

CON EDISON

Residential Programs Implementation Plan

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. CASES 07-M-0548,
08-E-1127 AND 08-E-1007, 08-G-1008



Residential Direct Install, Residential Room Air Conditioning, Appliance Bounty and
Residential HVAC

October 17, 2012

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**Energy Efficiency Portfolio Programs
Residential Suite of Programs
October 17, 2012**

I. Introduction

In response to the Public Service Commission's ("Commission") *Order Approving Certain Commercial and Industrial; Residential; and Low Income Residential Customer Energy Efficiency Programs with Modifications*, issued and effective January 4, 2010 ("January 4 Order") in the Energy Efficiency Portfolio Standards ("EEPS") Proceeding,¹ Consolidated Edison Company of New York Inc. ("Con Edison" or "the Company") submitted its Implementation Plan for the Residential Direct Install Program ("DI Program"), Residential Room Air Conditioning Program ("Room AC Program") and Appliance Bounty Program ("Bounty Program") (collectively, "The Residential Suite of Programs") on March 5, 2010. Portions of the Residential Portfolio have operated since 2009. The implementation plan for Residential HVAC Electric and Gas was submitted in May 2009, ("Fast Track Electric and Gas Energy Efficiency Implementation Plan") and the current program cycle runs from January 2012 through December 2015.

As required by the Commission's *Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule*,² this updated Implementation Plan ("Plan") revises the original implementation plans submitted on May 15, 2009, and March 5, 2010 for the Residential Suite of Programs. The programs are delivered through an Implementation Contractor ("IC") who processes rebate applications, markets programs, undertakes surveys, manages the pick-up and recycling of appliances, works with trade allies and contractors, inspects installations, and reports to the Company on all aspects of program delivery.

Con Edison's residential programs provide a pathway for residential customers and building owners to reduce their carbon footprint and lower energy costs through the installation of energy efficiency measures. With the exception of the Residential Room AC program, the programs target residential customers and building owners living in existing residential 1-4 family housing and paying into the System Benefit Charge ("SBC"). The Room AC program targets all directly metered residential electric customers paying into the SBC.

The Plan provides information on the components of the Company's Residential Suite of Programs. The Plan is a living document and will be updated as needed by the Company to reflect any new Commission orders and programmatic changes. The Plan outlines the Residential Suite of Programs' overall budget and implementation strategy to meet its goal.

¹Case08-E-1127, Case08-E-1129, Case09-G-0363, Case 07-M-0548, *Order Approving Certain Commercial and Industrial Residential; and Low Income Residential Customer Energy Efficiency Programs with Modifications* issued and effective January 4, 2010

²Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, *Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule*, issued and effective October 25, 2011.

II. Implementation Plan

The tables below reflect energy savings and planned budgets for the Residential Suite of Programs. The savings and budgets are consistent with the Commission's October 25, 2011 Order cited above and the February 17, 2012 *Order Approving Utility Target Adjustments*.³

Table 1. Projected Program Budget and Savings - Residential Direct Installation

Residential Direct Installation Program					
<i>Benefit/Cost Component</i>	Plan Year				Total
	2012	2013	2014	2015	
Savings (MWh)	5,517	5,517	5,517	5,517	22,068
Coincident Peak Savings (MW)	0.24	0.24	0.24	0.24	1.0
Direct Utility Costs	\$3,012,857	\$3,012,857	\$3,012,857	\$3,012,857	12,051,428
Customer Incentives or Services	\$500,000	\$500,000	\$500,000	\$500,000	2,000,000
Program Planning and Administration	\$906,009	\$906,009	\$906,009	\$906,009	3,624,037
Program Implementation Costs	\$831,807	\$831,807	\$831,807	\$831,807	3,327,228
Program Marketing and Trade Ally	\$624,398	\$624,398	\$624,398	\$624,398	2,497,592
Evaluation and Market Research	\$150,643	\$150,643	\$150,643	\$150,643	602,571
Plan Year					
<i>Benefit/Cost Component</i>	2012	2013	2014	2015	Total
<i>Program Planning and Administration</i>	\$906,009	\$906,009	\$906,009	\$906,009	\$3,624,037
General Administration	\$770,108	\$770,108	\$770,108	\$770,108	\$3,080,431
Program Planning	\$135,901	\$135,901	\$135,901	\$135,901	\$543,605
<i>Program Marketing and Trade Ally</i>	\$624,398	\$624,398	\$624,398	\$624,398	\$2,497,592
Program Outreach and Education/Marketing	\$618,154	\$618,154	\$618,154	\$618,154	\$2,472,616
Trade Ally Training	\$6,244	\$6,244	\$6,244	\$6,244	\$24,976
<i>Customer Incentives or Services</i>	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
Incentives and Services	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
<i>Program Implementation Costs</i>	\$831,807	\$831,807	\$831,807	\$831,807	\$3,327,228
Direct Program Implementation	\$831,807	\$831,807	\$831,807	\$831,807	\$3,327,228
<i>Program Evaluation</i>	\$150,643	\$150,643	\$150,643	\$150,643	\$602,572
Evaluation and Market Research	\$150,643	\$150,643	\$150,643	\$150,643	\$602,572

³ Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order Approving Utility Target Adjustments issued and effective February 17, 2012.

