounts (where the total is the sum of basic service accounts, competitive supply accounts, and accounts served by municipal aggregation suppliers, i.e., all households in the community), which is similar to

the participation rate for the rest of the state (21 percent during this month). This group has about 140,000 accounts served by competitive suppliers, accounting for approximately 28 percent of the approximate 497,000 accounts associated with the June 2017 zip code data.

[13] The AGO requested granular data for June 2017 because this was the most recent data point at the time of the request.

[14] In this section and in subsequent sections of the report, I compare the market during the July 2016 through June 2017 period with the market from the prior twelve-month period (July 2015 through June 2016). The data set from the prior year does not include the granular information regarding the differing rates charged by individual suppliers, but instead permits the calculation of the average rate charged by supplier in any given month. My analysis of the market based on data from two consecutive years shows that the most recent year continues a pattern that persists and is a harbinger of future continuing harm to households throughout the state absent prompt and effective intervention.

[15] The EDC 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.

[16] EDC rates vary among the service territories and during the year. I computed a statewide average EDC rate of $0.0905 (that is, the average rate that customers of competitive suppliers would have paid their electric companies) based on the locations of the suppliers' customers (which determines the electric companies that offer basic service), the months corresponding to their usage (because electric companies' rates vary throughout the year), and the amount of their usage during the relevant time periods.

[17] During the first study period, Eversource charged two different rates, National Grid charged three different rates, and Fitchburg charged three different rates. During the second study period, Eversource charged two different rates, National Grid charged four different rates, and Fitchburg charged three different rates. See Appendix 2A for the EDC's basic rates during the study period, and see Appendix 1A for a map of their service territories.

[18] I do not include supplier-specific results in my report to err on the side of caution in maintaining confidentiality. As Section 5, below, discusses, the Connecticut Office of Consumer Counsel distributes an annual fact sheet with supplier-specific consumer gains and losses. I recommend that similarly comprehensive and supplier-specific information be made public in Massachusetts to allow for informed decision-making by consumers and policy makers and to increase accountability by suppliers to policy makers and the general public.

[19] By contrast, the average annual consumer loss of $226 takes into consideration the groups of consumers who overpay and those who underpay. The average annual overpayment of $269 corresponds with only those bills associated with competitive suppliers whose rates are more than the corresponding EDC basic service rate.

[20] It is also possible for suppliers to design fixed-rate electricity contracts to work in similar way to variable rate contracts with a teaser. For example, the customer may save money during the initial period of the fixed-rate contract, but ultimately end up paying more than he or she would have otherwise later in the contract due to a drop in wholesale costs and basic service rates.

[21] I limited the supplier group to only those suppliers who rendered at least 100 bills during the 2016–2017 study period. I used 100 total bills in a year as a cut-off for identifying suppliers with a non-trivial participation. Appendix 2D provides complete information for all suppliers that served consumers for all twelve months of the study period, and for which at least 100 bills were rendered during this time period.

[22] See Section 3 for a parallel analysis of suppliers and low-income households.

[23] *See, e.g.*, suppliers' offers of cash back cards and diner rewards cards. http://www.energyswitchma.gov/#/compare/1/1 site visited March 30, 2017.

[24] *See, e.g.*, *Angela Wise, et al. v. Energy Plus Holdings LLC*, Case No. 1:11-cv-07345, in the U.S. District Court for the Southern District of New York; https://topclassactions.com/lawsuit-settlements/lawsuit-news/4945-judge-oks-14m-energy-plus-class-action-settlement/ ($14 million settlement resolved allegations that a competitive supplier deceived customers into signing contracts by luring them with promises of rewards.) (last visited January 26, 2018).

[25] Specifically, a search for electric supply offerings at zip code 02108 on December 6, 2017, showed that only 15 of 56 offerings had a renewable element.

[26] http://energyswtichma.gov/#/, visited on March 7, 2017.

[27] The premium may be low at least in part to "greenwashing." Greenwashing is a phenomenon whereby suppliers claim to be "green" but are purchasing low-cost renewable energy certificates from sources that are not eligible under the Renewable Portfolio Standard. Although these purchases allow a supplier to market its product as "green" they often have limited environmental benefits because they originate from older or out-of-region sources that do not promote "additionality," *i.e.*, additional renewable energy on the grid. *See, e.g.*, http://blog.massenergy.org/blog/competitive-electricity-suppliers; *See also* http://blog.massenergy.org/blog/class-i-recs.

[28] The data provided by the electric companies included a small number of customers who reside in a municipality with a municipal light plant but are nonetheless served by an EDC and take service from a competitive supplier. Due to their small sample and their potential to skew the data, I have excluded them from my municipal-level analyses.

[29] A necessity does not have as much price elasticity of demand as do other normal goods (although it is a normal good) because, although consumers can curtail their usage to some extent, they cannot curtail their usage entirely.

[30] *See* Investigation by the Department of Public Utilities regarding Purchase of Receivables pursuant to G.L. c. 164, § 1D and G.L. c. 164, § 76, D.P.U. 10-53 (2014).

[31] I estimated the size of the market by comparing the number of bills rendered and kWh purchased in each of the two study periods.

[32] Average monthly usage among low-income households participating in the competitive supply market is 552 kWh in comparison with average monthly usage of 621 kWh among non-low-income households, which affects the calculation of annual average per-household losses for the two groups.

[33] By contrast, the average annual consumer loss of $231 for low-income households takes into consideration the groups of consumers who overpay and those who underpay. The overpayment of $265 corresponds with only those bills associated with competitive suppliers whose rates are more than the corresponding EDC basic service rate.

[34] The scope of this report does not include an analysis of the consumer loss (or gain) associated with households' purchase of municipal aggregation (that is, a comparison of the rates that households pay municipal aggregation suppliers with the rates they would pay electric companies).

[35] The gray areas generally correspond with municipalities that are served by municipal light plants, however, there are some zip code portions of some municipalities that are mainly served by municipal power plants where there are non-municipal accounts (i.e., where customers are served by electric companies or competitive suppliers). Those instances where areas are gray in the maps that depict low-income participation and are not gray in the maps that depict participation by all customers correspond to the few instances where there are not any low-income customers in the zip code.

[36] The electric companies provided data with rate and usage information corresponding with approximately 500,0000 bills rendered on behalf of competitive suppliers during June 2017 disaggregated to the geographically granular level corresponding with zip codes.

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

[38] As used in 2011–2015 American Community Survey 5-Year Estimates from the U.S. Census Bureau, a limited English household is "one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English very well. In other words, all members 14 years old and over have at least

some difficulty with English. By definition, English-only households cannot belong to this group." (From https://www.census.gov/topics/population/language-use/about/faqs.html.)

[39] 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.

[40] 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.

[41] *See* Section 1, above.

[42] See Appendix 2C for a complete list of municipalities and associated net consumer losses.

[43] For the purpose of identifying the 20 poorest communities, median incomes are used. For the purpose of computing participation rates by low-income households, I examined households that receive subsidized electric rates.

[44] See Section 2.5, above, for the corresponding analysis for all residential customers.

[45] Appendix 2D provides complete information for all suppliers that served consumers for all twelve months of the 2016–2017 study period, and for which at least 100 bills were rendered.

[46] I chose a cut-off of 100 total bills during the 12-month study period in order to exclude suppliers who serve very few low-income customers.

[47] See Appendix 4A for more detailed information regarding the investigations and lawsuits.

[48] This recommendation does not apply to the commercial and industrial market for competitive electric supply, nor does it apply to municipal aggregations or private aggregators who purchase residential competitive supply as part of a procurement of small and/or large commercial industrial supply.

[49] I do not, at this time, recommend any other changes to other sectors of the electric supply market.

[50] New York Public Service Commission Case 15-M-0127 (In the Matter of Eligibility Criteria for Energy Service Companies), Case 12-M-0476 (Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State, Case 98-M-1343 (In the Matter of Retail Access Business Rules), Order Resetting Retail Energy Markets and Establishing Further Process, issued and effective February 23, 2016 ("NYPSC Order"), at 12–13, footnote omitted. As discussed in more detail in Section 5.2.3, below, the decision was vacated but the NY PSC has issued another order indicating that it intends to further pursue the issue. *See Retail Energy Supply Ass'n* v. *Pub. Serv. Comm'n of State*, 152 A.D.3d 1133, 1137–38, 59 N.Y.S.3d 590, 595 (N.Y. App. Div. 2017) ("We do find, however, that the PSC's broad statutory jurisdiction and authority over the sale of gas and electricity authorized it to impose the limitations set forth in the Reset Order."); s*ee also* Robert Walton, "New York Supreme Court Upholds State Prohibition on ESCO Sales to Low-Income Customers," Utility Dive (July 5, 2017), https://www.utilitydive.com/news/new-york-supreme-court-upholds-state-prohibition-on-esco-sales-to-low-incom/446380/.

[51] NYPSC, Case 12-M-0476, Notice of Evidentiary and Collaborative Tracks and Deadline for Initial Testimony and Exhibits, Issued December 2, 2106, at 3. ("After considerable experience with the offering of retail service to mass market customers by ESCOs, the Commission has determined that the retail markets serving mass-market customers are not providing sufficient competition or innovation to properly serve consumers. Despite efforts to realign the retail market, customer abuses and overcharging persist, and there has been little innovation . . . .")

[52] Connecticut Public Act No. 14-75, AN ACT CONCERNING ELECTRIC CUSTOMER CONSUMER PROTECTION, signed into law, June 3, 2014.
https://www.cga.ct.gov/asp/cgabillstatus/cgabillstatus.asp?selBillType=Public+Act&bill_num=75&

PURA Establishment of Rules for Electric Suppliers and EDCs Concerning Operations and Marketing in the Electric Retail Market, Connecticut Public Regulatory Authority Docket No. 13-07-18, *Decision*, November 5, 2014 (Connecticut Decision).

[53] PURA Establishment of Rules for Electric Suppliers and EDCs Concerning Operations and Marketing in the Electric Retail Market, Connecticut Public Utilities Regulatory Authority Docket No. 13-07-18, testimony of Susan M. Baldwin and Helen E. Golding on behalf of the Connecticut Office of Consumer Counsel, March 10, 2014, at p. 82.

[54] Connecticut Office of Consumer Counsel, News Release, April 20, 2016, "Connecticut Residential Customers of Electric Suppliers Paid $58 Million More Than Standard Service in 2015."

[55] See OCC fact sheet, included as Appendix 5A: Connecticut Office of Consumer Counsel, "OCC Fact Sheet: Electric Supplier Market, January 2017 through December 2017," updated on February 6, 2018. http://www.ct.gov/occ/lib/occ/fact_sheet_electric_supplier_market_december_2017.pdf

[56] "State Urged To Probe Abusive Electricity Suppliers," Gregory B. Hladky, *Hartford Courant*, January 31, 2017, http://www.courant.com/news/connecticut/hc-call-to-probe-abusive-electric-suppliers-20170130-story.html (reproduced in Appendix 5B).

[57] Maryland Public Service Commission Case No. 9324, Order 86211, issued March 7, 2014 ("Maryland Order"), at 21-22, 25. As summarized by the Maryland PSC: "Maryland's 'Door-to-Door Sales Act' states that it is an 'unfair or deceptive trade practice' for a seller to fail to provide a consumer with: 1) A fully completed receipt or copy of the contract at the time of its execution, which 'is in the same language as that principally used in the oral sales presentation;' 2) A statement on the receipt or contract of the customer's right to cancel the transaction within three days of the transaction which must be in bold and near the signature line; and 3) A separate 'Notice of Cancellation' form containing the statutorily required language." Maryland Order at 21, footnotes, omitted.

[58] Indeed, the NYPSC similarly attributes the unabated complaints it receives to a fundamental deficit in the existing competitive supplier (ESCO) model, finding "mass market customers purchasing commodity only from ESCOs are unlikely to obtain value commensurate with the premium paid in excess of the cost that would be paid as a full service customer of the utility." NYPSC Order at 12.

[59] Maryland Order, at 3.

[60] In 2017, the Department of Public Utilities created a webpage "Basic service information and rates," found at: https://www.mass.gov/service-details/basic-service-information-and-rates.

[61] During the past few years in Massachusetts, basic service rates have generally tended to go up during the cold winter months and go down during the warm summer months. This type of information, which is readily available to those in the industry, should also be readily available to consumers shopping for supply.

[62] Electric companies in Connecticut currently provide this information to the Connecticut PURA under Docket 06-10-22. The information can be accessed by all members of the public. Appendix 5C includes an excerpt of a report filed by Eversource for January 2017.

[63] See Appendix 5A.

[64] The AGO is currently revising its regulations to strengthen disclosure requirements.

[65] In Connecticut, as part of a settlement agreement with Energy Plus Holdings, LLC, the Public Utilities Regulatory Authority was provided with $4.5 million for consumer assistance and education and enforcement activity regarding third party electric suppliers. http://www.ct.gov/ag/cwp/view.asp?A=2341&Q=545458

[66] In February 2016, the NYPSC issued an order intended to implement immediate reforms in the practices of the state's energy service companies (ESCOs). Those reforms were intended to 1) "address the unfair business practices" and 2) "ensure residential and small nonresidential commercial customers (mass market customers) are receiving value from the retail energy markets." NYPSC Order at 1. In July 2016, the NYPSC order was partially vacated for failure to provide due process to the affected ESCOs and remanded to the agency for further proceedings. *National Energy Marketers Assn. v. New York State Pub. Serv. Commn.*, 2016 NY Slip Op. 26233 Decided on July 22, 2016, Supreme Court, Albany County (Zwack, J.). On appeal, the judgment regarding due process was upheld, but, notably, the appeals court did affirm that the PSC had the authority to issue the rules set forth in the February 2016 order. *See Retail Energy Supply Ass'n* v. *Pub. Serv. Comm'n of State*, 152 A.D.3d 1133, 1137–38, 59 N.Y.S.3d 590, 595 (N.Y. App. Div. 2017). Although the specific remedies are in abeyance, the

NYPSC's December 2016 Notice in the continuing investigation makes clear that the Commission retains the original concerns about the failure of competition in the retail energy market for mass market consumers and about the negative impact of industry practices on those consumers. Notice of Evidentiary and Collaborative Tracks and Deadline for Initial Testimony and Exhibits, Issued December 2, 2106, at 3.

[67] NYPSC Case 15-M-0127 (In the Matter of Eligibility Criteria for Energy Service Companies), Case 12-M-0476 (Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State, Case 98-M-1343 (In the Matter of Retail Access Business Rules), Order Adopting a Prohibition on Service to Low-Income Customers by Energy Service Companies, issued and effective December 16, 2016.

[68] Connecticut regulators stated: "Thousands of residential and business customers experienced significant rate increases under variable plans during late 2013 and early 2014. Some customers only learned about rate increases after service had been rendered and the cost incurred. The lack of notification regarding a change to the customer's electric generation price when a fixed plan converted to a variable plan or when rates increased under a variable plan was unreasonable and contributed to the problems and issues identified in this proceeding." PURA Establishment of Rules for Electric Suppliers and EDCs Concerning Operations and Marketing in the Electric Retail Market, Connecticut Public Regulatory Authority Docket No. 13-07-18, *Decision*, November 5, 2014 (Connecticut Decision), at 1.

Appendix ES1

Experience and Qualifications of Susan M. Baldwin

Experience and Qualifications of Susan M. Baldwin

Susan M. Baldwin specializes in utility economics, regulation, and public policy, with a long-standing focus on telecommunications markets and with a more recent focus on consumer issues in electric and gas markets. Ms. Baldwin has been actively involved in public policy for forty years. Since 2001, she has been consulting to public sector agencies, consumer advocates, and others as an independent consultant. Ms. Baldwin received 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. Ms. Baldwin has extensive experience both in government and in the private sector.

Ms. Baldwin has testified before 23 state public utility commissions on matters relating to telecommunications, electric and gas matters, and has also authored numerous comments and declarations submitted in various Federal Communications Commission proceedings on behalf of, among others, the National Association of State Utility Consumer Advocates. Ms. Baldwin analyzed the Connecticut residential retail electric market in 2013–2014 on behalf of the Connecticut Office of Consumer Counsel ("OCC"). She co-sponsored testimony with Helen E. Golding on behalf of the OCC in Connecticut Department of Public Utility Control Docket No. 13-07-18 that summarized these analyses and that proposed regulatory remedies for the residential retail electric market in Connecticut. Ms. Baldwin also analyzed approximately 800 individual complaints submitted to the Connecticut DPUC by consumers about the practices of retail electric suppliers.

Ms. Baldwin has served in a direct advisory capacity to public utility commissions in five states, testified before state legislative committees in four states, and has sponsored expert reports in several state taxation proceedings. Ms. Baldwin has contributed to numerous comments submitted to the FCC on diverse aspects of broadband in various proceedings on topics such as data collection, mapping, deployment, universal service, affordability, consumer protection, and network management. Also, in state regulatory proceedings that have examined carriers' proposals for spin-offs and for mergers, she has recommended conditions concerning broadband deployment and adoption. Ms. Baldwin has participated in more than twenty state and federal regulatory investigations of the impact of proposed transfers of control on consumers. Ms. Baldwin has been an invited speaker at more than 40 conferences.

Ms. Baldwin served as a direct advisor to the then Massachusetts Department of Telecommunications and Energy (DTE) between August 2001 and July 2003, in Massachusetts DTE Docket 01-20, an investigation of Verizon's total element long run incremental cost studies for recurring and nonrecurring unbundled network elements. She assisted with all aspects of this comprehensive case in Massachusetts. Ms. Baldwin analyzed recurring and nonrecurring cost studies, ran cost models, reviewed parties' testimony, cross-examined witnesses, trained staff, met with the members of the Commission, assisted with drafting substantial portions of the major orders issued by the DTE, and also assisted with the compliance phase of the proceeding.

Ms. Baldwin worked with Economics and Technology, Inc. for twelve years (1984 to 1988 and 1992-2000), most recently as a Senior Vice President. Among her numerous projects was the

responsibility of advising the Vermont Public Service Board in matters relating to a comprehensive investigation of NYNEX's revenue requirement and proposed alternative regulation plan, and participating in all phases of that in-depth investigation. During her first years at ETI, Ms. Baldwin was the Director of Publications and Tariff Research, and, in that capacity, she trained and supervised staff in the analysis of telecommunications rate structures, services, and regulation.

Ms. Baldwin served four years (1988-1992) as the Director of the Telecommunications Division for the Massachusetts Department of Public Utilities (now the Department of Telecommunications & Cable), where she directed a staff of nine, and acted in a direct advisory capacity to the DPU Commissioners. (The Massachusetts DTC maintains a non-separated staff, which directly interacts with the Commission, rather than taking an advocacy role of its own in proceedings). Ms. Baldwin advised and drafted decisions for the Commission in numerous DPU proceedings including investigations of a comprehensive restructuring of New England Telephone Company's rates, an audit of NET's transactions with its NYNEX affiliates, collocation, ISDN, Caller ID, 900-type services, AT&T's request for a change in regulatory treatment, pay telephone and alternative operator services, increased accessibility to the network by disabled persons, conduit rates charged by NET to cable companies, and quality of service. Under her supervision, staff analyzed all telecommunications matters relating to the regulation of the then $1.7-billion telecommunications industry in Massachusetts, including the review of all telecommunications tariff filings; petitions; cost, revenue, and quality of service data; and certification applications. As a member of the Telecommunications Staff Committees of the New England Conference of Public Utility Commissioners (NECPUC) and the National Association of Regulatory Utility Commissioners (NARUC), she contributed to the development of telecommunications policy on state, regional, and national levels.

Ms. Baldwin has worked with local, state, and federal officials on energy, environmental, budget, welfare, and telecommunications issues. As a policy analyst for the New England Regional Commission (NERCOM), Massachusetts Department of Public Welfare (DPW), and Massachusetts Office of Energy Resources (MOER), she acquired extensive experience working with governors' offices, state legislatures, congressional offices, and industry and advocacy groups. As an energy analyst for NERCOM, Ms. Baldwin coordinated New England's first regional seminar on low-level radioactive waste, analyzed federal and state energy policies, and wrote several reports on regional energy issues. As a budget analyst for the DPW, she forecast expenditures, developed low-income policy, negotiated contracts, prepared and defended budget requests, and monitored expenditures of over $100 million. While working with the MOER, Ms. Baldwin conducted a statewide survey of the solar industry and analyzed federal solar legislation.

Ms. Baldwin received Boston University's Dean's Fellowship and received her Master of Economics from Boston University. She received her Master of Public Policy from the Harvard Kennedy School and while attending the Harvard Kennedy School, Ms. Baldwin served as a teaching assistant for a graduate course in microeconomics and as a research assistant for the school's Energy and Environmental Policy Center. Ms. Baldwin received her Bachelor of Arts

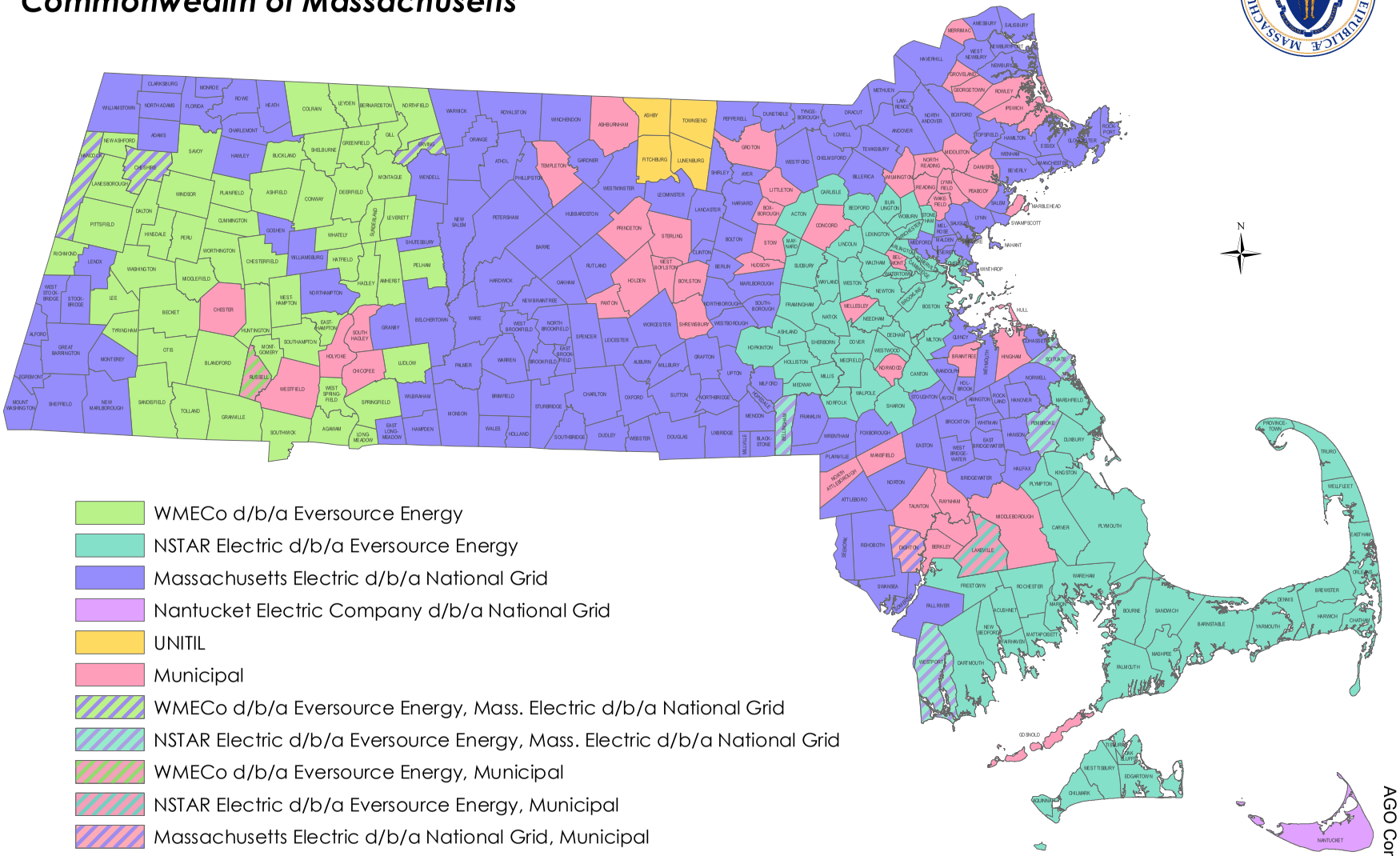
degree in Mathematics and English from Wellesley College, and at Wellesley College was a Rhodes Scholar nominee. She has also studied in Ghent, Belgium.

Appendix 1A

Map of EDC service areas and municipal light plant towns

Electricity Providers by Municipality

Commonwealth of Massachusetts



Source: Massachusetts Department of Public Utilities, September 2015

Map by MassGIS, 5/31/2015

Appendix 2A

EDC rates during study period: July 2015 – June 2016 and July 2016 – June 2017

EDC rates during study period:
July 2015 – June 2016 and July 2016 – June 2017

		Rate	
Months	**Number of Months**	**July 2015 - June 2016**	**July 2016- June 2017**
National Grid			
July - Sept	3	$0.09257	$ 0.08042
Oct	1	$0.09257	$ 0.08084
Nov - April	6	$0.13038	$ 0.09787
May - June	2	$0.08042	$ 0.09432
Nstar			
July - Dec	6	$0.10050	$ 0.08208
Jan - June	6	$0.10844	$ 0.10318
WMECo			
July - Dec	6	$0.09767	$ 0.07708
Jan - June	6	$0.10426	$ 0.09126
Fitchburg			
July - Nov	5	$0.07878	$ 0.07878
Dec - May	6	$0.12239	$ 0.09704
June	1	$0.11191	$ 0.09934

Appendix 2B

Methodology for computing consumer loss

Methodology for Computing Consumer Loss

Overview

This report analyzes detailed residential billing data rendered on behalf of competitive suppliers by EDCs for two different consecutive twelve-month time periods – the first time period spans July 2015 through June 2016 and the second time period spans July 2016 through June 2017. For each of these two data sets, the EDCs provided supplier-specific and monthly-specific data. The data for the second time period are more granular than for the first time period, and enable, among other things, a separate analysis of customers who saved versus those who lost by participating in the market. Both years' sets of data allow for approximations of the *net* consumer impact for each supplier and also statewide. A brief description follows that explains my methodology for computing the consumer loss associated with the individual residential electric supply market in Massachusetts. The end of this appendix includes two tables based on excerpts from the actual data provided by the EDCs to illustrate further my methodology.

Study Year 1: July 2015 – June 2016

The billing data provided by EDCs to the AGO for the first of the two years that this report encompasses (that is July 2015 through June 2016) includes monthly data by supplier (separately for each EDC region) and separately for each of the twelve months, a total count of the customers served, a total count of the usage, and a total count of the dollar amount paid. From this information, one can compute the average rate per kWh by supplier and by month, as well as the average residential usage. Comparing these rates with the hypothetical rate that these customers would have paid had they been served instead by their EDC, assuming the same usage, yields an approximation of consumer loss, which I sum to compute the aggregate statewide loss. However, these data did not contain information about the spread of specific rates billed by individual suppliers (which, as evidenced in subsequent data, can be quite substantial), and how usage varied across those different rates. The table at the end of this appendix shows my methodology for computing the consumer impact, based on actual data for an unnamed supplier in a specific region during the 12-month period corresponding with "Study Year 1," that is July 2015 through June 2016.

Study Year 2: July 2016 – June 2017

My methodology for computing the consumer impact for "Study Year 2" (July 2016 through June 2017) is similar in approach. With higher-resolution data showing the number of accounts billed and the kWh purchased from each supplier at each distinct rate, I was able to compare the actual rates charged by competitive suppliers with the hypothetical rate that would have applied in a given month if the customers had remained on basic service from the regional EDCs. The spread of rates offered throughout the study year reveals that some customers saved money relative to the EDC rates, and others lost money relative to the EDCs' rates. An excerpt from source data for one competitive

supplier for March 2017 is attached and shows the wide variety of rates that suppliers charge their customer base. In order to compute consumer loss for the second study year, I compared the counterfactual bill each group of customers would have paid their EDC during the corresponding time period, again assuming no change in usage, with the actual bill rendered for each competitive supplier at each distinct rate. Net consumer loss is the sum of all these gains or losses.

Illustrative Calculations Based on the Actual Billing of Supplier "A"

	MONTH	YEAR	COUNT	KWH	BILLED AMT	Average rate during month (per kWh)
a	AUG	2015	29,610	25,378,965	$3,939,181.64	$0.155214
b	DEC	2015	28,585	16,737,528	$2,511,319.43	$0.150041
c	JUL	2015	30,269	22,432,947	$3,498,868.56	$0.155970
d	NOV	2015	28,868	15,387,081	$2,329,527.67	$0.151395
e	OCT	2015	29,449	16,994,615	$2,579,689.20	$0.151795
f	SEP	2015	29,887	24,230,597	$3,707,343.10	$0.153003
g	APR	2016	27,332	14,050,030	$2,160,098.38	$0.153743
h	FEB	2016	27,903	17,326,927	$2,584,814.07	$0.149179
i	JAN	2016	28,260	18,622,963	$2,785,582.17	$0.149578
j	JUN	2016	27,010	14,598,573	$2,259,329.73	$0.154764
k	MAR	2016	27,607	15,443,273	$2,336,325.05	$0.151284
l	MAY	2016	27,165	13,016,451	$2,008,726.63	$0.154322

m	2015	176,668	121,161,733	$18,565,929.60
n	2016	165,277	93,058,217	$14,134,876.03
o	Total	341,945	214,219,950	$32,700,805.63

p	Avg # of customers	28,495
q	Avg usage per bill	626

				Hypothetical EDC billing
r	2015	NSTAR	$0.100500	$12,176,754
s	2016	NSTAR	$0.108440	$10,091,233
t		Total		$22,267,987

	Total Consumer loss	$10,432,818
v	Supplier A average rate	$0.152651
w	NSTAR averate rate	$0.103949
x	Amount above EDC	47%
y	Consumer Loss - annual per customer	$366.12

Rows a through l are ordered alphabetically and include source data from NSTAR.
Rows m and n compute half-year totals.
Row o computes 12-month total.
Row p computes the average number of customers served by Supplier A during any month.
Row q computes the average usage per bill rendered to Supplier A's customers.
Rows r through t compute the hypothetical billing had the customers been served by NSTAR.
Row u computes the total consumer loss by comparing total actual billing with hypothetical NSTAR billing.
Row v computes Supplier A's average rate during the 12-month period.
Row w computes NSTAR's hypothetical rate based on when the usage occurred.
Row x shows the "premium" that Supplier A's customers paid relative to NSTAR's rate.
Row y expresses the annual consumer loss on a per-consumer basis.
The "average rate per month" is computed.

Supplier X: March 2017, MeCO Region

(subset of Supplier X's Bills in March 2017)

Rate class ($/kwh)	Total kWh billed to residential accounts	Total amount ($) billed to residential accounts	# of Residential Accounts Billed
$0.15480	1,011	$156.50	1
$0.15487	1,195	$185.07	2
$0.15493	2,951	$457.20	3
$0.15509	953	$147.80	1
$0.15524	928	$144.06	1
$0.15535	908	$141.06	1
$0.15537	905	$140.61	1
$0.15538	1,293	$200.91	3
$0.15542	897	$139.41	1
$0.15547	888	$138.06	1
$0.15564	862	$134.16	1
$0.15565	860	$133.86	1
$0.15574	849	$132.22	1
$0.15579	841	$131.02	1
$0.15583	1,671	$260.39	2
$0.15590	825	$128.62	1
$0.15610	798	$124.57	1
$0.15617	789	$123.22	1
$0.15628	775	$121.12	1
$0.15647	187	$29.26	1
$0.15662	737	$115.43	1
$0.15663	736	$115.28	1
$0.15671	727	$113.93	1
$0.15675	723	$113.33	1
$0.15689	708	$111.08	1
$0.15690	707	$110.93	1
$0.15693	704	$110.48	1
$0.15699	698	$109.58	1
$0.15704	1,386	$217.66	2
$0.15711	686	$107.78	1
$0.15714	683	$107.33	1
$0.15737	1,324	$208.36	2
$0.15755	1,296	$204.18	2
$0.15773	633	$99.84	1
$0.15779	628	$99.09	1
$0.15793	617	$97.44	1

Rate class ($/kwh)	Total kWh billed to residential accounts	Total amount ($) billed to residential accounts	# of Residential Accounts Billed
$0.15808	605	$95.64	1
$0.15818	598	$94.59	1
$0.15829	175	$27.70	1
$0.15849	576	$91.29	1
$0.15891	1,100	$174.80	2
$0.15896	1,094	$173.90	2
$0.15909	539	$85.75	1
$0.15911	538	$85.60	1
$0.15914	1,072	$170.60	2
$0.15963	509	$81.25	1
$0.15966	507	$80.95	1
$0.15972	504	$80.50	1
$0.15974	503	$80.35	1
$0.15978	501	$80.05	1
$0.15984	996	$159.20	2
$0.15986	1,988	$317.80	4
$0.16000	980	$156.80	2
$0.16004	1,952	$312.40	4
$0.16014	483	$77.35	1
$0.16019	962	$154.10	2
$0.16023	958	$153.50	2
$0.16027	477	$76.45	1
$0.16047	468	$75.10	1
$0.16049	1,401	$224.85	3
$0.16054	930	$149.30	2
$0.16058	463	$74.35	1
$0.16061	462	$74.20	1
$0.16063	461	$74.05	1
$0.16065	920	$147.80	2
$0.16075	456	$73.30	1
$0.16077	455	$73.15	1
$0.16094	1,347	$216.78	3
$0.16096	896	$144.22	2
$0.16113	882	$142.12	2
$0.16118	439	$70.76	1
$0.16122	526	$84.80	1
$0.16126	436	$70.31	1
$0.16183	1,245	$201.48	3
$0.16203	816	$132.22	2
$0.16221	402	$65.21	1

Rate class ($/kWh)	Total kWh billed to residential accounts	Total amount ($) billed to residential accounts	# of Residential Accounts Billed
$0.16224	401	$65.06	1
$0.16249	1,179	$191.58	3
$0.16253	392	$63.71	1
$0.16262	778	$126.52	2
$0.16265	1,552	$252.44	4
$0.16269	387	$62.96	1
$0.16279	1,152	$187.53	3
$0.16292	1,900	$309.55	5
$0.16302	754	$122.92	2
$0.16309	750	$122.32	2
$0.16320	744	$121.42	2
$0.16372	358	$58.61	1
$0.16375	714	$116.92	2
$0.16379	356	$58.31	1
$0.16387	354	$58.01	1
$0.16422	346	$56.82	1
$0.16443	341	$56.07	1
$0.16464	1,008	$165.96	3
$0.16486	331	$54.57	1
$0.16491	330	$54.42	1
$0.16542	638	$105.54	2
$0.16552	317	$52.47	1
$0.16577	312	$51.72	1
$0.16597	616	$102.24	2
$0.16629	906	$150.66	3
$0.16645	598	$99.54	2
$0.16732	284	$47.52	1
$0.16739	283	$47.37	1
$0.16763	279	$46.77	1
$0.16802	546	$91.74	2
$0.16815	271	$45.57	1
$0.16992	124	$21.07	1
$0.17020	732	$124.59	3
$0.17063	717	$122.34	3
$0.17080	237	$40.48	1
$0.17098	235	$40.18	1
$0.17107	468	$80.06	2
$0.17162	228	$39.13	1
$0.17221	444	$76.46	2
$0.17251	219	$37.78	1

Rate class ($/kwh)	Total kWh billed to residential accounts	Total amount ($) billed to residential accounts	# of Residential Accounts Billed
$0.17315	426	$73.76	2
$0.17348	840	$145.72	4
$0.17477	199	$34.78	1
$0.17503	1,182	$206.88	6
$0.17528	585	$102.54	3
$0.17679	552	$97.59	3
$0.17724	362	$64.16	2
$0.17917	676	$121.12	4
$0.18081	160	$28.93	1
$0.18293	300	$54.88	2
$0.18384	292	$53.68	2
$0.18440	91	$16.78	1
$0.18632	136	$25.34	1
$0.19532	218	$42.58	2
$0.19750	104	$20.54	1
$0.20041	196	$39.28	2
$0.20489	90	$18.44	1
$0.21717	53	$11.51	1
$0.22600	130	$29.38	1
$0.25532	47	$12.00	1
$0.26786	42	$11.25	1

Note: The numbers above are an excerpt from 1056 rows of billing data for Supplier X. The totals below correspond with the billing information in all 1056 rows.

$/ kWh, Supplier X in March 2017	Total kWh billed to residential accounts	Total amount ($) billed to residential accounts	# of Residential Accounts Billed
$0.12426	2,016,726	$ 250,600.61	3,178

Appendix 2C

Consumer loss by municipality – aggregate and average per-household

Appendix 2C

Consumer Loss by Municipality in June 2017: All Households and Low-Income Households (Sorted Alphabetically)

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Abington	all	$ 19,065	$ 15.51	$ 0.0265	19%	1,229
Abington	low	$ 2,015	$ 14.19	$ 0.0281	26%	142
Acton	all	$ 14,132	$ 11.22	$ 0.0250	14%	1,259
Acton	low	$ 1,190	$ 15.26	$ 0.0363	19%	78
Acushnet	all	$ 8,643	$ 10.41	$ 0.0230	20%	830
Acushnet	low	$ 1,808	$ 12.56	$ 0.0289	27%	144
Adams	all	$ 12,667	$ 11.35	$ 0.0248	26%	1,116
Adams	low	$ 3,872	$ 12.41	$ 0.0280	37%	312
Agawam	all	$ 21,227	$ 14.54	$ 0.0269	20%	1,460
Agawam	low	$ 3,782	$ 15.37	$ 0.0287	28%	246
Alford	all	$ 2,000	$ 21.98	$ 0.0348	25%	91
Alford	low	$ 65	$ 21.54	$ 0.0464	38%	3
Allston	all	$ 22,383	$ 12.11	$ 0.0308	19%	1,848
Allston	low	$ 2,262	$ 12.78	$ 0.0331	32%	177
Amesbury	all	$ 17,342	$ 15.39	$ 0.0293	16%	1,127
Amesbury	low	$ 3,081	$ 15.88	$ 0.0362	29%	194
Amherst	all	$ 23,502	$ 15.34	$ 0.0297	15%	1,532
Amherst	low	$ 3,833	$ 18.79	$ 0.0355	26%	204
Andover	all	$ 31,233	$ 15.19	$ 0.0251	16%	2,056
Andover	low	$ 1,207	$ 12.84	$ 0.0218	22%	94
Aquinnah	all	$ 580	$ 8.41	$ 0.0205	14%	69
Aquinnah	low	$ 98	$ 32.66	$ 0.0743	17%	3
Arlington	all	$ 31,478	$ 12.39	$ 0.0260	13%	2,541
Arlington	low	$ 3,306	$ 14.44	$ 0.0351	25%	229
Ashby	all	$ 44	$ 7.35	$ 0.0139	1%	6
Ashfield	all	$ 2,476	$ 17.31	$ 0.0316	15%	143
Ashfield	low	$ 527	$ 20.28	$ 0.0404	31%	26
Ashland	all	$ 12,736	$ 11.55	$ 0.0255	16%	1,103
Ashland	low	$ 1,344	$ 15.63	$ 0.0357	21%	86
Assonet	all	$ 1,784	$ 6.54	$ 0.0147	18%	273
Assonet	low	$ 454	$ 11.65	$ 0.0266	30%	39
Athol	all	$ 20,398	$ 14.81	$ 0.0278	27%	1,377
Athol	low	$ 6,985	$ 15.98	$ 0.0311	36%	437
Attleboro	all	$ 62,318	$ 16.92	$ 0.0298	21%	3,683
Attleboro	low	$ 12,944	$ 17.35	$ 0.0354	32%	746

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Auburn	all	$ 22,087	$ 13.94	$ 0.0235	23%	1,584
Auburn	low	$ 2,559	$ 13.76	$ 0.0240	27%	186
Auburndale	all	$ 3,360	$ 11.91	$ 0.0280	12%	282
Auburndale	low	$ 165	$ 14.98	$ 0.0390	13%	11
Avon	all	$ 4,927	$ 14.80	$ 0.0250	19%	333
Avon	low	$ 896	$ 17.23	$ 0.0305	29%	52
Ayer	all	$ 10,521	$ 14.82	$ 0.0258	20%	710
Ayer	low	$ 1,588	$ 13.46	$ 0.0294	37%	118
Barnstable	all	$ 1,885	$ 7.31	$ 0.0166	23%	258
Barnstable	low	$ 98	$ 12.27	$ 0.0285	31%	8
Barre	all	$ 8,174	$ 14.04	$ 0.0249	27%	582
Barre	low	$ 1,342	$ 12.43	$ 0.0239	37%	108
Bass River	all	$ 2,061	$ 7.69	$ 0.0176	15%	268
Bass River	low	$ 212	$ 11.18	$ 0.0240	22%	19
Becket	all	$ 3,628	$ 15.57	$ 0.0288	13%	233
Becket	low	$ 475	$ 11.86	$ 0.0208	26%	40
Bedford	all	$ 6,438	$ 9.43	$ 0.0206	13%	683
Bedford	low	$ 684	$ 18.99	$ 0.0453	15%	36
Belchertown	all	$ 20,441	$ 14.67	$ 0.0252	22%	1,393
Belchertown	low	$ 3,555	$ 14.00	$ 0.0278	36%	254
Bellingham	all	$ 20,556	$ 13.88	$ 0.0258	23%	1,481
Bellingham	low	$ 2,653	$ 18.69	$ 0.0336	29%	142
Berlin	all	$ 3,623	$ 13.03	$ 0.0198	23%	278
Berlin	low	$ 209	$ 10.43	$ 0.0205	30%	20
Bernardston	all	$ 2,184	$ 14.66	$ 0.0261	15%	149
Bernardston	low	$ 336	$ 17.66	$ 0.0340	15%	19
Beverly	all	$ 43,351	$ 16.06	$ 0.0308	17%	2,699
Beverly	low	$ 5,498	$ 15.40	$ 0.0373	27%	357
Billerica	all	$ 43,562	$ 17.37	$ 0.0308	17%	2,508
Billerica	low	$ 5,373	$ 21.84	$ 0.0404	30%	246
Blackstone	all	$ 12,454	$ 11.54	$ 0.0224	30%	1,079
Blackstone	low	$ 1,949	$ 13.17	$ 0.0282	41%	148
Blandford	all	$ 1,361	$ 15.65	$ 0.0282	13%	87
Blandford	low	$ 151	$ 12.59	$ 0.0232	22%	12
Bolton	all	$ 4,945	$ 14.13	$ 0.0198	19%	350
Bolton	low	$ 268	$ 22.37	$ 0.0346	35%	12
Boston	all	$ 76,476	$ 9.82	$ 0.0209	11%	7,784
Boston	low	$ 15,832	$ 11.46	$ 0.0285	31%	1,382
Bourne	all	$ 5,141	$ 9.16	$ 0.0206	21%	561

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Bourne	low	$ 848	$ 13.46	$ 0.0306	26%	63
Boxford	all	$ 11,280	$ 22.97	$ 0.0317	17%	491
Boxford	low	$ 113	$ 18.81	$ 0.0381	13%	6
Brant Rock	all	$ 324	$ 9.82	$ 0.0207	14%	33
Brant Rock	low	$ 95	$ 13.57	$ 0.0266	37%	7
Brewster	all	$ 11,340	$ 6.81	$ 0.0168	20%	1,666
Brewster	low	$ 919	$ 11.49	$ 0.0256	21%	80
Bridgewater	all	$ 25,930	$ 17.32	$ 0.0268	17%	1,497
Bridgewater	low	$ 3,085	$ 18.58	$ 0.0332	26%	166
Brighton	all	$ 32,625	$ 9.93	$ 0.0233	17%	3,284
Brighton	low	$ 3,550	$ 13.50	$ 0.0330	26%	263
Brimfield	all	$ 5,929	$ 14.19	$ 0.0221	26%	418
Brimfield	low	$ 723	$ 13.15	$ 0.0219	30%	55
Brockton	all	$ 180,573	$ 16.24	$ 0.0325	33%	11,122
Brockton	low	$ 59,507	$ 16.82	$ 0.0354	45%	3,538
Brookfield	all	$ 6,535	$ 12.91	$ 0.0222	32%	506
Brookfield	low	$ 1,388	$ 13.48	$ 0.0242	41%	103
Brookline	all	$ 29,523	$ 12.52	$ 0.0278	11%	2,359
Brookline	low	$ 1,446	$ 15.22	$ 0.0371	15%	95
Buckland	all	$ 2,595	$ 18.41	$ 0.0341	16%	141
Buckland	low	$ 446	$ 17.82	$ 0.0331	20%	25
Burlington	all	$ 17,004	$ 11.84	$ 0.0256	15%	1,436
Burlington	low	$ 2,127	$ 15.41	$ 0.0351	25%	138
Buzzards Bay	all	$ 3,238	$ 8.18	$ 0.0192	22%	396
Buzzards Bay	low	$ 600	$ 13.96	$ 0.0331	24%	43
Cambridge	all	$ 50,183	$ 14.78	$ 0.0350	11%	3,395
Cambridge	low	$ 10,084	$ 17.82	$ 0.0439	32%	566
Canton	all	$ 15,459	$ 11.17	$ 0.0246	15%	1,384
Canton	low	$ 1,945	$ 14.85	$ 0.0344	21%	131
Carlisle	all	$ 2,356	$ 8.10	$ 0.0171	15%	291
Carlisle	low	$ 120	$ 24.00	$ 0.0520	19%	5
Carver	all	$ 6,777	$ 9.20	$ 0.0192	18%	737
Carver	low	$ 1,656	$ 12.08	$ 0.0270	26%	137
Cataumet	all	$ 786	$ 6.14	$ 0.0188	18%	128
Cataumet	low	$ (7)	$ (6.95)	$ (0.0150)	4%	1
Centerville	all	$ 8,920	$ 7.02	$ 0.0161	21%	1,270
Centerville	low	$ 1,046	$ 13.58	$ 0.0288	21%	77
Charlemont	all	$ 2,682	$ 18.50	$ 0.0342	21%	145
Charlemont	low	$ 772	$ 20.88	$ 0.0407	33%	37

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Charlestown	all	$ 9,590	$ 9.07	$ 0.0171	14%	1,057
Charlestown	low	$ 286	$ 12.45	$ 0.0288	17%	23
Charlton	all	$ 19,103	$ 13.89	$ 0.0218	27%	1,375
Charlton	low	$ 1,563	$ 13.25	$ 0.0235	31%	118
Chatham	all	$ 5,758	$ 8.68	$ 0.0230	17%	663
Chatham	low	$ 261	$ 13.74	$ 0.0316	18%	19
Chelmsford	all	$ 31,851	$ 15.38	$ 0.0280	15%	2,071
Chelmsford	low	$ 3,286	$ 17.20	$ 0.0341	24%	191
Chelsea	all	$ 61,037	$ 13.22	$ 0.0301	36%	4,616
Chelsea	low	$ 19,559	$ 14.51	$ 0.0348	47%	1,348
Cheshire	all	$ 4,821	$ 13.47	$ 0.0263	23%	358
Cheshire	low	$ 1,055	$ 13.18	$ 0.0299	36%	80
Chesterfield	all	$ 1,246	$ 18.32	$ 0.0335	11%	68
Chesterfield	low	$ 283	$ 21.77	$ 0.0422	20%	13
Chestnut Hill	all	$ 11,608	$ 12.22	$ 0.0237	14%	950
Chestnut Hill	low	$ 687	$ 18.07	$ 0.0432	20%	38
Chilmark	all	$ 1,111	$ 6.04	$ 0.0183	12%	184
Chilmark	low	$ 30	$ 14.83	$ 0.0324	14%	2
Clarksburg	all	$ 1,620	$ 12.36	$ 0.0258	18%	131
Clarksburg	low	$ 385	$ 11.65	$ 0.0240	24%	33
Clinton	all	$ 24,332	$ 13.87	$ 0.0276	27%	1,754
Clinton	low	$ 4,434	$ 13.48	$ 0.0290	42%	329
Cohasset	all	$ 9,864	$ 21.58	$ 0.0317	14%	457
Cohasset	low	$ 140	$ 9.33	$ 0.0168	19%	15
Colrain	all	$ 2,772	$ 16.70	$ 0.0310	19%	166
Colrain	low	$ 547	$ 17.11	$ 0.0312	26%	32
Conway	all	$ 2,316	$ 18.53	$ 0.0345	15%	125
Conway	low	$ 319	$ 19.95	$ 0.0387	28%	16
Cotuit	all	$ 2,800	$ 6.50	$ 0.0160	18%	431
Cotuit	low	$ 483	$ 16.64	$ 0.0372	31%	29
Cummaquid	all	$ 1,093	$ 8.28	$ 0.0192	26%	132
Cummaquid	low	$ (7)	$ (6.95)	$ (0.0150)	6%	1
Cummington	all	$ 949	$ 13.56	$ 0.0258	13%	70
Cummington	low	$ 41	$ 8.15	$ 0.0142	14%	5
Dalton	all	$ 7,546	$ 14.88	$ 0.0275	17%	507
Dalton	low	$ 1,176	$ 14.34	$ 0.0269	21%	82
Dartmouth	all	$ 33	$ 33.17	$ 0.0541	33%	1
Dedham	all	$ 16,958	$ 11.26	$ 0.0242	15%	1,506
Dedham	low	$ 2,672	$ 14.44	$ 0.0337	25%	185

