CON EDISON

Small Business Direct Install Program Implementation Plan

Consolidated Edison Company of New York, Inc. Cases 07-M-0548 and 08-E-1007

6/24/2013

As required by the New York Public Service Commission's *Order Modifying Certain Energy Efficiency Portfolio Standard (EEPS) Programs*, issued and effective April 25, 2013, this document revises and updates the original Small Business Direct Install Program Implementation Plan submitted by Con Edison on May 15, 2009.

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Energy Efficiency Portfolio Programs
Small Business Direct Install Implementation Plan
July 20, 2012

I. Introduction

In response to the Commission's June 23rd 2008 Order in the Energy Efficiency Portfolio Standards ("EEPS") Proceeding ("EEPS Order"),[1] Consolidated Edison Company of New York Inc. ("Con Edison" or the "Company"), filed a portfolio of energy efficiency programs on August 21, 2008 and September 22, 2008.

The Small Business Direct Installation ("SBDI") Program, known as a 60-day Fast Track Expedited Program ("Expedited Program"), was designed for rapid deployment of energy efficiency measures to specific market segments. This segment is defined as small business customers with average peak monthly demand of less than 100kW. The electric Expedited Programs were approved- as modified by the Public Service Commission ("Commission") - on January 16, 2009 ("Electric Fast Track Order").[2]

As required by the Commission's *Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule*[3] , this updated Implementation Plan was previously revised to update the original plan submitted on May 15, 2009 to include only the SBDI program (the "Program"). The Program is delivered through Implementation Contractors ("IC") who sell the Program, undertake surveys, work with their installation subcontractors, process paperwork, inspect installations, and report to the Company on all aspects of Program delivery. The Company re-bid the IC role in the winter and spring of 2012, receiving over 30 expressions of interest, and yielding a structure with two ICs, each having a designated territory and associated goals for the program cycle 2012-15. As required by the Commission's *Order Modifying Certain Energy Efficiency Portfolio Standard (EEPS) Programs* this updated Implementation Plan includes a modification providing the Company with discretion to allow customers whose demand exceeds the current eligibility limit by up to 10% to participate in Program, subject to the limitation that customers within the demand range of 100 kW to 110 kW be afforded the choice to participate in either the Program or the Company's Commercial and Industrial ("C&I") program, but not both.[4]

The Implementation Plan herein provides information on the components of the Company's Program. The Plan is a living document and will be updated as needed by the Company to reflect any Orders and programmatic changes. The implementation plan outlines the Program's overall budget and implementation strategy to meet its goal.

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[1] Case 07-M-0548, *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*, issued and effective June 23, 2008.
[2] Case Nos. 08-E-1003 & 08-E-1007, et al, *Order Approving "Fast Track" Utility-Administered Electric Energy Efficiency Programs with Modifications*, issued and effective January 16, 2009.
[3] Case Nos. 08-E-1003 & 08-E-1007, et al, *Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule*, issued and effective October 25, 2011.
[4] Case Nos. 08-E-1003 & 08-E-1007, et al, *Order Modifying Certain Energy Efficiency Portfolio Standard (EEPS) Programs*, issued and effective April 25, 2013.

II. Implementation Plan

Table 1 Projected Program Budgets and Savings

Small Business Direct Install Program Program

	Plan Year				
Benefit/Cost Component	**2012**	**2013**	**2014**	**2015**	**Total**
Savings (MWh)	44,900	89,800	89,800	89,800	314,300
Coincident Peak Savings (MW)	10	21	21	21	73
Direct Utility Costs	$18,547,485	$31,145,822	$31,082,119	$30,792,119	111,567,545
Customer Incentives or Services	$8,736,079	$17,472,159	$17,472,159	$17,472,159	$61,152,556
Program Planning and Administration	$2,516,812	$2,179,069	$2,115,366	$2,225,366	$9,036,613
Program Implemention Costs	$3,400,000	$6,850,000	$6,850,000	$6,850,000	$23,950,000
Program Marketing and Trade Ally	$2,500,000	$3,250,000	$3,250,000	$2,850,000	$11,850,000
Evaluation and Market Research	$1,394,594	$1,394,594	$1,394,594	$1,394,594	$5,578,376

