



Consolidated Edison Company of New York, Inc.
and Orange and Rockland Utilities, Inc.
Case 08-E-1007, 08-G-1008, 08-E-1003, 08-G-1004

Expedited Fast Track Electric and Gas Energy Efficiency Programs
Implementation Plans

May 15, 2009

Consolidated Edison Company of New York Inc. and Orange and Rockland Utilities
Energy Efficiency Portfolio Programs
“Expedited” Fast Track Implementation Plan
May 15, 2009

I. Introduction

In response to the Commission’s June 23rd Order in the Energy Efficiency Portfolio Standards (“EEPS”) Proceeding¹ (“EEPS Order”) Consolidated Edison Company of New York Inc. (Con Edison), and Orange and Rockland Utilities, Inc. (O&R) (referred to collectively as the “Companies”), each filed a portfolio of energy efficiency programs on August 21, 2008 and September 22, 2008.

The “Small Business Direct Installation and Residential Heating Ventilation and Air Conditioning (“HVAC”) Programs, known as the 60-day Fast Track Expedited Programs (“Expedited Programs”), were designed for rapid deployment of energy efficiency measures to specific market segments: residential (1-4 family) and small business customers with peak demand of less than 100kW. The electric Expedited Programs were approved- as modified by the Public Service Commission (“Commission”) - on January 16, 2009² (“Electric Fast Track Order”). The Residential HVAC Gas programs were approved – as modified by the Commission - on April 9, 2009³ (“Gas Fast Track Order”).

At this time, the Companies are conducting technical meetings with the vendors who responded to the request for proposals (“RFP”) for the Expedited Programs. This review includes both electric and gas programs as the Companies were able to incorporate the proposed gas measures into the initial RFP and update the RFP based on the Commission’s recent Gas Fast Track Order.

Therefore, although the implementation plan required under the Gas Fast Track Order is not due until June 8, 2009, this Expedited Fast Track Implementation Plan (“Implementation Plan”) covers all Expedited Programs - electric and gas. Since the RFP process is currently ongoing, upon execution of the contracts with the selected implementation contractors, the Companies will update this Implementation Plan with additional data and supporting documentation.

This Implementation Plan establishes the framework necessary for the Companies to become key providers of energy efficiency to their respective customers. Con Edison and O&R are well positioned to deliver customized energy efficiency programs to meet the needs of their customers. The Companies have ongoing customer relationships and regularly communicate with their respective customers. Access to and relationships with customers give Con Edison and O&R an important advantage in marketing and delivering energy efficiency programs. In addition, Con Edison’s and O&R’s knowledge of their respective electric and gas systems allow the Companies to implement efficiency programs that achieve both energy and capacity benefits.

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-G-1004 & 08-G-1008, et al, *Order Approving “Fast Track” Utility-Administered Gas Energy Efficiency Programs with Modifications*, issued and effective April 9, 2009,

Objectives of this Implementation Plan are to:

- Describe how the Companies will achieve the energy savings targets established in the June 23, 2008, January 16, 2009 and April 9, 2009 Orders.
- Create a strategic approach that is targeted, yet flexible enough to adjust and expand as warranted by changing market conditions by offering customers a logical continuum of actions coupled with prescribed rebates for cost-effective efficiency strategies.
- Utilize the Companies’ client relationships, market knowledge and community presence to aggressively target the small business and residential 1 – 4 family markets
- Focus on depth of savings and customer, trade ally and stakeholder relationships through training, education, Con Edison and O&R websites and customer support.
- Support the local economy by helping to reduce customer utility costs, utilizing local labor and stimulating trade ally business whenever possible and promoting the adoption of high quality equipment.
- Integrate demand response and ongoing work with the New York State Energy Research and Development Authority (“NYSERDA”), the New York Power Authority (“NYPA”), and the New York Independent System Operator (“NYISO”) as well as other programs in the state.

The Implementation Plan herein provides information on the components of the Companies programs as required by the Commission. The Plan is a living document and recognizes that certain tasks are in development and will be ongoing as the Expedited Programs ramp up.

Approved Energy Efficiency Programs

The Companies will implement and deliver six energy efficiency programs:

- Con Edison Small Business Direct Installation Program
- Con Edison Residential HVAC Program (Electric)
- Con Edison Residential HVAC Program (Gas)
- O&R Small Business Direct Installation Program
- O&R Residential HVAC Program (Electric)
- O&R Residential HVAC Program (Gas)

The programs target the 1 - 4 family market with central air conditioning and heating systems and small and mid-size commercial businesses (under 100kw). The implementation plans follow the Expedited Programs’ overall budgets and goals discussion. Eligible measures and associated customer incentives are also described herein.

II. Implementation Plan

The tables below reflect estimates of program participation, energy savings, and budgets for each of the approved Expedited Programs.

a. Con Edison Small Business Direct Install Program

<i>Program Budgets & Savings</i>	Plan Year			Total
	2009	2010	2011	
Number of Surveys	4,614	6,154	6,154	16,922
Savings (MWh)	79,067	105,421	105,421	289,909
Coincident Peak Savings (MW)	14	19	19	51
Direct Utility Costs	\$21,911,000	\$27,181,000	\$27,749,000	\$76,841,000
Customer Incentives or Services	\$14,131,000	\$19,242,000	\$19,646,000	\$53,019,000
Program Planning and Administration	\$444,000	\$450,200	\$456,500	\$1,350,700
Program Implementation Costs	\$4,833,000	\$4,934,000	\$5,038,000	\$14,805,000
Program Marketing and Trade Ally	\$1,251,000	\$1,277,000	\$1,304,000	\$3,832,000
Evaluation and Market Research	\$1,252,100	\$1,278,200	\$1,304,900	\$3,835,200

Orange & Rockland Small Business Direct Install Program

<i>Program Budget & Savings</i>	Plan Year			Total
	2009	2010	2011	
Number of Surveys	547	729	729	2,005
Savings (MWh)	9,367	12,489	12,489	34,345
Coincident Peak Savings (MW)	2	2	2	6
Direct Utility Costs	\$2,478,497	\$3,304,662	\$3,304,662	\$9,087,821
Customer Incentives or Services	\$1,710,101	\$2,280,135	\$2,280,135	\$6,270,370
Program Planning and Administration	\$43,566	\$58,088	\$58,088	\$159,743
Program Implementation Costs	\$477,528	\$636,704	\$636,704	\$1,750,935
Program Marketing and Trade Ally	\$123,599	\$164,799	\$164,799	\$453,197
Evaluation and Market Research	\$123,702	\$164,937	\$164,937	\$453,576

b. Con Edison Residential HVAC: Electric

<i>Program Budget & Savings</i>	Plan Year			Total
	2009	2010	2011	
Installations	7,131	9,506	9,509	26,146
Savings (MWh)	1,985	2,645	2,646	7,276
Coincident Peak Savings (MW)	3	4	4	12
Direct Utility Costs	\$3,007,000	\$3,652,000	\$3,725,000	\$10,384,000
Customer Incentives or Services	\$1,328,000	\$1,808,000	\$1,847,000	\$4,983,000
Quality Installation Costs	\$392,100	\$533,728	\$545,092	\$1,470,920
Program Planning and Administration	\$294,000	\$300,200	\$306,500	\$900,700
Program Implementation Costs	\$260,000	\$265,500	\$271,100	\$796,600
Program Marketing and Trade Ally	\$551,000	\$559,000	\$566,000	\$1,676,000
Evaluation and Market Research	\$181,800	\$185,500	\$189,100	\$556,400

Orange and Rockland Residential HVAC: Electric

<i>Program Budget & Savings</i>	Plan Year			Total
	2009	2010	2011	
Installations (Measures)	828	991	1,163	2,982
Savings (MWh)	230	295	340	865
Coincident Peak Savings (MW)	0.2	0.2	0.3	0.7
Direct Utility Costs	\$352,361	\$436,004	\$530,046	\$1,318,411
Customer Incentives or Services	\$225,075	\$306,560	\$372,000	\$903,635
Program Planning and Administration	\$29,125	\$28,742	\$35,129	\$92,996
Program Implementation Costs	\$54,654	\$53,935	\$65,757	\$174,346
Program Marketing and Trade Ally	\$25,529	\$25,193	\$30,792	\$81,514
Evaluation and Market Research	\$17,978	\$21,574	\$26,368	\$65,920

c. Con Edison Residential HVAC: Gas

<i>Program Budget & Savings</i>	Plan Year			Total
	2009	2010	2011	
Measure Installations	4,633	4,324	4,059	13,016
Savings (dekatherms)	38,444	75,710	74,528	188,682
Direct Utility Costs	\$1,541,013	\$3,082,431	\$3,081,997	\$7,705,441
Customer Incentives or Services	\$1,201,922	\$2,404,249	\$2,403,815	\$6,009,986
Program Planning and Administration	\$134,211	\$268,423	\$268,423	\$671,057
Program Implementation Costs	\$38,861	\$77,721	\$77,721	\$194,303
Program Marketing and Trade Ally	\$88,953	\$177,906	\$177,906	\$444,765
Evaluation and Market Research	\$77,066	\$154,132	\$154,132	\$385,330

Orange & Rockland Residential HVAC: Gas

<i>Program Budget & Savings</i>	Plan Year			Total
	2009	2010	2011	
Installations (Participants)	148	295	295	738
Savings (dekatherms)	2,396	4,792	4,792	11,980
Direct Utility Costs	\$109,762	\$219,523	\$219,523	\$548,808
Customer Incentives or Services	\$85,614	\$171,228	\$171,228	\$428,070
Program Planning and Administration	\$4,972	\$9,944	\$9,956	\$24,871
Program Implementation Costs	\$9,330	\$18,659	\$18,636	\$46,626
Program Marketing and Trade Ally	\$4,358	\$8,716	\$8,727	\$21,801
Evaluation and Market Research	\$5,488	\$10,976	\$10,976	\$27,440

Approved measures for each program are described in the tables below.

