ISSUES ADDRESSED BY THE SUSTAINABLE ENERGY UTILITY ADVISORY BOARD IN FY 2013

I. Gas Efficiency Program Spend

In the Board's FY 2012 Annual Report, the Board identified a serious concern regarding the failure of the SEU to meet two critical mandates of the CAEA specific to the reduction of per capita energy consumption. The SEU did not meet the minimum requirements of the contract, relative to either the electric or natural gas energy usage reduction, but was farther behind with gas energy reduction relative to the electric energy savings. Nor did the SEU meet the statutory mandate that 75% of gas customers' funding for the SEU be spent on gas programs.

In FY 2013 the Board devoted significant time to understanding why the SEU was unable to meet these goals in FY 2012. At each Board meeting in FY 2013, the Board requested information from the SEU and DDOE to facilitate a better assessment of the problem and help the SEU meet its energy reduction goals. The Board emphasized a focus on gas energy reduction since this was an area in which the SEU has consistently failed to meet the established goal. As a result of urging from the Board, in FY 2013 the SEU increased its focus upon creating savings in gas programs with the encouragement of the Board, in concert with DDOE.

At the January 2013 Board meeting, SEU stated that it was increasing the gas-spend for efficiency programs through the multifamily sector. The Board asked for more information from the SEU on the projects the SEU relied upon to reduce gas consumption, as well as a report on the institutional failures that may hinder the SEU in meeting its statutory mandates on gas spend and gas programs. The Board raised the question of how to resolve the tension between gas, as a more efficient fuel for certain purposes like heating, and the goal of reducing both gas and electric usage. The SEU pointed out that one of the unintended consequences of its replacement of less efficient light bulbs was increased gas usage for heating. Certain SEU board members raised the question of whether fuel switching, in some instances, may work to the benefit of District residents. The SEU stated that their goal should be to drive down the aggregate energy use in the District. The SEU asked for the Board's help in thinking through these questions of sustainable energy usage in the District.

The DDOE staff also raised the issue that the statutory mandate on gas and electric spend yields some contradictions since the SEU could spend between 75%-125% of the electric customers contribution and still not meet the 75% gas customer spend requirement because electric customers fund 80% of the public funds from District residents and gas customers fund the remaining 20%. However, the SEU had not met either the gas or the electric per capita energy reduction contractual benchmark in this fiscal year or any other year while it has spent all public funds available. Therefore, the money spent has not attained the major benchmark of the CAEA, reduction in per capita energy consumption. The CAEA does not expressly call for separate benchmarks for gas and electric customers, but rather an overall reduction in per capita energy consumption[2].

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[2]CAEA Section 201 (d) (1).

As a result of the evaluation of the SEU's performance by the Evaluation, Measurement and Verification consultant, the DDOE agreed with the Board's recommendation that the SEU not be provided an incentive because it failed to reduce per capita energy consumption in FY 2012 by the standards set under the SEU contract, i.e. 1% reduction in electricity consumption and 1% reduction in gas consumption.

The Board undertook an analysis of the institutional and other barriers preventing the SEU from meeting the contractual benchmark. Additionally, the DDOE indicated that it had made changes to the SEU contract to give the SEU the correct incentives for meeting the 1% reduction in gas energy use and 1% reduction in electric energy use in the future. These contract changes included:

i. Adding a penalty for failing to meet the energy usage benchmark along with the existing incentive payments;

ii. Requiring the spending of 35% of the budget within 6 months of the contract date to eliminate the hockey stick spending pattern of the SEU.

Despite these changes, the SEU continued to underperform with respect to this benchmark and particularly with respect to the reduction in gas energy consumption.

At the April 8, 2013 Board meeting, the SEU reported that it continued to underperform on gas-spend and usage reduction. While the SEU had spent 46% of its budget by the April meeting and was, therefore, closer to an even spend over the year, it had not overcome the barriers to gas-spend/savings in energy usage. At this meeting the EM&V consultant presented its findings without any representation of gas spend/gas usage reduction. The Washington Gas Board member requested inclusion of gas information in future EM&V documentation to the Board.

At the June 4 Board meeting, the Board agreed that a special meeting would be held on June 13 to discuss options that were potentially available to increase the SEU's gas programs and meet the energy consumption reduction standard for gas customers. The SEU reported it had spent 59% of its budget – a definite improvement over FY 2012. They confirmed that they would present new gas programs at the June 13 meeting. The SEU indicated that they were continuing to experience problems establishing a good pipeline for new gas projects. Washington Gas volunteered to assist the DC SEU in promoting its FY 2014 gas programs by providing information about the SEU to Washington Gas customers on its website, in pamphlets in its District of Columbia customer service offices and in bill inserts. Several Board members, such as the Public Service Commission and the Office of the People's Counsel, have also affirmed commitment to assist the SEU in publicizing its gas efficiency programs.

Additionally, during the June 4 meeting, several Board members discussed how it was difficult to try to calculate gas efficiency savings versus electric savings as often more efficient electric appliances result in increases in gas load. They affirmed that one of the objectives in the District was to "promote energy efficiency overall" which may lead to increased use of cogeneration and increased gas usage in the District. Washington Gas suggested that the Act gives the SEU the flexibility to look at reduction of energy consumption and that the issue should be discussed at the next meeting. At the request of the SEU, Washington Gas agreed to make a presentation at the June 13 meeting.