Table 2. Projected Program Budget and Savings - Residential Appliance Bounty

Residential Appliance Bounty Program

<i>Benefit/Cost Component</i>	Plan Year				Total
	2012	2013	2014	2015	
Savings (MWh)	13,177	13,177	13,177	13,177	52,708
Coincident Peak Savings (MW)	1.4	1.4	1.4	1.4	5
Direct Utility Costs	\$4,545,571	\$4,545,571	\$4,545,571	\$4,545,571	\$18,182,284
Customer Incentives or Services	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
Program Planning and Administration	\$2,254,498	\$2,254,498	\$2,254,498	\$2,254,498	\$9,017,991
Program Implementation Costs	\$707,999	\$707,999	\$707,999	\$707,999	\$2,831,995
Program Marketing and Trade Ally	\$855,796	\$855,796	\$855,796	\$855,796	\$3,423,184
Evaluation and Market Research	\$227,279	\$227,279	\$227,279	\$227,279	\$909,114

	Plan Year				Total
	2012	2013	2014	2015	
<i>Program Planning and Administration</i>	\$2,254,498	\$2,254,498	\$2,254,498	\$2,254,498	\$9,017,991
General Administration	\$1,916,323	\$1,916,323	\$1,916,323	\$1,916,323	\$7,665,292
Program Planning	\$338,175	\$338,175	\$338,175	\$338,175	\$1,352,699
<i>Program Marketing and Trade Ally</i>	\$855,796	\$855,796	\$855,796	\$855,796	\$3,423,184
Program Outreach and Education/Marketing	\$847,238	\$847,238	\$847,238	\$847,238	\$3,388,952
Trade Ally Training	\$8,558	\$8,558	\$8,558	\$8,558	\$34,232
<i>Customer Incentives or Services</i>	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
Incentives and Services	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
<i>Program Implementation Costs</i>	\$707,999	\$707,999	\$707,999	\$707,999	\$2,831,995
Direct Program Implementation	\$707,999	\$707,999	\$707,999	\$707,999	\$2,831,995
<i>Program Evaluation</i>	\$227,279	\$227,279	\$227,279	\$227,279	\$909,116
Evaluation and Market Research	\$227,279	\$227,279	\$227,279	\$227,279	\$909,116

Table 3. Projected Program Budget and Savings - Residential Room Air Conditioner

Residential Room Air Conditioner Program

<i>Benefit/Cost Component</i>	Plan Year				Total
	2012	2013	2014	2015	
Savings (MWh)	1,040	1,040	1,040	1,040	4,160
Coincident Peak Savings (MW)	1.8	1.8	1.8	1.8	7
Direct Utility Costs	\$1,337,143	\$1,337,143	\$1,337,143	\$1,337,143	5,348,572
Customer Incentives or Services	\$887,000	\$887,000	\$887,000	\$887,000	3,548,000
Program Planning and Administration	\$15,006	\$15,006	\$15,006	\$15,006	60,022
Program Implementation Costs	\$323,605	\$323,605	\$323,605	\$323,605	1,294,420
Program Marketing and Trade Ally	\$44,675	\$44,675	\$44,675	\$44,675	178,701
Evaluation and Market Research	\$66,857	\$66,857	\$66,857	\$66,857	267,429

	Plan Year				Total
	2012	2013	2014	2015	
<i>Program Planning and Administration</i>	\$15,006	\$15,006	\$15,006	\$15,006	\$60,022
General Administration	\$12,755	\$12,755	\$12,755	\$12,755	\$51,019
Program Planning	\$2,251	\$2,251	\$2,251	\$2,251	\$9,003
<i>Program Marketing and Trade Ally</i>	\$44,675	\$44,675	\$44,675	\$44,675	\$178,701
Program Outreach and Education/Marketing	\$44,228	\$44,228	\$44,228	\$44,228	\$176,914
Trade Ally Training	\$447	\$447	\$447	\$447	\$1,787
<i>Customer Incentives or Services</i>	\$887,000	\$887,000	\$887,000	\$887,000	\$3,548,000
Incentives and Services	\$887,000	\$887,000	\$887,000	\$887,000	\$3,548,000
<i>Program Implementation Costs</i>	\$323,605	\$323,605	\$323,605	\$323,605	\$1,294,420
Direct Program Implementation	\$323,605	\$323,605	\$323,605	\$323,605	\$1,294,420
<i>Program Evaluation</i>	\$66,857	\$66,857	\$66,857	\$66,857	\$267,428
Evaluation and Market Research	\$66,857	\$66,857	\$66,857	\$66,857	\$267,428