Small Business Direct Install Program Incentives

<u>Measure</u>	<u>Eligibility</u>	<u>Incentives</u>
Compact Fluorescent Lamps	ENERGY STAR [®]	Free
Low-flow Aerators	1.5 Gallons Per Minute (GPM)	Free
High-pressure Rinse Sprayers	1.6 GPM	Free
Water Heater Thermostat Setback	Thermostat setback and replacement (115 degrees)	Free
LED Exit Signs	5 Watts	70% of installed cost
Water Pipe Insulation	R-4 Insulation	70% of installed cost
Occupancy Sensors	Fluorescent	70% of installed cost
Vending Machine Controls	Passive Infrared Sensor Monitoring Vacancy of Area and Cycling Cooling Controls	70% of installed cost
HVAC Retro-Commissioning		70% of cost
Programmable Thermostat	ENERGY STAR [®]	70% of installed cost
Evaporator Fan Controls		70% of installed cost
Anti-condensation Door Heater Controls	Variable temperature controls	70% of installed cost
Efficient Lighting Package	Meets federal code	70% of installed cost
High-efficiency Lighting Package ⁴	Above federal code by 15%	70% of incremental installed cost
Bi-Level Control for Stairwell Lighting	50% Lighting power during unoccupied time	70% of installed cost
LED Refrigeration Case Lights	28 Watts	70% of incremental installed cost

⁴ This package will include lamps, ballasts, fixtures and full retrofit kits as required by the lighting application. For example, a change from T12 to T8 requires a fixture replacement, while replacing a standard T8 with a more efficient T8 does not.

Residential HVAC Program Rebates: Electric

Measure	Eligibility	Rebate
Central Air Conditioning	SEER \geq 15, EER \geq 12.5 Plus “Quality Installation”	\$400
Central Air Conditioning	SEER \geq 16, EER \geq 13.0 Plus “Quality Installation”	\$600
Central Air Source Heat Pump	SEER \geq 15, EER \geq 12, HSPF \geq 8.5 Plus “Quality Installation”	\$400
Central Air Source Heat Pump	SEER \geq 16, EER \geq 13.0, HSPF \geq 9.0 Plus “Quality Installation”	\$600
Duct and Air Sealing	Blower Door and Duct Blaster assisted sealing by certified contractors	\$600
ECM Furnace Fan	Electronically Controlled Motor (ECM) 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

Residential HVAC Program Rebates: Gas

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

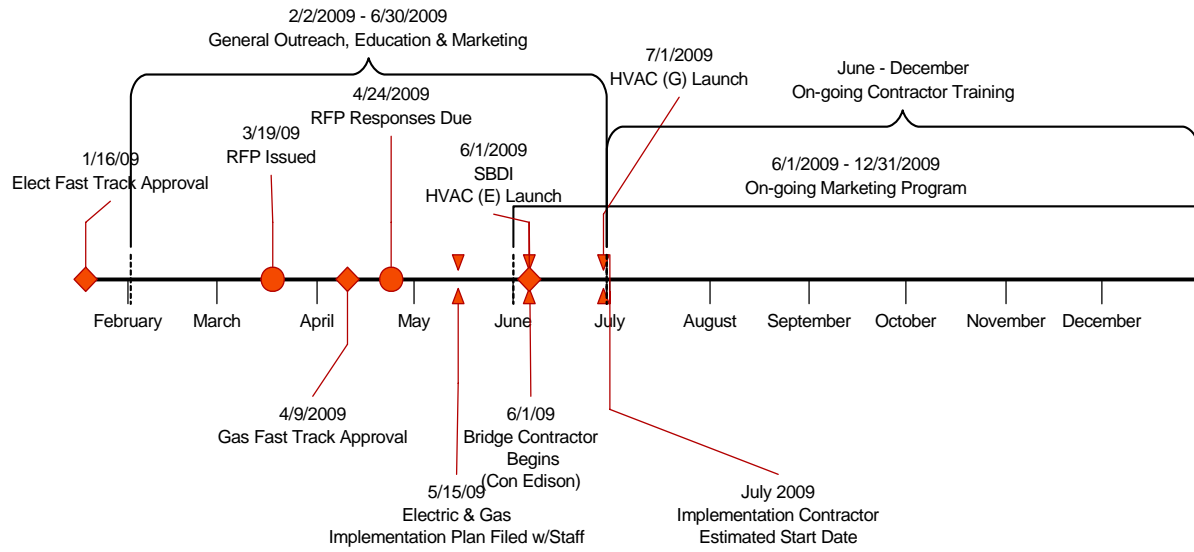
AFUE – Annual Fuel Utilization Efficiency

ECM – Electronically Controlled Motor

EF – Efficiency Factor

*Installed by a contractor at the time of furnace or boiler replacement.

Implementation Time Line



A. Small Business Direct Installation Program

The Con Edison and O&R Small Business Direct Installation programs will promote energy efficiency for existing commercial and industrial customers with average monthly peak demand of less than 100 kilowatts (kW). The programs will provide free on-site energy surveys, direct installation of free low-cost efficiency measures and recommendations for more extensive energy efficiency upgrades. Participants in the programs who choose to install the more extensive recommended measures pay 30% of the installed cost; the Companies pay the differential (70%) to the implementation contractor as the incentive⁵.

1. Target Customer Market

Con Edison Participation

Participation rates were estimated by examining the distribution of sales to each targeted segment with less than 100 kW in demand.

For the Con Edison program, the total technical potential was developed using end-use shares in the commercial and industrial sector available from the Energy Information Administration (EIA) and engineering estimates of measure savings. After establishing the technical potential, participation rates were developed for each segment by selecting a mix of measures with cumulative savings that would ultimately meet the savings goals. Con Edison will further refine these participation rates following the completion of its market potential study and on an ongoing basis after reviewing program evaluation results. The resulting participation projections are shown in the Table below.

Con Edison Projected Survey Participation by Market Segment

Segment	Total 2009-2011
Grocery	690
Lodging	120
Other Small Commercial	2,460
Restaurant	1,830
Retail	4,830
Small Office	4,440
Small Industrial/ Warehouse	2,550
Total	16,920

⁵ This 70/30 split is applicable to all measure other than HVAC Retro-Commissioning (70% of cost), High-efficiency Lighting Package, and LED Refrigeration Case Lights (both 70% of incremental installed cost)

O&R Participation

For the O&R Program, the achievable program potential was determined based on the results of O&R's market potential study. C&I billing data was disaggregated by building type, (i.e. office, retail, warehouse) and electric energy end use (i.e. lighting space cooling, refrigeration). Participation rates were developed based on lighting end use potential for customers with demands less than 100 kW. The target population for the program is all C&I customers with peak demand of less than 100 kW. O&R will further refine these participation rates after reviewing program results.

Orange and Rockland Projected Survey Participation by Market Segment

Segment	Total 2009-2011
Education	130
Grocery	77
Health	81
Lodging	32
Office	612
Restaurant	132
Retail	383
Warehouse	103
Other	455
Total	2,005

2. Marketing Plan

Con Edison and O&R's marketing approach for the Small Business Direct Installation Program will rely on traditional tactics. The companies intend to market their new energy efficiency programs by leveraging existing relationships and working with customer data to direct targeted promotional materials to areas with the greatest potential for efficiency gains (both energy and capacity). Con Edison is currently conducting a market potential study of its service territory, which will be completed in June 2009, and will enhance the Company's ability to tailor outreach efforts to specific market sectors, customer classes, geographic areas and individual customers. Con Edison and O&R will add focused marketing in specific geographic areas to broaden marketing efforts to promote community-wide participation. In coordination with these geographically targeted approaches, the implementation contractor may conduct door to door campaigns, building on the marketing contacts to gain access and acceptance for program participation.

The O&R small commercial market segment requires a different marketing and outreach approach than the approach to the Con Edison small commercial market segment. The O&R service territory, and particularly the small business market within that service territory, is spread out geographically. As a result, the marketing and outreach solution is more geographically oriented. While all eligible customers will receive program announcement in the form of bill

inserts, website announcements and other media advertising, O&R envisions that the program will require additional efforts. O&R will work with the implementation contractor to identify target specific geographic areas for marketing outreach. These geographic areas will receive direct mail and or other announcements immediately preceding a door to door canvassing campaign. This will enhance the impacts of the announcements and provide immediate customer enrollments and participation. Additionally, the plan will include preliminary contact with the Rockland Business Association, Orange County Chamber of Commerce, Rockland Economic Development Corporation, and Kiwanis and Rotary Clubs.

The Companies utilize a wide range of marketing channels to promote their programs and services. These include broad media outlets such as print media, direct mail and Internet advertisements. Additionally, Con Edison and O&R will capitalize on customer touch points including service calls, customer newsletters, on-bill messaging and speaking engagements at seminars, conferences and community events. The Companies will continue to utilize these traditional marketing channels, as well as conducting targeted, social marketing-based activities.

The Companies have received responses to solicitations for implementation contractors and are currently reviewing these proposals. Both Con Edison and O&R will approve and support the implementation contractors program marketing plans.

The following tables provide detail on the marketing activities the Companies will engage in including current estimated costs. These costs will be reconciled with the implementation contractor budgets for marketing when the RFP evaluation process is completed.