	Plan Year				
	2012	**2013**	**2014**	**2015**	**Total**
Program Planning and Administration	**$2,516,812**	**$2,179,069**	**$2,115,366**	**$2,225,366**	**$9,036,613**
General Administration	$1,562,500	$1,562,500	$1,562,500	$1,962,500	$6,650,000
Program Planning	$954,312	$616,569	$552,866	$262,866	$2,386,613
Program Marketing and Trade Ally	**$2,500,000**	**$3,250,000**	**$3,250,000**	**$2,850,000**	**$11,850,000**
Program Outreach and Education/Marketing	$2,350,000	$3,100,000	$3,100,000	$3,100,000	$11,650,000
Trade Ally Training	$150,000	$150,000	$150,000	$150,000	$600,000
Customer Incentives or Services	**$8,736,079**	**$17,472,159**	**$17,472,159**	**$17,472,159**	**$61,152,556**
Incentives and Services	$8,736,079	$17,472,159	$17,472,159	$17,472,159	$61,152,556
Program Implemention Costs	**$3,400,000**	**$6,850,000**	**$6,850,000**	**$6,850,000**	**$23,950,000**
Direct Program Implementation	$3,400,000	$6,850,000	$6,850,000	$6,850,000	$23,950,000
Evaluation and Market Research	**$1,394,594**	**$1,394,594**	**$1,394,594**	**$1,394,594**	**$5,578,376**
Program Evaluation	$1,394,594	$1,394,594	$1,394,594	$1,394,594	$5,578,376

A. Program Description

The Program will deliver free and low cost energy efficiency measures to save energy and reduce peak demand for small and medium commercial and industrial businesses and religious organizations. Eligible participants will have an average monthly peak demand of less than 100 kW, with Company discretion to increase the 100 kW by up to 10% (eligibility will effectively be increased to 110 kW). Customers up to 110kW average peak demand will be given the choice to participate in Con Edison's Program or the C&I program, but not both.

B. Program Incentives

The Program will install selected measures at low or no cost. Customers will receive installs up to $100 in material of no cost measures. Low cost measure opportunities will receive incentives up to 70% of the installed cost.

The Program does not pay rebates or incentives to the participant. Payments are made to the IC(s) who employ the incentives to reduce the cost of delivering the energy efficiency services. The products and installation of products are at reduced cost or free to the customer.

List of Measures

Eligible measure types are identified by the Free and Non-Free Measure Tables (below). The measures included are offered by the program but are not limited to:

Free Measure Table[5]

Measure	**Incentives**
Compact Fluorescent Lamps	Free
LED A-lamp	Free
Low-flow Aerators	Free
High-pressure Rinse Sprayers	Free
Water Heater Thermostat Setback	Free
Water Pipe Insulation	Free
Open Reach-in Refrigerated Night Case Covers	Free
Walk-in Refrigerated Strip Curtains	Free
Refrigerated Door Gaskets	Free

[5]Incentives for Free Measures are limited to $100 of material cost. Thereafter the measure incentive is up to 70% of the installed cost.

Non-Free Measure Table

Measure	**Incentives**
Efficient Lighting Package	Up to 70% of installed cost
High-efficiency Lighting Package	Up to 70% of incremental installed cost
Bi-Level Control for Stairwell Lighting	Up to 70% of installed cost
Occupancy Sensors	Up to 70% of installed cost
LED Exit Signs	Up to 70% of installed cost
HVAC Retro-Commissioning	Up to 70% of cost
Programmable Thermostat	Up to 70% of installed cost
Vending Machine Controls	Up to 70% of installed cost
LED Refrigeration Case Lights	Up to 70% of incremental installed cost
Electronically Commutated Motors	Up to 70% of installed cost
Evaporator Fan Controls	Up to 70% of installed cost
Anti-condensation Door Heater Controls	Up to 70% of installed cost

List of Non-incentive Customer Services

The Program provides a complete turnkey solution for the customer, including equipment purchasing, installation, clean-up, and disposal. In addition, information about the installed measures will be provided to the customer that explains the energy efficiency benefits they received and proper operation and maintenance practices to ensure sustained performance.

