Section 3

BUDGET STATUS AND PROCESS EVALUATION

This section provides budget and process-related information on the initial three-year **New York Energy $martK** Program. This section also contains a detailed summary of results to date from an ongoing process evaluation of the **New York Energy $martK** Program. This process evaluation involved interviews with NYSERDA contractors and program management staff to solicit opinions and attitudes toward the project development and implementation process.

BUDGET AND SPENDING STATUS

June 30, 2001 marked the end of the initial three-year SBC funding period. The three-year **New York Energy $martK** Program budget was $182.2 million.[1] By June 30, 2001, the **New York Energy $martK** Programs, in aggregate, had committed 110% of the $182.2 million, or $201.0 million.[2] After the Public Service Commission's January 2001 order extending the SBC program, committed funding was allowed to exceed the three-year program budget in order to introduce new peak load initiatives for Summer 2001 and to continue existing programs. Table 3-1 shows the financial status of the initial three-year program by major program area and in the aggregate.

The expanded SBC program continues through June 30, 2006. Budgets and funding status for the five-year SBC program expansion, which began on July 1, 2001, are shown in Table 3-2 by major program area and in the aggregate. As with the initial three-year SBC program, NYSERDA retains some funding flexibility within the major program areas in order to respond to market needs and opportunities.

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[1] This amount reflects: $174.8 million collected from utilities (including $3.0 million for Environmental Disclosure); $1.6 million in unspent SBC funds transferred to NYSERDA from ESEERCO and O&R; and $5.8 million in interest earnings from Year 1 and Year 2 of the **New York Energy $martK** Program. The SBC funds collected from utility companies are maintained separately under the custody of the Commissioner of Taxation and Finance, NYSERDA's statutory fiscal agent. All funds remain invested until disbursed. Investments consist of short-term U.S. Treasury obligations, collateralized certificates of deposit, and repurchase agreements, consistent with investment guidelines approved by NYSERDA's Board of Directors and guidelines promulgated by the State Comptroller.

[2] Committed funds are those associated with signed and pending purchase orders, contracts, and incentives. Of the $201.0 million committed, $153 million has been contracted (including expenditures of nearly $62 million), and $47.9 million is pending.

Table 3-1: Financial Status for the Initial Three-Year SBC Program ($ million)

Program Area	Budget	Funds Committed	Committed (% of Budget)	Balance
Energy Efficiency	$123.6*	$143.6	116%	None
Low-Income	$16.2*	$12.8	79%	$3.4
R&D	$28.8*	$33.6	116%	None
Environmental Disclosure	$2.9*	$0.4	12%	$2.5
Evaluation	$0.7	$0.7	105%	None
Administration	$10.0	$10.0	100%	None
TOTAL	**$182.2**	**$201.0**	**110%**	**None**

* Program budgets are exclusive of Evaluation and Administration.

Table 3-2: Financial Status for the Five-Year SBC Program Expansion ($ million)

Program Area	Total 5-Year Budget	Funds Committed (as of 8/31/01)
Energy Efficiency	$382.0*	$9.6
Low-Income	$103.4*	$0.03
R&D	$182.0*	$0.9
Evaluation	$14.7	$0
Administration	$51.3	$1.1
TOTAL	**$733.4**	**$11.6**

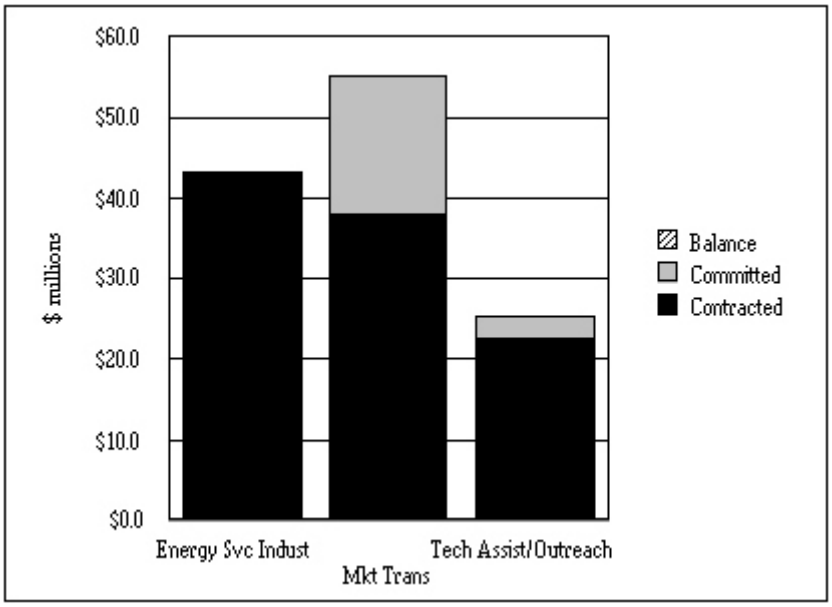
* Program budgets are exclusive of Evaluation and Administration.

The major **New York Energy $mart**K Program areas under the initial three-year program included: Energy Efficiency Services, Low-Income, and Research and Development (including renewable resource research, development, and deployment). The three-year budget and spending information on program elements in each of these major areas are presented in the following text.

Energy Efficiency Services

The Energy Efficiency Services program area, funded during the initial three-years at $123.6 million, includes Energy Services Industry, Market Transformation, and Technical Assistance programs. These programs represented 67% of the initial three-year **New York Energy $mart**K Program budget. When viewed overall, the Energy Efficiency Services programs have committed $143.6 million, or 116%, of their original three-year budget. Of the committed funds, $35.4 million has been expended, and $67.8 million represents remaining contract balances encumbered. Contracts or applications are pending for another $40.2 million. Figure 3-1 provides a financial summary by program area. Program areas that have begun committing funding under the expanded program are shown as 100% committed for the initial three-years in Figure 3-1.

