

CON EDISON

Multifamily Low Income Program Implementation Plan

Consolidated Edison Company of New York, Inc.
Case 09-G-0363

9/28/2012



Table of Contents

I.	Introduction.....	3
II.	Implementation Plan	4
1.	Target Customer Market	5
2.	Eligible Energy Efficiency Measures and Associated Customer Incentives	6
3.	Program Oversight to Minimize Overlap or Confusion	7
4.	Roles and Responsibilities of the Utility and all Program Contractors	7
5.	Procedures for Customer Enrollment.....	8
6.	Contact Information for Inquiries and Complaints.....	8
7.	Contractor Training and Program Orientation Plan.....	8
8.	Quality Assurance.....	9
9.	Coordination with Other New York Energy Efficiency Programs.....	9
III.	Marketing Plan.....	10
IV.	Evaluation Plan.....	10
	Measurement, Verification & Evaluation.....	10
1.	Administrative Support.....	11
2.	Data Reliability Issues	11
3.	Data Collection Requirements.....	11
4.	Evaluation Budgets Established	12
5.	Overall Evaluation Methodology	12
6.	Process Evaluation Methodology	12
7.	Impact Evaluation Methodology	13
	<i>Multifamily Electric & Gas Program (MFLI)</i>	14
1.	Process Evaluation	14
2.	Impact Evaluation	14

Energy Efficiency Portfolio Programs Multifamily Low Income Program

I. Introduction

In response to the Public Service Commission's ("Commission") *Order Approving Multifamily Energy Efficiency Programs with Modifications* issued and effective July 27, 2009 ("Order") in the Energy Efficiency Portfolio Standards ("EEPS") Proceeding, Consolidated Edison Company of New York Inc. ("Con Edison" or the "Company"), submitted its original Implementation Plan ("Plan") for its approved Multifamily Low Income ("MFLI") Program on January 5, 2010.

As required by the Commission's *Order Authorizing Energy Efficiency Programs, Revising Incentives Mechanism, and Establishing a Surcharge Schedule*, issued and effective October 25, 2011, this document revises and updates the original Plan submitted by Con Edison on January 5, 2010.

The revisions include updated budget tables and energy savings. Measure tables have been updated with new measures that were approved for the program.

The MFLI Program was designed and subsequently approved to provide funding to the New York City Housing Authority ("NYCHA") and the Westchester County housing authorities ("WCHA")¹ for prescriptive rebates of up to 100 percent of the incremental cost of qualifying cost-effective high efficiency gas heating equipment, such as boilers and furnaces, and up to 100% of the installed cost for other eligible measures, such as building weatherization measures. Additionally, new technologies or customized applications of other cost-effective energy savings measures may be submitted and approved.

The MFLI Program is administered by Con Edison and implemented either through NYCHA and WCHA with their existing protocols and processes modified to meet the MFLI Program criteria.

NYCHA and WCHA will develop and submit energy efficiency projects to Con Edison with program-approved eligible measures, including the ability to submit new technology or customer measures for review. A process has been established that provides for the evaluation of all proposals and their cost-effectiveness. Once a submitted project is approved by Con Edison, each responsible authority will use the agreed-upon process for project design and installation. Con Edison will monitor and verify all installations according to the EAG-approved measurement, verification & evaluation ("MV&E") protocols. In addition, Con Edison has established the tracking and reporting necessary to meet program requirements.

This Plan, describes the framework necessary to deliver this program and related funding to the authorities. The objectives of this Plan are to outline the delivery of a cost-effective program that will allow for the successful installation of approved gas measures in NYCHA and WCHA facilities, achieve the program's savings, and appropriately track and report these savings with a rigorous MV&E plan.

¹ WCHA includes various city, town and village housing authorities in Westchester County.

II. Implementation Plan

Since program approval, Con Edison has had ongoing discussions with NYCHA and WCHA to understand their internal processes, discuss potential projects, and move those that qualify to project approval, funding and installation.