C. Small Business Direct Installation Program

1. Target Customer Market

Small businesses remain a significant source of untapped energy-efficiency potential. Nevertheless, there are barriers to participation, including limited capital resources, lack of expertise and understanding of the benefits of energy efficiency, a suspicion of the "free offer" and its legitimacy, confusion with energy service providers offering commodity service, and language and cultural barriers. In the first cycle of EEPS the Company worked to address and overcome these barriers through design of program outreach and marketing efforts, including foreign language marketing materials, sales force training, and offering all available financing opportunities to customers.

The Company continues to deliver the Program broadly across all segments and also includes specific initiatives designed to focus on certain vertical customer segments. These segments can deliver significant energy savings to the Program. For example, the Company defines some vertical segments as follows:

- Small proportion of eligible customers and high consumers of energy, such as parking garages

- Large proportion of eligible customers, such as retail and restaurants
- High adoption, high energy savings potential, such as grocery stores
- Local agencies and organizations and non-profits

2. Program Oversight to Minimize Overlap or Confusion

The Company in conjunction with the following entities will continue to coordinate efforts to minimize Program overlap and eliminate customer confusion:

- New York State Energy Research Development Authority (NYSERDA);
- National Grid, which delivers gas energy services to Brooklyn, Staten Island and parts of Queens;
- New York State Electric and Gas Company (NYSEG), which delivers power in the northeastern part of Westchester County;
- New York Power Authority (NYPA), which generates electricity and delivers electric and gas services to various government and non-government customers throughout New York State;
- Other stakeholders, such as NYC and Westchester County.

The Company meets and speaks regularly with NYSERDA, joint utilities, the Implementation Advisory Group ("IAG") and the New York State Evaluation Advisory Group ("EAG") on coordination issues.

3. Roles and responsibilities of the utility and all program contractors

The Company will be responsible for strategic decisions and will direct and implement the Program marketing campaigns.

In addition, the Company will monitor all program activity, oversee and coordinate major decisions across markets and stakeholder groups, and assess and evaluate implementation contractor(s) compliance in accordance with performance expectations and requirements. The Company's program manager oversees the planning, coordination, resource management, project execution, and project performance of the program.

IC(s) are selected using a competitive bid process to ensure cost-effective delivery of services. Customer sales, existing equipment surveys, explanations of recommendations to customers, and installation of retrofits will be delivered by the contractor(s).

4. Procedures for Customer Enrollment

The Company's program management staff provides a customer contact list to the implementation contractor(s). Using this list the IC(s) will contact the customer to set up an appointment to meet to discuss the program, and if they wish to move forward, to conduct a walk- thru energy survey. If the customer signs up, the IC or its subcontractor will install the recommended measures at no or low cost to the customer. In cases where a customer name is not shown on the list (for example, a new business that opened after the list was generated), the IC(s) confirms their eligibility with the Company before performing a survey. Additionally, customers may enroll in other ways: via telephone using the Company's toll-free number directing them to efficiency

programs or the toll free number on their utility bill; on-line intake forms on the Company's website; and e-mail.

After completing the energy survey, the IC(s) must discuss the energy efficiency upgrade recommendations with the customer, and discuss other equipment recommended for upgrade and/or replacement that may be beyond the program's list of approved measures, and would be referred to another program, such as the Company's C&I program. The IC(s) must then ask the customer whether to proceed with the retrofit, and obtain a signature on a Motion to Proceed document.

Program applicants who do not fall into the Company's programs or are located in another utility's territory will be referred, if appropriate, to other program administrators.

5. Training for Retail Partners

The SBDI program does not utilize retail partners.

6. Contractor Training

The Company requires that the IC's employees and subcontractors attend training provided by the Company. The trainings will be provided on, but not limited to, customer service and sales, direct install and emerging energy efficiency technologies, description of the Company's energy efficiency and demand response portfolio of programs and programs provided by others, such as NYSERDA, and environmental health and safety issues.

7. Contact Information for Customer Inquiries and Complaints

Customers with inquiries and complaints relating to the Con Edison SBDI program may call:

Esteban Vasquez
Manager Small Business Direct Install Energy Efficiency Program
Con Edison
4 Irving Place
New York, NY 10003
212-460-651

8. Quality Assurance

Program applications and tracking will include information necessary to verify that the customer and equipment information submitted meet the Program qualification criteria. This includes confirming the customer account and location information, sales data, equipment make and model numbers are all in sync with the Program requirements.