Table 4. Projected Program Budget and Savings-Residential HVAC (Electric)**Residential HVAC Program (Electric)**

<i>Benefit/Cost Component</i>	Plan Year				Total
	2012	2013	2014	2015	
Savings (MWh)	1,873	1,873	1,873	1,873	7,492
Coincident Peak Savings (MW)	1	1	1	1	4
Direct Utility Costs	\$4,046,663	\$4,046,663	\$4,046,663	\$4,046,663	16,186,652
Customer Incentives or Services	\$1,699,598	\$1,699,598	\$1,699,598	\$1,699,598	6,798,394
Quality Installation Costs	\$3,000	\$3,000	\$3,000	\$3,000	12,000
Program Planning and Administration	\$941,731	\$941,731	\$941,731	\$941,731	3,766,926
Program Implementation Costs	\$808,441	\$808,441	\$808,441	\$808,441	3,233,764
Program Marketing and Trade Ally	\$391,559	\$391,559	\$391,559	\$391,559	1,566,236
Evaluation and Market Research	\$202,333	\$202,333	\$202,333	\$202,333	809,333
Plan Year					
	2012	2013	2014	2015	Total
<i>Program Planning and Administration</i>	\$941,731	\$941,731	\$941,731	\$941,731	\$3,766,926
General Administration	\$800,472	\$800,472	\$800,472	\$800,472	\$3,201,887
Program Planning	\$141,260	\$141,260	\$141,260	\$141,260	\$565,039
<i>Program Marketing and Trade Ally</i>	\$391,559	\$391,559	\$391,559	\$391,559	\$1,566,236
Program Outreach and Education/Marketing	\$387,643	\$387,643	\$387,643	\$387,643	\$1,550,574
Trade Ally Training	\$3,916	\$3,916	\$3,916	\$3,916	\$15,662
<i>Customer Incentives or Services</i>	\$1,702,598	\$1,702,598	\$1,702,598	\$1,702,598	\$6,810,394
Incentives and Services	\$1,699,598	\$1,699,598	\$1,699,598	\$1,699,598	\$6,798,394
Quality Installation Costs	\$3,000	\$3,000	\$3,000	\$3,000	\$12,000
<i>Program Implementation Costs</i>	\$808,441	\$808,441	\$808,441	\$808,441	\$3,233,764
Direct Program Implementation	\$808,441	\$808,441	\$808,441	\$808,441	\$3,233,764
<i>Evaluation and Market Research</i>	\$202,333	\$202,333	\$202,333	\$202,333	\$809,333
Program Evaluation	\$202,333	\$202,333	\$202,333	\$202,333	\$809,333

Table 5. Projected Program Budget and Savings-Residential HVAC (Gas)

Residential HVAC Program (Gas)

<i>Benefit/Cost Component</i>	Plan Year				Total
	2012	2013	2014	2015	
Savings (dekatherms)	34,158	34,158	34,158	34,158	136,632
Direct Utility Costs	2,802,406	2,802,406	2,802,406	2,802,406	\$11,209,624
Customer Incentives or Services	1,708,344	1,708,344	1,708,344	1,708,344	\$6,833,375
Quality Installation	2,000	2,000	2,000	2,000	\$8,000
Program Planning and Administration	41,942	41,942	41,942	41,942	\$167,768
Program Implementation Costs	741,475	741,475	741,475	741,475	\$2,965,900
Program Marketing and Trade Ally	168,525	168,525	168,525	168,525	\$674,100
Evaluation and Market Research	140,120	140,120	140,120	140,120	\$560,481

