- 1 Q. Please state your name.
- 2 A. My name is Rebecca Craft.
- 3 Q. Have you previously submitted testimony in this
- 4 proceeding?
- 5 A. Yes. I have.
- 6 Q. What is the purpose of your additional testimony?
- 7 A. The purpose of my additional testimony is to first update
- 8 my initial testimony with respect to the current status
- 9 of the Company's targeted program and the proposed
- program for 500 megawatts (MW) of permanent energy
- 11 efficiency by 2016. I will then respond to the testimony
- of a number of parties concerning Con Edison's proposed
- electric efficiency program and its management of the
- 14 Company's current targeted program. Those parties are:
- 15 Mr. Saxonis on behalf of the Department of Public Service
- 16 Staff (Staff); Mr. Henderson on behalf of the New York
- 17 State Energy Research and Development Authority
- 18 (NYSERDA); Mr. Chernick on behalf of New York City
- 19 (City); Mr. Bomke on behalf of the New York Energy
- 20 Consumers Council (NYECC); John Chamberlin, Don Bennett,
- 21 and Brian Hedman on behalf of the New York Power
- 22 Authority (NYPA) (the NYPA Panel); Mr. Lloyd Kass on

1

REBECCA CRAFT - UPDATE/REBUTTAL

behalf of the New York City Housing Authority (NYCHA);

2		Mr. Greene on behalf of the Natural Resources Defense
3		Council/Pace Energy Project; Mr. Brown on behalf of E-
4		Cubed; Mr. Dowling on behalf of Consumer Power Advocates;
5		Mr. Smith on behalf of Energy Curtailment Specialists,
6		Inc., and Mr. Bush on behalf of Astoria Generating
7		Company, LP ("Astoria").
8	Q.	In summary, how do you respond?
9	A.	My rebuttal testimony is as follows: (1) I will show that
10		the Commission should reject the recommendation of Mr.
11		Saxonis that the Commission should await the outcome of
12		the its efficiency portfolio standard (EPS) proceeding
13		before ruling on Con Edison's DSM proposal, because it is
14		important to move ahead now with programs so that there
15		will not be any lost DSM opportunities resulting from any
16		further delays in program implementation and that Company
17		and public policy goals are met. Similarly, I note that
18		while I support Mr. Saxonis's proposal to continue the
19		electric demand management collaborative, established in
20		the last rate case, it should be a reporting and
21		consultation collaborative and not a decision making
22		collaborative. As such, the collaborative would not

1	delay the Company's proposed energy efficiency program.
2	For similar reasons, the Commission should reject Mr.
3	Chernick's proposal to form a DSM Coordination Board.
4	(2) I will show that many parties have mistakenly assumed
5	that NYSERDA has achieved energy efficiency at a lower
6	cost than anticipated under the existing electric rate
7	plan ("Rate Plan") because they have failed to take into
8	account that the rate plan cap of \$746/kW was applicable
9	to energy efficiency programs and not curtailable load
10	programs, which constitute a significant portion of the
11	MW contracted for by NYSERDA to date. I also point out
12	here that while Con Edison only collects money from
13	ratepayers as it is spent on DSM programs, NYSERDA has
14	collected almost \$93 million from Con Edison ratepayers
15	and spent less than 10% on incentives for customers.
16	(3) I will rebut the claim of some parties that the
17	Company's proposal for 500 MW of permanent DSM is too
18	small, relative to the State's 15 \times 15 goal, because
19	those parties do not take into account the gains that
20	would result from other initiatives, such as improvements
21	in codes and standards. At the same time, I will also
22	rebut the testimony of Mr. Bomke and Mr. Dowling that the

1	Company program is unnecessary. I will also show that
2	the criticisms of some parties that the program is not
3	well designed are unfounded.
4	(4) I will show that Con Edison's targeted program is a
5	sound program and rebut the claim of Mr. Saxonis that
6	there is insufficient evidence that the program is cost
7	effective and effectively administered, and the claims of
8	Mr. Chernick and Mr. Bomke that the program is not
9	working well. The targeted program is achieving what it
10	was designed to achieve and the Company has consulted
11	with Staff prior to the issuance of requests for
12	proposals (RFPs) and execution of contracts.
13	(5) I will rebut the testimony of Mr. Bomke and the NYPA
14	Panel (supported by Mr. Chernick and Mr. Saxonis) that
15	their customers should not have to pay for Con Edison's
16	proposed energy efficiency program. The State and the
17	City have adopted aggressive energy efficiency goals,
18	which cannot be achieved without the Company's aggressive
19	program, in which all customers should participate and
20	therefore pay their equitable share.
21	(6) I will rebut Mr. Bush's claim that the Company should
22	not have issued an RFP for DSM to defer the transmission

1		project for the East 13 th Street load pocket. Among other
2		things, Mr. Bush expressed a concern that the Company may
3		not be able to obtain the required MW, but that should be
4		determined by the responses to the RFP and not the
5		Commission.
6		I do not address the claims of the parties that the
7		Company's incentive proposal is not justified. The issue
8		of incentives is addressed by Company witness Zielinski
9		in his rebuttal testimony. I do reiterate, consistent
10		with my initial testimony, that given the State's and the
11		City's aggressive energy efficiency goals, a substantial
12		incentive is required to align shareholder and customers
13		interests in achieving these goals.
14		UPDATE
15	Q.	Is there an update to provide on the current status of
16		the targeted program?
17	A.	Yes. I reported in my direct testimony (p. 10, lines 3-
18		8) that the program had resulted in 0 MW installed and 0
19		MW verified at that time, which has since increased to
20		1.4 MW installed and verified. In addition, I stated
21		that the Company expected 9 MW to be installed by
22		December 31, 2008, which has increased to 11 MW that is

21

Q.

What do they show?

- 1 expected to be installed by November 1, 2008. These 2 increases are in line with the contracted installation 3 dates and shows that the program is proceeding on 4 schedule. 5 Do you have an update to provide on the status of the Q. 6 Company's proposed program in this rate case? 7 Yes. I stated in my initial testimony (p. 13, lines 14-Α. 8 18) that the "Company proposes to contract for at least 9 250 MW of permanent DSM during the three-year period 10 April 1, 2008 - March 31, 2011, of which at least 50% 11 would be installed in that time period (if the Company's 12 DSM petition filed on May 2, 2007 is approved)." Was the Company's DSM petition approved by the 13 Q. 14 Commission? 15 No, and as a result, the implementation of the Company's 16 program will be delayed. I have accordingly revised 17 Exhibit __ (RC-1) and Exhibit __ (RC-2) from my direct 18 testimony. 19 MARK FOR IDENTIFICATION AS EXHIBIT __ (RC-1 - REVISED) AND EXHIBIT ___ (RC-2 - REVISED) 20
 - 6 -

1	A.	The rejection of the Company's May 2, 2007 DSM verified
2		petition delays the ramp up of the Company's system-wide
3		program and also results in delay in issuing additional
4		RFPs under the proposed continuation of the targeted
5		program. The total reduction is estimated to reduce the
6		originally anticipated from 138 MW installed to
7		approximately 87 MW during the proposed three-year rate
8		plan. The ramp up of the non-targeted program requires
9		program research and development, system acquisition, and
10		personnel hiring, among other things. The Company had
11		also estimated, based on the petition being approved,
12		that the Company would be able to install 75 MW under
13		this program during the proposed three-year rate plan.
14		The delay will most likely result in delaying the
15		achievement of approximately 20 of that 75 MW.
16		As Staff has noted in its preliminary proposal for the
17		EPS proceeding, there are certain programs that are well
18		suited for "fast track" implementation, for example, a
19		small business direct installation program. Con Edison
20		agrees that there are certain programs that lend
21		themselves to faster implementation and market
22		acceptance. However, the Company also believes that to

1	maximize the success of these programs, the Company would
2	have to tailor such programs to its service territory
3	under the proposed Company administered system-wide
4	initiative and would implement these kinds of programs as
5	so tailored.
6	The targeted program is also affected because the program
7	requires installation of demand reduction measures by
8	June $1^{\rm st}$ of each year. Accordingly, with the rejection of
9	the petition and delay of issuance of the next targeted
10	RFP until after April 1, 2008, there would be no load
11	reduction available to meet the needs by June 1, 2008 for
12	that summer.
13	I also note that the original projections in Exhibit
14	(RC-2) for the targeted program were developed with
15	reference to specific load relief projects. I have
16	revised our schedule for the 500 MW program but without
17	the benefit of a new load relief plan. The Company will
18	need to review this revised schedule against the load
19	relief plan in place at the time this program is
20	approved. The schedule in Exhibit (RC-1 - REVISED)
21	shows that the Company still intends to reach its 500 MW
22	goal by 2016, however, the Company will achieve more

1		reductions after the first several years than it would
2		have had the petition been approved.
3		Finally, I do note that in denying the petition, the
4		Commission stated that "we expect that the Company will
5		be asked in some manner to expand its involvement in the
6		implementation of energy efficiency programs to meet EPS
7		goals."
8		TIMING OF CON EDISON'S PROPOSED PROGRAM
9	Q.	What is Con Edison's position on the EPS proceeding?
10	Α.	Con Edison supports EPS and is an active member in all
11		working groups. The Company also strongly believes that
12		the ambitious EPS goal cannot be achieved absent the
13		delivery of energy efficiency programs by the utilities
14		to their customers. The ongoing nature of the proceeding
15		should not delay the implementation of cost effective
16		utility programs that will ultimately contribute to
17		achievement of the EPS goal.
18	Q.	Does Mr. Saxonis agree?
19	Α.	No, Mr. Saxonis states (p. 20-21) that the Commission
20		should not approve the Con Edison DSM program pending the
21		outcome of the EPS proceeding: "As a result of the
22		ongoing EPS proceeding it is premature for me to