Table 1 – Projected Program Benefits, Cost, Economic Summary

Multifamily Low Income Program					
Benefit/Cost Component	Plan Year				Total
	2012	2013	2014	2015	
Savings (dekatherms)	15,702	15,702	15,702	15,702	62,809
Direct Utility Costs	\$1,187,200	\$1,187,200	\$1,187,200	\$1,187,200	\$4,748,800
Customer Incentives or Services	\$985,376	\$985,376	\$985,376	\$985,376	\$3,941,504
Program Planning and Administration	\$47,488	\$47,488	\$47,488	\$47,488	\$189,952
Program Implementation Costs	\$35,616	\$35,616	\$35,616	\$35,616	\$142,464
Program Marketing and Trade Ally	\$59,360	\$59,360	\$59,360	\$59,360	\$237,440
Evaluation and Market Research	\$59,360	\$59,360	\$59,360	\$59,360	\$237,440
Plan Year					
	2012	2013	2014	2015	Total
Program Planning and Administration	\$47,488	\$47,488	\$47,488	\$47,488	\$189,952
General Administration	\$35,616	\$20,000	\$38,000	\$20,000	\$113,616
Program Planning	\$11,872	\$27,488	\$9,488	\$27,488	\$76,336
Program Marketing and Trade Ally	\$59,360	\$59,360	\$59,360	\$59,360	\$237,440
Program Outreach and Education/Marketing	\$47,488	\$47,488	\$47,488	\$47,488	\$189,952
Trade Ally Training	\$11,872	\$11,872	\$11,872	\$11,872	\$47,488
Customer Incentives or Services	\$985,376	\$985,376	\$985,376	\$985,376	\$3,941,504
Incentives and Services	\$985,376	\$985,376	\$985,376	\$985,376	\$3,941,504
Program Implementation Costs	\$35,616	\$35,616	\$35,616	\$35,616	\$142,464
Direct Program Implementation	\$35,616	\$35,616	\$35,616	\$35,616	\$142,464
Program Evaluation	\$59,360	\$59,360	\$59,360	\$59,360	\$237,440
Evaluation and Market Research	\$59,360	\$59,360	\$59,360	\$59,360	\$237,440

1. Target Customer Market

Energy Efficiency projects will be targeted to NYCHA and WCHA multifamily buildings that have natural gas heating or are converting from oil-to-gas heating. There are no restrictions regarding the size of buildings that can be served by this program

A. NYCHA Overview

NYCHA houses approximately 400,000 residents located in approximately 175,000 apartments throughout the five boroughs. NYCHA also administers a citywide Section 8 Leased Housing Program with 100,000 rental apartments. NYCHA reports to the U.S Department of Housing and Urban Development (“HUD”).

Approximately \$500 million of NYCHA’s annual expense budget is earmarked for energy and water – with approximately 17 million dekatherms of heating fuel consumed annually. Within Con Edison’s gas service territory; there are approximately 250,000 residents in more than 100,000 apartments, consuming in excess of 10 million dekatherms of firm gas per annum.

NYCHA must preserve its aging housing stock through timely maintenance and modernization of its infrastructure. In the past seventeen years, NYCHA has invested more than \$6.1 billion in maintaining and preserving its buildings. Under the 2009 American Recovery and Investment Act (“Stimulus Act”), NYCHA was awarded \$423 million for Capital Improvements.

B. WCHA Overview

There are ten housing authorities in Westchester County: Greenburgh Housing Authority, Mount Kisco Housing Authority, New Rochelle Housing Authority, North Tarrytown Housing Authority, Peekskill Housing Authority, Port Chester Housing Authority, Tarrytown Housing Authority, Tuckahoe Housing Authority, White Plains Housing Authority and Yonkers Municipal Housing Authority. Each housing authority is independent and reports only to HUD.

These housing authorities include various size residential buildings housing approximately 15,000 residents, located in approximately 5,000 apartments in approximately 100 buildings. In addition, there are 16 local Section 8 programs serving approximately 20,000 residents in more than 6,000 apartments. WCHA consumes approximately 200,000 dekatherms of heating fuel annually. Within the Con Edison gas service territory, there are approximately 10,000 residents in more than 4,000 apartments, consuming in excess of 100,000 dekatherms of firm gas per annum.

Westchester County provides periodic funding to several housing authorities to make improvements and provides technical assistance to a number of them as they explore and develop fair and affordable housing development opportunities. The Westchester County Department of Planning has been the administrator of Westchester County housing rehabilitation programs for over thirty years. Westchester County also administers a county-wide Section 8 Housing Choice Voucher Program in over 4,500 rental apartments.

2. Eligible Energy Efficiency Measures and Associated Customer Incentives

The MFLI Program provides prescriptive rebates for up to 100% of the incremental cost of qualifying, cost-effective gas heating equipment and up to 100% of the installed cost of other measures, such as building weatherization measures. Additionally, new technologies or customized applications of other cost-effective energy savings measures may be approved.

All projects (requests for funding) must meet the cost-effectiveness requirement of 1.0 or greater. Incentives are capped at \$1,500 per dwelling unit.