	Plan Year				Total
	2012	2013	2014	2015	
<i>Program Planning and Administration</i>	\$41,942	\$41,942	\$41,942	\$41,942	\$167,768
General Administration	\$35,651	\$35,651	\$35,651	\$35,651	\$142,603
Program Planning	\$6,291	\$6,291	\$6,291	\$6,291	\$25,165
<i>Program Marketing and Trade Ally</i>	\$168,525	\$168,525	\$168,525	\$168,525	\$674,100
Program Outreach and Education/Marketing	\$166,840	\$166,840	\$166,840	\$166,840	\$667,359
Trade Ally Training	\$1,685	\$1,685	\$1,685	\$1,685	\$6,741
<i>Customer Incentives or Services</i>	\$1,710,344	\$1,710,344	\$1,710,344	\$1,710,344	\$6,841,375
Incentives and Services	\$1,708,344	\$1,708,344	\$1,708,344	\$1,708,344	\$6,833,375
Quality Installation	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
<i>Program Implementation Costs</i>	\$741,475	\$741,475	\$741,475	\$741,475	\$2,965,900
Direct Program Implementation	\$741,475	\$741,475	\$741,475	\$741,475	\$2,965,900
<i>Evaluation and Market Research</i>	\$140,120	\$140,120	\$140,120	\$140,120	\$560,481
Program Evaluation	\$140,120	\$140,120	\$140,120	\$140,120	\$560,481

A) Program Descriptions

- a) The DI Program is designed to provide information and assistance to residential customers wishing to evaluate their home's energy performance and to identify energy saving opportunities before the installation of new energy efficiency upgrades. The program provides low cost on-site energy surveys, direct installation of specific, free electric efficiency measures and recommendations for more extensive electric and gas efficiency upgrades. Participants in the program who choose to install the more extensive recommended measures will be directed to Con Edison's electric and/or gas Residential Heating, Ventilation and Air Conditioning Programs ("HVAC Programs") and/or Room AC Program for prescriptive rebates, Appliance Bounty Program, when applicable, or other pertinent energy efficiency programs offered by NYSERDA or other utilities. The DI Program targets residential customers in 1-4 family housing.
- b) Con Edison's Room AC Program promotes the purchase and installation of new ENERGY STAR[®] room air conditioners. The Room AC program, coupled with the HVAC Program, expands the opportunity in Con Edison's service area for energy efficiency gains in residential air conditioned space. Con Edison offers the incentives to upgrade to higher efficiency air conditioning equipment to all residential directly metered electric customers who contribute to the SBC.
- c) Con Edison's Appliance Bounty Program encourages customers to dispose of freezers, inefficient second refrigerators and room air conditioners in an environmentally sound manner. Energy and capacity savings are achieved by removing the appliances and ensuring that they will not be used again. The program targets residential customers in 1-4 family housing.
- d) Con Edison's HVAC Programs (electric and gas) promote the purchase and installation of new high-efficiency cooling and heating equipment to residential customers by providing customers with 1) financial incentives to offset the higher purchase cost of energy efficient equipment and 2) information on the features and benefits of energy efficient equipment. The programs target residential customers in 1-4 family housing.

B) Eligible Energy Efficiency Measures & Associated Customer Incentives

DI Program

This program is available to Con Edison residential customers (owners and tenants) in existing 1 – 4 family buildings who pay the SBC. For whole building and custom solutions, customers will be referred NYSERDA's Home Performance with ENERGY STAR[®] program. Low-income customers will be referred to NYSERDA's low-income EmPowerNY program.

Table 2. DI - Eligible Measures

Measure	Eligibility Rating	Incentive
Compact fluorescent lamps	ENERGY STAR®	Free - Up to 10 installed Free
Smart Strip	N/A	Free – Up to two
Hot water pipe insulation ⁴	R-4 Insulation	Free
Low-flow showerheads ⁴	1.5 GPM	Free
Water heater thermostat setback	120 degrees	Free
Weather stripping/sweeps for doors	N/A	Free
Faucet Aerators ⁴	1.5 GPM	Free

Room AC Program

Con Edison provides a financial incentive of \$25 per unit to customers who purchase an ENERGY STAR® rated or above window or wall-mounted room air conditioning unit.

Table 3. Room AC – Eligible Equipment Measures

Measure	Eligibility Rating	Incentive
Room air conditioner (window)	ENERGY STAR® rated or higher	\$25
Room air conditioner (wall)	ENERGY STAR® rated or higher	\$25

Appliance Bounty Program

Con Edison provides rebates ranging from \$20 to \$50 per appliance, as shown in Table 4, with a limit of two rebates of each type per customer address. There are two distinct financial incentives associated with the program. Customers receive both a rebate check and free pick up and disposal services.

⁴ These measures will be installed in homes with electric water heating equipment.