Con Edison

Small Business Direct Install Program Outreach, Education & Marketing			
Marketing			
Target Market	Method	Frequency	Estimated Cost
Small Business Customers	Internet Collateral-Meetings/presentations/corresp Web site Customer newsletters On-bill messaging	on-going	\$150,000
Trade Ally	Internet support Collateral (printed brochures)	on-going	\$100,000
Prospective Participants Stakeholders	Direct Mail Meetings/correspondence Joint marketing	2x/yr. on-going	\$300,000 \$100,000
Public	Media Coverage (external)	on-going	
Trade/business/ prof./community orgs.	Meetings/presentations Direct Mail Sponsorships Seminars	on-going	\$100,000
All	Media - news releases, print ads, radio		\$500,000
Total Cost			\$1,250,000

O&R

Small Business Direct Install Program Outreach, Education & Marketing			
Marketing			
Target Market	Method	Frequency	Estimated Cost
Small Business Customers	Internet Collateral-Meetings/presentations/corresp Web site Customer newsletters On-bill messaging	on-going	\$32,371
Trade Ally	Internet support Collateral (printed brochures)	on-going	\$78,952
Prospective Participants Stakeholders	Direct Mail Meetings/correspondence Joint marketing	2x/yr. on-going	\$64,742 \$68,162
Public	Media Coverage Web site	on-going	
Trade/business/ prof./community orgs.	Meetings/presentations Direct Mail Sponsorships Seminars	on-going	\$68,162
All	Media - news releases, print ads, radio		\$140,808
Total Cost			\$453,197

3. General Outreach & Education

The Companies continue to integrate energy efficiency as part of their overall corporate communication efforts. Employees are made aware of efficiency programs through the internal intranet site, email communications, newsletters and presentations at mandatory meetings. Con Edison includes energy efficiency promotions in demand response messages, specifically the direct load control program for residential and small business customers and in general outreach and education efforts. These efforts include: calls for energy efficiency program information and other utility services, economic development efforts, corporate communications, public affairs, and customer outreach to build support and market the programs.

Con Edison and O&R will leverage their customer service representatives, public affairs representatives, and economic development staffs, as well as vendor relationships and trade allies to promote programs. The Companies are currently conducting outreach to trade allies and other stakeholders for participation. For example, Con Edison’s awards program for trade allies substantially contributes to its oil-to-gas conversion program. O&R will utilize relationships developed through their New Business team and other customer support groups to identify potential leads and areas where need and opportunity may be greatest.

Outreach, education and marketing efforts are coordinated with State and local organizations and agencies such as realty management and housing associations, neighborhood and community associations, small business groups, architect and engineering associations, economic development groups and corporations, industrial parks, Chambers of Commerce, business improvement districts, and banks and other financial institutions. The table below illustrates a sample of current events where Energy Efficiency staff will participate and promote the Expedited Programs.

Con Edison Events	Date 2009	Target Market
“Greening” Your Business	May 20	Small Businesses
Queens Chamber of Commerce Business Expo	May 21	Small and Large Businesses
City Economic Development Meeting	June 10	City; Small and Large Businesses
E 166 th ST Festival	June 13	Residential and Small Business
Bar and Restaurant Show	June 14 and 15	Small Businesses
Buildings NY	June 16 & 17	Small and Large Businesses; Multifamily
Staten Island Women’s Conference	September 10	Women Owned Businesses

O&R Events	Date 2009	Target Market
Rockland Business Assoc. Green Seminar	June 3	Small Businesses
Orange County Chamber Business Expo	October 7	Small and Large Businesses
Rockland Business Assoc. BtoB Expo	October 16	Small and Large Businesses

4. Program Oversight to Minimize Overlap or Confusion

The Companies will be responsible for all strategic decisions including program design, development, and establishing budgetary priorities. In addition, the Companies will monitor all program activity, oversee and coordinate major decisions across markets and stakeholder groups, and assess and evaluate implementation contractor compliance in accordance with performance expectations and requirements. The Companies will make final design and content decisions for all advertising and marketing collateral, which must comply with the Companies' corporate standards.

The Companies' oversight of the programs will include, but is not limited to, the following responsibilities:

- Create, review and approve program materials and forms;
- Provide direction to the implementation contractor in the delivery, management and marketing, program application forms and advertising and marketing collateral;
- Coordinate efforts with the Companies' information resources (e.g. website, call center, Salesforce.com, etc.);
- Conduct quality assurance to monitor savings, budget expenditures and adherence with the Companies' policies;
- Evaluate, in conjunction with an independent firm, all programs;
- Coordinate program design and marketing with other related local, regional and national initiatives, specifically including the offerings of other utilities, New York City, NYSERDA, and U.S. EPA/DOE (ENERGY STAR);
- Monitor the overall program budget;
- Provide final review and approval of cost-benefit analyses for overall program and program measures;
- Establish short term and long term program benchmarks, evaluate trends, monitor schedules and provide recommendations to improve program execution and performance;
- Manage and oversee the implementation contractor's complaint resolution process to ensure claims are handled expeditiously and to the customer's satisfaction.

The Companies intend to pay incentives directly to the contractors performing the survey, free install and other direct install measures for this program, however the Companies will consider other models presented by implementation contractors.

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

Energy Efficiency Program Management

Con Edison and O&R will use internal staff and third parties to provide administrative and delivery functions for the Programs. Con Edison and O&R staff are finalizing program design and conducting implementation activities, marketing the program and qualifying customer inquiries received to date until the implementation contractor is selected. Con Edison and O&R staff are responsible for the Companies energy efficiency programs, including delivery, contractor hiring and management, Company marketing efforts, coordination of vendor marketing and coordination with NYSERDA and the neighboring New York utilities regarding their respective energy efficiency programs. Program managers oversee the planning, coordination, resource management, project execution, and project performance of the programs.

Energy Efficiency Program Evaluation Staff

Both the Con Edison and O&R program evaluation responsibilities are currently assigned to the Con Edison Measurement, Verification and Evaluation Section. This section was established to operate independently of program implementation and does not share staffing or implementation responsibilities. The Section Manager is responsible for: defining the scope of program evaluations; developing MV&E Requests for Proposals (RFP); selecting and hiring independent evaluation consultants to conduct studies; participating in the Statewide Evaluation Advisory Group (EAG) meetings; managing the vendors under contract; and communicating results with program implementation employees and other internal and external contacts, including DPS Staff.

Support Staff

The Companies will continue to enlist the established capabilities of various departments that focus on customer outreach and education and marketing, such as Media Relations, Public Affairs, Economic Development, Customer Operations, Energy Services and Governmental Relations. Energy efficiency staff meet regularly with these departments to coordinate the Companies' efforts for energy efficiency programs and general outreach and education.

In coordination with these other departments, the energy efficiency team develops marketing plans, advertising, direct mail, collateral material and bill inserts, and designs the internal and external websites. The department marketing staff also directs and develops advertising with trade allies, and coordinates events and appearances of energy efficiency department staff. Events and O&E efforts include community, business, trade and industry events aimed at building awareness and stimulating participation in Con Edison and O&R Energy Efficiency programs, and the state-wide EEPS undertaking. Website development for the EEPS programs is ongoing, with a special energy efficiency section having gone live on April 1, 2009 at www.coned.com/energyefficiency.

Implementation Contractors

The Companies will use third-party program implementation contractors to provide centralized program delivery services and qualified professionals to perform on-site energy surveys and the installations that occur at the time of the survey. The implementation contractors will be required to report regularly to Con Edison and O&R. Program managers will work closely with the implementation contractors to ensure that program goals are achieved as well as to assure customer satisfaction with the program.

At the time of submission of this Plan, the Companies are interviewing the implementation contractors who responded to the Company's RFP for program implementation services and plan to select one or more prior to July.

To meet the June 1st launch, Con Edison will utilize a bridge contractor to: operate and manage calls and initial customer contact; complete in-take screening, application review and processing. Surveys and installations will have a ramp-up period. The bridge contractor's role will end when the implementation contractor is in place.

O&R will provide a toll free customer intake and support line for its Expedited Program and its portfolio of Energy Efficiency Programs. Initially, this will be staffed internally until the implementation contractor(s) is selected, thus O&R will not utilize a bridge contractor. This line will be capable of forwarding calls based on customer selection, to the implementation contractor, or various implementation contractors, supporting multiple programs when approved and implemented. Additionally, the O&R website will be revised to include Expedited program information, online intake forms, and all relevant customer applications forms.

The Companies will provide training for their selected vendors with respect to necessary business processes, including promoting demand response, administrative procedures, roles and responsibilities, quality assurance protocols, budgets and timelines and will provide ongoing facilitation and oversight throughout the program delivery period.

The implementation contractor is responsible for providing customers with any and all applicable information for tax credits, available grants, loan subsidies and guarantees, local, state and federal government renewable offerings (e.g. solar, renewable energy credits) to the eligible customers. The Companies will work with the implementation contractor as this information is developed.

6. Procedures for Customer Enrollment

Customers may enroll in various ways: through the implementation contractor via telephone using toll-free numbers specific to efficiency programs or the toll free number on their utility bill; on-line intake forms on the Companies' websites; and e-mail. Additionally, customers may enroll immediately as a function of door to door canvassing by the implementation contractor.

Con Edison and O&R have energy efficiency portals on their websites (www.coned.com/energyefficiency) and (www.oru.com). These websites provide program information. Con Edison customers can enroll by completing an on-line form. The information is entered into the Companies data base tracking system and the customer is then referred to the implementation contractor to schedule an appointment. A copy of this form is in the appendix.

O&R is in the process of updating and reconfiguring its energy efficiency website functionality. Customers will view information about Expedited programs, request additional information, contact program representatives and enroll in the program at their convenience.

Once leads are qualified by the implementation contractor, energy surveys will be provided to small business customers at no cost to encourage participation. The survey results will be presented to the customer with recommended measures for installation. This list of energy efficiency measures will provide the portion of the costs assigned to the customer (30%) and those covered by the Utility (70%) (with the caveat noted in footnote 5 above). Upon acceptance by the customer, work orders are generated by the implementation contractor for the recommended measures which the customer has requested. These work orders are assigned by the implementation contractor to their own crews, or subcontractors, who will complete the ordered work upon follow-up visits. Upon completion, appropriate post installation quality control is completed and reporting and invoicing is provided to the appropriate Company and to the customer.

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

7. Training for Retail Partners

The structure of the Small Business Direct Install Program does not utilize retail partners; therefore no such training is necessary.

8. Contractor Training

The implementation contractor has the overall responsibility to coordinate and train the contractor pool for the Small Business Direct Install Program. The Companies require that the implementation contractor management team, field employees, as well as any subcontracted employees who are assigned to the program attend training provided by the Companies. The training will include at a minimum customer contact protocol, program requirements and procedures and energy efficiency programs provided by others, such as NYSERDA.