IC(s) are required verify that all aspects of the customer's project are complete and satisfactory. For each installation the IC must do the following:

- Performs an on-site post-verification of the installation. The test must ensure that all retrofit work is completed and in compliance with all applicable statutes, acts, ordinances, regulations, codes and standards of the federal, state and local governmental agencies having regulatory jurisdiction.
- If a customer has any complaint about work done through the Program, the Contractor(s) is ultimately responsible for handling it.

In Process Inspections
The Company will conduct in process inspections, on a random basis, at a minimum of 10% of approved Program applications.

Realization Rates
At the end each month the Company will conduct completed project installation quality assurance/quality control inspections, on a random basis, on all approved applications for that month. Samples will be based upon 90/10 confidence sampling.

9. Coordination with other New York energy efficiency programs

The Company will continue to coordinate with NYSERDA and the joint utilities as described in Section 3.

III. Marketing Plan

SBDI Marketing Initiatives

As noted in the March 31, 2013 report by the Department of Public Service ("DPS") Office of Outreach, Education and Marketing, the marketing objective of the Program is tied to the Company's Green Team awareness campaign. If awareness can be raised among business customers with Green Team branding, the personal call to participate will be met with less skepticism. On this tactical level, call-to-action messaging will be directly relevant to the Green Team messaging.

The Company will produce and run traditional media, online media, community outreach and other broad reach strategies to specifically support the SBDI program. The media distribution will be focused either on geographic targeting and vertical targets such as retail, restaurants, warehousing, light industrial, religious, educational, parking/automotive facilities and fitness centers. The creative will be focused on successful peer program participants.

Targeted marketing campaigns delivered through traditional direct mail, email, and search engine marketing will be produced by the Company on a turnkey basis. This allows the IC to be in complete control of the timing and process to maximize their resources.

The Company's internal customer outreach, corporate communications, public affairs, customer assistance, and economic development departments all offer key customer touch points to leverage the energy efficiency messaging. Touch points include on-bill/on-envelope messages, e-bill banners, call center scripts and website banners. Company-delivered media relations and social media will be used to identify opportunities of interest to the customer base.

Community Outreach coordinators provide program information at events, directly to BIDs (Business Improvement Districts), chambers of commerce, business organizations, merchants associations and community development groups.

A new Green Team energy efficiency website will incorporate all SBDI information, online survey requests and contact information.

The marketing budget overview projections are shown in the Table 2 below.

Table 2 Con Edison Marketing Budget Overview

Small Business Direct Install 2012 – 2015 Outreach, Education and Marketing		
Strategy	**Tactics**	**Cost**
Community Outreach	Event Participation	$4,400,000
	Sponsorships	
	Media Relations	
	Social Media	
	Community Ally Engagement	
	Trade Ally Engagement	
Media Advertising	Print	$5,250,000
	Online	
	Radio	
	Out of Home	
Digital	Website development and maintenance	$2,000,000
	Email marketing	
	Social networking	
Sales Support	Direct Mail	$200,000
	Collateral	
	Case Studies	
	PPT	
Total		**$11,850,000**

IV. Evaluation Plan

Measurement, Verification & Evaluation

The Company, in conjunction with DPS Staff, acting as the oversight agency, will adhere to the guidance provided in the EAG recommended evaluation guidelines, and will administer detailed program evaluations for the second cycle of EEPS programs, that will be in effect from 2012-2015. The Company will hire evaluation consultants through a competitive bidding process, to conduct all evaluation assessments, and will work in conjunction with the EAG if any evaluations are deemed appropriate for future statewide evaluation review. In that case, the Companies will work in collaboration with the assigned administrator of the statewide project, and the evaluation contractor chosen through a combined review approach, utilizing the statewide prototype developed for the Residential High Efficiency Heating impact evaluation assessment, which is currently ongoing. Detailed evaluation plans will be developed and submitted for review and approval to DPS Staff (acting as the oversight agency), and their evaluation consulting review team, headed by their consultant TecMarket Works. This process is further developed below. In most cases both a process and an impact evaluation will be conducted. Process evaluations will move to the fore as program implementation continues. This will allow for strategic adjustments to be implemented increasing each program's overall efficiency and effectiveness. Process evaluation will comply with the newly created Process Evaluation protocols document, developed on behalf of the DPS Staff and the EAG by Katherine Johnson Consulting. Impact evaluations will become the focus after each program begins to mature, and the availability of program and measure specific data increases, allowing for program impacts to be thoroughly measured.