Table 4. Appliance Bounty - Eligible Equipment Measures

Measure	Eligibility Rating	Incentive
Refrigerator	Working unit; ≥ 10 CU FT.	Free pick up and disposal; cash rebate of \$50
Freezer	Working unit; ≥ 10 CU FT.	Free pick up and disposal; cash rebate of \$50
Room air conditioner (wall)	Working unit	Free pick up and disposal; cash rebate of \$20
Room air conditioner (window)	Working unit	Free pick up and disposal; cash rebate of \$20

HVAC Programs

a) Residential HVAC Program Rebates: Electric

Con Edison promotes the replacement of older inefficient electric cooling equipment with high-efficiency equipment. In addition the program provides incentives for duct and air sealing and also offers a contractor incentive for quality installation of the equipment. Rebates range from \$25 to \$600.

Measure	Eligibility	Rebate
Central Air Conditioning	SEER ≥ 15 , EER ≥ 12.5 Plus "Quality Installation"	\$400
Central Air Conditioning	SEER ≥ 16 , EER ≥ 13.0 Plus "Quality Installation"	\$600
Central Air Source Heat Pump	SEER ≥ 15 , EER ≥ 12 , HSPF ≥ 8.5 Plus "Quality Installation"	\$400
Central Air Source Heat Pump	SEER ≥ 16 , EER ≥ 13.0 , HSPF ≥ 9.0 Plus "Quality Installation"	\$600
Duct and Air Sealing	Blower Door and Duct Blaster assisted sealing by certified contractors	\$600
Electronically Controlled Motor ("ECM") Furnace Fan	ECM Furnace Fan	\$200
Electric Heat Pump Water Heater	Energy Factor > 2.0	\$400
Energy Star Thermostats	Energy Star	\$25
Quality Installation	Installation by BPI-certified contractor and documentation that an ACAA Manual J calculation has been completed to determine proper sizing	Contractor Incentive of \$200

SEER - Seasonal Energy Efficiency Ratio
 EER - Energy Efficiency Ratio
 HSPF- Heating Season Performance Factor
 BPI – Building Performance Institute
 ACAA – Air Conditioning Contractors of America

b) Residential HVAC Program Rebates: Gas

Con Edison promotes the replacement of older inefficient water and space heating equipment with high-efficiency equipment in 1 – 4 family residential buildings. Rebates range from \$25 to \$1,000.

Measure	Eligibility	Rebate
Furnace	AFUE \geq 90	\$200
Furnace	AFUE \geq 92	\$200
Furnace	AFUE \geq 92 w/ ECM	\$400
Furnace	AFUE \geq 94 w/ ECM	\$600
Furnace	AFUE \geq 95 w/ ECM	\$600
Water Boiler	AFUE \geq 85	\$500
Water Boiler	AFUE \geq 90	\$1,000
Steam Boiler	AFUE \geq 82	\$500
Boiler Reset Control		\$100
Indirect Water Heater *		\$300
Programmable Thermostats		\$25
Duct and Air Sealing		\$600

AFUE – Annual Fuel Utilization Efficiency

*Installed with Eligible Equipment

C) Implementation

1. Target Customers

The DI, HVAC, and Bounty Residential Programs target electric and gas customers in 1-4 family homes. The Room AC Program targets any directly metered residential electric customers in Con Edison’s service territory who own their own equipment. Customers must pay into the SBC.

2. Program Oversight to Minimize Overlap or Confusion

Con Edison continues to work with New York State utilities and NYSERDA on a number of initiatives to avoid overlap and customer confusion. For example, to avoid double-payment of incentives customers that intend to participate in utility programs are checked to see if they have participated in the NYSERDA Home Performance with Energy Star program. In addition, Con Edison promotes NYSERDA and National Grid’s programs to its residential customers via website, brochures, and other materials. Also, Con Edison and National Grid collaborate on HVAC contractor training and educational events, and cross market to each others’ contractor pool.

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

The Company is responsible for strategic decisions and directs the program marketing campaigns.

In addition, the Company monitors all programs activity, oversees and coordinates major decisions across markets and stakeholder groups, and assesses and evaluates IC(s) compliance in accordance with

performance expectations and requirements. The Company's residential program manager oversees the planning, coordination, resource management, project execution, and project performance of the Residential Suite of Programs.

IC selection is based upon a competitive bid process to provide cost-effective delivery of services. Customer lead generation, home surveys, measure installation, equipment pick-up and recycling, rebate application process and explanations of recommendations to customers will be the responsibility of the IC or its subcontractor. Con Edison will also provide leads to the contractor generated from its efforts.