To expedite forming a contractor pool the Companies have decided to hire an independent contractor to facilitate the qualification process. The contractor will identify and recruit BPI accredited contractors; pre-qualify contractors including documenting training, certifications and references and provide BPI training where necessary. Preferred certifications for the contractor pool include Building Performance Institute (BPI), North American Technician Excellence (NATE), and Air Conditioning Contractors of America (ACCA).

The Companies are offering training on program protocols and guidelines, installation best practices, quality assurance requirements and reporting. Training will be done class-room style at the implementation contractor's facility or Con Edison's Leaning Center or O&R's Spring Valley Operations Center.

The table below provides the estimated budgets.

Training				
Small Business Direct Install				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Trade Ally/ Contractors	Classroom Style	up to 6x/yr		\$75,000
	E-communications (intranet/webinar)	Periodic	June 2009 - 2011	\$10,200
	Printed materials			\$30,000
Contractor Pool	Recruitment Pre-Qualification			\$15,000
Employees	E-communications (intranet/webinar) Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Total				\$133,600

O&R

Training				
Small Business Direct Install				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Trade Ally/ Contractors	Classroom Style	up to 6x/yr		TBD
	E-communications (intranet/webinar)	Periodic	June 2009 - 2011	TBD
	Printed materials			TBD
Contractor Pool	Recruitment/Pre-Qualification			TBD
	BPI Training (\$1500/150 Contractors/75% reimbursement)			TBD
Employees	E-communications (intranet/webinar) Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Total				TBD

Note: O&R will finalize training budgets when implementation contractor is selected.

9. Contact Information for Customer Inquiries and Complaints

Customers with inquiries and complaints relating to the Con Edison Small Business Direct Install Program may call:

Manager Energy Efficiency Programs
Con Edison
4 Irving Place
New York, NY 10003
212-460-2035

For Orange and Rockland the program management contacts are:

Manager Energy Efficiency Programs
Orange and Rockland Utilities
390 West Route 59
Spring Valley, New York 10977

845- 577-3373

10. Quality Assurance

Quality Assurance/Quality Control (QA/QC)

The Companies will work directly with the implementation contractor to finalize Quality Assurance and Quality Control details. For the small business direct installation program post inspection and verification will be conducted on a random sampling of customers (15-25%). For projects greater than \$25,000 post installation inspections will be required. Upon completing the energy efficiency upgrades all customers will receive a satisfaction survey to understand their experience with the program. The survey information will be compiled for the Companies' measurement and verification (M&V) contractor.

A description of the installation process and inspector training is being developed with the implementation contractor to address proper measures selection and installation of equipment. Quality assurance inspectors will be fully qualified to carry out these inspections and evaluations.

The implementation contractor will be required based on standard terms and conditions of its contract, to resolve customer complaints. Con Edison and O&R require that complaint resolution processes be documented and reported to the Companies. Program managers will monitor this closely.

11. Coordination with other New York energy efficiency programs

The Companies individually, and in conjunction with the following entities are developing a common delivery platform to coordinate efforts and eliminate duplication:

- 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;
- Central Hudson and NYSEG, which deliver gas to Orange and Sullivan Counties; and
- Other stakeholders, such as NYC and Westchester County.

Con Edison and O&R meet and speak regularly with NYSERDA and other utilities on coordination issues. The Companies met with NYSERDA in April and May of 2009 to create working groups on the issues of double counting, customer and participation referrals, and joint contractor qualification and training. Other areas planned for coordination are speakers and events, Web content, architectural and engineering standards, and joint procurement strategies. On training, the group has invited and heard a presentation from the BPI executive director, on BPI accreditation and certification, and holding joint training sessions. On outreach and education, the companies will collaborate with NYSERDA and the Commission's Outreach and Education Advisory Group to develop consistent regional marketing messages and materials.

B. Residential Heating, Ventilation and Cooling: Electric

The Companies' HVAC Program will promote the replacement of older inefficient electric heating and cooling equipment with high-efficiency equipment. In addition the program provides incentives for heat pump water heating equipment, duct and air sealing and Energy Star thermostats. Finally the program will also offer a contractor incentive for quality installation of the equipment.

1. Target Customer Market

Participation

There are approximately 835,000 1 – 4 family residential buildings in Con Edison's service area. Of these, Con Edison estimates that there are approximately 210,000 with central air conditioning systems that may be eligible for the Residential HVAC Program. Any residential customer (owner or tenant) with central air conditioning or electric hot water heating may participate; however, in situations where energy is delivered by more than one utility company, the installed measure must save energy delivered directly by the Companies to be eligible for the incentives. In addition, only customers who pay the System Benefits Charge will be eligible.

For O&R, the target market is all existing residential customers. According to O&R's market potential study approximately 38% or 70,000 residential customers have central air conditioners and 3,000 have central heat pumps. Any residential customer who is replacing central air conditioners or electric hot water equipment with energy efficient equipment is eligible.

2. Marketing Plan

The Companies' marketing plans will directly support the selected implementation contractor's outreach, education and marketing plans submitted with their proposals. These plans are currently being reviewed; however the Companies are already planning for the use of traditional marketing channels. Those vehicles include: direct mail, customer newsletters, and bill messaging and web promotion.

Con Edison launched its energy efficiency web site on April 1, 2009. Residential electric customers can complete an inquiry form requesting information on energy efficiency programs and eligibility. Additionally, customers who call Con Edison's general number will have an option to select and receive information on electric energy efficiency programs. The voice response unit (VRU) will be operational on June 1, 2009. Customers who call or sign-up via the web, will be contacted for program participation. Also, customers who are not eligible (do not have central air conditioning, for example) will be referred to other programs offered by partners such as NYSERDA. All customer inquiries will be tracked in the Companies database.

The O&R website will be updated with program information upon program launch. A toll-free customer access line is also being installed and upon selection of the implementation contractor(s) will allow the customer to automatically be forwarded. O&R's website will be revised to include Expedited program information, an online intake forms, and all relevant customer application forms.

Implementation contractors have proposed outreach, education and marketing plans for promoting and enrolling customers that include awareness advertising, trade ally awareness and recruitment, web content, collateral materials and event marketing.

The following tables provide detail on the marketing activities the Companies will engage in with estimated costs.

Con Edison

Residential HVAC Program Electric Outreach Education & Marketing			
Marketing			
Target Market	Method	Frequency	Estimated Cost
Owners/Tenants (1-4 family market)	Internet Presentation materials (collateral) Web site Customer newsletters On-bill messaging Social based marketing	on-going	\$150,000
Trade Ally	Internet support Collateral (printed brochures)	on-going	\$100,000
Prospective Participants	Direct Mail	2x/yr.	\$300,000
Stakeholders	Meetings/correspondence Joint marketing	on-going	\$100,000
Public	Media Coverage (external)	on-going	
Trade/business/ prof./community orgs.	Meetings/presentations Direct Mail Sponsorships Seminars	on-going	\$100,000
All	Media - news releases, print ads, radio		\$250,000
Total Cost			\$1,000,000

Similar to the SBDI Program, efforts will be coordinated with local, State and national organizations and agencies such as realty management and housing associations and groups, neighborhood and community associations, architect and engineering associations, banks and other financial institutions.

The table below illustrates the Energy Efficiency Department’s presence and participation at various events in coordination with other departments within Con Edison to promote the Expedited Programs to our targeted markets.

Con Edison Events	Date 2009	Target Market
Ossining Town Fair	June 13	Residential
E 166 th ST Festival	June 13	Residential and Small Business
Buildings NY Expo	June 16 & 17	Small and Large Businesses; Multifamily
Coney Island Unity Day	July 25	Residential

O&R Events	Date 2009	Target Market
Orange County Home Show	October 16-17-18	Residential
Orange County Cancer Awareness	October 25	Residential
Rockland County Energy Workshop	November 6	Residential
Rockland Comm. College Energy Fest	November 20	Residential
Orange County Weatherization Workshops	November 23 December 7	Residential

3. General Outreach and Education

The Companies continue to integrate energy efficiency as part of their overall corporate communication efforts. Employees are made aware of efficiency programs through the internal intranet site, email communications, newsletters and presentations at mandatory meetings. Con Edison includes energy efficiency promotions in demand response messages, specifically the direct load control program for residential and small business customers and in general outreach and education efforts. These efforts include: calls for energy efficiency program information and other utility services, economic development efforts, corporate communications, public affairs, and customer outreach to build support and market the programs.

Con Edison and O&R will leverage their customer service representatives, public affairs representatives, and economic development staffs, as well as vendor relationships and trade allies to promote programs. The Companies are currently conducting outreach to trade allies and other stakeholders for participation. For example, Con Edison’s awards program for trade allies substantially contributes to its oil-to-gas conversion program. O&R will utilize relationships developed through their New Business team and other customer support groups to identify potential leads and areas where need and opportunity may be greatest.

4. Program Oversight to Minimize Overlap or Confusion

The Companies will be responsible for all strategic decisions including program design, development, and establishing budgetary priorities. In addition, the Companies will monitor all program activity, oversee and coordinate major decisions across markets and stakeholder groups, and assess and evaluate implementation contractor compliance in accordance with performance expectations and requirements. The Companies will make final design and content decisions for all advertising and marketing collateral, which must comply with the Companies' corporate standards.

The Companies' oversight of the programs will include, but is not limited to, the following responsibilities:

- Create, review and approve program materials and forms;
- Provide direction to the implementation contractor in the delivery, management and marketing, program application forms and advertising and marketing collateral;
- Coordinate efforts with the Companies' information resources (e.g. website, call center, Salesforce.com, etc.);
- Conduct quality assurance activities to monitor savings, budget expenditures and adherence with the Companies' policies;
- Evaluate, in conjunction with an independent firm, all programs;
- Coordinate program design and marketing with other related local, regional and national initiatives, specifically including the offerings of other utilities, New York City, NYSERDA, and U.S. EPA/DOE (ENERGY STAR);
- Process payment of all rebates;
- Monitor the overall program budget;
- Provide final review and approval of cost-benefit analyses for overall program and program measures;
- Establish short term and long term program benchmarks, evaluate trends, monitor schedules and provide recommendations to improve program execution and performance.