Figure 3-1: Financial Summary for Energy Efficiency Services



During the initial three years of funding, the Energy Services Industry programs represented about 35% of the total Energy Efficiency Services budget. Programs included Standard Performance Contracting and Institutional Performance Contracting Assistance. Although NYSERDA's September 2000 Report noted that the Standard Performance Contracting Program had progressed more slowly than anticipated, several early corrections had increased activity in the months preceding the report. That increased activity has been sustained, and incentive requests now average about $2 million each month. The Energy Services Industry programs contracted their entire three-year SBC budget.

Market Transformation initiatives represented approximately 45% of the total Energy Efficiency Services budget during the initial three-year program. Slow progress in committing funds was noted in the September 2000 report. However, the report recognized that "Market Transformation programs, by their nature, require more time to bring about intended market effects, and therefore can be expected to commit funds more slowly." The Premium Efficiency Motors Program was cited as one such example. As a result of mid-course corrections and the ramping up of several Market Transformation programs over the past year, this area has also committed its entire three-year program budget and has begun initiatives under the expanded SBC program.

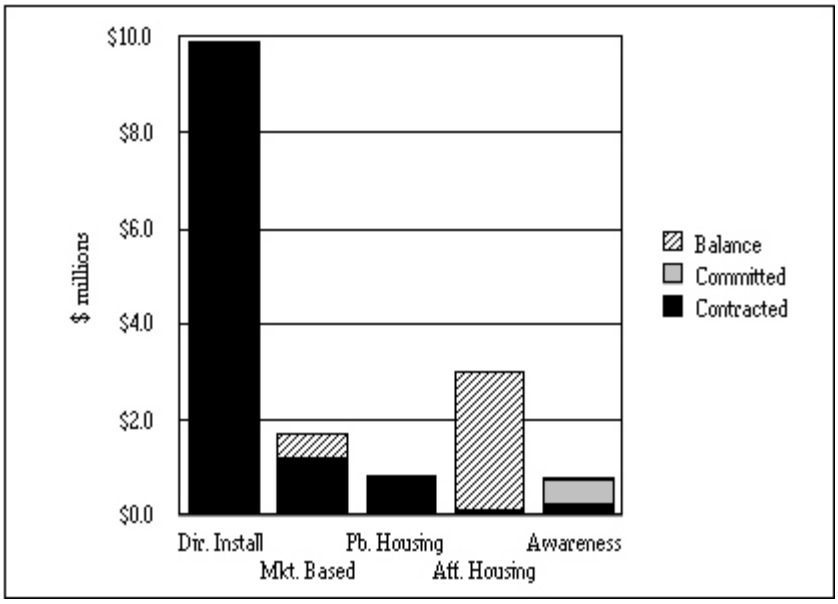
Technical Assistance and Outreach programs represented approximately 20% of the overall three-year Energy Efficiency Services budget. The September 2000 report noted the excellent progress made in this program area. The three-year SBC budget for Technical Assistance and Outreach has also been fully committed.

Expansion of Energy Efficiency Funding Allocation. During the five-year extension of the **New York Energy $mart**K Program, an additional $382 million has been allocated for spending on Energy Efficiency Services programs.

Low-Income Energy Affordability

The Low-Income Energy Affordability program area, funded at $16.2 million under the initial three-year program, includes Direct Installation, Market-Based Strategies (Aggregation), Public Housing Coordination, Affordable Assisted Housing, and Public Awareness programs. Together, these programs represent 9% of the overall **New York Energy $mart**K Program budget. As of June 30, 2001, 79% ($12.8M) of the initial three-year Low-Income program budget has been committed. A total of $5.1 million of the Low-Income budget has been expended, and $7.2 million represents remaining contract balances encumbered. Contracts or applications are pending for another $0.5 million, leaving $3.4 million of the three-year Low-Income funding remaining. The remaining funds primarily consist of incentives available in the affordable assisted housing area. Program managers indicate that several major projects are in development and that these incentives will soon be committed. Figure 3-2 provides a financial summary by program area. Program areas that have begun committing funding under the expanded program are shown as 100% committed for the initial three-years in Figure 3-2.

Figure 3-2: Financial Status for Low-Income



Direct Installation had the largest portion (over 60%) of the Low-Income program budget at just over $9.9 million. As shown in Figure 3-2, approximately 100% of the Direct Installation Program funds are contracted as part of NYSERDA's agreement with the program implementation contractor. As of June 30, 2001, approximately $5.5 million, or 56% of the contracted amount, has been used to serve low-income customers.[3]

In the Market-Based Strategies program area, last year's report found the Low-Income Aggregation Program "developing more slowly than anticipated due to the lack of a competitive market for electric generation early on in the three-year **New York Energy $mart**K Program schedule." As of this reporting, three aggregation pilot contractors have been hired and have commenced work. By June 30, 2001, nearly 70% ($1.1 million) of the Market-Based Strategies program budget has been committed.

[3] Including dollars spent on measure installations to date as well as anticipated spending for approved buildings which are scheduled to be audited.

The Public Housing Coordination and Affordable Assisted Housing components of the Low-Income program function as one program. The Public Housing Coordination budget funds implementation and the Affordable Assisted Housing budget provides program incentives. Although the program is ramping up and activity is expected to increase significantly in upcoming quarters, only 5% of the incentive budget has been committed.