4. Procedures for Customer Enrollment

1) Direct Install

- ***Scheduling an on-site energy survey***

The customer generally initiates participation in the DI Program through a phone call, the Company's website or in response to the Company's marketing activities. The customer provides its contact information and account number, the customer's eligibility is confirmed and an appointment is scheduled. At this time the customer will be notified of the applicable \$50 charge and acceptable methods of payment. Customer data is saved and tracked for reporting purposes and to coordinate participation in other programs offered by the Company or others.

- ***Completing an on-site energy survey***

At the appointment the customer will be asked to pay the applicable \$50 charge via credit card. The energy surveyor will conduct a walkthrough energy survey including evaluation of building envelope characteristics and major energy-using equipment, e.g., lighting, space conditioning and hot water heating equipment, to identify areas for cost effective efficiency upgrades. The surveyor will recommend appropriate follow-up activities, explain other available programs that may benefit the customer, discuss best practices for operating home energy systems efficiently and disseminate educational materials. During the survey, the surveyor may install low-cost, energy efficiency measures as described in section B.

- ***Providing the homeowner with a survey report***

Within a few days of the survey being conducted, each customer will receive a customized report which outlines the measures installed during the visit, recommendations provided, and referrals to other programs, usage analysis and the next steps in completing the additional recommended measures. Customers are provided with the surveyor's and call center's contact information in case they have additional questions pertaining to their survey. The IC is responsible for recording data collected, storing survey reports, tracking and reporting.

- ***Following up with customers***

After each energy survey, the IC will follow up with customers to inquire about the survey, the direct installation measures installed and whether the customer intends to implement recommended measures so that referrals can be made to the appropriate program. The IC will provide contact information for further assistance, e.g., identifying installation contractors or supporting additional program participation, and address any quality assurance issues.

- ***Field quality assurance checks***

About 5% of surveyed sites will be inspected by the IC to verify that all program protocols were followed, that the data collected accurately represents the conditions found, that the customer was satisfied with program measures and services, and that the installed measures meet program quality standards. The Company retains the right to increase its quality control inspections at any time.

2) Room AC

Directly metered Con Edison residential electric customers who purchase an ENERGY STAR® rated or better air conditioner can apply for a \$25 rebate by applying online, downloading an application from Con Edison's website, or obtaining the application at the point of purchase (retailer). Applicants must include a dated sales receipt and product specification with their rebate application.

- ***Processing rebate checks***

The implementation contractor will track applications and report to Con Edison. Con Edison reviews reports. Upon approval from the Company, the IC is responsible for processing the rebate and issuing the check to the approved customer. The IC may subcontract this process.

3) Appliance Bounty

- ***Scheduling the appliance collection***

This task is generally triggered by the customer initiating participation in the program through a phone call, the Company's website, marketing activities or as a result of the DI energy survey recommendation.

- ***Program Compliance***

The IC will verify that the customer receives Con Edison electric service and that the appliance meets program requirements of a working refrigerator greater than 10 cubic feet and/or a working room air conditioner.

- ***Transporting appliance to a recycling facility***

The appliance is disassembled and the applicable components are recycled. The remaining components are disposed of in an environmentally responsible manner. Environmentally responsible disposal involves removing chlorinated fluorocarbons ("CFCs") from the refrigerant (and possibly foam insulation), preparing refrigerant for reclamation or recycling, and recycling other materials such as metal (and possibly plastic) components.

- ***Processing rebate checks***

The IC will track appliance rebate applications through the process and report to Con Edison. Con Edison reviews reports and determines whether to approve rebates. Upon approval, implementation contractor is responsible for processing the rebate and issuing the check to the customer.

4) HVAC Electric and Gas

Customers typically hear about the program through one of two channels: program marketing efforts or through their installation contractor. Customers must select their own licensed contractor for installation of eligible measures.

To apply for an incentive, eligible customers must submit to the IC a valid program application along with required documentation. Customers must attach the equipment specification sheet and the installation invoice from the contractor showing the model and serial number of all applicable equipment. Customers applying for rebates associated with duct and/or air sealing must include a detailed description of the work performed.

If all of the customer and equipment eligibility requirements are met and the appropriate documentation is provided, the rebate application proceeds through the approval process.

- ***Processing rebate checks***

The IC will track rebate applications through the process and report to Con Edison. Con Edison reviews reports and determines whether to approve rebates. Upon approval, implementation contractor is responsible for processing the rebate and issuing the check to the customer.

- ***Field quality assurance checks***

About 10% of surveyed sites will be inspected by the IC to verify that all program protocols were followed, that the data collected accurately represents the conditions found, that the customer was satisfied with program measures and services, and that the installed measures meet program quality standards. The Company retains the right to increase the levels of quality control inspections if warranted.