Rebates will be paid by the Companies directly to customers in the HVAC Programs.

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

Energy Efficiency Program Management

Con Edison and O&R will use its own staff and third parties to provide administrative and delivery functions for the Programs. The Companies are finalizing program design and conducting implementation activities, marketing the program and engaging in potential participant intake. Energy Efficiency employees are responsible for the Companies energy efficiency programs, including delivery, contractor hiring and management, marketing efforts, oversight of implementation contractor marketing plans and coordination with NYSERDA and the neighboring New York utilities regarding their respective energy efficiency programs.

Program managers oversee the planning, coordination, resource management, project execution, and project performance of the programs.

Energy Efficiency Program Evaluation Staff

Both the Con Edison and O&R program evaluation responsibilities will be currently assigned to the Con Edison Measurement, Verification and Evaluation Section. This section was established to operate independently of program implementation and does not share staffing or implementation responsibilities. The Section Manager is responsible for: defining the scope of program evaluations; developing MV&E Requests for Proposals (RFP); selecting and hiring independent evaluation consultants to conduct studies; participating in the Statewide Evaluation Advisory Group (EAG) meetings; managing the vendors under contract; and communicating results with program implementation employees and other Company and PSC Staff contacts.

Support Staff

The Companies will be calling on the established capabilities of various departments that focus on customer outreach and education and marketing, such as Media Relations, Public Affairs, Economic Development, Customer Operations, and Governmental Relations. Energy efficiency staff meet regularly with these departments to coordinate the Companies' efforts for energy efficiency programs and general outreach and education.

In coordination with these other departments, the Energy Efficiency team develops marketing plans, advertising, direct mail, collateral material and bill inserts, and designs the internal and external websites. The department marketing staff also directs and develops advertising with trade allies, and coordinates events and appearances of Energy Efficiency department staff. Events and O&E efforts include community, business, trade and industry events aimed at building awareness and stimulating participation in Con Edison Energy Efficiency programs, and the state-wide EEPS undertaking. Website development for the EEPS programs is ongoing, with a special energy efficiency section having gone live on April 1, 2009 at www.coned.com/energyefficiency.

Implementation Contractors

The Company will use one or more third-party program implementation contractors to provide centralized program delivery services and qualified professionals to install energy efficient equipment. The implementation contractor will be required to report regularly to Con Edison and O&R. Program managers work directly with the implementation contractors to ensure that program goals are achieved as well as to assure customer satisfaction with the program.

At the time of the Plan submission, the Companies are evaluating proposal submitted by implementation contractors who responded to the RFP to provide services. We plan to select one or more very shortly.

To meet the program launch of June 1, 2009, Con Edison will utilize a bridge contractor to operate and manage customer inquiries and screening for program eligibility as the implementation contractor ramps-up program delivery.

O&R will provide a toll free customer intake and support line for its Expedited Program and its portfolio of Energy Efficiency Programs. Initially, this will be staffed internally until the implementation contractor(s) is established. This line will be capable of forwarding calls based

on customer selection, to the implementation contractor, or various implementation contractors, supporting multiple programs when approved and implemented. Additionally, the O&R website will be revised to include Expedited program information, online intake forms, and all relevant application forms.

The Companies will provide training for the selected implementation contractor (s) with respect to necessary business processes, including promoting demand response, administrative procedures, roles and responsibilities, quality assurance protocols, budgets and timelines and will provide ongoing facilitation and oversight throughout the program delivery period.

The implementation contractor is responsible for providing customers with any and all applicable information on tax credits, available grants, loan subsidies and guarantees, local, state and federal government renewable offerings (e.g. solar, renewable energy credits) to the eligible customers. The Companies will work with the implementation contractor as this information is developed.

6. Procedures for Customer Enrollment

Customers may enroll in various ways: through the implementation contractor via telephone using toll-free numbers specific to efficiency programs or the toll free number on their utility bill; on-line intake forms on the Companies' websites; and e-mail. Additionally, customers may enroll immediately as a function of door to door canvassing by the implementation contractor.

Con Edison and O&R have energy efficiency portals on their websites (www.coned.com/energyefficiency) and (www.oru.com). These websites provide program information. Con Edison customers can enroll by completing an on-line form. The information is entered into the Companies data base tracking system and the customer is then referred to the implementation contractor to schedule an appointment. A copy of this form is in the appendix.

O&R is in the process of updating and reconfiguring its energy efficiency website functionality. Customers will view information about Expedited programs, request additional information, contact program representatives and enroll in the program at their convenience.

7. Training for Retail Partners

The structure of the Residential HVAC (electric) program does not utilize retail partners; therefore no such training is necessary.

8. Contractor Training

The implementation contractor has the overall responsibility to coordinate and train the contractor pool for the Residential HVAC (electric) program. The Companies require that the implementation contractor management team, field employees, as well as any subcontracted employees who are assigned to the program attend training provided by the Companies. The training will include at a minimum customer contact protocol, program requirements and procedures and energy efficiency programs provided by others, such as NYSERDA.

To expedite forming a contractor pool the Companies have decided to hire an independent contractor to facilitate the qualification process. The contractor will identify and recruit BPI accredited contractors; pre-qualify contractors including documenting training, certifications and references and provide BPI training where necessary. Preferred certifications for the contractor pool include Building Performance Institute (BPI), North American Technician Excellence (NATE), and Air Conditioning Contractors of America (ACCA).

The Companies are offering training on program protocols and guidelines, installation best practices, quality assurance requirements and reporting. Training will be done class-room style at the implementation contractor’s facility or Con Edison’s Leaning Center or O&R’s Spring Valley Operations Center.

Below is a table listing the Companies timeline for contractor training.

Con Edison

Training				
Residential Electric HVAC				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Employees	E-communications (intranet/webinar) Face-to-Face Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Trade Ally (HVAC Contractors)	E-communications (intranet/webinar) Face-to-Face (classroom style) Printed materials Power Point Presentations	Periodic up to 6x/yr	June 2009 - 2011	\$10,200 \$75,000 \$30,000
			Total	\$118,600

O&R

Residential Electric HVAC				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Employees	E-communications (intranet/webinar) Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Trade Ally (HVAC Contractors)	E-communications (intranet/webinar) Classroom Style Printed materials	Periodic up to 6x/yr	June 2009 - 2011	TBD TBD TBD
			Total	TBD

Note: O&R will finalize training budgets when implementation contractor is selected.

9. Contact Information for Customer Inquiries and Complaints

Customers with inquiries and complaints relating to the Con Edison Residential HVAC Program (electric) may call:

Manager Energy Efficiency Programs
Con Edison
4 Irving Place
New York, NY 10003
212-460-2035

For Orange and Rockland the program management contacts are:

Manager Energy Efficiency Programs
Orange and Rockland Utilities
390 West Route 59
Spring Valley, New York 10977

845- 577-3373

10. Quality Assurance

Quality Assurance/Quality Control (QA/QC)

The Companies will be working directly with the implementation contractor on Quality Assurance and Quality Control. For the Residential HVAC (electric) equipment program, post inspection and verification will be conducted on a random sampling of customers (10%).

A description of the installation process and inspector training is being developed with the implementation contractor to address proper sizing and installation of equipment. At a minimum the Companies will require that QA review includes: review sizing calculations for accuracy; contractor compliance for program requirements i.e.; duplicate airflow tests and check appliance charge; verify equipment size and energy efficiency rating.

The implementation contractor is required based on the terms and conditions of contract to resolve all customer complaints. Con Edison and O&R require that complaint resolution processes be documented and reported to the Companies on a monthly basis that includes the status of the complaint. The Companies plan to monitor this closely.

11. Coordination with other New York energy efficiency programs

The Companies individually, and in conjunction with the following entities are developing a common delivery platform to coordinate efforts and eliminate duplication:

- 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;
- Central Hudson and NYSEG, which deliver gas to Orange and Sullivan Counties; and
- Other stakeholders, such as New York City and Westchester County.

Con Edison and O&R meet and speak regularly with NYSERDA and utilities on coordination issues. The Companies met with NYSERDA in April and May of 2009 to create working groups on the issues of double counting, customer and participation referrals, and joint contractor qualification and training. Other areas planned for coordination are speakers and events, Web content, architectural and engineering standards, and joint procurement strategies.

On training, the Companies attended a presentation from the BPI executive director, on BPI accreditation and certification, and holding joint training sessions. On outreach and education, the companies will collaborate with NYSERDA and the Commission's Outreach and Education Advisory Group to develop consistent regional marketing messages and materials.

C. Residential Heating, Ventilation and Cooling: Gas

The Companies' Residential HVAC Program will promote the replacement of older inefficient water and space heating equipment with high-efficiency equipment in 1 – 4 family residential buildings.⁶

1. Target Customer Market

Participation

There are approximately 835,000 1 – 4 family residential buildings in Con Edison's service area. Of these, Con Edison estimates that there are approximately 215,000 1-4 family residential buildings with gas heating to approach as targets. Any residential customer (owner or tenant) with gas space and water heating may participate; however, in situations where energy is delivered by more than one utility company, the installed measure must save energy delivered directly by the Companies to be eligible for the incentives. In addition, only customers who pay the System Benefits Charge will be eligible.

O&R has approximately 110,000 customers with gas heating equipment. Any residential customer replacing gas heat and water heating equipment with qualifying energy efficiency equipment may participate.

2. Marketing Plan

The Companies' marketing plans will directly support the selected implementation contractor's outreach, education and marketing plans submitted with their proposals. These plans are currently being reviewed; however the Companies are already planning for the use of traditional marketing channels. Those vehicles include: direct mail, customer newsletters, bill messaging and web promotion.