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Deerfield	all	$ 912	$ 11.26	$ 0.0193	15%	81
Deerfield	low	$ 85	$ 14.21	$ 0.0264	18%	6
Dennis	all	$ 3,766	$ 6.33	$ 0.0159	19%	595
Dennis	low	$ 261	$ 12.45	$ 0.0279	22%	21
Dennis Port	all	$ 3,882	$ 6.70	$ 0.0162	13%	579
Dennis Port	low	$ 540	$ 10.20	$ 0.0226	23%	53
Dorchester	all	$ 208,823	$ 12.69	$ 0.0288	33%	16,461
Dorchester	low	$ 89,206	$ 13.30	$ 0.0324	49%	6,705
Douglas	all	$ 10,493	$ 13.07	$ 0.0224	22%	803
Douglas	low	$ 1,305	$ 13.60	$ 0.0266	32%	96
Dover	all	$ 2,067	$ 7.01	$ 0.0134	14%	295
Dover	low	$ 59	$ 14.84	$ 0.0322	25%	4
Dracut	all	$ 34,437	$ 15.75	$ 0.0276	18%	2,186
Dracut	low	$ 5,022	$ 15.55	$ 0.0290	26%	323
Dudley	all	$ 16,141	$ 12.85	$ 0.0223	28%	1,256
Dudley	low	$ 3,237	$ 15.64	$ 0.0296	38%	207
Dunstable	all	$ 3,259	$ 13.99	$ 0.0216	20%	233
Dunstable	low	$ 399	$ 33.26	$ 0.0483	38%	12
Duxbury	all	$ 6,919	$ 8.34	$ 0.0180	13%	830
Duxbury	low	$ 366	$ 13.07	$ 0.0293	13%	28
E Cambridge	all	$ 11,826	$ 14.42	$ 0.0317	12%	820
E Cambridge	low	$ 2,019	$ 17.41	$ 0.0431	29%	116
E Harwich	all	$ 3,645	$ 8.26	$ 0.0194	21%	441
E Harwich	low	$ 352	$ 14.09	$ 0.0320	25%	25
E. Bridgewater	all	$ 18,198	$ 16.12	$ 0.0269	22%	1,129
E. Bridgewater	low	$ 2,346	$ 17.38	$ 0.0323	32%	135
E. Brookfield	all	$ 3,686	$ 12.29	$ 0.0213	30%	300
E. Brookfield	low	$ 756	$ 18.43	$ 0.0348	45%	41
East Boston	all	$ 64,650	$ 15.22	$ 0.0358	29%	4,249
East Boston	low	$ 17,948	$ 15.63	$ 0.0385	43%	1,148
East Dennis	all	$ 2,006	$ 7.04	$ 0.0170	16%	285
East Dennis	low	$ 153	$ 16.99	$ 0.0350	27%	9
East Falmouth	all	$ 14,375	$ 8.00	$ 0.0189	21%	1,797
East Falmouth	low	$ 1,811	$ 10.84	$ 0.0237	28%	167
East Freetown	all	$ 2,340	$ 7.70	$ 0.0161	15%	304
East Freetown	low	$ 548	$ 11.18	$ 0.0249	27%	49
East Longmeadow	all	$ 22,994	$ 15.97	$ 0.0278	24%	1,440
East Longmeadow	low	$ 2,188	$ 15.30	$ 0.0331	29%	143
East Orleans	all	$ 1,677	$ 7.77	$ 0.0204	16%	216

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
East Orleans	low	$ 57	$ 14.37	$ 0.0324	17%	4
East Otis	all	$ 1,597	$ 18.15	$ 0.0321	9%	88
East Otis	low	$ 126	$ 41.97	$ 0.0820	11%	3
East Sandwich	all	$ 3,391	$ 6.03	$ 0.0144	20%	562
East Sandwich	low	$ 535	$ 15.29	$ 0.0340	24%	35
East Walpole	all	$ 2,803	$ 11.68	$ 0.0259	14%	240
East Walpole	low	$ 266	$ 17.72	$ 0.0435	17%	15
East Wareham	all	$ 4,665	$ 9.37	$ 0.0217	24%	498
East Wareham	low	$ 1,745	$ 9.64	$ 0.0227	38%	181
Eastham	all	$ 4,248	$ 7.13	$ 0.0184	17%	596
Eastham	low	$ 376	$ 14.45	$ 0.0332	21%	26
Easthampton	all	$ 21,694	$ 17.22	$ 0.0309	16%	1,260
Easthampton	low	$ 4,247	$ 17.26	$ 0.0319	25%	246
Easton	all	$ 33,708	$ 18.72	$ 0.0290	20%	1,801
Easton	low	$ 2,812	$ 17.25	$ 0.0310	34%	163
Edgartown	all	$ 4,719	$ 5.53	$ 0.0137	17%	854
Edgartown	low	$ 275	$ 9.47	$ 0.0162	20%	29
Egremont	all	$ 2,931	$ 15.26	$ 0.0261	20%	192
Egremont	low	$ 91	$ 6.96	$ 0.0145	30%	13
Erving	all	$ 2,216	$ 16.17	$ 0.0320	19%	137
Erving	low	$ 496	$ 13.78	$ 0.0298	27%	36
Essex	all	$ 4,469	$ 16.86	$ 0.0298	16%	265
Essex	low	$ 398	$ 28.40	$ 0.0546	25%	14
Everett	all	$ 72,935	$ 15.06	$ 0.0309	29%	4,843
Everett	low	$ 16,642	$ 14.93	$ 0.0313	40%	1,115
Fairhaven	all	$ 11,017	$ 9.34	$ 0.0211	16%	1,180
Fairhaven	low	$ 2,291	$ 10.91	$ 0.0252	21%	210
Fall River	all	$ 151,610	$ 13.92	$ 0.0323	28%	10,888
Fall River	low	$ 57,762	$ 13.67	$ 0.0338	35%	4,224
Falmouth	all	$ 8,480	$ 8.80	$ 0.0214	18%	964
Falmouth	low	$ 724	$ 12.93	$ 0.0292	23%	56
Feeding Hills	all	$ 11,190	$ 12.88	$ 0.0233	19%	869
Feeding Hills	low	$ 2,298	$ 14.27	$ 0.0267	25%	161
Fitchburg	all	$ 14,191	$ 5.40	$ 0.0115	16%	2,626
Fitchburg	low	$ 6,124	$ 5.92	$ 0.0140	27%	1,035
Florida-Drury	all	$ 1,033	$ 15.65	$ 0.0301	17%	66
Florida-Drury	low	$ 221	$ 13.80	$ 0.0324	19%	16
Forestdale	all	$ 1,697	$ 5.44	$ 0.0124	20%	312
Forestdale	low	$ 303	$ 10.43	$ 0.0208	24%	29

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Foxboro	all	$ 20,617	$ 16.64	$ 0.0273	17%	1,239
Foxboro	low	$ 1,896	$ 15.80	$ 0.0310	29%	120
Framingham	all	$ 89,377	$ 14.30	$ 0.0313	24%	6,252
Framingham	low	$ 17,651	$ 17.37	$ 0.0407	36%	1,016
Franklin	all	$ 37,987	$ 15.62	$ 0.0260	21%	2,432
Franklin	low	$ 2,891	$ 16.81	$ 0.0345	31%	172
Gardner	all	$ 28,645	$ 12.55	$ 0.0258	25%	2,282
Gardner	low	$ 8,147	$ 13.42	$ 0.0294	35%	607
Gill	all	$ 1,820	$ 17.33	$ 0.0317	16%	105
Gill	low	$ 253	$ 28.16	$ 0.0537	13%	9
Gloucester	all	$ 48,607	$ 16.69	$ 0.0322	20%	2,912
Gloucester	low	$ 8,943	$ 18.55	$ 0.0387	29%	482
Goshen	all	$ 1,070	$ 18.45	$ 0.0338	9%	58
Goshen	low	$ 237	$ 29.56	$ 0.0529	21%	8
Grafton	all	$ 23,788	$ 15.22	$ 0.0244	20%	1,563
Grafton	low	$ 1,975	$ 15.92	$ 0.0298	34%	124
Granby	all	$ 15,516	$ 15.98	$ 0.0272	34%	971
Granby	low	$ 2,012	$ 16.36	$ 0.0290	44%	123
Granville	all	$ 4,488	$ 13.89	$ 0.0239	24%	323
Granville	low	$ 364	$ 11.04	$ 0.0205	33%	33
Green Harbor	all	$ 274	$ 15.20	$ 0.0320	8%	18
Green Harbor	low	$ 55	$ 27.27	$ 0.0654	15%	2
Greenfield	all	$ 20,852	$ 16.39	$ 0.0307	15%	1,272
Greenfield	low	$ 7,209	$ 16.69	$ 0.0320	27%	432
Gt. Barrington	all	$ 11,523	$ 13.28	$ 0.0252	24%	868
Gt. Barrington	low	$ 1,413	$ 12.62	$ 0.0288	35%	112
Hadley	all	$ 11,050	$ 16.35	$ 0.0299	14%	676
Hadley	low	$ 1,534	$ 18.04	$ 0.0371	23%	85
Halifax	all	$ 9,897	$ 16.17	$ 0.0248	20%	612
Halifax	low	$ 1,865	$ 21.19	$ 0.0359	30%	88
Hamilton	all	$ 10,655	$ 21.52	$ 0.0339	18%	495
Hamilton	low	$ 647	$ 28.15	$ 0.0456	23%	23
Hampden	all	$ 7,906	$ 16.37	$ 0.0250	24%	483
Hampden	low	$ 812	$ 17.27	$ 0.0263	33%	47
Hancock	all	$ 1,078	$ 10.08	$ 0.0187	15%	107
Hancock	low	$ 40	$ 13.45	$ 0.0211	9%	3
Hanover	all	$ 13,441	$ 15.43	$ 0.0239	18%	871
Hanover	low	$ 790	$ 16.81	$ 0.0325	26%	47
Hanson	all	$ 11,848	$ 16.21	$ 0.0251	19%	731

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Hanson	low	$ 845	$ 16.24	$ 0.0279	20%	52
Hardwick	all	$ 4,335	$ 15.76	$ 0.0293	22%	275
Hardwick	low	$ 979	$ 15.79	$ 0.0296	30%	62
Harvard	all	$ 4,999	$ 15.24	$ 0.0239	16%	328
Harvard	low	$ 32	$ 10.80	$ 0.0182	14%	3
Harwich	all	$ 5,285	$ 6.31	$ 0.0162	22%	838
Harwich	low	$ 772	$ 11.19	$ 0.0252	27%	69
Harwich Port	all	$ 2,533	$ 6.74	$ 0.0175	17%	376
Harwich Port	low	$ 82	$ 9.14	$ 0.0211	16%	9
Hatfield	all	$ 3,035	$ 19.97	$ 0.0378	13%	152
Hatfield	low	$ 290	$ 22.33	$ 0.0408	17%	13
Haverhill	all	$ 85,273	$ 16.97	$ 0.0320	20%	5,024
Haverhill	low	$ 26,971	$ 18.93	$ 0.0369	31%	1,425
Hawley	all	$ 450	$ 9.79	$ 0.0211	23%	46
Hawley	low	$ 145	$ 10.37	$ 0.0233	44%	14
Heath	all	$ 1,976	$ 20.59	$ 0.0367	17%	96
Heath	low	$ 586	$ 30.86	$ 0.0545	35%	19
Hinsdale	all	$ 2,876	$ 16.63	$ 0.0308	14%	173
Hinsdale	low	$ 702	$ 20.63	$ 0.0403	20%	34
Holbrook	all	$ 25,126	$ 15.70	$ 0.0278	33%	1,600
Holbrook	low	$ 5,238	$ 20.70	$ 0.0371	40%	253
Holland	all	$ 4,517	$ 12.62	$ 0.0208	25%	358
Holland	low	$ 647	$ 13.21	$ 0.0239	33%	49
Holliston	all	$ 7,671	$ 11.66	$ 0.0247	12%	658
Holliston	low	$ 491	$ 13.64	$ 0.0301	15%	36
Hopedale	all	$ 8,499	$ 14.07	$ 0.0237	27%	604
Hopedale	low	$ 624	$ 14.85	$ 0.0280	30%	42
Hopkinton	all	$ 7,647	$ 9.43	$ 0.0200	13%	811
Hopkinton	low	$ 467	$ 12.97	$ 0.0260	20%	36
Hubbardston	all	$ 5,742	$ 13.11	$ 0.0227	25%	438
Hubbardston	low	$ 710	$ 16.90	$ 0.0303	30%	42
Humarock	all	$ 546	$ 8.53	$ 0.0208	9%	64
Humarock	low	$ 32	$ 32.21	$ 0.0769	11%	1
Huntington	all	$ 2,430	$ 18.99	$ 0.0358	13%	128
Huntington	low	$ 301	$ 15.83	$ 0.0293	17%	19
Hyannis	all	$ 17,608	$ 9.01	$ 0.0192	26%	1,955
Hyannis	low	$ 5,383	$ 12.94	$ 0.0298	33%	416
Hyannis Port	all	$ 149	$ 3.38	$ 0.0097	12%	44
Hyannis Port	low	$ (3)	$ (3.03)	$ (0.0082)	17%	1

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Hyde Park	all	$ 47,409	$ 12.92	$ 0.0300	30%	3,670
Hyde Park	low	$ 14,489	$ 14.39	$ 0.0358	39%	1,007
Indian Orchard	all	$ 16,801	$ 16.49	$ 0.0311	27%	1,019
Indian Orchard	low	$ 9,851	$ 17.91	$ 0.0324	41%	550
Jamaica Plain	all	$ 34,108	$ 12.71	$ 0.0299	17%	2,683
Jamaica Plain	low	$ 6,452	$ 15.85	$ 0.0385	36%	407
Kingston	all	$ 6,389	$ 8.07	$ 0.0169	15%	792
Kingston	low	$ 972	$ 11.18	$ 0.0247	21%	87
Lake Pleasant	all	$ 97	$ 9.69	$ 0.0191	11%	10
Lake Pleasant	low	$ 30	$ 14.84	$ 0.0257	13%	2
Lancaster	all	$ 6,240	$ 13.22	$ 0.0177	17%	472
Lancaster	low	$ 482	$ 12.05	$ 0.0235	25%	40
Lanesborough	all	$ 2,890	$ 13.26	$ 0.0241	14%	218
Lanesborough	low	$ 464	$ 15.48	$ 0.0292	17%	30
Lawrence	all	$ 153,228	$ 17.26	$ 0.0361	35%	8,878
Lawrence	low	$ 76,935	$ 18.58	$ 0.0387	46%	4,141
Lee	all	$ 6,056	$ 12.02	$ 0.0218	17%	504
Lee	low	$ 718	$ 11.58	$ 0.0229	20%	62
Leicester	all	$ 18,752	$ 15.15	$ 0.0241	29%	1,238
Leicester	low	$ 2,904	$ 16.99	$ 0.0293	36%	171
Lenox	all	$ 5,835	$ 15.52	$ 0.0260	14%	376
Lenox	low	$ 430	$ 15.35	$ 0.0369	24%	28
Lenoxdale	all	$ 432	$ 20.57	$ 0.0347	9%	21
Lenoxdale	low	$ 11	$ 5.75	$ 0.0098	10%	2
Leominster	all	$ 64,559	$ 13.50	$ 0.0256	28%	4,781
Leominster	low	$ 12,990	$ 13.17	$ 0.0290	41%	986
Leverett	all	$ 2,925	$ 19.37	$ 0.0340	18%	151
Leverett	low	$ 311	$ 22.23	$ 0.0354	21%	14
Lexington	all	$ 17,143	$ 10.31	$ 0.0209	14%	1,662
Lexington	low	$ 914	$ 14.99	$ 0.0345	16%	61
Leyden	all	$ 924	$ 16.21	$ 0.0318	16%	57
Leyden	low	$ 165	$ 32.93	$ 0.0667	17%	5
Lincoln	all	$ 3,948	$ 10.53	$ 0.0240	17%	375
Lincoln	low	$ 257	$ 19.76	$ 0.0458	22%	13
Longmeadow	all	$ 21,140	$ 18.66	$ 0.0326	20%	1,133
Longmeadow	low	$ 840	$ 14.00	$ 0.0267	22%	60
Lowell	all	$ 163,967	$ 15.72	$ 0.0325	26%	10,430
Lowell	low	$ 55,097	$ 16.85	$ 0.0352	41%	3,270
Ludlow	all	$ 23,494	$ 16.67	$ 0.0300	17%	1,409

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Ludlow	low	$ 4,055	$ 17.04	$ 0.0303	22%	238
Lunenburg	all	$ 686	$ 6.72	$ 0.0123	2%	102
Lunenburg	low	$ 66	$ 10.96	$ 0.0260	2%	6
Lynn	all	$ 167,567	$ 15.48	$ 0.0313	32%	10,823
Lynn	low	$ 50,279	$ 15.29	$ 0.0333	47%	3,289
Malden	all	$ 83,431	$ 15.46	$ 0.0319	21%	5,398
Malden	low	$ 16,922	$ 15.77	$ 0.0337	34%	1,073
Manchester	all	$ 6,281	$ 17.74	$ 0.0305	15%	354
Manchester	low	$ 44	$ 6.28	$ 0.0105	13%	7
Manomet	all	$ 356	$ 9.12	$ 0.0215	13%	39
Manomet	low	$ 45	$ 22.55	$ 0.0489	13%	2
Marion	all	$ 2,489	$ 6.10	$ 0.0147	15%	408
Marion	low	$ 316	$ 10.54	$ 0.0235	16%	30
Marlboro	all	$ 54,504	$ 15.35	$ 0.0293	21%	3,551
Marlboro	low	$ 7,915	$ 15.55	$ 0.0317	35%	509
Marshfield	all	$ 13,835	$ 8.48	$ 0.0173	16%	1,631
Marshfield	low	$ 1,393	$ 11.06	$ 0.0258	20%	126
Marshfld Hls	all	$ 170	$ 10.02	$ 0.0202	12%	17
Marshfld Hls	low	$ 27	$ 26.65	$ 0.0602	20%	1
Marstons Mls	all	$ 4,476	$ 6.22	$ 0.0137	22%	720
Marstons Mls	low	$ 480	$ 10.90	$ 0.0231	20%	44
Mashpee	all	$ 16,889	$ 7.62	$ 0.0171	21%	2,216
Mashpee	low	$ 2,569	$ 12.78	$ 0.0280	27%	201
Mattapan	all	$ 44,323	$ 13.99	$ 0.0324	39%	3,168
Mattapan	low	$ 16,669	$ 14.76	$ 0.0357	48%	1,129
Mattapoisett	all	$ 3,823	$ 7.62	$ 0.0169	15%	502
Mattapoisett	low	$ 275	$ 9.16	$ 0.0194	20%	30
Maynard	all	$ 8,487	$ 13.80	$ 0.0304	14%	615
Maynard	low	$ 1,231	$ 18.37	$ 0.0436	22%	67
Medfield	all	$ 6,295	$ 10.32	$ 0.0221	14%	610
Medfield	low	$ 262	$ 12.50	$ 0.0289	15%	21
Medford	all	$ 62,281	$ 15.30	$ 0.0306	17%	4,070
Medford	low	$ 5,360	$ 14.49	$ 0.0322	27%	370
Medway	all	$ 7,464	$ 11.17	$ 0.0238	15%	668
Medway	low	$ 869	$ 19.75	$ 0.0445	21%	44
Melrose	all	$ 21,095	$ 15.80	$ 0.0298	11%	1,335
Melrose	low	$ 1,955	$ 13.58	$ 0.0308	21%	144
Mendon	all	$ 7,160	$ 14.41	$ 0.0219	22%	497
Mendon	low	$ 424	$ 12.48	$ 0.0203	32%	34

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Methuen	all	$ 63,573	$ 15.40	$ 0.0285	22%	4,129
Methuen	low	$ 13,738	$ 16.32	$ 0.0343	34%	842
Middlefield	all	$ 402	$ 12.56	$ 0.0256	11%	32
Middlefield	low	$ 26	$ 3.66	$ 0.0075	39%	7
Milford	all	$ 44,399	$ 15.13	$ 0.0280	26%	2,935
Milford	low	$ 6,159	$ 16.34	$ 0.0333	39%	377
Millbury	all	$ 20,602	$ 13.35	$ 0.0208	27%	1,543
Millbury	low	$ 2,414	$ 13.12	$ 0.0234	37%	184
Millers Falls	all	$ 617	$ 11.02	$ 0.0204	15%	56
Millers Falls	low	$ 91	$ 6.49	$ 0.0115	17%	14
Millis	all	$ 5,852	$ 11.94	$ 0.0246	15%	490
Millis	low	$ 243	$ 7.84	$ 0.0168	18%	31
Millville	all	$ 4,501	$ 13.64	$ 0.0249	28%	330
Millville	low	$ 465	$ 15.48	$ 0.0274	28%	30
Milton	all	$ 16,755	$ 11.01	$ 0.0235	16%	1,522
Milton	low	$ 1,079	$ 12.26	$ 0.0287	22%	88
Monroe	all	$ 195	$ 11.49	$ 0.0257	23%	17
Monroe	low	$ 6	$ 3.23	$ 0.0141	25%	2
Monson	all	$ 13,468	$ 15.96	$ 0.0273	24%	844
Monson	low	$ 1,826	$ 15.60	$ 0.0288	31%	117
Montague	all	$ 2,536	$ 18.38	$ 0.0348	14%	138
Montague	low	$ 279	$ 17.41	$ 0.0345	18%	16
Monterey	all	$ 2,317	$ 20.15	$ 0.0362	13%	115
Monterey	low	$ 147	$ 36.70	$ 0.0540	15%	4
Montgomery	all	$ 1,080	$ 17.15	$ 0.0305	17%	63
Montgomery	low	$ (12)	$ (11.91)	$ (0.0214)	5%	1
Monument Bch	all	$ 1,733	$ 9.79	$ 0.0222	21%	177
Monument Bch	low	$ 271	$ 14.25	$ 0.0306	41%	19
Mt.Washington	all	$ 575	$ 15.96	$ 0.0269	23%	36
Mt.Washington	low	$ 11	$ 3.75	$ 0.0061	43%	3
N Cambridge	all	$ 17,650	$ 16.40	$ 0.0369	12%	1,076
N Cambridge	low	$ 3,468	$ 18.35	$ 0.0432	34%	189
N Dartmouth	all	$ 8,870	$ 8.92	$ 0.0202	14%	994
N Dartmouth	low	$ 2,062	$ 14.32	$ 0.0318	18%	144
N Falmouth	all	$ 3,327	$ 7.76	$ 0.0199	16%	429
N Falmouth	low	$ 123	$ 8.22	$ 0.0155	22%	15
N. Adams	all	$ 18,425	$ 13.08	$ 0.0272	23%	1,409
N. Adams	low	$ 6,599	$ 13.55	$ 0.0272	31%	487
N. Andover	all	$ 32,723	$ 16.63	$ 0.0257	17%	1,968

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
N. Andover	low	$ 2,246	$ 17.02	$ 0.0325	21%	132
N. Brookfield	all	$ 7,357	$ 13.35	$ 0.0237	27%	551
N. Brookfield	low	$ 1,407	$ 16.36	$ 0.0306	33%	86
Nahant	all	$ 3,969	$ 16.40	$ 0.0305	15%	242
Nahant	low	$ 238	$ 12.55	$ 0.0253	28%	19
Nantucket	all	$ 5,859	$ 6.93	$ 0.0095	7%	845
Nantucket	low	$ 202	$ 8.42	$ 0.0103	11%	24
Natick	all	$ 26,434	$ 11.19	$ 0.0228	16%	2,362
Natick	low	$ 3,499	$ 19.02	$ 0.0428	21%	184
Needham	all	$ 12,993	$ 9.32	$ 0.0204	13%	1,394
Needham	low	$ 635	$ 14.43	$ 0.0346	18%	44
New Ashford	all	$ 247	$ 12.36	$ 0.0222	17%	20
New Ashford	low	$ 3	$ 2.68	$ 0.0046	13%	1
New Bedford	all	$ 108,881	$ 11.15	$ 0.0261	24%	9,765
New Bedford	low	$ 46,793	$ 12.25	$ 0.0301	32%	3,821
New Braintree	all	$ 1,291	$ 14.03	$ 0.0243	22%	92
New Braintree	low	$ 205	$ 20.46	$ 0.0341	30%	10
New Marlboro	all	$ 2,190	$ 16.22	$ 0.0275	12%	135
New Marlboro	low	$ 99	$ 10.99	$ 0.0238	12%	9
New Salem	all	$ 1,267	$ 14.08	$ 0.0271	19%	90
New Salem	low	$ 83	$ 11.82	$ 0.0250	16%	7
Newbury	all	$ 7,236	$ 16.45	$ 0.0274	15%	440
Newbury	low	$ 440	$ 16.28	$ 0.0295	20%	27
Newburyport	all	$ 18,401	$ 14.32	$ 0.0286	15%	1,285
Newburyport	low	$ 1,213	$ 11.03	$ 0.0271	26%	110
Newton	all	$ 8,192	$ 11.01	$ 0.0245	15%	744
Newton	low	$ 570	$ 9.99	$ 0.0239	26%	57
Newton Center	all	$ 9,223	$ 10.02	$ 0.0192	14%	920
Newton Center	low	$ 363	$ 13.45	$ 0.0298	16%	27
Newton Hlds	all	$ 4,627	$ 11.77	$ 0.0260	14%	393
Newton Hlds	low	$ 534	$ 16.18	$ 0.0382	23%	33
Newton L F	all	$ 822	$ 13.05	$ 0.0319	13%	63
Newton L F	low	$ 176	$ 25.10	$ 0.0624	22%	7
Newton U F	all	$ 1,811	$ 12.24	$ 0.0280	12%	148
Newton U F	low	$ 192	$ 11.27	$ 0.0274	25%	17
Newtonvlle	all	$ 6,406	$ 12.54	$ 0.0276	14%	511
Newtonvlle	low	$ 398	$ 14.76	$ 0.0351	20%	27
Norfolk	all	$ 4,562	$ 9.11	$ 0.0188	14%	501
Norfolk	low	$ 130	$ 11.82	$ 0.0270	10%	11

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
North Carver	all	$ 434	$ 10.59	$ 0.0217	19%	41
North Carver	low	$ 13	$ 2.09	$ 0.0046	26%	6
North Chatham	all	$ 1,362	$ 7.28	$ 0.0221	17%	187
North Chatham	low	$ 27	$ 26.65	$ 0.0602	6%	1
North Eastham	all	$ 2,566	$ 6.45	$ 0.0181	15%	398
North Eastham	low	$ 391	$ 17.78	$ 0.0399	25%	22
North Easton	all	$ 2	$ 1.88	$ 0.0032	20%	1
North Hatfield	all	$ 197	$ 19.74	$ 0.0353	7%	10
North Truro	all	$ 1,817	$ 7.77	$ 0.0204	14%	234
North Truro	low	$ 103	$ 17.17	$ 0.0377	11%	6
Northampton	all	$ 34,101	$ 15.74	$ 0.0328	17%	2,166
Northampton	low	$ 6,795	$ 16.90	$ 0.0403	31%	402
Northboro	all	$ 17,051	$ 15.47	$ 0.0245	19%	1,102
Northboro	low	$ 1,244	$ 18.02	$ 0.0308	28%	69
Northfield	all	$ 3,476	$ 16.24	$ 0.0305	15%	214
Northfield	low	$ 630	$ 15.00	$ 0.0298	29%	42
Norton	all	$ 21,519	$ 17.01	$ 0.0262	18%	1,265
Norton	low	$ 2,533	$ 16.03	$ 0.0310	23%	158
Norwell	all	$ 11,613	$ 17.54	$ 0.0257	18%	662
Norwell	low	$ 291	$ 18.20	$ 0.0392	20%	16
Oak Bluffs	all	$ 6,084	$ 8.46	$ 0.0204	17%	719
Oak Bluffs	low	$ 580	$ 16.58	$ 0.0346	26%	35
Oakham	all	$ 3,448	$ 13.63	$ 0.0243	29%	253
Oakham	low	$ 417	$ 16.70	$ 0.0333	38%	25
Ocean Bluff	all	$ 83	$ 4.13	$ 0.0096	12%	20
Onset	all	$ 4,362	$ 9.85	$ 0.0222	19%	443
Onset	low	$ 609	$ 8.95	$ 0.0201	30%	68
Orange	all	$ 13,348	$ 13.78	$ 0.0272	27%	969
Orange	low	$ 5,755	$ 15.31	$ 0.0319	39%	376
Orleans	all	$ 4,823	$ 7.31	$ 0.0164	21%	660
Orleans	low	$ 544	$ 13.59	$ 0.0319	20%	40
Osterville	all	$ 3,663	$ 7.54	$ 0.0167	17%	486
Osterville	low	$ 196	$ 11.51	$ 0.0252	20%	17
Otis	all	$ 1,509	$ 12.68	$ 0.0217	13%	119
Otis	low	$ 152	$ 21.77	$ 0.0440	13%	7
Oxford	all	$ 20,000	$ 12.66	$ 0.0213	28%	1,580
Oxford	low	$ 3,432	$ 14.73	$ 0.0264	36%	233
Palmer-3Rivers	all	$ 19,125	$ 13.91	$ 0.0254	24%	1,375
Palmer-3Rivers	low	$ 5,309	$ 14.87	$ 0.0277	35%	357

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Pelham	all	$ 1,478	$ 15.89	$ 0.0288	15%	93
Pelham	low	$ 36	$ 8.93	$ 0.0141	9%	4
Pembroke	all	$ 20,598	$ 15.94	$ 0.0255	19%	1,292
Pembroke	low	$ 1,432	$ 13.64	$ 0.0245	25%	105
Pepperell	all	$ 12,708	$ 13.89	$ 0.0237	20%	915
Pepperell	low	$ 1,629	$ 14.17	$ 0.0283	32%	115
Peru	all	$ 1,267	$ 17.36	$ 0.0299	17%	73
Peru	low	$ 266	$ 22.13	$ 0.0380	23%	12
Petersham	all	$ 1,735	$ 13.25	$ 0.0214	22%	131
Petersham	low	$ 74	$ 9.30	$ 0.0199	18%	8
Phillipston	all	$ 2,711	$ 15.40	$ 0.0262	21%	176
Phillipston	low	$ 457	$ 16.33	$ 0.0261	37%	28
Pittsfield	all	$ 64,271	$ 16.83	$ 0.0319	18%	3,818
Pittsfield	low	$ 19,698	$ 18.06	$ 0.0341	27%	1,091
Plainfield	all	$ 1,038	$ 15.04	$ 0.0274	19%	69
Plainfield	low	$ 148	$ 9.89	$ 0.0173	33%	15
Plainville	all	$ 11,123	$ 16.14	$ 0.0257	17%	689
Plainville	low	$ 1,462	$ 15.89	$ 0.0304	26%	92
Plymouth	all	$ 36,254	$ 8.19	$ 0.0170	17%	4,428
Plymouth	low	$ 6,068	$ 10.84	$ 0.0244	25%	560
Plympton	all	$ 813	$ 5.05	$ 0.0104	15%	161
Plympton	low	$ 17	$ 2.08	$ 0.0041	16%	8
Pocasset	all	$ 4,539	$ 9.76	$ 0.0248	20%	465
Pocasset	low	$ 700	$ 19.43	$ 0.0466	28%	36
Provincetown	all	$ 5,049	$ 7.42	$ 0.0188	15%	680
Provincetown	low	$ 798	$ 14.51	$ 0.0331	25%	55
Quincy	all	$ 134,899	$ 14.52	$ 0.0291	21%	9,288
Quincy	low	$ 22,529	$ 14.44	$ 0.0300	39%	1,560
Randolph	all	$ 54,122	$ 15.59	$ 0.0295	29%	3,472
Randolph	low	$ 11,323	$ 16.06	$ 0.0309	37%	705
Rehoboth	all	$ 13,701	$ 15.97	$ 0.0258	18%	858
Rehoboth	low	$ 1,515	$ 18.04	$ 0.0291	27%	84
Revere	all	$ 79,144	$ 15.42	$ 0.0303	25%	5,132
Revere	low	$ 16,572	$ 16.54	$ 0.0335	37%	1,002
Richmond	all	$ 1,586	$ 13.10	$ 0.0230	13%	121
Richmond	low	$ 101	$ 12.56	$ 0.0231	20%	8
Rochester	all	$ 2,133	$ 6.52	$ 0.0134	15%	327
Rochester	low	$ 294	$ 10.51	$ 0.0230	24%	28
Rockland	all	$ 22,438	$ 13.74	$ 0.0252	23%	1,633

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Rockland	low	$ 3,007	$ 14.67	$ 0.0294	32%	205
Rockport	all	$ 9,337	$ 14.37	$ 0.0269	14%	650
Rockport	low	$ 625	$ 12.02	$ 0.0262	19%	52
Roslindale	all	$ 34,043	$ 11.71	$ 0.0266	25%	2,907
Roslindale	low	$ 9,165	$ 14.08	$ 0.0341	38%	651
Rowe	all	$ 661	$ 14.38	$ 0.0246	21%	46
Rowe	low	$ 112	$ 22.34	$ 0.0357	24%	5
Roxbry Xng	all	$ 14,955	$ 12.40	$ 0.0297	26%	1,206
Roxbry Xng	low	$ 5,673	$ 13.94	$ 0.0349	50%	407
Roxbury	all	$ 48,009	$ 13.23	$ 0.0298	36%	3,630
Roxbury	low	$ 22,029	$ 13.95	$ 0.0344	49%	1,579
Royalston	all	$ 1,965	$ 16.10	$ 0.0279	19%	122
Royalston	low	$ 407	$ 19.39	$ 0.0321	25%	21
Rutland	all	$ 11,163	$ 13.24	$ 0.0225	26%	843
Rutland	low	$ 1,287	$ 14.96	$ 0.0292	39%	86
S Boston	all	$ 1,903	$ 12.86	$ 0.0233	5%	148
S Boston	low	$ 75	$ 15.08	$ 0.0391	14%	5
S Dartmouth	all	$ 6,674	$ 8.51	$ 0.0203	13%	784
S Dartmouth	low	$ 1,563	$ 13.25	$ 0.0306	19%	118
S Wellfleet	all	$ 1,063	$ 6.44	$ 0.0186	16%	165
S Wellfleet	low	$ 219	$ 18.26	$ 0.0455	28%	12
S Yarmouth	all	$ 8,840	$ 8.40	$ 0.0193	22%	1,052
S Yarmouth	low	$ 1,789	$ 13.76	$ 0.0329	28%	130
Sagamore	all	$ 778	$ 7.01	$ 0.0162	19%	111
Sagamore	low	$ 151	$ 12.61	$ 0.0328	15%	12
Sagamore Bch	all	$ 1,700	$ 6.05	$ 0.0153	19%	281
Sagamore Bch	low	$ 292	$ 12.68	$ 0.0266	27%	23
Salem	all	$ 49,150	$ 14.18	$ 0.0296	19%	3,466
Salem	low	$ 11,322	$ 15.02	$ 0.0343	33%	754
Salisbury	all	$ 11,482	$ 14.19	$ 0.0263	17%	809
Salisbury	low	$ 2,152	$ 17.08	$ 0.0310	27%	126
Sandisfield	all	$ 2,688	$ 12.05	$ 0.0214	17%	223
Sandisfield	low	$ 337	$ 21.09	$ 0.0376	16%	16
Sandwich	all	$ 7,290	$ 7.04	$ 0.0159	20%	1,035
Sandwich	low	$ 906	$ 12.77	$ 0.0268	22%	71
Saugus	all	$ 27,767	$ 13.61	$ 0.0251	19%	2,040
Saugus	low	$ 3,188	$ 14.17	$ 0.0280	25%	225
Savoy	all	$ 1,072	$ 14.48	$ 0.0263	20%	74
Savoy	low	$ 166	$ 7.53	$ 0.0133	34%	22

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Scituate	all	$ 22,221	$ 17.03	$ 0.0281	17%	1,305
Scituate	low	$ 889	$ 16.16	$ 0.0318	22%	55
Seekonk	all	$ 17,540	$ 16.77	$ 0.0295	19%	1,046
Seekonk	low	$ 2,731	$ 20.53	$ 0.0375	25%	133
Sharon	all	$ 8,036	$ 9.80	$ 0.0198	13%	820
Sharon	low	$ 545	$ 13.64	$ 0.0277	17%	40
Sheffield	all	$ 6,296	$ 18.46	$ 0.0317	19%	341
Sheffield	low	$ 1,241	$ 20.01	$ 0.0355	29%	62
Shelburne	all	$ 345	$ 12.78	$ 0.0242	12%	27
Shelburne	low	$ 30	$ 10.04	$ 0.0174	21%	3
Shelburne Fls	all	$ 1,781	$ 14.60	$ 0.0279	16%	122
Shelburne Fls	low	$ 156	$ 11.17	$ 0.0193	16%	14
Sherborn	all	$ 2,208	$ 9.99	$ 0.0211	14%	221
Sherborn	low	$ 107	$ 21.45	$ 0.0459	20%	5
Shirley	all	$ 7,679	$ 14.46	$ 0.0246	20%	531
Shirley	low	$ 1,446	$ 14.76	$ 0.0291	33%	98
Shutesbury	all	$ 2,268	$ 14.92	$ 0.0284	17%	152
Shutesbury	low	$ 183	$ 12.21	$ 0.0270	18%	15
Somerset	all	$ 26,570	$ 15.46	$ 0.0315	23%	1,719
Somerset	low	$ 4,153	$ 15.97	$ 0.0328	26%	260
Somerville	all	$ 56,762	$ 13.52	$ 0.0313	18%	4,199
Somerville	low	$ 12,079	$ 14.28	$ 0.0343	42%	846
South Boston	all	$ 22,162	$ 14.34	$ 0.0317	10%	1,545
South Boston	low	$ 3,532	$ 15.16	$ 0.0383	31%	233
South Carver	all	$ 547	$ 9.12	$ 0.0198	12%	60
South Carver	low	$ (3)	$ (0.70)	$ (0.0017)	13%	4
South Chatham	all	$ 1,294	$ 6.81	$ 0.0199	13%	190
South Chatham	low	$ 92	$ 9.16	$ 0.0181	28%	10
South Deerfield	all	$ 3,909	$ 14.69	$ 0.0270	15%	266
South Deerfield	low	$ 401	$ 11.14	$ 0.0222	25%	36
South Dennis	all	$ 5,159	$ 7.27	$ 0.0178	19%	710
South Dennis	low	$ 1,266	$ 13.19	$ 0.0288	34%	96
South Harwich	all	$ 824	$ 8.68	$ 0.0216	15%	95
South Harwich	low	$ 51	$ 12.69	$ 0.0356	33%	4
South Lee	all	$ 114	$ 19.05	$ 0.0373	10%	6
South Lee	low	$ 40	$ 39.60	$ 0.0685	13%	1
South Orleans	all	$ 853	$ 6.28	$ 0.0180	18%	136
South Orleans	low	$ 5	$ 5.36	$ 0.0127	6%	1
South Walpole	all	$ 451	$ 11.00	$ 0.0237	12%	41

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
South Walpole	low	$ 18	$ 17.70	$ 0.0424	5%	1
Southampton	all	$ 5,719	$ 15.29	$ 0.0276	15%	374
Southampton	low	$ 470	$ 15.17	$ 0.0268	18%	31
Southboro	all	$ 10,507	$ 12.91	$ 0.0177	22%	814
Southboro	low	$ 232	$ 14.53	$ 0.0254	25%	16
Southbridge	all	$ 39,447	$ 15.50	$ 0.0272	35%	2,545
Southbridge	low	$ 15,246	$ 17.71	$ 0.0319	49%	861
Southwick	all	$ 12,034	$ 16.90	$ 0.0302	18%	712
Southwick	low	$ 1,667	$ 18.32	$ 0.0332	25%	91
Spencer	all	$ 20,414	$ 13.49	$ 0.0237	29%	1,513
Spencer	low	$ 4,350	$ 14.79	$ 0.0287	41%	294
Springfield	all	$ 273,201	$ 17.74	$ 0.0341	28%	15,403
Springfield	low	$ 153,731	$ 18.72	$ 0.0350	45%	8,213
Stockbridge	all	$ 4,058	$ 16.10	$ 0.0288	16%	252
Stockbridge	low	$ 202	$ 14.43	$ 0.0275	22%	14
Stoneham	all	$ 19,338	$ 13.93	$ 0.0298	14%	1,388
Stoneham	low	$ 2,307	$ 18.31	$ 0.0423	19%	126
Stoughton	all	$ 38,826	$ 15.44	$ 0.0293	22%	2,514
Stoughton	low	$ 5,100	$ 15.41	$ 0.0316	31%	331
Sturbridge	all	$ 14,867	$ 13.02	$ 0.0206	27%	1,142
Sturbridge	low	$ 1,527	$ 11.14	$ 0.0222	35%	137
Sudbury	all	$ 8,743	$ 9.91	$ 0.0219	14%	882
Sudbury	low	$ 765	$ 21.24	$ 0.0469	19%	36
Sunderland	all	$ 3,608	$ 16.03	$ 0.0301	12%	225
Sunderland	low	$ 555	$ 16.81	$ 0.0317	24%	33
Sutton	all	$ 12,818	$ 14.39	$ 0.0229	25%	891
Sutton	low	$ 680	$ 13.08	$ 0.0227	32%	52
Swampscott	all	$ 15,045	$ 16.66	$ 0.0282	15%	903
Swampscott	low	$ 1,271	$ 18.97	$ 0.0390	25%	67
Swansea	all	$ 23,519	$ 16.39	$ 0.0322	22%	1,435
Swansea	low	$ 4,163	$ 15.95	$ 0.0346	28%	261
Teaticket	all	$ 3,729	$ 8.63	$ 0.0200	21%	432
Teaticket	low	$ 673	$ 12.24	$ 0.0270	32%	55
Tewksbury	all	$ 29,374	$ 16.31	$ 0.0287	16%	1,801
Tewksbury	low	$ 2,575	$ 15.99	$ 0.0293	23%	161
Tolland	all	$ 1,311	$ 13.51	$ 0.0238	18%	97
Tolland	low	$ 104	$ 20.87	$ 0.0351	29%	5
Topsfield	all	$ 6,085	$ 16.10	$ 0.0261	16%	378
Topsfield	low	$ 215	$ 19.52	$ 0.0357	32%	11

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Townsend	all	$ 1,788	$ 7.74	$ 0.0160	7%	231
Townsend	low	$ 273	$ 9.75	$ 0.0228	8%	28
Truro	all	$ 1,493	$ 6.33	$ 0.0178	17%	236
Truro	low	$ 138	$ 11.50	$ 0.0271	31%	12
Turners Falls	all	$ 4,991	$ 11.83	$ 0.0221	16%	422
Turners Falls	low	$ 1,843	$ 13.17	$ 0.0249	24%	140
Tyngsboro	all	$ 14,158	$ 16.79	$ 0.0274	19%	843
Tyngsboro	low	$ 2,035	$ 16.96	$ 0.0321	35%	120
Tyringham	all	$ 461	$ 17.72	$ 0.0185	8%	26
Tyringham	low	$ 38	$ 37.86	$ 0.0727	20%	1
Upton	all	$ 10,518	$ 16.06	$ 0.0252	22%	655
Upton	low	$ 664	$ 13.83	$ 0.0276	33%	48
Uxbridge	all	$ 18,693	$ 13.43	$ 0.0219	25%	1,392
Uxbridge	low	$ 1,892	$ 13.81	$ 0.0259	35%	137
Vineyard Hvn	all	$ 4,679	$ 7.70	$ 0.0191	19%	608
Vineyard Hvn	low	$ 532	$ 11.31	$ 0.0224	29%	47
Vlg Nag Wd	all	$ 405	$ 10.67	$ 0.0275	14%	38
Vlg Nag Wd	low	$ 6	$ 3.06	$ 0.0082	40%	2
W Barnstable	all	$ 2,174	$ 6.84	$ 0.0159	23%	318
W Barnstable	low	$ 309	$ 16.29	$ 0.0383	29%	19
W Hyannisprt	all	$ 1,120	$ 9.10	$ 0.0217	17%	123
W Hyannisprt	low	$ 166	$ 15.07	$ 0.0345	38%	11
W Somerville	all	$ 13,729	$ 14.47	$ 0.0342	9%	949
W Somerville	low	$ 1,074	$ 16.03	$ 0.0368	22%	67
W. Bridgewater	all	$ 8,523	$ 16.42	$ 0.0277	18%	519
W. Bridgewater	low	$ 1,377	$ 18.36	$ 0.0326	32%	75
W. Brookfield	all	$ 6,583	$ 13.83	$ 0.0250	28%	476
W. Brookfield	low	$ 994	$ 16.30	$ 0.0323	34%	61
W. Newbury	all	$ 4,083	$ 13.04	$ 0.0205	19%	313
W. Newbury	low	$ 7	$ 1.44	$ 0.0018	10%	5
W.Stockbridge	all	$ 2,328	$ 14.83	$ 0.0273	18%	157
W.Stockbridge	low	$ 113	$ 11.32	$ 0.0243	15%	10
Waban	all	$ 2,940	$ 10.03	$ 0.0224	13%	293
Waban	low	$ 74	$ 7.41	$ 0.0187	20%	10
Wales	all	$ 2,588	$ 10.70	$ 0.0180	26%	242
Wales	low	$ 948	$ 16.93	$ 0.0281	42%	56
Walpole	all	$ 11,654	$ 11.05	$ 0.0242	15%	1,055
Walpole	low	$ 1,016	$ 17.51	$ 0.0411	18%	58
Waltham	all	$ 54,801	$ 11.10	$ 0.0252	19%	4,936

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Waltham	low	$ 8,184	$ 14.59	$ 0.0347	33%	561
Waquoit	all	$ 1,733	$ 6.28	$ 0.0143	23%	276
Waquoit	low	$ 454	$ 11.96	$ 0.0257	30%	38
Ware	all	$ 17,496	$ 14.02	$ 0.0265	27%	1,248
Ware	low	$ 5,972	$ 15.84	$ 0.0303	38%	377
Wareham	all	$ 13,250	$ 9.16	$ 0.0203	22%	1,446
Wareham	low	$ 3,639	$ 11.63	$ 0.0270	35%	313
Warren	all	$ 8,453	$ 13.72	$ 0.0231	29%	616
Warren	low	$ 2,007	$ 13.29	$ 0.0249	38%	151
Warwick	all	$ 1,712	$ 16.79	$ 0.0341	24%	102
Warwick	low	$ 412	$ 17.15	$ 0.0404	35%	24
Washington	all	$ 770	$ 16.75	$ 0.0305	16%	46
Washington	low	$ 105	$ 15.02	$ 0.0298	27%	7
Watertown	all	$ 28,853	$ 12.34	$ 0.0277	15%	2,339
Watertown	low	$ 3,929	$ 15.17	$ 0.0345	26%	259
Wayland	all	$ 7,383	$ 9.53	$ 0.0204	15%	775
Wayland	low	$ 297	$ 12.39	$ 0.0284	19%	24
Webster	all	$ 27,939	$ 12.36	$ 0.0226	28%	2,261
Webster	low	$ 7,145	$ 12.38	$ 0.0244	38%	577
Wellfleet	all	$ 3,719	$ 7.28	$ 0.0201	16%	511
Wellfleet	low	$ 285	$ 12.40	$ 0.0269	20%	23
Wendall	all	$ 1,592	$ 14.60	$ 0.0283	25%	109
Wendall	low	$ 445	$ 13.08	$ 0.0258	36%	34
Wenham	all	$ 1,433	$ 16.10	$ 0.0233	19%	89
Wenham	low	$ 8	$ 8.16	$ 0.0123	17%	1
West Chatham	all	$ 950	$ 7.72	$ 0.0199	14%	123
West Chatham	low	$ 76	$ 25.43	$ 0.0527	15%	3
West Dennis	all	$ 2,085	$ 6.54	$ 0.0175	14%	319
West Dennis	low	$ 81	$ 7.37	$ 0.0181	15%	11
West Falmouth	all	$ 1,592	$ 10.83	$ 0.0260	14%	147
West Falmouth	low	$ 24	$ 12.23	$ 0.0264	18%	2
West Harwich	all	$ 1,736	$ 7.58	$ 0.0194	15%	229
West Harwich	low	$ 180	$ 11.98	$ 0.0268	24%	15
West Hatfield	all	$ 732	$ 17.43	$ 0.0328	13%	42
West Hatfield	low	$ 138	$ 19.72	$ 0.0381	16%	7
West Newton	all	$ 6,742	$ 10.84	$ 0.0233	14%	622
West Newton	low	$ 485	$ 16.73	$ 0.0392	18%	29
West Roxbury	all	$ 27,187	$ 12.88	$ 0.0279	19%	2,110
West Roxbury	low	$ 3,613	$ 15.71	$ 0.0369	30%	230

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
West Springfield	all	$ 37,637	$ 15.77	$ 0.0296	21%	2,387
West Springfield	low	$ 10,783	$ 15.27	$ 0.0286	36%	706
West Tisbury	all	$ 2,983	$ 8.15	$ 0.0205	17%	366
West Tisbury	low	$ 200	$ 18.18	$ 0.0368	15%	11
West Wareham	all	$ 3,805	$ 10.66	$ 0.0234	23%	357
West Wareham	low	$ 1,024	$ 12.65	$ 0.0297	34%	81
West Yarmouth	all	$ 11,603	$ 9.76	$ 0.0225	19%	1,189
West Yarmouth	low	$ 2,210	$ 15.78	$ 0.0353	26%	140
Westboro	all	$ 15,953	$ 14.81	$ 0.0248	15%	1,077
Westboro	low	$ 752	$ 15.67	$ 0.0315	21%	48
Westford	all	$ 23,313	$ 18.50	$ 0.0284	14%	1,260
Westford	low	$ 1,155	$ 17.50	$ 0.0340	20%	66
Westhampton	all	$ 2,207	$ 17.24	$ 0.0311	16%	128
Westhampton	low	$ 167	$ 23.91	$ 0.0456	17%	7
Westminster	all	$ 10,368	$ 17.02	$ 0.0273	20%	609
Westminster	low	$ 1,115	$ 23.24	$ 0.0393	24%	48
Weston	all	$ 6,048	$ 9.62	$ 0.0201	16%	629
Weston	low	$ 237	$ 11.87	$ 0.0283	29%	20
Westport	all	$ 18,859	$ 13.39	$ 0.0276	19%	1,408
Westport	low	$ 3,418	$ 14.92	$ 0.0310	30%	229
Westport Pt	all	$ 345	$ 10.14	$ 0.0340	14%	34
Westwood	all	$ 6,888	$ 9.88	$ 0.0210	12%	697
Westwood	low	$ 374	$ 16.24	$ 0.0385	14%	23
Weymouth	all	$ 71,820	$ 15.06	$ 0.0280	21%	4,768
Weymouth	low	$ 9,665	$ 15.97	$ 0.0335	31%	605
Whately	all	$ 1,210	$ 17.04	$ 0.0299	11%	71
Whately	low	$ 153	$ 19.14	$ 0.0364	15%	8
Whitinsville	all	$ 26,138	$ 15.32	$ 0.0264	26%	1,706
Whitinsville	low	$ 3,487	$ 15.92	$ 0.0297	27%	219
Whitman	all	$ 21,546	$ 17.85	$ 0.0297	21%	1,207
Whitman	low	$ 2,821	$ 17.85	$ 0.0319	28%	158
Wht Horse Bch	all	$ 228	$ 9.92	$ 0.0194	10%	23
Wht Horse Bch	low	$ 7	$ 6.60	$ 0.0155	17%	1
Wilbraham	all	$ 22,728	$ 16.97	$ 0.0258	24%	1,339
Wilbraham	low	$ 2,098	$ 15.31	$ 0.0296	32%	137
Williamsburg	all	$ 3,508	$ 17.20	$ 0.0314	16%	204
Williamsburg	low	$ 320	$ 21.35	$ 0.0387	14%	15
Williamstown	all	$ 6,305	$ 13.86	$ 0.0259	15%	455
Williamstown	low	$ 503	$ 10.93	$ 0.0239	23%	46

Municipality	Income	Total Consumer Loss in Month	Average Per Household Loss (Monthly)	Premium (per kWh)	% of Households Participating in Competitive Supply Market	# Competitive Supply Accounts
Winchendon	all	$ 14,031	$ 15.69	$ 0.0291	22%	894
Winchendon	low	$ 3,659	$ 17.02	$ 0.0312	34%	215
Winchester	all	$ 10,211	$ 10.35	$ 0.0236	13%	987
Winchester	low	$ 398	$ 12.84	$ 0.0288	17%	31
Windsor	all	$ 1,237	$ 13.90	$ 0.0240	18%	89
Windsor	low	$ 208	$ 14.88	$ 0.0273	36%	14
Winthrop	all	$ 20,274	$ 14.94	$ 0.0298	18%	1,357
Winthrop	low	$ 2,129	$ 14.19	$ 0.0311	24%	150
Woburn	all	$ 35,894	$ 13.29	$ 0.0292	17%	2,701
Woburn	low	$ 6,365	$ 16.49	$ 0.0376	28%	386
Woods Hole	all	$ 819	$ 7.38	$ 0.0197	13%	111
Woods Hole	low	$ 40	$ 19.90	$ 0.0566	17%	2
Worcester	all	$ 274,749	$ 14.42	$ 0.0284	28%	19,055
Worcester	low	$ 83,212	$ 15.24	$ 0.0323	42%	5,459
Woronoco	all	$ 155	$ 8.63	$ 0.0140	15%	18
Woronoco	low	$ 31	$ 15.49	$ 0.0282	10%	2
Worthington	all	$ 1,717	$ 15.61	$ 0.0306	16%	110
Worthington	low	$ 324	$ 27.00	$ 0.0406	20%	12
Wrentham	all	$ 13,311	$ 15.04	$ 0.0232	21%	885
Wrentham	low	$ 869	$ 15.52	$ 0.0263	28%	56
Yarmouth Port	all	$ 6,800	$ 7.85	$ 0.0180	23%	866
Yarmouth Port	low	$ 650	$ 13.00	$ 0.0297	28%	50

Note: Average per household loss is computed over those households participating in the market (that is not across all households in municipality).