5. Contact Information for Customer Inquiries and Complaints

The IC is responsible for responding to customer inquiries, resolving customer complaints, and addressing customer satisfaction issues. The IC will serve as the customers' primary point of contact regarding all residential programs. When needed, high level customer questions or concerns are escalated to Con Edison management for resolution at:

Cristina Coltro

Manager Residential Energy Efficiency Programs

Con Edison

4 Irving Place

New York, NY 10003

212-460-6850

6. Training for Appropriate Trade Allies

There is no mandatory training of trade allies for the Residential Suite of Programs.

7. Contractor Training and Program Orientation Plan

The IC has the overall responsibility to coordinate and train the field technicians as needed for the Residential Suite of Programs. Con Edison requires that the IC ensure that field employees, as well as any subcontractor employees who are assigned to the program, are trained in customer contact protocol, program requirements and procedures and energy efficiency programs provided by others, such as NYSERDA.

8. Quality Assurance

Con Edison and the IC share in the quality assurance and control process, with each having its own requirements. The IC carries out its own quality control review, while the Company may do additional quality control on a more selective basis. A series of efforts aimed at maximizing quality assurance and control is part of the delivery process and the IC must adhere to customer relationship standards that equal or exceed industry norms.

Quality assurance inspectors must be fully qualified to carry out inspections and evaluations. The IC ensures high quality installations through random on site inspections of installed equipment. The IC works with the Company's staff and contractors when the inspection results in a failure to make sure they have a full understanding of necessary actions to taken to remedy the situation. Related responsibilities include, but are not limited to, the handling of customer issues and the general education of contractors serving the Con Edison service territory through outreach and training events.

The Company analyzes post-program delivery data, collected via a combination of online, telephone and mail surveys, to further determine and measure customer expectations and satisfaction as well as the Company staff and contractor efficiency. Marketing and sales campaigns are similarly scrutinized to determine if the right messages, advertising, channels and contractor delivery services have proven successful.

Finally, the IC has a process in place, with the necessary resources and systems, for customer complaint resolution. IC reports on customer complaints are submitted to Con Edison monthly. Any urgent situation is acted on by Con Edison through its own customer complaint resolution process.

9. Coordination with Other New York Energy Efficiency Programs

The Company will continue to coordinate with NYSERDA and other utility programs to allow for a more integrated delivery process.

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 Residential Suite of Program marketing objective is tied to the Company’s Green Team awareness campaign.

The primary marketing objective is to educate the residential customers and local contractor base on the value of the energy saving program portfolio and then engage them to participate.

The Company and implementation contractor will produce and run traditional media such as:

- Direct Mail
- Out of Home (phone kiosk, billboards, transit)
- Email blasts
- Search Engine Marketing: advertisements on sites such as Google, Yahoo, AOL and Pandora
- Local Newspaper
- Website
- Public Relations
- Community Events
- Partnerships: ENERGY STAR®, retailers, distributors, National Grid, NYSERDA, New York Contractor Exchange, Master Plumbers Council, etc.

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.

Budget Overview

Residential Electric and Gas 2012 – 2015 Outreach, Education and Marketing		
Strategy	Tactics	Cost
Community Outreach	Event Participation Sponsorships Media Relations Social Media Community Ally Engagement	\$3,181,794
Media Advertising	Print Online Radio Out of Home	\$3,231,391
Digital	Website development and Maintenance Email Marketing Social Networking	\$1,744,951
Sales Support	Direct Mail Collateral Case Studies PPT	\$181,677
Total		\$8,339,813

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. The Company will work in conjunction with the EAG if any evaluations are deemed appropriate for future statewide evaluation review. In that case, the Company 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 ongoing Residential High Efficiency Heating impact evaluation assessment. Detailed evaluation plans will be developed and submitted for review and approval to DPS Staff and its evaluation consulting review team, headed by its consultant Tec Market 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 programs begin to mature and the availability of program and measure specific data increases, allowing for program impacts to be thoroughly measured.

1. Administrative Support

The Company will fully support all aspects of the process. Impact evaluations will be independently administered and managed by utilizing outside evaluation consultants through Con Edison's Energy Efficiency/Demand Management Programs' MV&E section, as all MV&E employees have no involvement in the implementation of any of the Companies' approved programs. The section'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, and 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.

2. Data Reliability Issues

The Company 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 using the program data collection templates that were designed by DPS Staff, vetted through a review process, and utilized for Monthly Scorecard reporting. 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. Data residing in each IC'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 responses to our consulting team's documented data requests, which will be sequentially numbered and submitted through the MV&E group which will facilitate the requests 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.