1		recommend a specific DSM program portfolio for Con Edison
2		at this time. I cannot guarantee that my recommendations
3		would effectively synchronize with the guidance that will
4		result from future Commission EPS rulings."
5	Q.	Does Mr. Saxonis raise a valid concern?
6	A.	No. First, the Staff proposal in the EPS proceeding
7		anticipates that no matter how the EPS goal is achieved,
8		the utilities will need to increase their activities.
9		See, e.g., Staff Report at 53-54 As Mr. Saxonis notes (p.
10		19, lines 12-14), the Staff proposal also states that
11		there are "fast track" programs that could be implemented
12		by the utilities, and Con Edison is ready now to
13		implement those programs and can continue with its
14		targeted program to obtain additional permanent MW
15		reductions. Indeed, Con Edison's proposed 500 MW program
16		would be an important component of achieving the EPS
17		goal.
18	Q.	In addition, Mr. Saxonis in his direct testimony in this
19		case recommends (page 22, lines 19 -22) that a formal
20		collaborative be established to explore options for a
21		"bridge program". Do you agree?

1	A.	No, Con Edison supports establishment of a collaborative
2		process but the collaborative should be a reporting and
3		consultation collaborative and not a decision-making
4		collaborative. Given the aggressive reductions needed to
5		meet the State's and the City's goals, there is a need to
6		move quickly and the collaborative should accordingly not
7		delay the timely implementation of the DSM programs. Mr.
8		Saxonis suggests (pp. 23-24) that programs can be
9		implemented after recommendations are made by his
10		proposed collaborative, which appear to require
11		Commission approval because he describes them as
12		"recommendations." This could result in a material delay
13		(in the last rate, it took one year to obtain a
14		Commission decision on the programs, resulting in no
15		permanent DSM being achieved during the first rate year).
16	Q.	Mr. Chernick proposes the formation of a DSM Coordination
17		Board. Do you agree?
18	A.	No. It appears at this time that such a Board would add
19		an additional layer of bureaucracy that could only serve
20		to delay the delivery of DSM programs. Mr. Chernick
21		states (p. 18, lines 9-10)that this DSM Coordination
22		Board would "provide the expertise necessary to optimize

1		the DSM programs," but he does not specify what this
2		expertise is and why it would be better to have it at
3		this Board and instead of Con Edison, or why the
4		collaborative could not provide this expertise.
5		COSTS OF DSM PROGRAMS
6	Q.	Do certain parties claim that NYSERDA's costs under the
7		System-wide program are less than anticipated?
8	A.	Yes. Both Mr. Saxonis and Mr. Henderson state that the
9		"cost" anticipated under the rate plan was \$746/kW, while
10		the actual cost to date of the contracted MW under the
11		NYSERDA System-wide program has been \$351/kW (exclusive
12		of NYSERDA's administrative costs, which Mr. Henderson
13		states (p. 5) raises the cost of the program to \$380/kW).
14	Q.	Is this comparison correct?
15	A.	No. The current Rate Plan (Joint Proposal at 66-67),
16		provides as follows with respect to the basis for the
17		\$746/kW amount: "Con Edison's funding will be capped on
18		an average initiative-wide per kWh basis at the level
19		NYSERDA spent statewide for eight of nine
20		business/institutional programs (the curtailable load
21		program is excluded) from 1998-2003, including incentive
22		payments, implementation costs and an administrative fee

1		to NYSERDA, including any fee for program evaluation,
2		adjusted for inflation and higher NYC costs (25%)."
3		(Emphasis added). Accordingly, it is clear that the cost
4		of curtailable load programs should be excluded when
5		comparing the \$746/kW Rate Plan cap to the actual cost of
6		programs, but neither Mr. Henderson nor Mr. Saxonis (nor
7		Mr. Bomke, p. 18, lines 2-3) did so. In addition, the
8		NYSERDA contracted MW, as set forth in Exhibit (BH-2)
9		to Mr. Henderson's testimony, include 6 MW achieved under
10		the FlexTech/Technical Assistance category. As NYSERDA
11		acknowledges, there is overlap, the details of which
12		remain to be determined, between that category and others
13		(see Exhibit (BH-2), Table 5), that will ultimately
14		result in a lower revised amount of MW than has been
15		identified as achieved in that report.
16	Q.	Are curtailable load programs a significant portion of
17		the MW achieved by NYSERDA?
18	Α.	Yes. With respect to contracts executed, it appears that
19		at least 59 MW and possibly more of the 142 MW is
20		attributable to demand response. Exhibit (BH-2), Table
21		2. In addition, of the amount installed under the
22		System-wide program as of July 15, 2007, Con Edison has

1		determined that 18 MW out of 30 MW is attributable to the
2		purchase of interval meters to facilitate customer
3		enrollment in Con Edison's or the NYISO's demand response
4		programs.
5	Q.	Has Con Edison asked for information so that the cost of
6		NYSERDA's energy efficiency, distributed generation and
7		demand response or curtailable load programs can be
8		calculated separately?
9	A.	Yes. In response to Con Edison interrogatories, NYSERDA
10		stated that Con Edison should consult Exhibit (BH-2).
11		The information contained therein is not precise and the
12		Company requested additional information from NYSERDA.
13		At this time, however, for the programs that I can
14		determine are clearly for energy efficiency only, the
15		cost is\$720/kW (which excludes the \$183/kW for combined
16		heat and power).
17	Q.	Do these dollars per kW amount for NYSERDA take into
18		account factors such as free ridership?
19	A.	No. A free rider is someone who would have installed a
20		measure without the incentive, and according to NYSERDA's
21		reports, many of its programs have free ridership rates
22		that range from 25% - 50%. (See NYSERDA's New York Energy

22

REBECCA CRAFT - UPDATE/REBUTTAL

1 SmartSM Program Evaluation and Status Report (May 2006)). 2 Exhibit __ (RC-3) (containing the excerpted pages from 3 the report). 4 MARK FOR IDENTIFICATION AS EXHIBIT __ (RC-3) 5 In other words, the NYSERDA cost per kW for these programs could be higher, perhaps up to twice, than the 6 7 amounts stated above if free ridership were taken into 8 account. 9 Does NYSERDA use spillover as an offset to free 10 ridership? 11 Yes. Spillover is the concept that other energy Α. 12 efficiency is achieved that is incremental to the paid for energy efficiency and therefore can be an offset to 13 14 free ridership 15 Has the treatment of free ridership and spillover been 16 consistent? 17 A. No. 18 Please explain. Q. 19 In its July 24, 2006 order on Con Edison's recovery of 20 lost revenues under the Rate Plan, the Commission stated that Con Edison would not be allowed to count free 21

ridership in its recovery of lost revenues and did not

1		explicitly permit Con Edison to include spillover as an
2		offset to free ridership. Staff has informed the Company
3		that Staff believes this order means that Con Edison will
4		not be allowed to count spillover as an offset to free
5		ridership when determining lost revenues. In contrast,
6		NYSERDA is allowed to count spillover as an offset to
7		free ridership when providing its program results. This
8		inconsistency is not logical, and whether spillover
9		should or should not be used as an offset should be the
10		result of a consistently applied policy that will enhance
11		the transparency of program results.
12	Q.	Does the Company have a position at this time on free
13		ridership and spillover?
14	A.	No, except that the Commission's treatment of free
15		ridership and spillover should be consistent.
16	Q.	Can the dollar per kW amounts for NYSERDA's permanent
17		programs be directly compared to the Con Edison targeted
18		program?
19	A.	No. When making any comparison between the cost of Con
20		Edison's and NYSERDA's programs, it is important to
21		understand the differences between the two programs. Con
22		Edison's targeted program is designed to use permanent

1 energy efficiency to defer transmission and distribution 2 ("T&D") infrastructure load relief projects because if 3 the energy efficiency measures are not permanent they 4 cannot be relied upon to defer T&D infrastructure work. 5 Accordingly, demand response and load management measures are not eligible for participation in the targeted 6 7 In addition, so that the MW reductions are program. 8 truly incremental to any DSM that customers may have 9 implemented on their own without incentives (i.e., free 10 riders), new construction and total renovation are 11 excluded from participating in the targeted program. Con 12 Edison does this because the strategy is for MW installed to be truly incremental and used in load relief planning. 13 14 In addition, in the targeted program, because the Company 15 seeks to achieve MW over relatively short time periods, 16 new construction and total renovation are often not 17 viable measures. In sum, overall Con Edison is seeking 18 to achieve the more difficult but more verifiable and 19 reliable permanent MW reductions. 20 As an additional point of comparison, how does the cost Q. 21 of Con Edison's targeted program compare to the NYPA 22 energy efficiency programs?