At the June 13 meeting, Washington Gas indicated that the best way to remove the impediments preventing the SEU from meeting its statutory mandate for gas spend and gas usage reduction was to make the statutory language that requires a reduction in overall energy consumption the standard. Overall energy consumption incorporates the energy consumed to generate electricity, a concept referred to as "total fuel cycle" or "energy productivity." As presented by Washington Gas, this view is supported and adopted by the National Academy of Science, the U.S. Department of Energy, and the U.S. Environmental Protection Agency. They further advocated for the removal of separate contractual requirements for a percentage reduction in electric and gas usage. Washington Gas asserted that the statutory requirement that places a floor of 75% spending of electric and gas funds for their respective customers and places a ceiling of 125% of gas and electric funds that can be spent for other programs ensures that there will be sufficient gas and electric savings.

Washington Gas provided independent support for the following information:

(1) Looking at the fuel usage and fuel productivity from point of extraction to point of use, natural gas is three times as efficient as the other dominant energy sources;

(2) Sixty-five percent of the energy used to produce electricity is lost before it arrives at its end use.

Washington Gas recommended that the SEU and the DDOE factor that information into their development of the optimal mix of gas and electric energy efficiency programs by measuring energy usage reduction in BTUs and removing the separate reduction goals for gas and electricity from the benchmarks in the SEU contract. The current contract terms limit the opportunity for efficient combined heat and power and other efficient alternatives. Gas customers pay into the pot to support the SEU but are not getting the benefits consistent with the amount paid. Nor are electric customers receiving full value with these separate fuel reduction benchmarks. Washington Gas presented language to amend the contract that would help the SEU meet its goals in FY 2014.

At the July 24 Board meeting, the DDOE indicated that they had retained an independent consultant to advise the DDOE and the SEU on ways to improve the contractual benchmarks to address the concerns related to gas program spend and savings and other issues. The DDOE stated that given the 80%/20% split in funds from electric versus gas customers, the DDOE questioned whether it was appropriate to have two separate benchmarks for per capita savings or to have one per capita savings benchmark for both fuel types. Without such a change it may be impossible for the SEU to meet its statutory goal for energy reduction, thus giving a misleading impression that the SEU was consistently underperforming.

The consultant recommended that the DDOE remove the separate gas and electric energy reduction benchmarks and use BTUs to measure overall energy consumption reduction consistent with the Act. However, the consultant recommended that the conversion of kwhrs and therms to BTUs be made at the site (or appliance), not at the point of generation (or total fuel cycle). Washington Gas strongly disagrees with the consultant's recommendation as designed. DDOE is evaluating the recommended change to one overall BTU benchmark for the statutorily mandated per capita energy consumption reduction benchmark.

II. SEU Branding and Community Awareness

During FY 2013, the Board continued its discussions on the strengths and weaknesses of the SEU brand and the level of awareness among District residential and commercial consumers about the SEU. The Board and members of the public raised ongoing concerns that the SEU's market transformation objectives could be undermined by the lack of awareness in the community about the SEU and its services. Several board meeting participants questioned the SEU's level of coordination with community groups and information-sharing with both Board members. SEU representatives attending these meetings discussed their efforts to form partnerships with retailers and consistently provide information to Advisory Neighborhood Commissions. However, several Board members expressed strong concern that these steps were insufficient to ensure broad awareness among DC residents.

The SEU hired a consultant, Vanguard Communications ("Vanguard"), to conduct branding research to understand how DC consumers view the SEU brand and to offer recommendations for how consumer awareness about the SEU can be improved. Vanguard conducted research through gathering internal and external input through five tasks: 1) a branding workshop with DCSEU staff; 2) telephone interviews with teaming partners and SEU Advisory Board members; 3) an online survey with DCSEU partners and customers; 4) media and competitive analyses and 5) a SWOT (strengths, weaknesses, opportunities and threats) analysis.

Vanguard found that stakeholders had positive feedback regarding the following aspects of the SEU's brand. They liked the cleanliness and simplicity; the logo communicated transparency; the use of "DC" as opposed to "District;" there was awareness of the name "DC SEU"; and the brand reflected passion, commitment and collaborative spirit. However, stakeholders also shared negative feedback about the brand. They felt that the logo is sterile, cannot stand alone and could be mistaken for the acronym for Southeastern University. Regarding the website, they said that the images on the old website were boring and the word "utility" could be confusing to consumers. They further expressed that the SEU needed to communicate that it was a "different kind of utility" and clarify what its primary purpose is. In other words, there was confusion about whether the SEU was an economic development organization first or an environmental/energy efficiency organization second. These roles are complex and could be interpreted as conflicting or competing with each other.

Vanguard's research confirmed that the SEU's target audience is residential and commercial energy consumers. Additionally, there were a number of characteristics and brand attributes, identified by the research participants, which make the SEU unique. They included terms like: value delivery, excellence, transparency, market transformers, results driven trailblazers, trusted, committed, experts and community resource center. Vanguard also concluded that while the SEU had brand equity after having been in existence for almost two years, at the time the study was completed, the SEU needed to do a better job at telling its story: "Who is the DC SEU and why are we here?"