4. Evaluation Budgets Established

Consistent with the EEPS Order for all evaluation activity, budgets have been established at approximately 5% of the total budgets for the Residential Suite of Programs. The Company will attempt to conduct all required evaluation activity 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 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.

5. Overall Evaluation Methodology

The primary goal of the impact and process evaluations is to document the energy savings attributable to each program, help identify areas where the performance of each program can be improved, and report on program operations that are functioning well. Additionally, the Company will work closely with its peers on the EAG and the EAG 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 Company, 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 evaluations are 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 Ongoing Programs in the State

Each 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 to mitigate the customers' potential time constraints and survey fatigue. Other survey instruments will be developed to gather data from internal program staff, customers (both participants and non-participants) of the program, IC 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 participants include trade allies, local businesses, 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 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; issues such as these will be discussed with the evaluation consulting team to determine what avenue presents the best approach to achieve the most accurate results. All parties involved in the delivery of these programs will be required to be available for multiple interviews and to provide requested project and program information.

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. 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 a 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, allow for corrective actions to be taken by integrating change with a minimal amount of interruption to ongoing program operations, and 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. 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 for the evaluations will be conducted, after the MV&E team discusses program operations with the evaluation consulting team. No one research methodology 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 residential program impact evaluations (2009-2011) may shed additional insight (when completed) on future program assessments. We strive to utilize as much primary data as possible for the analysis, and assessing hours of operation, especially in conjunction with Room ACs and savings derived from the Appliance Bounty program will be of particular interest.

Process and Impact Evaluation

Program evaluations are currently being conducted for both Process and Impact (in the early stages) for the 2009-2011 programs.

A. Process Evaluation

We envision that a second round of process evaluations will take place in 2013. Solicitation for the implementation contractor of these programs is about to begin. The Company anticipates that the RFP for evaluation services will go out for bid sometime in late summer 2012 for the 2012-2015 period. The MV&E group will prepare a solicitation for an evaluation consultant during the first half of 2013. Evaluation contractor selection will be followed by a kick-off meeting. A process evaluation work plan will then be developed and submitted for approval by DPS Staff and its evaluation projects committee review team. Surveys will be designed to adhere to the guidelines provided by DPS Staff, and reinforced by the EAG. After Staff approval, survey instruments will be used to interview program participants and non-participants, various implementation contractor employees, Con Edison employees, and trade allies to satisfy the 90/10 criteria for confidence and precision.

For the Appliance Bounty program, the evaluation will also include “ride-alongs” with the recycling vendor (s) to verify eligibility compliance of the collected units and to ensure appropriate field procedures are followed. Recycling center site visits may also be conducted to verify the recycling vendor is complying with all program rules governing proper disposal of collected appliances to ensure no resale on the secondary market can take place.

B. Impact Evaluation

During the latter portion of the 2012-2015 program period we anticipate initiating a second impact evaluation for the Residential Suite of Programs. The Company has just initiated impact evaluations for

the 2009-2011 EEPS program portfolios, 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 and measures installed.
- Develop a net-to-gross analysis to include the effects of free-ridership and spillover (both participant and non-participant) on the programs. As currently directed by the 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 by quantifying the increase in the stocking levels of efficient equipment.
- Determine whether any revisions should be suggested to algorithms currently found in New York State's Technical Review Manual ("TRM"), which governs the savings algorithms (and subsequent savings 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 would be willing to work jointly with other Program Administrators ("PAs") 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 Company is 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 of 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 Demand Resources Department will support the MV&E section and the evaluation consulting team t.

1. Engineering Analysis

The use of appropriate engineering analyses will be discussed at length with the selected evaluation consulting team at the appropriate time and a further assessment will be made at that juncture to determine the best available methodology.

Because the measures installed in each of these programs are varied, each will be treated differently. The Company plans to augment its analysis with data collected from as much on-site end-use metering / data logging of measures as possible. 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. Additionally, savings claimed as achieved by removing operating but inefficient refrigerators via the Appliance Bounty Program will be given special consideration in light of the fact that the deemed refrigerator savings amount currently stipulated in the

TRM will most likely be decreased due to other research that was recently conducted, although some of that research was completed outside New York State. 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 and 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 for the Residential Suite of Programs. 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;
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. 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 Residential Suite of Programs effort. Each project will be 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 % and, separately, 100 % or higher, are flagged for potential site visits. Sites chosen for site visits will be surveyed by a member of 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 site visit or inspection 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 self reported operating hours were utilized. Another function of the site visit will be to assess whether the correct customer account was utilized in instances where a customer site may have multiple accounts present.

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