Appendix 2D

Supplier-specific information (share of market, average premium, etc.) for all households

Suppliers Ranked by Weighted Average Premium: July 2016 - June 2017 - All Households

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #1	$ 0.1697	58,892	$ 0.0797	1.00%	$ 2,799,826	2.51%
Supplier #18	$ 0.1571	130,806	$ 0.0657	2.21%	$ 4,443,744	3.99%
Supplier #47	$ 0.1561	108,393	$ 0.0657	1.83%	$ 3,751,646	3.37%
Supplier #39	$ 0.1452	38,021	$ 0.0552	0.64%	$ 1,079,459	0.97%
Supplier #37	$ 0.1450	611,891	$ 0.0546	10.35%	$ 20,571,677	18.47%
Supplier #12	$ 0.1417	362,897	$ 0.0511	6.14%	$ 8,763,432	7.87%
Supplier #41	$ 0.1382	462,750	$ 0.0484	7.83%	$ 12,970,332	11.64%
Supplier #25	$ 0.1449	61,886	$ 0.0477	1.05%	$ 1,104,503	0.99%
Supplier #15	$ 0.1376	213,518	$ 0.0458	3.61%	$ 4,648,970	4.17%
Supplier #6	$ 0.1282	284,867	$ 0.0381	4.82%	$ 6,237,222	5.60%
Supplier #20	$ 0.1282	29,505	$ 0.0374	0.50%	$ 624,413	0.56%
Supplier #43	$ 0.1265	159,306	$ 0.0345	2.69%	$ 3,098,412	2.78%
Supplier #29	$ 0.1240	213,923	$ 0.0341	3.62%	$ 3,596,144	3.23%
Supplier #31	$ 0.1234	65,938	$ 0.0297	1.12%	$ 1,171,382	1.05%
Supplier #32	$ 0.1196	623,020	$ 0.0290	10.54%	$ 12,035,815	10.81%
Supplier #22	$ 0.1193	73,432	$ 0.0270	1.24%	$ 1,146,036	1.03%
Supplier #19	$ 0.1174	23,492	$ 0.0262	0.40%	$ 369,553	0.33%
Supplier #24	$ 0.1169	88,272	$ 0.0250	1.49%	$ 1,191,389	1.07%
Supplier #13	$ 0.1153	92,681	$ 0.0249	1.57%	$ 1,408,879	1.26%
Supplier #30	$ 0.1121	27,880	$ 0.0228	0.47%	$ 327,252	0.29%
Supplier #3	$ 0.1128	10,671	$ 0.0225	0.18%	$ 130,314	0.12%
Supplier #23	$ 0.1109	338,309	$ 0.0203	5.72%	$ 3,778,146	3.39%
Supplier #26	$ 0.1105	35,550	$ 0.0188	0.60%	$ 498,606	0.45%
Supplier #46	$ 0.1110	11,677	$ 0.0186	0.20%	$ 101,757	0.09%
Supplier #4	$ 0.1098	72,038	$ 0.0181	1.22%	$ 727,835	0.65%
Supplier #27	$ 0.1119	33,272	$ 0.0177	0.56%	$ 312,916	0.28%
Supplier #14	$ 0.1096	7,170	$ 0.0171	0.12%	$ 79,739	0.07%
Supplier #42	$ 0.1082	573,887	$ 0.0170	9.71%	$ 6,429,872	5.77%
Supplier #34	$ 0.1079	295,967	$ 0.0168	5.01%	$ 3,379,955	3.03%
Supplier #11	$ 0.1093	6,979	$ 0.0162	0.12%	$ 115,496	0.10%
Supplier #44	$ 0.1033	837	$ 0.0150	0.01%	$ 9,338	0.01%
Supplier #10	$ 0.1051	29,947	$ 0.0146	0.51%	$ 431,659	0.39%
Supplier #45	$ 0.1033	7,113	$ 0.0144	0.12%	$ 91,124	0.08%
Supplier #7	$ 0.1028	158,203	$ 0.0121	2.68%	$ 1,483,557	1.33%
Supplier #2	$ 0.1007	146,034	$ 0.0111	2.47%	$ 1,282,170	1.15%
Supplier #35	$ 0.1009	179,346	$ 0.0104	3.03%	$ 1,221,951	1.10%
Supplier #28	$ 0.1012	23,327	$ 0.0094	0.39%	$ 286,322	0.26%
Supplier #8	$ 0.1009	13,873	$ 0.0078	0.23%	$ 74,409	0.07%
Supplier #21	$ 0.0954	4,372	$ 0.0064	0.07%	$ 32,395	0.03%
Supplier #16	$ 0.0987	458	$ 0.0054	0.01%	$ 4,315	0.00%

Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #33	$ 0.0950	1,873	$ 0.0037	0.03%	$ 7,255	0.01%
Supplier #38	$ 0.0944	4,297	$ 0.0019	0.07%	$ 8,742	0.01%
Supplier #9	$ 0.0899	163,131	$ (0.0026)	2.76%	$ (274,277)	-0.25%
Supplier #36	$ 0.0903	62,229	$ (0.0045)	1.05%	$ (169,726)	-0.15%
Supplier #17	$ 0.0900	114	$ (0.0050)	0.00%	$ (1,355)	0.00%
Supplier #5	$ 0.0930	285	$ (0.0064)	0.00%	$ (1,031)	0.00%
All Suppliers		5,912,329		100.00%	$ 111,381,567	100%

Table includes those suppliers that served customers all twelve months of the year. The average rates shown are weighted by usage. The premium is the difference between the supplier's average rate and the hypothetical average rate that would have applied if the EDC had provided the same kWh during the same time periods.

Appendix 3A

Supplier-specific information (share of market, average premium, etc.) for low-income households

Suppliers Ranked by Weighted Average Premium: July 2016 - June 2017 - Low-Income Households

Masked Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #1	$ 0.1671	2,635	$ 0.0778	0.22%	$ 118,919	0.50%
Supplier #18	$ 0.1648	34,096	$ 0.0738	2.79%	$ 1,229,851	5.22%
Supplier #47	$ 0.1547	36,739	$ 0.0648	3.01%	$ 1,327,411	5.63%
Supplier #39	$ 0.1471	10,720	$ 0.0580	0.88%	$ 355,810	1.51%
Supplier #12	$ 0.1416	136,009	$ 0.0516	11.13%	$ 3,449,749	14.64%
Supplier #41	$ 0.1391	105,476	$ 0.0502	8.63%	$ 2,862,367	12.15%
Supplier #37	$ 0.1394	56,781	$ 0.0502	4.65%	$ 1,644,197	6.98%
Supplier #15	$ 0.1391	88,406	$ 0.0476	7.24%	$ 2,034,689	8.64%
Supplier #25	$ 0.1404	9,600	$ 0.0436	0.79%	$ 157,136	0.67%
Supplier #29	$ 0.1282	74,480	$ 0.0394	6.10%	$ 1,448,851	6.15%
Supplier #20	$ 0.1297	6,880	$ 0.0390	0.56%	$ 144,095	0.61%
Supplier #6	$ 0.1264	76,048	$ 0.0364	6.23%	$ 1,554,980	6.60%
Supplier #31	$ 0.1291	17,534	$ 0.0363	1.44%	$ 360,426	1.53%
Supplier #43	$ 0.1273	45,184	$ 0.0351	3.70%	$ 939,809	3.99%
Supplier #32	$ 0.1225	82,977	$ 0.0328	6.79%	$ 1,696,511	7.20%
Supplier #24	$ 0.1190	19,311	$ 0.0277	1.58%	$ 276,628	1.17%
Supplier #44	$ 0.1113	74	$ 0.0272	0.01%	$ 1,119	0.00%
Supplier #22	$ 0.1193	23,376	$ 0.0272	1.91%	$ 363,828	1.54%
Supplier #19	$ 0.1178	7,210	$ 0.0266	0.59%	$ 111,366	0.47%
Supplier #3	$ 0.1135	3,418	$ 0.0264	0.28%	$ 43,951	0.19%
Supplier #30	$ 0.1126	7,846	$ 0.0239	0.64%	$ 96,573	0.41%
Supplier #13	$ 0.1135	21,883	$ 0.0235	1.79%	$ 301,658	1.28%
Supplier #23	$ 0.1125	40,691	$ 0.0227	3.33%	$ 489,414	2.08%
Supplier #27	$ 0.1151	11,841	$ 0.0209	0.97%	$ 122,471	0.52%
Supplier #26	$ 0.1118	2,318	$ 0.0197	0.19%	$ 32,928	0.14%
Supplier #42	$ 0.1108	106,105	$ 0.0191	8.69%	$ 1,187,957	5.04%
Supplier #4	$ 0.1098	25,201	$ 0.0184	2.06%	$ 257,136	1.09%
Supplier #8	$ 0.1095	2,421	$ 0.0180	0.20%	$ 26,873	0.11%
Supplier #46	$ 0.1094	5,714	$ 0.0179	0.47%	$ 51,738	0.22%
Supplier #34	$ 0.1081	48,707	$ 0.0178	3.99%	$ 527,076	2.24%
Supplier #45	$ 0.1058	603	$ 0.0156	0.05%	$ 7,178	0.03%
Supplier #10	$ 0.1045	589	$ 0.0156	0.05%	$ 7,255	0.03%
Supplier #14	$ 0.1075	775	$ 0.0154	0.06%	$ 7,731	0.03%
Supplier #35	$ 0.1008	39,362	$ 0.0107	3.22%	$ 260,940	1.11%
Supplier #2	$ 0.1001	8,824	$ 0.0097	0.72%	$ 59,660	0.25%
Supplier #38	$ 0.0988	38	$ 0.0088	0.00%	$ 225	0.00%
Supplier #28	$ 0.0996	410	$ 0.0083	0.03%	$ 2,779	0.01%
Supplier #7	$ 0.1000	15,068	$ 0.0073	1.23%	$ 69,701	0.30%

Masked Supplier ID	Average Rate	# of Bills	Average Premium	Share of Accounts	Net Consumer Loss	Share of Loss
Supplier #9	$ 0.0905	35,918	$ (0.0022)	2.94%	$ (47,153)	-0.20%
Supplier #36	$ 0.0909	10,342	$ (0.0037)	0.85%	$ (22,110)	-0.09%
All Suppliers		1,221,610		100%	23,561,724	100%

Table includes those suppliers that served customers all twelve months of the year. The average rates shown are weighted by usage. The premium is the difference between the supplier's average rate and the hypothetical average rate that would have applied if the EDC had provided the same kWh during the same time periods.

Appendix 3B

Zip code and municipality participation in the market for competitive retail electric, June 2017: Majority-Minority Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Majority-Minority vs. Rest of State

Zip	Municipality	Percent nonwhite and/or Hispanic	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Majority Minority		68%	351,819	25%	$ 0.0333	30%	45%	25%
Rest of State		18%	2,082,079	10%	$ 0.0295	19%	31%	17%
02121	Dorchester	97%	9,881	39%	$ 0.0328	42%	53%	36%
02126	Mattapan	96%	8,106	29%	$ 0.0341	39%	48%	35%
01840	Lawrence	91%	2,332	39%	$ 0.0380	36%	50%	27%
02119	Roxbury	90%	10,130	32%	$ 0.0328	36%	49%	30%
01107	Springfield	88%	4,069	49%	$ 0.0379	42%	58%	26%
01841	Lawrence	86%	14,349	39%	$ 0.0387	37%	47%	30%
01841	Methuen	86%	55	35%	$ 0.0403	24%	26%	22%
01105	Springfield	85%	4,857	50%	$ 0.0373	39%	54%	24%
02124	Dorchester	83%	17,342	27%	$ 0.0318	33%	46%	28%
01561	Lancaster	82%	351	10%	$ 0.0190	15%	22%	14%
01103	Springfield	80%	1,281	20%	$ 0.0304	18%	45%	12%
01109	Springfield	78%	10,384	40%	$ 0.0337	32%	47%	22%
02150	Chelsea	76%	12,777	22%	$ 0.0329	36%	47%	33%
01608	Worcester	75%	1,106	18%	$ 0.0378	22%	49%	16%
01843	Lawrence	75%	8,848	28%	$ 0.0329	31%	43%	27%
02136	Hyde Park	74%	12,126	21%	$ 0.0327	30%	39%	28%
02125	Dorchester	69%	13,408	23%	$ 0.0328	28%	46%	22%
02122	Dorchester	68%	9,021	23%	$ 0.0278	31%	51%	25%
01902	Lynn	68%	16,278	24%	$ 0.0334	33%	48%	29%
01104	Springfield	68%	8,284	36%	$ 0.0368	27%	41%	20%
02128	East Boston	68%	14,862	18%	$ 0.0382	29%	43%	25%
01901	Lynn	67%	1,226	38%	$ 0.0405	27%	35%	22%

Zip	Municipality	Percent nonwhite and/or Hispanic	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
01108	Springfield	66%	10,459	32%	$ 0.0342	27%	44%	20%
01905	Lynn	65%	8,990	22%	$ 0.0336	37%	51%	33%
02366	South Carver	64%	497	6%	$ 0.0246	12%	13%	12%
02368	Randolph	63%	12,076	16%	$ 0.0276	29%	37%	27%
02301	Brockton	63%	22,235	24%	$ 0.0337	34%	47%	30%
01610	Worcester	61%	7,910	29%	$ 0.0343	34%	49%	27%
01151	Indian Orchard	60%	3,759	36%	$ 0.0316	27%	41%	19%
01151	Springfield	60%	24	17%	$ 0.0307	29%	0%	35%
01851	Lowell	60%	10,503	21%	$ 0.0334	31%	45%	27%
02120	Roxbry Xng	60%	4,624	18%	$ 0.0309	26%	50%	21%
02111	Boston	60%	4,510	17%	$ 0.0262	13%	35%	8%
01605	Worcester	54%	8,464	21%	$ 0.0315	28%	44%	24%
02118	Boston	53%	11,707	11%	$ 0.0315	14%	35%	11%
02148	Malden	53%	25,123	12%	$ 0.0334	21%	34%	20%
01119	Springfield	53%	5,348	28%	$ 0.0330	23%	34%	19%
01854	Lowell	53%	8,922	19%	$ 0.0316	24%	39%	20%
02302	Brockton	52%	11,463	23%	$ 0.0307	31%	41%	28%
02131	Roslindale	51%	11,784	14%	$ 0.0296	25%	38%	22%
02142	Cambridge	50%	2,348	3%	$ 0.0352	6%	20%	6%

Source: Basic supply providers and ZCTA data from the U.S. Census 2015 American Community Survey
Note: Places with fewer than 10 total accounts were dropped; 46 rows with missing demographic data were dropped

Appendix 3C

Zip code and municipality participation in the market for competitive retail electric, June 2017: Top 20 Percent African-American Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent African-American vs. Rest of State

Zip	Municipality	Percent African-American	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Top 20: percent African-American		44%	166,239	26%	$ 0.0322	32%	46%	27%
Rest of State		4%	2,267,659	11%	$ 0.0301	20%	33%	18%
02126	Mattapan	86%	8,106	29%	$ 0.0341	39%	48%	35%
02121	Dorchester	69%	9,881	39%	$ 0.0328	42%	53%	36%
02124	Dorchester	64%	17,342	27%	$ 0.0318	33%	46%	28%
02119	Roxbury	59%	10,130	32%	$ 0.0328	36%	49%	30%
02136	Hyde Park	46%	12,126	21%	$ 0.0327	30%	39%	28%
02301	Brockton	44%	22,235	24%	$ 0.0337	34%	47%	30%
02368	Randolph	42%	12,076	16%	$ 0.0276	29%	37%	27%
01109	Springfield	39%	10,384	40%	$ 0.0337	32%	47%	22%
02302	Brockton	34%	11,463	23%	$ 0.0307	31%	41%	28%
02122	Dorchester	32%	9,021	23%	$ 0.0278	31%	51%	25%
02125	Dorchester	27%	13,408	23%	$ 0.0328	28%	46%	22%
02131	Roslindale	27%	11,784	14%	$ 0.0296	25%	38%	22%
02366	South Carver	26%	497	6%	$ 0.0246	12%	13%	12%
01119	Springfield	25%	5,348	28%	$ 0.0330	23%	34%	19%
02120	Roxbry Xng	25%	4,624	18%	$ 0.0309	26%	50%	21%
01901	Lynn	23%	1,226	38%	$ 0.0405	27%	35%	22%
01608	Worcester	23%	1,106	18%	$ 0.0378	22%	49%	16%
01718	Vlg Nag Wd	22%	279	2%	$ 0.0370	14%	40%	13%
01105	Springfield	21%	4,857	50%	$ 0.0373	39%	54%	24%
02071	South Walpole	20%	346	5%	$ 0.0314	12%	5%	12%

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

Note: Places with fewer than 10 total accounts were dropped; 46 rows with missing demographic data were dropped

Appendix 3D

Zip code and municipality participation in the market for competitive retail electric, June 2017: Top 20 Percent Hispanic Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Hispanic vs. Rest of State

Zip	Municipality	Percent Hispanic	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Top 20: percent Hispanic		55%	131,870	30%	$ 0.0352	33%	47%	27%
Rest of State		8%	2,302,028	11%	$ 0.0299	20%	33%	18%
01840	Lawrence	86%	2,332	39%	$ 0.0380	36%	50%	27%
01841	Lawrence	82%	14,349	39%	$ 0.0387	37%	47%	30%
01841	Methuen	82%	55	35%	$ 0.0403	24%	26%	22%
01107	Springfield	80%	4,069	49%	$ 0.0379	42%	58%	26%
02150	Chelsea	64%	12,777	22%	$ 0.0329	36%	47%	33%
01105	Springfield	64%	4,857	50%	$ 0.0373	39%	54%	24%
01103	Springfield	63%	1,281	20%	$ 0.0304	18%	45%	12%
01843	Lawrence	63%	8,848	28%	$ 0.0329	31%	43%	27%
02128	East Boston	58%	14,862	18%	$ 0.0382	29%	43%	25%
01104	Springfield	55%	8,284	36%	$ 0.0368	27%	41%	20%
01608	Worcester	54%	1,106	18%	$ 0.0378	22%	49%	16%
01108	Springfield	43%	10,459	32%	$ 0.0342	27%	44%	20%
01902	Lynn	43%	16,278	24%	$ 0.0334	33%	48%	29%
01109	Springfield	38%	10,384	40%	$ 0.0337	32%	47%	22%
01905	Lynn	38%	8,990	22%	$ 0.0336	37%	51%	33%
01610	Worcester	38%	7,910	29%	$ 0.0343	34%	49%	27%
01151	Indian Orchard	37%	3,759	36%	$ 0.0316	27%	41%	19%
01151	Springfield	37%	24	17%	$ 0.0307	29%	0%	35%
01901	Lynn	37%	1,226	38%	$ 0.0405	27%	35%	22%
01550	Charlton	32%	20	15%	$ 0.0155	25%	0%	29%

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

Note: Places with fewer than 10 total accounts were dropped; 46 rows with missing demographic data were dropped

Appendix 3E

Zip code and municipality participation in the market for competitive retail electric, June 2017: Top 20 Percent Limited English Proficiency Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Limited English Proficiency vs. Rest of State

Zip	Municipality	Percent limited English proficiency	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Top 20: pct. limited English		22%	158,850	25%	$ 0.0344	30%	45%	25%
Rest of State		5%	2,274,551	11%	$ 0.0299	20%	34%	18%
01840	Lawrence	43%	2,332	39%	$ 0.0380	36%	50%	27%
01608	Worcester	41%	1,106	18%	$ 0.0378	22%	49%	16%
01901	Lynn	33%	1,226	38%	$ 0.0405	27%	35%	22%
01841	Lawrence	30%	14,349	39%	$ 0.0387	37%	47%	30%
01841	Methuen	30%	55	35%	$ 0.0403	24%	26%	22%
01107	Springfield	30%	4,069	49%	$ 0.0379	42%	58%	26%
02128	East Boston	29%	14,862	18%	$ 0.0382	29%	43%	25%
01103	Springfield	29%	1,281	20%	$ 0.0304	18%	45%	12%
02111	Boston	28%	4,510	17%	$ 0.0262	13%	35%	8%
02150	Chelsea	27%	12,777	22%	$ 0.0329	36%	47%	33%
02744	New Bedford	22%	5,155	37%	$ 0.0316	27%	37%	21%
02746	New Bedford	20%	6,353	37%	$ 0.0277	28%	35%	25%
01105	Springfield	20%	4,857	50%	$ 0.0373	39%	54%	24%
01610	Worcester	18%	7,910	29%	$ 0.0343	34%	49%	27%
01702	Framingham	18%	13,720	15%	$ 0.0374	29%	40%	27%
01104	Springfield	17%	8,284	36%	$ 0.0368	27%	41%	20%
02115	Boston	17%	9,844	10%	$ 0.0230	15%	27%	13%
02149	Everett	17%	16,474	17%	$ 0.0310	29%	40%	27%
01902	Lynn	17%	16,278	24%	$ 0.0334	33%	48%	29%
02125	Dorchester	17%	13,408	23%	$ 0.0328	28%	46%	22%

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

Note: Places with fewer than 10 total accounts were dropped; 48 rows with missing demographic data were dropped

Appendix 3F

Zip code and municipality participation in the market for competitive retail electric, June 2017: Bottom 20 Median Income Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Bottom 20 Median Income vs. Rest of State

Zip	Municipality	Median household income	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Bottom 20: med. income		$28,769	117,836	33%	$ 0.0343	31%	44%	25%
Rest of State		$74,282	2,306,506	11%	$ 0.0300	20%	34%	18%
01103	Springfield	$15,558	1,281	20%	$ 0.0304	18%	45%	12%
01105	Springfield	$16,845	4,857	50%	$ 0.0373	39%	54%	24%
01094	Hardwick	$17,708	164	38%	$ 0.0224	24%	27%	23%
01840	Lawrence	$18,291	2,332	39%	$ 0.0380	36%	50%	27%
01901	Lynn	$21,605	1,226	38%	$ 0.0405	27%	35%	22%
01107	Springfield	$22,288	4,069	49%	$ 0.0379	42%	58%	26%
01608	Worcester	$22,789	1,106	18%	$ 0.0378	22%	49%	16%
02121	Dorchester	$26,150	9,881	39%	$ 0.0328	42%	53%	36%
02746	New Bedford	$26,705	6,353	37%	$ 0.0277	28%	35%	25%
01104	Springfield	$28,858	8,284	36%	$ 0.0368	27%	41%	20%
02119	Roxbury	$28,885	10,130	32%	$ 0.0328	36%	49%	30%
02721	Fall River	$29,684	11,445	35%	$ 0.0325	30%	38%	26%
02120	Roxbry Xng	$30,487	4,624	18%	$ 0.0309	26%	50%	21%
02724	Fall River	$30,688	7,363	34%	$ 0.0344	28%	34%	26%
01610	Worcester	$31,019	7,910	29%	$ 0.0343	34%	49%	27%
02047	Humarock	$31,302	686	1%	$ 0.0319	9%	11%	9%
02744	New Bedford	$31,709	5,155	37%	$ 0.0316	27%	37%	21%
02115	Boston	$31,737	9,844	10%	$ 0.0230	15%	27%	13%
02723	Fall River	$32,275	6,777	34%	$ 0.0378	31%	40%	26%
01841	Lawrence	$32,928	14,349	39%	$ 0.0387	37%	47%	30%

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

Note: Places with fewer than 10 total accounts were dropped; 63 rows with missing demographic data were dropped

Appendix 3G

Zip code and municipality participation in the market for competitive retail electric, June 2017: Top 20 Percent Participating in Low-Income Program Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Percent Participating in Low-Income Program vs. Rest of State

Zip	Municipality	Total accounts	Percent low income accounts	All - Mark-Up	Low-Income Mark-Up	Percent of accounts in competitive supply: All	Low income	Non - L.I.
	Top 20: Pct LI	107,102	38%	$ 0.0349	$ 0.0363	32%	44%	25%
	Rest of State	2,333,080	10%	$ 0.0300	$ 0.0340	20%	34%	18%
01105	Springfield	4,857	50%	$ 0.0373	$ 0.0379	39%	54%	24%
01107	Springfield	4,069	49%	$ 0.0379	$ 0.0389	42%	58%	26%
01367	Charlemont	12	42%	$ 0.0415	$ 0.0415	17%	40%	0%
01109	Springfield	10,384	40%	$ 0.0337	$ 0.0355	32%	47%	22%
01840	Lawrence	2,332	39%	$ 0.0380	$ 0.0384	36%	50%	27%
01841	Lawrence	14,349	39%	$ 0.0387	$ 0.0410	37%	47%	30%
02121	Dorchester	9,881	39%	$ 0.0328	$ 0.0344	42%	53%	36%
01862	Tewksbury	137	39%	$ 0.0340	$ 0.0343	41%	51%	35%
01094	Hardwick	164	38%	$ 0.0224	$ 0.0296	24%	27%	23%
01901	Lynn	1,226	38%	$ 0.0405	$ 0.0453	27%	35%	22%
02744	New Bedford	5,155	37%	$ 0.0316	$ 0.0327	27%	37%	21%
02746	New Bedford	6,353	37%	$ 0.0277	$ 0.0294	28%	35%	25%
01151	Indian Orchard	3,759	36%	$ 0.0316	$ 0.0331	27%	41%	19%
01104	Springfield	8,284	36%	$ 0.0368	$ 0.0368	27%	41%	20%
02721	Fall River	11,445	35%	$ 0.0325	$ 0.0342	30%	38%	26%
01841	Methuen	55	35%	$ 0.0403	$ 0.0293	24%	26%	22%
01607	Auburn	41	34%	$ 0.0261	$ 0.0168	24%	36%	19%
02724	Fall River	7,363	34%	$ 0.0344	$ 0.0384	28%	34%	26%
02723	Fall River	6,777	34%	$ 0.0378	$ 0.0342	31%	40%	26%
01108	Springfield	10,459	32%	$ 0.0342	$ 0.0349	27%	44%	20%

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

Note: Places with fewer than 10 total accounts were dropped; 63 rows with missing demographic data were dropped

Appendix 3H

Zip code and municipality participation in the market for competitive retail electric, June 2017: Top 20 Median Income Vs. Rest of State

Zip code and municipality participation in the competitive supply market, June 2017: Top 20 Median Income vs. Rest of State

Zip	Municipality	Median household income	Total accounts	Percent low income accounts	Average markup over basic	Percent of accounts in competitive supply: All	Low income	Non - L.I.
Top 20: med. income		$151,800	76,753	3%	$ 0.0293	15%	18%	15%
Rest of State		$69,463	2,347,589	12%	$ 0.0303	21%	35%	19%
02493	Weston	$199,519	3,926	2%	$ 0.0306	16%	29%	16%
02468	Waban	$196,250	2,321	2%	$ 0.0315	13%	20%	12%
02030	Dover	$185,542	2,088	1%	$ 0.0245	14%	25%	14%
01467	Harvard	$183,750	73	4%	$ 0.0073	16%	0%	17%
01741	Carlisle	$166,111	1,895	1%	$ 0.0269	15%	19%	15%
01776	Sudbury	$165,745	6,196	3%	$ 0.0311	14%	19%	14%
01770	Sherborn	$155,956	1,570	2%	$ 0.0289	14%	20%	14%
01773	Lincoln	$153,438	2,255	3%	$ 0.0347	17%	22%	16%
02420	Lexington	$151,607	5,482	3%	$ 0.0310	14%	18%	14%
01740	Bolton	$147,446	1,848	2%	$ 0.0177	19%	35%	19%
02421	Lexington	$147,335	6,376	4%	$ 0.0328	14%	14%	14%
01772	Southboro	$145,179	3,523	2%	$ 0.0177	22%	24%	22%
01778	Wayland	$143,616	5,112	3%	$ 0.0303	15%	19%	15%
01890	Winchester	$143,017	7,697	2%	$ 0.0324	13%	17%	13%
02056	Norfolk	$141,278	3,503	3%	$ 0.0274	14%	10%	14%
02492	Needham	$140,734	6,707	2%	$ 0.0301	14%	16%	14%
02461	Newton Hlds	$140,733	2,856	5%	$ 0.0351	14%	23%	13%
01921	Boxford	$140,268	2,783	2%	$ 0.0297	17%	11%	17%
01748	Hopkinton	$138,551	6,119	3%	$ 0.0286	13%	20%	13%
02052	Medfield	$138,036	4,423	3%	$ 0.0308	14%	15%	14%

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

Note: Places with fewer than 10 total accounts were dropped; 63 rows with missing demographic data were dropped

Appendix 3I

45 zip-municipalities with the highest mark-up (premium) relative to basic rates

45 zip-municipalities with the highest mark-up (premium) relative to basic rates

Top 45 by mark-up:		Low income accounts		
Zip	Municipality	Total	Percent in CS market	Average mark-up over basic
01236	Gt. Barrington	90	32%	$0.1386
01821	Billerica	640	30%	$0.0800
01929	Essex	57	25%	$0.0709
02142	Cambridge	65	20%	$0.0552
01339	Heath	13	77%	$0.0546
01982	Hamilton	98	23%	$0.0521
01776	Sudbury	185	19%	$0.0512
02138	Cambridge	441	24%	$0.0505
01773	Lincoln	58	22%	$0.0493
02725	Somerset	169	36%	$0.0488
01240	Lenox	111	24%	$0.0485
02053	Medway	207	21%	$0.0476
02559	Pocasset	130	28%	$0.0471
02032	East Walpole	89	17%	$0.0467
01730	Bedford	235	15%	$0.0454
01901	Lynn	461	35%	$0.0453
01754	Maynard	300	22%	$0.0451
01760	Natick	893	21%	$0.0451
01038	Hatfield	75	17%	$0.0447
02140	N Cambridge	564	34%	$0.0444
01560	Grafton	121	39%	$0.0443
01098	Worthington	59	20%	$0.0441
02467	Chestnut Hill	186	20%	$0.0440
02141	E Cambridge	406	29%	$0.0438
02139	Cambridge	1,236	36%	$0.0438

Top 45 by mark-up:		All other accounts		
Zip	Municipality	Total	Percent in CS market	Average mark-up over basic
01074	Barre	203	31%	$0.1100
01230	New Marlboro	720	13%	$0.0982
01525	Uxbridge	122	19%	$0.0737
01531	New Braintree	391	21%	$0.0608
01844	Lawrence	72	22%	$0.0483
01982	Hamilton	2,552	18%	$0.0479
02791	Westport Pt	240	14%	$0.0474
01050	Montgomery	41	27%	$0.0469
01220	Adams	3,451	23%	$0.0445
02140	N Cambridge	8,373	11%	$0.0436
01242	Lenoxdale	209	9%	$0.0428
02138	Cambridge	12,873	10%	$0.0412
02723	Fall River	4,487	26%	$0.0407
02139	Cambridge	13,750	11%	$0.0406
02144	W Somerville	10,137	9%	$0.0401
01038	Hatfield	1,101	12%	$0.0396
01852	Lowell	11,349	20%	$0.0395
01608	Worcester	911	16%	$0.0391
02189	Weymouth	5,372	22%	$0.0390
01267	Williamstown	2,750	15%	$0.0389
01718	Vlg Nag Wd	274	13%	$0.0386
01944	Manchester	2,370	15%	$0.0386
01850	Lowell	4,437	25%	$0.0383
01835	Haverhill	4,971	17%	$0.0381
01050	Huntington	913	12%	$0.0381

Top 45 by mark-up:		Low income accounts		
Zip	Municipality	Total	Percent in CS market	Average mark-up over basic
02180	Stoneham	666	19%	$0.0433
01827	Dunstable	31	39%	$0.0431
02081	Walpole	327	18%	$0.0428
02663	S Wellfleet	43	28%	$0.0425
01012	Chesterfield	64	20%	$0.0424
01702	Framingham	2,082	40%	$0.0422
01473	Westminster	203	24%	$0.0421
01701	Framingham	708	24%	$0.0420
01930	Gloucester	1,633	30%	$0.0417
01255	Sandisfield	98	16%	$0.0415
01983	Topsfield	34	32%	$0.0411
01915	Beverly	1,301	27%	$0.0411
01863	Chelmsford	256	21%	$0.0410
01841	Lawrence	5,601	47%	$0.0410
02651	North Eastham	87	25%	$0.0410
02492	Needham	111	16%	$0.0407
01862	Billerica	193	29%	$0.0407
01235	Hinsdale	169	20%	$0.0406
02720	Fall River	3,148	30%	$0.0405
02420	Lexington	152	18%	$0.0405

Top 45 by mark-up:		All other accounts		
Zip	Municipality	Total	Percent in CS market	Average mark-up over basic
02141	E Cambridge	6,467	11%	$0.0381
01338	Buckland	759	15%	$0.0379
02143	Somerville	11,158	11%	$0.0379
02108	Boston	2,176	10%	$0.0379
02650	North Chatham	1,086	17%	$0.0378
02128	East Boston	12,202	25%	$0.0378
02565	N Falmouth	497	10%	$0.0378
02445	Brookline	8,258	11%	$0.0377
02534	Cataumet	703	18%	$0.0376
01754	Maynard	4,229	13%	$0.0376
01066	North Hatfield	134	7%	$0.0376
02725	Somerset	835	26%	$0.0376
01840	Lawrence	1,420	27%	$0.0375
02127	South Boston	15,431	9%	$0.0373
01609	Worcester	6,287	20%	$0.0373
01351	Montague	894	14%	$0.0373
02659	South Chatham	1,416	13%	$0.0372
01201	Lanesborough	195	11%	$0.0371
01104	Springfield	5,328	20%	$0.0368
01054	Leverett	788	17%	$0.0368

Source: Basic supply providers

Note: Places with fewer than 10 competitive supplier accounts (low income or all other income) were dropped

Appendix 4A

State Investigations and Class Action Lawsuits Alleging Unfair or Deceptive Acts or Practices by Suppliers Licensed to Operate in the Commonwealth of Massachusetts

STATE INVESTIGATIONS AND CLASS ACTION LAWSUITS ALLEGING UNFAIR OR DECEPTIVE ACTS OR PRACTICES BY SUPPLIERS LICENSED TO OPERATE IN THE COMMONWEALTH OF MASSACHUSETTS[1]

AMBIT NORTHEAST, LLC d/b/a AMBIT ENERGY

State Investigations

- New York Department of Public Service: investigation of Ambit (2015).[2]

Lawsuits

- Kostovetsky vs. Ambit Energy Holdings, LLC, et al. U.S. District Court for the Northern District of Illinois, docket 1:15-cv-02553.
- Urbino v. Ambit Energy Holdings LLC, et al. U.S. District Court for the District of New Jersey, docket 3:14-cv-05184.
- Little, et al. v. Ambit Northeast, LLC, et al. U.S. District Court for the District of New Jersey, docket 3:16-cv-08800-PGS-LHG.
- Simmons v. Ambit Energy Holdings LLC. Supreme Court of the State of New York, County of Kings, docket 503285/2015.
- Lazarek et al v. Ambit Energy Holdings, LLC et al. U.S. District Court for the Western District of New York, docket 6:15-cv-06361-FPG-MWP.
- Silvis v. Ambit Energy LP. U.S. District Court for the Eastern District of Pennsylvania, docket 2:14-cv-05005; Third Circuit Court of Appeals, docket 16-1976.

CLEANCHOICE ENERGY, INC.
Formerly Ethical Electric, Inc., d/b/a Clean Energy Option

State Investigations

- Illinois Attorney General announced a settlement with Ethical Electric (2017).[3]
- Pennsylvania Attorney General announced an assurance of voluntary compliance with Ethical Electric (2015).[4]

CLEARVIEW ELECTRIC, INC. d/b/a CLEARVIEW ENERGY

State Investigations

[1] This list is meant to be illustrative rather than exhaustive. There may be additional lawsuits and state investigations that were not easily located via internet search.
[2] *See* https://www.governor.ny.gov/news/governor-cuomo-announces-energy-bill-refunds-more-1500-new-yorkers (last visited February 12, 2018).
[3] *See* http://www.illinoisattorneygeneral.gov/pressroom/2016_08/20160808b.html (last visited February 5, 2018).
[4] *See* https://legalnewsline.com/stories/510549039-pennsylvania-electric-supplier-faces-legal-action-over-solicitation-pieces (last visited February 5, 2018).

- Maine Public Utilities Commission: investigation of Clearview (2015). Docket 2015-00297.
- New Hampshire Public Utilities Commission: investigation of Clearview (2017). Docket DE 17-002**.**

CONSTELLATION ENERGY POWER CHOICE, LLC
CONSTELLATION ENERGY SERVICES, INC./INTEGRYS ENERGY SERV., INC.
CONSTELLATION NEW ENERGY, INC.
Parent Company: Exelon

State Investigations

- Pennsylvania Public Utilities Commission: investigation of MXenergy (2012).[5] Docket M-2012-2201861.

Lawsuits

- Coda v. Constellation Energy Power Choice, LLC. U.S. District Court for the District of New Jersey, docket 2:17-cv-03437-JMV-MF.

DIRECT ENERGY SERVICES, LLC
DIRECT ENERGY BUSINESS, LLC
Parent Company: Centrica, plc

State Investigations

- Connecticut Public Utilities Regulatory Authority: investigation of Direct Energy (2013). Docket No. 13-07-17.
- Public Utilities Commission of Texas: investigation of Direct Energy (2014). Docket No. 42524.

Lawsuits

- Richards v. Direct Energy Services, LLC. U.S. District Court in the District of Connecticut, docket 3:14-cv-01724-VAB; Second Circuit Court of Appeals, docket 17-1003.
- Dolemba v. Direct Energy Services, LLC. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:14-cv-09677.
- Sevugan v. Direct Energy Services, LLC. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:17-cv-06569.
- Forte v. Direct Energy Services, LLC. U.S. District Court for the Northern District of New York, docket 6:17-cv-00264-FJS-ATB.

[5] MXenergy was acquired by Constellation in 2011.

- Wilson v. Direct Energy Services, LLC. U.S. District Court for the Southern District of Ohio Western Division at Cincinnati, docket 1:16-cv-00454.
- Getso v. Direct Energy. U.S. District Court for the Northern District of Texas, docket 3:16-cv-02142-K.

DISCOUNT POWER, INC.
Parent Company: Spark Energy, Inc.

Lawsuits

- Chandler et al. v. Discount Power, Inc. State of Connecticut Superior Court, Judicial District of Hartford docket HHD-CV-14-6055537-S.

ENERGY PLUS HOLDINGS MA
Parent Company: NRG Energy, Inc.

State Investigations

- Connecticut Attorney General and Office of Consumer Counsel announce a settlement with Energy Plus Holdings, LLC (2014). CT PURA Docket No. 12-07-13.
- New York Attorney General announced a settlement with Energy Plus (2017).[6]

Lawsuits

- Fortney v. Energy Plus Holdings, LLC. U.S. District Court for the District of Maryland Greenbelt Division, docket 1:12-cv-08119-WHP.
- Wise et al. v. Energy Plus Holdings LLC. U.S. District Court for the Southern District of New York, docket 1:11-cv-07345-WHP.
- Faistl v. Energy Plus Holdings, LLC et al. U.S. District Court for the District of New Jersey Newark Division, docket 2:12-cv-02879-JLL-MAH.
- Yu v. Energy Plus Holdings, LLC. U.S. District Court for the District of New Jersey, docket 2:12-cv-02627-JLL-JAD.

JUST ENERGY MASSACHUSETTS CORP. d/b/a JUST ENERGY
Parent Company: Just Energy Group, formerly d/b/a U.S. Energy Savings

State Investigations

- Massachusetts Attorney General announced a settlement with Just Energy (2014).[7]
- Public Utilities Commission of Ohio: investigation into Commerce Energy, d/b/a Just Energy (2016). Docket Case No. 16-2006-GE-UNC.

[6] *See* https://ag.ny.gov/press-release/ag-schneiderman-announces-800k-settlement-energy-service-company-falsely-advertised (last visited February 5, 2018).
[7] *See* http://www.mass.gov/ago/news-and-updates/press-releases/2015/2015-01-06-just-energy.html (last visited February 5, 2018).

Lawsuits

- Nieves v. Just Energy New York Corp. U.S. District Court for the Western District of New York, docket 1:17-cv-00561-WMS.
- Donin et al v. Just Energy Group Inc. et al. U.S. District Court for the Eastern District of New York, docket 1:17-cv-05787-WFK-SJB.

LIBERTY POWER HOLDINGS, LLC

State Investigations

- Connecticut Public Utilities Regulatory Authority announced a settlement with Liberty Power (2016). Docket No. 06-12-07-RE06.
- Connecticut Public Utilities Regulatory Authority: investigation of Liberty Power (2017). Docket No. 06-12-07-RE07.
- Public Utilities Commission of Texas: investigation of Liberty Power Holdings, LLC (2016). Docket No. 45215.
- New York Public Service Commission: investigation of Liberty Power (2013). Case No. 13-E-0062.

Lawsuits

- Dolemba v. Liberty Power Corp., LLC et al. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:13-cv-05429.
- Moore v. Liberty Power Holdings LLC. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:16-cv-07553.
- Kreke v. Liberty Power Holdings LLC. U.S. District Court for the Southern District of Illinois, docket 3:17-cv-00808-DRH-RJD.

MAJOR ENERGY ELECTRIC SERVICES LLC
Parent Company: Spark Energy, Inc.

State Investigations

- Illinois Commerce Commission: investigation of Major Energy (2014).[8]
- Maryland Public Service Commission: investigation of Major Energy Electric Service, LLC and Major Energy Services, LLC (2014). Case No. 9346.

Lawsuits

[8] *See* https://www.icc.illinois.gov/downloads/public/Major%20Energy%20Press%20Release%20FINAL%205%206%2015.doc (last visited February 13, 2018).

- Carrera v. Major Energy Services, LLC et al. U.S. District Court for the District of New Jersey, docket 3:15-cv-03208-MAS-LHG.
- Gillis et al v. Major Energy et al. U.S. District Court for the Eastern District of Pennsylvania, docket 2:14-cv-03856-MSG.

MASSACHUSETTS GAS & ELECTRIC
Local Subsidiary of: U.S. Gas & Electric
Parent Company: Crius Energy

State Investigations

- Connecticut Public Utilities Regulatory Authority: investigation of Connecticut Gas & Electric (2013). Docket No. 13-07-15.
- Maryland Public Service Commission: investigation of U.S. Gas & Electric and Energy Service Providers, Inc. d/b/a Maryland Gas & Electric (2014). Case No. 9347.
- Pennsylvania Attorney General and Pennsylvania Office of Consumer Advocate announced settlement with Pennsylvania Gas & Electric (2015).[9]

Lawsuits

- Sobeich v. U.S. Gas & Electric, Inc. et al. U.S. District Court for the Eastern District of Pennsylvania, docket 2:14-cv-04464.