1	A.	The Con Edison targeted program has achieved permanent
2		energy efficiency reductions at a cost of approximately
3		\$1,000/kW. In contrast, since 1991, the NYPA energy
4		efficiency program has achieved approximately 114,000 kW
5		of reduction for approximately \$700 million, or a cost of
6		over \$6,000/kW. (See Excerpt of NYPA response to Con
7		Edison interrogatory 1(a) (Exhibit _ (RC-4)).
8		MARK FOR IDENTIFICATION AS EXHIBIT (RC-4)
9		This cost increased to over \$15,000/kW for programs
10		implemented during the last three years, or approximately
11		15 times the cost of Con Edison's targeted program. (See
12		Exhibit (RC-4) (kW achieved and cost for the NYPA
13		program for the years 2005-07)).
14	Q.	Finally, with respect to cost, Mr. Bomke states (p. 17,
15		lines 7-12), that "Ratepayers paying for DSM are ill
16		served by efforts to merely 'contract for' MW reductions
17		on paper when there is little in the way of actual
18		installations and actual MW reductions attained during
19		the three-year rate plan, yet 'actual' dollars are
20		expected from Con Edison's ratepayers before
21		installations are completed and before MW reductions are
22		achieved." Does Mr. Bomke raise a valid concern?

1	Α.	Yes, however, it is only applicable to NYSERDA's
2		programs, and not to Con Edison's programs. Con Edison
3		only collects funds for costs it has actually incurred
4		under the targeted program, and thus for measures that
5		are installed and verified. In contrast, NYSERDA has
6		collected almost \$95 million from Con Edison ratepayers
7		for the System-wide program to date, but has spent
8		approximately \$9.5 million through July 15, 2007 (of
9		which \$5.7 million comprised incentives paid to
10		customers) and encumbered approximately \$54 million.
11		(Exhibit BH-2, Table 3). I agree with Mr. Bomke that
12		ratepayers should not pay in advance for DSM programs,
13		and this is one of the reasons for having the Company
14		administer energy efficiency programs.
15		THE COMPANY'S DSM GOAL AND PROGRAM
16	Q.	Do you agree with Mr. Saxonis and others (NRDC, E-Cubed)
17		when they state that Con Edison's proposal for 500 MW of
18		permanent load reduction program appears to be small?
19	A.	No, I disagree. As discussed in the Staff Report in the
20		EPS proceeding, there are three different kinds of
21		programs that will be used to reach the 15 \times 15 goal: (1)
22		programs that provide incentives to customers to use more

1	energy efficiency equipment, which we believe should be
2	provided by the utilities; (2) market transformation
3	programs coordinated by NYSERDA; and (3) improvements in
4	building codes and appliance standards. The Report
5	provides (at 122) that Staff expects more than 42% of the
6	State's 15 X 15 goal (11,606/27,389 gigawatt hours) will
7	be achieved through improvements in building codes and
8	appliance standards, a process that Con Edison supports
9	but cannot administer. The Company also believes that a
10	fourth component could be considered, and that is
11	improvements in delivery system efficiency.
12	In addition, NYPA has its own energy efficiency programs
13	in Con Edison's service territory, on which it plans to
14	spend at least \$100 million annually (NYPA Panel, p. 41,
15	line 8), which will also contribute toward achievement of
16	the 15 \times 15 goal. Finally, there has been significant
17	customer migration to ESCOs, which also provide energy
18	efficiency services to their customers. While Con Edison
19	delivers all the electricity to customers in its service
20	territory, the Company provides less than 50% of the
21	commodity of electricity in its service territory.
22	Accordingly, the Company's 500 MW program is a reasonable

1		component of a larger effort that must involve a broad
2		array of parties if the 15 \times 15 goal is to be achieved.
3	Q.	Did Con Edison ask these parties to explain why the
4		Company's 500 MW goal was small considering the other
5		initiatives that were being considered for achievement of
6		the 15 x 15 goal?
7	A.	Yes. But to the extent they responded, none of these
8		parties explained why Con Edison's goal is small in light
9		of these other programs. For example, Mr. Saxonis states
10		that "It was beyond the scope of my analysis to determine
11		energy reduction targets for specific energy providers
12		(e.g., NYPA and Con Edison) and specific energy programs
13		and measures (e.g., building codes and appliance
14		standards)." (Response to Con Edison Interrogatory 18(b)-
15		(d), Exhibit, RC-5)
16		MARK FOR IDENTIFICATION AS EXHIBIT (RC-5)
17		In addition, Mr. Greene from NRDC also agrees that
18		contributions should come from NYPA and building codes
19		and appliance standards, but declines to provide any
20		estimate of what they can achieve and therefore whether
21		Con Edison's 500 MW goal is inadequate. (NRDC Response to
22		Con Edison Interrogatory # 1. Exhibit, RC-6)).

- 21 -

1		MARK FOR IDENTIFICATION AS EXHIBIT (RC-6)
2	Q.	Mr. Chernick states that the 500 MW goal is too small
3		because up to 1,750 MW of relief "would be useful in Zone
4		J." Do you agree?
5	A.	No. Mr. Chernick has misconstrued the most recent
6		reliability needs assessment ("RNA") issued by the New
7		York Independent System Operator. First, Mr. Chernick
8		fails to recognize that Con Edison's goal is not to meet
9		all reliability needs identified in the RNA since these
10		needs encompass the entire New York Control Area. In
11		addition, I have consulted with the Company's Energy
12		Markets Policy Group and have been informed that some
13		minimum volume of the cumulative 1750 compensatory MW
14		must be located in Zones G, H, or I, given the voltage
15		transfer issues through the mid-Hudson Valley region
16		existing as early as 2011. Considering the entire RNA
17		study period, it makes sense first to address the 2011
18		voltage deficiencies with compensatory MW in the Mid-
19		Hudson Valley region, thus reducing the remaining
20		compensatory MW need in later years of the study period.
21		Other utilities will be involved in satisfying this
22		statewide need.

1	Q.	Mr. Bomke and Mr. Dowling state that Con Edison's
2		proposed energy efficiency program is unnecessary and
3		would impose an unnecessary cost burden on ratepayers.
4		Do you agree?
5	A.	No. To achieve the goals that the State and New York
6		City have set out for energy demand reduction, utilities
7		must be involved and have a central role in providing
8		energy efficiency programs.
9		In addition, as I have shown above, it would be a mistake
10		to assume that NYSERDA has achieved demand reductions
11		more cost-effectively than Con Edison. The transfer of
12		the primary responsibilities for demand-side management
13		from the utilities to NYSERDA in 1998 was part of the
14		transition to a competitive energy marketplace and not
15		the result of an analysis concluding that NYSERDA was the
16		best party to implement end-use directed energy
17		efficiency programs or that the utility-run programs were
18		not a cost-effective means of achieving reductions in
19		energy usage.
20		In the DPS Staff proposal (at 21) in the Energy
21		Efficiency Portfolio Standard Proceeding, Case No. 07-M-

1		0548, Staff recognizes that utilities have a proven track
2		record as providers of energy efficiency programs.
3	Q.	Is there information available comparing the cost
4		effectiveness of utility programs to non-utility run
5		energy efficiency programs?
6	A.	Yes, comparative studies on the cost effectiveness of
7		energy efficiency programs suggest that utility run
8		programs (e.g., California and Connecticut) can be twice
9		as cost effective as the programs currently run by
10		NYSERDA and other centralized program administrators
11		(e.g., Efficiency Vermont). (See National Action Plan for
12		Energy Efficiency - Table 6-3, at 6-8 & 6-9, available at
13		http://www.epa.gov/solar/pdf/napee/napee_report.pdf).
14		Utilities have the ability to be more cost effective
15		because they have the system knowledge that can be used
16		to effectively segment markets and target and implement
17		energy efficiency programs.
18	Q.	Mr. Saxonis and Mr. Chernick criticize the Company
19		because according to them, the Company did not put forth
20		a plan for achieving the 500 MW goal. Do you agree?
21	Α.	No. My direct testimony describes the programs that the
22		Company plans to implement. Additional details may be

1		found in the Company's May 2, 2007 DSM petition. The
2		petition explains that the Company would hire additional
3		employees to, among other things: (1) determine the
4		technologies and programs that appear most likely to
5		result in cost-effective reductions in energy demand; (2)
6		develop and take preliminary steps to implement the DSM
7		measures; and (3) develop any necessary support
8		information systems to implement a program of this scale.
9		These efforts would encompass market studies for
10		identification of barriers, development of market
11		segments by, for example, customer and product, and
12		identify new technologies that can be piloted to
13		determine their effectiveness. These are the kinds of
14		steps that Mr. Chernick states (p. 12) are appropriate.
15	Q.	Mr. Chernick also claims (p. 22) that Con Edison has not
16		sufficiently clarified how it intends to use wholesale
17		market effects to evaluate its proposed programs. Is
18		this correct?
19	A.	No. As I stated in my direct testimony (p. 16, lines 14-
20		19), the Company intends to follow the rule adopted by
21		the Commission in the March 16, 2006 demand management
22		order (Case No. 04-E-0572), which provided that market

1		effects should not be considered unless necessary to
2		justify a program that has some other public policy
3		benefit, e.g., help for low-income households. To date,
4		the Company has not relied on market effects to justify
5		any of its programs, so it has not needed to precisely
6		determine wholesale market effects. While Mr. Chernick
7		also questions the Company's calculation of market
8		effects, the precise calculation does not need to be
9		resolved in this proceeding because the Company expects,
10		as has occurred to date, that most programs will be cost
11		justified without the need to determine market effects.
12		Moreover, the market effects and other cost issues, such
13		as Mr. Chernick's claim that a carbon dioxide adder is
14		required, are supposed to be resolved on a statewide
15		basis in the EPS proceeding. Given that, I believe that
16		Con Edison can proceed with its programs without
17		resolution of these adders. When these issues are
18		resolved later in the generic EPS proceeding, they could
19		be reflected in the Company's program, as appropriate.
20	Q.	Finally, Mr. Smith expresses concern that the Con Edison
21		program may limit the ability of third parties to