Con Edison launched its energy efficiency web site on April 1st. Residential gas customers can complete an inquiry form requesting information on energy efficiency programs and eligibility. Additionally, customers who call Con Edison's general number will have an option to select and receive information on gas efficiency programs. The voice response unit (VRU) will be operational on June 1st. Customers who call, or sign-up via the web, will be contacted, for program participation. Also, customers who are not eligible (do not have gas heating, etc.) will be referred to other programs offered by partners such as NYSERDA. All customer inquiries will be tracked in the Companies database.

The O&R website will be updated with program information upon program launch. A toll-free customer access line is also being installed and upon selection of the implementation contractor(s) will allow the customer to automatically be forwarded. O&R's website will be revised to include Expedited program information, an online intake forms, and all relevant customer application forms.

Implementation contractors have proposed outreach, education and marketing plans for promoting and enrolling customers that include awareness advertising, trade ally awareness

⁶ Customers wishing to purchase high-efficiency equipment for residential homes with more than four units will be directed to an appropriate multifamily efficiency program.

and recruitment, web content, collateral materials and event marketing. The following table provides an understanding of the marketing activities the Company will engage in including estimated costs.

The following tables provide detail on the marketing activities the Companies will engage in with estimated costs.

Con Edison

Residential HVAC Program Gas Outreach Education & Marketing			
Marketing			
Target Market	Method	Frequency	Estimated Cost
Owners/Tenants (1-4 family market)	Internet Collateral materials Web site Customer newsletters On-bill messaging Social based marketing	on-going	\$150,000
Trade Ally	Internet support Collateral (printed brochures)	on-going	\$100,000
Prospective Participants	Direct Mail	2x/yr.	\$300,000
Stakeholders	Meetings/correspondence Joint marketing	on-going	\$100,000
Public	Media Coverage Web site	on-going	
Trade/business/ prof./community orgs.	Meetings/presentations Direct Mail Sponsorships Seminars	on-going	\$100,000
All	Media - news releases, print ads, radio		\$250,000
Total Cost			\$1,000,000

O&R

Marketing			
Target Market	Method	Frequency	Estimated Cost
Residential Customers	Internet Collateral materials Web site Customer newsletters On-bill messaging Social based marketing	on-going	\$4,057
Trade Ally	Internet support Collateral (printed brochures)	on-going	\$2,595
Prospective Participants	Direct Mail	2x/yr.	\$5,614
Stakeholders	Meetings/correspondence Joint marketing	on-going	\$2,076
Public	Media Coverage Web site	on-going	
Trade/business/ prof./community orgs.	Meetings/presentations Direct Mail Sponsorships Seminars	on-going	\$2,076
All	Media - news releases, print ads, radio		\$5,381
Total Cost			\$21,801

Similar to the SBDI Program, efforts will be coordinated with local, State and national organizations and agencies such as realty management and housing associations and groups, neighborhood and community associations, architect and engineering associations, banks and other financial institutions.

3. General Outreach and Education

The Companies continue to integrate energy efficiency as part of their overall corporate communication efforts. Employees are made aware of efficiency programs through the internal intranet site, email communications, newsletters and presentations at mandatory meetings. Con Edison includes energy efficiency promotions in demand response messages, specifically the direct load control program for residential and small business customers and in general outreach and education efforts. These efforts include: calls for energy efficiency program information and other utility services, economic development efforts, corporate communications, public affairs, and customer outreach to build support and market the programs.

Con Edison and O&R will leverage their customer service representatives, public affairs representatives, and economic development staffs, as well as vendor relationships and trade allies to promote programs. The Companies are currently conducting outreach to trade allies and other stakeholders for participation. For example, Con Edison's awards program for trade allies substantially contributes to its oil-to-gas conversion program. O&R will utilize relationships developed through their New Business team and other customer support groups to identify potential leads and areas where need and opportunity may be greatest.

4. Program Oversight to Minimize Overlap or Confusion

The Companies will be responsible for all strategic decisions including program design, development, and establishing budgetary priorities. In addition, the Companies will monitor all program activity, oversee and coordinate major decisions across markets and stakeholder groups, and assess and evaluate implementation contractor compliance in accordance with performance expectations and requirements. The Companies will make final design and content decisions for all advertising and marketing collateral, which must comply with the Companies' corporate standards.

The Companies' oversight of the programs will include, but is not limited to, the following responsibilities:

- Create, review and approve program materials and forms;
- Provide direction to the implementation contractor in the delivery, management and marketing, program application forms and advertising and marketing collateral;
- Coordinate efforts with the Companies' information resources (e.g. website, call center, Salesforce.com, etc.);
- Conduct quality assurance activities to monitor savings, budget expenditures and adherence with the Companies' policies;
- Evaluate, in conjunction with an independent firm, all programs;
- Coordinate program design and marketing with other related local, regional and national initiatives, specifically including the offerings of other utilities, New York City, NYSERDA, and U.S. EPA/DOE (ENERGY STAR);
- Process payment of all rebates;
- Monitor the overall program budget;
- Provide final review and approval of cost-benefit analyses for overall program and program measures;
- Establish short term and long term program benchmarks, evaluate trends, monitor schedules and provide recommendations to improve program execution and performance; and

Rebates will be paid by the Companies directly to customers in the HVAC Programs.

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

Energy Efficiency Program Management

Con Edison and O&R will use its own staff and third parties to provide administrative and delivery functions for the Programs. The Companies are finalizing program design and conducting implementation activities, marketing the program and engaging in potential participant intake. Energy Efficiency employees are responsible for the Companies energy efficiency programs, including delivery, contractor hiring and management, marketing efforts, oversight of implementation contractor marketing plans and coordination with NYSERDA and the neighboring New York utilities regarding their respective energy efficiency programs.

Program managers oversee the planning, coordination, resource management, project execution, and project performance of the programs.

Energy Efficiency Program Evaluation Staff

Both the Con Edison and O&R program evaluation responsibilities will be currently assigned to the Con Edison Measurement, Verification and Evaluation Section. This section was established to operate independently of program implementation and does not share staffing or implementation responsibilities. The Section Manager is responsible for: defining the scope of program evaluations; developing MV&E Requests for Proposals (RFP); selecting and hiring independent evaluation consultants to conduct studies; participating in the Statewide Evaluation Advisory Group (EAG) meetings; managing the vendors under contract; and communicating results with program implementation employees and other Company and PSC Staff contacts.

Support Staff

The Companies will be calling on the established capabilities of various departments that focus on customer outreach and education and marketing, such as Media Relations, Public Affairs, Economic Development, Customer Operations, and Governmental Relations. Energy Efficiency meets regularly with these departments to coordinate the Companies' efforts for energy efficiency programs and general outreach and education.

In coordination with these other departments, the Energy Efficiency team develops marketing plans, advertising, direct mail, collateral material and bill inserts, and designs the internal and external websites. The department marketing staff also directs and develops advertising with trade allies, and coordinates events and appearances of energy efficiency department staff. Events and O&E efforts include community, business, trade and industry events aimed at building awareness and stimulating participation in Con Edison and O&R Energy Efficiency programs, and the state-wide EEPS undertaking. Website development for the EEPS programs is ongoing, with a special energy efficiency section having gone live on April 1, 2009 at www.coned.com/energyefficiency.

Implementation Contractors

The Company will use a third-party program implementation contractor to provide centralized program delivery services and qualified professionals to install energy efficient equipment. The implementation contractor will be required to report regularly to Con Edison and O&R. Program managers work directly with the implementation contractors to ensure that program goals are achieved as well as to assure customer satisfaction with the program.

At the time of the Plan submission, the Companies are evaluating proposal submitted by implementation contractors who responded to the RFP to provide services. We plan to select one or more very shortly. To meet the program launch of July 1st, Con Edison will utilize a bridge contractor to operate and manage customer inquiries and screening for program eligibility as the implementation contractor ramps-up program delivery.

O&R will provide a toll free customer intake and support line for its Expedited Program and its portfolio of Energy Efficiency Programs. Initially, this will be staffed internally until the implementation contractor(s) is established. This line will be capable of forwarding calls based on customer selection, to the implementation contractor, or various implementation contractors,

supporting multiple programs when approved and implemented. Additionally, the O&R website will be revised to include Expedited program information, online intake forms, and all relevant application forms.

The Companies will provide training for the selected implementation contractor (s) with respect to necessary business processes, including promoting demand response, administrative procedures, roles and responsibilities, quality assurance protocols, budgets and timelines and will provide ongoing facilitation and oversight throughout the program delivery period.

The implementation contractor is responsible for providing customers with any and all applicable information on tax credits, available grants, loan subsidies and guarantees, local, state and federal government renewable offerings (e.g. solar, renewable energy credits) to the eligible customers. The Companies will work with the implementation contractor as this information is developed.

6. Procedures for Customer Enrollment

Customers may enroll in various ways: through the implementation contractor via telephone using toll-free numbers specific to efficiency programs or the toll free number on their utility bill; on-line intake forms on the Companies' websites; and e-mail. Additionally, customers may enroll immediately as a function of door to door canvassing by the implementation contractor.

Con Edison and O&R have energy efficiency portals on their websites (www.coned.com/energyefficiency) and (www.oru.com). These websites provide program information. Con Edison customers can enroll by completing an on-line form. The information is entered into the Companies data base tracking system and the customer is then referred to the implementation contractor to schedule an appointment. A copy of this form is in the appendix.

O&R is in the process of updating and reconfiguring its energy efficiency website functionality. Customers will view information about Expedited programs, request additional information, contact program representatives and enroll in the program at their convenience.

7. Training for Retail Partners

The structure of the Residential HVAC (gas) program does not utilize retail partners; therefore no such training is necessary.

8. Contractor Training

The implementation contractor has the overall responsibility to coordinate the contractor pool for the Residential HVAC (gas). To expedite forming a qualified contractor pool the Companies have decided to hire an independent contractor to facilitate the qualification process. The contractor will identify licensed plumbers and recruit BPI accredited heating contractors; pre-qualify contractors including documenting training, certifications and references.