As a result of the findings of the research performed, Vanguard provided several recommendations for ways in which the SEU could improve its brand and make the larger DC community aware of its services. These recommendations included:

1. Illustrate the DCSEU as the go-to resource for energy efficiency via programs, services, and marketing materials;
2. Create a web presence that clearly and concisely demonstrates what services and programs are available; how can ratepayers immediately take advantage of the DCSEU and how existing customers are benefiting from services offered through the DCSEU;
3. Retain the name because of recognition;
4. Develop a descriptive tagline and brand guidelines;
5. Integrate the DCSEU and tagline into copy;
6. Refresh the logo;
7. Establish energy efficiency as a primary theme;
8. Create a clear and concise communications strategy;
9. Until the new brand is phased in late April, continue to use the current logo.

Following the presentation of these findings and recommendations, the SEU did not provide any additional information regarding branding or advancements in community awareness. In subsequent meetings, however, several board members and members of the public continued to raise this issue. They offered several suggestions regarding how the SEU could better coordinate with community groups and government agencies to disseminate information to DC consumers about its programs. These suggestions included:

1. Consistently informing Washington Gas, Pepco and alternative energy suppliers about their programs so that those companies can distribute information to their customers;
2. Following up with all of the DC residents who have had the free energy audits, provided by the DDOE, in their homes;
3. Providing timely information and updates to the Office of the People's Counsel and the Public Service Commission staff about the roll-out of new energy efficiency rebates and programs;
4. Partnering with more grassroots community groups, not only the ANCs.

The Board has not received further information regarding whether these recommendations have been adopted by the SEU.

III. Annual Budgeting and Performance Measures

As in FY 2012, problems with annual budgeting and performance measures remained a significant concern for the Board. As explained in the Board's Annual Report for FY 2012, the SEU's ability to meet performance benchmarks has been impaired by contractual restrictions on how its performance is evaluated and how its budget is spent. Under the SEU Contract, project evaluation is limited to a 12-month scope of review. In order to be counted towards reaching the performance benchmarks, all funded projects must be completed within that 12-month period which means that funding can only be applied to project within one year and cannot be carried over to future years. This is problematic because it effectively prohibits the SEU from allotting funds for larger, multi-year energy efficiency projects that will enable the SEU to meet the performance benchmarks set forth in the CAEA.

The Board's Structure & Finance Committee (SFC) prepared a resolution for adoption by the Board to address this fundamental flaw in the SEU Contract, as well as the CAEA. The resolution was based on a wealth of discussion on this issue by the Board throughout 2012. The resolution addressed several obstacles to optimization of SEU programs including annual budgeting, annual performance periods, limitations on SETF fund expenditures, and the structural organization of the SEU. Specifically, the Board noted the following challenges of SEU Contract and CAEA as currently drafted:

1. Requirement that the SEU spend-down the entire annual funding each year to $0.
2. Performance requirements that evaluate the SEU on spending efficiency and social benefit as measured by performance outcomes on a strict annual basis.
3. Statutory requirement that the SETF be only spent on SEU program operations, which unfortunately precludes by definition such useful program strategies as establishment of a loan-loss reserve fund, revolving loan fund, or other such longer-term institutional funding related incentives.
4. Absence of a structural home for the SEU that would serve to anchor contractual agreements with financial institutions, PJM Interconnection, local contractors, and clients.
5. Insufficient separation of funding source from the District treasury such that the SEU is subject unnecessarily to the government anti-deficiency clause. The remedy would be to establish the SETF with a third party fiscal agent such that funds flow directly from the levied fee on the gas and electric utilities to the SETF without passing through the DC treasury or annual budget process.

The SFC's resolution further proffered a phased approach to addressing the obstacles identified above. In phase one, a small team of SEU-AB members, SEU management, and DDOE contract management would meet to: draft revised contract language for a future contract program period (year); develop consensus on recommendations to amend elements of the CAEA. The new contract language would revise annual spending requirements and performance assessment to better enable longer-term and deeper efficiency projects that may exceed an annual program year; characterize necessary conditions to allow a performance period's budget to carry forward; detail which performance measures can serve an annual basis and which should be modified to focus on multi-year performance; characterize how the reward structure can be modified to ensure that it best rewards the efforts that lead to most effective program outcomes; and clarify DDOE responsibility for SEU programmatic review or approval. In phase 2, in advance of the next contract award, the Board would consider the small group's recommendations and pass a resolution. In phase 3, the Board would advise DDOE on any adjustments to contract language for out years and formalize recommendations to the Mayor and City Council for an amendment to the CAEA.

The Board initially voted in favor of this resolution. However, the Board later determined that forming a small committee was not necessary to move forward on making these changes and allowing the SFC to facilitate the process was sufficient. The Board is currently in the process of deciding the optimal approach for addressing these issues.

IV. Performance Benchmarks

The Board engaged in extensive discussions about the performance benchmarks outlined in the CAEA and whether these benchmarks could be reasonably achieved by the SEU. DDOE retained an independent consultant to evaluate and update the performance benchmarks. The consultant's review considered whether the purpose of each benchmark remained valid, whether each benchmark was clearly defined, could be measured and attained and whether each benchmark yielded effectiveness. Also, the performance goals of other SEU's across the country were considered. The evaluation further considered external constraints and internal trade-offs. For purposes of the evaluation, constraints were defined as real or perceived challenges beyond the SEU's control. The notion of "trade-offs" was used to recognize that the CAEA has three overarching goals – energy efficiency, social equity and job creation – that are sometimes in conflict.