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REBECCA CRAFT - UPDATE/REBUTTAL

1		contribute to demand response in the Con Edison service
2		territory. Is this a legitimate concern?
3	A.	No. Con Edison's proposed program is for permanent energy
4		efficiency and not demand response. Demand response
5		programs will continue and likely expand. Third party
6		aggregators have enrolled a significant number of MW in
7		the demand response programs, and the Company expects no
8		change. In addition, the Company has contracted with
9		energy service companies under its targeted program.
10		CON EDISON'S TARGETED PROGRAM
11	Q.	Mr. Saxonis states (p. 15) that while he agrees that the
12		targeted program is conceptually sound, there is
13		insufficient evidence to determine whether the targeted
14		program is cost effective and being effectively
15		administered and that an independent evaluation is
16		required. Do you agree?
17	A.	While I agree that the targeted program is sound I don't
18		agree that there is insufficient evidence to determine
19		its cost efficiency and effective administration.
20	Q.	Please explain
21	A.	In its March 16, 2006 Demand Side Management order that I

previously have referred to, the Commission, after full

consideration of the report and plan filed by the rate
plan collaborative, set forth the guidelines establishing
the cost effectiveness of the program. In addition, Con
Edison has kept the DPS Staff informed throughout its
implementation of the targeted program in numerous ways.
In the targeted program, the Company periodically
solicits bids for demand reduction in specific areas that
are slated for T&D load relief by issuing RFPs to defer
the capital investment necessary to implement the load
relief, such as the construction of a new substation or
the installation of additional transformers at an
existing substation. Prior to the release of each RFP,
the Company has met with Staff, either in person or by
phone. Con Edison informs Staff of the networks being
targeted for load relief, the expected capital cost of
such load relief, the expected deferral period, and the
resulting carrying charge deferral that determines the
price that can be paid in addition to the rate plan cap
of \$746/kW.
After bids are received from the potential vendors in
response to the RFPs, Con Edison ranks and scores the
bids by project, price and area. Once this review has

1		been completed and summarized, Con Edison provides these
2		results to Staff on an aggregated basis and provides the
3		cost justification for entering into contracts. The
4		Company begins the final phase of the process and
5		executes contracts with the selected vendors only after
6		the Company has reviewed its decision-making process with
7		Staff.
8		Also, the Company has reviewed its monitoring and
9		verification (M&V) process with Staff and provided Staff
10		with updates and revisions upon request. This M&V
11		process includes pre- and post- installation inspections,
12		as well as annual inspections of the installations at
13		selected sites. Any degradation of load reduction
14		revealed by the annual inspections must be cured by the
15		vendors, or they pay liquidated damages.
16	Q.	Do you agree with Mr. Saxonis that an independent
17		evaluation is required?
18	A.	No. There is no clear justification for ratepayers
19		incurring this additional expense, given the Commission
20		order, collaboration and extensive Staff review and
21		oversight. Mr. Saxonis also provides no estimate of the

are below:

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REBECCA CRAFT - UPDATE/REBUTTAL

- 1 cost of such an evaluation, which would have to be 2 recovered as a program expense.
- 3 Q. Mr. Chernick and Mr. Bomke imply that the current Con
 4 Edison program is not working. Do you agree?

5 Under the targeted program, Con Edison's goal is to Α: 6 defer capital investment. The need for DSM reductions is 7 a function of the need for capital projects and the 8 anticipated in-service dates of such projects. Based on 9 the contracts currently in place and projects that the 10 Company is planning to defer as a result of the targeted 11 program, the reductions needed by June 1st of each year

Date <u>2008</u> <u>2009</u> <u>2010</u> <u>2011</u>

MWs 11 22 20 25

Of the 11 MW needed in 2008, projects representing 9.4 MW have been submitted for Con Edison review, of which 1.4 MW have been installed and verified as of September 18, 2007. Based upon this progress and our review of weekly updates, the Company fully expects to meet the 11 MW goal of permanent demand reductions by June 1, 2008.

In addition, on August 28, 2007, Con Edison issued an RFP for additional demand side management measures under the

1		targeted program. This RFP requests proposals that can
2		result in the deferral of investment through 2012 of
3		major infrastructure projects. Because contractors that
4		wish to participate in the RFP can provide projects over
5		a larger area than past RFPs have provided for, the
6		Company expects greater participation by contractors.
7	Q.	Mr. Chernick states (p. 11, lines 22-26) that Con
8		Edison's current targeted program "relies on non-
9		comprehensive, balkanized programs implemented by
10		contractors that are paid only for peak load reductions.
11		The current practice creates complicated and inefficient
12		incentives for contractors, while encouraging cream-
13		skimming and the creation of lost opportunities." Do you
14		agree?
15	A.	No. First, I note that Mr. Chernick provides no support
16		for these statements. I also note that the Con Edison
17		targeted DSM program was structured in consultation with
18		the targeted collaborative conducted under the currently
19		effective electric rate plan. New York City (Mr.
20		Chernick was one its representatives) as well as other
21		parties were active members of the collaborative.
22		Following the completion of the targeted collaborative,

1	Con Edison filed an implementation plan with the
2	Commission, which stated that its implementation was the
3	result of a "full and open process." (Implementation
4	Plan at 2). Con Edison further stated that it "discussed
5	this proposed plan with the collaborative and that the
6	members generally agree with its outlines."
7	(Implementation Plan at 3). The City has never made any
8	comment or objected to any aspect of the Company's
9	implementation plan filing.
10	In addition, I note that the Company's current targeted
11	program was not designed to be a comprehensive program,
12	but rather a program through which planned capital
13	investments for transmission and distribution can be
14	deferred. Finally, Mr. Chernick's statement that the
15	current targeted program pays only for peak load
16	reductions is off point. The Company pays for permanent
17	energy efficiency and demand reductions that coincide
18	with network peaks because that provides significant
19	value to the Company and its customers due to the T&D
20	load relief deferral. In addition, the price paid per kW
21	includes the proxy value of \$746/kW for avoided energy
22	and capacity, in addition to the T&D deferral value.

1	Q.	But Mr. Chernick states in his testimony that he cannot
2		find reference to the \$746/kW value. Can you explain
3		this value?
4	A.	Yes. The Rate Plan (Joint Proposal at 66-67), provided
5		that the Con Edison targeted program would be capped at
6		achieving 150 MW for \$112 million exclusive of the value
7		of the T&D deferral. Accordingly, the \$746/kW cap was
8		deemed to be the proxy for the avoided generation
9		capacity and energy costs under the targeted program,
10		exclusive of the value of the T&D deferral.
11	Q.	Mr. Bomke criticizes the Company's targeted program and
12		states (page 16, lines 13-15) "Con Edison demonstrated
13		significantly less than superior achievement by
14		contracting for zero MW in Rate Year 1 ending March 31,
15		2006." Is this criticism valid?
16	Α.	No. Mr. Bomke simply failed to note that Con Edison was
17		prohibited from issuing any RFPs under the Rate Plan
18		until after the Commission issued its demand management
19		order on March 16, 2006. Following review of the order
20		and review of the RFP with DPS Staff, the Company issued
21		its first RFP on April 14, 2006 and NYSERDA issued its
22		first proposal under the System-wide program on May 1,

1		2006. (NYSERDA System-Wide Demand Reduction Program Bi-
2		monthly Report for the Period Ending May 15, 2006
3		(Exhibit (RC-7))
4		MARK FOR IDENTIFICATION AS EXHIBIT (RC-7)
5	Q.	Do you understand Mr. Bomke's concern?
6	A.	Yes. As discussed above, the Company believes that a
7		decision-making collaborative will only serve to delay
8		the implementation of needed electric reduction programs.
9		This is why the Company was not able to issue any new
10		RFPs, and NYSERDA was unable to issue System-wide plan
11		proposals until the second rate year of the current rate
12		plan. Thus, Con Edison proposes that any new
13		collaborative would be a reporting and consulting
14		collaborative, not a decision-making collaborative.
15		CON EDISON'S DSM PROGRAM COST RECOVERY
16	Q.	Mr. Bomke states that all electric customers should not
17		be required to contribute to the cost of DSM programs.
18		Do you agree?
19	Q.	No. Mr. Bomke states "because some customers, who have
20		already invested heavily in their own energy efficiency
21		improvements can derive no further energy efficiency
22		benefits but will suffer discrimination because they will

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REBECCA CRAFT - UPDATE/REBUTTAL

be expected to subsidize other customers, who have not

2		made comparable investments." First, Mr. Bomke's
3		proposal is simply unworkable because there is no simple
4		way to determine which customers have invested "heavily"
5		and would derive no further benefit. The administrative
6		costs of such a system would outweigh any possible
7		benefit. I note that this NYECC claim was also raised
8		and rejected by the Commission in the last electric rate
9		case. The Commission stated there that "information
10		provided in support of such a broad exemption is
11		anecdotal at best." (Case 04-E-0572, Order Adopting Joint
12		Three-Year Rate Plan at 90 (March 24, 2005)). Here
13		again, NYECC has provided only conclusory statements in
14		support of its proposed exemption.
15	Q.	In addition, the NYPA Panel argues that NYPA should be
16		exempt from paying for the Con Edison program. Do you
17		agree?
18	Α.	No. The NYPA Panel states that the NYPA customers should
19		be exempt because its customers are already paying for
20		and have access to DSM programs." (p. 41, lines 9-10).
21		But this NYPA claim is contradicted by one of its own
22		customers, NYCHA, which submitted testimony stating that
		35