The Companies are offering training on program protocols and guidelines, installation best practices, quality assurance requirements and reporting. Training will be done class-room style at the contractor’s training facility or Con Edison’s Learning Center or O&R’s Spring Valley Operations Center.

The following tables

Con Edison

Training				
Residential Gas HVAC				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Employees	E-communications (intranet/webinar) Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Trade Ally (HVAC Contractors)	E-communications (intranet/webinar) Classroom Style Printed materials	Periodic up to 6x/yr	June 2009 - 2011	\$10,200
				\$75,000
				\$30,000
	Total	\$118,600		

O&R

Residential Gas HVAC				
Target Audience	Method	Frequency	Timeline	Estimated Costs
Employees	E-communications (intranet/webinar) Power Point presentations	Periodic	Pre-Launch- 2011	\$3,400
Trade Ally (HVAC Contractors)	E-communications (intranet/webinar) Classroom Style Printed materials	Periodic up to 6x/yr	June 2009 - 2011	TBD
				TBD
				TBD
	Total	TBD		

Note: O&R will finalize training budgets when implementation contractor is selected.

9. Contact Information for Customer Inquiries and Complaints

Customers with inquiries and complaints relating to the Con Edison Residential HVAC Program (gas) may call:

Manager Energy Efficiency Programs
 Con Edison
 4 Irving Place
 New York, NY 10003
 212-460-2035

For Orange and Rockland the program management contacts are:

Manager Energy Efficiency Programs
 Orange and Rockland Utilities
 390 West Route 59
 Spring Valley, New York 10977

 845- 577-3373

10. Quality Assurance

Quality Assurance/Quality Control (QA/QC)

The Companies will be working directly with the implementation contractor on Quality Assurance and Quality Control. For the residential HVAC (gas) equipment program, post inspection and verification will be conducted on a random sampling of customers (10%).

A description of the installation process and inspector training is being developed with the implementation contractor to address proper sizing and installation of equipment. At a minimum the Companies will require that QA review includes: review sizing calculations for accuracy; contractor compliance for program.

The implementation contractor is required based on the terms and conditions of contract to resolve all customer complaints. Con Edison and O&R require that complaint resolution processes be documented and reported to the Companies on a monthly basis that includes the status of the complaint. The Companies plan to monitor this closely.

11. Coordination with other New York energy efficiency programs

The Companies individually, and in conjunction with the following entities are developing a common delivery platform to coordinate efforts and eliminate duplication:

- 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;
- Central Hudson and NYSEG, which deliver gas to Orange and Sullivan Counties; and
- Other stakeholders, such as NYC and Westchester County.

Con Edison and O&R meet and speak regularly with NYSERDA on coordination issues. The Companies met with NYSERDA in April and May of 2009 to create working groups on the issues of double counting, customer and participation referrals, and joint contractor qualification and training. Other areas planned for coordination are speakers and events, Web content, architectural and engineering standards, and joint procurement strategies.

On training, the Companies attended a presentation from the BPI executive director, on BPI accreditation and certification, and holding joint training sessions. On outreach and education, the companies will collaborate with NYSERDA and the Commission's Outreach and Education Advisory Group to develop consistent regional marketing messages and materials.

III. Evaluation Plan

Measurement, Verification & Evaluation

The Companies, in conjunction with DPS Staff guidance and the New York State Evaluation Advisory Group's recommended guidelines, along with an independent contractor(s) will evaluate the implemented expedited programs. Detailed evaluation plans are outlined below for review. In most cases both a process and an impact evaluation will be conducted. Process evaluations will move to the fore as program implementation begins. This will allow for strategic adjustments to be implemented increasing each program's overall efficiency and effectiveness. 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.

1. Administrative Support

The Companies will fully support all aspects of the process and impact evaluations and will independently administer and manage these assessments utilizing outside evaluation consultants through Con Edison's newly formed 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. This 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, and communicate results back to program implementers, managers and other stakeholders. Con Edison's MV&E group will oversee Con Edison and Orange & Rockland EEPs program activities with regard to MV&E.

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 data 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 Tec Market Works, and are currently under review by DPS Staff and the EAG. Below is a list of specific data that will be collected via site visits, customer application forms and surveys, and then utilized to evaluate each program:

- Program Name
- Name of Installation Contractor
- Application Number

- Start Date of Installation
- End Date of Installation
- Customer Account Number
- Customer Address
- Measure Type
- Annualized Energy Savings
- Measure Life
- Total Measure Installed Cost
- Incremental Measure Cost
- Incentive Payment Amount
- Date of Post-Install Inspection
- Date of Evaluation Inspection
- Evaluation Type
- Evaluation Result

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. 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 2011. All evaluations will go through a competitive bidding process and costs will be determined at that time. If joint statewide evaluations are conducted, we expect that all costs will be allocated in a fair and equitable manner among the participants.

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. 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 ongoing Energy Efficiency Potential Study will be used to support all evaluations conducted by the Companies where applicable, and will be shared with members of the EAG when final.

6. Process Evaluation Methodology

All process evaluations will rely on reviews of program documentation, interviews with program staff, implementation contractors 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 actors include trade allies, local business, community groups and unions. 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. The process evaluations will also include a survey of program participants and non-participants. Participant surveys will be developed and 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 to be

conducted. 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. 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.

7. Impact Evaluation Methodology

Impact evaluations determine the level of savings and the quality of those savings from ongoing energy efficiency programs. 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 Companies look forward to working in concert with, and in support of, other EAG members to facilitate the standardization of MV&E practices, applying common methodologies and implementing protocols on a statewide basis.

Residential HVAC Program: Electric and Gas

Evaluation activities for both Con Edison and O&R during the calendar year 2009 will be limited and directed initially towards process evaluation reviews only. Until each Company has access to a representative amount of program specific achievement data (specified below), any evaluation activity conducted will be limited to the process side. This will allow early feedback to be obtained on all program activities and communicated back to Program Managers and the Companies’ Implementation Contractor(s) to better serve the customers in their respective markets by instituting program enhancements and modifications where necessary.

8. Process Evaluation

If no statewide evaluation consultant is selected to evaluate the Expedited Programs, the Companies plan to issue separate and distinct RFP solicitations to conduct process evaluations for their respective programs and service areas. These RFPs will be competitively bid shortly after program implementation begins. We expect that the process evaluations for these programs will begin during the latter stages of 2009 to determine the following information:

- Assess the customer’s understanding of the program
- Determine customer satisfaction levels
- Determine market penetration rates (determining the effect of the program on retailers)
- Review the selection process of the Implementation Contractor
- Determine the efficiency of the Implementation Contractor
- Assess the delivery processes of the program

- Assess the effectiveness of the rebate levels offered
- Review all eligible measures
- Assess the effectiveness of the contractor training and certification process
- Assess the overall training received by internal Con Edison staffing
- Assess Marketing and Customer Outreach activities
- Determine the effectiveness of the Customer Application process
- Review of all data collection items
- Assess measure installations for quality and right sizing
- Implementation of action items for improvements cited

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 subcontractors, Con Edison employees and trade allies to satisfy 90/10 criteria for confidence and precision. This will all be completed through an evaluation consultant working through Con Edison's newly created independent MV&E section. It is unclear at this time if there will be a statewide evaluation RFP consultant selection process or not.

A final report of the process evaluation conducted for this program is projected to be completed in mid-2010 and a second process evaluation should be conducted after the program ends in 2011.

9. Impact Evaluation

By mid-2010, the Companies expect to have sufficient program related achievement data to support the commencement of impact evaluations on the initial program year for both the electric and gas components, The main objectives of the impact assessment are to:

- Quantify energy (both kwh or dths) 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 on the program. (As currently directed by the EAG and contained in the Tec Market Works Technical Manual developed for New York State, 10% on average is the current projection for use until the actual analysis is conducted, although individual measures may have varying levels of free-ridership.)
- Determine Market Penetration rates (quantifying the increase in the stocking levels of efficient equipment)
- Inform program design for future program planning

The sample size of customer sites is required to be at a level that will support and satisfy 90/10 criteria for confidence and precision.

Where applicable, the Companies will utilize data derived from their energy efficiency potential studies in the residential markets in their service territories to aid in this review. Data from this report will be made available to members of the EAG to aid in their own baseline assessments proposed. Other data necessary to conduct the impact assessment of these programs are:

- Twelve consecutive months of consumption histories
- Daily weather data from local weather station sources to calculate heating and cooling degree days (HDD and CDD);
- Expected (planning) estimates of savings from specific measures installed at each site
- Modified planning estimates where such modifications have been made subsequent to energy simulation modeling
- Monitored equipment data used in calibration of engineering models

Where additional data is required in a specific customer class or market segment, Con Edison's Market Research section of the Energy Efficiency Programs department will support the MV&E section and the evaluation consultant to supply the required data.

The Companies hope to work jointly with other members of the EAG to implement this assessment, however if no statewide evaluation consultant is selected by the EAG, the Companies will issue RFPs to competitively solicit evaluation services to conduct separate and distinct impact evaluations.

Small Business Direct Installation Program

Due to the delayed launch of this approved program (which targets small commercial customers with less than 100 kw usage per month), evaluation activities for both Con Edison and O&R during the calendar year 2009 will be limited and directed initially toward process evaluation reviews only. Until each Company has a representative amount of program specific achievement data (12 months), any evaluation activity conducted will be limited to the process side so that early feedback can be obtained on all program activities which can then be communicated back to Program Managers, and the Company's Implementation contractor to better serve the customers in their respective markets by instituting program enhancements and modifications where necessary.