PALMCO POWER MA LLC

State Investigations

- Connecticut Public Utilities Regulatory Authority investigation of Palmco (2017).[10] Docket No. 10-01-24RE01.
- New Jersey Attorney General, New Jersey Board of Public Utilities, and New Jersey Division of Consumer Affairs announce settlement with Palmco Power NJ, LLC and Palmco Energy NJ, LLC (2016).[11]

Lawsuits

- The People of the State of Illinois v. Palmco Power IL, LLC. The State of Illinois Circuit Court of the Seventh Judicial Circuit, Sangamon County, docket 2017-CH-00099.
- Komoda v. Palmco Energy NJ, LLC et al. U.S. District Court for the Eastern District of New York, docket 1:14-cv-01679-KAM-VVP.

PROVIDER POWER MASS, LLC

[9] *See* http://www.oca.state.pa.us/Industry/Electric/Attorney%20General%20Kane%20Press%20Release.pdf (last visited February 5, 2018).
[10] *See* http://www.ct.gov/occ/lib/occ/8-17-17_palmco_settlement.pdf (last visited February 12, 2018).
[11] *See* http://www.nj.gov/oag/newsreleases16/pr20160623b.html (last visited February 5, 2018).

Parent Company: Spark Energy, Inc.

Lawsuits

- Veilleux et al v. Electricity Maine, LLC et al. U.S. District Court for the District of Maine, docket 1:16-cv-00571-NT.

PUBLIC POWER, LLC
Parent Company: Crius Energy

State Investigations

- Connecticut Public Utilities Regulatory Authority investigation of Public Power (2016). Docket 13-02-08.
- Connecticut Public Utilities Regulatory Authority investigation of Public Power (2013). Docket 11-10-06.
- Pennsylvania Public Utilities Commission investigation of Public Power (2013). Docket M-2012-2257858.
- Pennsylvania Public Utilities Commission investigation of Public Power (2016). Docket No. M-2015-2439492.

SPARK ENERGY, INC.

Lawsuits

- Ortiz et al v. Spark Energy, LLC. U.S. District Court for the Northern District of California, docket 4:15-cv-02326-JSW.
- Hoy v. Spark Energy Gas, LLC et al. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:14-cv-09579.
- Ballantyne v. Spark Energy, Inc. U.S. District Court for the Eastern District of Michigan, docket 2:17-cv-11018-MFL-SDD.
- Melville v. Spark Energy, Inc. et al. U.S. District Court for the District of New Jersey, docket 1:15-cv-08706-RBK-JS.
- Rolland v. Spark Energy, LLC. U.S. District Court for the District of New Jersey, docket 3:17-cv-02680-MAS-LHG.
- Bank v. Spark Energy Holdings, LLC et al. U.S. District Court for the Eastern District of New York, docket 1:13-cv-06130-JG-VMS.
- Markey et al v. Spark Energy, LLC et al. U.S. District Court for the Eastern District of Pennsylvania, docket 2:16-cv-01597-MSG.

STARION ENERGY, INC.

State Investigations

- Connecticut Public Utilities Regulatory Authority investigation of Starion Energy (2015). Docket No. 09-10-10.
- District of Columbia Office of the People's Counsel announced a settlement with Starion (2014). Formal Case No. 1105.
- Delaware Public Services Commission investigation of Starion Energy (2013). PSC DOCKET NO. 395-13.
- Maryland Public Service Commission investigation of Starion Energy (2013). Case No. 9324.

Lawsuits

- Gruber v. Starion Energy, Inc. U.S. District Court for the District of Connecticut, docket 3:14-cv-01828-SRU.
- Owens v. Starion Energy, Inc. U.S. District Court for the District of Connecticut New Haven Division, docket 3:16-cv-01912-VAB.
- Primack v. Starion Energy PA, Inc. et al. U.S. District Court for the Northern District of Illinois Eastern Division, docket 1:14-cv-08772.
- Camuso et al v. Starion Energy Inc. U.S. District Court for the District of Massachusetts, docket 1:17-cv-12215.
- Windley v. Starion Enery Inc., et al. U.S. District Court for the Southern District of New York, docket 1:14-cv-09053.
- Orange v. Starion Energy PA, Inc. et al. U.S. District Court for the Eastern District of Pennsylvania, docket 2:15-cv-00773-CDJ; Third Circuit Court of Appeals, docket 16-1949.
- Eisenband v. Starion Energy, Inc. U.S. District Court for the Southern District of Florida, docket 9:17-cv-80195-KAM.

VERDE ENERGY USA MASS LLC
Parent Company: Spark Energy, Inc.

Lawsuits

- Roberts v. Verde Energy USA, Inc. U.S. District Court for the District of Connecticut, docket 3:15-cv-00312-VLB.
- Vebell v. Verde Energy USA, Inc. U.S. District Court for the District of Connecticut, docket 3:15-cv-00008-JBA.
- Coleman v. Verde Energy USA, Inc. U.S. District Court for the Southern District of Illinois, docket 3:17-cv-00062-DRH-SCW.
- Bunnell v. Verde Energy USA, Inc. U.S. District Court for the District of Massachusetts, docket 3:15-cv-30220-MGM.
- Schley v. Verde Energy USA, Inc. U.S. District Court for the District of New Jersey, docket 2:17-cv-00887-LS.
- Richardson et al v. Verde Energy USA, Inc. U.S. District Court for the Eastern District of Pennsylvania, docket 5:15-cv-06325-LS.

- Wachstock v. Verde Energy USA, Inc. U.S. District Court for the Eastern District of New York, docket 1:14-cv-04082-WFK-JMA.
- Bowser v. Verde Energy USA, Inc. U.S. District Court for the Southern District of New York, docket 7:15-cv-09471-CS.

VIRIDIAN ENERGY, INC.
Parent Company: Crius Energy

State Investigations

- Connecticut Public Utilities Regulatory Authority investigation of Viridian Energy (2015). Docket No. 09-04-15RE03.
- Maryland Public Service Commission investigation of Viridian Energy (2012). Case No. 9255.[12]

Lawsuits

- Sanborn v. Viridian Energy, Inc. U.S. District Court for the District of Connecticut, docket 3:14-cv-01731.
- Steketee v. Viridian Energy, Inc. U.S. District Court for the District of Connecticut, docket 3:15-cv-00585-SRU.
- Mirkin et al v. Viridian Energy, Inc. U.S. District Court for the District of Connecticut, docket 3:15-cv-01057-SRU.
- Hembling et al v. Viridian Energy, LLC et al. U.S. District Court for the District of Connecticut, docket 3:15-cv-01258-SRU.
- Lempert v. Viridian Energy, Inc. et al. U.S. District Court for the District of Connecticut, docket 3:15-cv-00703-VLB.
- Daniyan v. Viridian Energy, LLC. U.S. District Court for the District of Maryland, docket 1:14-cv-02715-GLR.
- Landau v. Viridian Energy PA, LLC. U.S. District Court for the Eastern District of Pennsylvania, docket 2:16-cv-02383-GAM.

XOOM ENERGY MASSACHUSETTS, LLC
Parent Company: ACN, Inc.

State Investigations

- The Maryland Public Service Commission investigation of Xoom Energy (2014). Case No. 9346.

Lawsuits

[12] http://webapp.psc.state.md.us/newIntranet/sitesearch/Press%20Releases/Maryland%20PSC%20Issues%20$60,000%20Civil%20Penalty%20Against%20Viridian%20Energy.pdf (last visited February 12, 2018).

- Adesina v. ACN, Inc. et al. U.S. District Court for the Western District of North Carolina, docket 3:14-cv-00562-GCM.
- Todd et al v. ACN, Inc. et al. U.S. District Court for the District of Maryland, docket 8:15-cv-00154-GJH.

Appendix 5A

Connecticut Office of Consumer Counsel Summary for January 2017 through December 2017 – Fact Sheet

D.P.U. 19-07
H.O. Wade
AGO Comments Attachment A

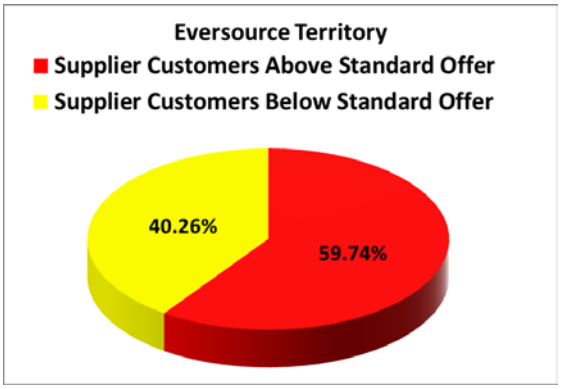
Updated on
February 6, 2018

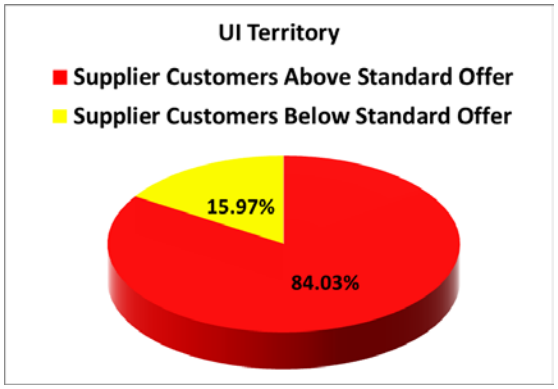
OCC FACT SHEET: ELECTRIC SUPPLIER MARKET, JANUARY 2017 THROUGH DECEMBER 2017

The following is an update to the Office of Consumer Counsel's (OCC's) Electric Supplier Market Fact Sheet, originally created in 2014. The numbers provided herein are based on data submitted as compliance filings in the Public Utilities Regulatory Authority's Docket Number 06-10-22.

- Retail suppliers serve 26.4% of Eversource Energy (Eversource) residential customers and 32.7% of United Illuminating (UI) residential customers, in December 2017.

- In the month of December 2017, nearly **six out of ten** residential supplier customers paid more than the Standard Offer in Eversource territory, and **eight out of ten** residential supplier customers paid more than the Standard Offer in UI territory.[1]





- In the month December 2017, residential Eversource customers who chose suppliers paid in aggregate **$3,043,199.42 more** than the Standard Offer for their electric generation, and residential UI customers who chose suppliers paid in aggregate **$1,598,120.23 more** than the Standard Offer.[2]

- For the rolling year of January 2017 through December 2017, residential consumers who chose a retail supplier paid, in aggregate, **$46,298,211.20 more** than the Standard Offer.

[1] This Fact Sheet only examines available data regarding pricing by electric suppliers. While some suppliers may offer products or services to customers such as airline miles or a product with additional renewable energy content, there is no data available to quantify the value of such offers. OCC recommends that customers look carefully at the fine print for offers for additional products or services that come with higher prices, to ensure they are getting sufficient value to justify the higher price tag.

[2] These calculations are based on an assumption of 750/month kWh usage.

- The Standard Offer for Eversource customers from January 1, 2017 through June 30, 2017, was 7.87 cents/kWh. From July 1, 2017 through December 31, 2017, the Standard Offer for Eversource customers is 8.01 cents/kWh.
- The Standard Offer for UI customers from January 1, 2017 through June 30, 2017, was 9.26 cents/kWh. From July 1, 2017 through December 31, 2017, the Standard Offer for UI customers is 7.59 cents/kWh.
- The following table lists all electric suppliers who charged at least 20% of their residential customers 12.021 cents/kWh (50% higher than Eversource standard service) or 11.399 cents/kWh (50% higher than UI standard service) or more in the month of July. The phone numbers for each supplier are taken from those listed at energizect.com or the website for that supplier.

Suppliers Charging at Least 20% of their Customers 50% or more than Standard Offer in December

Electric Suppliers	% of Eversource Customers paying over 12.021 cents	% of UI Customers paying over 11.399 cents	Supplier Phone Number
Aequitas Energy, Inc.	N/A	35.73%	(855) 799-8200
Choice Energy	90.18%	92.82%	(888) 565-4490
Direct Energy Services	37.68%	41.98%	1(800) 348-2999
Energy Plus Holdings, LLC	92.61%	91.41%	(888) 766-3509
Liberty Power Holdings LLC	48.18%	91.10%	1(866) 769-3799
Major Energy Electric Services, LLC	66.67%	N/A	(888) 625-6760
North American Power and Gas LLC	33.13%	48.31%	(888)313-9086
NRG Retail Solutions	88.10%	90.30%	1(855) 457-5700
Public Power, LLC	23.77%	39.34%	(844) 585-8900
Spark Energy LP	45.27%	37.64%	(877) 374-8013
Starion Energy Inc.	27.79%	31.22%	(800) 600-3040
Viridian Energy Inc.	24.48%	51.15%	(866) 663-2508

Please feel free to contact the Office of Consumer Counsel at 860-827-2900 or occ.info@ct.gov if you have any questions about this information.

Appendix 5B

"State Urged To Probe Abusive Electricity Suppliers," Gregory B. Hladky, *Hartford Courant*, January 31, 2017

State Urged To Probe Abusive Electricity Suppliers

Consumer Counsel Elin Swanson Katz talking about complaints from electric customers.

By **Gregory B. Hladky**

JANUARY 31, 2017, 2:15 PM | HARTFORD

A new state investigation is needed into abusive and deceptive marketing practices by electricity suppliers who target vulnerable consumers, Connecticut's consumer counsel and several Democratic lawmakers said Monday.

Consumer Counsel Elin Swanson Katz said the companies con or lie to potential customers to get them to switch electric providers, then charge them higher rates. The companies have targeted elderly homeowners,

low-income residents, people with disabilities and non-English speaking immigrants, Katz said.

Katz said her office is seeking an in-depth probe by the state Public Utilities Regulatory Authority (PURA) to determine if there is a pattern of targeting certain consumers using high-pressure tactics and deceptive practices. Key legislative Democrats backed her request.

"We also can't forget that, when those facing financial difficulties cannot pay their bills, the unpaid amounts are collected from other ratepayers," Katz said. Last year, consumers who chose a third-party retail supplier paid a total of $59 million more than they would have under the standard service rates, Katz said.

But a spokesman for the Retail Energy Supply Association said there is no need for an investigation. "We believe PURA has all the authority it needs to respond to any problems they may identify," said Bryan Lee, a spokesman for the industry group.

Lee said state statistics show there were fewer consumer complaints about third-party energy suppliers between July and November than about Connecticut's standard suppliers, Eversource and United Illuminating.

Connecticut's deregulated energy system allows consumers to choose independent or third-party electricity suppliers rather than pay the standard rate for power with Eversource or UI.

Katz said available data "demonstrates that, overall, customers using a supplier have been paying millions more than customers on utility standard-service rates" through Eversource and UI.

In 2014, a supplier called Energy Plus settled state charges of deceptive practices and agreed to pay a penalty of $4.5 million. Michael Coyle, a PURA spokesman, said Monday that Energy Plus is no longer operating in Connecticut.

A state investigation was launched in 2015 into allegedly deceptive practices by another supplier, Palmco Power CT. At the time, Katz charged that many of Palmco's customers were subjected to "outrageous and intimidating marketing practices." A state ruling on that probe is now pending.

At least two other energy suppliers, Direct Energy Services and Choice Energy Review, are also under review.

The Senate's top Democrat, President Pro Tem Martin Looney of New Haven, said a full investigation is needed to see if legislation passed in 2014 aimed at halting such practices is working. The 2014 law provided a range of potential sanctions for violators including fines and the suspension of licenses.

http://www.courant.com/news/connecticut/hc-call-to-probe-abusive-electric-suppliers-20170130-story.html

Katz acknowledged that the law gives state regulators broad powers to act against companies using deceptive or illegal practices, but said a probe is needed to determine if these are isolated cases or a pattern within the industry.

Sen. Terry Gerratana, D-New Britain, said many elderly people simply don't understand what's happening when they are pressured by electric company sales representatives. Gerratana said that when she decided to switch to Medicare for health insurance, she was inundated by calls from energy suppliers urging her to switch to their companies.

"It becomes overwhelming to try and deal with these phone calls and understand what these people are talking about," Gerratana said.

Katz offered a series of examples of complaints to her office by consumers or their relatives about representatives of third-party suppliers claiming to work for Eversource or United Illuminating and using high-pressure tactics on consumers.

In one case, two women working for a third-party energy supplier talked their way into the home of two sisters aged 97 and 99 by claiming they worked for Eversource, Katz said.

Katz said another complaint involved energy company representatives contacting refugees from Burma living in one building and telling them they all had to switch from Eversource to the representative's firm.

"There are too many stories not to be concerned," Katz said.

Lee said reputable energy suppliers are worried that theactions of a few companies will sully the reputation of the industry.

"We don't want those actions to paint the whole industry with a broad brush," Lee said.

This article is related to: Martin M Looney

Appendix 5C

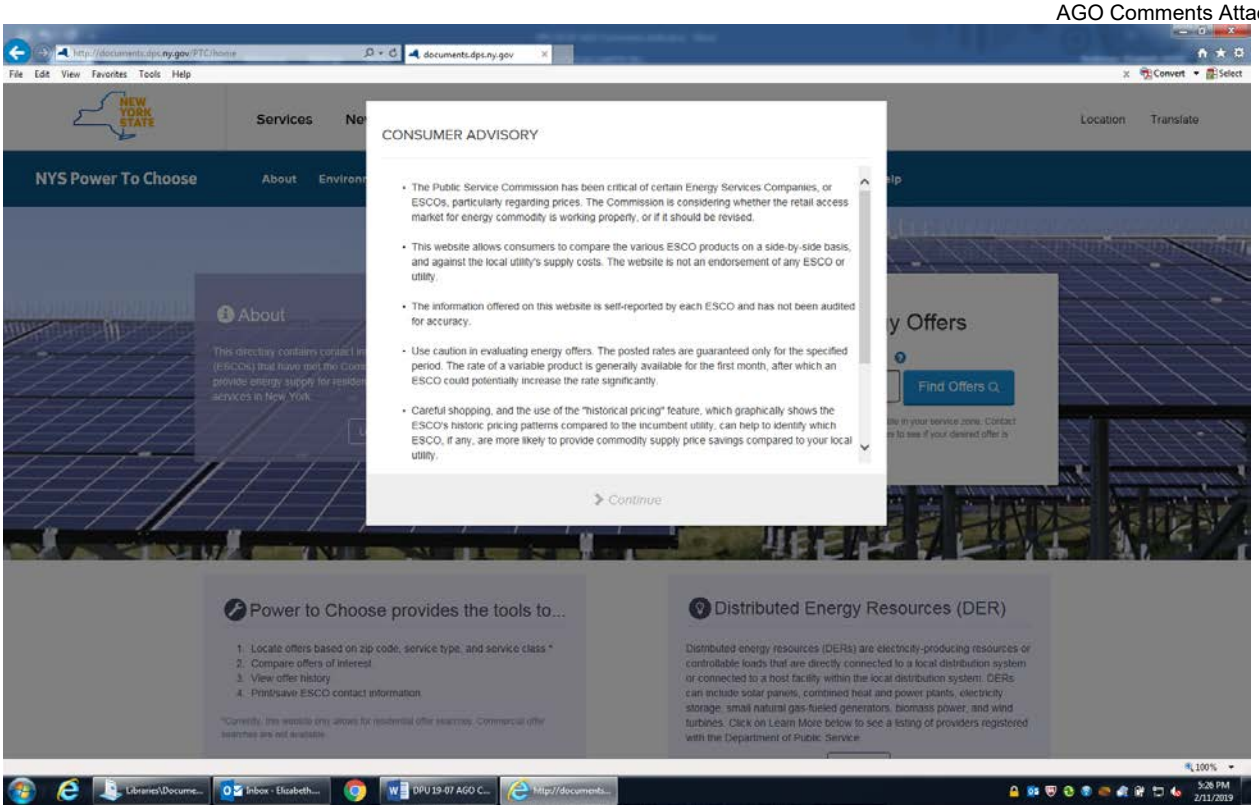
Illustrative report filed by an EDC in Connecticut pursuant to PURA Docket No. 06-10-22. (Eversource for January 2017)

(Appendix includes excerpt: first and last page)

Supplier Code	Supplier Name	Price $/kWh	Number of Residential customers by price January 2017
GI	ABEST POWER & GAS LLC	0.0499	5
GI	ABEST POWER & GAS LLC	0.0549	16
GI	ABEST POWER & GAS LLC	0.0588	6
GI	ABEST POWER & GAS LLC	0.0599	6
GI	ABEST POWER & GAS LLC	0.0629	2
GI	ABEST POWER & GAS LLC	0.0699	4
GI	ABEST POWER & GAS LLC	0.0729	14
GI	ABEST POWER & GAS LLC	0.0749	5
GI	ABEST POWER & GAS LLC	0.0759	19
GI	ABEST POWER & GAS LLC	0.0769	45
GI	ABEST POWER & GAS LLC	0.0774	6
GI	ABEST POWER & GAS LLC	0.0779	4
GI	ABEST POWER & GAS LLC	0.0789	1
GI	ABEST POWER & GAS LLC	0.0795	2
GI	ABEST POWER & GAS LLC	0.0798	5
GI	ABEST POWER & GAS LLC	0.0799	47
GI	ABEST POWER & GAS LLC	0.08	1
GI	ABEST POWER & GAS LLC	0.0805	1
GI	ABEST POWER & GAS LLC	0.081	1
GI	ABEST POWER & GAS LLC	0.08149	111
GI	ABEST POWER & GAS LLC	0.0815	10
GI	ABEST POWER & GAS LLC	0.0818	3
GI	ABEST POWER & GAS LLC	0.0819	15
GI	ABEST POWER & GAS LLC	0.082	1
GI	ABEST POWER & GAS LLC	0.0825	2
GI	ABEST POWER & GAS LLC	0.083	2
GI	ABEST POWER & GAS LLC	0.0834	18
GI	ABEST POWER & GAS LLC	0.0835	3
GI	ABEST POWER & GAS LLC	0.0836	1
GI	ABEST POWER & GAS LLC	0.0839	260
GI	ABEST POWER & GAS LLC	0.0843	4
GI	ABEST POWER & GAS LLC	0.0845	2
GI	ABEST POWER & GAS LLC	0.0846	1
GI	ABEST POWER & GAS LLC	0.0849	1
GI	ABEST POWER & GAS LLC	0.085	1
GI	ABEST POWER & GAS LLC	0.0853	3
GI	ABEST POWER & GAS LLC	0.0854	3
GI	ABEST POWER & GAS LLC	0.0855	4
GI	ABEST POWER & GAS LLC	0.0857	1
GI	ABEST POWER & GAS LLC	0.0858	2
GI	ABEST POWER & GAS LLC	0.086	12
GI	ABEST POWER & GAS LLC	0.0862	1
GI	ABEST POWER & GAS LLC	0.0864	1
GI	ABEST POWER & GAS LLC	0.0865	118

Supplier Code	Supplier Name	Price $/kWh	Number of Residential customers by price January 2017
ED	VIRIDIAN ENERGY INC	0.1168	7
ED	VIRIDIAN ENERGY INC	0.1169	27
ED	VIRIDIAN ENERGY INC	0.1199	2602
ED	VIRIDIAN ENERGY INC	0.1299	80
EV	XOOM ENERGY CONNECTICUT LLC	0.0649	114
EV	XOOM ENERGY CONNECTICUT LLC	0.0781	2
EV	XOOM ENERGY CONNECTICUT LLC	0.0799	69
EV	XOOM ENERGY CONNECTICUT LLC	0.0829	292
EV	XOOM ENERGY CONNECTICUT LLC	0.0839	1
EV	XOOM ENERGY CONNECTICUT LLC	0.0849	231
EV	XOOM ENERGY CONNECTICUT LLC	0.0869	105
EV	XOOM ENERGY CONNECTICUT LLC	0.088	1
EV	XOOM ENERGY CONNECTICUT LLC	0.0899	504
EV	XOOM ENERGY CONNECTICUT LLC	0.0919	30
EV	XOOM ENERGY CONNECTICUT LLC	0.0929	27
EV	XOOM ENERGY CONNECTICUT LLC	0.0949	736
EV	XOOM ENERGY CONNECTICUT LLC	0.0969	6
EV	XOOM ENERGY CONNECTICUT LLC	0.0975	33
EV	XOOM ENERGY CONNECTICUT LLC	0.0989	1
EV	XOOM ENERGY CONNECTICUT LLC	0.0999	758
EV	XOOM ENERGY CONNECTICUT LLC	0.1049	157
EV	XOOM ENERGY CONNECTICUT LLC	0.1079	13
EV	XOOM ENERGY CONNECTICUT LLC	0.1099	506
EV	XOOM ENERGY CONNECTICUT LLC	0.1119	75
EV	XOOM ENERGY CONNECTICUT LLC	0.1129	239
EV	XOOM ENERGY CONNECTICUT LLC	0.1149	129
EV	XOOM ENERGY CONNECTICUT LLC	0.1199	202

CONSUMER ADVISORY on New York's "Power to Choose" Website



The text of the CONSUMER ADVISORY is as follows:

- The Public Service Commission has been critical of certain Energy Services Companies, or ESCOs, particularly regarding prices. The Commission is considering whether the retail access market for energy commodity is working properly, or if it should be revised.
- This website allows consumers to compare the various ESCO products on a side-by-side basis, and against the local utility's supply costs. The website is not an endorsement of any ESCO or utility.
- The information offered on this website is self-reported by each ESCO and has not been audited for accuracy.
- Use caution in evaluating energy offers. The posted rates are guaranteed only for the specified period. The rate of a variable product is generally available for the first month, after which an ESCO could potentially increase the rate significantly.
- Careful shopping, and the use of the "historical pricing" feature, which graphically shows the ESCO's historic pricing patterns compared to the incumbent utility, can help to identify which ESCO, if any, are more likely to provide commodity supply price savings compared to your local utility.
- Please note that comparative historical pricing data is typically not available if the ESCO is offering "value-added products" such as furnace cleaning or "green products".
- For information on complaints taken by the Department of Public Service regarding ESCOs please click here.
- To file a complaint please click here.

Intelometry, Inc.

Comments on the Massachusetts Attorney General's Office Report titled Are Consumers Benefiting from Competition?

Prepared on behalf of the Retail Energy Supply Association (RESA)

Table of Contents

I. Executive Summary 3
A. Author's Note 3
B. Introduction 3
II. Issues with the AGO Report 4
A. Fails to Address the Impact of Basic Service Rates on Residential Customer Behavior 4
B. Disregards Reasons Customers Opt for Retail Service 6
C. Analyzes a Timeframe of General Basic Service Rate Decline in a Vacuum 6
D. Discounts the Complexities of Retail Supply Pricing and Procurement 8
E. Inappropriate Comparisons between Supplier Prices and Basic Service Rates 9
F. Misleading Derivations of Consumer Loss 9
G. Unsubstantiated Assertion that Consumer Loss is Getting Worse 11
H. Even When Basic Service Rates are Low Retail Customers Save Money 12
I. Higher Low-Income Participation Rates Does Not Necessarily Equate to Targeting 12
J. The Rate of Customer Complaints Should be Put in Perspective 13
K. Massachusetts Market Transparency 13
III. Conclusions 14
A. Eliminating Choice Harms Consumers 14
B. Performing an Appropriate Study of Massachusetts Retail Competition 14
Appendix 16
C. Table 1.0 - Historical Massachusetts Utility Basic Service Rates 16
D. Table 2.0 – Intelometry Massachusetts Savings Report 17

Comments on the AGO Report

I. Executive Summary

A. Author's Note

Throughout my twenty-year career in retail energy I have learned that, when it comes to data and market analysis, the devil is in the details. The results and associated conclusions of any expert report can be profoundly different depending on base assumptions made, data quality, selection of analysis time-period and other factors. In preparing this document I did not have access to the proprietary and competitively sensitive customer data utilized by the Massachusetts Attorney General's Office ("AGO") to conduct the analysis provided in the AGO's report, titled Are Consumers Benefiting from Competition? ("AGO Report"). I also did not have access to any associated workpapers or assumptions that weren't clearly stated in the AGO Report. In addition, while I generally followed the report write-up, I can't independently verify any analysis results reported. As such, this document is not meant to serve as a counter study to the AGO Report but only to comment on the report's stated approach, known assumptions and conclusions with the supposition that the figures presented were derived correctly using stated data inputs.

B. Introduction

The AGO Report presents the results and conclusions of an analysis that compared residential retail supplier bills with Massachusetts utility Basic Service rates over a two-year period. Due to stated data constraints a different approach was used to analyze year one than was used to analyze year two. Year one of the analysis ran from 7/2015 through 6/2016 and year two from 7/2016 through 6/2017. The AGO Report charges that Massachusetts customers overpay for retail supplier service and that low-income customers are deliberately targeted by retail suppliers. As a result, the report concludes that the retail competitive market in Massachusetts should be abolished.

Upon my review of the report I identified numerous issues with the stated approach, analysis, assumptions, results and conclusions and, as such, do not believe that the evidence presented in the report is sufficient to justify the extreme step of abolishing retail competition in Massachusetts. Further, I would caution using the AGO Report as a sole basis for policy making. Among other issues found, the report ignores the pitfalls of Basic Service rates, discounts that retail customers in Massachusetts can act rationally, draws inappropriate comparisons between retail supply products and Basic Service rates and draws conclusions on low income residential customer targeting without sufficient evidence.

However, I do believe that the issues raised by the AGO are serious enough that a more comprehensive review of the market may be warranted. I present some recommendations on how to do this in the conclusion section of this document should such review be undertaken. The remainder of this report details the issues I found with the AGO Report.

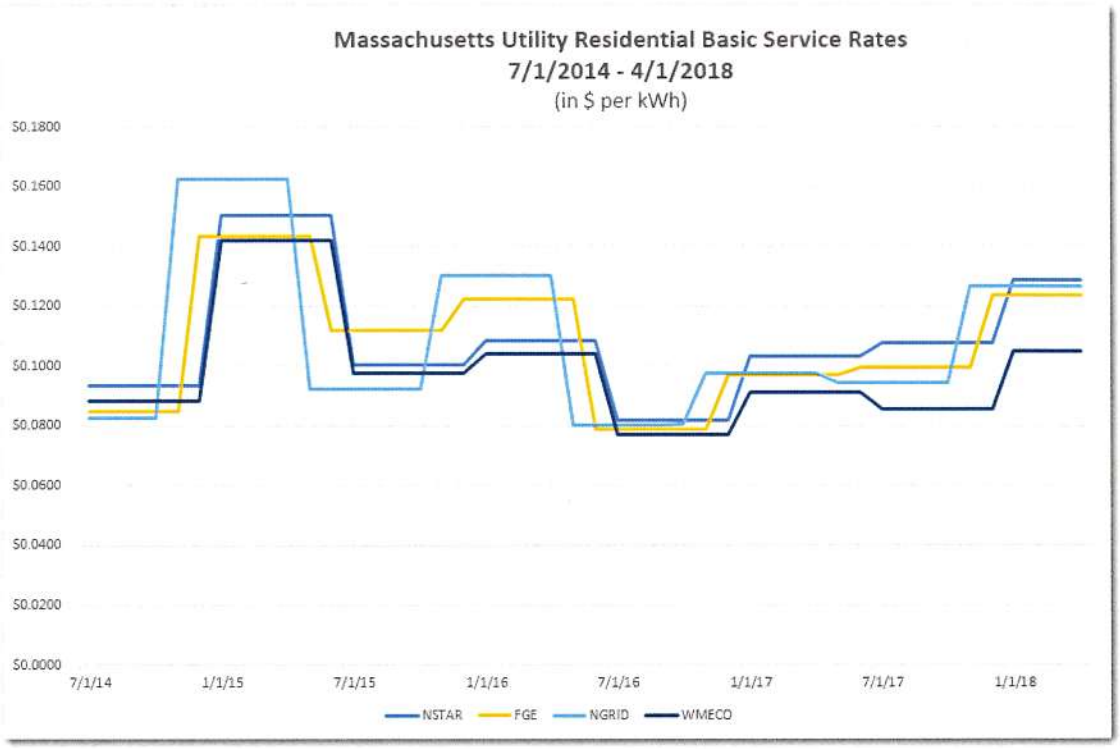
II. Issues with the AGO Report

Upon my review I identified numerous issues with the AGO Report. This section goes through several of them. While I did not have access to the proprietary residential customer data sets necessary to verify the AGO's results or to perform a counter study I do present some light analysis in this section based on available data.

A. Fails to Address the Impact of Basic Service Rates on Residential Customer Behavior

Massachusetts Basic Service rates charged to residential customers that do not actively shop are limited to 6-month rates with no value-added services. In addition, these rates can change massively from one Basic Service period to the next. The AGO Report alludes to this when claiming that Basic Service rates "dropped by 16 percent"[1] in the two-year study period. However, Basic Service rates move both ways – up and down -- and, in many cases, much more significantly than 16 percent. The graph and table below illustrate the increase or decrease in residential Basic Service rates between July of 2014 and April of 2018.

[1] See AGO Report, Executive Summary, page 8



Basic Service Percentage Price Movement
2015 - 2018

Utility	1st Basic Service Period of 2015	2nd Basic Service Period of 2015	1st Basic Service Period of 2016	2nd Basic Service Period of 2016	1st Basic Service Period of 2017	2nd Basic Service Period of 2017	1st Basic Service Period of 2018
NSTAR	60%	(33%)	8%	(24%)	26%	4%	20%
FGE	69%	(22%)	9%	(36%)	23%	2%	24%
NGRID	97%	(43%)	41%	(38%)	21%	(4%)	34%
WMECO	61%	(31%)	7%	(26%)	18%	(6%)	22%

As illustrated by the graph and table, Basic Service rates can move significantly from one period to another creating a major increase or decrease in residential customer bills. These large price swings can entice rational customers to seek competitive pricing options that stabilize their bills for longer periods, while steep increases in Basic Service rates promote shopping of lower priced competitive options. Take for example the Basic Service rate increase at the end of 2014 illustrated in the table below:

Residential Basic Service Percentage Price Increase
2015 Period 1

Utility	Date of Increase	Previous 6 Month Price (in $ per kWh)	New 6 Month Price (in $ per kWh)	Rate of Increase	Estimated Increase in Monthly Electric Bill *
NSTAR	1/1/2015	$0.09379	$0.15046	60%	$31.19
FGE	12/1/2014	$0.08485	$0.14328	69%	$33.17
NGRID	11/1/2014	$0.08277	$0.16273	97%	$50.05
WMECO	1/1/2015	$0.08844	$0.14228	61%	$33.74

** estimates based on customer usage derived from utility standard load profiles*

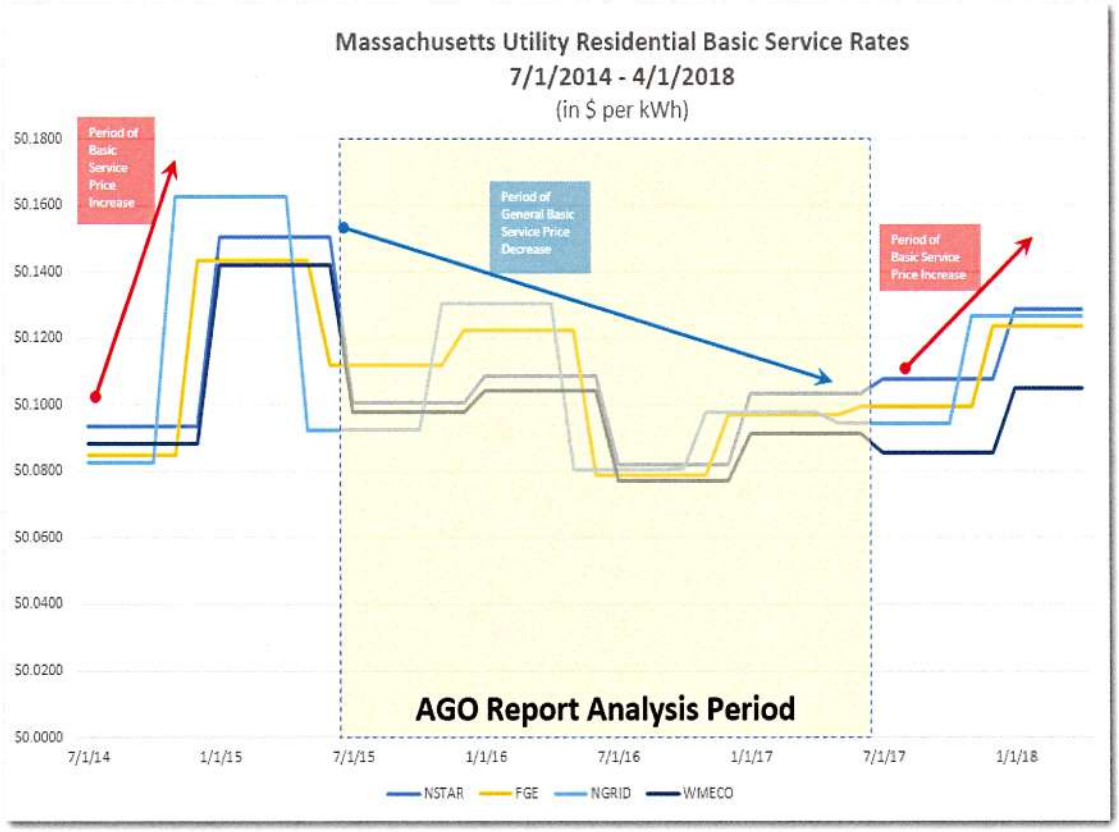
Budget conscious customers that see their utility Basic Service bill for generation service rise by 60% or more in a single month would be encouraged to seek better alternatives in the competitive market. Such behavior would certainly be rational. The AGO Report, however, ignores this and glosses over how the historic nature of Basic Service rates impacts consumer shopping behavior. The report merely implies that the reason customers shop is because they are "targeted" by retail suppliers.

B. Disregards Reasons Customers Opt for Retail Service

Unlike Massachusetts utilities, competitive retail suppliers offer many different types of products to residential customers that incorporate varying contract lengths and value-added service options. An offer search of energyswitchma.gov in March of 2018 showed a multitude of retail products available to residential customers for periods of 6 to 36 months, including 70% and 100% green products and products with value-added services, such as loyalty programs, Smart Thermostats, carbon offsets and cash back. Retail suppliers offer many product options because these are the products that residential customers have shown a willingness to buy. The reason a customer chooses to buy any retail supply product will vary. For example, an NSTAR residential customer that experienced a 60% Basic Service rate increase in January of 2015 might decide to purchase insurance by opting for a 24 or 36-month competitive supplier rate to avoid a future rate shock. Another customer may opt for a green product to be environmentally conscious, while another may simply opt for a rate option because it's lower than the current Basic Service rate. In all cases, customers opt for retail supplier products precisely because they are not available from their utility. The AGO Report makes no mention of any attempt to ascertain why customers opt for retail supply and simply makes a blanket assumption that all retail customers that leave Basic Service are coerced into doing so.

C. Analyzes a Timeframe of General Basic Service Rate Decline in a Vacuum

The AGO Report analysis period extends from July of 2015 through June of 2017. This two-year timeframe incorporates two periods of steep Basic Service rate declines and ignores the period of sharp Basic Service rate increases prior to July of 2015.

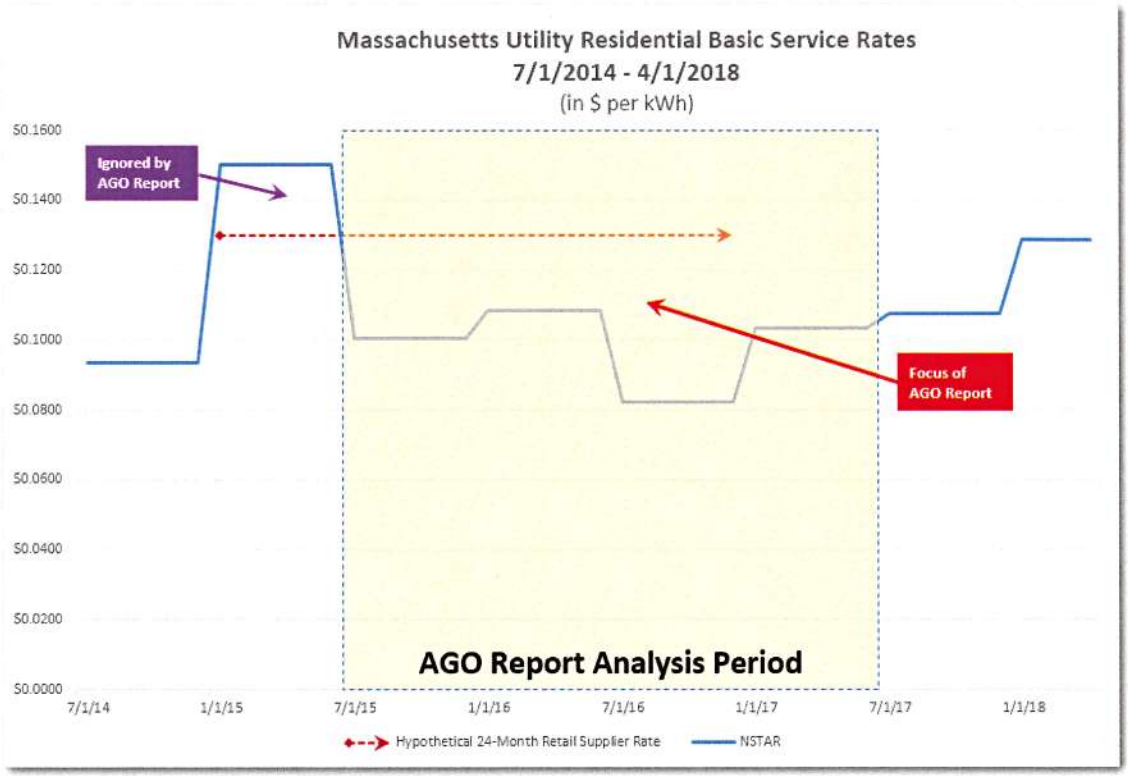


Basic Service Percentage Price Movement
2015 - 2018

Utility	1st Basic Service Period of 2015	2nd Basic Service Period of 2015	1st Basic Service Period of 2016	2nd Basic Service Period of 2016	1st Basic Service Period of 2017	2nd Basic Service Period of 2017	1st Basic Service Period of 2018
NSTAR	60%	(33%)	8%	(24%)	26%	4%	20%
FGE	69%	(22%)	9%	(36%)	23%	2%	24%
NGRID	97%	(43%)	41%	(38%)	21%	(4%)	34%
WMECO	61%	(31%)	7%	(26%)	18%	(6%)	22%

AGO Report Analysis Period

By focusing on a select period of overall declining rates in a vacuum, the AGO Report ignores the rational consumer behavior that likely occurred prior to the report's analysis period. Taking the NSTAR example from above, a customer that saw a 60% rate increase in January of 2015 may have opted to lock into a 24-month retail supply offer to both save money over the prevailing Basic Service rate as well as prevent another rate shock in the next six months.



Since the customer would have locked into a price reflective of the market at the time, there would be the appearance of overpayment when Basic Service prices dropped in July of 2015. In truth, the customer would have acted rationally at the time, buying both savings and long-term insurance. The AG Report ignores this, simply surmising that any customer that pays a supplier rate higher than Basic Service is being harmed.

D. Discounts the Complexities of Retail Supply Pricing and Procurement

The price of a retail supply offer to a residential customer is a function of the current state of associated energy and capacity markets, product structure, hedge options available, forward view of retail uplift costs, contract term, competing offers, associated value-added services, marketing/branding considerations and other factors. Yet the sophistication of the retail pricing process is ignored in the AGO Report. The report essentially claims in Section 2.6 that the only reason retail supply prices should ever be higher than Basic Service rates is because of "gift cards, rebates or reward programs."[2] The study further makes the claim that the cost to procure green products is very small or even negative. These claims are based on just three (3) rate comparisons from energyswitchma.gov.[3]

[2] See AGO Report, Section 2.6, page 14
[3] See AGO Report, Section 2.6, page 14

Missing from the AGO Report is the understanding that the costs and risks associated with a 36-month fixed price product can be far different than the costs and risks associated with a 6-month product, or that the state of the market at the time of pricing can greatly impact the price offered, or that green power is generally bought at a premium. Take, for example, the NGRID residential Basic Service rate which increased by 97% in November of 2014. The steep increase in this rate had nothing to do with gift cards, rebates or reward programs (of which the NGRID Basic Service rate provides none), but a function of the utility's procurement process combined with the state of the market at the time. At no time does the AGO Report provide a meaningful comparable analysis of retail supplier prices as evidenced by the report's claim that Constellation Energy can procure a green product for less than the cost to procure an equivalent product without a green provision.

E. Inappropriate Comparisons between Supplier Prices and Basic Service Rates

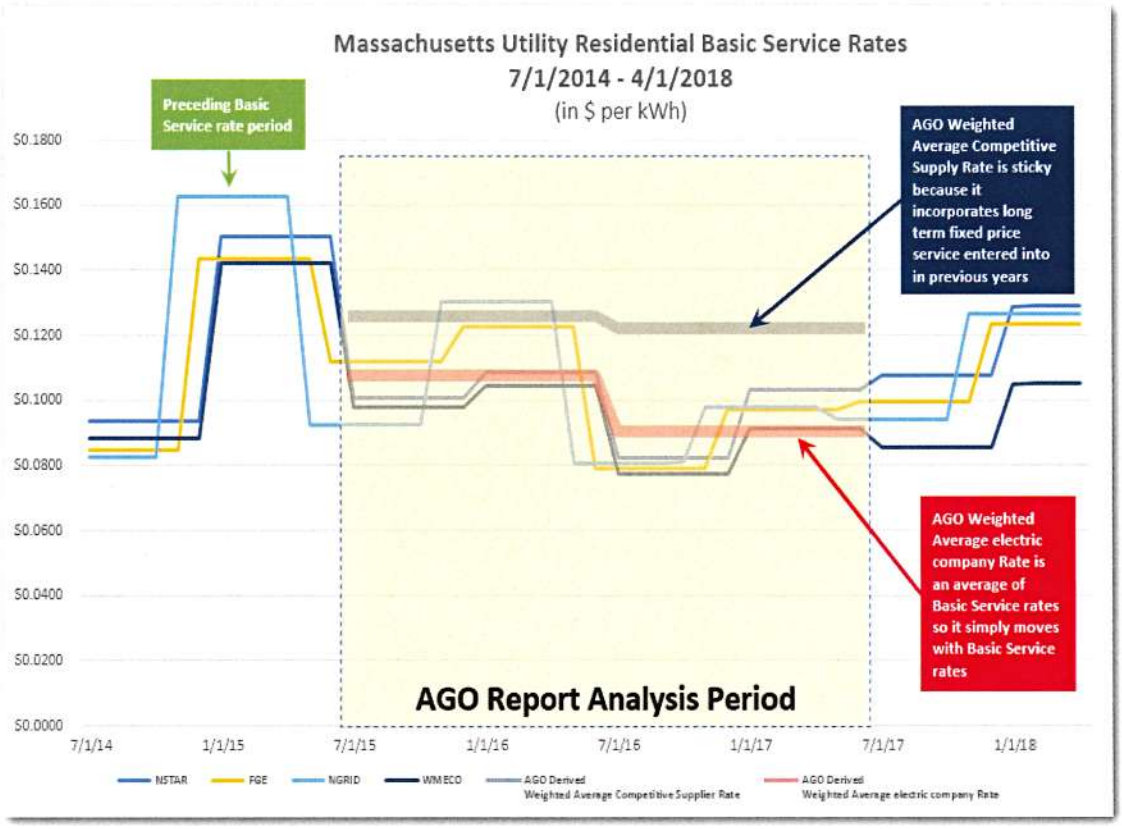
As previously stated, retail suppliers offer many different types of products to residential customers that incorporate varying contract lengths and value-added service options. The prices at which retail supply products are offered can vary greatly depending on the state of the market at the time, the length of the contract period, value-added provisions and other factors. The AGO Report essentially combines all bills of a given retail supplier for a given month into a single number without accounting for when any single product billed was procured, the structure associated with the product, the inclusion of value-added services or the reason why any individual customer opted for the product in the first place. The report then compares this number to 6-month Basic Service rates structured and procured in a completely different manner than any of the products incorporated into the first number. Such comparisons are inappropriate. Take, for example, a residential customer that signs a 12-month contract with a retail supplier in April of 2015. Drawing a simple comparison between that customer's fixed price and Basic Service rates six months later without acknowledging that the customer actively chose to take service under a long term fixed price contract would be misleading. Since Basic Service rates declined in July of that same year, a simple comparison would imply the customer was worse off for choosing 12 months of price insurance, when in truth the customer may be perfectly happy with supplier service.

A more appropriate comparison would have been to isolate customers that sign up for supplier service in a given month and compare the overall value of such products to the prevailing Basic Service rate at the time of signup. The AGO Report, however, fails to do this and essentially ends up comparing apples and oranges.