1		it should have access to the Con Edison programs. Mr.
2		Kass of NYCHA states (pp. 8-9) that if "NYCHA's remaining
3		268 properties and 135,000 apartments could participate
4		in the [Con Edison] program, the impact on energy savings
5		and CO2 emissions would be significant not only for NYCHA
6		but for the City of New York." There are direct gains to
7		be realized if NYPA customers participate in Con Edison's
8		programs and indirect gains as well. Accordingly, like
9		all other customers, they should be required to
10		contribute their fair share.
11	Q.	Does anyone else state that NYPA customers should be
12		exempt?
13	A.	Yes, Mr. Chernick states (p. 31, lines 5-8) that the
14		Company should negotiate with each NYPA customer that is
15		interested in participating in the Con Edison program
16		(Mr. Kass makes a similar claim). This proposal is
17		clearly unworkable and would create an extremely
18		complicated, time consuming and expensive program
19		structure that could not be easily replicated and scaled
20		up.

REBECCA CRAFT - UPDATE/REBUTTAL

1		Moreover, as shown above, NYPA's programs to date have
2		been significantly more expensive than the Con Edison
3		programs.
4		DSM FOR EAST 13 TH LOAD POCKET
5	Q.	Mr. Bush argues that the Company should not have issued
6		an RFP under the targeted program for the East 13 th Street
7		load pocket, expressing a concern (pp. 8-9) that this
8		project requires an "extensive" amount of DSM and that
9		system needs will not be met if the DSM is not obtained.
10		Do you agree?
11	A.	No. As I noted above, this RFP was issued under the
12		current Rate Plan so that the Company could achieve the
13		150 MW goal. The RFP was larger (more MW were requested)
14		than previous RFPS and also requests proposals for
15		projects over a larger geographic area. For example,
16		under the current rate plan, for contracts issued to
17		date, the average MW per year per network varies from
18		0.25 MW/year to 4.0 MW/year with 85% of the projects
19		requiring load reduction from a single network. For the
20		East 13 th Street project, energy efficiency projects can
21		be implemented over 10 networks to supply the required
22		load relief and thus would require an average of

REBECCA CRAFT - UPDATE/REBUTTAL

- 1 approximately 1.6 MW/year which is well within the above
- 2 successfully contracted range. In addition, the
- 3 Infrastructure Investment Panel addresses Mr. Bush's
- 4 claim that the system needs will not be met if the MW are
- 5 not obtained.
- 6 Q. Does this conclude your update and rebuttal testimony?
- 7 A. Yes. It does.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. Case 07-E-0523

ANTICIPATED SCHEDULE FOR 500 MW OF DEMAND REDUCTIONS BY SUMMER 2016 REVISED

	RY1	RY2	RY3	4/2012	4/2013	4/2014	4/2015	4/2016	
									TOTAL
Targeted Program	0	2	29	32	21	13	17	24	138
Enlightened Energy	5	20	30	45	55	65	70	72	362

Total 500

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

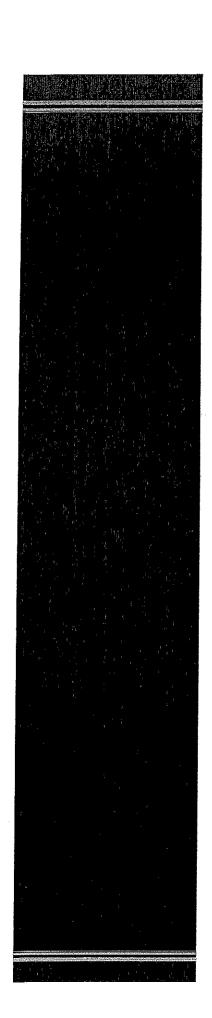
ANTICIPATED DSM PROGRAM BUDGET FOR RATE YEARS 2008 THROUGH 2010 REVISED

	RY 1	RY2	RY3	Total
Program Funding (\$M)	3.7	16.4	44	64.1
Administration Funding (other than Labor)(\$M)	0.9	1.3	3.3	5.5
Labor (Included in revenue requirement)	2.0	3.5	3.8	9.3
Megawatt Reduction (MW)	5	22	59	86

Notes:

Program funding includes customer incentives

Administration funding includes outside services, software and hardware to support areas such as monitor & verification, market analysis, program development, advertising, sales and payment processing



NEW YORK ENERGY \$MARTSM PROGRAM EVALUATION AND STATUS REPORT

YEAR ENDING DECEMBER 31, 2006

REPORT TO THE SYSTEM BENEFITS CHARGE ADVISORY GROUP

FINAL REPORT MARCH 2007



NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY



Gross Savings

The objective of the M&V evaluation review is to verify the estimate of the program's cumulative savings. Based on Nexant's review, as of December 31, 2006, the program has resulted in the energy savings and demand reductions shown in Table 3-7.

Net Savings

The final step to determining net energy savings is attribution analysis. Attribution analysis determines, through various methods, whether the gross savings estimate from the M&V activities should be adjusted downward or upward for freeridership or spillover. Adjustments for freeridership and spillover, and the ultimate program net-to-gross ratio and net savings are shown in Table 3-7.

Table 3-7. PLMP Cumulative Annual Energy and Peak Demand Savings (through December 2006)

	Program Reported Savings	M&V Realiza- tion rate	Adjusted Gross Savings	Freerider- ship	Spillover	Net-to- Gross Ratio ^l	Net Savings				
LC/S & DEGI (Demand Response Measures) MW	242.4	1.02	247.2	24%	25%	0.95	234.9				
PDRE (MW)	43.7	1.02	44.5	25%	37%	1.03	45.9				
Cooling Recom- missoning (MW)	8.6	1.0	8.6	0%	0%	1.0	8.6				
IM (MW)	245.7	0.88	216.2	10%	22%	1.09	235.7				
Total MW	540.3	_	516.5	-	-	_	525				
PDRE (MWh)	88,784	1.02	90,560	25%	37%	1.03	93,276				
Cooling Recom- missoning (MWh)	24,700	1.0	24,700	0%	0%	1.0	24,700				
Total MWh	113,484	-	115,260	-	-	_	117,977				

¹ Net-to-Gross Ratio = (1-Freeridership) * (1+Spillover).

3.5 Enhanced Commercial and Industrial Performance Program

3.5.1 Program Description

The ECIPP serves commercial and industrial businesses, healthcare facilities, and state and local governments. It provides information and incentives to improve existing building loads, non-building loads, and process equipment. Building off the successful CIPP and SEC Program, ECIPP is a consolidation of the two programs that simplifies customer access to incentives by having a single point of entry into NYSERDA and by providing to customers a streamlined and simplified process to the marketplace.

When separate programs, CIPP and SEC focused on different customers. CIPP provided incentives to ESCOs and other contractors to promote energy efficiency-related capital improvement projects. NYSERDA provides financial incentives on a performance-basis through the ESCO's measurement and

3.5.4 Program Impact Evaluation

This section presents cumulative annual energy savings for the program from inception through December 31, 2006. Savings estimates and adjustments are shown in Table 3-11.

Gross Savings

The objective of the M&V evaluation review is to verify the estimate of the program's cumulative savings. Based on Nexant's review, as of December 31, 2006, the program has resulted in the energy savings and demand reductions shown in Table 3-11.

Net Savings

The final step to determining net energy savings is attribution analysis. Attribution analysis determines, through various methods, whether the gross savings estimate from the M&V activities should be adjusted downward or upward for free ridership or spillover. Adjustments for free ridership and spillover, and the ultimate program net-to-gross ratio and net savings are shown in Table 3-11.

Table 3-11. ECIPP Cumulative Annual Energy and Peak Demand Savings (Through December 2006)

	Program Reported Sayings	Realiza- tion Rate	Adjusted Gross Savings	Freerider- ship	Spillover	Net-to- Gross Ratio	Net Savings
		Commercial/I	industrial Pe	formance Pro	gram		
MWh/year	724,649	1.01	731,900	31%	44%	1.04a	757,427
MW	157.2	0.77	121.0	31%	44%	1.04a	125.3
		Sma	ert Equipmen	it Choices			
MWh/year	121,288	0.94	112,640	51%	45%	0.7b	78,848
MW On-Peak	25.5	0.93	23.9	51%	45%	0.7b	16.7
MMBtu/year	6,593	1.0	6,593	51%	45%	0.7b	4,615
	Enhanced Co	mmercial/Ind	ustrial Perfo	mance Progra	m (ECIPP) - To	tal	
MWh/year	845,937	N/A	844,540	N/A	N/A	N/A	836,275
MW On-Peak	182.8	N/A	144.9	N/A	N/A	N/A	142.0
MMBtu/year	6,593	N/A	6,593	N/A	N/A	N/A	4,615

a Net-to-Gross Ratio = 1-Freeridership+Spillover (a weighted average of the NTG ratios estimated in the previous MCAC analysis and this current analysis is shown here).