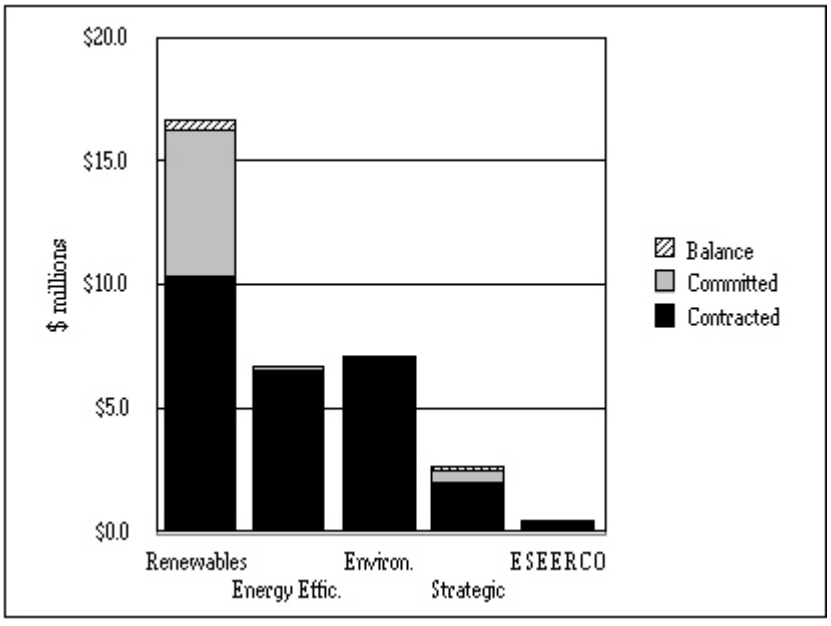
Since the last reporting, a contractor has been hired in the Low-Income Public Awareness area. This entire budget has been committed.

Expansion of Low-Income Funding Allocation. During the expanded five-year funding period, an additional $103.5 million has been allocated for spending on low-income programs.

Research and Development

The Research and Development (R&D) program area, funded at $28.8 million, includes Renewable Energy; Energy Efficiency and Strategic R&D; Environmental Monitoring, Evaluation, and Protection programs; and projects transferred from the Empire State Electric Energy Research Corporation (ESEERCO). The R&D program represents 16% of the overall **New York Energy $mart**K Program budget. As of June 30, 2001, 116% ($33.6M) of the initial three-year R&D program budget has been committed, up from the $26 million (90%) reported in September 2000. Of the committed funding, $10.8 million (32%) has been expended, $15.6 million (47%) represents additional encumbered balances from existing contracts, and contracts and applications are pending for another $7.2 million (21%). Figure 3-3 provides a financial summary by program area. Program areas that have begun committing funding under the expanded program are shown as 100% committed for the initial three-years in Figure 3-3.

Figure 3-3: Financial Summary for Research & Development



Expansion of Research and Development Funding Allocation. During the expanded five-year funding period, an additional $182 million has been allocated for spending on R&D programs (including

expanded renewable resources research, development, and deployment activities). Included in this revised allocation is funding for distributed generation and combined heat and power and increased dollars for Strategic R&D.

Environmental Disclosure

Due to the technical complexity of establishing this new program, Environmental Disclosure was still in the development stage as of June 30, 2001. Therefore, only $350,000 (12%) of the $2.9 million budget was committed by that date. The remaining $2.55 million in uncommitted funds will carry forward.

Program Evaluation and Administration

Three-year funding for Evaluation was $650,000. As of June 30, 2001, 105% of the Evaluation budget was committed. Funding for Evaluation increased to $14.7 million for the five-year program extension.

Three-year funding for Administration was $10 million. As of June 30, 2001, 100% of the Administration funds were expended. Under the five-year expansion of the SBC program, funding for Administration activities increased to $51.3 million.

PROCESS EVALUATION TRACKING

Solicitations Released

Program Implementation Solicitations. Under the initial three-year SBC program, 38 solicitations, comprising 18 Requests for Proposals (RFPs) and 20 Program Opportunity Notices (PONs), were issued to competitively select contractors for program design and implementation. By June 30, 2001, all of these solicitations had closed. RFPs resulted in 116 proposals being received, 31 (26%) of which were approved for funding. PONs resulted in 367 proposals being received, 144 (34%) of which were approved for funding.

Incentive Offerings. Under the initial three-year SBC program, 28 solicitations for financial incentives were issued. These solicitations have yielded more than 2,000 applications. As of June 30, 2001, nearly 1,600 (77%) of the applications received were, or were expected to be, approved for funding. Applications received just prior to June 30 and reviewed shortly after that date may also be approved.

Program Process Cycle Times

NYSERDA's **New York Energy $mart**K program solicitation process consists of three major phases, each of which is tracked as part of the SBC process evaluation. The three phases, along with their

evaluation tracking measurements are described in the following text.

Phase 1. The time from Program Development Management Committee (PDMC) approval of the solicitation to its release is tracked as part of the record of program activities. This cycle time in weeks is highly variable. Depending on the nature of the program and the planning process involved, programs can be brought to the PDMC for review anywhere from very early (sometimes several months before release) to a few weeks before solicitation release. There is often good reason for the noted variability. Therefore, cycle time for this phase is used simply as a record-keeping tool.

Phase 2. The interval between solicitation release and proposal due date represents the amount of time that contractors or customers have to respond to a solicitation. This interval is tracked as part of the record of program activities. The cycle time is also highly variable and is tracked only as a record-keeping measurement for this phase.

Phase 3. The interval between the proposal submission date and the date of contract signing is spent reaching agreements with proposers on specific work scopes and contract terms. Phase three is typically longer for PONs than for RFPs because PONs involve multiple proposals, as many as 70 proposals may be received from one solicitation, that are approved for funding at the same time and require contract agreements with multiple parties. Although cycle time is tracked for all three phases of the solicitation process, it is most relevant for phase three. The number of weeks between the proposal due date and contract signing is an important indicator of how well NYSERDA is functioning administratively, especially in terms of the following:

- Clarity of solicitations (clear solicitations should produce quality proposals which require less work to bring to the contracting stage);
- Effectiveness of contract negotiations; and
- Efficiency of NYSERDA's contracting process.