F. Misleading Derivations of Consumer Loss

The AGO Report claims that from July of 2015 through June of 2016 Massachusetts residential retail customers collectively paid $65.4 million more for supplier service than they would have

for Basic Service and that from July of 2016 through June of 2017, they collectively paid $111.4 million more. The report refers to these figures throughout as a customer or consumer loss, thereby implying that retail supply customers do not benefit from retail service. The AGO calculates consumer loss by taking a weighted average price paid by all residential customers for supplier service across utilities and comparing this number to the *Weighted Average electric company Rate,* which is the weighted average Basic Service rate across utilities. The report's findings, however, are not surprising given the AGO's analysis approach combined with the state of Basic Service rates before and during the AGO analysis period. The diagram below overlays the AGO's derived *Weighted Average Competitive Supplier Rates* and *Weighted Average electric company Rates* with Basic Service rates:



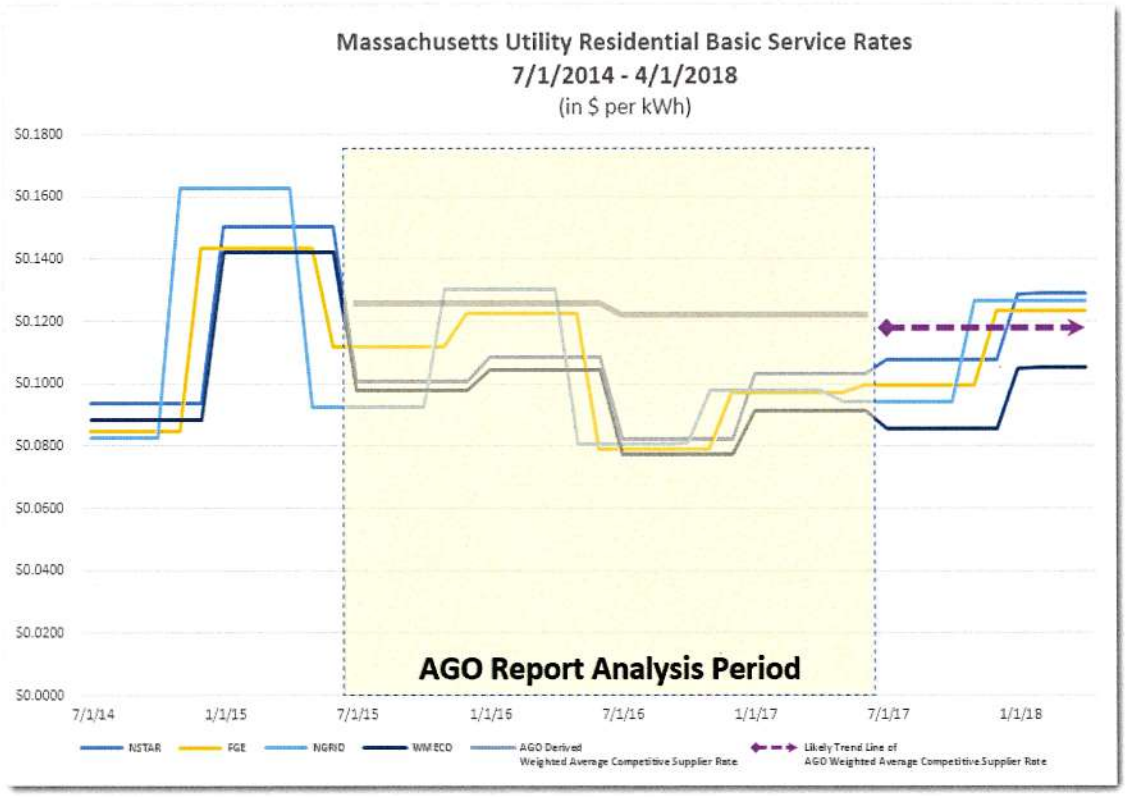
As illustrated by the diagram, the AGO Report's *Weighted Average Competitive Supplier Rate* line in year one ($0.12583 per kWh[4]) is substantially lower than even the lowest Basic Service rate in the preceding Basic Service rate period ($0.14228 per kWh), and is likely a function of customers locking in with competitive supplier service both to save money over the steep Basic Service rates in early 2015 as well as to avoid future rate shocks. Since the AGO's *Weighted Average electric company Rate* is derived from Basic Service rates, this line simply follows the

[4] See AGO Report, Table 2.1, page 7

movement of Basic Service rates. In year two the AGO's *Weighted Average electric company Rate* declines as Basic Service rates drop. The AGO's *Weighted Average Competitive Supplier Rates,* which inappropriately incorporates customers who entered into long term supplier contracts at the start of 2015, drops also but to a lesser extent due to the stickiness of the curve. As previously stated, a more appropriate comparison would have been to isolate customers that sign up for competitive supplier service in a given month and then compare the overall value of such products to the prevailing Basic Service rate at the time of signup.

G. Unsubstantiated Assertion that Consumer Loss is Getting Worse

The AGO Report claims that because consumer loss was $65.4 million in year one and $111.4 million in year two it means that "customer losses are getting worse not better."[5] Setting aside the question about whether the observation of two data points alone is sufficient to declare a trend exists, a different trend can be inferred by once again overlaying the AGO derived *Weighted Average Competitive Supplier Rates* with the movement of Basic Service rates.



The predictive trend line in the diagram rationally assumes that the AGO derived *Weighted Average Competitive Supplier Rate* would continue to drop as long term fixed price contracts entered into at the start of 2015 begin to expire and customers renew fixed price service at

[5] See AGO Report, Section 2.1, page 6

prices reflective of the 2017 wholesale market. When Basic Service rates increased at the start of 2018, it's highly likely that the consumer loss derived in the AGO report would diminish or even become a consumer surplus.

Further evidence is provided in the *Intelometry Massachusetts Savings Report* provided in the Appendix of this document which compared retail supplier offers posted on energyswitchma.gov in January through April of this year to Basic Service rates. That analysis identified that, depending on the utility, 24% to 83% of posted offers in April were lower than their associated Basic Service rates, lending further credence to the above trend line.

H. Even When Basic Service Rates are Low Retail Customers Save Money

The AGO Report only reviewed actual customer bills for year two of the analysis period (the report relied on aggregated bill data in year one). Basic Service rates in year two were far lower overall than they were in year one. The AGO Report admits, however, that even during this low Basic Service rate period, 12% of households (including 10% of low income customers) saved money[6]. Using the AGO's figure of 493,275 residential customers taking alternative supply in year two, this would mean that 59,193 residential customers saved money. Although the AGO Report does not provide the percentage of customers that saved money in year one, the number would presumably be much higher since the report's consumer loss figure was far lower for that year.

I. Higher Low-Income Participation Rates Does Not Necessarily Equate to Targeting

The AGO Report claims that low income customers opt for supplier service at higher rates than other customers and that this is evidence of targeting. While this is a serious charge that may warrant further review, it may simply be the case that, being more budget conscious, low income customers are more prone to actively shop. When Basic Service rates spiked at the end of 2014, it would certainly not be surprising to find that a higher rate of customers switched to supplier fixed price service to escape the Basic Service rate hike. A more appropriate way to examine whether low income customers are being targeted is to review whether both low income and other residential customers have the same access to the same products and prices across retail supplier sales channels. If the answer is yes, then collective differences in shopping behavior and even prices paid between residential customer classes may simply be a function of the way individuals in the class make decisions.

[6] AGO Report, Section 2.3, page 9

J. The Rate of Customer Complaints Should be Put in Perspective

The AGO Report states that "From January 1, 2014 through December 31, 2017, the AGO received more than 700 complaints from residential consumers regarding various competitive suppliers. Due to the high number of complaints from consumers, the AGO is concerned that the market as a whole might not be operating as intended by the Legislature." Customer complaints to the AGO are a serious matter and should be examined and resolved. However, the number of complaints should be put in perspective in terms of the market as a whole. According to the AGO Report, approximately 490 thousand residential customers participate in the retail supplier market in Massachusetts and another 450 thousand participate in municipal aggregation. If all 700 complaints to the AGO occurred in just one of the four years and came from non-Municipal Aggregation customers exclusively, the complaint rate for that year would be 0.143%, meaning that 99.857% of customers participating in retail choice were happy with supplier service. If the 700 complaints were spread out over four years the complaint rate would be even lower. It's important to remember that residential customers are free to return to utility Basic Service when their retail supplier contracts expire and yet many continue to remain on supplier service. If dissatisfaction with retail suppliers was widespread, the AGO Report should have shown a significant decrease in the number of customers taking supplier service from one year to the next, and yet the report showed a slight increase[7].

K. Massachusetts Market Transparency

The AGO Report states that as "currently constructed, the Massachusetts market operates largely in a "black box." This lack of transparency makes it infinitely more difficult to hold bad actors in the marketplace accountable for their abuses."[8] If there are issues with transparency, then those issues should be discussed and certainly bad actors should be held to account, but the fact remains that Massachusetts retail suppliers provide a lot of information to their customers. Retail suppliers prominently display their retail supply offers on energyswitchma.gov and/or in their service agreements. Further, suppliers work with customers to answer questions, assist them in signing up for new service and other matters. Finally, retail suppliers remain eager to work with government officials and regulatory bodies to continually improve the state of the market and customer experience. As far as RESA is aware, the AGO did not contact any RESA members in preparing the AGO Report.

[7] See AGO Report, Table 2.1, page 7
[8] See AGO Report, Section 5.2.1, page 42

III. Conclusions

A. Eliminating Choice Harms Consumers

The AGO Report concludes that Massachusetts should "end the competitive supply market."[9] Yet, this would be a critical mistake. According to the AGO's own report, nearly half a million Massachusetts residential customers voluntarily choose to take service from a competitive retail supplier each month, and the number rises to almost a million customers when adding municipal aggregation. Customers that take service directly from suppliers are free to return to Basic Service at the end of their contracts, yet many refuse to do so. The AGO Report even acknowledges that the number of residential customers taking supplier service increased slightly from year one to year two[10]. Eliminating choice for residential customers will:

- force half a million residential customers taking supplier service to return to Basic Service rates they do not want against their will
- abolish the option for 1.5 million Basic Service residential customers to leave Basic Service
- abolish the ability of residential customers to save money over Basic Service rates
- abolish green products
- abolish value-added products
- abolish retail energy industry innovation
- abolish retail energy service jobs

B. Performing an Appropriate Study of Massachusetts Retail Competition

While this document primarily focuses on illuminating select issues with the AGO Report, the concerns raised by the AGO are important. It may be the case that a more robust examination of the Massachusetts retail market is warranted to identify and resolve issues as well as determine how the overall market can be improved. Should such an effort be undertaken I would recommend the following:

- Involve all appropriate parties in the review process including consumers, regulators, retail suppliers, and other relevant parties to identify pressing issues and evaluate solutions
- Review current regulatory policy to ascertain if changes to existing rules can fix known issues and improve the market for all participants

[9] See AGO Report, Section 6, page 46
[10] See AGO Report, Table 2.1, page 7

- Examine retail supplier sales channels to ensure that both low income and other customers have access to the same retail supply price offers and products
- When conducting a historical analysis of the market, incorporate a longer analysis timeframe so that the bias of short run market trends is minimized
- Avoid making direct comparisons between retail supplier offers and Basic Service rates without accounting for the full value of individual retail supplier products or when and why a given customer opts for such products
- Assess retail supply products and associated prices in the context of the state of the market at the time the products were offered and procured
- Examine the information available to consumers and ensure customers have the tools to make rational informed choices for electric service

Appendix

C. Table 1.0 - Historical Massachusetts Utility Basic Service Rates

DATE	NSTAR	FGE	Nantucket/MECO	WMECO
1/1/14	0.09333	0.09276	0.10025	0.08174
2/1/14	0.09333	0.09276	0.10025	0.08174
3/1/14	0.09333	0.09276	0.10025	0.08174
4/1/14	0.09333	0.09276	0.10025	0.08174
5/1/14	0.09333	0.09276	0.08277	0.08174
6/1/14	0.09333	0.08485	0.08277	0.08174
7/1/14	0.09379	0.08485	0.08277	0.08844
8/1/14	0.09379	0.08485	0.08277	0.08844
9/1/14	0.09379	0.08485	0.08277	0.08844
10/1/14	0.09379	0.08485	0.08277	0.08844
11/1/14	0.09379	0.08485	0.16273	0.08844
12/1/14	0.09379	0.14328	0.16273	0.08844
1/1/15	0.15046	0.14328	0.16273	0.14228
2/1/15	0.15046	0.14328	0.16273	0.14228
3/1/15	0.15046	0.14328	0.16273	0.14228
4/1/15	0.15046	0.14328	0.16273	0.14228
5/1/15	0.15046	0.14328	0.09257	0.14228
6/1/15	0.15046	0.11191	0.09257	0.14228
7/1/15	0.10050	0.11191	0.09257	0.09767
8/1/15	0.10050	0.11191	0.09257	0.09767
9/1/15	0.10050	0.11191	0.09257	0.09767
10/1/15	0.10050	0.11191	0.09257	0.09767
11/1/15	0.10050	0.11191	0.13038	0.09767
12/1/15	0.10050	0.12239	0.13038	0.09767
1/1/16	0.10844	0.12239	0.13038	0.10426
2/1/16	0.10844	0.12239	0.13038	0.10426
3/1/16	0.10844	0.12239	0.13038	0.10426
4/1/16	0.10844	0.12239	0.13038	0.10426
5/1/16	0.10844	0.12239	0.08042	0.10426
6/1/16	0.10844	0.07878	0.08042	0.10426
7/1/16	0.08208	0.07878	0.08042	0.07708
8/1/16	0.08208	0.07878	0.08042	0.07708
9/1/16	0.08208	0.07878	0.08042	0.07708
10/1/16	0.08208	0.07878	0.08084	0.07708
11/1/16	0.08208	0.07878	0.09787	0.07708
12/1/16	0.08208	0.09704	0.09787	0.07708
1/1/17	0.10318	0.09704	0.09787	0.09126
2/1/17	0.10318	0.09704	0.09787	0.09126
3/1/17	0.10318	0.09704	0.09787	0.09126
4/1/17	0.10318	0.09704	0.09787	0.09126
5/1/17	0.10318	0.09704	0.09432	0.09126
6/1/17	0.10318	0.09934	0.09432	0.09126
7/1/17	0.10759	0.09934	0.09432	0.08563
8/1/17	0.10759	0.09934	0.09432	0.08563
9/1/17	0.10759	0.09934	0.09432	0.08563
10/1/17	0.10759	0.09934	0.09432	0.08563
11/1/17	0.10759	0.09934	0.12673	0.08563
12/1/17	0.10759	0.12340	0.12673	0.08563
1/1/18	0.12881	0.12340	0.12673	0.10486
2/1/18	0.12888	0.12340	0.12673	0.10503
3/1/18	0.12888	0.12340	0.12673	0.10503
4/1/18	0.12888	0.12340	0.12673	0.10503

D. Table 2.0 – Intelometry Massachusetts Savings Report

Market Savings Report - Massachusetts

All Offers								Fixed Price Offers				Variable Price Offers			Green Offers		
Year to Date	Price to Compare "PTC" ($/kWh)	Lowest Offer ($/kWh)	Customer Savings ($/kWh)	Potential Market Savings for the Month (Total $)	# of Offers	Offers Below PTC	Recorded Date	# of Offers	Offers Below PTC	Longest Term (bill cycles)	Lowest Offer ($/kWh)	# of Offers	Offers Below PTC	Lowest Offer ($/kWh)	# of Offers	Offers Below PTC	Lowest Offer ($/kWh)
Estimated Potential Total Market Savings - Year to Date				$92,731,345													
Current Monthly Report																	
April, 2018																	
NSTAR BECO	$0.1289	$0.0950	$0.0339		66	46	4/19/18	14	12	36	$0.10390	27	22	$0.09500	25	12	$0.11090
NSTAR CAMB	$0.1289	$0.0950	$0.0339	$14,685,090	66	46	4/19/18	14	12	36	$0.10390	27	22	$0.09500	25	12	$0.11090
NSTAR COMM	$0.1289	$0.0950	$0.0339		65	46	4/19/18	14	11	36	$0.10640	26	20	$0.09500	25	15	$0.10590
FGE	$0.1234	$0.1029	$0.0205	$212,432	18	15	4/19/18	6	6	24	$0.10365	8	5	$0.10290	4	4	$0.10700
Nantucket	$0.1267	$0.1019	$0.0248		57	40	4/19/18	12	10	36	$0.10990	24	18	$0.10190	21	12	$0.10700
MECO	$0.1267	$0.1019	$0.0248	$11,804,309	22	12	4/19/18	5	4	36	$0.10990	10	4	$0.10190	7	4	$0.11090
WMECO	$0.1050	$0.0917	$0.0133		46	11	4/19/18	11	3	36	$0.09690	17	5	$0.09170	18	3	$0.09190
Previous Monthly Report Summaries																	
March, 2018																	
NSTAR BECO	$0.1289	$0.1021	$0.0268		64	41	3/22/18	14	11	36	$0.10210	26	19	$0.10240	24	11	$0.11090
NSTAR CAMB	$0.1289	$0.1021	$0.0268	$12,667,019	64	41	3/22/18	14	11	36	$0.10210	26	19	$0.10240	24	11	$0.11090
NSTAR COMM	$0.1289	$0.1021	$0.0268		64	42	3/22/18	14	10	36	$0.10210	26	18	$0.10240	24	14	$0.10790
FGE	$0.1234	$0.1040	$0.0194	$213,696	16	12	3/22/18	7	6	24	$0.10490	5	2	$0.10400	4	4	$0.10700
Nantucket	$0.1267	$0.1019	$0.0248		57	37	3/22/18	12	8	36	$0.10250	25	17	$0.10190	20	12	$0.10700
MECO	$0.1267	$0.1019	$0.0248	$12,425,474	16	9	3/22/18	3	3	36	$0.10790	8	2	$0.10190	5	4	$0.11090
WMECO	$0.1050	$0.0919	$0.0131		44	8	3/22/18	11	1	36	$0.09990	16	4	$0.09800	17	3	$0.09190
February, 2018																	
NSTAR BECO	$0.1288	$0.1024	$0.0264		54	30	2/22/18	16	9	36	$0.10240	20	14	$0.11190	18	7	$0.11090
NSTAR CAMB	$0.1288	$0.1024	$0.0264	$14,458,911	54	30	2/22/18	16	9	36	$0.10240	20	14	$0.11190	18	7	$0.11090
NSTAR COMM	$0.1288	$0.1024	$0.0264		55	33	2/22/18	16	9	36	$0.10240	20	14	$0.11190	19	10	$0.11090
FGE	$0.1234	$0.1049	$0.0185	$260,261	11	9	2/22/18	7	7	24	$0.10490	2	0	$0.13447	2	2	$0.11090
Nantucket	$0.1267	$0.1039	$0.0228		57	33	2/22/18	16	9	36	$0.10390	21	13	$0.10860	20	11	$0.10950
MECO	$0.1267	$0.1039	$0.0228	$13,074,842	13	7	2/22/18	4	4	36	$0.10390	5	0	$0.13190	4	3	$0.11090
WMECO	$0.1050	$0.0947	$0.0103		39	4	2/22/18	13	1	36	$0.09470	11	1	$0.10500	15	2	$0.09490
January, 2018																	
NSTAR BECO	$0.1288	$0.1050	$0.0238		54	34	2/2/18	14	8	36	$0.10790	21	16	$0.10500	19	10	$0.11090
NSTAR CAMB	$0.1288	$0.1050	$0.0238	$13,035,466	54	34	2/2/18	14	8	36	$0.10790	21	16	$0.10500	19	10	$0.11090
NSTAR COMM	$0.1288	$0.1050	$0.0238		55	36	2/2/18	14	8	36	$0.10790	21	16	$0.10500	20	12	$0.11090
FGE	$0.1234	$0.1079	$0.0155	$218,056	10	8	2/2/18	6	6	24	$0.10790	2	0	$0.12908	2	2	$0.11090
Nantucket	$0.1267	$0.1079	$0.0188		13	7	2/2/18	4	4	36	$0.10790	5	0	$0.13190	4	3	$0.11090
MECO	$0.1267	$0.1079	$0.0188	$9,929,314	56	34	2/2/18	13	8	36	$0.10790	22	14	$0.10860	21	12	$0.10950
WMECO	$0.1049	$0.1000	$0.0049		40	1	2/2/18	12	0	36	$0.11190	12	1	$0.10000	16	0	$0.10490

State of Rhode Island
Division of Public Utilities & Carriers

Administration
89 Jefferson Blvd.
Warwick, R.I. 02888
(401) 941-4500

Contact: Thomas Kogut
(401) 780-2105

DPUC Enacts New Rules for Competitive Electricity Suppliers Initiates Review of Competitive Supply Marketplace

The Division of Public Utilities and Carriers (DPUC) has implemented a new set of rules to protect customers of competitive electric suppliers. The Nonregulated Power Producer Consumer Bill of Rights, based on legislation passed by the General Assembly, adds important new provisions to earlier consumer protection provisions. Among the features of the new regulation:

- A requirement that Nonregulated Power Producers (NPP's) provide consumers with specific contract terms
- Holds NPP's accountable for actions of their third-party agents
- Prohibits abusive switching practices
- Limits residential early termination fees to $50
- Requires electric bills to include the Standard Offer Service (the electric supply rate offered by the electric company) price to compare

To better enforce these provisions, the rule also has provisions for the Division to issue penalties for violations.

Consumers can find out more about competitive electric supply on our web site, http://www.ripuc.ri.gov. Complaints can be filed through this site or by calling the DPUC's Consumer Section at (401) 780-9700. While these new rules will help protect consumers in the competitive energy supply marketplace, the DPUC continues to urge NPP customers to understand their supplier's contract terms. In particular, customers should be aware of when a decision has to be made whether to stay with their current supplier, to select another supplier, or return to the Standard Offer Service offered by National Grid.

According to data gathered by the DPUC over the last five years, Rhode Island competitive supply customers paid $55 million more than they would have paid if they had been on Standard Offer. For residential customers alone, competitive supply costs were a total of nearly $28 million above Standard Offer for that same period.

Based on this preliminary analysis, as well as the results of the recent investigation of this industry by the Massachusetts Attorney General, the DPUC is initiating an investigation into the practices of competitive suppliers providing service to residential and small commercial customers in Rhode Island. This review will examine the policies and sales practices of NPP's, their effect on residential customers, especially those in vulnerable populations, as well as the structure of the competitive supply marketplace in Rhode Island and surrounding jurisdictions, and the potential role of competitive suppliers in realizing a transformation to a more affordable, cleaner and reliable energy system. Pending that review, the Division may seek further changes to the statutes and rules governing competitive suppliers of residential customers to address any inequities that may exist in the marketplace.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 15-M-0127 – In the Matter of Eligibility Criteria for Energy Service Companies.

Case 12-M-0476 – Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State.

Case 98-M-1343 – In the Matter of Retail Access Business Rules.

DEPARTMENT OF PUBLIC SERVICE STAFF
UNREDACTED INITIAL BRIEF

F. THOMAS DWYER
STEVEN J. KRAMER

Staff Counsel

DATED: March 30, 2018

JOINT TABLE OF CONTENTS

Page

I. PRELIMINARY STATEMENT 1

II. BACKGROUND 6

A. PROCEDURAL HISTORY 6

B. THE RETAIL MARKETS TODAY 16

1. Overview of the Retail Energy Markets Serving Mass Market Customers 16

2. ESCO Registration and Eligibility 17

3. ESCO Business Practices 17

4. Billing and Purchase of Receivables 17

5. Current Status of the UBP 17

6. Monitoring and Enforcement 18

III. ANALYSIS 20

A. REGULATORY REGIME 20

1. Commission's Vision in Opening the Competitive Markets 20

2. Application of Public Service Law to ESCOs 20

a) Scope of Commission Jurisdiction Under the PSL 20

b) Should ESCOs Be Required To File Tariffs? 24

c) Financial Oversight 25

3. Enforcement Powers Over ESCOs 26

a) Commission's Enforcement Mechanisms and Efforts 26

b) Attorney General's Enforcement Mechanisms and Efforts 27

4. Other State and Federal Laws Applicable to ESCOs 27

B. USEFULNESS & ACCURACY OF COMPARING ESCO AND UTILITY RATES 27

1. Utility Bill Comparison Methodologies 27

2. Utility Delivery and Supply Cost Allocations 40

C. RESPONSE TO COMMISSION'S INQUIRIES ON THE FUTURE OF ESCOs IN THE MASS MARKET 41

1. Should Retail Choice Continue In New York? 41

a) ESCOs' Role in Residential Markets 42

(i) Defining Residential 44

b) ESCOs' Role in Non-Residential Markets 45

(i) Defining Small Commercial 45

(ii) Whether Small Commercial should be included in Mass Market? 45

(iii) Whether Certain UBP Provisions Should Apply to Small Commercial? 48

2. ESCOs' Place in the Competitive Market 49

a) Whether ESCOs have "Market Power" 49

b) The Functionality of Competitive Markets for Retail Commodity Services 54

c) ESCOs' Impact on Commodity Prices: Rates in the Fully Regulated Market 59

3. Future Product Offerings 62

a) Variable-Rate, Commodity-Only Products 63

b) Fixed-Price Products 64

c) Renewable Energy Products 67

d) Value-Added or Bundled Products 71

e) CCA Products 72

f) Other Products 74

4. ESCOs' Role in the Commission's Energy Policies, Including REV and CES 75

5. ESCO Eligibility Requirements 77

a) New Applicants 77

b) Current ESCOs 77

6. ESCO Reporting and Collateral Posting Requirements 77

7. ESCO Marketing Practices 79

a) ESCO Practices; Materials; Contracts; Scripts & Training Materials 79

b) Door-to-Door Marketing 79

c) Telemarketing 79

d) Other 79

8. Customer Information and Cyber Security 79

9. Purchase of Receivables and Billing Process 80

a) Purchase of Receivables 80

b) Billing Methodologies 82
(1) Utility Consolidated Billing 82
(2) Dual Billing 83
(3) Supplier Consolidated Billing 83
10. Customer Complaints 83
a) Historical Complaints 83
(1) Prices 83
(2) Sales and Marketing 83
b) ESCO Complaint Rates v. Utility Complaint Rates 83
c) Impact of Enforcement on Complaint Rates 83
d) Complaint-Rate Trends and Implications 83
11. Transparency 85
a) Transparency in Utility Pricing 85
b) Transparency in ESCO Pricing & Products 85
c) Mechanisms for Creating or Improving Transparency 85
12. Customer Renewal Process 90
13. Customer Shopping Tools 90
14. Customer Choice 90
a) Default Service 90
b) ESCO Products 90
15. Examples of Competitive Market Frameworks in Other States 90
16. State Agency & Consumer Advocacy Group Actions 90
a) Investigations 90
b) Actions to Monitor the Market 90
17. Energy Brokers 90
a) Proposed Energy Broker Role in the Mass Market 90
b) Registration of Energy Brokers in the Mass Market 90
IV. CONCLUSION 91

I. PRELIMINARY STATEMENT

The prices charged to residential and small commercial (mass market) customers by energy service companies (ESCOs) for electric and gas commodity service are substantially higher than the prices charged by the utilities. Additionally, the large gulf between ESCO and utility charges is not justified by the offering of energy-related value-added services. Instead, mass market ESCO customers have become the victims of a failed market structure that results in customers being fooled by advertising and marketing tricks into paying substantially more for commodity service than they had remained full utility customers, yet thinking they are getting a better deal. Rather than fierce ESCO against ESCO price competition working to protect customers from excessive charges, ESCOs have deliberately obfuscated prices and resisted market reforms such that the Commission's decision to allow ESCOs access to the utility distribution systems to sell electric and gas commodity products to mass market customers has proven to be no longer just and reasonable. The Commission has an obligation under the Public Service Law (PSL) to rectify this situation, which can only be done through either a full revocation of retail access for mass market customers, or a fundamental reset in the retail access rules in the manner proposed by Staff in this brief.

To satisfy its ongoing obligation to ensure that retail markets are providing their commodity offerings at just and reasonable rates, the Commission initiated this ESCO Track I proceeding by notice issued December 2, 2016.[1] That notice directed the parties to submit testimony and exhibits addressing, to the extent relevant to their positions, 20 questions.[2] The overarching question among those 20 is whether ESCOs should be prohibited, in whole or in part, from serving mass market customers, and how the Commission should regulate the ESCOs and their product offerings.[3]

---

1 Case 15-M-0127 et al., In the Matter of Eligibility Criteria for Energy Service Companies, Notice of Evidentiary and Collaborative Tracks and Deadline for Initial Testimony and Exhibits (December 2, 2016) (December 2016 Notice).

2 Id. at 5-8.

3 Id. at 5-6, questions 1-6.

In order to analyze the retail markets to determine whether they are or are not providing commodity products at just and reasonable rates, the Commission also directed that the record for Track I contain data for the years 2014 through 2016 including the number of customers served by the ESCOs, volume of sales in dollars and in kilowatt hours (kWh).[4] This, and other data, were to be used to analyze the prices that ESCOs have charged for electric or gas commodity on an annual basis during the period 2014-2016 compared to the incumbent utilities, including whether the ESCOs were profitable or not, and whether under the current mass markets structure, ESCOs can profitably offer lower prices on an annual basis compared to the incumbent utility.[5] Other questions sought information regarding the marketing practices of the ESCOs, whether customers were able to obtain information about the relative prices and offerings of the ESCOs and utilities and their likely ability to understand this information, including evidence regarding the transparency of the retail markets and customer complaints about ESCO service and practices.[6]

As we explain in this initial brief, the retail energy markets for the mass market customers are not functioning as the Commission originally intended for those customers. The Commission's intention in opening the retail markets to competition was for customers to realize the benefits of competition – lower prices for customers. Evidence proves that, on an aggregated basis, ESCOs are charging mass market customers significantly more than those customers would have been charged if they instead remained as full service utility customers. According to the data provided by the utilities, the approximately two million New York State residential utility customers who took commodity service from an ESCO collectively paid almost $1.2 billion more than they would have paid if they purchased commodity from their distribution utility during the 36-months ending December 31, 2016. Additionally, small commercial customers

---

4 Id. at 6-7, questions 9-11.

5 Id. at 7, questions 12-13.

6 Id. at 6, 7-8, questions 7, 14-20.

paid $136 million more than they would have paid if they instead simply remained with their default utilities for commodity supply for the same 36-month period. Combining the residential and small commercial customer classes, mass market customers were "overcharged" by over $1.3 billion dollars over this time period. Finally, the data also shows that low-income customers (a subset of the residential customer mentioned above) who took commodity service from an ESCO collectively paid in excess of $146 million more than they would have paid if they took commodity supply from their utility. Staff has shown that the lack of transparency in the mass markets for commodity service does not allow customers to make rational price comparisons among all competitors in the market (the ESCOs and the incumbent utility). Additionally, the evidence developed by Staff proves that the marketing and enrollment practices of many of the ESCOs are not in accord with the Commission's Uniform Business Practices (UBP) for ESCOs and that their marketing practices rely on pressure tactics and unfulfilled promises that the customer will save money on commodity. In contrast, the evidence clearly demonstrates that, overall, mass market customers paid $1.3 billion more than they would have if they simply remained with their default utility provider during the 2014-2016 period that the Commission directed be analyzed in this Track I proceeding.

Most customers are receiving no material energy-related value-added products or services to account for the excess charges. Thus, a majority of mass market customers are receiving nothing more than the same electrons or therms they would have received from the utility, but at a significantly higher price. These facts, combined with evidence in the record of ESCO marketing abuses, lack of price transparency, and high complaint rates, demonstrate that the Commission must take action to protect mass market customers and to ensure they receive commodity service at just and reasonable rates.

Further, in light of the pricing abuses ESCOs are committing against their customers, Staff recommends that the Commission direct the utilities to prohibit ESCOs from using their distribution systems to provide commodity service to mass market

customers (both residential and small commercial, as defined by the Commission and discussed in sections III.C.1.a.(i) and III.C.1.b.(i) of this brief), unless Staff's eleven recommendations are implemented by the Commission (Tr. 2032, ln 18 to Tr. 2037). These 11 recommendations are discussed in detail in Section III.C.3.a, below.

Briefly, Staff's recommendations are that ESCOs not be allowed to use the utilities' systems to distribute their commodity unless the ESCO provides a guarantee that each customer's total electric and/or gas bills are lower than, or no greater than, that charged by the utility for delivery and commodity service over the calendar year. That said, an ESCO may provide customers energy generated through 100 percent renewable resources, that are delivered to and consumed in New York and otherwise in compliance with the Commission's environmental disclosure program requirements, at a premium to utility service. We also recommend that aggregation of customers be allowed through either a Not For Profit (NFP) or municipal entity or Community Choice Aggregation (CCA) utilizing a professional energy buyer acting as a fiduciary to the CCA and independent of the ESCO.

Commodity product and price transparency is a tremendous problem in the retail energy markets, as discussed in Section III.C.11., thus the Commission must direct that mass market ESCO customer bills disclose a relative bill comparison showing the current bill charges and what the customer would have paid had they taken delivery and commodity from their utility. Furthermore, the Commission must establish a reporting requirement to ensure that the Commission and the Department can monitor ESCOs to ensure that they are not charging customers more than what the utility would have charged over the calendar year. The protection of customer data is critical, and the Commission should direct the ESCOs to protect this confidential data with appropriate cyber security measures.

ESCO marketing practices are frequently abusive to customers, as discussed in detail in Section III.C.10. Therefore, the Commission should prohibit ESCOs from using the utilities' systems to deliver commodity to their customers unless

they agree not to use door-to-door, point of sale, telephonic sales, or similar marketing practices, since the record proves that customers are often provided incorrect or incomplete information, coupled with a lack of transparency, upon which they make their decision as to whether to sign up with the ESCO. ESCO marketing should be limited to direct mail, electronic communications (such as e-mail), or similar forms of marketing where the customer initiates contact with the ESCO.

Finally, the UBP should be amended to conform to our recommendations, ordering clauses as contained in Exhs. 724 (SP-12) and 725 (SP-13) should be adopted, and the Commission should provide for an orderly transition to implement our recommendations, and not allow itself to be distracted from implementing our recommendations by the offering of "value-added" services by the ESCOs in conjunction with their commodity offerings.

The Commission has the jurisdiction and authority to establish and modify the conditions under which ESCOs may offer electric and gas commodity service to customers, and even whether they should be prohibited from using the distribution utilities' systems to provide commodity service. The Commission's authority to oversee ESCO product offerings, including setting limits on the prices charges by ESCOs, has been upheld by the courts.

In light of the above, the Commission should take action to reform the retail commodity marketplace to protect New York's mass market customers. As discussed in detail in this brief, the Commission should take action to cap ESCO commodity prices at the utility rate. This will serve to further the Commission's primary objective in establishing the retail energy markets -- lower commodity rates for customers.

II. BACKGROUND

A. PROCEDURAL HISTORY

1. Creation of the Retail Markets

In the 1980's, utility regulators began unbundling utility service into transport and energy (commodity) components. (See Associated Gas Distribs. v Federal Energy Regulatory Commn., 824 F2d 981, 997-1001 [DC Cir. 1987] [affirming, as lawful, a decision of the Federal Energy Regulatory Commission (FERC) that "bundled" gas rates were discriminatory and anticompetitive and needed to be unbundled to yield open access to transportation in order to achieve "just and reasonable" rates]). As a result of "unbundling," the cost for the provision of natural gas was billed as two components: a charge for the transportation and distribution of the gas, and a charge for the gas itself. The gas itself (commodity) could therefore be provided or contracted for by an independent, competitive, supplier.

In 1984, the New York Legislature amended the PSL to provide the Commission with the authority to require franchised providers of gas transportation and distribution services to open their pipelines to competitively provided gas. (PSL §66-d). The Commission later adopted a regulatory framework for non-utility gas marketers establishing policies and guidelines for the competitive gas market.[7]

With respect to electric commodity, the Commission began unbundling electric rates into distribution and commodity components in the 1990's in order to enable competition in the electric supply markets as well. On June 7, 1995, the Commission adopted nine principles to guide the transition to competition for electric service, the primary principle being the realization of savings and other benefits.[8]

---

[7] Case 93-G-0932, Proceeding on Motion of the Commission to Address Issues Associated with the restructuring of the Emerging Competitive Natural Gas Market, Opinion 94-26, Opinion and Order Establishing Regulatory Policies and Guidelines for Natural Gas Distributors (issued December 20, 1994) (Opinion 94-26).

[8] Case 94-E-0952, supra, Opinion No. 95-7, Opinion and Order Adopting Principles to Guide the Transition to Competition (Issued June 7, 1995) at 5 (Opinion 95-7).

Then, in Opinion 96-12, the Commission stated that the operation of market forces could be expected over time to produce retail rates that would be lower than would otherwise be expected under a regulated environment.[9] The Commission's expectation was that retail competition and increased consumer choice would result in lower customer bills and the introduction of innovative products and services, and that there would be market based solutions to public policy issues, including aggressive pursuit of energy efficiency measures.[10] The Commission subsequently adopted a set of rules and guidelines to govern interactions between the utilities, customers, and ESCOs known as the UBP.[11]

Also in 1996, the Albany County Supreme Court held that the Commission could effectuate competitive access to utility systems by unbundling utility rates into monopoly (transmission and distribution) and competitive (energy commodity) portions. (Matter of Energy Assn. of New York State v Pub. Serv. Commn. of State of New York, 169 Misc 2d 924, 932-37 [Sup Ct Albany County 1996], affd on other grounds, 273 AD2d 708 [3d Dept 2000]).

The Supreme Court further rejected utility claims "that the PSC may not allow market pressures to set rates for the generation component of electric service." (Energy Assn., 169 Misc.2d at 936). In doing so, the court relied on Federal case law holding that "FERC's approval of market-based pricing was 'just and reasonable'" because, in part, FERC had emphasized that it would exercise its oversight powers to assure that a market rate remained 'just and reasonable.' (Id. at 936). The utilities did not

---

9 Case 94-E-0952, Competitive Opportunities Regarding Electric Service, Opinion No. 96-12, Opinion and Order Regarding Competitive Opportunities for Electric Service (Issued May 20, 1996) at 30-32 (Opinion 96-12).

10 Id. at 30-32.

11 Case 98-M-1343, In the Matter of Retail Access Business Rules, Order Adopting Uniform Business Practices and Requiring Tariff Amendments (issued January 22, 1999).

appeal Albany County's decision; a PULP appeal was dismissed on standing grounds. (Energy Assn., 273 AD2d 708, 710-11).

Then, in 2002 the Legislature amended PSL §53; as a result, the Commission's regulations at 16 NYCRR Part 11 (the Home Energy Fair Practices Act or HEFPA) were also amended so that HEFPA protections extended to residential customers taking service from an ESCO. (L. 2002, c. 686). Moreover, the Commission developed several policies to promote the development of competitive retail energy markets[12] including: providing utilities with significant financial incentives to migrate blocks of customers to ESCOs;[13] using utility customer service call centers to facilitate the transfer of customers to ESCOs;[14] the purchase of ESCO accounts receivable by utilities in combination with the continuation of utility consolidated billing;[15] the unbundling of utility bill formats;[16] and procedures for making customers' utility account numbers more readily available to ESCOs.[17] In an Order issued October 15, 2008, the Commission concluded that statewide retail access markets were mature and that

---

[12] Case 00-M-0504, Provider of Last Resort Responsibilities, the Role of Utilities in Competitive Energy Markets, and Fostering the Development of Retail Competitive Opportunities, Statement of Policy on Further Steps Toward Competition in Retail Energy Markets (issued August 25, 2004)(2004 Policy Statement).

[13] Case 04-E-0572, Consolidated Edison Company of New York, Inc., Order Adopting Three-Year Rate Plan (issued March 24, 2005)(Con Edison Rate Order), Joint Proposal (JP), pp. 35-36.

[14] Case 05-M-0858, State-Wide Energy Services Company Referral Programs, Order Adopting ESCO Referral Program Guidelines and Approving an ESCO Referral Program Subject to Modifications (issued December 22, 2005).

[15] See Case 05-M-0333, Niagara Mohawk Power Corporation, Order Clarifying and Adopting Joint Proposal on Competitive Opportunities (issued April 20, 2006).

[16] Case 00-M-0504, supra, Order Directing Submission of Unbundled Bill Formats (issued February 18, 2005).

[17] Case 98-M-1343, Accent Energy LLC, Order Denying Petition and Making Other Findings (issued November 7, 2006).

ratepayers should, therefore, no longer incur incremental costs related to promotional programs unless a particular program directly benefits ratepayers.[18]

2. Growing Concerns with the Retail Markets

Then, in 2010, in response to many high bill complaints from ESCO customers, Department Staff began to investigate and evaluate the prices that ESCOs were charging. (Tr. 2055-2056, lns. 20-3). Staff subsequently reported that ESCOs were typically charging significantly higher commodity rates than the utilities for the exact same commodity with minimal or no value-added products.[19] (Id.). Attempts to informally work with ESCOs to reform the pricing schemes were ultimately unsuccessful, prompting the Commission to institute a proceeding in October 2012 to address the Commission's growing concern with the retail markets.[20]

The October 2012 Order directed Staff to undertake a review of the retail markets for mass market customers to determine whether the market was functioning as intended, and to identify areas that could be improved. (Tr. 2056-2057, lns. 21-2). Among the most significant of Staff's findings was the large premiums charged for commodity services by ESCOs compared to the utilities with no readily apparent energy-related value-added attributes. (Tr. 2058, lns. 12-17). Following that investigation, the Commission issued its Order Taking Actions to Improve the Residential and Small Non-

---

[18] Case 07-M-0458, Policies and Practices Intended to Foster the Development of Competitive Retail Energy Markets, Order Determining Future of Retail Access Programs (issued October 27, 2008).

[19] Energy-related value-added services are products or services that can be provided by ESCOs that enhance the value of traditional utility products or services to customers. (Tr. 2063, lns. 5-8).

[20] Case 12-M-0476, et al., Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State., Order Instituting Proceeding and Seeking Comments Regarding the Operation of the Retail Energy Markets in New York State (issued October 19, 2012) (October 2012 Order).

residential Retail Access Markets on February 25, 2014 (February 2014 Order).[21] The February 2014 Order attempted to address the major flaws in the retail energy markets including, but not limited to, the lack of accurate, transparent commodity product pricing information, and predatory marketing behavior that frequently relied on customer confusion.[22] The Commission found that:

> [A]s currently structured, the retail energy commodity market for residential and small commercial customers cannot be considered to be workably competitive. Although there are a large number of suppliers and buyers, and suppliers can readily enter and exit the market, the general absence of information on market conditions, particularly the price charged by competitors, is an impediment to effective competition (i.e., neither buyers nor sellers have good information about prices).[23]

In addition to the higher prices charged by ESCOs compared to the utilities, the Commission also found that while there are a large number of ESCOs in the market, they lacked any competitive pressure that would cause the ESCOs to innovate and develop and provide real energy-related value-added services or products to mass market customers.[24] The Commission took a variety of actions in the February 2014 Order directed at improving the retail markets including: (a) the creation of utility historic bill calculators; (b) the requirement that ESCOs report their historic pricing data on a quarterly basis to the Commission; (c) the expansion of the Power to Choose website, and a requirement that the ESCOs honor the prices quoted on the website; (d) the requirement that ESCOs provide low-income customers with products that guarantee savings, or provide energy-related value-added services designed to reduce the customer's overall bill; (e) the requirement that all door-to-door and telephonic sales be subject to independent third party verification; (f) the requirement that a standardized renewal

---

[21] Case 12-M-0476 et al., supra, Order Taking Actions to Improve the Residential and Small Non-residential Retail Access Markets (issued February 25, 2014).

[22] Id. at 4.

[23] Id. at 10.

[24] Id. at 11.

notice be sent in an envelope clearly marked that the contract renewal offer is enclosed; (g) the creation of a streamlined process to facilitate prompt enforcement actions against ESCOs; and (h) the requirement that ESCOs file with the Department a list of entities marketing on their behalf. (Tr. 2059-2060, lns. 21-19).

Four parties filed petitions for rehearing, reconsideration, and clarification of the February 2014 Order and, as a result, the Commission stayed several of the actions mandated by the February 2014 Order.[25] The Commission stated that, given the breadth and complexity of the February 2014 Order, and the desire to first address the petitions for rehearing and the comments thereto, the Commission decided to stay the requirements regarding: (1) independent third party verifications; (2) service to low-income customers; (3) implementation of PSL §32(5)(d); (4) the filing of quarterly historic pricing reports; (5) price reporting on the power-to-choose website; (6) ESCO specific purchase of receivable (POR) rates; and, (7) specific redlines to the UBP.[26] Subsequently, the Commission issued an Order on February 6, 2015 addressing, among other things, the conditions for ESCO service to low-income customers enrolled in their default utility's low-income assistance programs, third party verification requirements, and whether UBP changes were adopted in conformation with the State Administrative Procedure Act (SAPA).[27] Among the directives in the February 2015 Order was the requirement that when serving low-income customers, an ESCO must either: 1) guarantee that the customer will pay no more than the customer would have paid the utility; or, 2) provide energy-related value-added services that do not dilute the effectiveness of the financial assistance programs provided by the utilities and funded by ratepayers.[28] Additionally,

---

[25] Case 12-M-0476 et al., supra, Order Granting Requests for Rehearing and Issuing a Stay (issued April 25, 2014).

[26] Id. at 4-6.

[27] Case 12-M-0476 et al., supra, Order Granting and Denying Petitions for Rehearing in Part (issued February 6, 2015) (February 2015 Order).

[28] Id. at 6.

the Commission directed that a Staff-led collaborative be convened to address implementation issues concerning the requirements for serving low-income customers.[29]

3. Protections for Low-Income Customers

The collaborative met several times throughout 2015 and, ultimately, a Collaborative Report was filed with the Commission on November 5, 2015.[30] (Tr. 2062, lns. 12-13; Tr. 2064, lns. 1-7). Following the collaborative process, the Commission issued an Order on July 15, 2016 imposing a moratorium on new enrollments and renewals of low-income customers by ESCOs.[31] The July 2016 Order found that, during the collaborative, many ESCOs indicated they were unwilling or unable to beat utility commodity prices, and that despite the efforts of the collaborative participants, no combination of commodity service and energy-related value-added services were developed that would provide a cost-effective benefit to low-income customers.[32]

Three parties filed petitions seeking rehearing or clarification, and the Commission clarified its July 2016 Order on September 19, 2016, affirming the protections directed for low-income customers in the July 2016 Order.[33] The September 2016 Order, among other things, re-adopted the low-income moratorium on an emergency basis, and sought comments on whether to continue the moratorium, terminate it, or continue it with modifications.[34] Then, on December 16, 2016, the

---

29 Id. at 7-8.

30 Case 12-M-0476 et al., supra, Report of the Collaborative Regarding Protections for Low-Income Customers of Energy Service Companies (November 5, 2015).

31 Case 12-M-0476 et al., supra, Order Regarding the Provision of Service to Low-Income Customers by Energy Service Companies (issued July 15, 2016) (July 2016 Order).

32 Id. at 17.

33 Case 12-M-0476 et al., supra, Order on Rehearing and Providing Clarification (issued September 19, 2016) (September 2016 Order).

34 Id. at 6-7.

Commission issued an Order[35] stating that "[a]fter years of investigation and numerous thwarted attempts to address the persistent, unresolved problem of ESCO overcharges to residential customers in general and the specific issues arising from overcharges to [low-income customers]..."[36] it is necessary to convert the moratorium on ESCO service to low-income customers into a prohibition to protect low-income customers. The December 2016 Order further stated that:

> In light of the persistent ESCO failure to address (or even apparently to acknowledge) the problem of overcharges to [low income] customers and the resulting diminution of financial assistance to those customers, by this Order, the moratorium on ESCO service to [low-income] customers directed in the July and September Orders is converted to a permanent prohibition on ESCO service to [low-income customers]. Further, the Department of Public Service is actively pursuing reforms to the retail market for mass-market customers (citation omitted). Through this process, the Commission will evaluate the products and services to be offered to mass-market customers, including energy related value-added products or services, as part of its broader effort to ensure just and reasonable rates for retail access customers.[37]

The ESCO trade associations, as well as individual ESCOs, challenged the Commission's authority to issue and enforce the July, September, and December 2016 low-income related Orders in New York State Supreme Court, which ultimately upheld the Commission Orders and denied and dismissed, in all respects, the petitioners' requests. (National Energy Marketers Assn. v New York State Pub. Serv. Commn., 57 Misc. 3d 282 [Sup Ct Albany County 2017] appeal pending). There the Court decided that the record before the Commission fully supported imposing a prohibition on ESCO service to low-income customers given "the overwhelming evidence that low-income [sic] ESCO customers are paying more than the utility would charge for energy..." and

---

[35] Case 12-M-0476 et al., supra, Order Adopting A Prohibition On Service To Low-Income Customers By Energy Services Companies (issued December 16, 2016) (December 2016 Order).