However, Board members encouraged an alternate view of how these goals complement and reinforce each other, rather than conflict with other. Viewing energy efficiency, social equity and job creation as the "three-legged stool" of sustainability would better facilitate evaluation of the SEU's benchmarks. With these factors in mind, the consultant carried out its research through review of SEU governing documents and discussions with DDOE, SEU, the Public Service Commission, the Office of the People's Counsel, Pepco, Washington Gas, Tetra Tech and SEU Advisory Board members.

The evaluation produced the following results with respect to each individual benchmark:

For Benchmark 1 (Overall Reduction in Energy Consumption), the purpose was found to be valid and the idea of a single, consolidated energy use reduction had broad support. The SEU Contract currently requires separate reduction goals for electricity and gas. The consultant recommended that there be a single BTU specification and convert kWh and therms into MMBTU. With the exception of the Pepco representative, a majority of the Board supported the use of a BTU single measurement for both gas and electric savings for setting a "combined energy target subject to spend." The Pepco representative stressed the importance of establishing distinct targets for electricity and natural gas. Among other details, the consultant recommended that the SEU should be evaluated based on the overall performance BTUs saved at the site of consumption. Washington Gas, while agreeing with the combined energy target, expressed disagreement that the benchmark recommendation did not go far enough to incorporate energy productivity, and, as it stated, would result in worse energy savings results than was achieved with the original benchmark if site to source measure were not included. The Board has not reached any conclusions on the details of implementing a single measurement target, including the use of site specific savings. This is an important issue that the Board will continue to consider in the year ahead.

With respect to Benchmark 2 (Renewable Energy), the overall purpose of the goal was found to be valid in light of the District's commitment to renewable energy. However, the consultant indicated that stakeholders are unclear regarding whether the SEU can lead in meeting District's renewable energy goals because of budgetary constraints. The consultant recommended that this benchmark be reformulated away from price changes and the SEU should revert to the tracking indicator used in year 1 and define and implement a cost effective program.

For Benchmark 3 (Peak Demand), the purpose was validated. The consultant did not recommend any substantive changes to this benchmark.

Benchmark 4 (Low-income housing) was unanimously determined to be critically important. Also, the consultant found that in order to accurately reflect the energy efficiency measures benefitting low-income residents, the SEU should not count solar PV installations as part of this target.

With respect to Benchmark 5 (Largest Users), the purpose of the goal was validated and stakeholders emphasized that the SEU must pursue large energy users for energy efficiency projects because they would yield the most benefit for the District's energy reduction goals. Targeting large users offers the most cost-effective opportunities. However, this target is not adequately defined. The consultant recommended that the SEU use the term "large" instead of "largest" as a working criterion because there is no data to define "largest." Further, it would be beneficial to define this benchmark in terms of "executed financial agreements" with large users instead of physical or monetary units.

Finally, Benchmark 6 (Green Jobs) was found to be valid and critically important for the District of Columbia. No other SEU in the country has explicit green job goals. However, measurement of green jobs presents some challenges. Some created green work hours are not being measured. Also, the use of the metric of 1 FTE job = 2,080 work hours is unrealistic for field work. The consultant made the following recommendations: 1) maintain current target values; 2) provide information on "all jobs created" as specified in the contract; 3) separate jobs into "field jobs and "office jobs'; 4) field jobs based on work done and capped hourly compensation; 5) use 1 FTE=1,920 work hours for field jobs; 6) count "estimated" work hours when verified paperwork requirements are not enforceable; 7) set a limit on estimated work hours that are countable based on an agreed-upon methodology; 8) set numerical target for field jobs only; and 9) require that 60-80% of personnel funds spent on office jobs flow to District residents (this last recommendation was rejected by the DDOE because of complexity and practical difficulties).

The Board generally agreed with these recommendations but continues to deliberate regarding how they should be implemented. The Board has not received confirmation regarding whether the DDOE has agreed to some or all of these recommendations.

V. Advisory Board Vice Chair position

To ensure that Board meetings and activities continue to flow uninterrupted when the Board Chair, DDOE Director Keith Anderson, is unavailable, the Board discussed the possibility of amending the Board's by-laws to allow for a Vice Chair position. The duties of the Vice Chair would be to conduct the Board's meetings whenever the Chair is not available, vet and respond to the concerns of the Board members, as well as assist with the execution of action items. DDOE staff researched whether a Vice Chair role would be permissible under the CAEA and concluded that the statute was silent on that matter. The Board voted in favor of amending the by-laws to add a Vice Chair position. The Board's by-laws committee subsequently amended the by-laws accordingly to reflect that the Vice Chair position would be elected by Board votes. The Board voted for member Larry Martin to serve in the role of Vice Chair.