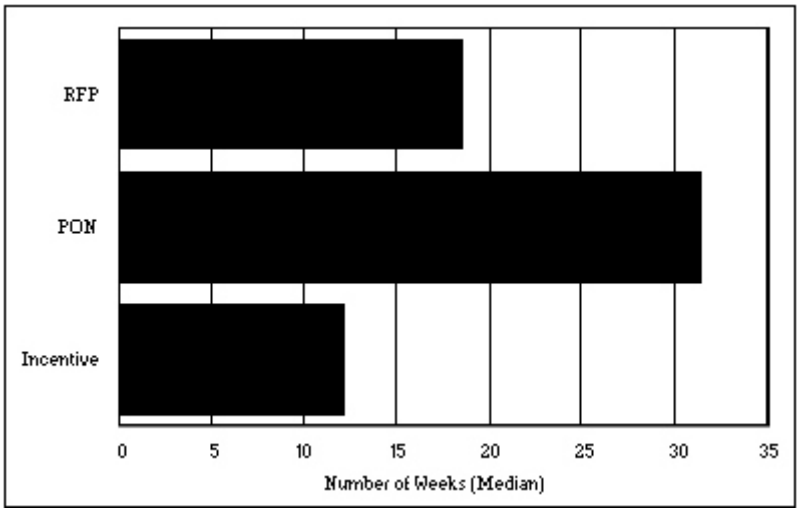
However, as with any negotiation process, the number of weeks for this phase can be affected by factors outside of NYSERDA's control.

The phase three cycle time is shown in Figure 3-4 for all three types of solicitations (RFPs, PONs and incentives) under the initial three-year **New York Energy $mart**K Program. The cycle time presented for incentives includes only those using a closed enrollment process. Phase three cycle time for open enrollment incentives is not presented here due to the number of individual projects (in the hundreds) on different time lines for contracting.

It is also instructive to view the phase three cycle time by year, as shown in Figure 3-5. Cycle time

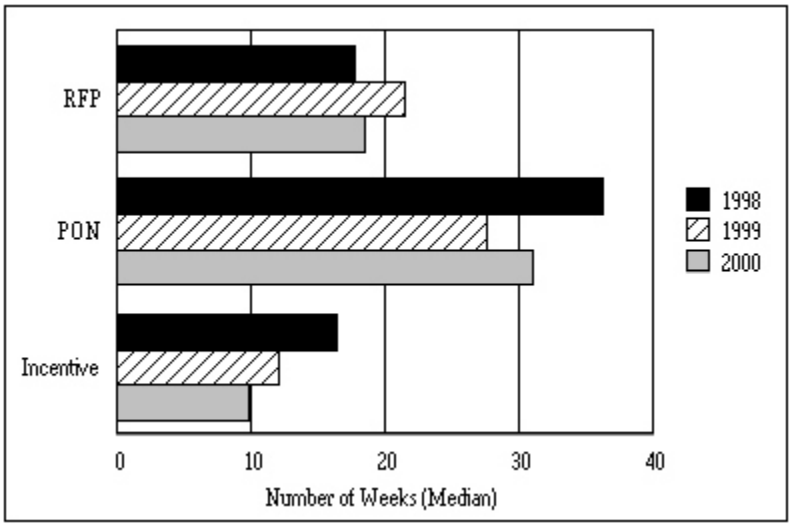
improvements are apparent for PONs and incentives when 1998 results are compared with 2000 results. Cycle time for PONs decreased by nearly 15%, and cycle time for incentives declined by almost 40%. Further improvements are expected for solicitations released in 2001 and during the expanded SBC program. Annual cycle time comparisons will be made in year-end evaluation reporting to determine the extent of improvements.

Figure 3-4: Three-Year New York Energy $mart℠ Cycle Time Results for Phase Three



PROCESS EVALUATION SURVEY

Figure 3-5: New York Energy $mart℠ Phase Three Cycle Time by Year



To assess the effectiveness of the **New York Energy $mart℠** Program solicitation, contracting, and project start-up processes, one of NYSERDA's evaluation assistance contractors, GDS Associates, Inc., has conducted process evaluation interviews. The purpose of these interviews was to assess the **New York Energy $mart℠** Program RFP and PON solicitation methods, including NYSERDA's solicitation process, contracting process, and project implementation to determine satisfaction of NYSERDA contractors and end-use customers with the way NYSERDA conducts business.

During the time period between October 15 and November 7, 2001, 88 randomly-selected customers[4] and 26 randomly-selected contractors[5] of the **New York Energy $mart℠** Program were surveyed regarding

[4] For purposes of this process evaluation survey, a customer is defined as any entity that has successfully applied to receive **New York Energy $mart℠** incentives through a Program Opportunity Notice.

[5] For purposes of this process evaluation survey, a contractor is defined as any entity under contract with NYSERDA for the design and implementation of **New York Energy $mart℠** Programs or projects (including research).

their satisfaction with NYSERDA's program planning and implementation practices. For this report, results are provided by type of solicitation method, by program, and across all respondents.

Overall satisfaction levels are reasonable across all program processes, especially given that this initial detailed process evaluation includes all the initial start-up issues (consistent with the findings from last year's smaller preliminary process evaluation exam). The pattern shows that, in general, the contractors involved in the RFP program design and implementation method and the PON projects method (listed below as Methods #1 and #5, respectively) are the most satisfied with NYSERDA's processes. On the customer side, customers involved in the competitive PON method (referred to below as Method #4) are among the most satisfied; they are closely followed, and sometimes exceeded by, customers of the open enrollment PONs with an extended time period (Method #3). The least satisfied participants are contractors responding to solicitations seeking service providers (Method #6) and customers responding to open enrollment PONs under a limited time period (Method #2). Both groups rate the implementation process as their most problematic. Due to the unique and complicated nature of the projects in Method #6, these results, unfortunately, seem logical. As additional projects are completed, satisfaction is likely to increase as NYSERDA and participants develop mutual understanding of each other's needs and requirements. It is hoped that the detailed results from this evaluation will be used to determine areas where process improvements can be made.