A. Administrative Support

The Companies will fully support all aspects of the process and impact evaluations and will independently administer and manage these assessments by utilizing outside evaluation consultants through Con Edison's Energy Efficiency Program's MV&E section, as all MV&E employees have no involvement in the implementation of any of the Companies' approved programs. The group's responsibilities will be to define the scope of all evaluations, communicate that scope by developing RFPs to solicit the participation of evaluation consultants, oversee the competitive selection process for all evaluation services solicitations, manage the workflow of all contracted consultants by holding weekly status conference calls, review all documents created by the consultants, inform the consulting team on program operations so that they can probe internal and external staff intelligently about program implementation. Upon completion of that effort, MV&E will communicate results back to program implementers, managers, executive management, DPS Staff, PSC Commissioners and other stakeholders. Con Edison's MV&E group will oversee both Con Edison and Orange & Rockland Utilities EEPS program evaluation activities.

B. Data Reliability Issues

The Companies will review all plans and proposals submitted by selected evaluation consultants to ensure that they are aligned and consistent with the guidelines established by the EAG. All research must satisfy the 90/10 criteria established for confidence and precision. Additionally, all proposals must ensure that a concerted effort will be made to mitigate threats to the reliability of all results by utilizing methods to minimize

systematic and random error, and reduce uncertainty. A discussion of these items will be a required element of all final evaluation reports.

C. Data Collection Requirements

Much of the data that will be required to conduct these evaluations will be collected and extracted from the program data collection templates that were designed by DPS Staff, and vetted through a review process, and utilized for Monthly Scorecard reporting. Data residing in each implementation contractor's program specific database and Con Edison's internal data repository will also be utilized. Con Edison's data repository was designed as a temporary data holding area, until Con Edison's Energy Efficiency Information System ("CEMT") is fully operational. Data will be collected as a response to our Consulting team's documented data requests (which will be sequentially numbered) and submitted through the MV&E group, who will facilitate the request and return the data through accepted cyber security vehicles. MV&E will also ensure that all evaluation consultants will meet internal data security criteria for both the transportation and storage of customer specific, program related data. Additionally, data collected from meter and logging equipment installed at various customer facilities, will be utilized as a key component to conduct the impact analysis.

D. Evaluation Budgets Established

Consistent with the EEPS Order for all evaluation activity, budgets have been established at approximately 5% of the total program budget. The Companies thus will attempt to conduct all evaluation activity required while remaining within the parameters of these budgets. At this time it would be speculative to attempt to project the exact costs of all process and impact evaluations that will be required through the current EEPS period ending in 2015. All evaluations will go through a competitive bidding process and costs will be determined at that time and contingent upon budgetary restrictions. If joint statewide evaluations are conducted, we expect that all costs will be allocated in a fair and equitable manner among the participants. Budget provisions for statewide evaluation efforts were established at a not to exceed guideline amount of 33% of the overall 5% budgets for evaluation.

E. Overall Evaluation Methodology

The primary goal of the impact and process evaluations is to document the energy savings attributable to each program and to help identify areas where the performance of each program can be improved, or report on program operations that are functioning well. Additionally, the Company will work closely with its peers on the EAG and its sub-committees to streamline evaluation protocols and methodologies across New York State. Data derived from the Con Edison's Energy Efficiency Potential Study may be used to support all evaluations conducted by the Companies where applicable, and may be used as a guide to support ongoing baseline assessment work by NYSERDA (under direction from the EAG) for the residential and commercial market segments elsewhere in the state

F. Process Evaluation Methodology Process Evaluation Methodology

All process evaluations will utilize the process evaluation protocols published by the NYS EAG, along with the evaluation guidelines that were published, and recently updated in 2012 by DPS Staff. The process evaluation is expected to focus on (but not be limited to) 6 key areas of research:

- Program Planning
- Continued Infrastructure Development
- Marketing and Customer Acquisition
- Program Delivery
- Customer satisfaction with program experiences
- Interaction with other programs ongoing in the State

The evaluation will be based on a detailed program specific evaluation work plan. The work plan will include a sampling design plan which adheres to the 90/10 guideline for confidence and precision, along with survey instruments that will be developed and submitted for DPS review and approval. Once the survey instruments are approved, they will undergo a rigorous testing procedure to gauge whether they can be conducted in a reasonable amount of time which will respect the customers' time constraints. Other survey instruments will be developed to gather data from internal program staff, customers (both participants and non-participants) of the program, implementation contractor staff, and key market actors, and will focus on improving the efficiency of program recruitment, delivery and adoption of measures, and overcoming barriers to participation. Key market factors include trade allies, local business, community groups and unions. Program related data will also be reviewed to assess program operations versus stated and approved program goals. The process evaluation will begin during the early stages of program implementation in time to provide the required feedback to program managers on the progress and performance of each program. Participant surveys will be designed to focus on extracting information from the customer's experience with the program, and will also serve as a vehicle for obtaining more detailed site information in support of the upcoming impact evaluations that will follow. Participant sampling for these surveys will be based upon stratified samples designed to satisfy 90/10 criteria for confidence and precision. Participant samples will allow for some stratification by fuel, building type, geographical location and measure type but issues such as these will be discussed in length with the evaluation consulting team to determine what avenue presents the best approach in achieving the most accurate results. All parties involved in the delivery of these programs will be required to be available for multiple interviews, and will provide project and program information as required

It is anticipated at this time that the surveys will be implemented over the life of the program. Participant surveys will include a free ridership and participant spillover module, and the non-participant surveys will include a measure adoption module.

The process evaluation will also include an "Evaluability Assessment" review of data collection and tracking, and review (or development) of the program logic model,

indicators and researchable issues. The process evaluation will be designed to identify program findings that can be used to inform program personnel and management, and allow for corrective actions to be taken by integrating change with a minimal amount of interruption to ongoing program operations, which will maintain and improve customer throughput and acquired savings levels.

G. Impact Evaluation Methodology

Impact evaluations determine the level of savings (gross and net) from ongoing energy efficiency program operations. Strategic implementation of an impact assessment should depend upon the amount of time the program has been in operation in order to receive the full benefit of the data collected. The most appropriate type of research will be conducted, after the MV&E team discusses program operations with the evaluation consulting team. No one method is used consistently, and in many situations multiple or hybrid approaches are often contemplated before a course of action is implemented. Therefore is would be premature to propose an impact methodology at this time. Results from ongoing SBDI impact evaluations (2009-2011) may shed additional insight (when completed) on future program assessments. However we strive to utilize as much primary data as possible for the analysis.

Small Business Direct Install Program (SBDI)

Program evaluations are currently being conducted for both Process and Impact for the 2009-2011 programs.

1. Process Evaluation

We envision that a second round of process evaluation will take place, now that multiple vendors will be implementing this program during the 2012-2015 period. Surveys will be designed to adhere to the guidelines presented by Staff, and reinforced by the EAG. Surveys will be conducted to interview participants and non-participants, various Implementation contractor employees and Con Edison employees, and trade allies to satisfy 90/10 criteria for confidence and precision.

2. Impact Evaluation

During the latter portion of the 2012-2015 program period we anticipate initiating a second impact evaluation for this program. The Companies have just initiated impact evaluations for the 2009-2011 EEPS program portfolio, due to delayed implementation of many of our programs. The main objectives of the Impact assessment will be to:

- Quantify energy and demand savings attributable to program activities, measures installed
- Develop a Net-to-Gross analysis to include the effects of free-ridership and spillover (both participant and non-participant) on the program. (As currently directed by the NYS EAG and contained in the Tec Market Works Technical Manual developed for New York State, 10% is the current projection for use until the actual analysis is conducted.)