SUSTAINABLE ENERGY UTILITY ADVISORY BOARD RECOMMENDATIONS FOR FY 2014[3]

I. Annual Budgeting and Performance Periods

The SEU's legal limitations on its ability to commit to expenditures in future fiscal years prevents its engagement in long-term energy efficiency and renewable energy programs that would make a more meaningful impact on reducing the District's energy consumption. A statutory amendment is required to permit a SETF that would bypass the Anti-Deficiency Act limitations, but still be administered by DDOE.

II. Validation of Green Job Creation

Toward the end of FY 2013, the Board engaged in discussions about how the SEU defines and measures the creation of green jobs. The Board will continue its deliberations on this issue in FY 2014. However, the need for reliable job creation numbers needs to be balanced against the time and effort to report this information to the SEU and DDOE. Job creation beyond that which is directly "papered" should also be considered since this will be an important outcome of successful market transformation.

III. Low Income Efficiency and Conservation Performance Measure

Presently, the performance measure is simply an administrative spending target which does not measure the actual success of the program in meeting energy conservation and efficiency objectives. This target should be an outcome measure that tracks success in energy conservation and efficiency.

IV. SEU's Potential for Participation in the PJM Capacity Market

The SEU should share its analysis concerning participating in the PJM Capacity Market. Pursuant to Section C.5.2 of the contract, the SEU in its strategic planning analysis shall identify program measures that may be bid into the PJM capacity market and estimate the potential revenue to the SEU from bidding this resource into the PJM market. The SEU should be directed to take the required next steps to participate in the PJM Capacity Market if the analysis indicates a positive benefit. The Board is of the opinion, based on the data that has been provided by the SEU, that this is an opportunity to access additional funds at no additional cost to District consumers that could be used to invest in energy efficiency programs and to create more green collar jobs. To not pursue this option simply fails to capture a financial benefit that is available to District consumers.

V. Submission of Board's Annual Report

Board members have determined that to wait for the SEU's issuance of its EM&V report four months or more following the close of the fiscal year in order to submit the Board's Annual report would be ill-advised. Instead, the Board decided that it would receive the SEU's Annual

[3] The Board did not make any recommendations for changes in the incentives structure for the SEU.

Report in October/November and would then complete its own Annual Report prior to the end of the calendar year. The Board had operated with the belief that the CAEA required the Annual Report to be filed within 30 days of the completion of the SEU's fiscal year, and that filing the report later would be in violation of the CAEA. This is, in fact, debatable. The applicable clause in the statute can be read to be silent on the date for submission of the Board's Annual Report – following the first year of operation.

> CAEA Sec. 204. Operations of the Sustainable Energy Utility Advisory Board.
> (g) The Board shall present a report on the progress of the SEU to the Council annually, with the 1st report being due 30 days after the conclusion of the 1st year of the SEU contract. The DDOE shall make this document available to the public on its website within 10 days of its submission to the Council.

The Board believes that it is more prudent to submit its Annual Report on a schedule that facilitates a more thorough review of the SEU's annual report and permits submission of its own annual report prior to the end of the calendar year.

CONCLUSION

The members of the Sustainable Energy Utility Advisory Board are pleased to have this opportunity to report on both the performance of the SEU and its deliberations over the past fiscal year. The Board has worked diligently to fulfill its statutory obligations and remains committed to the success of the SEU. The District of Columbia, and the nation's energy economy at large, is in a pivotal period in the transition toward a clean energy future. The Board believes that the SEU is uniquely positioned to help the District of Columbia achieve its sustainability objectives. The Board hopes to continue to serve as an advisory resource to the Council, Mayor and SEU so that the SEU will achieve its mission of helping District residents, businesses, and institutions sustainably reduce energy consumption and save money through energy efficiency and renewable energy programs. District ratepayers have invested significant resources into the SEU, and deserve a measurable benefit for this investment. Indeed, the SEU is distinguishable from other DC energy programs, as it is the only *ratepayer-funded* energy efficiency and renewable energy entity. The SEU Advisory Board respectfully submits this annual report to the District of Columbia Council with hopes that the information and recommendations will be valuable in continuing to improve the SEU's performance. The Board may supplement this report in the future, to the extent necessary to apprise the DC Council of key developments regarding the SEU.

APPENDIX

Sustainable Energy Utility Programs in FY 2013

Residential: Offering District residents rebates and incentives that can help them save money and energy in their homes. These projects range from small projects involving light bulb upgrades to evaluating the energy efficiency of an entire home.

- Home Performance with Energy Star- Targeting District residents of single family-homes, row homes or converted (1 to 4 unit) apartments, this program sought to galvanize consumers to take advantage of comprehensive energy efficiency measures for the entire home. Rather than focusing on a single problem, the program provided for an all-inclusive, holistic approach through attention to air sealing, insulation, heating and cooling, lighting and appliances and indoor air quality.

- Enlighten DC - Focusing on DC's residential consumers, Enlighten DC provided increased inventory and rebates on compact fluorescent lights (CFLs) and light emitting diodes (LEDs) through more retailers in the District of Columbia.

- Appliance rebates – Offering rebates on appliances such as refrigerators and clothes washers.

- Food Bank Program – Targeted customers are low-income District residents who were provided CFLs through partnerships with District food banks such as Bread for the City.

- Small Scale Solar – Targeting low-income residents, particularly in Wards 7 and 8, with the goal of installing solar PV and solar thermal systems to help reduce energy costs.