Results show that one of NYSERDA's most important assets is its staff. Across all solicitation Methods and processes, results show that customers and contractors view NYSERDA's program contracting, accounting, and evaluation staff very favorably.

One area for possible process improvement centers on coordination of programs at both the national and NYSERDA levels. Results consistently show that, for some Methods, respondents see significant room for improvement.

Survey Methodology

The type of interaction between NYSERDA and the program participant (contractor or customer) and the level of complexity of the solicitation and contracting processes differ significantly for each type of solicitation method. Given this finding, the project solicitations were divided into six solicitation methods. A random sample was then drawn from the total population of purchase orders or contracts within each of these solicitation methods. Table 3-3 summarizes the six solicitation methods that were identified and the number of surveys completed for each. The solicitation methods are further described in this subsection.

Table 3-3: Solicitation Descriptions

Solicitation Methods	Participant Type	# Of Surveys (N)
#1 - RFP Program Design and Implementation	Contractors	6
#2– PON Incentive (Limited time period)	Customers	8
#3 - PON Incentive (Open enrollment)	Customers	40
#4 - PON Incentive (Competitive)	Customers	40
#5 – PON Projects	Contractors	8
#6 – Participating Service Providers	Contractors	12
		Total N = 114

The solicitation methods are as follows:

- Method #1 represents RFPs requesting contractor services for program design and implementation. Most RFPs result in the selection of one contractor to perform all services. However, some RFPs have awarded as many as seven contracts to different firms, which work together on program outreach activities.

- Method #2 represents open enrollment PONs that offer incentives to targeted groups over a defined and limited time period. Applicants submit a simple form and are approved on a first-come, first-served basis. Usually between 20 and 50 applications may be approved under this type of offering.

- Method #3 represents open enrollment PONs that offer incentives to targeted groups over an extended time period. Many of these PONs were open until the official end of SBC1 or until funding ran out, whichever occurred first. Applicants submit the required documentation and are approved on an ongoing first-come, first-served basis. From 40 to upwards of 300 applications may be approved under this type of offering.

- Method #4 represents competitive PONs (for customers) that offer incentives to targeted groups over a defined and limited time period. Applications submitted under these PONs are held until the solicitation closes and awards are made to those that rank the highest. The number of applications approved under this type of offering range from eight to more than 30.

- Method #5 represents PONs seeking contractor services for focused research and deployment projects. Applicants submit detailed proposals, which are held until the solicitation closes, and awards are made to those that rank the highest. The number of applications approved ranges from one to nearly 40.

- Method #6 represents solicitations seeking service providers for the **New York Energy $mart**[SM] Programs to perform client audits on behalf of NYSERDA. Selection can either be first-come, first-served or competitive.

Survey Results

Overall Analysis. In the survey, respondents were asked for a satisfaction rating for components of each of the four process stages and then asked a question dealing with their level of **overall satisfaction** with

the entire project (see last row of each table). Inquiries were also made regarding respondents satisfaction with the communication between themselves and each of the other parties (*e.g.*, program staff, accounting, contracting, evaluation, and other NYSERDA contractors) they interact with through the process stages. Table 3-4 shows the levels of satisfaction for respondents during the four processes of the project and satisfaction with the overall project. In the tables that follow, the number of survey respondents that replied to a question or section is referred to as "n" and the "Mean" for a section or question is the average response across survey respondents.

Table 3-4: Overall Satisfaction with the Project Processes – All Respondents

Process	n	% Indicating satisfied or extremely satisfied	% Indicating dissatisfied or extremely dissatisfied	Mean Response
Solicitation	99	81.8	5.0	4.1
Contracting	83	73.5	8.4	3.9
Project Design	95	74.8	6.4	3.9
Implementation	92	73.9	6.5	3.9
Overall	112	79.5	6.3	4

In terms of **overall satisfaction**, approximately 80% of respondents indicated that they were satisfied or extremely satisfied. On a scale of one to five, where one represents extremely dissatisfied and 5 represents extremely satisfied, the mean score was 4.0. This is generally considered a fairly good satisfaction approval rating within energy efficiency program evaluation. The highest level of satisfaction is in the solicitation process, where 81.8% of those responding indicated that they are satisfied or extremely satisfied. The overall mean score for satisfaction in the solicitation process is 4.1. Looking at the overall scores across all processes, there is little difference between the other three project processes, with approximately 74% of respondents indicating that they are satisfied or extremely satisfied with each of these program processes.

The contracting process is the most problematic process with 8.4% of those responding indicating that they are dissatisfied or extremely dissatisfied with this part of the process. Areas with satisfaction ratings less than 80% will be further examined for possible improvements. Additionally, any element score with either a high dissatisfaction score (more than 10%) or with a satisfaction rating of less than 70% will also be examined. A goal could be to have 75-80% satisfaction approval ratings for each process when a process evaluation is conducted again.[6]

Each of the processes by the type of participant, contractor, or customer is provided in Tables 3-5 and 3-6. Comparing these tables shows that satisfaction levels are considerably different between the two types

[6] Optimal timing for another process evaluation would be after there is time to allow process improvement changes to be identified and implemented and once enough time has passed to properly assess whether the changes have obtained the desired results.

of respondents. Across each process, customers consistently rate their satisfaction higher than that of contractors. Some of the differences in the satisfaction ratings between contractors and customers appear to be due to the solicitation Method required by their type of project. The Methods vary significantly in their complexity. This is demonstrated in Table 3-7 where the results are broken down by solicitation Method. The table shows that the satisfaction ratings for Method #6 are consistently lower than for the other Methods. Participating Service Providers consistently have the lowest satisfaction levels.