Non-Energy Impacts

The Summit Blue MCAC team evaluated non-energy impacts for both the CIPP and SEC programs. Key results are presented in Table 3-12. Non-energy impacts (NEIs) are expressed as a percentage of energy savings.

b Net-to-Gross Ratio = (1-Freeridership) * (1+Spillover).

3.6.4 Program Impact Evaluation

This section presents cumulative annual energy savings for the program elements from inception through December 31, 2006.

Gross Savings

The objective of the M&V evaluation review is to verify the estimate of the program's cumulative savings. Based on Nexant's review, as of December 31, 2006, the program has resulted in the energy savings and demand reductions shown in Table 3-16. Note that the realization rate shown is applicable to the entire program period.

Net Savings

The final step to determining net energy savings is attribution analysis. Attribution analysis determines, through various methods, whether the gross savings estimate from the M&V activities should be adjusted downward or upward for freeridership or spillover. Adjustments for free ridership and spillover, and the ultimate program net-to-gross ratio and net savings are shown in Table 3-16. Adjustments for freeridership and spillover were not estimated for the Hospitality Lighting Program. For Commercial HVAC, the savings estimates were determined by the MCAC team based on market research.

Table 3-16. New York Energy \$martSM Business Partners Cumulative Annual Energy and Peak Demand Savings (through December 2006)

	Program- Reported Sayings	Realization Rate	Adjusted Gross Savings	Freeridership	Spillover	Net-to- Gross Ratio ¹	Net Savings
			Small Comme	rcial Lighting			
MWh/year	33,541	1.0	33,541	39%	79%	1.09	36,559
MW On- Peak	8.3	1.0	8.3	39%	79%	1.09	9.0
			Premium-Effic	iency Motors²			
MWh/year	9,689	1.0	9,689	67%	168%	0.88	8,822
MW On- Peak	1.8	1.0	1.8	67%	113%	0.70	1.3
			Commercia	al HVAC			
MWh/ year	6,767	N/A	6,767	N/A	N/A	N/A	6,767
MW On- Peak	2.0	N/A	2.0	N/A	N/A	N/A	2.0

Table 3-26. High Performance New Buildings Cumulative Annual Energy and Peak Demand Savings (through December 2006)

	Program- Reported Savings	Realiz- ation Rate	Adjusted Gross Savings	Freerider- ship	Spillover	Net-to- Gross Ratio ¹	Net Savings
MWh/year	193,586	1.06	205,201	40%	85%	1.22	250,345
MW	41.4	1.06	43.9	40%	85%	1.22	53.5

¹ Net-to-Gross Ratio = 1-Freeridership+Spillover (a weighted average of the NTG ratios estimated in the previous MCAC analysis and this current analysis is shown here).

The MCAC team last evaluated non-energy impacts (NEIs) for the New Construction Program in 2005. The study found that customers valued NEIs at 40% of the value of the energy savings achieved in their new buildings. This value is similar to the value of NEIs found in an earlier study on the NCP.

3.9.5 Process Evaluation

A best practices study, the third in a series of process evaluation reports for the NCP, was conducted by Research Into Action. The prior reports, completed in 2004 and 2005, showed the NCP was a valuable and effective program focused on acquiring energy savings within a market transformation framework. The program and project managers currently report that several factors, including the threat of insufficient power supplies in New York, have changed their emphasis to resource acquisition and demand reduction, with market transformation as an important but secondary goal. The managers requested this best practices review of other notable new construction programs throughout the country to compare various approaches and to uncover useful insights and ideas that might benefit the program. The following topics were addressed in this study:

- Balancing resource acquisition with market transformation
- Emphasizing LEED® or green projects
- Alternative program delivery models
- Reaching the right decision-makers
- Conducting successful scoping meetings
- Benchmarking and monitoring usage over time
- Coordinating with other programs

After working with the program managers to identify nine other exemplary new construction programs,² evaluators gathered and analyzed information from best practices literature, program materials, and interviews with program managers. Results of this best practices study are provided below.

² Programs include those from National Grid, NSTAR, Northeast Utilities, California, the Energy Trust of Oregon, MidAmerican, Xcel Energy, New Jersey, and Wisconsin.

Table 3-30. FlexTech Program Cumulative Annual Energy and Peak Demand Savings (through December 2006)

	Program- Reported Savings	Realization Rate	Adjusted Gross Savings	Freerider- ship	Spillover	Net-to- Gross Ratio ¹	Net Savings
MWh/ year	611,962	1.0	611,962	25%	48%	1.14	697,637
MW	114.0	1.0	114.0	25%	48%	1.14	130.0
MW Enabled	9.0	1.0	9.0	25%	48%	1.14	10.2
MMBtu	2,513,073	1.0	2,513,073	25%	48%	1.14	2,864,903

¹ Net-to-Gross Ratio = 1-Freeridership+Spillover (a weighted average of the NTG ratios estimated in the previous MCAC analysis and this current analysis is shown here).

The MCAC team last evaluated NEIs for the Technical Assistance Program in 2004. The study found that customers valued NEIs at 37-55% of the value of the energy savings achieved in their new buildings.

Table 4-9. Single Family Home Performance Program Cumulative Annual Energy and Peak Demand Savings (Through December 2006)

	Program- Reported Savings	Realization Rate	Adjusted Gross Savings	Freeridership	Spillover	Net-to- Gross Ratio ¹	Net Savings
		New York I	NERGYSTA	R Labeled Homes I	nitiative		
MWh/year	7,835	1.01	7,914	28%	47.6%	I.17	9,259
MW On- Peak	0.8	1.11	0.9	28%	47.6%	1.17	1.1
MMBtu	501,588	1.0	501,588	28%	47.6%	1.17	586,858
		Home	Performance:	with ENERGY STA	IR .		
MWh/year	12,909	1.01	13,031	26%	41%	1.12	14,595
MW On- Peak	1.9	1.07	2.0	26%	41%	1.12	2.2
MMBtu	573,623	1.0	573,623	26%	41%	1.12	642,458
		Single Fam	ily Home Perf	ormance Program	- Total		
MWh/year	20,737	N/A	20,945	N/A	N/A	N/A	23,854
MW On- Peak	2.7	N/A	2.9	N/A	N/A	N/A	3.3
MMBtu	1,075,211	N/A	1,075,211	N/A	N/A	N/A	1,229,316

¹ Net-to-Gross Ratio = 1-Freeridership+Spillover (a weighted average of the NTG ratios estimated in the previous MCAC analysis and this current analysis is shown here).

The MCAC team examined non-energy impacts (NEIs) for ENERGY STAR Labeled Homes in 2005, and NEIs for Home Performance were last studied in 2003. Results from the most recent evaluations are shown in Table 4-10.

Table 4-10. Single Family Home Performance NEI Results

Results from Direct Query Approach (year of study)	Percentage of Energy Savings
ENERGY STAR New Homes (2005)	51%
Home Performance with ENERGY STAR (2003)	50%

4.5 Multifamily Building Performance Program

4.5.1 Program Description

The Multifamily Building Performance Program has two tracks: one for new construction (and complete gut-rehabilitation projects) named the ENERGY STAR Multifamily Building Program (EMP); and one for existing buildings named the Multifamily Building Performance Initiative.

Table 4-13. Multifamily Building Performance Program Cumulative Annual Energy and Peak Demand Savings (Through December 2006)

	Program- Reported Savings	Realization Rate	Adjusted Gross Savings	Free- ridership	Spillover	Net-to- Gross Ratio	Net Savings
		Assi	sted Multifami	ly Program (AM	(P)		
MWh/year	28,362	0.97	27,511	27%	15%	0.84	23,109
MW On- Peak	1.7	1.26	2.1	27%	15%	0.84	1.8
MMBtu	167,303	1.0	167,303	27%	15%	0.84	140,541
		Comprehens	ive Energy Ma	nagement (CEM	() Program		
MWh/year	3,192	0.97	3,096	2%	18%	1.16	3,592
MW On- Peak	0.8	1.77	1.4	2%	18%	1.16	1.6
		1	.ow Income Di	rect Installation			
MWh/year	11,494	1.0	11,494	0%	0%	1.0	11,494
MW On- Peak	1.6	1.0	1.6	0%	0%	1.0	1.6
		Multifamily	Building Perf	ormance Progra	m -Total		
MWh/year	43,048	N/A	42,101	N/A	N/A	N/A	38,209
MW On- Peak	4.1	N/A	5.1	N/A	N/A	N/A	5.0
MMBtu	167,303	N/A	167,303	N/A	N/A	N/A	140,541

¹ Net-to-Gross Ratio = (1-Freeridership) * (1+Spillover).

The MCAC team has examined non-energy impacts for both elements of the combined Multifamily Building Performance Program. The Assisted Multifamily Program was studied in 2003, while the Comprehensive Energy Management Program was the focus of an evaluation in 2004. Results are shown in Table 4-14.