[36] Id. at 2.

[37] Id. at 3.

the fact that ESCOs, despite claims to the contrary, have been unable to identify a single energy-related value-added product or service that would provide price savings. (Id. at 57 Misc. 3d 296; "In spite of ESCOs repeated insistence that the Commission recognized the price guarantee offered by the energy companies as a value-added project, this simply is not and was never the case, and instead the record establishes that the ESCOs during the Collaborative—and to this day—- were unwilling or unable to identify a value added *energy* product which would provide a price guarantee.").

4. Mass Market Customers and the Current Proceeding

Turning to retail access issues as they relate to mass market customers in general, not just low-income customers, the Commission addressed the broader retail market concerns in its February 2016 Order which directed that, when serving a mass market customer, an ESCO must provide that customer with a product that either guarantees savings in comparison to what the customer would have paid as a full-service utility customer or provides at least 30 percent renewable electricity.[38] In the February 2016 Order, the Commission again noted that mass market customers have not seen benefits from being ESCO customers.[39] Staff then held a series of collaborative meetings with ESCOs, utilities, consumer advocates, and other stakeholders, between April 15, 2016 and March 19, 2017, and received comments from the parties on a number of issues related to the reshaping of the retail energy market for mass market customers. (Tr. 2070, lns. 16-21).

The ESCO trade associations, as well as individual ESCOs, challenged the February 2016 Order, and Albany County Supreme Court restrained the Commission

[38] Case 15-M-0127 et al., supra, Order Resetting Retail Energy Markets and Establishing Further Process (issued February 23, 2016) (February 2016 Order).

[39] Id. at 2.

from enforcing Ordering Clauses 1-3 of the Order.[40] National Energy Marketers Assn. v New York State Pub. Serv. Commn., 53 Misc. 3d 641 [Sup Ct Albany County 2016]). The Court found that the Commission violated ESCOs' procedural due process rights insofar as the SAPA notice used by the Commission mentioned revisions to the UBP, but not with regard to the imposition of pricing protections to customers other than low-income customers. However, the Court also concluded that the claim that the Commission lacks jurisdiction to impose pricing requirements on ESCOs "surely defies logic." (Id. at 53 Misc. 3d 649-50). The challenging parties appealed the Supreme Court's decision that the Commission has jurisdiction over ESCO prices and, on July 27, 2017, the Appellate Division, Third Department, affirmed that decision of the Supreme Court. (Matter of Retail Energy Supply Assn. v Public Serv. Commn. of The State of New York, 152 A.D.3d 1133 [3d Dept 2017] appeal pending). There, the Court found that "the PSC's broad statutory jurisdiction and authority over the sale of gas and electricity authorized it to impose the limitations set forth in the Reset Order," and further noted that "it is the PSC's broad jurisdiction that enabled it to allow ESCOs access to utility systems in the first place. The PSC essentially maintains that this same authority allows it to impose limitations on ESCO rates as a condition to continued access. We agree." (Id. at 152 A.D.3d 1137-38).

Continuing its efforts to address concerns with the retail markets serving mass market customers, the Commission issued the December 2016 Notice which established two tracks (Track I and Track II) in these proceedings. In Track I, the

[40] Those three ordering clauses directed ESCOs to: (1) only enroll new customer or renew existing customers on products that guarantees that the customer will pay no more than were the customer a full-service customer of the utility or provide an electricity product derived from at least 30 percent renewable sources; (2) receive affirmative consent from customers prior to renewing from a fixed rate or guaranteed savings contract into a contract that provides renewable energy but does not guarantee savings; and (3) submit a filing by the Chief Executive Officer (CEO) or equivalent corporate officer of the ESCO certifying that any enrollments will comply with the conditions of the February 2016 Order. The remaining Ordering Clauses were not vacated by the Court and remain in effect today.

Commission expects the parties to address, in a litigated proceeding, "(a) whether ESCOs should be completely prohibited from serving their current products to mass market customers; (b) whether the regulatory regime, rules and Uniform Business Practices (UBP) applicable to ESCOs need to be modified to implement such a prohibition, to provide sufficient additional guidance as to acceptable rates and practices of ESCOs, or to create enforcement mechanisms to deter customer abuses and overcharging..."[41] Track II, using a collaborative process, would commence in the future to consider whether new ESCO rules and products can be developed that would provide sufficient real value to mass market customers at just and reasonable rates.[42]

B. THE RETAIL MARKETS TODAY

1. Overview of the Retail Energy Markets Serving Mass Market Customers (December 2016 Notice Questions 9, 10, 11, and 12)

The percentage of residential and small commercial customers served by ESCOs is considerable. (Tr. 2041-2042, lns. 5-4). The distribution utilities provide, as of December 2016, electric delivery service to approximately 5.9 million residential customers, and approximately 927,700 small commercial customers. (Tr. 2041, lns. 8-12). Comparatively, as of December 2016, ESCOs provided electric supply service to approximately 1.2 million, or 20 percent, of residential customers, and 160,000, or 33 percent, of the non-residential small commercial customers. (Exh. 712 (SP-2); Tr. 2041, lns. 17-23). With respect to gas, the utilities provide gas delivery service to approximately 4.4 million residential customers and 414,000 small commercial customers in New York State. (Tr. 2041, lns. 13-17). ESCOs provided gas commodity supply service to approximately 754,000, or 17 percent, of the residential and 130,000, or 31.4 percent, of the small commercial customers. (Tr. 2041-2042, lns. 24–4; see also Exh. 712 (SP-2)).

---

41 Id. at 3-4.

42 Id.

2. ESCO Registration and Eligibility

The requirements for an ESCO to obtain and maintain eligibility are defined in UBP §2. The UBP sets forth the necessary contents of an ESCO's eligibility application, the review process undertaken by the Department of Public Service, the ongoing filings that an ESCO must make to maintain eligibility, as well as the conditions under which eligibility can be revoked. (UBP §§2.A.-2.D.). As of December 2016, there were approximately 155 eligible, and 140 active, electric commodity ESCOs, and 150 eligible, and 130 active, natural gas commodity ESCOs throughout the state. (Tr. 2045, lns. 10-13).

3. ESCO Business Practices

This subsection is not addressed here, but is instead addressed throughout this brief.

4. Billing and Purchase of Receivables

See Section III.C.9. of this brief for a discussion of billing practices and purchase of receivables.

5. Current Status of the UBP

(December 2016 Notice Question 6)

The Commission's UBP serves not only to define an ESCO's interactions with customers and utilities, but also imposes the standards to which an ESCO must adhere in order to remain in compliance with the Commission's performance requirements (see Exh. 723 (SP-11)). As such, the UBP defines and codifies all interactions between an ESCO, its customers, and the distribution utility. Since it was established by the Commission in 1999, the UBP has been modified and refined numerous times in response to changes in the retail markets and/or customer abuses discovered through the customer complaint review process. (Exh. 715 (SP-4)). Notably, however, the UBP does not currently address issues regarding the prices charged by ESCOs, such as rate transparency, and does not set or cap those prices in any way. (Tr. 2109, lns. 22-24).

6. Monitoring and Enforcement

(December 2016 Notice Questions 5, 7, 14, and 15)

As indicated, the UBP provides the standards by which ESCO compliance with their customer facing operations, including appropriate marketing practices, are measured. (Tr. 2050, lns. 1-5). Enforcement actions against ESCOs are typically initiated after a negative trend in customer complaints is noted by the Department's Call Center Staff or by anti-competitive complaints raised by competing ESCOs or the distribution utility. (Tr. 2104, lns. 11-15). A Staff investigation begins first by gathering the facts regarding the customer complaint or inquiry regarding an ESCO. (Tr. 2104, lns. 18-21). Staff then communicates with the affected parties directly via email or telephone to determine if in fact there appear to be UBP violations. (Tr. 2104-2105, lns. 21-3). If Staff observes a trend in complaints or UBP violations related to, for example, deceptive or anti-competitive marketing practices, or customer slamming,[43] or the ESCO's fails to meet compliance reporting requirements, including ESCO price reporting, notices of Apparent Failure (NOAFs) are issued, which detail the specifics of the complaints and alleged UBP violations by the ESCO or its agents, for which the ESCO is ultimately responsible. (Tr. 2103-2104, lns. 16-7).

Since January 2013, the Department of Public Service, Office of Consumer Services (OCS) has issued 79 NOAFs. (Tr. 2103, lns. 10-12). If the ESCO fails to adequately respond to or address the issues identified in Staff's NOAF, Staff recommends that the Commission issue an Order to Show Cause (OTSC) requiring the ESCO to explain why, in light of the allegations, it should be allowed to continue to market or otherwise not be subject to consequences or sanctions as provided for in the UBP. (Tr. 2108-2109, lns. 20-4). The Commission issued OTSCs to three ESCOs in 2013, six in 2015, six in 2016, and four were issued in 2017 as of the date testimony was filed. (Tr. 2109, lns. 7-10).

---

[43] UBP §1 defines slamming as the enrollment of a customer by an ESCO without authorization.

We caution the Commission that the relatively small number of Commission actions is no indication that the market is performing as it should or that the Commission's current enforcement powers are strong enough to correct the on-going failings of ESCOs serving the mass market. Because the UBP currently does not address commodity price transparency, nor otherwise limit in any way the prices charged by ESCOs, the Commission is unable to address the fundamental flaw of price transparency in the retail markets which allows the majority of the ESCO community to aggressively market and charge commodity prices that significantly exceed the prices charged by the utility for supply. (Tr. 2109-2110, lns. 21-5). As the Staff Panel explained in its testimony, the current enforcement mechanisms are reactive, and typically driven by customer complaints or known UBP violations, and many mass market customer complaints concern high commodity prices and lack of transparency as to what they would pay after the "teaser rate" ended after a few months, which are presently not violations of the UBP. (Tr. 2109, lns. 18-20). The data in the record proves that, in aggregate, ESCOs have charged their residential customers over $1.3 billion more than they would have paid their default utility if they had remained with their utility for commodity service for the years 2014 through 2016. (Exh. 711 (SP-1a Confidential); Exh. 720 (SP-8 Confidential)). In addition to concerns regarding the prices charged by ESCOs, the Commission has made several attempts through the years to curtail aggressive marketing. (Tr. 2110, lns. 6-9). On a daily basis Staff hears from, and works with, customers who tell us that they were subjected to high pressure sales tactics by ESCO employees and agents. (Tr. 2110, lns. 6-9). In summary, the Commission cannot correct the flaws in the mass markets solely through amendments to the UBP or modifications to its enforcement process because the UBP does not regulate the prices ESCOs charge for their products. Real change to the ESCO regulatory regime, as discussed in this brief, is required to protect residential and small commercial customers and ensure that their commodity rates are just and reasonable.

III. ANALYSIS

A. REGULATORY REGIME

1. The Commission's Vision in Opening the Competitive Markets

The Commission stated its expectation that retail competition and increased consumer choice should result in lower bills and the introduction of new products and services.[44] The Commission posited that, over time, the market forces should produce lower retail commodity rates than would be expected in a fully regulated commodity environment and ESCOs would drive or at least facilitate the introduction of innovative products and services.[45] The Commission further stated its expectation that there would be market-based solutions to public policy issues, including aggressive pursuit of energy efficiency measures and a competitive energy service market.[46]

The Supreme Court concluded that the Commission could use its ratemaking authority to effectuate competitive access to electric utility systems. The Supreme Court further rejected utility claims "that the PSC may not allow market pressures to set rates for the generation component of electric service." (Energy Assn. v Pub. Serv. Commn., 169 Misc 2d at 932-36 [Sup Ct Albany County, Nov 25, 1996] affd on other grounds, 273 AD2d 708 [3d Dept 2000]).

2. Application of the Public Service Law to ESCOs

(December 2016 Notice Questions 2, 3, 4, 12, and 20)

a. Scope of Commission Jurisdiction Under the PSL

The jurisdiction of the Commission to control ESCO product offerings, including setting limits on the prices charged by ESCOs, has been upheld by the courts. Most recently, the Appellate Division, Third Department, held that "the PSC's broad

---

[44] Case 94-E-0952, Competitive Opportunities Regarding Electric Service, Opinion No. 96-12, Opinion and Order Regarding Competitive Opportunities for Electric Service at 30-32 (Issued May 20, 1996) (Opinion 96-12).

[45] Id. at 30.

[46] Id. at 31.

statutory jurisdiction and authority over the sale of gas and electricity authorized it to impose the limitations set forth in the Reset Order." (Matter of Retail Energy Supply Assn. v Public Serv. Commn. Of The State of New York, 152 A.D.3d 1133, 1137–8 [3d Dept. 2017] appeal pending). The Court went on to hold that "it is the PSC's broad jurisdiction that enabled it to allow ESCOs access to utility systems in the first place," and agreed with the position of the Commission that "this same authority allows it to impose limitations on ESCO rates as a condition to continued access." (Id. at 1138). ESCOs that want to utilize the utility distribution system to serve customers in New York are subject to the full regulation of the Commission as to whether they can use such systems.

The Commission has broad legal authority to oversee ESCOs, pursuant to its jurisdiction in Articles 1 and 2 of the PSL.[47] ESCO eligibility requirements were originally created in Opinion 97-5,[48] and were reflected in the UBP in 2003.[49] In both instances, the Commission's authority under PSL §66(5) was used to direct the distribution utilities to incorporate the applicable requirements in their respective tariffs. Since the eligibility requirements were originally established, those criteria have been amended on numerous occasions. For example, in 2003, ESCOs were required to submit

---

[47] See PSL §5 (Commission's broad statutory grant of authority over the sale of natural gas and electricity); see also Case 98-M-1343, In the Matter of Retail Access Business Rules, Order Adopting Amendments to the Uniform Business Practices, Granting in Part Petition on Behalf of Customers and Rejecting National Fuel Gas Distribution Corporation's Tariff Filing at 10 (issued October 27, 2008) (2008 Order); PSL §53 (stating Article 2 of the PSL applies to "any entity that, in any manner, sells or facilitates the sale or furnishing of gas or electricity to residential customers").

[48] Case 94-E-0952, In the Matter of Competitive Opportunities Regarding Electric Service, Opinion and Order Establishing Regulatory Policies for the Provision of Retail Energy Services (issued May 19, 1997) (Opinion 97-5); Opinion and Order Deciding Petitions for Clarification and Rehearing (issued November 18, 1997) (Opinion 97-17).

[49] Case 98-M-1343, supra, Order Adopting Revised Uniform Business Practices (issued November 21, 2003).

sample standard customer agreements and disclosure statements in order to be deemed eligible to provide electricity and/or natural gas commodity service in New York.[50] In adopting ESCO eligibility requirements, the Commission stated that such requirements are necessary to ensure that ESCOs provide consumer protections, to give the public confidence in ESCOs, to ensure competency of providers, to protect system reliability, and to oversee development of the market.[51] Eligibility requirements remain a necessary baseline tool to accomplishing the Commission's related goals and policies.

In 2002, the Legislature amended PSL Article 2 to add PSL §53 and specifically to require that ESCOs adhere to PSL Article 2, also known as the Home Energy Fair Practices Act (HEFPA), which provides numerous protections to residential utility customers. (L. 2002, c. 686). Following this amendment, while ESCOs were required to afford HEFPA protections to customers, HEFPA also provides certain rights to utilities and ESCOs. For instance, ESCOs could suspend or terminate the provision of utility distribution service to compel payment of unpaid ESCO commodity bills. If, however, upon service termination the ESCO commodity bills exceeded what the utility would have charged for commodity, then a customer need only pay the lesser utility bill to reinstate service. (PSL §32(5)(d)).

The Commission also has broad authority over utility tariffs, which contain the rules and regulations of the particular electric and gas distribution utility and, as such, places conditions on when the distribution utilities may allow, or are required to allow, ESCOs to use utility's electric and gas systems to distribute electricity and natural gas to ESCO customers.[52] In fact, the creation of competitive retail markets was an exercise of Commission ratemaking authority over jurisdictional utilities whereby the unbundling of electric rates was accomplished purely through the Commission's exercise of its authority to set "just and reasonable" rates for gas and electric utilities pursuant to PSL §65(1).

---

50 Id.

51 Opinion 97-5.

52 PSL §66(5).

(Energy Assn. v PSC, 169 Misc 2d at 932-36). The unbundling of utility rates enabled the creation of the retail market by subsequently imposing upon utilities the obligation to deliver eligible competitors' energy. (Id. at 932-34). In Energy Assoc., Albany County Supreme Court observed that the decision to restructure traditional monopoly utility markets had to advance the Legislature's purpose of bringing customers just and reasonable prices for electric service. (Id. at 936-7).

Moreover, the Commission's obligation to ensure that the retail markets are providing just and reasonable rates is an ongoing obligation and central to the issues and concerns raised by the Commission in these proceedings (December 2016 Notice) and addressed in Staff testimony. Restructuring of the utility monopolies was approved based on the assumption that the Commission would exercise continuing oversight to ensure that prices in the competitive energy markets would remain just and reasonable. (Energy Assoc. v PSC, 169 Misc 2d at 936-7). In upholding utility restructuring, the Court relied heavily on precedent stating FERC approval of market-based rates was reasonable because FERC would continue to exercise oversight power to ensure that market prices were just and reasonable. (Energy Assoc. v PSC, 169 Misc 2d at 936, citing Elizabeth Town Gas Company v Federal Energy Regulatory Commn., 10 F3d 866, 869 [DC Cir 1993]). Utility rates are set by the Commission and are, therefore, just and reasonable.

In satisfying its continuing obligation to ensure that retail markets are providing just and reasonable rates, the Commission may limit or otherwise control what products ESCOs can offer – including setting limits on price - in order to retain access to utility distribution systems. Using utility rates to cap ESCO commodity offerings is a logical and reasonable proxy in the absence of full rate regulation of ESCO pricing. Absent such imposition of pricing requirements, the retail mass markets should not continue. Restructured energy markets that have resulted in higher prices run contrary to the fundamental legal basis for such markets. The Commission basis for unbundling rates or maintaining rate unbundling is absent, and not just and reasonable, if the resulting retail market rates were higher than comparable bundled utility rates. In addition, if the

ESCO rates are generally, and often significantly, higher than utility rates, it is not reasonable - and certainly not in the public interest - to continue to allow ESCOs access to utility systems. The current system cannot be reconciled with the Commission's responsibility to ensure rates are just and reasonable.

Additionally, the Commission's authority over ESCO pricing through limiting competitive access was further solidified by Chapter 416 of the Laws of 2010, adding GBL §349-d (11-12) to preserve Commission authority over ESCO eligibility and marketing practices.[53] GBL §349-d (11-12) is not a grant but rather a reservation of the Commission's authority to suspend ESCO eligibility or control their marketing practices. Those provisions recognize that the Commission's authority to control ESCO access to utility systems allows it to impose limits on such access. There is, therefore, no question that the Commission has the jurisdiction and authority to establish and modify the conditions under which ESCOs may offer electric and gas commodity service to mass market customers.

b. Should ESCOs Be Required to File Tariffs?

ESCOs should not be required to file tariffs. Such a requirement is unnecessary to effectuate the pricing controls on ESCOs that we recommend because, as stated above, the Commission has jurisdiction over ESCO prices through its very broad powers to regulate the rates, service classifications, and the terms and conditions under which utility service is furnished to customers.[54] Additionally, the expense and administrative burden associated with having each ESCO file a rate case would not make sense given the available alternative mechanisms to achieve the same goal. Therefore, to effectuate the required changes in the mass markets, the Commission can direct the

---

[53] GBL § 349-d (11 & 12)

[54] Matter of Campo Corp. v. Feinberg, et al., 284 AD 302, at 304-307 (3rd Dept. 1952), aff'd. 303 NY 995. In Campo, the Appellate Division held and the Court of Appeals affirmed at the Commission could prohibit the submetering and resale of electricity through tariffed terms and conditions of service.

utilities to file tariff amendments in compliance with the Track I order it issues in these proceedings.

c. Financial Oversight

More rigorous financial oversight of ESCOs is necessary to ensure the retail markets meet the objectives identified by the Commission when it initially established the markets. However, as discussed in Section III.A.2.a., above, the Commission need not assert jurisdiction under PSL Article 4 to exert control over the prices charged by ESCOs. The Commission has authority to control practices of even non-jurisdictional entities such as ESCOs through the imposition of conditions on access to utility facilities. (Matter of Campo Corp. v Feinberg, 279 AD 302, 306 3d Dept [1952]). In Campo Corp., non-jurisdictional "submeterers" of electricity (i.e., owners of multiple-dwelling buildings that purchased electricity from the utility and resold it to their tenants) challenged a Commission decision to curtail that practice. The Court held that although the Commission lacked authority to directly regulate submeterers, it did have authority to impose conditions upon the utility's provision of service to them. (Id. at 305-06). In this instance, the PSL precluded Commission jurisdiction over providers of submetered electricity. (PSL §2 [10, 11, 12 and 13] [Exempting entities providing gas or electricity to their tenants]). Subsequently, however, and identical to the application to ESCOs in the present proceedings, submeterers became subject to HEFPA under the 2002 amendments adding PSL §53. (L. 2002, c. 686). Thus, oversight over the products ESCOs can offer in New York, including the prices they can charge, can be effectuated through restrictions on access to the utility distribution system and the Commission's ongoing obligation to ensure that the rates arising out of the retail markets are just and reasonable. (Retail Energy Supply Assn., 152 A.D.3d at 1137–8).

3. Enforcement Powers Over ESCOs

(December 2016 Notice Questions 2 and 19)

a. Commission's Enforcement Mechanisms and Efforts

The Commission has taken steps to ensure market participants are complying with Commission rules and regulations since the creation of the retail markets. Since January 2013, OCS has issued 79 NOAFs. (Tr. 2103, lns. 16-23). Violations warranting the issuance of an NOAF can include deceptive marketing practices, customer slamming, or an ESCO's failure to meet compliance reporting requirements as specified in the UBP, or otherwise not in compliance with a Commission order. (Id.). Following the issuance of an NOAF, the ESCO implements either improved training or procedural processes to address and resolve the immediate UBP violation concerns. If the UBP violations are not remedied, or the ESCO fails to respond to the NOAF, Staff would request that the Commission issue an Order to Show Cause, directing the ESCO to explain why, in light of the allegations, it should be allowed to continue to market to customers in New York, or otherwise not be subject to consequences as provided for in the UBP. (Tr. 2208-2209, lns. 22-24).

While the existing enforcement mechanisms have been effective in addressing violations of the UBP that are brought to the attention of the Commission or OCS, they are not sufficient to address the concerns identified by Staff in its testimony. (Tr. 2209-2210, lns. 15-12). As evident in the Commission's December 2016 Notice, there are ongoing concerns with the retail markets surrounding the prices charged by ESCOs and the lack of innovative products offered, which ultimately contributes to the lack of real value being offered to customers by the retail markets.[55] Under the current UBP, there are no requirements or standards regarding the prices ESCOs can charge for commodity – thus there is nothing that can be enforced using the Commission's existing enforcement mechanisms. Those mechanisms have proven insufficient to address the primary concerns identified by the Commission and at the heart of these proceedings.

[55] December 2016 Notice at 3-4.

b. Attorney General's Enforcement Mechanisms and Efforts

This subsection is not addressed in this Brief.

4. Other State and Federal Laws Applicable to ESCOs

This subsection is not addressed in this Brief.

B. USEFULNESS & ACCURACY OF COMPARING ESCO AND UTILITY RATES

1. Utility Bill Comparison methodologies

(December 2016 Notice Questions 12, 16, and 17)

In the February 2014 Order, the Commission addressed several major flaws in the mass markets, including the lack of accurate, transparent commodity product pricing information for customers, and predatory marketing behavior that too often relied on customer confusion.[56] Therefore, to address the lack of commodity pricing transparency and utility-to-ESCO pricing comparisons, the Commission directed the utilities to develop historic bill calculators that would "…allow existing ESCO customers receiving a consolidated utility bill to compare the total amount charged, including utility delivery service and ESCO supply charges, with the total that the customers would have paid if purchasing commodity service from the utility for that period."[57]

In these proceedings, and to be responsive to the Commission's directives in questions 9, 10, and 11 of the December 2016 Notice, Staff performed a total utility-to-ESCO, bill-to-bill comparison. (Tr. 2112, lns. 5-12). The comparison of the total cost for energy, including commodity provided by an ESCO versus commodity provided by the utility, is more conservative and accurate comparison than if only comparing a customer's utility commodity service rate to an ESCO's commodity service rate. (Id.). In fact, such a comparison is to the ESCOs' advantage because it also reflects any tax advantages that an ESCO customer received. (Tr. 2112, lns. 12-15).

---

[56] February 2014 Order at 4.

[57] Id. at 13-15.

To evaluate ESCO commodity charges relative to utility pricing, we aggregated the historical bill data provided by the utilities in response to Staff IR DPS-Utility 5 (Exh. 709). This analysis was summarized in Exh. 716, which provides an aggregated relative total bill comparison of what ESCO customers were billed for ESCO commodity and utility delivery services, compared to what they would have been billed for commodity and delivery service from the default utility. (Tr. 2113, lns. 9-16). This data indicates that customers served by ESCOs were generally charged significantly more for ESCO provided commodity service than they would have been charged if they received commodity service from their utility. (Id.). Specifically, as shown at the top of page 1 of Exh. 716, residential utility customers who took commodity service from an ESCO collectively paid almost $1.2 billion more than they would have if they purchased commodity from their distribution utility during the 36 months ending December 31, 2016. (Tr. 2113-2114, lns. 21-5). Additionally, small commercial customers paid $136 million more than they would have paid if they instead simply remained with their default utilities for commodity supply for the same 36-month period. (Tr. 2114, lns. 5-14). Combining the residential and small commercial customer classes, the mass market was charged by over $1.3 billion dollars more than had they remained on full utility service over this time period. Finally, the data also shows that low-income customers (a subset of the residential customer mentioned above) who took commodity service from an ESCO collectively paid in excess of $146 million more than they would have paid if they took commodity supply from their utility. (Tr. 2114, lns. 5-14).

The following examples use actual customer data in the record to illustrate the negative impact ESCO practices have on individual customers.[58] The first example [redacted] illustrates the impact of an ESCO variable price product on an actual customer with the near-average annual 2016 electricity usage of [redacted] (5,076 kWh is the average). During the calendar year 2016 this customer (see Figure 1) was on a variable rate and paid $[redacted] in February, [redacted] in April, $[redacted] in June, $[redacted] in August, $[redacted] in October, and $[redacted] in November for an overall total of [redacted]. If the customer remained on default utility supply, it would have paid $[redacted] in February, $[redacted] in April, $[redacted] in June, [redacted] in August, $[redacted] in October, and [redacted] in November for an overall total of [redacted]

[58] The data for the two customer bill comparisons were chosen as follows from Exh. 701 (JSA-1 Confidential). Staff chose to look at Central Hudson bills because the Central Hudson data file is the most manageable having only 1.2 million rows of customer bills over the 2014 to 2016 time-period covered in Exhibit 701, and this data set also contained rate information which allowed Staff to reasonably conclude whether a customer was on a fixed or variable rate. Staff focused solely on residential electric customers who had six bi-monthly bills in 2016. We then selected bill comparison information for two residential electric customers that had very close to the average 2016 annual electricity usage of 5,076 kWh. For the comparison of a residential customer with a 3-year fixed price to what that customer would have paid under the default utility rate, Staff chose one of the very few residential customers in the data file which had close to the 600 kWh per month usage amount used for residential customer typical bill analyses. The 3-year fixed rate customer chosen by Staff had [redacted] kWh per month average usage over the 3-year period.

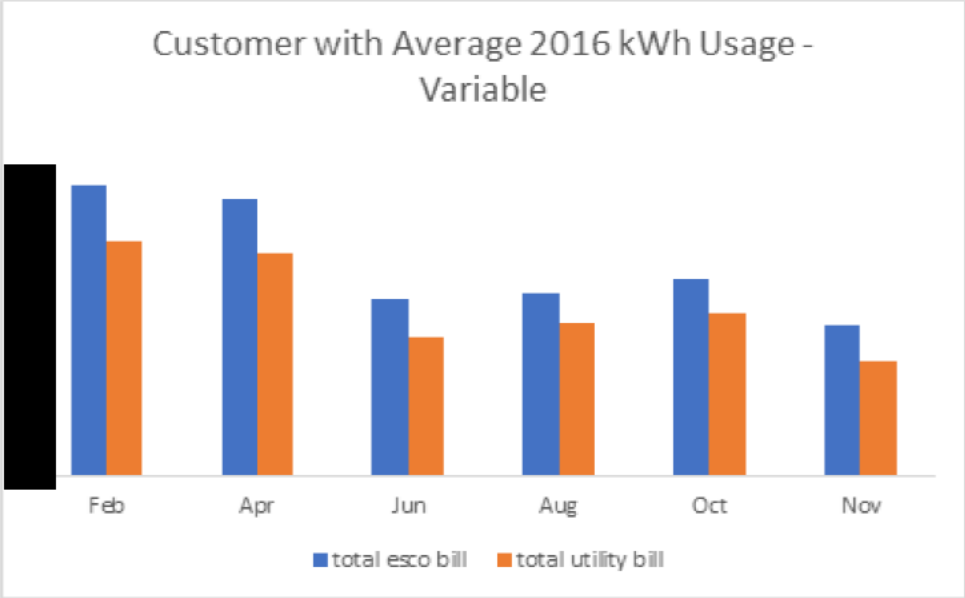


Figure 1

As illustrated in Figure 1 above, this customer paid [redacted] more to the ESCO than it would have paid to the utility, which is over [redacted]% more than would have been paid to the utility. It is like paying for approximately three extra months of electricity during the year. This customer was charged more than they would have paid on default supply every month in 2016, an experience shared with millions of fellow ESCO customers across the state. In addition, the difference between what the ESCO charged and what the utility would have charged was highest during the billing periods when the customer had the most usage. For the February bill alone, the higher charges amounted to over [redacted]. The higher ESCO charges therefore worsened the customer's peak bills for the year making them even higher when the financial impact would be hardest on the customer. This example is typical of what the vast majority of ESCO customers experienced – they paid substantially more with an ESCO on a yearly basis than they would have paid while remaining on default utility supply.

The second example [redacted] illustrates the impact of an ESCO fixed-price product on an actual customer with the average annual 2016 electricity usage of 5,076 kWh. During the

calendar year 2016, this customer (see Figure 2) was on a fixed rate of [redacted] cents/kWh and paid [redacted] in February, $[redacted] in April, $[redacted] in June, [redacted] in August, [redacted] in October, and [redacted] in December for an overall total of $[redacted] If the customer remained on default utility supply, it would have paid [redacted] in February, [redacted] in April, $[redacted] in June, [redacted] in August, [redacted] in October, and [redacted] in December, for an overall total of $[redacted].

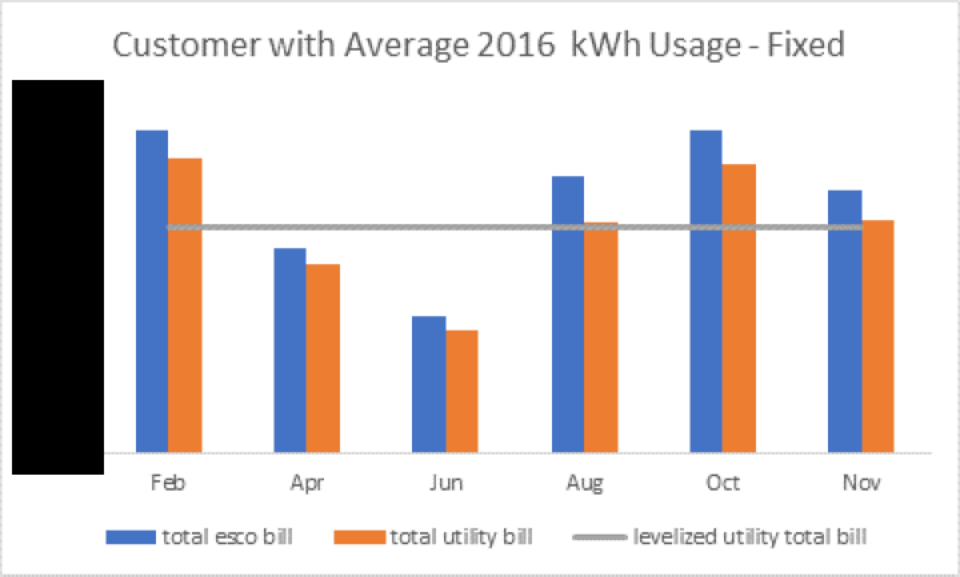


Figure 2

As illustrated in Figure 2 above, this customer paid [redacted] more to the ESCO than it would have paid to the utility, which is over [redacted]% more than would have been paid to the utility. This example is like paying for approximately one and one half extra months of electricity during the year. This customer was too charged more than they would have paid on default supply every billing period in 2016, an experience shared with millions of fellow ESCO customers across the state. (See, Exh. 701 (JSA-1) Confidential). Although this customer chose a fixed-rate ESCO product, a portion of the default supply is also fixed due to the utility's hedging practices, decreasing the need for fixed-price ESCO products.

There are two primary reasons why a customer might want a fixed-price product. The first is to avoid volatility in the amount of the customer's cost of electricity from billing period to billing period. This option is particularly attractive to customers on a fixed monthly income. The second is to avoid volatility in the unit cost of electricity. This option may be particularly attractive to commercial customers that recover their electricity costs in the unit price they charge for their products. If the price of electricity rises unexpectedly, the customer may unhappily be forced to raise the prices of its products to compensate.

The fixed-priced product in the example above is inherently the wrong way for a fixed monthly income customer to decrease volatility in the amount of the customer's cost of electricity from billing period to billing period. Figure 2 includes a black line across the data in that represents the level at which the utility charges would be charged if they were "levelized" (in other words, if the same annual amount of $[redacted] was collected in equal installments of $[redacted] for each billing period). The distance between the black line and the top of each bar on the graph, up or down, is a measurement of the variance or volatility for each billing cycle. When you add up all the variances of the blue bars representing the ESCO bills, and all the variances of the orange bars representing the utility bills, a comparison of the two totals in this example yields a total variance of $[redacted] for the ESCO bills and $[redacted] for the utility bills. The comparison thus discloses that the ESCO bills are in fact approximately [redacted] more volatile from billing period to billing period than the utility's bills. The higher volatility is a direct and inherent result of the ESCO charging substantially more than the utility.

A second reason the fixed-priced product in the example above is inherently the wrong way for a fixed monthly income customer to decrease volatility in the amount of the customer's cost of electricity from billing period to billing period is that the customer has a much better option, one that actually decreases volatility in the amount of the customer's cost of electricity from billing period to billing period down to zero. That option is provided by the utility, and is called "budget billing."

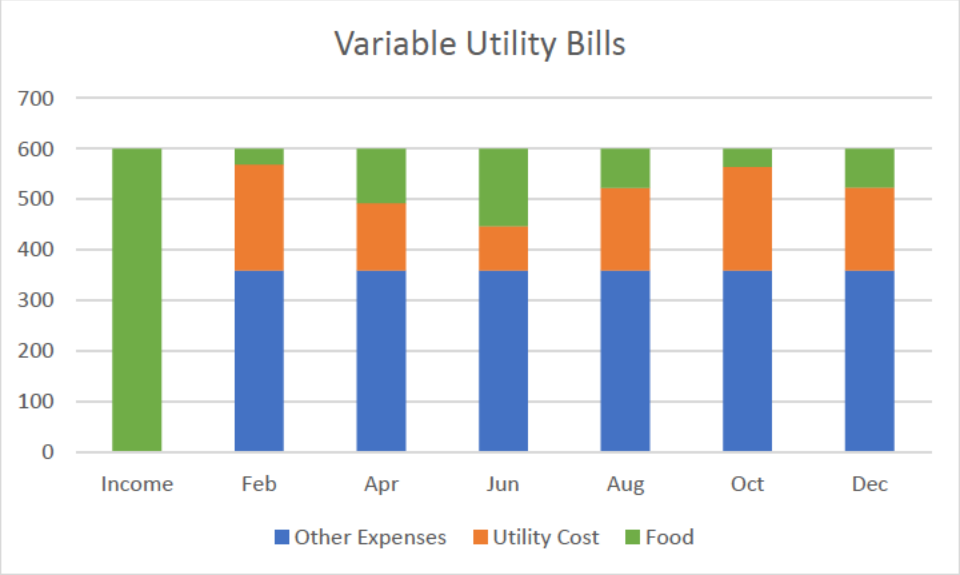


Figure 3

Figure 3 above illustrates the dilemma of a fixed income customer that must pay utility bills that vary from billing period to billing period. In this simplified example, the customer has a fixed income of $600 for each billing period, must spend $360 per billing period for other expenses such as housing and transportation, must pay variable utility costs as they are billed, and relies on the income remaining to pay for food during the billing period. As can be seen on Figure 3, in this example, the amount remaining available to pay for food varies significantly from billing period to billing period, and in some periods (February and October) is likely insufficient to cover the necessary food expenses. This customer would benefit greatly from budget billing as provided by all electric and gas utilities.

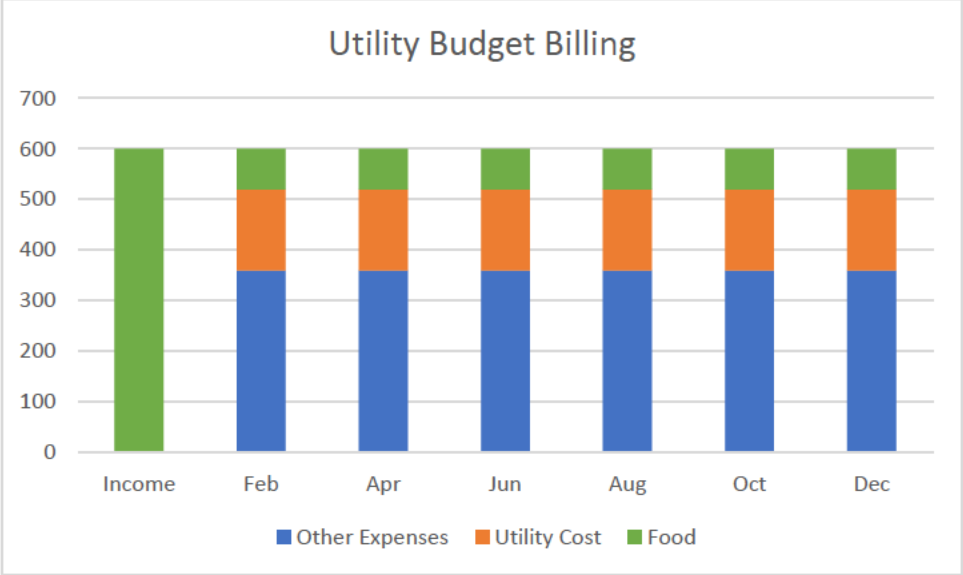


Figure 4

Figure 4 above illustrates how the dilemma described above is solved by utility-provided budget billing. In this simplified example, the customer has the same fixed income of $600 for each billing period, must spend the same $360 per billing period for other expenses such as housing and transportation, but now is allowed to pay the same annual amount of $959.67 in utility costs in levelized bills collected in equal installments of $159.95 for each billing period. The amount remaining available to pay for food is now a constant amount by billing period with zero variance or volatility.[59] This approach is vastly superior to the fixed-price products offered by ESCOs.

As to customers wishing to avoid volatility in the unit cost of electricity, they should be taught that ESCO long-term fixed-price products are more like gambling than budgeting. Figure 5 illustrates [redacted]

[59] It should be noted here that the budget billing process does result in a periodic reconciliation between the budgeted costs and the actual costs during the year, but the high level of utility experience in making accurate estimates while providing this service, and the ability to spread out a share of any surplus or deficit into future levelized payments results in a fully manageable reconciliation that does not detract from the customer benefits of budget billing.

[redacted] the experience of an actual customer that has paid a fixed price of [redacted] cents/kWh over a three-year period.

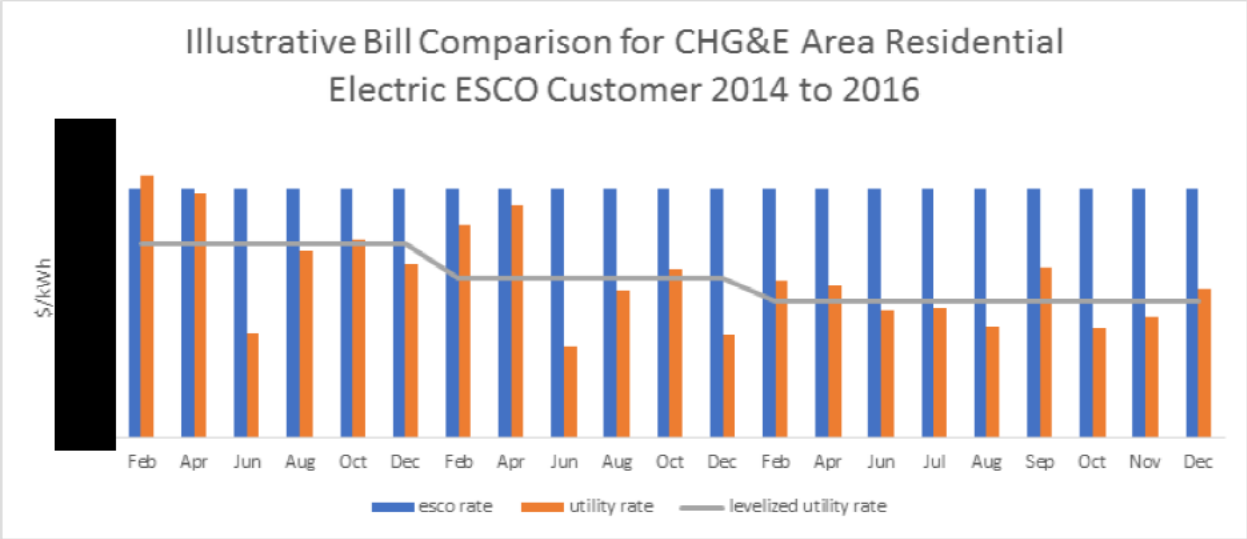


Figure 5

As illustrated by the difference between the gray line and the top of the blue bars on Figure 5 above, the customer paid a [redacted] premium during the first year over what the utility would have charged, a [redacted]% premium during the second year over what the utility would have charged, and a whopping [redacted]% premium during the third year over what the utility would have charged. This is not an isolated example. It is inconceivable that any customer is so price-change averse that they would find value in paying such high premiums. Staff understands that some customers are demanding fixed-price products, but Staff does not believe that such products as currently offered by the ESCOs are delivering value. Staff does not know whether this customer was scared by a single high bill, or was influenced by marketing hype conflating rising utility delivery costs with commodity costs, but the customer clearly felt a need to lock in prices at the beginning of its fixed-price contract. The customer made a horribly wrong decision and has paid a tremendous price. Staff believes that customers do not understand the degree to which utilities are already providing a hedging function and have recently instituted more

sophisticated strategies that now more-surgically target hedging at peak prices and local price conditions for the greater benefit of customers. The risk of significant commodity rate swings has been greatly reduced, and new technologies such as energy storage provide promise that peak prices pressures may continue to drop over time. Given the immense downside to customers that bet wrong as in the example described above, Staff cannot support the continued provision of fixed-price products by ESCOs as currently configured.

While this total bill-to-bill comparison methodology remains the most effective, and perhaps the only accurate, way to consistently compare ESCO and utility charges, it does have its limitations. Specifically, this comparison only reflects the amount that the ESCO tells the utility to bill the customer for ESCO service each month; the utility does not know what type of product (fixed, variable, or energy-related value-added services) the customer purchased from the ESCO; further, the utility can only report on accounts for which the utility bills using the consolidated utility billing (CUB) model. (Tr. 2130-2131, lns. 15-21). In other words, it does not account for, nor can Staff quantify, the amount of any overcharges that are likely to have accrued to customers who were billed directly by the ESCOs. Furthermore, this analysis is also unable to account for any reduction in consumption that may have occurred as a result of some value-added energy efficiency products that an ESCO may have offered to its customers. Nevertheless, for the reasons stated above, this methodology remains the most appropriate comparison methodology.

That said, Staff attempted to parse the commodity pricing disparity to identify and quantify any portion of premiums associated with the ESCO provided value-added products or other associated product benefits such as energy consumption reductions versus the total overall mark-up associated with the bundled product by asking the ESCOs to provide this information in response to Staff IRs DPS-ESCO 1 through 4. (Exh. 615). In response to our requests, however, ESCO parties generally either refused to respond., or offered statements that the request to quantify the actual value of value-

added products was beyond the scope of these proceedings, that the data was unavailable, or that it would be of no value and/or relevance. (Tr. 2115-2116, lns. 23-2). Moreover, individual review of those responses revealed no significant real dollar value associated with the "value-added" products claimed by the responding ESCOs. (Tr. 2116, lns. 4-7). ESCOs' substantive responses also failed to explain or describe what the value-added products were, or how the reported value was developed by the ESCO. (Tr. 2116, lns. 8-11). The limited substantive responses to the IRs (Exh. 615) that were received, however, included data that was not conducive to performing a consistent analysis. (Tr. 2116, lns. 2-4). As a result, Staff was unable to quantify or verify the actual value, if any, of the value-added benefits that ESCOs claim were provided to customers. Thus, and as explained in detail below, the ESCOs' argument that the value-added products account for the significant pricing differences between the ESCO customers' bills for commodity and delivery and the "all-in" distribution utility bills is unsupported in the record and should be rejected by the Commission as, at best, a post hoc rationalization for the $1.3 billion in overcharges collected by ESCOs from their unsuspecting customers. (Tr. 2116, lns. 11-18).

Several ESCO parties challenge any analysis comparing actual ESCO bills to what the default utility would have charged for the same billing period. These parties assert that such a comparison is improper because ESCOs incur costs that utilities do not, ESCOs allegedly offer value-added products and services such as renewable energy and fixed rate contracts, and because utilities are allowed to recover costs outside of the period those costs were incurred. (See, Tr. 253-257, lns. 15-3). With respect to the costs incurred by ESCOs, such as customer acquisition and "overhead costs," no party to these proceedings put forth any evidence of the magnitude of these costs, or even whether these costs are experienced by a majority (or even any) of the ESCOs operating in New York. (Tr. 253-254, lns. 15-11). Moreover, even taking these speculative costs into account, vague reference to "overhead costs" does not justify the significant overcharges evidenced by the record in these proceedings. Additionally, ESCO costs are not at issue

in these proceedings. What is at issue is the value ESCOs provide to customers and whether or not the prices charged by ESCOs are just and reasonable that is at issue here.

Turning to the issue of out-of-period adjustments, ESCO parties cite the fact that utilities are permitted to sometimes defer recovery of costs to soften increases in default rates or to true-up default revenues and costs and recover any under-collection in subsequent months. (Tr. 254-255, lns. 11-7). On its face, this argument is flawed in that it fails to recognize that such true-ups and out-of-period adjustments can be both negative and positive. Notwithstanding the argument that out-of- period adjustments make a comparison between ESCO and utility bills improper it also fails when one considers that this analysis is done over periods of time longer than one month. Staff acknowledges that, if one looks at such a comparison for a single month, potential out-of-period adjustments on the utility side might make the utility rate either appear more or less favorable compared to the ESCO. However, when such a comparison is done over the course of an entire year, or as in these proceedings, over three consecutive years, the impact of any out-of-period adjustments is minimized because both the overcollection, for example, and the true-up are likely to be contained within the analysis. It is important to remember that Staff aggregated the overpayments over a three-year period, and no out-of-period adjustments, polar vortexes, or other event could explain the over $1.3 billion in overcharges.

With respect to the argument that the analysis performed by Staff does not take into account any potential additional services offered by the ESCO, Staff acknowledged this as a potential shortcoming, but nonetheless, as discussed above, this type of comparison remains the most effective way to evaluate ESCO price performance in the retail markets. Several ESCO parties argue that because Staff acknowledged that the bill-to-bill comparison has flaws, that the entire analysis should be disregarded. (See, Tr. 292-294, lns. 234-280; Tr. 364-366, lns. 13-12; Tr. 695-696, no line numbers in this testimony; Tr. 812-815, lns. 5-3). However, these parties at the same time fail to provide any reasonable alternative price comparison, and also fail to acknowledge that Staff in

fact attempted to elicit the value of any alleged value-added products included on the ESCO side of the comparison, but that effort was stifled by the ESCO parties. (Tr. 2115-2116, lns. 23-2). These parties withheld this information as "not relevant to these proceedings" (Id.), and then argued that Staff's analysis is not creditable because it does not account for the very information withheld. This is a prime example of the obstructionist position taken by so many ESCO parties. Moreover, as discussed below, the substantial delta between utility and ESCO charges simply cannot be justified through the alleged offering of additional energy-related value-added services by ESCOs. Evidence in the record shows that, using renewable energy as an example, nearly every ESCO operating in New York offers a level of renewable energy that is practically identical to the level of renewable energy offered by the utility, thus refuting the claim that ESCO charges in excess of what the utility would have charged can be justified in part by the fact that ESCOs are providing a higher level of renewables to customers at a premium.