Table 3-5: Overall Satisfaction with the Project Processes - Customers

Process	n	% Indicating satisfied or extremely satisfied	% Indicating dissatisfied or extremely dissatisfied	Mean Response
Solicitation	73	83.6	4.1	4.2
Contracting	58	82.8	5.2	4.0
Project Design	71	78.9	7.0	4.0
Implementation	70	77.1	4.3	4
Overall	87	81.6	6.9	4.1

Table 3-6: Overall Satisfaction with the Project Processes - Contractors

Process	n	% Indicating satisfied or extremely satisfied	% Indicating dissatisfied or extremely dissatisfied	Mean Response
Solicitation	26	76.9	7.6	3.9
Contracting	25	52.0	16.0	3.6
Project Design	24	62.5	4.2	3.8
Implementation	22	63.6	13.6	3.7
Overall	25	72.0	4.0	4

Table 3-7: Overall Satisfaction with the Project Processes– By Method

	Solicitation		Contracting		Project Design		Implementation		Overall	
Method	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
1	6	4.3	6	3.8	6	4	6	4.2	6	4.3
2	8	4.1	7	3.7	6	3.7	8	3.4	8	3.8
3	32	4.2	20	3.9	35	3.9	33	4.1	40	4.2
4	33	4.1	31	4.2	30	4.1	29	4	39	4
5	8	4.4	8	4	8	4	8	4	8	4.4
6	12	3.4	11	3.1	10	3.6	8	3	12	3.5

A further examination of these results by process is presented in the remaining subsections that follow.

Solicitation. In this section, respondents were asked for their opinions on 1) the duration of the NYSERDA proposal review and selection process, 2) the clarity of the solicitations, 3) selection criteria and application requirements, 4) the reasonableness of these requirements, 5) guidance provided during application development, 6) and the appropriateness of the time allotted for submittals. Respondents were also asked 7) how they had heard about the program and to 8) rate their overall satisfaction with this process. In general, respondents gave the solicitation process the highest rating of the processes analyzed (with the exception of Method #6 respondents, Participating Service Providers). The mean satisfaction scores were over 4.0 for all Methods expect Method #6 (equivalent to our goal of an 80% satisfaction rating) and demonstrate a high satisfaction with little need to look at potential improvement for Methods 1-5. When asked to rate their satisfaction with the solicitation process, Method #6 respondents provided a mean rating of 3.4 (as shown in Table 3-7) that is considerably lower than respondents in other solicitation Methods. In the solicitation process, Participating Service Providers see the following areas as needing improvement:

- Duration of NYSERDA proposal review and selection process (Mean= 3.3),
- Clarity of contractor selection criteria (Mean=3.1),
- Clarity of proposal and application requirements (Mean=3.2), and the
- Reasonableness of proposal requirements (Mean=3.2).

These same respondents rated the level of guidance provided to them in proposal development very high. Their mean rating of 4.1 was the second highest among the six solicitation Methods. Due to the competitive nature and unique attributes required of proposers in this Method, the solicitation Method is not as straightforward as in the other processes. NYSERDA staff recognize this difference and work closely with potential respondents as they are developing proposals.

The difference in the rating by Method #6 and the other Methods is most pronounced in rating the clarity of the proposal and reasonableness of the requirements, as compared to the more straightforward Methods where the providers are often firms doing almost exactly the same type of work for other clients. (The mean score for Method #6 was statistically different on these parameters from Methods #3 and #5 at the $p < .05$ level. The p value of less than .05 refers to the probability level of a result that would be expected to occur fewer than five times in a hundred samples and is therefore considered statistically significant.) This finding may suggest that the follow-up to this survey include examining the amount of education incorporated within the solicitation process and expanding it in areas where NYSERDA is asking experts to "make a stretch" somewhat outside what they normally do to help accomplish a particular **New York Energy $mart**[SM] objective.

Contracting. In regard to the contracting process, participants were asked to rate the ease of contract negotiation, the reasonableness of paperwork requirements, and the contracting process duration. Respondents were also asked to rate their overall satisfaction with the contracting process and for any recommendations how this process could be improved. The contracting process received a high customer

satisfaction rating of 82.8% indicating that they are satisfied or very satisfied. The more simplified, direct customer contracting process appears to be driving this rating. This finding and the fact that NYSERDA's contracts with research organizations are typical of the type of contracting arrangements seen in this field are likely reasons that contracting mean scores of 4.0 or over are seen in Methods #4 and #5.

Tables 3-5 and 3-6 show a wide discrepancy in satisfaction levels with the contracting process between customers and contractors. While customers rated the contracting process very high (Mean = 4.0), contractors rated it considerably lower (Mean = 3.6). In fact, 16% of contractors indicate that overall they were dissatisfied with the contracting process. The lowest satisfaction level shown in the three tables above is 52%, provided by contractors for the contracting process.

The area of greatest dissatisfaction is in the length of the contracting process, where 20% of respondents indicated that they are dissatisfied or extremely dissatisfied with the duration of the contracting process. The mean rating of 3.4 is the third lowest found in the survey results. A possible reason for this finding is illustrated in the results of Table 3-7 which shows the overall satisfaction with the project processes by Method. The results of Table 3-7 revealed that the mean satisfaction rating was lower for those Methods that have the most complex contracting processes (Methods 1, 2, 3, and 6). In the contracting process, the highest overall satisfaction mean of 4.2 is found in Method #4 –competitive PONs for customers. Method #6 –PON for service providers– has a mean score of more than a full point lower at 3.1. Thus, customers of Method #4 (a simpler contracting process) are satisfied or extremely satisfied with the contracting process, whereas the service providers of Method #6 are less satisfied with respect to this process. The difference in these means was statistically significant ($\underline{p} < .05$).