- Determine Market penetration rates (quantifying the increase in the stocking levels of efficient equipment)
- Determine whether any revisions can be suggested in algorithms currently found in New York State's Technical Review Manual ("TRM") which governs the savings algorithms (and subsequent calculations) across the State.
- Inform program design for future program planning

The sample size of randomly selected customer sites will be at a level that will support and satisfy 90/10 criteria for confidence and precision. A proposed component of the second round of impact evaluations, not currently being assessed during the 2009-2011 review is to look at the market effects associated with this and other efficiency program initiatives. This component was deemed to be less important during the initial review, but worth a drill down during the second round of evaluations.

The Companies would be willing to work jointly with other Program Administrators of the EAG to implement this assessment in a statewide evaluation framework (if one is determined to be appropriate), however if no statewide evaluation consultant is selected by the EAG, the Companies are prepared to issue RFPs to conduct separate and distinct impact evaluations to be competitively bid. Much of the required data will be extracted from the data collection templates that were designed by DPS Staff. Additionally a combination of billing analyses and selective end-use metering may be used in conjunction with detailed post-installation inspections which will determine the level of demand and energy savings along with a determination for persistence of installed measures. Where additional data is required in a specific customer class or market segment, Con Edison's Market Research section of the Energy Efficiency Program Department will support the MV&E section, and the evaluation consulting team to supply the required data.

Non-lighting measures (which account for more than 10% of the savings as a whole for SBDI) will require a further layer of evaluation which may necessitate additional end-use metering.

1. Engineering Analysis

The use of appropriate engineering analyses will be discussed at length with the evaluation consulting team at the appropriate time and a further assessment will be made at that juncture to determine the best available methodology. The SBDI program offers a diverse set of measures. Therefore the treatment for each measure type may be different. The Company views this as an opportunity to augment any analysis with data collected from on-site end-metering / data logging of measures, which has not been conducted in many years. Conducting this research and the subsequent analysis will help develop a better understanding of individual equipment and will help validate program design assumptions and inform the statistical analysis. It should be noted that any site visit activity to a customer's premises will be governed by a task specific Health and Safety Plans ("HASP") which are currently being developed by our evaluation consultants in

conjunction with oversight from internal Con Edison and O&R Environmental Health and Safety ("EH&S") personnel.

2. Statistical Analysis of Consumption Histories

Statistical analysis of consumption histories involving a regression-based comparison of pre- and post-program energy use between participants and a matching sample of non-participants will be the principal method for determining electricity and gas savings in this program. Since the analysis combines data on participants and non-participants, it will also yield estimates on "net" savings. Discussions with our evaluation consulting team will determine which methodology will provide the most accurate results for the program, or we may use a dual approach where it is deemed appropriate.

3. Data Requirements

Data necessary for the impact assessment will consist of five main elements:

i. Twelve consecutive months of consumption histories for electricity and gas;
ii. Daily weather data from the local weather stations for calculating heating and cooling degree days (HDD and CDD);
iii. Expected (planning) estimates of savings from specific measures installed at each site;
iv. Modified planning estimates where such modifications have been made subsequent to energy simulation modeling; and
v. Monitored equipment data used in calibration of engineering models.

4. Calculation of Net Program Impacts

Net energy and demand (coincident and non-coincident) savings from the program may be obtained directly from the estimated parameters of the SAE model at the measure and program levels. These estimates will be used to adjust the planning estimates of measure savings for subsequent years. The adjusted savings estimates will also be used in conjunction with actual accrued costs to re-calculate the cost effectiveness of the program.

5. Quality Assurance / Quality Control

The MV&E group also plans to conduct a review of project sites that are installed and completed each month as part of the SBDI Program effort. Each project is reviewed to assess the reasonableness of its projected energy savings, against its account usage history over the prior 24 month period. Projects that exhibit a savings to usage ratio (S/U) of greater than 50 %; 100 % or higher are flagged for potential site visits. Sites chosen for site visits will be surveyed by a member or our M&V contractor, along with a member of the MV&E staff. The site visit will review installed fixture counts, fixture types, along with other installed equipment. The survey will also probe building / business owners for the operating characteristic of their business or facility, to judge if operating hours of the facility were applied properly from the NYS Technical Manual or whether they utilized self reported operating hours. Another function of the site visit will

be to assess whether the correct customer account was utilized; (in instances where customer businesses have multiple accounts present.)

The effort described above is in addition to the programmatic QA/QC effort randomly conducted shortly after energy conservation measures are installed.