Table 4-14. Multifamily Building Performance NEI Results

Results from Direct Query Approach (year of study)	Percentage of Energy Savings
Assisted Multifamily Program (2003)	. 54%
Comprehensive Energy Management Program (2004)	22-55%

Table 4-18. Market Support Program Cumulative Annual Energy and Peak Demand Savings (Through December 2006 unless noted)

	Program- Reported Savings	Realiza- tion Rate	Adjusted Gross Savings	Free- ridership	Spillover	Net-to- Gross Ratio ¹	Net Savings
		ENERGY	STAR Products	and Marketin	g (2005) ²	este de la port	
MWh/year	n/a	n/a	n/a	n/a	n/a	n/a	238,828
MW On-Peak	n/a	n/a	n/a	n/a	n/a	n/a	54.0
MMBtu	10/a	n/a	n/a	n/a	n/a	n/a	325,628
ne na nave a vistoria			Keep (Zool			
MWh/year	29,460	1.0	29,460	18%	15%	0.94	27,781
MW On-Peak	13.6	1.0	13.6	18%	15%	0.94	12.8
			Bulk Pm	chase			
MWh/year	19,451	2.03	39,397	10%	5%	0.95	37,230
MW On-Peak	3.9	1.62	6.4	10%	5%	0.95	6.0
MMBtu	24,307	0.71	17,240	10%	5%	0.95	16,292
		Ma	rket Support P	rogram — Tota	1		
MWh/year	n/a	n/a	n/a	n/a	n/a	n/a	303,839
MW On-Peak	n/a	n/a	n/a	n/a	n/a	n/a	72.8
MMBtu	n/a	n/a	n/a	n/a	n/a	n/a	341,920

¹ Net-to-Gross Ratio = (1-Freeridership) * (1+Spillover).

The MCAC team has examined non-energy impacts for CFLs and clothes washers. Results from the most recent direct query analysis on both of these measures are shown in Table 4-19.

Table 4-19. Market Support Program NEI Results

Results from Direct Query Approach (year of study)	Percentage of Energy Savings
Clothes Washers (2004)	27%
CFLs (2005)	60%

4.7 Communities and Education Program

4.7.1 Program Description

The Communities and Education Program provides face-to-face contact with New York residents on energy efficiency topics and NYSERDA programs through schools, local seminars and workshops, and events. The ultimate goal of the program is to help develop an energy-conscious society in New York with the desire and capability to create more efficient and sustainable communities. More immediate goals of the program include: 1) educating teachers, students, homeowners, renters, representatives of

² Savings for ENERGY STAR products and marketing are through year-end 2005. Year-end 2006 savings are currently being estimated by the MCAC evaluation team and will be presented in the first quarter 2007 report.

Excerpt From NYPA Response to Con Edison Interrogatory 1(a):

New York Power Authority

Summary of Projects Completed in NYC and Westchester

Data as of August 31, 2007

Year	Number Of			
Completed	Projects	Total Installed Cost	KW	MWH
1991	29	\$7,443,150	3,555.1	17,640
1992	33	\$12,949,520	7,032.1	35,687
1993	38	\$17,120,163	9,283.1	48,431
1994	34	\$19,635,137	10,849.5	57,697
1995	34	\$7,185,093	3,620.4	19,385
1996	78	\$27,942,271	9,388.0	55,117
1997	87	\$48,003,097	13,948.8	76,751
1998	95	\$46,922,944	11,739.0	75,253
1999	146	\$37,089,640	8,563.6	51,393
2000	131	\$81,986,507	4,983.8	29,402
2001	109	\$90,708,018	7,572.0	38,779
2002	108	\$80,156,857	4,828.1	27,507
2003	110	\$41,101,863	6,551.7	34,397
2004	49	\$27,028,366	2,526.6	14,161
2005	47	\$38,561,730	4,403.9	22,593
2006	51	\$47,705,504	3,905.2	22,139
2007	30	\$69,154,290	1,867.2	16,991
	1,209	\$700,694,147	114,617.9	643,322

Staff Response to Con Edison Interrogatory 18(b)-(d):

Mr. Saxonis states on page 5, line 20 through page 7, line 7, that he has calculated estimated energy reduction goals specific to Con Edison territory and that it results in the need for approximately 2,000 MW and 9,752,000 MWh of cumulative reduction that will be needed by 2015 to meet the State's goals from Con Edison full service, Retail Choice and New York Power Authority customers:

- a. Please state how much of this Staff expects to be achieved by the New York Power Authority.
- b. Please state how much of this Staff expects to be achieved from enhancements to building codes and appliance standards.
- c. Mr. Saxonis states on page 7, lines 1-4 of his testimony that Con Edison's "proposed program would represent only a relatively small component of the initiatives needed to achieve the EPS goal." Please state Mr. Saxonis's belief as to how much Con Edison should be expected to achieve after a. and b. above are taken into account.

Response:

b., c., d. The estimate of the energy reduction goal was calculated and included in my testimony exclusively to illustrate the relationship of Con Edison's proposed 428 MW energy savings goal to a preliminary estimate of MW reduction needed to satisfy the goals of the EPS. It was beyond the scope of my analysis to determine energy reduction targets for specific energy providers (e.g., NYPA and Con Edison) and specific energy programs and measures (e.g., building codes and appliance standards). These topics will be investigated in detail by a working group established by ALJ Stein as part of the EPS Proceeding (Working Group III—Establishing targets and benchmarks, measurement and verification, electricity and gas). I was appointed by Judge Stein to be a co-convener of this working group. Rich Miller is Con Edison's representative.

NRDC Response to Con Edison Interrogatory 1(a):

Question 1:

Mr. Greene states on page 12, line 19 through page 13, line 1 that "The Company should procure all cost-effective energy efficiency and should be required to achieve a 15 percent reduction in electricity consumption below forecasted levels by 2015, in accordance with New York State's energy efficiency goal."

Question 1a:

a. Please state NRDC/Pace's position on how much of the State's energy efficiency goal should be achieved through enhancements to appliance standards and building codes, and how much of that would be achieved in Con Edison's service territory.

Response:

Enhancements to codes and standards should only be included in achieving the State's 15 by '15 goal, and in achievements in Con Edison's service territory, if they are new and can provide measurable and verifiable energy savings before 2015. When new codes and standards will be adopted or what level they will be set at is impossible to predict at this point, and therefore we cannot estimate what the amount would be statewide or within Con Edison's territory. Absent new adoption of new codes and standards, Con Edison should pursue all measures in its service territory that are cost-effective assuming there is no contribution from new codes and standards.

CON EDISON SYSTEM-WIDE DEMAND REDUCTION PROGRAM BI-MONTHLY REPORT FOR THE PERIOD ENDING MAY 15, 2006

BI-MONTHLY SUMMARY

On March 24, 2005, the New York State Public Service Commission, in Case 04-E-0572, issued an Order adopting a rate plan for the Consolidated Edison Company of New York, Inc. (Con Edison). One aspect of the rate plan was the establishment of demand side management goals to be achieved through demand-reduction programs administered by NYSERDA and by Con Edison. As part of that effort, NYSERDA was directed to submit bi-monthly reports to inform both the Department of Public Service (DPS) and Con Edison of its progress.

This bi-monthly evaluation report of the **Con Edison System-Wide Demand Reduction Program (SWP)** contains information on initial program activity through May 15, 2006. Beginning with the report for period ending July 15, 2005, data will be presented in the following tables. (1) Table 1 -- SWP Budget Status by SWP Program Area (2) Table 2 – Demand Savings by SWP Program Area, (3) Table 3 -- Energy Savings by SWP Program Area (4) Table 4 – Summary of SWP Data, and (5) Table 5 -- Solicitations Newly Released or Updated Through May 15, 2006. Formatting for the tables is presented below.

Table 1. SWP Budget Status by SWP Program Area Format

Program	Budget	Encumbered² Funds	Paid
Peak/Aggregate Load Reduction	\$53,000,000		
Combined Heat & Power	\$15,000,000		
Commercial/Industrial Performance	\$13,000,000		
Residential A/C Load Management	\$12,400,000		
New Construction	\$7,000,000		
Building Performance & Financing	\$6,600,000		
FlexTech/Technical Assistance	\$5,000,000		
Total	\$112,000,000		
Note: Sums may not total due to rounding.			

¹ Case 04-E-0572 Proceeding on the Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service, Order Adopting Three-Year Rate Plan, Issued and Effective March 24, 2005.

² Encumbered funds are dollars associated with signed contracts.

Table 2. Demand Savings by SWP Program Area Format

	Anticipated kW Savings From Encumbered Funds			Installed kW Savings (unadjusted)		
Program Area	Target per SWP Action Plan (kW)	Cumulative through current bi- monthly period	Current Bi- Monthly Period Only	Cumulative through current bi- monthly period	Current Bi-Monthly Period Only	
Peak/Aggregate Load Reduction	82,000					
Combined Heat & Power Performance	14,000					
Commercial/Industrial Performance	18,000					
Residential A/C Load Management	13,000					
New Construction and Green Buildings	9,000					
Building Performance & Financing	7,000					
FlexTech Technical Assistance	22,000					
Subtotal	165,000					
Adjustment for program overlap ¹	-15,000					
Total SWP Program	<u>150,000</u>					

Table 3. Energy Savings by SWP Program Area Format

	_	h Savings From red Funds	Installed kWh Savings (unadjusted)		
Program Area	Cumulative through current bi-monthly period Only		Cumulative through current bi- monthly period	Current Bi- Monthly Period Only	
Peak/Aggregated Load Reduction					
Combined Heat & Power Performance					
Commercial/Industrial Performance					
Residential A/C Load Management					
New Construction					
Building Performance & Financing					
Technical Assistance/FlexTech					
Subtotal					
Adjustment for program overlap ¹					
Total Program					

Table 4. Summary of SWP Data Format

		-	Anticipated Savings From Encumbered Funds		Installed Savings	
	Target per SWP Action Plan	Cumulative through current bi- monthly period	Current Bi- Monthly Period Only	Cumulative through current bi- monthly period	Current Bi- Monthly Period Only	
Total Demand Reduction (kW)	150,000¹					
Energy Savings (kWh)	N/A					
Dollars (\$)	\$112,000,000					
SWP Cost (\$) per kW	\$746/kW					

Table 5. Solicitations Newly Released or Updated through May 15, 2006

Solicitation Name	Solicitation Date	Solicitation Closing Date
Smart Equipment Choices Program ¹	May 1, 2006	September 30, 2006
Loan Fund	May 8, 2006	October 31, 2006
Peak Load Reduction Program	May 15, 2006	September 29, 2006
	Smart Equipment Choices Program ¹ Loan Fund	Smart Equipment Choices Program ¹ May 1, 2006 Loan Fund May 8, 2006

Smart Equipment Choices will merge into the Commercial/Industrial Performance Program on November 1, 2006.