Results across contract signing periods were examined. It was assumed that customers and contractors with later signing dates might have higher levels of satisfaction since many of the initial program start-up issues had been resolved. However, no improvement was found in respondents' satisfaction with the contracting process when results were examined based on early (before January 1, 2001) and late (post January 1, 2001) contract signing dates. Given this result, a supplemental qualitative examination of what can be done to improve the contracting process might be warranted.

Project Design. With respect to the project design process, respondents were asked questions relating to 1) NYSERDA's encouragement of innovation, 2) openness to design improvements, 3) ability to define project objectives, 4) timeliness in dealing with problems or issues, 5) overall level of flexibility, and 6) the importance of NYSERDA involvement to program success. Participant were also asked about 7) their degree of involvement in the creation of project forms and documents. And finally, respondents were asked to rate 8) their satisfaction with the effectiveness of the project design process. Overall project design satisfaction ratings were in the mid-range among the processes examined. However, NYSERDA scored well for encouraging innovation, openness to design improvements, and overall flexibility. The highest satisfaction ratings within this process were seen among contractor respondents

in Method #1, where a mean score of 4.7 was given to NYSERDA for encouraging innovation and a mean of 4.5 for openness of design improvements and overall flexibility in project design.

Again, Method #6 received the lowest ratings, with an overall project design satisfaction rating of 3.6. This mean score was the highest among Method #6's process ratings. The lower rating for Method #6 in this process area seems to be influenced by a lower satisfaction with timeliness in dealing with problems. Method #6's mean rating of 3.1 (slightly above neutral) with the timeliness in dealing with problems was statistically ($p < .05$) lower than Method #4 that had the highest rating for this component with a mean score of 4.3.

Implementation. This section of the survey asked respondents questions regarding the amount of paperwork and the clarity, appropriateness, and frequency of reporting requirements. It also gauged respondents' satisfaction with implementation issues, such as 1) project startup, 2) coordination between NYSERDA programs, 3) oversight by NYSERDA's project manager, 4) responsiveness of staff, 5) program coordination with national or regional efforts, 6) the project and firm evaluation processes, 7) general NYSERDA policies, 8) timeliness of invoice payments, 9) the payment process, and 10) satisfaction with the implementation process in general. Across all respondents, 73.9% felt that the implementation process was satisfactory or extremely satisfactory. When analyzed at the participant level, customers showed a 77% approval rating and contractors a 64% approval rating. However, four of the six Methods received high mean scores of 4.0 or better (equivalent to an 80% approval rating or better). Method #2 and Method #6 had the weaker satisfaction levels with mean scores of 3.4 and 3.0, respectively. For Method #6, this finding appears to be driven by lower-than-average satisfaction levels with the amount of paperwork, oversight by NYSERDA project managers, and lack of responsiveness of NYSERDA staff.

Within the implementation process, program coordination appears to have the most room for improvement. Coordination with national efforts had a mean score of 3.2, with 22.5% of respondents indicating that they were extremely dissatisfied or dissatisfied with the job being done. Only 42.5% indicated that they were satisfied or extremely satisfied. Coordination among NYSERDA's programs had a slightly better score with a mean of 3.6, with 21.4% of respondents indicating that a better job could also be done coordinating NYSERDA's program activities. However, across all respondents, contractors were the least satisfied with this program component, giving it a mean score of 3.1. Almost 30% of contractors responding were dissatisfied or extremely dissatisfied with efforts to coordinate NYSERDA's programs.

Review of individual survey questions shows that recognition should go to NYSERDA's program staff for achieving the highest satisfaction levels. When asked to rate their satisfaction with the responsiveness of NYSERDA staff, not a single respondent was extremely dissatisfied while 83.5% said that they were satisfied or extremely satisfied. The mean rating across all processes of 4.3 for the responsiveness of NYSERDA staff was the highest rating for any individual component surveyed.

Methods #4 and #5 both rated this component extremely high with mean scores of 4.7 and 4.6, respectively. Since Method #4 deals with customers and Method #5 deals with contractors, these results are significant since it appears that satisfaction with the responsiveness of NYSERDA staff during implementation is high across participant types.

Communication. Respondents were asked to rate their satisfaction with the ease of communication between their company and NYSERDA's program staff, contracting group, accounting department, evaluation staff, and other NYSERDA contractors working with the project contractor or customer. Overall, communications ranks second to solicitation in the high satisfaction rating received, with a mean rating over 4.0. The lowest communication rating was with other NYSERDA contractors; however, even this achieved a mean score of 3.7.

The second highest mean satisfaction rating of 4.3 was seen when respondents were asked to rate their satisfaction with the ease of communication with NYSERDA's program staff. Of those responding, 83.8% said that they were satisfied or extremely satisfied with their communication with NYSERDA's program staff. Five of the six Methods had means over 4.0, with only Method #6 showing a lower mean rating of 3.3 for satisfaction in communicating with program staff (which was significantly different statistically at the $p < .05$ level from Methods 1, 3, 4, and 5).

The lowest satisfaction with a communication process is between Method #6 participants and the NYSERDA contracting group, which received an unsatisfactory rating (below neutral), with a mean of 2.7.[5] There is also room for improvement in this area for Method #2 participants, where the mean was 3.2.

Recommendations from Process Survey

One area for possible process improvement centers on coordination of programs at both the national and NYSERDA levels. Table 3-8 shows the satisfaction ratings associated with coordination of activities between their respondent's programs and other NYSERDA programs, national, or regional effort by solicitation Method. While the number of respondents answering this question was relatively small, respondents from half of the Methods--specifically Methods 1, 2, and 6-- see significant room for improvement.