Additionally, this argument also assumes that customers in New York are actually taking products from ESCOs that include energy-related value-added services. Direct Energy witness Hanger lists products and services that ESCOs "can" offer such as (1) fixed rates, (2) renewable energy, (3) smart thermostats, (4) gift cards, (5) airline miles, (6) information regarding energy consumption, and (7) "more customer-friendly terms and conditions" (Tr. 255-256, lns. 21-13), but does not provide any hard evidence that ESCOs in New York are offering any or all of these products, nor that any New York customers actually take such products. Furthermore, there is no attempt to quantify the benefits associated with such products so as to potentially justify the over $1.3 billion in overcharges experienced by mass market customers who took ESCO service for the 36-month period ending June 2016.

Finally, several parties attempt to argue that the time period and customer class selected for this analysis is inappropriate. (See, Tr. 694-695, no line numbers in this testimony). Ignoring the fact that review of the most recent (at the time) 36-month time

period was directed by the Commission itself,[60] the wealth of information and data collected for this three-year time period provides a more than sufficient data set for evaluation of relative ESCO price performance. The claim that the data set is flawed because it does not include large commercial and industrial customers is also misguided as this proceeding is limited to addressing the recognized flaws with the retail markets serving mass market customers, not the markets serving large commercial and industrial customers.[61] For example, NEM witness Cicchetti relies on ESCO data self-reported to U.S. Energy Department (EIA) which included both mass market as well as large commercial and industrial customers, which biases his analysis and is therefore of no use in these proceedings. (Tr. 696-707, no line numbers in this testimony). The use of EIA data is discussed in more detail in section III.C.2. of this brief.

The data sets and sources relied on by Staff for its analysis is the most comprehensive relative pricing comparison between New York ESCOs and utilities in the record. (Exh. 701 (JSA-1 Confidential); Exh. 711 (SP-1a Confidential)). This data is not just a sample, it is the entire universe of actual data for the three-year period that the parties were to analyze according to the Commission's directive in the December 2016 Notice.[62] This is the only data set in evidence in these proceedings, and is the most reliable and accurate source of ESCO to utility price comparisons available.

2. Utility Delivery and Supply Cost Allocations

Footnote 20 of the February 2014 Order explains that specific rate unbundling and cost allocation questions would be addressed and subsequently approved in individual rate cases based on detailed analyses which conform to provisions set forth

60 December 2016 Notice at 7-8.

61 Id. at 1-2.

62 December 2016 Notice at 7.

by the Commission.[63] These allocation questions are, therefore, outside the scope of these proceedings.

C. RESPONSE TO COMMISSION'S INQUIRIES ON THE FUTURE OF ESCOS IN THE MASS MARKET

1. Should Retail Choice Continue in New York?

(December 2016 Notice Question 1)

The evidence in the record clearly proves that the retail access mass markets for electricity and natural gas are not working as the Commission originally envisioned when it first established the retail markets in the 1990s. (Tr. 2038, Exh. 724 (SP-12)). The primary problem with the retail markets for mass market customers is the overcharging of customers for commodity due to the lack of transparency to customers on ESCO prices and products (Tr. 2039, lns. 8-11); this lack of transparency allows ESCOs to charge customers practically whatever they want without customers' understanding that they are paying substantially more than if they received full utility service. Consequently, potential commodity customers attempting to choose between the ESCO offerings and the default utility service cannot readily determine which ESCO offers the best price for comparable products or if the ESCOs' prices can possibly "beat" or even be competitive with the utility's default commodity service for the duration of the contract term. (Tr. 2039-2040).

Thus, as the current retail access mass markets are structured, customers simply cannot make fully informed and fact-based choices on price and other factors, such as energy-related value-added products, since the terms and pricing of the ESCO product offerings are not transparent to customers. For variable rate products this is due, in large part, to the fact that ESCOs often offer "teaser rates" to start (Tr. 2080, lns. 4-6; Tr. 2082-2083, lns. 17-3), and after expiration of the teaser rate, the rate is changed to

[63] See, Case 00-M-0504, Proceeding on Motion of the Commission Regarding Provider of Last Resort Responsibilities, the Role of Utilities in Competitive Energy Markets, and Fostering the Development of Retail Competitive Opportunities.

what is called a "market rate" that is not transparent to the customer, and the contract signed by the customer does not provide information on how that "market rate" is calculated (Tr. 2084, lns 2-10; Tr. 2219-2220, lns. 22-4). The transparency issues are discussed in detail below in Section C.11.

a. ESCOs' Role in Residential Markets

In light of the pricing abuses ESCOs are committing against their customers, Staff recommends that the Commission direct that the utilities prohibit ESCOs from using their distribution systems to provide commodity service to mass market customers (both residential and small commercial, as defined in sections III.C.1.a.(i) and III.C.1.b.(i) of this brief), unless our recommendations are implemented by the Commission (Tr. 2032, ln 18 to Tr. 2037).

Staff's first recommendation is that the commodity service product provided by the ESCO must either provide a guarantee that the mass market ESCO customer's overall electric or gas bill will be lower, or no greater, than that charged by the utility for delivery and commodity, or that 100 percent of the ESCO product is generated from renewable resources that are delivered to and consumed in New York and otherwise in compliance with the Commission's environmental disclosure program requirements. (Tr. 2033, lns. 1-14).

Second, the Commission should prohibit ESCOs from using the utility distribution systems to provide commodity service to aggregated mass market customers unless the customer aggregation is enabled through either a Community Choice Aggregation (CCA) model utilizing a professional energy buyer acting in a fiduciary manner that is independent of the ESCO (Tr. 2033, lns. 14-24), or the energy service provider is a not-for-profit (NFP) corporation or municipal entity (Tr. 2033-2034, lns. 24-3).

Third, in both instances, the Commission should monitor the performance of the CCA and NFP to ensure that they are providing competitive prices vis-á-vis the utility's default service (Tr. 2034, lns. 3-6).

Fourth, mass market customer bills (whether individual or aggregated) must disclose a relative bill comparison in a manner acceptable to the Commission between the current bill charges and what the customer would have paid if the customer took both delivery and commodity service from the distribution utility (Tr. 2034, lns. 7-18).

Fifth, the Commission should direct that the utilities no longer provide Purchase of Receivables (POR) without recourse to ESCOs, but instead that POR only be offered to ESCOs with recourse, meaning that the ESCOs would not be made whole in the instance where funds for commodity service cannot be collected from the ESCO's customers (Tr. 2034-2035, lns. 18-2; Tr. 2155, lns. 1-3; Tr. 2157-2158, lns. 10-2; Tr. 2159, lns. 1-3)).

The sixth recommendation is that the Commission should require that ESCOs provide written reports on a calendar year basis, and that those filings contain the information necessary for the Commission to monitor the mass market and ensure that ESCOs are compliant with the Commission's new requirements (Tr. 2035, lns. 2-10), including that ESCO customers must be provided with 100 percent green energy or realize savings on their commodity compared to the default utility's offering.

Regarding ESCO marketing practices, the seventh recommendation is that the Commission should prohibit ESCOs from using door-to-door, point of sale, telephonic sales, or similar marketing practices (Tr. 2035, lns. 11-14). Instead, the Commission should direct ESCOs to limit their marketing to direct mail, electronic communications, or similar forms of marketing where the potential ESCO customer would respond to such marketing and otherwise initiate direct contact with the ESCO (Tr. 2035, lns. 15-22).

The eighth recommendation is that the Commission should require that the ESCOs ensure the protection of customer data, confidentiality and cyber security by being in compliance with UBP Section 4 and consistent with the National Institute of Standards and Technology Cyber Security Framework (NTS&TCS) (Tr. 2035-2036, lns. 22-12; Tr. 2188, lns. 9-16) or the applicable cyber security requirements of the North

American Electric Reliability Corporation (NERC) (Tr. 2698-2700, lns. 9-3), as proposed in the UBP, Section 12 (Exh. 724 (SP-11)).

The ninth recommendation is that the Commission should modify the UBP to conform to Staff's recommendations, which are shown on our redlined revisions to the UPB in Exh. 724 (SP-11). (Tr. 2036, lns. 12-14).

The tenth recommendation is that the Commission should provide for an orderly transition to implement our recommendations, and direct interested parties to file with the Secretary proposals concerning the scope of Track II, and that the Commission issue an Order determining the scope and issues to be addressed in Track II. (Tr. 2036, lns. 14-20).

The eleventh and final substantive recommendation is that the Commission should not delay or be distracted from implementing these recommendations by the prospect of potential value-added products that the ESCOs may offer to mass market customers until the transitional actions that we recommend have been implemented. The potential development of appropriate energy-related value-added products should occur later in a collaborative process in Track II, after the detrimental aspects of the current ESCO markets have been eliminated and customers can then make fully informed decisions regarding whether they want ESCO products based on full transparency of pricing for commodity products available to them, untainted by misleading or inappropriate marketing (Tr. 2036-2037, lns. 20-10).[64]

(i) Defining Residential

Presently, the Commission defines residential customers as those electric customer accounts that are not demand-metered. (Tr. 2038-2039, lns. 21-1).[65] The definition of a residential electric customer is clear, and we do not recommend that it be

[64] The twelfth recommendation is that the Commission adopt findings and ordering clauses consistent with our recommendations in testimony, Exh. 724 (SP-12) and Exh. 725 (SP-13).

[65] Case 15-M-0127, et al., supra, Order Resetting Retail Energy markets and Establishing Further Process (issued February 23, 2016), at 4, fn 2.

modified. Residential gas customers (and small commercial gas customers) are defined as those customers whose annual gas consumption is not greater than 750 dekatherms (dth), or equivalent, per year (Tr. 2039, lns. 1-3; Tr. 2043, lns. 1-6).[66] While staff has some concerns that the 750 dth threshold for small commercial gas customers may be too low, we recommend this definition be maintained for Track I of these proceedings. Staff's concerns with regard to the definition of a gas mass market threshold are discussed below in Section III.C.1.b.(i).

b. ESCO's Role in Non-Residential Markets

(i) Defining Small Commercial

The mass market includes small commercial customers, as defined above in Section C.1.a.(i). Therefore, Staff's recommendations in section C.1(a) apply to the mass market small commercial electric and gas customers. While there are concerns that the threshold of 750 dth for small commercial customers may not be high enough to protect all small commercial customers who are more like residential customers as to their ability and sophistication to understanding the markets and buying gas commodity for contract terms often measured in yearlong increments, at this time we recommend that this issue be addressed in Track II, or that the Commission institute a proceeding limited to investigating the threshold of 750 dth to determine whether it should be increased.

(ii) Whether Small Commercial should be included in Mass Market

The Commission should not modify the definition of mass market to exclude small commercial customers. Small commercial customers who are presently defined by the Commission as part of the mass market are in need of the same consumer protections in the UBP that are afforded to residential customers. The customer compliant data reveals that many of the complaints received are registered by small commercial electric and gas customers that contend that they were either slammed or subject to inappropriately aggressive and/or deceptive marketing practices.

---

[66] Id.

In addition, Staff is concerned that the 750 dth and below threshold that presently defines small commercial gas customers is actually set too low, as the threshold likely results in protections not being afforded to smaller commercial customers whose lack of technical expertise places them in the same situation as those at or below the threshold. This endeavor is particularly important because, while the electric commodity market for non-demand commercial customers (small commercial customers) appears to have provided these customers with a small savings (0.1 percent or $940,000) over the 2014 to 2016 period, mass market commercial gas customers paid approximately $137.2 million, or 9.8 percent more between 2014 and 2016 than they would have if they had taken gas commodity from their utility (Tr. 2135, lns. 3-17).

BBPC, LLC d/b/a Great Eastern Energy (GEE) witness Lukas raises two issues in his testimony concerning small commercial customers. First, he proposes that instead of limiting the definition of small commercial gas customer to customers with usage of less than 750 dth, GEE claims that "some link" to the size of a residential customer is a "good proxy" for gas. (Tr. 77-79, lns. 17-12). Lukas states that he researched the issue and that, for lending purposes, banks will grant a residential mortgage on a four-family structure and a commercial loan for a larger building. (Tr. 78-79, lns. 16-3). From this "analysis," which is not presented in the record, GEE claims that its proposal of 500 dth is a reasonable level. (Tr. 79, lns. 6-12).

The Commission should reject Mr. Lukas' "analysis" because his argument is an attempt to convince the Commission to believe that the financial risk associated with small commercial gas customers has some relationship or nexus to residential customers and the sorts of mortgages they might be able to obtain from a bank. This is a red herring, as the important distinction between mass market commercial customers and the larger commercial and industrial customers is not the size of their buildings or the sort of loans a bank might provide to them, but the sophistication of these customers and their ability to navigate the nuances of obtaining gas commodity service at rates that are competitive. The Commission should be concerned with the small commercial

customers' ability to negotiate with ESCOs in an equitable and transparent manner so that they know and understand the rate that they will be paying for gas commodity after the introductory rate term expires and whether it is likely to be competitive with the default utility and other ESCOs.

Lukas' second argument is that small commercial customers must make decisions on rent, fixtures and other inputs into whatever product or service they are selling, and therefore, tend to be more sophisticated than the residential customers they are "lumped" with. (Tr. 98, lns. 5-9).[67] Witness Lukas offers no evidence to support his claims. The Commission should reject this argument as the question is not how sophisticated a small commercial customer is compared to a residential customer; the question is whether the small commercial gas customer has the sophistication to make informed decisions on commodity purchases that often cover a year or more time frame and often vary at the whim of the ESCO (unlike rent payments). The fact is that the evidence adduced in these proceedings indicates that small commercial gas customers face the same problems and challenges in the retail energy markets as residential customers.

Witness Hanger claims that he could find no justification for inclusion of what he calls the "small business sector"[68] in the Commission's December 2016 Notice as he could find no justification for the Commission to conclude that the small business market is not working effectively. (Tr. 241, lns. 12-16). Mr. Hanger certainly offers no proof that the small commercial markets are operating "effectively," he merely offers the red herring that he could find no evidence in "major orders" indicating that the market was not working effectively, and describes the Commission's action "an egregious

---

[67] Witness Hanger makes the very same argument in his testimony, and our criticism of Mr. Lukas' testimony applies to his as well. (Tr. 242, lns. 3-9).

[68] It appears that witness Hanger is referring to small commercial customers, which is the terminology used by the Commission. Case 15-M-0127, et al., supra, Order Resetting Retail Energy markets and Establishing Further Process (issued February 23, 2016), at 4, fn 2.

example of regulatory over-reach." (Tr. 241-242, lns. 15-2). Mr. Hanger's claims are simply unsupported by the facts and the structure of the retail energy market itself and are in direct conflict with the Commission's longstanding and oft stated concerns for residential and small commercial customers participating in the retail energy markets.[69] The fact is, the December 2016 Notice properly included the small commercial markets in these proceedings as those markets are part of the mass market that the Commission directed be reviewed in these proceedings. The evidence has shown that small commercial ESCO gas customers are paying approximately ten percent more in aggregate than they would pay for their local utility, and this percentage is often significantly higher when looking at ESCO provided gas commodity. (Tr. 2136-2137, lns. 18-14). Mr. Hanger's concerns should be rejected by the Commission, particularly because, as discussed in this brief, Staff has identified that small commercial customers have also experienced many of the same problems experienced by residential customers in the markets.

The Commission should adopt our recommendation to investigate expanding the definition of small commercial gas customer beyond 750 dth of usage to ensure that it is providing appropriate protections to these customers, who are often as misinformed and vulnerable to the ESCOs' marketing practices.

(iii) Whether Certain UBP Provisions Should Apply to Small Commercial?

All UBP provisions currently applicable to small commercial electric and gas customers should be continued. There is no basis for limiting their applicability to only residential customers, as the evidence adduced in these proceedings shows that these customers need the protections (Tr. 2135, lns. 3-17; Tr. 2136-2137, lns. 18-20; Tr. 2138-2139, lns. 3-20), and that, in fact, the protections should possibly be expanded to commercial customers with annual gas usage above the 750 dth per year threshold. The

[69] See, February 2014 Order, February 2015 Order, February 2016 Order, December 2016 Order.

Commission should reject any attempt to limit the applicability of the provisions of the UBP to only residential customers.

2. ESCO's Place in the Competitive Market

(December 2016 Notice Questions 1, 2, 3, 9, and 13)

a. Whether ESCOs have "Market Power"

Absent any market power, if an ESCO marks up its price over the prevailing competitive price, then one would expect that ESCO's market share to decline if the ESCO operates within a competitive market. (Tr. 3269, lns. 13-24). In analyzing the competitiveness of the retail commodity markets, both Staff and Direct Energy Services LLC (Direct Energy) relied upon the analytical framework (Tr. 3335, lns. 4-7) laid out in the Harvard Law Review article entitled Market Power in Antitrust Cases, by Richard A. Posner and William M. Landes. (Exh. 69 (JSA-6)). The first sentence of this seminal article defines the term "market power" as the ability of a firm or a group of firms acting jointly to raise prices above the competitive level, without losing so many sales so rapidly that the price increase is unprofitable and must be rescinded. (Id.; Tr. 3334-3335, lns. 21-3). It is as simple as that. Exhibits 701 and 704 show that a significant number of ESCO suppliers have been able to consistently charge residential customers in excess of levels charged by the utilities, and some other lower priced ESCOs, for the entire three-year period covered by the pricing data set Staff entered into the record of this proceeding. (See, Exh. 701 (JSA-1 Confidential); Exh. 704 (JSA-3 Confidential); Tr. 3262, Tr. 4170, Tr. 4177, Tr. 4180, Tr. 4188, Tr. 4194).

Direct Energy, however, attempts to focus the market power question specifically on the elasticity of demand, and notes that the merger guidelines treat low elasticity of demand as a factor that enhances market power. (Tr. 3319, lns. 9-24). Both Staff and Direct Energy agree that a low elasticity of demand would make it more likely that market power could be exercised. (Id.). However, the ESCO parties' attempts to singularly focus the analysis of market power upon the necessarily difficult estimation of price elasticity is a red herring. (Tr. 3336-3337, lns. 24-6). In addition, Direct Energy

incorrectly attempts to calculate price elasticity within a particular year's time. (See, Tr. 3725–3727). However, as the Staff economists explain, these relationships should be examined over the three-year period to see whether the significant departures from the prices charged by the utility were sustained over time. (Tr. 3728, lns. 5-9). The Staff economists noted a number of problems with Direct Energy's misguided attempts to estimate elasticity within a single year's time. (Tr. 3729-3730, ln. 17-9).

To support this view Staff referred to the ability of an ESCO to sustain a significant, small but non-transitory, increase in prices (SSNIP) as a relevant indication of whether ESCOs' have market power. (Tr. 3318, lns. 1-24; Tr. 3366). This SSNIP test is outlined in the Department of Justice and Federal Trade Commission Merger Guidelines (Exh. 33). Price elasticity plays into the ability to sustain a significant, small but non-transitory increase in prices (TR 3318, lns. 22-24).

Exhibit 704 (JSA-3 Confidential) reveals numerous instances where ESCOs have consistently charged residential customers in excess of levels charged by the utilities and some other ESCOs for the entire three-year period covered by the data provided in response to DPS-Utility 4 (Exh. 701 (JSA-1 Confidential)), without significantly losing market share. (Tr. 4170, lns. 3-21; Confidential Tr. 3730 lns. 20-23; Tr. 4188 lns. 7–11). All else equal, these sustained 20 percent plus mark-ups would clearly represent an exercise of market power. However, is all else really equal? Could these ESCOs be providing additional value beyond what is attributable to utility default service? There is no dispute that customers paid more than 20 percent higher prices to take commodity service from these ESCOs. The real question is whether the customer switching data on actual purchasing decisions by customers (Tr. 4189) is reflective of a reasonable valuation of those services. (Tr. 4190). In fact, over the three-year time period, 30 percent (226 out of 746) of the ESCOs were billing customers in excess of 20 percent more than what the utility would have billed them for commodity, yet these ESCOs were able to remain in the market all three years. (Tr. 4177, lns. 1-7).

It is telling that parties decided to spend more time pointing out alleged anomalies in Staff's analysis of the data provided in Exh. 701 (JSA-1 Confidential), rather than using the data, which is the most comprehensive data set on pricing and purchasing decisions produced in this proceeding and in the record, in trying to prove their case. Moreover, these parties could have potentially used this rich pricing and customer demand data set, along with their own proprietary data, to show that the charge in excess of the utility's charge is attributable to a value-added service and not rent-seeking behavior, but failed to do so. (Confidential Tr. 3731-3732, lns. 20-6).

Although Staff did not have ESCO supplied information on whether the value of differentiated products could reasonably warrant a sustained, 20 percent mark-up in prices, Staff did provide its views on certain added value attributes. For example, in typical financial markets, a risk premium would range from 3.5 percent to 5.5 percent. (Tr. 4191, lns. 13-15). Thus, these 20 percent plus mark ups reflect more than just a hedge against price fluctuations. In contrast, the Staff Policy panel testified that a NYSEG 100 percent green product contained a green product adder of 2.5 cents per kWh. (Tr. 2869). A 2.5 cent per kWh adder would represent more than a 20 percent markup on most commodity rates (e.g. Exh. 65; Exh. 1402). However, the ESCO, utility, and spot market emission profiles are very similar (Tr. 3260), indicating that, on average, ESCOs are not providing a greener product. Thus, the 20 percent plus mark ups provided by the conventional ESCOs included in the emissions profiles in Exh. 705 (JSA-4), on average, should not be reflective of the value of a greener product. Also, the five "Specialty ESCOs," which Exhibit 705 (JSA-4) lists as providing noticeably different fuel shares than the Conventional ESCOS, at most would explain away the number of ESCOs that were billing customers in excess of 20 percent more than what the utility would have billed them for commodity from 226 out of 746 ESCOs to 191 of 746 (assuming that these five ESCOs were active in all six electric utility service areas).

Direct Energy offers the possibility that consumers may simply consider ESCO services and utility services to be different value propositions. (Tr. 255-256, lns.

16-16). In fact, Staff issued information requests to probe that possibility in more depth. (Tr. 3352, 17-25). Unfortunately, however, Staff could not conclude, due to the lack of information provided by the ESCO parties, that the observed price differences were, or were not, based on how consumers valued those services. (Tr. 3353-2254, lns. 15–9). The Staff Panel testified that the information they evaluated in Exhibit 704 (JSA-3 Confidential) reflected customers' actual purchasing decisions. (Tr. 4189, lns. 17-20). The pertinent question, according to Staff, was whether that decision was based on a reasonable valuation. (Tr. 4190, lns. 7-10). When asked if utility default service customers are told the basis for this rate, that is, how much of it is based on the spot market, how much is a hedge, how much is included as capacity, how much is electricity, PULP witness Barbara Alexander responded, "No, they are not." (Tr. 3657).

Staff did ask the ESCOs to provide information on the types of products they offered in the market. (Tr. 3264, lns. 5-11). However, there was not enough information in these responses to make a meaningful determination of either product type or the price charged for that product. (Id.). Moreover, where there's a significant price difference between the ESCO and the utility, the provider of a value-added service should have the burden of proof regardless of the complexities and difficulties that arise in performing studies to estimate the amounts by which consumers value products. (Tr. 4195-4197, lns. 9–22). Either a few individual, large ESCOs, or an association of ESCOs, would have the adequate resources to conduct a study that would identify reasonable amount of value-added by differentiated ESCO products. (Tr. 4197, lns. 16-20). Clearly, it was in the ESCOs' best interest not to present such a study. Instead, witness Morris only argues, offhandedly, that revealed preference, simply by buying something, somehow proves that the price paid was commensurate with the actual value of that product. (Tr. 555-557, lns. 7-24). This conclusion, however, completely ignores the fact that, regardless of any "revealed preference," the Commission needs a basis to find that prices charged in the retail mass markets are just and reasonable. The Commission should not let this deliberate obfuscation by the ESCO parties hinder it in

finding that the differential between ESCO and utility service cannot be supported by the ESCOs' value-added claim; they are simply padding their retained earnings (profit).

RESA witness Makholm even acknowledged that his consulting firm, the National Economic Research Associates (NERA), has performed ordered logit studies to weigh how customers value the attributes of services in the past. (Tr. 1020, lns. 6-8). However, witness Makholm, somewhat superciliously argues that such a study would not be useful to the record in this proceeding and would leave the ALJs and the Commission with no ability to choose among the parties warring over the arcane econometrics study that would be in front of them. (Tr. 1019-1022, lns. 6–14).

But in fact, ordered logit analyses have been presented by NERA before the Commission in Case 90-C-0191 regarding the attributes associated with business telecom services. (Tr. 4196, lns. 7-21). A few single large ESCOs with adequate resources, or an association of ESCOs with adequate resources could have engaged in such a study for this proceeding. (Tr. 4196-4197, lns. 22-22).

Direct witness Kagan argues that it is difficult to state that the utilities' default rates were developed by appropriate 'transfer pricing principles.' (Tr. 254, lns. 6-11). However, Direct and others who hold this view had the opportunity to cross examine the Staff Rates Panel, witnesses Twergo and Wheeler, with a combined almost 70 years of experience in the energy industry, and sought only to generally attack the methodologies used to arrive at the merchant function charge (MFC), but proposed no solution to what they saw as a glaring problem. (Tr. 3149-3155). RESA witness Lacey goes further, stating that utilities are exerting market power by placing all costs in delivery and thus suppressing their commodity prices. (Tr. 1222, lns. 13-18). Lacey neglects the fact that the unbundling case was designed to place utilities and ESCOs on an even playing field, and that any disputes as to the components of the MFC are appropriately handled in individual utility rate cases. (Tr. 3116, lns. 5-15). Moreover, retail competition was implemented, carefully and slowly, with the intent to ensure customer protection, so that customers could realize rates lower than those

currently being provided by utilities, or access to value-added products; and only if that market is effectively competitive.[70] Witness Kagan affirmatively states that ESCO rates can generate savings (Tr. 183, lns. 5-6) over utility rates, but at no point was he able to demonstrate, using historical data from actual New York customer purchases, that ESCOs do provide value. Given the resources at Direct's disposal, and given the critical issues raised in this proceeding, it is surprising that Direct's witnesses did not reconcile the charges as shown in Exh. 701 (JSA-1 Confidential) with the charges in Direct's proprietary data set (which was not entered into the record) to show instances where the overcharge was attributed to a value-added service. It is readily apparent that the ESCO parties are derelict in their duty to defend the reasonableness of their high-priced sales to end-use customers by quantitatively showing that their products met either of these two conditions, nor have they made a showing regarding the Commission's requirement of an effective or workably competitive market. They have not done so because they cannot make such a showing.

b. The Functionality of Competitive Markets for Retail Commodity Services

Though parties in this case would like to point out aspects of the market that exhibit the markers of competition, some of which have not been contested in this proceeding (e.g., markets function best when there are a large number of buyers and sellers; Tr. 164), they fail to provide substantive evidence regarding certain issues raised by Staff which point out how certain aspects deviate from what would typically be seen in a competitive market, such as a large number of ESCOs charging well in excess of the utilities and other ESCOs over the entire 2014 to 2016 time period. (Tr. 3264; Tr. 4195-4197). Furthermore, the ESCOs attempt to muddy the record by making analogies to other markets without laying a foundation as to how and why these two markets are similar. (Tr. 2722-2729).

The testimony of the Staff Economics Panel reveals that a number of market characteristics in the retail access market are counter to what would be expected

[70] Opinion 96-12 at 12-15.

in a workably competitive market. (Tr. 3278, lns. 3-6). These unfavorable characteristics include (1) the ability of many ESCOs to charge significantly in excess of competitive price levels without losing market share, (2) the lack of price transparency, (3) high market concentration indices (HHIs), (4) the limited degree of ESCOs exiting the market, and (5) the lack of differentiating products and pricing strategies beyond what is currently available under utility default supply. (Tr. 3278, lns. 6-15). Whether these unfavorable characteristics are present in what the Commission intended to be a reasonably competitive retail markets was the key question raised in the February 25, 2014 Order.[71] Thus, we will discuss what the record shows for each of these market characteristics.

Regarding the ability of many ESCOs to charge significantly more than competitive price levels without losing market share (Tr. 3264; Tr. 4195–4197), markets for retail commodity services are not functioning as expected, and prices for many ESCOs reflect the exercise of market power. (Tr. 4181, lns. 4-8; Tr. 3302 – 3303, lns. 24-17). As indicated in Exh. 704 (JSA-3 Confidential), a significant number of ESCOs have been able to consistently charge residential customers in excess of levels charged by the utilities and some other ESCOs for the entire three-year period covered by the data provided in response to DPS-Utility 4 (Exh. 701 (JSA-1 Confidential)). Large differences in prices do not appear to be the primary factor behind ESCOs remaining in or exiting the market. (Tr. 4176-4177, lns. 14-19). The competitive forces in the mass markets have failed, and retail commodity markets are not price competitive. (See, Tr. 4180-4182).

Witness Kagan suggests the retail markets are workably competitive and even contestable.[72] (Tr. 168-169, lns. 15–5). However, Staff proved that there are other considerations that must hold true for a market to be perfectly contestable, and that, in

---

71 See, February 2014 Order.

72 A contestable market is a market in which there are no barriers to entry or exit, and thus the threat of entry by competitors is sufficient to maintain the price discipline associated with perfect competition regardless of the number of competitors. (Tr. 4163, lns. 18-24, citing Direct Energy witness Kagan at Tr. 168).

fact, the existence of high mark-ups over the utility charge has not resulted in competitive entrants which undercut those high prices, to take over considerable market share – however, we simply see no evidence of this happening. (Tr. 4163-4168).

Regarding the lack of price transparency, while some parties wish to focus on the perceived lack of transparency of the utility price, they conveniently ignore that the Commission exercises regulatory oversight over utility commodity pricing. (Tr. 3402, lns. 10-15). One of the threshold questions the Commission seeks to answer to in Track I is whether or not ESCOs have consistently offered lower prices than the incumbent utility on an annual basis, and whether offering lower prices could be done profitably.[73] The evidence shows that, in very few instances ESCOs have been able to maintain a lower price, on an annual basis, than the utility (JSA-3), but that Staff was unable to determine whether the ESCOs were profitable.[74] (Tr. 2172, lns. 14-16). In fact, witness Cook would refer that the Commission design utility rates to make ESCOs more competitive. (Tr. 644, lns. 1-6). Witness Cook is arguing that the regulated utility commodity rate is simply too efficient and the only innovative solution ESCOs can come up with for competing is raising the utility rate. Utility rates are efficient, and they are set by the Commission to be collected in a manner, including out-of-period adjustments, that is best for customers. If ESCOs are to be a valuable and viable alternative, they must provide even more value than the incumbent utility, something they have not been doing. If they cannot provide such value, it is not in the public interest to continue retail access for mass market customers.

Regarding high market concentration indices, the February 2014 Order in these proceedings mentioned the relationship between market concentration and market competitiveness.[75] (Tr. 3244). Staff presented in initial testimony an analysis based on

---

[73] December 2016 Notice at 3-4.

[74] However, one can make the assumption that if the ESCO remained in business, it must have been profitable.

[75] February 2014 Order at 10.

the Department of Justice/ Federal Trade Commission (DoJ/FTC) Horizontal Merger Guidelines' Herfindahl-Hirschman Indices (HHIs) that is used by economists as a screening tool to analyze the potential for anti-competitive behavior in a market. (See, Tr. 3247, Tr. 3313, Tr. 3315, Tr. 3316). No other party calculated market HHIs in their initial testimony, although Kagan spoke of them in general terms. (Tr. 165). Staff, in contrast, presented HHIs in two ways. The Staff Economics Panel first calculated the HHIs including the kWh's, ccf's, or therms that each supplier and the incumbent utility sells to retail customers, and then subsequently removed the sales from the incumbent utility and calculated the HHIs based solely on the sales made by ESCOs. (Tr. 3249; Exh. 702 (JSA-2)). Given the market share impact of the incumbent utility in the "with" calculations, and since the change in the HHIs from the "with" to "without" calculations reflect that the incumbent utilities have the majority share of these retail markets, Staff concluded that the utilities retain the dominant share in these markets, and that continued regulation in these markets is warranted. (Tr. 3249).

Witness Kagan also notes that the Commission has stated that the large C&I market is workably competitive[76] (HHI 2083) and, thus, a lower HHI for residential market means it is also workably competitive. (Tr. 184, lns. 9-15). However, Kagan fails to follow his own recommended methodology of consolidating ESCOs' market shares for those ESCOs under one parent company and recalculate those HHIs. (Tr. 220, lns. 7-19). If he did, this would result in increases to the HHI indices, undercutting his flawed argument regarding competitiveness of the market. Moreover, Kagan ignores the fact that there is no one single measure that would point to a workably or non-workably competitive market, and market concentration is just one factor to be considered. In fact, economists use the HHI as a screening tool. (Tr. 3247). HHIs are not the be all, end all of market power examinations. (Tr. 3253, lns. 16-17).

[76] Staff has not conducted an analysis as to whether the large C&I market is actually workably competitive.

With respect to the limited number of ESCOs exiting the market, large differences in prices do not appear to be the dominant factor behind ESCOs remaining in or exiting the market. (Tr. 4176-4177, lns. 14–19). Staff has shown that since 2010, the retail energy market migration has not significantly changed in either size or product offerings (Tr. 2157, lns. 1-3). In addition, Exhibit 703 (JSA-3) shows evidence that many ESCOs have entered the market within the period of 2014-2016, have continued to sustain prices above the utility price, and have not lost significant market share. For customers who do switch, Staff has shown evidence that customers are, in fact, switching back to the utility. (Exh. 726 (SEP-1)). In other words, competition is primarily between the utility and the ESCO, not between ESCOs, as should be expected. Customers appear to be willing to take a chance on an ESCO initially, but it is more likely that they return to utility service when they find the utility price to be better, instead of switching to another ESCO.

Regarding the lack of differentiating products and pricing strategies beyond what is currently available under utility default supply, Staff engaged in a lengthy discovery process with the intent of developing the record on the types of products offered in the market. Unfortunately, there was not enough information in the ESCO's responses to make a meaningful determination of either product type (e.g., fixed rate product, variable rate product, green product) or the price charged for that product. (Tr. 3264, lns. 5-11). Absent responsive information from the ESCOs, Staff made its own attempt at distinguishing between fixed and variable rate products, and found that some Con Edison small commercial electric customers from 2014-2016, Central Hudson small commercial electric customers in 2014, and Orange & Rockland low-income electric customers in 2014 showed instances of savings over the utility. Almost all other ESCO customers in those three service territories showed charges above those of the utility, as an absolute value and percent difference, for both fixed and variable rate products. This suggests that in most all instances, for mass market customers, there has been no clear

price benefit to either a fixed or variable ESCO rate over a default utility rate for the 2014-2016 period. (Tr. 3264–3269, Exh. 706 (JSA-5)).

c. ESCOs' Impact on Commodity Prices: Rates in the Fully Regulated Market

ESCO parties manipulate EIA data to manufacture a claim that ESCO participation in the New York energy market has, over the last decade and half, saved New Yorkers over $10 billion. (Tr. 676–678, no line numbers in this testimony). According to these parties, by eliminating the utilities' monopoly on energy supply, and introducing competition into the marketplace, ESCOs have lowered energy costs for all New Yorkers, and put billions of dollars back into customers' pockets. (Id.). However, this is not the case. (Tr. 3895-3898). In fact, witness Yates shows that the $10 billion Dr. Cicchetti claims has been saved by "New Yorkers" was actually the difference between the $1.5 billion of extra cost burden incurred by residential customers, offset by $11.5 billion of savings to C&I ESCO customers. (Tr. 3895, lns. 16-18). Therefore, taken as a whole, Dr. Cicchetti's EIA data shows that ESCO participation in the mass market, the relevant customer segment for evaluation in these proceedings, does not result in net positive value for its customers. (Tr. 3895, lns. 19-21).

Moreover, NEM and RESA attempt to use EIA data to argue that since 2012, ESCOs actually have been selling more MWhs than the incumbent utilities. (Tr. 698, no line numbers in this testimony). However, NEM relied on all customer categories reported in the EIA dataset even though the focus of this proceeding is on mass market customers. (Tr. 4173, lns. 4-7). In contrast, the market shares for the subset of residential mass market customers shown in Exh. 726 (SEP-1) show the opposite. Notable is that in all instances except one (Con Edison electric), the incumbent utility's usage share of the residential market increased from 2014 to 2016. (Tr. 4174, lns. 5-7; Exh. 726 (SEP-1)). Additionally, in all instances, with the exception of O&R gas and electric, the incumbent utility market shares were above 70 percent for 2014 through 2016. (Tr. 4173, lns. 10-16).

These increases in utility default service market share are completely at odds with the decreases in utility markets share envisioned when residential markets were opened to retail competition.[77] More incredulous are RESA's references to Dr. Alfred E. Kahn's advocacy of "the benefit of 'letting go' in markets where competition, even if sometimes with unpredictable results, was a better avenue to pursue than regulation." (Tr. 887). The market share increases of the incumbent utilities occurring in the retail electricity and gas markets for residential customers over the 2014 to 2016 time period are simply not consistent with the dramatic decreases in incumbent utility market shares that were evident at the time parties were arguing for a relaxation of regulatory constraints on New York's telecommunications markets. (Tr. 4173, lns. 17-24; Exh. 726 (SEP-1)).

The rate at which competitive forces impact pricing behaviors is important. (Tr. 4178-4179, lns. 21–12). Even assuming that market forces alone could bring commodity rates for all customers down to competitive levels multiple years into the future, it would be problematic if the Commission were to waive its pricing oversight on rate levels in the present. (Tr. 4179, 8-12). Moreover, the record in this proceeding indicates that any competitive forces currently at work in the retail access market quite often take years to have a constraining impact on prices. (Tr. 4180, lns. 6-16). Competitive forces have had over two decades to have a constraining impact on prices; time is up. Exhibit 704 (JSA-3 Confidential) shows that a significant number of ESCO suppliers have been able to consistently charge residential customers in excess of levels charged by the utilities, and some other lower priced ESCOs, for the entire three-year period covered by the pricing data set in the record of this proceeding. (Tr. 4180, 10-16; Exh. 701 (JSA-1 Confidential)).

The Commission did not envision a workably competitive market as one in which a significant number of ESCOs were charging 20 percent plus markups without being forced out of the market. Also, indicative of the competitive failure of the ESCOs

[77] Opinion 96-12, at 26; Opinion 97-5, at 5.

is that, overall, instead of switching away from high priced ESCO offerings to lower-priced ESCO offerings, consumers were moving away from competition in general by moving back to, and increasing the market share of, utility default service. (Tr. 4172, lns. 19-23).

Witness Kagan also suggests that ESCOs have beneficial impact on retail commodity markets via the role that ESCOs play in facilitating wholesale competition. (Tr. 162, lns. 7-13). We categorially refute this assertion. Witness Kagan gives no quantitative support for this assertion. In fact, Exh. 705 (JSA-4) shows that the great majority of ESCOs are not involved in long term supply agreements with generators, and no party has presented evidence to the contrary, such as redacted or confidential long-term agreements with generators. Witness Makholm, in addition, confirms that wholesale markets drive down costs, and stated affirmatively that ESCOs do not own any generation (Tr. 764-765, lns. 15-12). Furthermore, the Commission requires real-time pricing (mandatory hourly pricing) for large, interval metered utility customers in excess of 2MW.[78] There, the Commission appropriately isolated these customers, as "targeting the largest customers could yield the level of demand response and load reductions advocated by the NYISO and Con Edison/O&R as being necessary to mitigate wholesale price spikes effectively."[79]

No ESCO presented evidence that they are uniquely situated to reduce wholesale market coincident peak through their various pricing schemes, or that their energy management services are economical for mass market customers to reduce wholesale market coincident peak or affect the bids by merchant generators. In fact, the Impacted ESCO Coalition stated affirmatively that they only have demand response

---

[78] Case 03-E-0641, Proceeding on Motion of the Commission Regarding Expedited Implementation of Mandatory Hourly Pricing for Commodity Service, Expedited Implementation of Mandatory Hourly Pricing for Commodity Service, Order Instituting Further Proceedings and Requiring the Filing of Draft Tariffs. (issued September 23, 2005).

[79] Id. at 14.

products aimed at NYISO peak period for large C&I customers, and none for residential customers. (Tr. 4043-4044, lns. 6–13).

Thus, the evidence in the record highlights several characteristics which indicate that the retail energy market for residential mass market customers is not workably competitive. Namely, many ESCOs are able to charge prices in excess of the utilities, and other lower priced ESCOs, without losing significant market share. Additionally, the high HHI indices suggest a concentrated retail market. Moreover, the similarity of the emissions profiles indicates that, on average, the ESCOs offers few distinguishable and innovative green products from those currently offered by the utility. Finally, the lack of price transparency in both product attributes and relative pricing likely enhanced many ESCO's ability to sustain high prices. The evidentiary phase of these proceedings was not commenced to base conclusions about market competitiveness on what the ESCOs would have us believe -- that when customers buy a product it is unquestionably worth that amount. The ESCOs should have the burden of proof, and should not be allowed to argue that ESCOs have no role in quantitively defending the value of their products. Taken in sum, not as isolated market characteristics, the evidence presented by the non-ESCO parties constitutes a strong indication that the market is not workably competitive, and the Commission's continued oversight and focus on customer protections is warranted.

3. Future Product Offerings

(December 2016 Notice Questions 1, 2, 3, 16, and 20)

As explained in Section III.C.1., the utilities should be ordered, and tariffs should be filed, to prohibit the ESCOs' use of the utilities' systems to provide their commodity service, except where: (1) the products offer a guaranteed savings to mass market customers or, in the instance of low-income customers that take commodity service only from Commission approved ESCOs, to provide commodity service at a cost that is no greater than the default utility; (2) the ESCO provides 100 percent electricity generated from 100 percent renewable sources, as defined in and subject to the

environmental attributes and delivery rules of the Commission's EDP; or, (3) the ESCO is engaged in customer aggregation using either the CCA model or the NFP model (Tr. 2033, 2092). Thus, Staff recommends that the Commission determine the following:

a. Variable-Rate, Commodity-Only Products

As previously stated, the Commission should prohibit the ESCOs from using the utilities' distribution systems to provide any sort of variable-rate commodity-only products unless the ESCO guarantees that it will charge less, or no more, than the applicable utility's default commodity service on an annual basis. (Tr. 2033, lns. 1-14).

Witness Lukas proposes that variable rates be continued in the mass markets, but that benchmarks be used to establish a reference price for commodity service as a means of preventing "potential" ESCO overcharges. (Tr. 50-51, lns. 5-6). Mr. Lukas makes a number of proposals on how to benchmark gas and electric commodity prices (Tr. 62-63, lns. 1-11); however, these complicated calculations will not provide market clarity and transparency, but could confuse consumers even further, and thus should be rejected by the Commission. The clearest way to ensure that mass market customers are not overcharged for commodity is to require that the utility price be shown in a side-by-side comparison on the customer's bill, and that the ESCOs guarantee that they will charge less, or no more, than the utility default service.

Claiming that restricting variable rate products is a draconian and harmful step, witness Hanger proposes "reform" options, including requiring ESCOs to disclose variable rate product prices at the beginning of each applicable month, establishing "guardrails" to limit how much an ESCO variable rate product can increase each month, banning the sale to low-income customers, or prohibiting their sale to residential customers. (Tr. 259, lns. 7-20). After initially stating that his preference is to not intervene in any manner in ESCO pricing, he proposes, in the alternative, guardrails for a trial period and with a starting point of 30 percent increase from month-to-month, that would limit how much a variable rate could increase in any one month. (Tr. 260, lns. 2-5).

The proposals offered by Mr. Hanger should be rejected as inferior to Staff's recommendation on limiting such pricing to less than or equal to the utility's price. Publishing the monthly price the month before it applies does not allow the customer to shop for the best commodity price; it only provides a "heads-up" as to what the commodity price will be next month. The guardrails proposed would allow prices to only increase by 30 percent from month-to-month, which is hardly a benefit to customers who are already paying exorbitant rates as compared to what they would have paid had they remained with the utility. We do agree, however, and the Commission already requires, that low-income customers are guaranteed savings over the default utility service. We also agree with Mr. Hanger that prohibiting the sale of variable rate products is a logical reform to the mass markets. That is why the Commission should determine that ESCOs are prohibited from using the utilities' systems to sell their variable products unless they guarantee that mass market customers will not be charged more than they would have been charged for default utility service.

Witness Lacey describes at length a number of measures that other states have implemented regarding variable rates. (Tr. 1187-1192). Mr. Lacey does not suggest that the Commission adopt any specific set of rules adopted in other states, but recommends that the Commission have the stakeholders address these potential solutions in a collaborative to explore these solutions. (Tr. 1192-1193, lns. 13-7). The time for stalling and stone walling by the ESCOs is over. The Commission should reject this suggestion and adopt Staff's recommendation to cap variable rate products at no more than what the utility would have charged.

b. Fixed-Price Products

The Commission should prohibit the distribution utilities from providing ESCOs access to their systems to provide fixed-price commodity products to mass market customers (Tr. 2132) unless the product can be structured so that they provide a guaranteed savings when measured against the default utility on an annual basis. (Tr. 2132, lns. 7-14). The rationale for this recommendation is the generally significant

premiums charged for fixed-price products – as evidenced by the data provided by the utilities in response to Staff IR DPS-Utility 5 – and the failure of ESCOs to quantify the "value" attributed to their fixed-price products in response to Staff IR DPS-ESCO 2. (Exh. 709 (SP-1); Exh. 710 (SP-1a); Exh. 711 (SP-1a Confidential)). In addition, the utilities' budget billing process offers many of the same benefits as fixing the commodity price and does not impose any premium on the customer. (Tr. 2131, lns. 15-21). Fixed rate products stabilize only one of the four inputs to customers' bills. (Tr. 2209, lns. 2-11).

Witness Lukas proposes that fixed-price products be continued in the mass markets, but that a "market price comparison" be used to benchmark commodity service as a means of identifying ESCOs that are "unjustifiably" taking advantage of mass market customers. (Tr. 58, lns. 3-6). Lukas suggests that this market price comparison would use the average of ESCO charges, as published in the Commission's Price to Compare website, for the commodity markets and set an upper bound of reasonableness above those average gas and electric commodity prices. (Id.). However, these complicated calculations will not provide market clarity and transparency, but could further confuse consumers, and should be rejected by the Commission. The most clear and simple way to ensure that mass market customers are not overcharged for commodity is to require that the ESCOs guarantee that, on an annual basis, they will charge less, or no more, than the utility default service. In the alternative, Lukas offers an "index based" benchmark similar to that discussed in his variable rate product proposal, and contained in a May 4, 2016 Staff Whitepaper (2016 Whitepaper), to monitor fixed prices. (Tr. 59, lns. 12-17). It should be noted that in his rebuttal testimony, Mr. Lukas criticizes Staff for not following the approach in the 2016 Whitepaper, noting the statement that fixed prices could provide value to customers. (Tr. 90, lns. 4-8). He claims that a fixed price offers value because the customer knows he or she will not pay more than the fixed price despite increased commodity prices. (Tr. 90, lns. 15-16). Staff's 2016 Whitepaper was

simply a proposal for offered for comment and was never adopted, and the Commission should place no weight on the document since Track I is a litigated proceeding.

Direct Energy witnesses Kagan, Sharfman, and Cicchetti agree with Mr. Lukas, and make the statement that ESCOs offering a fixed-price product provide "clear" value for customers, allowing them to budget their energy costs. (Tr. 161, lns. 14-15; Tr. 355, lns. 11-13; Tr. 725, no line numbers in this testimony). Witness Kagan also argues that eliminating fixed prices for small business customers is a concern because he claims, without supporting evidence, that these customers rely on fixed-price offerings to manage their energy expense within their budgets. (Tr. 242, lns. 15-17). Witness Hanger also argues that fixed prices offer a benefit to customers, and that Staff's proposal would result in the termination of hundreds of thousands of current fixed-price contracts and prevent future customers from electing to take such products. (Tr. 295, lns. 294-298(sic)).

RESA witness Lacey views the "ESCO of the future" as one that provides innovative products that customers want, such as fixed-price commodity as customers often seek protection or "insurance" on their commodity prices, and that should be allowed in the markets going forward. (Tr. 1142, lns. 7-10; Tr. 1176, lns. 10-14). He believes that customers should be allowed to place the price risk on their ESCO(s). (Tr. 1256, lns. 4-5). In responding to Staff, Mr. Lacey opined that Staff's opinion of what constitutes a benefit does not matter; only the customer's opinion as to the "value" of that benefit matters. (Tr. 1275, lns. 5-6). Witness Lacey's final argument is that the budget billing offered by the utilities is not the same as a fixed-price product (Tr. 1275, lns. 13-14), noting that the ESCO fixed-price product does not use intra-period price adjustments or a true-up at the end of the year. (Tr. 1275, lns. 11-13).