- Gas Efficient Products – Rebate program for residential boilers, water heaters and furnaces.

Low Income Multifamily: A two–part program, Low-Income Multifamily Services includes Low-Income Multifamily Comprehensive Program and the Low-Income Implementation Contractor Direct Program. The Comprehensive Program targets affordable housing developments at the new construction or rehabilitation phase for technical assistance, information and financial incentives for energy efficiency. The ICDP offers no cost energy-efficient CFL light bulbs, water saving devices, and hot water conservation measures to owners and property managers of qualified affordable housing developments.

Commercial and Institutional: Targeting large building owners in the District, SEU continued offering comprehensive energy services to those owners to ease the retrofitting and efficiency renovation process. These services included financial incentives, technical and design assistance, and other services.

- Business Energy Rebates - As a vehicle for encouraging businesses to install energy efficient upgrades and reap savings, the Business Energy Rebates program was designed to reduce the up-front cost of technologies and equipment such as efficient lighting, refrigeration, heating and cooling, water heating, and commercial cooking equipment. For example, this supported T12 to T8 light bulb replacement projects throughout the city. By enabling businesses and institutions to make energy efficient upgrades, the SEU also promoted increased participation of CBEs and employment of District residents.

- Energy Benchmarking - Pursuant to DC's new benchmarking regulation, the SEU established the Benchmarking Help Center to guide building owners and property managers through benchmarking in ENERGY STAR® Portfolio Manager software, respond to inquiries about the law and assist with data collection.

- Technical Analysis Support – SEU provides technical analysis and evaluation services to commercial and institutional consumers to assist their understanding of their energy costs and opportunities for improved efficiency and savings.

Summary of FY 2013 Quarterly Reports

I. First Quarter Report (October 1, 2012 – December 31, 2012)

The SEU's report for the first quarter of FY 2013 discussed the Utility's efforts to continue on its track to maturity and expansion. The SEU expanded on organizational development through increasing its full-time staff. The Utility hired 24 full-time employees during the first quarter, six times the number of full-time staff at the beginning of FY 2012.

The SEU also launched market-based initiatives and continued to work on public relations and community outreach. For example, it developed a training curriculum for contractors qualified for inclusion as service providers in the SEU's residential services initiatives. Recognizing contractors as important players in promoting consolidated energy efficiency services, the SEU conducted training workshops for contractors on sales and marketing. Additionally, in December 2012, the SEU launched its Energy Star LED mail-in rebates program. In order to serve the business community's energy efficiency needs, the SEU completed a technical review of business energy rebate options and tailored its business energy rebates program so that all rebate request for more than $5,000 and more than 100 products would be handled as commercial custom projects.

The solar thermal installation at the Capital Manor Cooperative marked the SEU's first renewable and energy efficiency improvement at a low-income cooperative in the city. In support of Mayor Gray's Sustainable DC initiative, the SEU coordinated with low-income multifamily Sustainable DC grant winners to provide technical assistance regarding energy efficiency and renewables. In December 2012, the Department of General Services received technical assistance from the SEU from the SEU Benchmarking Help Center.

The first quarter report also reflected a focus on advanced technical analysis support, particularly with respect to evaluation, measurement and verification (EM&V). For example, the SEU delivered the 2012 DC SEU Technical Reference Manual and savings verification database to Tetratech. Also, the SEU's EM&V group revised the comprehensive analysis tool which enables SEU to show the energy costs, cash flow and benefits of various energy efficiency measures used in custom projects. In addition to work on technical analysis, the report referenced leveraging of foundation grants and indicated that the SEU has researched potential grant opportunities and would approach foundations in the second quarter of FY2013 for funding for low-income initiatives. Also, the SEU contacted several federal home loan member lenders to support Home Performance with Energy Star projects.

With respect to branding and community outreach, the report discussed the enlighten DC campaign launched in December 2012, canvassing in Ward 5 and ongoing in-store events with area retailers.

II. Second Quarter (January 2, 2013 – March 30, 2013)

The SEU's report for the second quarter of FY 2013 discussed advances and challenges in EM&V, execution of programming, community outreach and green jobs. In the area of workforce development and greens jobs, the report discussed training and professional development of data collection associates, canvassers and interns working with the SEU. After a full year of service, Data Collection Associates had canvassed 12,800 homes in the District and distributed 2,500 CFLs.

The Benchmarking Help Center continued assist building owners with understanding and implementing EPA Energy Star benchmarking requirements. The Center received upwards of 200 calls and conducted six hands-on training sessions held at the University of the District of Columbia.

The SEU directed resources to improving community outreach, its website and overall branding. The Utility's marketing group secured a DC-based graphic designer to work on the SEU's new brand identity. Also, the SEU made several presentations to elementary schools students and various civic and business associations such as the Pleasant Plains Civic Association, Georgia Avenue Business Alliance, Capital View Civic Association, Georgia Avenue Community Development Task Force and the DC Chapter of the Sierra Club. The SEU made appearances on local radio and television stations such as WAMU, NBC4 and public access television.
The report listed steps that the SEU took to expand and improve its Commercial and Institutional services. They included making gas savings a priority, expanding and developing the C&I staff, updated web content regarding business energy rebates and devoting resources towards preparation for the T12 lighting replacement initiative. In the area of the renewable energy programs, the SEU completed the installation of 33 solar PV systems on low-income homes in wards 7 and 8. The SEU acknowledged the challenge of the high cost of renewable energy installations as a barrier for customers but confirmed plans to develop a comprehensive renewable energy strategy.