Table 2. Eligible Measures and Incentives

Measure	Eligibility Rating	Incentive
High Efficiency Water Boiler	$\geq 85\%$ AFUE/ E_t	100% of incremental cost
High Efficiency Water Boiler	$\geq 90\%$ AFUE/ E_t	100% of incremental cost
High Efficiency Steam Boiler	$\geq 82\%$ AFUE/ E_t	100% of incremental cost
High Efficiency Gas Furnace	$\geq 90\%$ AFUE/ E_t	100% of incremental cost
Attic Insulation*	Bring level to code or above code requirements	100% of installed cost
Basement Insulation*	Bring level to code or above code requirements	100% of installed cost
Floor Insulation*	Bring level to code or above code requirements	100% of installed cost
Steam Traps	N/A	100% of installed cost
Thermostatic Radiator Valve (TRV)	N/A	70% of installed cost
Energy Management System (EMS)	N/A	70% of installed cost

Wall Insulation*	Bring level to code or above code requirements	100% of installed cost
Reduce Air Infiltration*	N/A	100% of installed cost
Weather Stripping and Sweeps for Doors*	N/A	100% of installed cost
Pipe Insulation*	N/A	100% of installed cost
Vent Dryer/Bath Fan*	N/A	100% of installed cost
HVAC Tune-Up & Repair*	N/A	100% of installed cost

Note: An asterisk (“*”) next to an energy efficiency measure in the above table means that the measure is included in a bundle of energy efficiency measures that will be offered to program participants. For this program, weatherization, insulation and air sealing measures were modeled in a bundle, with costs, therm savings and useful life assumptions representing a bundle of approximately fifty energy efficiency measures.

3. Program Oversight to Minimize Overlap or Confusion

Con Edison administers the MFLI Program. The MFLI Program was designed for Con Edison to exclusively serve NYCHA and WCHA under the EEPs Programs, thereby minimizing the possibility for overlap and confusion with other energy efficiency programs. Con Edison will continue to look at ways to further minimize the possibility of overlap and confusion. More specifically, Con Edison will be working with NYCHA and WCHA to establish clear protocols and tracking of all funding sources that relate to NYCHA and WCHA energy efficiency projects submitted for approval and will be in communication with other entities, such as NYSERDA, where overlap may occur.

4. Roles and Responsibilities of the Utility and all Program Contractors

Described below are the responsibilities of Con Edison and NYCHA and WCHA for the MFLI Program.

Con Edison

Con Edison will provide administration of the MFLI Program, either directly or through an implementation contractor. Con Edison’s MFLI Program manager or implementation contractor will work directly with NYCHA and WCHA to finalize program implementation details and delivery protocols.

Con Edison’s program manager will review all submitted proposed projects, and, if necessary, engage an independent consultant/s, to ensure that the projects are cost-effective and will achieve

the requisite terms savings. Con Edison will ensure that each project is reviewed fairly and equitably and work with and negotiate with NYCHA/WCHA to approve cost-effective projects.

Con Edison will monitor the overall program budget, provide review and approval of cost-benefit analyses for proposed projects and measures, approve and process incentive payments, review and approve contractor invoices, and evaluate the MFLI Program to assure that the authorities and its contractors are achieving the MFLI Program goals.

NYCHA/WCHA

NYCHA and WCHA will each designate a program manager to coordinate all related matters with Con Edison's program manager. Due to their complex, existing organizational structures, which in some cases are separated by municipality, borough or project type, additional authority coordination may be necessary.

NYCHA and WCHA will submit proposed projects to Con Edison for review and approval. Such submissions will include, but not be limited to, installation costs, incremental high efficiency equipment costs (if applicable), associated therm savings calculations and timelines for installation.

5. Procedures for Customer Enrollment

The MFLI Program is unique in that the decision to proceed with energy efficiency projects is not driven by the end-user (i.e. NYCHA & WCHA residents), but is driven by these authorities, as explained in Roles and Responsibilities section above. The establishment of procedures for customer enrollment is not applicable to the MFLI Program.

6. Contact Information for Inquiries and Complaints

Contact:
Greg Elcock
MFLI Program Manager
Energy Efficiency Programs
Con Edison
(212) 460-6507
4 Irving Place
New York, NY 10003

7. Contractor Training and Program Orientation Plan

NYCHA is a reporting agency to HUD and WCHA housing authorities also report directly to HUD. Each of the entities has policies, procedures and protocols ("criteria") associated with contract management for projects considered by NYCHA and WCHA. The housing authorities have, within their organizations, trained, experienced contractors who have met the requirements of the governing bodies having jurisdiction over their operations. Con Edison will review such

existing criteria to ensure that they meet Con Edison's contractor training standards. Depending on the installation process, agreed to between Con Edison and the authorities, Con Edison will ensure that the installation contractors meet Con Edison's contractor training standards.