The Commission should reject the arguments of the ESCO witnesses because the evidence in the record shows that the significant premium demanded by most ESCOs offering fixed-price products is a tremendous expense to the customer, and only fixes one input to the amount billed to the customer. Thus, the "insurance" price is too high, and most rational customers, presented with the facts in a transparent manner,

would see this. The mass markets, however, are not transparent and customers are not provided sufficient information by the ESCOs to determine if the product actually provides them "value." If there is no way to analyze a fixed-price offering, then the customer cannot make a rational choice, and they are making a choice based on marketing tactics by the ESCO or, perhaps, fear. Thus, the ESCOs' basic argument here is that customers should be left to their own decision-making process, whether or not they have any information or transparency as to the commodity markets or the premium charged by the ESCO. It is simply a "buyer beware" mentality that the ESCOs have, and the Commission should step in and protect customers by ensuring just and reasonable rates. The ESCOs' argument also completely ignores the fact that the Commission needs to be able to determine whether the rate is just and reasonable. Therefore, the Commission should adopt Staff's recommendation on fixed prices to protect mass market customers.

c. Renewable Energy Products

As discussed above in section III.C.3.a., the Commission should determine that the only renewable energy products ESCOs may offer to mass market customers, excluding low-income customers, is a 100 percent renewable resource energy product provided over the calendar year and generated from renewable resources. (Tr. 2040, lns. 4-8). This recommendation modifies the requirement the Commission intended to establish in the Reset Order,[80] that ESCOs provide to their customers "green products" that are comprised of at least 30 percent renewable energy. (Tr. 2086). The renewable energy may be generated by biomass, biogas, hydropower, solar, or wind as defined in

[80] Case 15-M-0127, et al., supra, Order Resetting Retail Energy Markets and Establishing Further Process (issued February 23, 2016)(Reset Order) at 14-16.

and subject to the Commission's environmental attributes and delivery rules contained in the EDP.[81] (Tr. 2086-2087, lns. 14-5).[82]

A large percentage of the electric commodity that customers purchase from the utilities is generated from renewable resources. The utility-provided renewable resources come from utility-owned and contracted facilities, from renewable energy credits (RECs) (coupled with conversion transactions) utilities purchase for their customers to comply with the old Renewable Portfolio Standard (RPS) and the new Renewable Energy Standard (RES) mandates, and additional residual renewable resources blended into the New York Spot Market purchased that utilities make. As a result, the Environmental Disclosure Labels on the Commission's website disclose that as of 2015 the utilities were currently satisfying between 11 percent and 28 percent of their electric load with power generated from renewable resources. Those utility-provided resources are and will ratchet upward each year through 2030 due to the RES mandates. On the other hand, the Environmental Disclosure Labels on the Commission's website disclose that as of 2015 the ESCOs were providing very in the way of renewable resources other that what they were obtaining through the residual mix of the New York Spot Market where most ESCOs obtain virtually all of the power. The Environmental Disclosure Labels show the fuel sources and air emissions used to generate the electricity commodity provided by each ESCO in New York on a portfolio basis.[83] The Environmental Disclosure Label of Direct Energy is typical of the fuel source mix provided by ESCOs in New York and, in fact, only two ESCO vary significantly from

---

[81] Under the EDP, energy labels are based on the environmental attributes of the energy purchased by the load serving entity (LSE) and are not affected by the separate purchase of Renewable Energy Certificates (RECs).

[82] Case 15-E-0696, Environmental Disclosure Labeling Program, Notice Instituting Proceeding and Soliciting Comments on Environmental Disclosure Labeling Program (issued December 10, 2015).

[83] Environmental Disclosure Labels for every ESCO operating in New York can be found on the Department's website at: https://nygats.ny.gov/ng/Report/getdto_view_Report_PublicEDPLabel.

that mix.[84] (Exh. 1301). The Direct Energy label shows a virtually identical fuel mix to that of the label for the New York Spot Market. The claim that at least a portion of the significant delta between ESCO and utility charges is explained by ESCOs offering renewable energy is disingenuous at best. ESCOs may be charging a premium for green energy, but they are not actually providing a significant amount of added renewable energy to customers in New York.

Any market for voluntary purchases of additional renewable resources should not allow customers to pay voluntary premiums for renewable resources that ESCOs or utilities are already mandated to deliver, or for resources that an ESCO received by chance in the residual mix of the New York Spot Market. Such purchases do not add value. In addition, any market for voluntary purchases of additional renewable resources should not allow customers to pay voluntary premiums for renewable resources at a level that is below what the customer could have received without a premium from the utility company. If there is to be voluntary purchases of additional renewable resources, they should provide obvious added value. Staff recommends that the best way to do that is to require a 100% renewable resource product which will ensure that the value will be above what is already mandated through 2030.

Additionally, any argument that these labels do not reflect the actual products offered because they are reported on a total ESCO portfolio basis is misplaced. The fuel mixes of electricity purchased on the spot market cannot be disaggregated, meaning that an ESCO cannot "divert" the renewable portion of the spot market electricity to some customers, while serving other customers with the electricity

[84] See Environmental Disclosure Labels at https://nygats.ny.gov/ng/Report/getdto_view_Report_PublicEDPLabel.

generated by non-renewable sources.[85] An Environmental Disclosure label that nearly matches the spot market mix evidences that the ESCO is providing all its customers with the same level of renewables, without any bilateral agreements with renewable generators or conversion transactions, which would be reflected in the label. Thus, in almost every instance, a customer who switches from the utility to an ESCO is likely to receive the same or less renewable energy than they were receiving from the utility, even if they are sold a "green" commodity product.

GEE's witness argues that meeting our recommendation regarding 100 percent renewable energy is unreasonable because, he claims, without offering any analysis, that GEE has difficulty selling renewable products at a minor premium and that GEE's "electric desk" determined that the level at which it would have to price such a product would be too high and not attractive to customers. (Tr. 97, lns. 8-12). Yet, Direct witness Hanger sees no such problem and states that ESCOs can provide 100 percent renewable energy to their customers. (Tr. 256, lns. 2-3). Messrs. Hanger, Sharfman, and Lacey state in their rebuttal that Staff's proposal is radical and draconian. (Tr. 304, lns. 4-6; Tr. 419; Tr. 1269-1270). Witness Hanger and Sharfman also claim, without offering any analysis, that a 50 percent product "could" meet the states 50 percent renewable goal by 2030, before the 2050 deadline. (Tr. 309, lns. 94-98(sic); Tr. 419). Witness Lacey also asks that the Commission reject the proposed requirement that 100 percent renewable energy products comply with the New York environmental disclosure label program. (Tr. 1269-1270, lns. 18-8).

---

[85] Case 94-E-0952, In the Matter of Competitive Opportunities Regarding Electric Service, filed in C 93-M-0229, Opinion NO. 98-19, Opinion and Order Adopting Environmental Disclosure Requirements and Establishing A Tracking Mechanism, Appendix page 1 of 12 (issued December 15, 1998); "An LSE can disaggregate its generation sources into separate products with different environmental characteristics, provide disclosure by product, and sell the products to different customers. However, disaggregation of the environmental characteristics of spot market purchases, except those that are otherwise subject to conversion transactions (further described below), is not permitted."

The Commission should reject these arguments as they fail to acknowledge that the 100 percent requirement is the exception to our overarching position that ESCOs should be providing value to their customers by guaranteeing that they will save money over the year when compared to the default utility service or by providing them with 100 percent renewable energy at an uncapped cost. However, should a ESCO create a "green" product with something less than 100 percent renewable energy, but is also willing to guarantee that customers will not pay more than the default utility rate over a year, then that product could be allowed. In fact, one ESCO is currently serving customers with a 100 percent green product that also guarantees that the customer will pay no more than if the customer was a full-service utility customer.[86] Finally, the recommendation that the ESCOs comply with the New York Environmental Disclosure Label program is to ensure that New York obtains the benefits of renewable generation. When an ESCO commits to sell a customer a renewable product, the Commission should ensure that the renewable energy is actually delivered in New York, and is not just a paper transaction that cannot be verified. Thus, the Commission should determine that the only renewable energy products ESCOs may offer to mass market customers, excluding low-income customers, is a 100 percent renewable resource energy product provided over the calendar year and generated from renewable resources.

d. Value-Added or Bundled Products

Regarding energy-related value-added and "bundled products," the prospect of potential "value-added" products that the ESCOs could or do offer to mass market customers should not be considered until after the recommended transition to the new retail access mass markets has been implemented by the Commission. (Tr. 2036-2037, lns. 20-2). After the detrimental aspects of the current ESCO products and marketing activities are eliminated, the potential development of value-added products should then occur in the collaborative process contemplated in Track II. (Tr. 2037, lns. 2-10). At this

[86] Case 12-M-0476, et al., supra, Order Approving Waiver and Authorizing Utility Expense Reduction, LLC to Serve Low-Income Customers (issued December 14, 1027).

time, the only "value-added" products that may justify a modest premium over default utility pricing are 100 percent renewable energy products (Section c., above).

The ESCOs view any commodity product they offer as value-added simply because customers "value" them. (See, Tr. 46, lns. 3-4; Tr. 187, lns. 1-7; Tr. 291, lns. 210-213(sic); Tr. 364, lns. 2-3). What the ESCOs mean by this is that the effort to quantify these value-added products by the Commission is misplaced, that the Commission should simply accept that customers ascribe some value to these products and leave it at that, with no analysis. In the ESCOs' view, it does not matter whether the Commission finds the value of value-added products reasonable; it's whether the customer does. Yet, if these value-added products were actually providing real economic benefit to customers, the ESCOs would have quantified it and touted it in their testimony. Claiming that only the customers should decide, in a market that lacks transparency, whether they are receiving value is akin to arguing that "buyer should beware." The Commission must ensure that customers rates for commodity service are just and reasonable. This is precisely why the Commission should, for Track I, set aside and not consider value-added products or services at this time. First, the Commission must address and correct the pricing, transparency, and marketing of ESCOs. After that is done, and the mass markets have transitioned as recommended by Staff, then the Commission should consider potential energy-related value-added services and the pricing of such products.

e. CCA Products

At the onset, it is important to note that CCA is still in its infancy and further evaluation is needed to determine whether or not CCA programs are providing real value to customers. However, one of the primary differences between a CCA and a traditional ESCO offering is the fact that a CCA utilizes an independent expert or aggregator that works with the municipality to arrange favorable terms in ways that

individual customers have not been able to do.[87] The evidence in these proceedings shows that the aggregation of mass market customers could provide economic benefits to such customers, and that ESCOs could address the commodity energy needs of such customers with a significantly improved pricing performance. (Tr. 2145, lns. 18-23). This is supported by the review of bill data from the Sustainable Westchester Community Choice Aggregation (SW CCA) provided by Con Edison and NYSEG, contained in Exh. 709 (SP-1), Exh. 711 (SP-1a Confidential), and summarized in Exh. 722 (SP-9). (Tr. 2145-2146, lns. 18-5). This data indicates that in the aggregate, from May 2016 (the start of the program) to the end of that calendar year, certain electric customers participating in the SW CCA in the NYSEG service area saved approximately eight percent on their total bill compared to what NYSEG would have charged for the bundled commodity and delivery service. (Tr. 2146-2147, lns. 6-19). In Con Edison's service territory, the SW CCA customers, who appear to have a more typical electric usage patterns and no electric heat, saved approximately 5.3 percent compared to what they would have paid for bundled service from Con Edison. (Tr. 2147-2148, lns. 20-2).

While, of course, data for more than just the eight months from the SW CAA program would be preferable, the data suggests that aggregating enough mass market customers with a CCA administrator can save customers on their commodity service. (Tr. 2148-2149, lns. 5-5). Similarly, the Not For Profit (NFP) model offers some promise as our review of the NFP data indicates that mass market customers of some NFP ESCOs were able to provide commodity at a lower price than NFG over the 2016 calendar year. (Tr. 2149-2150, lns. 9-11).

Therefore, the rules should be changed to prohibit ESCOs from providing commodity service to aggregated mass market customers directly. Instead, the CCA must utilize a professional energy buyer independent of the ESCO and acting in a

[87] Case 14-M-0224, Proceeding on Motion of the Commission to Enable Community Choice Aggregation Programs, Order Authorizing Framework for Community Choice Aggregation Opt-Out Program, at 2 (issued April 21, 2016)(CCA Framework Order).

fiduciary capacity (Tr. 2033, lns. 14-24), or a NFP model where the ESCO is a bonafide not-for-profit corporation or municipal entity. (Tr. 2033-2034, lns. 24-3).

RESA witness Lacey argues that aggregators should be free to offer whatever product is best for a particular community (Tr. 1278, lns. 17-18), nor should they be limited in any way as to the price and products they offer. (Tr. 1278-1279, lns. 18-2). Witness Lacey also is concerned about limiting CCA to those facilitated through a NFP, municipality, or fiduciary buyer, since he claims, without any evidence, that they might not be viable business options for some entities. (Tr. 1279, lns. 4-7). Mr. Lacey believes that traditional ESCOs should not be prohibited from this market as excluding them will lead to potentially stifling innovative products, and he claims that ESCOs are able to quickly provide supply options to these CCA customers. (Tr. 1279, lns. 14-19). However, witness Lacey shows a lack of understanding of the New York market, provides no support for his assertions, and further fails to acknowledge that: (1) the framework for offering service through a CCA is not being addressed here, but instead has already been established by the Commission; (2) CCAs are still of an experimental nature; and (3) CCAs depend heavily on an expert buyer.[88] In light of the overcharging of mass market customers by the ESCOs, the Commission should limit CCA facilitators to only NFPs or municipal entities to ensure that the Commission's and communities' CCA programs are benefiting customers by the utilization of an independent professional energy buyer acting in a fiduciary capacity.

f. Other Products

There are no "other products" that Staff has to discuss. However, any other potential ESCO products offerings should be discussed and developed in Track II of these proceedings, notwithstanding adoption of the above recommendations in Track I.

[88] See, CCA Framework Order.

4. ESCO's Role in the Commission's Energy Policies, Including REV and CES

(December 2016 Notice Questions 1 and 20)

The Commission has, in recent years, undertaken numerous energy initiatives, including the Reforming the Energy Vision (REV) initiative[89] and the Clean Energy Standard (CES) initiative.[90] While, currently, ESCOs can offer products to New York customers that may advance one or more of the goals of these initiatives, ESCOs are not essential to either initiative and, to date, have done little to materially contribute to either initiative.

Several ESCO Parties have asserted that ESCOs play an essential role in advancing the Commission's REV and CES initiatives, claiming that ESCOs offer energy efficiency, green products and other Distributed Energy Resource (DER) products. (See, Tr. 268-269, lns. 12-15; Tr. 1139-1142, lns. 9-3). However, as discussed below, the ESCO parties offer no evidence to support these claims, and instead rely on assumptions and unsupported conclusions.

As an initial matter, while the Commission has acknowledged that ESCOs can play a role in REV and other Commission initiatives, it is expected that DER providers will be the entities that will drive innovation and penetration of DER in furtherance of these important Commission initiatives.[91] (Tr. 2588, lns. 13-19). DER providers, as distinguished from ESCOs, do not sell commodity, and their practices are governed by the Uniform Business Practices for Distributed Energy Resource Suppliers

---

89 Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision.

90 Case 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.

91 See, Case 14-M-0101, supra, Order Adopting Regulatory Policy Framework and Implementation Plan (issued February 26, 2015).

and a separate registration process.[92] (Tr. 2588, lns. 13-19). Thus, the DER market is a market distinct from that of the ESCOs.[93] In fact, in the DER Oversight Order, the Commission specifically mentions the retail markets, the shortcomings of those markets, and the need to provide the appropriate level of oversight to the DER markets to avoid making the same mistakes.[94] It is expected that DER markets will provide the innovative products and services that, to at least some extent, ESCOs active in the retail markets were expected to promote, but which never materialized. (Tr. 2596, lns. 2-14). Therefore, while it is possible for an ESCO to provide DER services, they are not required to offer such services, and they are not expected to be the primary entity driving DER penetration in the market; and thus, ESCOs are not essential to or even needed to ensure the success of the Commission's REV and CES initiatives.

Moreover, even assuming that ESCOs are the entities primarily responsible for the introduction of DER (which they are not), evidence in the record shows that, even after approximately two decades, very few ESCOs are offering DER products and services, or any products that can remotely be considered innovative. (Tr. 2596, lns. 2-14; Exh. 710 (SP-1a Public Redacted) and 711 (SP-1a Confidential) pages 163-1253). In fact, there is scant evidence introduced in these proceedings that shows that ESCOs are in fact offering energy-related value-added products and services, and more importantly, that any customers in New York actually take those services from an ESCO. Instead, the ESCO parties state on numerous occasions throughout the record that ESCOs offer such products and services to customers, but they provided little to no evidence to show that ESCOs are providing such products and services to New York State residents. Indeed,

---

92 See, Case 15-M-0180, In the Matter of Regulation and Oversight of Distributed Energy Resource Providers and Products, Order Establishing Oversight Framework and Uniform Business Practices for Distributed Energy Resource Suppliers (issued October 19, 2017)(DER Oversight Order).

93 Id. at 1-3.

94 Id. at 2, and passim.

the Commission should take notice of the ESCOs' failures in the mass markets and take a jaundiced view of their potential to be productive resources for DER services.

5. ESCO Eligibility Requirements

(December 2016 Notice Questions 1 and 4)

The ESCO eligibility process is thoroughly explained in the UBP §2. Exhibit 724 (SP-11) contains, in redline, several proposed changes to UBP, specifically requiring compliance with the proposed UBP §11 as part of an ESCO's eligibility requirement. These proposed changes include both the redlined changes that were proposed for comment in March 2016,[95] as well as several additional proposals offered as part of the Staff Panel Testimony. The latter includes, but is not limited to, a new §11 that proposes the additional consumer protections necessary for mass market customers that are reflective of the recommendations Staff offered in the initial testimony of the Staff Panel, and that are further supported by this brief. Additionally, depending on the Commission's determinations in Track I of these proceedings, further modifications of the UBP may be required. Any changes to the UBP should be implemented on a prospective basis and apply to ESCOs that are currently eligible to serve in New York State, as well as ESCOs that may apply for eligibility. In order to address the issues identified with the retail markets serving mass market customers, the Commission needs self-executing solutions that rely solely on enforcement.

6. ESCO Reporting and Collateral Posting Requirements

(December 2016 Notice Question 20)

One of the premier challenges in conducting the investigation directed by the Commission in the December 2016 Notice has been the unwillingness of ESCOs to provide information regarding their business practices, particularly with respect to specifics of the products and services that they claim to offer in New York. (Tr. 2115, lns. 10-24 – Tr 2116, lns. 1-4). Despite the multiple comments on the value of the

[95] Case 98-M-1343, In the Matter of Retail Access Business Rules, Notice Seeking Comments on Revisions to the Uniform Business Practices (March 8, 2016).

products ESCOs are selling, including fixed rate products, the ESCOs were unwilling to quantify or provide the value of such products and services. Staff recommends additional reporting requirements that are necessary in order to effectively monitor and oversee the retail markets going forward. If the ultimate goal is to ensure that customers are receiving material value from participation in the retail markets, then accurate and transparent reporting on the products that ESCOs are offering to customers is essential. In particular, if an ESCO is charging prices for commodity in excess of the amount the utility would charge that same customer because the ESCO is offering an energy-related value-added service, then ESCOs should be required to report on the cost of the commodity, and separately state the cost of the energy-related value-added service so that the Commission, and the customer, can determine what the premium for that energy-related value-added service is, and then decide whether it is actually providing a value commensurate with the cost.

Some of the ESCOs claim that collateral posting requirements, or bonding, for ESCOs would have the same salutary effects as price controls by forcing bad actors out of the markets. (Tr. 606, lns. 11-14; Tr. 1170; Tr. 1216, lns. 12-15). Generally, the proponents of establishing bonding requirements ask that the Commission establish a collaborative process to determine specifics, such as the amount of the bond or posted collateral. (Id.). The Commission should reject the idea that bonding and collateral posting will have the same effect as ensuring that the ESCOs are charging just and reasonable rates, as it will not. Presently, the UBP place no limit on what an ESCO can charge a customer, so the Commission cannot currently seek consequences under the UBP against a bad actor charging unjust and unreasonable rates. Thus, the posting of a bond or collateral will not have the effect they claim, and the proposal should be rejected by the Commission. Additionally, this appears to be part of a hidden agenda advanced by the larger ESCOs to weed out the smaller ESCOs.

7. ESCO Marketing practices

(December 2016 Notice Questions 6 and 7)

a. ESCO Practices; Materials; Contracts; Scripts & Training Materials

The guidelines for ESCO marketing practices are explained in UBP §10. The Commission has, on several occasions, revised and strengthened those requirements in light of persistent abuses arising out of ESCO marketing.[96] The Commission has taken a number of steps to address ESCO marketing abuses and, while the number of complaints has generally decreased, issues surrounding ESCO marketing practices continue to persist. (Tr. 2102-2103, lns. 6-5; Tr. 3027-3028, lns. 20-5). Marketing abuses, such as slamming and false representations regarding who the marketer represents or what the proposed products will actually provide, continue to drive a significant portion of customer complaints against ESCOs. (Tr. 2105-2108, lns. 20-2). Additionally, a majority of such abuses arise out of direct door-to-door and telephonic marketing. (Tr. 3027-3028, lns. 20-5; Tr. 3029, lns. 3-11). ESCOs should therefore be prohibited from utilizing direct door-to-door, point of sale, telephonic sales, or similar marketing practices to enroll mass market customers. Instead ESCOs' marketing practices should be limited to direct mail, electronic enrollments, or similar marketing channels whereby the consumer must respond and/or initiate direct contact with the ESCO.

8. Customer Information and Cyber Security

(December 2016 Notice Question 6)

As stated above, the Commission should require that the ESCOs ensure the protection of customer data, confidentiality, and cyber security by demonstrating compliance with UBP §4, and consistent with the National Institute of Standards and Technology Cyber Security Framework (NTS&TCS) (Tr. 2035-2036, lns. 22-12; Tr. 2188, lns. 9-16) or the applicable cyber security requirements of the North American Electric Reliability Corporation (NERC)(Tr. 2698-2700, lns. 9-3) as proposed in the

[96] See, e.g. February 2014 Order at 27-47.

UBP, Section 12 (Exh. 724 (SP-11)). The current UBP include protections against selling or otherwise improperly transferring customer information,[97] but does not address processes and procedures regarding cyber security necessary in the digital age where cyber security breaches have become more prevalent. (Tr. 2187-2188, lns. 19-16). No parties offered positions directly opposing the addition of cyber security requirements.

9. Purchase of Receivables and Billing Process

(December 2016 Notice Question 8)

a. Purchase of Receivables

In the early stages of the retail markets, the Commission authorized utilities to purchase the ESCO accounts receivable in order to reduce ESCO operating costs, ensure that customers receive the full benefits of HEFPA, minimize the switching of payment-troubled customers back to full utility service, and further promote retail access migration.[98] (Tr. 2053, lns. 4-14). The Commission also noted that the purchase of receivables (POR) program would only be needed on a transitional basis to help jump-start the retail energy market, stating that "in the long run, ESCOs should no longer need the support of the utilities to provide customer care services, and should ultimately provide all customer services associated with the provision of commodity."[99]

Under the current POR construct, the utility purchases the ESCO receivables when they occur, at a discount (POR discount). (Tr. 2053, lns. 16-18). The discount amount varies by utility based on, among other things, the uncollectibles incurred by all of the ESCOs in that utility's service area. (Tr. 2053, lns. 18-21). Furthermore, the utilities purchase the ESCO receivables without recourse, which means that the utility cannot subsequently seek to collect from the ESCO any monies that it could not collect from the ESCO's customers. (Tr. 2154-2155, lns. 17-3). Pursuant to the rate plans of each utility, these POR discount rates are updated annually and are

---

97 See, UBP Section 4.

98 See, 2004 Policy Statement.

99 Id. at 16.

composed of four components: (1) the uncollectibles discount rate; (2) the risk factor associated with the uncollectibles; (3) a credit and collections adder based upon forecasted POR receivables for the upcoming year; and, (4) a small administrative handling fee. (Tr. 2155, lns. 11-19).

Question 8 of the December 2016 Notice asked "whether the Purchase of Receivables system for mass market customers should be modified in any way, including but not limited to, imposing 'purchase with recourse' provisions or tiered discount rates so that ESCOs with abusive practices bear more financial risk from such practices?"[100] GEE offers that the existing POR model should not be changed. (Tr. 80, lns. 1-6). GEE argues that modifying the POR system as proposed in the Staff testimony would subject ESCOs to additional costs in the form of "credit checks on customers, incremental credit and collection costs and the inability of ESCOs to pledge receivables to guaranty payments to utilities under gas retail choice programs." (Tr. 81, lns. 14-17). GEE also opines that if POR were eliminated, ESCOs would need to have the ability to terminate a customer's service for non-payment, and could also have a negative impact on competition by favoring larger ESCOs. (Tr. 82-83, lns. 3-2). Infinite Energy recommends eliminating POR altogether, requiring ESCOs to bear the costs. (Tr. 642, lns 15-18). RESA proposes modifications to the POR system to address the perverse incentive to engage in "distasteful business practices." (Tr. 1197, lns. 1-11). One such modification, RESA continues, would be the implementation of a "claw back" whereby, if an ESCO's bad debt exceeds a certain threshold, or the ESCO charges rates above a pre-determined pricing threshold, the ESCO would be charged the difference between the ESCO's actual bad debt, and the other pre-determined threshold. (Tr. 1197-1198, lns. 11-6). Other parties support reforms to the POR system, but provide no specific recommendations. (See, Tr. 278, lns. 12-16).

The retail energy markets are now mature, albeit fundamentally flawed, steady state markets that are populated by a significant number of ESCOs that promote

[100] December 2016 Notice at 6.

themselves as well-established national providers of retail commodity services. (Tr. 2156-2157, lns. 17-19). Therefore, POR without recourse, using an overall ESCO uncollectible discount rate, is neither a necessary nor an appropriate mechanism to continue. Moreover, POR without recourse can have potentially unfair effects on ESCOs and their customers because ESCOs with higher prices, and likely higher uncollectibles, are shielded from higher uncollectibles, while ESCOs with potentially lower prices and uncollectibles are paying an unnecessarily high POR discount rate to account for those higher uncollectibles. (Tr. 2157-2158, lns. 19-2). Accordingly, the Commission should direct the utilities to no longer provide the ESCOs the option of purchase of receivables without recourse. Instead, the distribution utilities should be directed to provide ESCOs the option of purchase of receivables "with recourse." Staff recognizes the complexities surrounding such a change and thus implementation of this new paradigm should be addressed with the parties, particularly the utilities.

b. Billing Methodologies

1. Utility Consolidated Billing

As explained in detail in the Staff Policy Panel testimony, the Commission also directed the utilities to provide consolidated utility billing services (CUB) as an additional enticement to encourage ESCOs to participate in the developing market. (Tr. 2051-2052, lns. 22-2). CUB, which was enabled by Commission actions directing the utilities to completely unbundle their delivery and supply operations and bifurcate bills to separately show their unbundled delivery service and commodity supply service charges, allowed ESCOs to provide the utility with the customer's commodity charges to be separately identified on the customer's bill. (Tr. 2052, lns. 2-10). This lowered ESCOs' barrier to market entry, and greatly simplified their back office operational requirements. Staff does not propose to eliminate CUB at this time, but recommends inclusion of a bill comparison on the customers' bill which will help to improve transparency for retail access customers. The Commission should require that mass market ESCO customer

bills include a "side-by-side" comparison showing the current bill charges and what the customer would have paid had they taken delivery and commodity from their utility.

2. Dual Billing & Supplier Consolidated Billing

While we have no direct recommendations regarding changes to these billing model mechanisms at this time, though we expect that adoption of several of the recommendations of Staff and the proposals of other parties in these proceedings may impact these processes, and there may be a need to review these processes in Track II of this proceeding.

10. Customer Complaints

(December 2016 Notice Questions 1 and 14)

A customer complaint regarding ESCO or utility services can be registered with the Department's Call Center via telephone, by email, fax, through the Commission's website, or in person. (Tr. 2098-2099, lns. 22-3). In the initial process, known as the Quick Resolution System, or QRS, Staff reviews the details of the concern to first determine if it falls within the Commission's jurisdiction and, if it does, a case is opened, the customer will receive a six-digit case number, and the concern is forwarded to the utility or ESCO for review and response. (Tr. 2099, lns. 4-10). If the customer is not satisfied with the utility or ESCO's response to their QRS concern, he or she will contact the Department again and, if appropriate, the concern is escalated to a complaint under the Standard Resolution System (SRS), which is the first step in the formal complaint process. (Tr. 2099, lns. 10-16). An escalated complaint requires a written response from the utility or ESCO, including what resolution will be offered, if any. (Tr. 2099, lns. 16-20).

The Department's OCS compiles consumer complaint statistics monthly and these are publicly available on the Department's website. (Tr. 2101, lns. 4-6). The number of complaints is used as a performance indicator by which utilities are measured, and they are also tied to financial incentives. The substance of a customer complaint is also evaluated for trends in utility activities that may require a more focused review.

While ESCOs are not subject to financial adjustments predicated on the number of complaints, Staff does similarly review, document and track trends and the basis of consumer complaints about ESCO activities. (Tr. 2101).

Regarding ESCOs specifically, the Department's year-end complaint reports indicate a significant number of customer calls alleging deceptive marketing, by or on behalf of ESCOs. For the years 2012 through 2016, the number of ESCO related complaints were: 322, 2,001, 2,510, 2,348 and 1,375 respectively. (Tr. 2101-2102, lns. 16-6). Similarly, the reports indicate that the Department registered 186, 289, 936, 1,076, and 664 escalated complaints for the years 2012 through 2016, respectively, about ESCOs. (Id.). In total, and on an equivalent per capita basis, the level of escalated complaints received by the Department concerning ESCOs during 2014 was several times the per capita escalated complaint rates of the combined gas and electric utilities, which also provide distribution and billing services, unlike the ESCOs. (Tr. 2102, lns. 6-14; Exh. 612; Exh. 1123). For 2015, the ESCO complaint rate per 100,000 customers rose to 5 times the comparable rate for the combined electric and gas utilities. (see, Exh. 612). This comparison modestly improved to 3.8 times the combined utilities complaint rate during 2016. (see, Exh. 1123).

In summary, Staff remains concerned that despite the efforts to oversee and monitor ESCO activities and interactions with their customers, ESCOs have been unable to achieve the level of customer satisfaction that the regulated utilities are able to achieve.

The ESCOs generally characterize customer complaints against ESCOs as insignificant when compared to all initial complaints filed with the Commission. Witness Sharfman claims that only 0.016 percent of customers filing complaints each month were ESCO customers. (Tr. 404, lns. 10-14). Mr. Lacey states that for 2016, the customer complaint rate for ESCOs is identical to the rate for utilities. (Tr. 1097, lns. 13-16). The Direct Energy Panel claims that Direct's customers (and two unspecified competitors) "show a high degree of satisfaction with the market." (Tr. 584, lns. 10-12). Infinite Energy's witness Cook, however, acknowledges that although utility complaints have

been stable on an annual basis, ESCO complaints have "skyrocketed" from one complaint per 1,000 in 2012 to one complaint per 390 customers in 2016. (Tr. 655, lns. 8-13).

The Commission should reject Direct's claim that its customers "show a high degree of satisfaction with the market" as satisfaction with the "market" and customer complaints about their commodity service, often due to marketing or pricing abuses, are not the same. (Tr. 584, lns. 10-12). The evidence shows that that for 2015, the ESCO complaint rate per 100,000 customers was five times that of the combination utilities (Exh. 612), and 3.8 times the combination utilities for 2016. (Exh. 1123).

11. Transparency

(December 2016 Notice Questions 16 and 17)

As stated in the Staff Panel testimony, one of the primary flaws with the current retail access markets for mass market customers is that they are not price transparent to customers. (Tr. 2039, lns. 8-13). Price and product transparency is the ability of the customer to know all of the bid prices and ask prices and trading quantities for given goods or services (such as electric and gas commodity) at any point in time, such that they cannot be misled by marketing claims. A market where such information is not available or incomplete, is, by definition, less efficient as true and open competition is inhibited. The Commission should recognize that as the retail markets are currently structured, mass market customers cannot make rational and fully informed decisions between commodity service from one of a number of ESCOs operating in the service territory, or the utility's default service, because the ESCOs are unwilling to provide the necessary information required to make a rational decision (Tr. 2081, lns. 10-20). This is evidenced by the number of customers filing complaints with the Commission wherein they state that they were unaware of the rate they would pay for commodity after the ESCO's "teaser" rate expired, or that they were subject to aggressive marketing techniques (Tr. 2081, lns. 17-24; Tr. 2084, lns. 2-10; Tr. 2106-2107, lns. 13-17).

ESCOs take advantage of the mass market customers' lack of knowledge and understanding of, among other issues, the electric and gas commodity markets, commodity pricing, and contract terms (which often extend to three full pages), and in particular, the ESCOs' use of teaser rates and "market based rate" mechanisms that customers are charged after the teaser rate expires (Tr. 2106-2107, lns. 13-7 and Tr. 2107-2108, lns. 16-2). In fact, ESCOs appear to be unwilling to provide the necessary product pricing details as to how those "market based rates" are derived to mass market customers in a manner that is transparent so as to enable an open and competitive marketplace where customers can participate fairly and with the necessary knowledge to make rational and fully informed decisions on whether it is in their best interest to take commodity service from their default utility, or from a particular ESCO among competing but equally opaque choices (Tr. 2081, lns. 11-20). Additionally, these problems would not occur if the ESCOs could not charge in excess of the utilities.

Price and product transparency is also an issue in the retail markets in situations where ESCOs bundle their commodity service with so-called energy-related value-added products, such as LED light bulbs, furnace maintenance plans, thermostats, and other products (Tr. 2084, lns. and Tr. 2114, lns. 23-24), where the incremental costs for those additional products are not disclosed.

The available data does, however, show that there was no significant (de minimis) real incremental value, or cost to the ESCO, associated with these products (Tr. 2116, lns. 4-18). Through information requests propounded on the few ESCO parties to these proceedings (along with subpoenas to the non-party ESCOs), Staff attempted to obtain information from the ESCOs to identify the value (that is, the cost) of the value-added products they were providing to their customers, but that the ESCOs generally failed to provide data in response to DPS-ESCO 2 and 3 (Exh. 709 (SP-1); Exh. 710 (SP-1a); Exh. 711 (SP-1a Confidential)).; Tr. 2115-2116, lns. 10-11). Those ESCOs that did provide substantive responses to DPS-ESCO 2 and 3 (Id.) did not provide Staff with data

that could be used to perform a consistent analysis of the data among the ESCOs (Tr. 2116, lns. 2-4).

Thus, the cost incurred by the ESCOs in procuring these sorts of value-added products is at best de minimis and does not explain away the significantly higher commodity costs charged by so many ESCOs. (Tr. 2116, lns. 12-18). The $1.3 billion in charges over what these customers would have been charged had they taken default utility service cannot be explained away as the result of the costs incurred by the ESCOs to provide their customers with light bulbs and thermostats as "energy-related value-added products" (Tr. 2214, lns. 1-5; December 2016 Notice, at 7-8). The massive $1.3 billion in overcharges is the result of higher, and more often than not, significantly higher, commodity costs imposed by the ESCOs on unsuspecting residential and other mass market customers. (Tr. 2116, lns. 11-18). These Overcharges are simply due to (1) the lack of transparency and greed in the market, which prevents customers from making rational economic choices based on facts rather than the promises of the ESCO representative, and (2) obvious efforts by the ESCOs to prevent, or at least limit, the transparency of the market. (Id.). These obvious efforts include the lack of a definition for "market rate" in their contracts, resulting in the fattening of ESCOs' retained earnings. (Id.).

ESCOs also contend that their fixed-price offerings are "value-added" because these products guarantee that the customer will not be subject to the potential increase in commodity costs during the term of the agreement (Tr. 2063, lns. 10-13). Of course, these products only offer price stability in the sense that customers know the rate they will be charged for the commodity itself over a fixed term. A fixed-rate only provides "upside" protection if the commodity rate actually does rise above the fixed rate the ESCO offers; they do not provide any protection to customers if commodity prices go down ("downside protection"). While the Staff Panel acknowledges that fixed commodity prices might provide some de minimis incremental benefit to customers seeking to "fix" their commodity charges, that benefit is grossly outweighed by the fact

that there is no downside protection for customers, that customer bills are still subject to fluctuations due to changes in customer usage patterns, and that the premiums charged customers to obtain this de minimis potential value are often unreasonable, as discussed below. Finally, customers can largely achieve the primary intent of the fixed price commodity option (levelized monthly billing) by using the budget billing that all utilities must offer to smooth and levelize the mass market customers' total commodity and delivery costs (their bills) over the year (Tr. 2084, lns. 19-24).

The value of fixed-rate products is grossly overstated by the majority of ESCOs in their marketing, and does not provide the customer material "value" as the ESCOs claim. (Tr. 2132, lns. 1-14). In fact, while a few ESCOs charge a modest premium for their fixed price products, in the five to six percent range, the majority of ESCOs are charging premiums of 20 to 30 percent or more. (Id.). Since the utilities are required to offer budget billing programs, the monthly bill stability sought by some customers can be achieved without paying a premium over their otherwise available default and ESCO commodity options (Tr. 2132, lns. 14-24) and will further enable customers to realize the financial benefit when commodity prices do drop. Therefore, the Commission should not be distracted from implementing Staff's 12 recommendations by the prospect of potential energy-related value-added products offerings until all our recommendations have been implemented, and the ESCO mass markets have transitioned to the new paradigm we recommend (Tr. 2036-2037, lns. 20-10).

The ESCOs see the current commodity mass market as transparent, although GEE's witness Lukas states that it has always been GEE's position that variable rate products are "most prone" to overcharges as they are not transparent. (Tr. 92, lns. 15-16). Mr. Kagan, testifying on behalf of Direct Energy, sees it differently and claims that ESCOs play a "critical role" in providing customers direct and transparent access to wholesale markets, and that the retail markets are transparent. (Tr. 161, lns. 15-16; Tr. 211, lns. 18-19). Mr. Sharfman, also testifying on behalf of Direct Energy, at least offers his definition of transparency, stating that the customer must know the price per unit of

the commodity he or she is buying before receiving a bill. (Tr. 363, lns. 1-3). Sharfman does admit, however, later in his direct testimony, that longer term ESCO variable pricing offers may only show customers the price for the first month of the term, and so are less transparent. (Tr. 366, lns. 4-6). Mr. Lacey's, Mr. Lukas', and Dr. Cicchetti's testimony also claim that utility default service is not fully unbundled, therefore, consumers cannot be provided transparent price signals regarding the default service, and that delivery rates are inflated. (Tr. 1210, lns. 15-16; Tr. 1255, lns. 8-11; Tr. 71-72, lns. 12-5; Tr. 690, no line numbers in this testimony).

The ESCOs hired witnesses did their best to dance around the fact that the retail markets are not transparent to customers, but even in their own pre-filed testimony, witnesses Lukas and Sharfman cannot ignore the reality of these markets and admit that variable priced ESCO commodity service is not transparent to customers. Finally, the claims that the markets are not transparent because utility rates are not unbundled is simply incorrect, as explained in detail by the Staff Rates Panel. (Tr. 3108-3120). The ESCOs' proposals would raise delivery costs for customers, violate Commission regulations, and skew default delivery rates to make the ESCOs' rates appear to be lower. Thus, the ESCO claims that incomplete unbundling makes their commodity rates appear artificially high compared to the utility default rates is wrong and yet another effort by the ESCOs to explain away the $1.3 billion delta between their rates and the utilities' rates.

Finally, one recommendation that will help to improve transparency in the retail markets is inclusion of a comparison on the customer's bill. The Commission should require mass market ESCO customer bills to include a comparison showing both the current charges with the ESCO, and what the customer would have paid had they taken delivery and commodity from their utility. Such a comparison will assist customers in assessing whether the ESCO is living up to any promises of savings, or allow the customer to determine what premium they are paying for ESCO service. Additionally, ESCOs that offer energy-related value-added products in the future should be required to

disclose the price of that additional product on the customer bill, separate and apart from the price charged for commodity service. Both recommendations will provide mass market ESCO customers with critical information right on their bill.

Subsections III.C.12 – III.C.17 are not addressed in this brief.

These sections include: (1) Customer renewal process; (2) Customer shopping tools; (3) Customer choice; (4) Examples of competitive market frameworks in other states; (5) State agency & consumer advocacy group actions; and (6) Energy brokers. Staff reserves the right to address these, and other points not addressed in this brief, in our reply brief.

IV. CONCLUSION

The Commission should determine that the prices charged to residential and small commercial customers in the electric and gas mass markets are substantially higher than those charged by the utilities. The ESCOs, NEMA and RESA seek to explain away this substantial difference by pointing to "value-added" services that they offer. As Staff has proven, the tremendous difference in prices cannot be justified by light bulbs, thermostats, ridiculously high fixed-price offerings, "green" energy that is no more green than the energy provided by the utilities at a lower cost, and other "value-added" services and products. Mass-market customers are in fact the victims of a failed market structure that has emboldened the ESCOs into taking advantage of customers trust in statements made to them by unscrupulous representatives of the ESCOs and marketing tricks, designed to obfuscate commodity prices to exact unconscionable commodity prices that are not just and reasonable. Therefore, the Commission must take bold action to protect customers and ensure just and reasonable rates by either preventing the ESCOs' from using the utilities' systems to serve mass-market customers or fundamentally change the retail access requirements and rules in the manner proposed by Staff in this brief.

Respectfully Submitted,

F. THOMAS DWYER
STEVEN J. KRAMER

Staff Counsel

'ATE OF CONNECTICUT
C UTILITIES REGULATORY AUTHORITY

November 20, 2014
In reply, please refer to:
Docket No. 06-10-22

Christopher Bernard
Manager, Regulatory Policy
Northeast Utilities Services Company
P O Box 270
Hartford, CT 06141-0270

Michael A. Coretto
Vice President-Regulatory Affairs
The United Illuminating Company
157 Church Street
New Haven, CT 06506-0901

Re: Docket No. 06-10-22 - PURA Monitoring the State of Competition in the Electric Industry

Dear Messrs. Bernard and Coretto:

The Public Utilities Regulatory Authority (Authority) requests that, effective November 18, 2014 and thereafter, The Connecticut Light and Power Company and The United Illuminating Company include the following information in each company's Monthly Competition Reports filed in the above-cited docket:

> For each calendar month, for Residential and Business customers separately: an Excel worksheet listing all the electric suppliers listed alphabetically (names unmasked), all the rates billed by each supplier in ascending order, and the total number of customers under each rate billed.

The Authority will not issue a confidential protective order for this information. Section 16-245p of the General Statutes of Connecticut (Conn. Gen. Stat.) requires electric suppliers to submit information to the Authority that "will assist customers in making informed decisions when choosing an electric supplier, including, but not limited to, the information provided in subsection (b) of this section." Subsection (b) requires, in relevant part, that PURA "shall maintain and make available to customers upon request, a list of electric aggregators and the following information about each electric supplier and each electric distribution company providing standard service or back-up electric generation service, pursuant to section 16-244c: (1) Rates and charges…." Thus, electric suppliers' rates and charges information are required to be public by statute, and

therefore, cannot qualify for an exemption from public disclosure under Conn. Gen. Stat. §1-210(b)(5)(B).

Sincerely,

PUBLIC UTILITIES REGULATORY AUTHORITY

Nicholas E. Neeley
Acting Executive Secretary

cc: Service List

STATE OF CONNECTICUT

NEWS RELEASE

Consumer Counsel Elin Swanson Katz

FOR IMMEDIATE RELEASE

Contact: Elin Swanson Katz
Elin.Katz@ct.gov
(860) 827-2901

CONSUMER COUNSEL ELIN SWANSON KATZ RELEASES REPORT SHOWING THAT HARDSHIP CUSTOMERS PAY MORE FOR ELECTRICITY WITH THIRD-PARTY SUPPLIERS

Hardship Customers in Low-Income and Minority Communities Are More Likely to Receive Third-Party Electric Supply and Pay More For Electricity

NEW BRITAIN, Conn. (February 27, 2019) Connecticut's "hardship" electric customers—those consumers who are identified as medically vulnerable or facing significant financial hardship—paid approximately $7.2 million more to purchase electricity from third-party electric suppliers than if they purchased utility standard service. That is one of the conclusions of a report released today by Consumer Counsel Elin Swanson Katz that examined the impact of third-party electric suppliers on these vulnerable customers during a 24-month study period (October 2016-September 2018). The report finds that hardship customers experience an average annual net loss of $143 per hardship household.

"$143 is a lot of money for many consumers who struggle to make ends meet. They derived no benefit from this extra electric cost, but rather just overpaid for electricity. They clearly would have been better off on the 'standard service' option available from our electric companies, Eversource and United Illuminating," Consumer Counsel Katz said.

Consumer Counsel Katz filed the study, authored by her economic consultant Susan M. Baldwin, in Public Utilities Regulatory Authority (PURA) Docket No. 18-06-02. In this docket, per legislative authorization, PURA is examining whether to place hardship electric customers on utility standard service. Hardship electric customers generally include those with a documented financial hardship, a certified medical protection, or those who receive public assistance.

Consumer Counsel Katz remarked on the scope and depth of the study, saying she is confident in its conclusions. "My team, in concert with our team of economic experts, has pored over voluminous data showing what some of the state's most vulnerable folks actually paid for their electric service," she said. "Our report shows that hardship customers, particularly in the poorest parts of our state, pay a high premium over utility standard service for their electricity with third-party suppliers. The legislature paved a clear path forward for this important issue to be studied. Our report shows significant financial harm to hardship customers, leading to no other remedy than that hardship customers be placed on standard service."

Consumer Counsel Katz believes the standard offer is a less expensive and more transparent option for hardship customers. The standard offer rates of Eversource and United Illuminating are set through an open and competitive process that is overseen by several state agencies, including a state Procurement Manager, and includes no mark-up or profit for the utilities. There is one price for every consumer, and it only changes twice a year, on January 1 and July 1.

Consumer Counsel Katz's report further finds that during September 2018, 35 percent of hardship customers purchased electricity from third-party suppliers, as opposed to 27 percent of non-hardship customers. Using U.S. Census data, the report finds that in some of Connecticut's poorest areas—such as communities in Waterbury, Bridgeport, and Hartford—approximately 50 percent of hardship customers purchase their electricity from third-party suppliers and on average pay up to 2 cents more per kilowatt hour over utility standard service to do so. Likewise, hardship customers living in communities with high percentages of minority populations disproportionately participate in the third-party electric supply market, and pay high premiums to do so.

"This isn't just about hardship customers," Katz said. "This impacts every electric consumer. The suppliers sell their accounts receivable—the money that customers owe—to Eversource and United Illuminating for approximately 99 cents on the dollar pursuant to state procedure. So if suppliers target those customers who are least able to pay for high electric rates, the rest of us serve as a backstop and pay any uncollected amounts. It's outrageous that we're subsidizing these extra energy costs."

Similar findings have been made in Massachusetts, where a March 2018 report issued by the Massachusetts Attorney General found that low-income customers make up a disproportionately large share of the third-party residential electric supply market in Massachusetts, and pay especially high prices. That report also found that from July 2015 through June 2017, residential Massachusetts customers who purchased their electricity from third-party suppliers paid an aggregate $176.8 million more than if they received electric supply from their utility company.

Earlier this month OCC released its finding that from 2015 through 2018, all Connecticut consumers using third-party electric suppliers paid an estimated $200 million more than consumers on electric utility standard service. In addition, there is currently legislation proposed in both Massachusetts and New York to prohibit third-party suppliers from entering into new contracts with residential customers, and Katz has asked for such legislation in Connecticut.

Members of the public wishing to provide public comment are encouraged to contact PURA at: Public Utilities Regulatory Authority, Ten Franklin Square, New Britain, CT 06051, or via e-mail at pura.executivesecretary@ct.gov, referencing Docket No. 18-06-02. Consumers may also contact PURA by calling 1-800-382-4586 (toll free within Connecticut); 1-860-827-2622 (outside Connecticut); or TDD 860-827-2837.

Consumer Counsel Katz thanked her staff involved in the study, especially Attorney Lauren Henault Bidra, Attorney Andrew W. Minikowski, Rate Specialist Taren O'Connor, and Economist John Viglione.

###

The Office of Consumer Counsel (OCC) is the State of Connecticut's advocate for consumers on issues relating to electricity, natural gas, water, and telecommunications. For more information, visit www.ct.gov/occ.