SEU listed advancements in programs in its residential and low-income multifamily services. During the second quarter, SEU contractors completed 13 home performance with Energy Star projects and thirteen households were approved for retrofit projects with loans from Industrial Bank. The SEU also launched its residential mail-in appliance rebate program in which DC residents could receive $50 off purchases of Energy Star qualified refrigerators and washers. However, the SEU indicated that customer use of LED mail-in was slower than anticipated. To address this issue, the SEU planned to improve in-store signage and educating store employees on LED technology and rebate promotion. The SEU completed the planning and RFP process for its Food Bank CFL Distribution Initiative. The RFP was for the delivery of 80,000 CFLs to Bread for the City clients.

Regarding EM&V, the SEU completed its FY 2012 DC SEU Evaluation, Measurement and Verification report in March 2013. This report indicated that achieved realization rates of 92% for electricity savings, 95% for peak demand reduction and 99% for gas savings. Further, by the end of this quarter the SEU had compiled a compendium of 45 efficiency and renewable measure characterizations and values to aid in more accurate technical analysis of the Utility's performance.

III. Third Quarter (April 1, 2013 – June 30, 2013)

The SEU's third quarter report emphasized improvements in Retail Efficient Products promotions, technical assistance and support, brand development and public outreach. With respect to retail efficient products, the report discussed the SEU's transition away from focusing on mail-in rebates to automatic, on-the-shelf discounts that would make it easier for consumers to purchase efficient light bulbs. The SEU partnered with more retailers, both local stores and national chains. Also, the SEU distributed upwards of 50,000 CFLs through its DC SEU Food Bank initiative, in collaboration with Bread for the City. The SEU also researched and prepared to launch its gas efficient products campaign.

For its Low-income Multifamily program, the SEU continued to both receive and provide technical assistance and training to empower its contractors to better serve DC consumers. For example, in coordination with the Institute for Market Transformation and the DC Department of Consumer and Regulatory Affairs, the SEU planned training sessions for architects, engineers and DCRA inspectors. For Commercial and Institutional customers, the SEU continued to provide technical analysis support. The SEU worked with Gallaudet University to prepare a 3-year historical trend analysis of energy consumption, costs and heating and cooling days to assist the university with understanding its energy expenses and areas for improvement. The SEU also served Catholic University, the Children's National Medical Center, Union Kitchen and other major institutions in the area to help them make well-informed, cost-effective energy decisions. Also, during the quarter, the SEU processed 35 business energy rebate forms for more than $22,800 in incentives.

The SEU prioritized updating its technical analysis tools and identifying areas for energy savings measurement and evaluation. For example, the SEU updated its Lighting Power Density tool and Comprehensive Analysis tool. The technical analysis team further proposed a method for accounting for energy savings for projects with DC Water, as well as revised technical measure characterizations to determine energy savings for numerous efficiency measures in both the residential and commercial sectors.

The third quarter report discussed ongoing public relations and community outreach efforts of the SEU. The SEU made appearances on a public access television show, Earth Day events, EnergySmart DC sessions, the DCHD Housing Expo and Dumbarton Oaks Open House, among other venues. Additionally, the SEU reported that it was in the process of working with a graphic designer to develop a new SEU logo and brand which would be launched in the first quarter of the FY 2014. The SEU reported the implementation of an advertising campaign to promote residential initiatives and the completion of a strategic marketing plan.

IV. Annual Report (July 1, 2013 – September 30, 2013)

The SEU publishes a full annual report for the full fiscal year at the end of its fourth quarter, rather than a fourth quarter report. The SEU's Annual Report for FY 2013 highlights several impacts that the SEU has had on the District's energy consumption. For example, the SEU reports that its work prevented 45,000 tons of carbon dioxide emissions, achieved 50,000 MWh in total electricity savings, provided District residents with $1.6 million in lifetime energy cost savings from renewable energy installations and served 46,500 District households.

With respect to its residential programs, the SEU annual report asserted that more District residents than ever before took advantage of SEU initiatives. The SEU achieved $178 in average annual whole-home energy savings per household and facilitated the sale of 226,000 efficient lighting and appliances through 50 retailers in all eight wards of the city. The SEU completed Home Performance projects with 45 homeowners in FY 2013, resulting in more than $296,000 of work for local contractors. As in its third quarter report, the SEU highlighted its partnership with Bread for the City and its distribution of 46,000 CFLs to low-income residents.

Regarding its Low-income Multifamily programs, the SEU reported 2,800 low-income households served and $220 in average energy cost savings per household. The SEU highlighted the retrofit and renovation of Bass Circle Apartments in southeast DC. After having fallen into disrepair, the DC Department of Housing and Community Development partnered with the SEU to facilitate the improvements made at that location which are projected to reduce Bass Circle's annual energy costs for all units by $65,000.