8. *Quality Assurance*

NYCHA and WCHA have existing quality assurance ("QA") policies and procedures. Con Edison will review the housing authorities' existing QA policies and procedures and will work directly with the authorities to modify those policies and procedures, as necessary, to ensure alignment with EEPS. In addition, in the Con Edison role of MFLI administrator, Con Edison will be providing direct oversight to QA.

9. *Coordination with Other New York Energy Efficiency Programs*

NYCHA and WCHA have existing relationships with other entities, such as DOE and NYSERDA for energy efficiency projects (e.g. Weatherization Assistance Programs). Con Edison has had and will continue to have discussions with NYSERDA, DOE and other entities to maximize the energy efficiency penetration and to seamlessly move projects to other programs that are more applicable. Con Edison will work directly with NYCHA/WCHA to ensure that program funds are coordinated appropriately and in a cost-effective manner.

III. Marketing Plan

As noted in the March 31, 2012 Outreach Education and Marketing report to the Department of Public Service (“DPS”) Office of Outreach, Education and Marketing, the MFLI Program marketing objective 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 MFLI program. The media distribution will be focused either on geographic targeting or vertical targets such as retail, restaurants, warehousing, light industrial, religious, educational, parking/automotive facilities and fitness. 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 contractor 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.

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

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 New York State Evaluation Advisory Group's ("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. 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 begins for the 2012-2015 period and will build off of the recommendations made from the 2009-2011 program process review. This will allow for strategic adjustments to be implemented increasing each program's overall efficiency and effectiveness. Process evaluation activity 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 project and measure specific data increases, allowing for program impacts to be thoroughly measured. Con Edison does not currently utilize an implementation contractor to administer this program, but does have a contract in place with an M&V contractor should field work be required and conducted.

1. 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.

2. 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.

3. 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. 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, which will facilitate the request and return the data through accepted cyber security vehicles. MV&E will also ensure that all evaluation consultants 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 (where applicable) at various customer facilities will be utilized as a key component to conduct the impact analysis.

4. 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 where possible. 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.

5. 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 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.

6. 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) six 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 (or census if applicable) 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, to focus on improving the efficiency of program recruitment, delivery and adoption of measures, and to overcome barriers to participation. Key market actors for this program include HUD, authorities, 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 and follow-up on recommendations made in the prior round of process evaluation assessments. Participant surveys will be designed to focus on extracting information from the customer's experience (in this case the appropriate Housing Authority) 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 may 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.

7. Impact Evaluation Methodology

Impact evaluations quantify the level of savings (gross and net) from ongoing energy efficiency program operations, and in this case, should be used on a prospective basis only. 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 it would be premature to propose an impact methodology at this

time. Results from ongoing MFLI 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, although it should be noted that this program lend itself towards a more customized one-off project approach, so that should be kept in mind.

Multifamily Electric & Gas Program (MFLI)

A Draft Final Report of the process evaluation assessment for the 2009-2011 program periods was recently delivered to Con Edison by its evaluation team. Those results are currently being reviewed.

1. Process Evaluation

We envision that a second round of process evaluation will take place, 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 housing authority personnel, participating ESCOs (where applicable), Con Edison employees, and trade allies to satisfy the 90/10 criteria for confidence and precision.

2. Impact Evaluation

During the 2012-2015 program periods, 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 EAG, and contained in the Tec Market Works Technical Manual developed for New York State. Ten percent is the current projection net freeridership and spillover 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 program review, but worth a drill down during the second round of evaluations.

The Company is prepared to issue an RFP to conduct an impact evaluation that would 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. The Company has an M&V contractor on board to assist with any post-installation field work, and now possesses in-house engineering support to review proposed project saving scenarios. Where additional data is required in a specific customer class or market segment, Con Edison's Market Research section of the Energy Efficiency and Demand Management Program Department will support the MV&E section, and the evaluation consulting team to supply the required data.

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.

Because these projects can be custom in nature, each will be treated independently.

The Company views this as an opportunity to augment any analysis with data collected from on-site end-use 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 Plan ("HASP") which is currently being developed by our evaluation consultants in conjunction with oversight from internal Con Edison 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:

1. Twelve consecutive months of consumption histories for electricity and gas;
2. Daily weather data from the local weather stations for calculating heating and cooling degree days ("HDD" and "CDD");

3. Expected (planning) estimates of savings from specific measures installed at each site;
4. Modified planning estimates where such modifications have been made subsequent to energy simulation modeling; and
5. 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 Statistically Adjusted Engineering (“SAE”) model at the measure and program levels. These estimates will be used to adjust the planning estimates of measure savings for subsequent years.