10. Process Evaluation

If no statewide evaluation consultant is selected for this program, the Companies plan to issue separate and distinct RFP solicitations to conduct these process evaluations. These RFPs will be competitively bid shortly after the implementation of these programs. The Companies expect that the process evaluations for this program will begin during the latter stages of 2009 to determine the following information:

- Assess the customer's understanding of the program
- Determine customer satisfaction levels
- Determine market penetration rates (determining the effect of the program on retailers)
- Review the selection process of the Implementation Contractor
- Determine the efficiency of the Implementation Contractor
- Assess the delivery processes of the program
- Assess the effectiveness of the rebate levels offered
- Review all eligible measures for relevance
- Assess the effectiveness of the contractor training and certification process

- Assess the overall training received by internal Con Edison, O&R staffing
- Assess Marketing and Customer outreach activities
- Determine the effectiveness of the Customer Application process
- Review of all data collection items
- Implementation of action items for improvements cited

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. This will all be completed through an evaluation consultant working through Con Edison's newly created independent MV&E section. It is unclear at this time if there will be a statewide evaluation RFP consultant selection process or not.

A final report of the process evaluation conducted for this program is projected to be completed during the mid 2010 calendar year and a second process evaluation should be conducted after the program ends in 2011.

11. Impact Evaluation

During the 2010 mid-year time frame, the Companies expect to have sufficient program related achievement data that could support the commencement of Impact evaluations on the initial program year. The main objectives of the Impact assessment are 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 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)
- Inform program design for future program planning

The sample size of customer sites will be at a level that will support and satisfy 90/10 criteria for confidence and precision.

- Where applicable, the Companies will utilize data derived from the Energy Efficiency Potential Study conducted in the Residential markets in both New York City and Westchester County to aid in this review

The Companies hope to work jointly with other members of the EAG to implement this assessment, 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 Tec Market Works and are currently under review by PSC Staff.

Additionally a combination of billing analyses and selective end-use metering will 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 consultant to supply the required data.

Non-Lighting measures that account for more than 10% of the savings from the Small Business Direct Install Program will require a further layer of evaluation which may necessitate additional end-use metering.

Engineering Analysis

The SBDI program offers a diverse set of measures. Several of the measures such as high-efficiency heat pumps and mini split heat pump equipment are new technologies. It is, therefore, important to use measure-specific analytic methods on a small sample of participating sites. Such analysis will help develop a better understanding of individual equipment and will help validate program design assumptions and inform the statistical analysis.

For each major equipment type, a model-based sampling (MBS) scheme will be used to identify an efficient, small number of sites for the simulation analysis. It is expected that simulations will be based on "prototype" modeling of a small number of sites for each major equipment type. The simulation modeling will use DOE's Energy-10, or an ASHRAE Standard 140 compliant tool. The models will be informed with directly observed characteristics for the metropolitan New York climate zone, home vintage and type and selective metering of certain equipment.

Monitoring of certain high-impact equipment may be necessary to calibrate the energy simulation models. In such cases, the units will be monitored for the entire cooling or heating season, although a period of at least three weeks during cooling or heating seasons is sufficient under the International Performance Measurement and Verification Protocols (IPMVP) Option B. The impacts estimated under Option B will be weather-normalized to long-term average weather data. The metered data also will be utilized to provide post-retrofit load shapes. End-use data will be applied to energy simulation, consistent with the IPMVP Option D for use in the demand and energy impact calculations.

To calibrate the models, the evaluation will use an iterative process to compare collected data with modeled output for whole building and cooling end-use load shapes and calculated calibration statistics. Monthly billing data and weather data with matching periods will be utilized to calibrate whole building model usage to within the ranges of $\pm 15\%$ Root Mean Square (RMS) error and $\pm 5\%$ Mean Bias error. Cooling end-use data would then be applied at the hourly level to a requirement of $\pm 30\%$ RMS error and $\pm 10\%$ Mean Bias Error. The final calibrated model will then be run using long term average weather data to obtain the final 8760 end-use consumption and savings load shapes.

Solar attic fans are unique in terms of technology and impacts. Based on available engineering estimates, solar attic fans are projected to save less than 200 kWh per year in cooling electricity use. This amount represents a *de minimus* amount of savings for a typical 1-4 family home. Since this measure cannot be properly modeled, the primary impact evaluation approach for this measure will be simple engineering models, taking into account direction of fan exposure and

attic insulation rating. As part of this analysis, a sample of 60 sites will be surveyed to collect data on technical parameters including exposure and existing attic insulation levels.

12. 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.

The analysis will be based on a Statistically Adjusted Engineering (SAE) specification. The advantage of this specification is that it will provide estimates of actual savings realization rates for individual measures (or groups of measures) installed under the program. The SAE model involves a regression model with the following specification:

$$ADC_{it} = \alpha + \beta EE_{ji} + \lambda_1 HDD_{it} + \lambda_2 CDD_{it} + \varepsilon_{it}$$

where, for each customer i and calendar month t ,

- α is the base consumption
- ADC_{it} is the average daily consumption during the pre- and post-program periods
- EE_i is initial engineering estimates of savings for each measure j ; the associated beta represents the savings realization rate
- HDD_{it} is average daily heating degree days based on location
- CDD_{it} is the average daily cooling degree days based on facility location
- ε_{it} is the regression error term.

To capture the potential heterogeneity in the population of participants, the SAE model will be estimated using an Analysis of Covariance (ANCOVA) model. The advantage of this approach is that it allows each participant or non-participant to have separate estimate of the “intercept” term.⁷ By allowing each participant and/or non-participant to have its own intercept, you allow for some differences among the analysis subjects. The specification of the ANCOVA model is identical to SAE, except that each observation will have a unique intercept term, represented as α_i .

13. 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;

⁷ Regression models estimate an intercept (in the case of energy modeling, this often represents the base component, i.e., non-weather sensitive component of energy use) and a slope coefficient (this often represents the change in energy consumption for one unit change in the explanatory variable).

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.



14. 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.

15. Reports – Regulatory, Standard and Ad Hoc

In conjunction with Commission requirements and the directions of the EAG, the Companies will comply by filing annual, quarterly and monthly reports tracking market activity, progress in terms of customer reach and megawatt-hour goals or energy savings.

IV. APPENDIX



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energy efficiency


energy efficiency home


Energy efficiency is the smart way to use less energy. It keeps costs down, produces less air pollutants, preserves natural resources and promotes the use of domestic energy sources.

Residential	Business
<p>electric</p> <ul style="list-style-type: none">Heating, Ventilation and Cooling ProgramTargeted Demand Side Management ProgramCentral Air Conditioning Program <p>natural gas</p> <ul style="list-style-type: none">Energy EfficiencyOil to Gas Conversions <p>Contact us for more info on residential programs.</p>	<p>electric</p> <ul style="list-style-type: none">Small Business Direct Installation ProgramTargeted Demand Side Management ProgramDemand ResponseCentral Air Conditioning Program <p>natural gas</p> <ul style="list-style-type: none">Energy EfficiencySales <p>Contact us for more info on business programs.</p>

call us:
1-800-643-1289



 Programs

 Residential HVAC Program

 Small Business Direct Installation Program

Energy efficiency, a matter of choice!
Residential and small business customers: you can save money and

Con Edison's Small Business Direct Installation Program

Contact us for a free on-site energy survey for your business.

If you are a Con Edison business customer with a monthly electric demand up to 100kW, we will conduct an energy survey of your business for free. We will show you how to spend less and save more on lighting and energy used to cool your business and heat your water. We will install energy efficiency measures at no cost to you such as compact fluorescent lamps (CFLs), low-flow aerators, high pressure rinse sprayers, and a water heater thermostat setback.

We'll also recommend how you can achieve even greater energy and financial savings with rebates of up to 70% when you install high efficiency lighting, ballasts and fixtures; retro commission your existing heating, ventilation and cooling (HVAC) system; install an Energy Star rated programmable thermostat for heating and cooling, and more.

For more information about the Small Business Direct Installation Program and to sign up for your free energy survey which will be available June 2009, contact us.

Spend less and save more on the energy you use, while preserving the environment.

call us:
1-800-643-1289



Programs

Residential HVAC Program

Small Business Direct Installation Program



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energy efficiency business inquiry form

Contact Information

<input type="text" value="First Name"/>	<input type="text" value="Last Name"/>
<input type="text" value="Name of Business"/>	
<input type="text" value="Name of Business Owner"/>	
<input type="text" value="Service Address"/>	
<input type="text" value="Service Address Line 2"/>	
<input type="text" value="County/Town"/>	<input type="text" value="Zip Code"/>
<input type="checkbox"/> Check this box if your mailing address is different than your service address.	
<input type="text" value="Phone Number"/>	<input type="text" value="Best time to call"/>
<input type="text" value="Email Address"/>	<input type="text" value="Confirm Email Address"/>

Service Information

What service(s) do you currently receive from Con Edison? (Check all that apply)

- Gas
- Electric
- Steam

Provide your account number below:

[Click here](#) if you have more than 1 account

How much electricity do you use per month? (Check box)

- Less than 100 kW
- More than 100 kW
- I don't know

What are you interested in? (Check all that apply)

- Energy Efficiency Programs
- Natural Gas Sales Programs
- Demand Response Programs
- Other (Please specify)



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energy efficiency residential inquiry form

Contact Information

<input type="text" value="First Name"/>	<input type="text" value="Last Name"/>
<input type="text" value="Service Address"/>	
<input type="text" value="Service Address Line 2"/>	
<input type="text" value="County/Town"/>	<input type="text" value="Zip Code"/>
<input type="checkbox"/> Check this box if your mailing address is different than your service address.	
<input type="text" value="Phone Number"/>	<input type="text" value="Best time to call"/>
<input type="text" value="Email Address"/>	<input type="text" value="Confirm Email Address"/>

Service Information

What service(s) do you currently receive from Con Edison? (Check all that apply)

- Gas
- Electric

Provide your account number below.

Type of residence (Check box)

- Single Family (1-4 residential units)
- Multi-Family (5-25 residential units)
- Large (25+ residential units)

What are you interested in? (Check all that apply)

- Energy Efficiency Programs
- Con Edison Central Air Conditioning Program
- Natural Gas Conversion Program
- Other (Please specify)

Additional Comments