SEU further discussed its efforts to increase access to renewable energy projects in the District. Beginning with its launch of the Small Scale Solar Initiative in FY 2012, the SEU reported that it has installed 110 solar PV systems in wards 5, 7 and 8. The SEU reports that its solar installation work has benefitted residents with an average of $500 of annual energy savings per household with solar PV. The SEU also enhanced its work on solar thermal installations in the District.

In its discussion about commercial and institutional customers in the District, the SEU reported on its role as a resource for technical advice, rebates and incentives for entities seeking to reap benefits of energy efficiency. The SEU served 258 businesses and institutions in FY 2013 and helped facilitate a total of $12.5 million in energy efficiency improvements. An example of one of the successful projects was the SEU's work with Union Kitchen. Union Kitchen received $2,000 in business energy rebates for energy efficient equipment that will reduce its annual energy use by 60 Mcf and 6,800 kWh.

Finally, the SEU annual report discussed its achievements in green jobs and community outreach. The SEU saw a 70% increase in use of its website, was featured on television, radio, newspapers, magazines and blogs and SEU staff participated in 65 community events throughout the District. Additionally, the SEU reported $4.6 million spent with 33 District-based Certified Business Enterprises. In FY 2013, more than 400 District residents were employed full or part-time in support of SEU initiatives. The SEU continues to value its role as a "gateway for green jobs, not just within the DCSEU, but throughout the city."

DCSEU Annual Report, FY 2013
Appendix

Table 4. Core area expenditures and energy savings, to date

	Residential	Low-Income Multifamily	Commercial and Institutional	Renewable Energy	Total
DC SEU Expenditures					
Total expenditures by sector	$ 1,750,926	$ 3,369,896	$ 8,608,934	$ 2,072,241	$ 15,801,997
Electricity Savings, MWh					
Electricity savings (MWh)	16,669	3,873	29,594	225	50,361
Percent of annual MWh savings goal met	65%	72%	58%	25%	61%
Summer Peak Demand Savings[1], kW					
Summer peak demand reduction (kW)	2,331	486	4,615	36	7,468
Percent of summer peak demand reduction goal met	378%	371%	375%	171%	373%
Natural Gas Savings, Mcf[2]					
Natural gas savings (Mcf)	-20,821	6,110	62,716	4,712	52,717
Percent of annual Mcf savings goal met	-62%	28%	51%	12%	24%
Lifetime Economic Benefit[3]					
Lifetime Economic Benefit	$ 8,243,825	7,726,518	$ 60,877,744	$ 3,758,271	$ 80,606,358
Participants Served					
Participants served	44,040	2,874	258	832	48,004

[1] *Summer peak demand savings* represent the avoided electrical demand at the time of summer peak.

[2] Represents total aggregate annual gas savings adjusted to account for a reduction in waste heat from the installation of energy-efficiency lighting measures.

[3] *Lifetime Economic Benefit* is the present value of the avoided cost of energy over the life of installed efficiency measures.

Table 5. Quantity of measures installed by category and initiative

Energy Efficiency Measures	Business Energy Rebates	Commercial and Institutional Custom	T-12 Market Transformation	T-12 Replacement	Low-Income Comprehensive	Implementation Contractor Direct Installation	Low-Income Multifamily T-12 Replacement	Retail Efficient Products	Efficient Products Food Bank	Home Performance with ENERGY STAR	Federal Home Loan Bank Home Performance	Solar Hot Water	Solar Photovoltaic Systems	Total
Air Conditioning Efficiency	12	31			407									450
Cooking and Laundry		4			559			455						1,018
Design Assistance		4												4
Hot Water Efficiency	690	1			324	10,219				559	35			11,828
Hot Water Replacement	1	1			43			2			2			49
Light Bulb/Lamp	3,469	12,344	340	1,113	269	21,035	679	224,957	49,581	2,399	555			316,741
Lighting Efficiency/Controls	497	3,503			160									4,160
Lighting Hardwired Fixture	3,031	19,527	5,070	14,504	3,711		2,734							48,577
Motor Controls	21	86			5									112
Motors		13												13
Office Equipment	140													140
Other			93	178		4,199	22			39	17		25	4,573
Other Fuel Switch		1												1
Refrigeration	43				493			459						995
Renewables												19	33	52
Space Heat Efficiency		1			569					37	10			617
Space Heat Fuel Switch					1									1
Space Heat Replacement	6	9			36			5		3	6			65
Thermal Shell					132					58	21			211
Ventilation		10			521									531
Total	**7,910**	**35,535**	**5,503**	**15,795**	**7,230**	**35,453**	**3,435**	**225,878**	**49,581**	**3,095**	**646**	**19**	**58**	**390,138**

Table 6. DCSEU and Teaming Partner green jobs by Ward

Job Title	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
Assistants (administrative, project, and program)	2				1	1		2	6
Associates (initiative, project, and program)	4		1	4	2	4		2	17
Interns	1	2		3	1				7
Specialists (energy, IT, and customer support)			3	3	1	1	1		9
Managers (account, initatitive, and program)	6	1		1	4	5	1		18
Coordinators (project and administrative)				1	1			1	3
Advisors and Researchers	1								1
Directors (compliance, managing, operations)	2	1	1	2	2	1			9
Cumulative total positions, by Ward	**16**	**4**	**5**	**14**	**12**	**12**	**2**	**5**	**70**