PROGRAM PROGRESS

In addition to offering incentive programs, NYSERDA staff have taken the following actions to facilitate program access, improve customer service, and expand measure level data tracking capabilities. Examples of this include:

- NYSERDA program staff have begun to consolidate several incentive programs to further facilitate
 program participation and reduce potential market confusion. For example, the Smart Equipment
 Choices (SEC) Program will be integrated into the Enhanced Commercial/Industrial Performance
 Program (ECIPP) on November 1, 2006. Also, the ECIPP will include incentives for Combined
 Heat and Power (CHP).
- NYSERDA has implemented an aggressive program to consolidate and enhance data management and integration. By the end of 2006, most building programs managed by NYSERDA will be tracked and managed within one SQL server, web-based data management system. In addition, to facilitate reporting as mandated by the Order programs have been standardization and many revisions were made to provide improved measure level detail to the DPS and to Con Edison
- NYSERDA staff have begun development of an eCommerce application path. Due to the
 importance of the SWP and the need to increase customer participation in the Con Edison service
 territory, the Peak Load Reduction Program (PLRP) was chosen as the first program to receive this
 on-line application module. Additional programs will follow through the remainder of 2006 and
 early 2007.

Programs staff have implemented significant changes and conducted extensive outreach efforts to implement services to achieve the goals of the SWP. Program updates, stakeholder meetings, improved measure level data tracking, program consolidation and other related efforts are listed by program in the following section. To facilitate reporting of SWP information, work is ongoing to integrate all SWP programs into a single web-based, portal database. Currently, three programs (the Peak Load Reduction Program, the Aggregated Load Reduction Program, and the Commercial/Industrial Performance Program) have been fully integrated into the database. Additional programs will complete integration into the database over the next six (6) months. Programs have also improved their quality assurance/quality control (QA/QC) process to provide a higher level of accuracy with regard to realized savings.

SWP program areas include component programs as described below.

PEAK/AGGREGATED LOAD REDUCTION PROGRAMS

---- Peak Load Reduction Program

- Staff developed an initial SWP outreach plan and met with the SWP Marketing Collaborative on March 17, 2006 to discuss opportunities and challenges. The Marketing Collaborative provided significant feedback which was then incorporated into the Marketing Plan.
- Numerous presentations were done by PLRP staff in New York City, including contractor sessions on March 7, and March 16.
- In March 2006, PLRP staff presented the services available from NYSERDA programs at Con Edison's hourly pricing workshops. Attendees included large end users, ESCOs, RIPs and consultants.
- Revisions to the PLRP solicitation released May 15, 2006 included program
 enhancements for the SWP. For Con Edison service territory customers, steam
 incentives were enhanced; and facility, contractor caps and project time frames were
 increased.
- During May 2006, NYSERDA met with staff from Con Edison and the DPS to discuss Total Resource Cost Test (TRCT) algorithms and inputs for steam projects funded under the SWP. The Commission-approved Action Plan provided direction for the TRCT analysis. The parties discussed and agreed on various inputs needed for the TRCT analysis. Steam projects as a stand-alone measure may not pass the TRCT.

---- Aggregated Load Reduction Program

• On March 2, 2006 PLRP staff met with DG/CHP contractor representatives to develop program concepts for the Aggregated Load Reduction Program.

ENHANCED COMMERCIAL/INDUSTRIAL PERFORMANCE PROGRAM

---- Commercial Industrial Performance Program (CIPP)

• SWP incentives were added to the existing solicitation, PON 984, on May 1, 2006. All projects encumbered after March 16, 2006 and all applications submitted after May 1, 2006 in Con Edison service territory will receive SWP funding. Caps and incentives were adjusted to encourage additional demand reductions in the Con Edison service territory.

---- Smart Equipment Choices

• The SEC Program's PON 968 was revised on May 1, 2006 to include SWP incentives. Incentives for many measures were increased to better target demand reductions in the Con Edison service territory.

COMBINED HEAT AND POWER PERFORMANCE

• A CHP incentive module is being designed as a component of the CIPP. CHP incentives are expected to be added to the CIPP PON in July, 2006.

RESIDENTIAL A/C LOAD MANAGEMENT

• NYSERDA staff are working in conjunction with DPS staff to develop a program model(s). Staff have begun interviewing several market stakeholders regarding program design issues.

NEW CONSTRUCTION AND GREEN BUILDINGS (NCP)

• A new solicitation for the NCP, PON 1035, will be issued in June, 2006. Planned changes to address the SWP include an increase of NYSERDA's incentive caps to \$400,000 in the upstate areas and to \$1,000,000 in the Con Edison service territory.

BUILDING PERFORMANCE AND FINANCING PROGRAMS

----Loan Fund

- The Loan Fund was revised and reissued for the SWP on May 8, 2006. Con Edison electric customers are now eligible for a 6.5% interest rate. Several new measures were added to the pre-qualified measures list in the application to facilitate demand reductions in the Con Edison service territory.
- An outreach meeting was held in New York City for 35 customers and sales representatives for Grainger supply regarding SWP programs. This and other similarly planned meetings will facilitate key stakeholder understanding of program opportunities and increase program participation.

----Small Commercial Lighting Program (SCLP)

• Bonus incentives will be added to the SCLP for projects completed in the Con Edison service territory in July, 2006. This is expected to increase program participation in New York City and Westchester, especially with ally design firms.

---- Building Performance Program

• The Building Performance Program is a new program design specifically in response to the SWP and its initial solicitation, PON 970, is expected to be issued in July, 2006.

FLEXTECH TECHNICAL ASSISTANCE

• NYSERDA's funding caps for studies in FlexTech and Technical Assistance were raised from \$50,000 to \$100,000 for Con Edison customers.

---- Technical Assistance Program (TA)

- The TA Program will reissue PON 1045 on June 1, 2006 with enhancements for SWP.
- The PON was redesigned to highlight peak-load reduction and load management services.

---- Flexible Technical Assistance Program

- In anticipation of the SWP, an RFP was issued to obtain additional Con Edison service territory FlexTech consultants. Proposals were due November 16, 2005. Contracts were awarded in March 2006 to eight (8) firms.
- Consultant information/training sessions were held on March 7, 16, and June 20, 2006. Over 115 people attended these training sessions, which were a supplement to the kick-off event in April 2006.

---- Small Commercial Audit Program

- A solicitation for the Small Commercial Energy Audit contractors, RPF 1030, will seek an additional contractor in the Con Edison service territory, increasing eligible program providers from one to two.
- Small Commercial Energy Audits are being labeled, marketed and promoted through the *Power Saving Partners* marketing program.

SWP MARKETING COORDINATED ACTIVITIES - POWER-SAVING PARTNERS

A coordinated SWP marketing program has been introduced to maximize the outreach and understanding of incentives being offered in the Con Edison service territory; included are:

- In partnership with Con Edison, NYSERDA staff held a kick-off event for the SWP at Con Edison's Irving Place facility in Manhattan on April 25, 2006. Approximately 250 attended, representing: building owners, vendors, property managers, ESCOs, energy consultants, utilities, and other interested parties.
- Direct outreach by NYSERDA staff and consultants, combined with a coordinated effort with Con Edison Key Account representatives to reach customers.
- Direct outreach via e-mail involved a concerted effort to generate a listserv from all existing resources at NYSERDA.

- Development of a SWP web portal on NYSERDA's web site, located at: http://www.nyserda.org/programs/swp/swp.asp
- Development of a *Power Saving Partners* Newsletter.
- Cooperative advertising with Energy Services Companies (ESCOs).
- Numerous web site enhancements using case studies and project examples specific to SWP goals and objectives.
- NYSERDA staff are working with the Building Owners and Managers Association (BOMA) to create a, "BOMA 10% Challenge" program for their membership. This campaign will encourage BOMA members to benchmark, i.e., measure their energy consumption at their facilities, then implement energy projects and, after a determined period of time, compare the pre- and post-project energy consumption. Energy benchmarking in this manner provides on-going feedback and encourages continuous action by the building owners. This effort will also help BOMA member develop a strategy to reduce their energy consumption by at least 10%.
- Plans to conduct a WebX training for key stakeholders.
- NYSERDA's Outreach Project Consultants who find the most appropriate incentive program for customers have been trained in all SWP program enhancements and are conducting outreach to increase program participation.