[5] This mean is statistically significant in its difference from the means from Method 1, 3, 4, and 5 participants at the $p < .05$ level.

Table 3-8: Satisfaction by Solicitation Method for Program Coordination Efforts

	Satisfaction with Program coordination NYSERDA Level		Satisfaction with Program coordination National Level	
Method	**N**	**Mean**	**N**	**Mean**
1	5	3	5	3.6
2	5	3.2	5	2.8
3	9	3.9	9	2.9
4	11	4.1	8	3.8
5	7	3.7	5	4.2
6	5	2.4	8	2.4

While actual problem areas are hard to determine with a 1 to 5 rating scale, some of the open-ended responses hint at a few of the potential problems.

"I feel that coordination of activities is important. One of our project deliverables was to provide an educational component – to [my clients] – NYSERDA had a conference with [my clients] and didn't tell us about it –this would have been a perfect opportunity –but they (NYSERDA) decided not to use us – Frustrating - when we had to do it anyway – now we have to find a forum – NYSERDA had the forum and didn't include us."

Fostering better coordination among NYSERDA programs and other regional and national energy efficiency efforts was initiated more than a year ago. The importance of this alliance between NYSERDA programs and other energy efficiency programs is discussed in an industry paper published by NYSERDA. NYSERDA has begun a project on evaluating the synergies present, and opportunities for such, in a portfolio or systems oriented perspective.[6]

Respondents frequently brought up two issues that were not asked in the closed-ended questions. The first related to providing more information regarding the program, its operations, and enhanced follow-up feedback.

"It would help to have a checklist of items that have to be completed, and a more concise step-by-step description of the process to be done would be helpful."

The second issue not asked in the survey questions but mentioned by many respondents was how the program was marketed or how NYSERDA gets the word out. All those raising the issue were customers

[6] For a discussion of NYSERDA's portfolio strategy, see the paper by Paul DeCotis, *et al.*, "Portfolio Approach to Designing and Evaluating Buildings Energy Efficiency Programs," presented at the Association of Energy Service Professionals (ASESP), 11th Annual Energy Services Conference and Exposition Proceedings, December 4-6, 2000, New Orleans, Louisiana. This paper provides the intellectual foundation for the development of the evaluation strategy discussed in this report.

(over 18% of customers surveyed in Methods 2, 3, and 4 mentioned this issue). These customers all believed that NYSERDA needs to put more effort into marketing and program promotion.

"I have recommended this program to many [of my clients] – It is a great program – the Flex Tech contractor does all the work - (NYSERDA) Just needs to make the availability more well known throughout [my location] – get the word out more!"

Next Steps

As NYSERDA seeks to improve the quality of its program offerings, a possible next step is to explore these survey results at a micro level by analyzing the small number of individuals who have indicated that they are dissatisfied, or extremely dissatisfied, with various program components. While the sample of dissatisfied respondents represents a small proportion of the overall sample, further analysis of their responses might provide valuable insights into possible improvement areas.

Survey results for the processes will be examined by the five program areas (Energy Services, Market Transformation, Technical Assistance, Low-Income, and Research and Development) to identify potential process improvements.

Areas with satisfaction ratings less than 80% will be further examined for possible improvement. Each area has 4 to 15 questions rating satisfaction with its various steps and elements of the process. Potential improvement efforts will also be investigated whenever an element score has either a high dissatisfaction rating (more than 10%) or a satisfaction rating of less than 65%. More specifically, the results of this process evaluation indicate that the solicitation process and the contracting process should be more closely examined to understand how these processes might be improved.

PROCESS FINDINGS FROM OTHER DATA COLLECTION EFFORTS

As part of their contract requirements, a number of **New York Energy $mart**K Program implementation contractors have been collecting information that includes some process-related items. NYSERDA and their evaluation contractors have been working with implementation contractors to review draft survey and data collection instruments and incorporate additional questions to assess various process, impact, and causality areas. Table 3-9 shows **New York Energy $mart**K programs that include significant process-related data collection activities. For each program, this table identifies the how the process information is being collected and provides a brief listing of key process related results. Additional data collection, beyond process information, is taking place for these and other programs. Descriptions of other data collection activities and key findings can be found in Appendix A of this report.

Table 3-9: New York Energy $martK Program Process-Related Data Collection

Program	Data Collection Type	Purpose	Target	Key Process-Related Findings
Commercial/Industrial Performance Program (formerly Standard Performance Contracting)	In-person survey	**Participant Survey:** Assess participating customer attitudes toward the program and reasons for participating.	Participating customer completes survey at time of BPA.	TBD
	In-person survey	**Participant Survey:** Assess participating customer attitudes toward the program and reasons for participating.	Participating customer completes survey at time of verification.	TBD
	Phone survey	Background for a program case study.	Seven participating and five non-participating firms	- Overall quality of the program: On a scale of 1 to 10 with 10 being the highest, best rating, the mean response was a rating of '7.8' from the survey participants.
			Seven participating and five non-participating ESCO's	- Overall quality of the program: On a scale of 1 to 10 with 10 being the highest, best rating, the mean response was a rating of '7.6' from the survey participants.
			Six experts in the energy service industry	- Best type of planning process to bring about the best program design results: a collaborative process, such as a formalized advisory group with public meetings.
Institutional Performance Contracting Assistance Program	Phone survey	**Participant Survey:** Assess implementation rate of recommended measures.	Participating institutional customers.	TBD
New Construction Program	Phone survey	**Participant Survey:** Assess participant satisfaction with the program, and identify changes in practices.	Participating architecture and engineering firms.	TBD

Table 3-9: New York Energy $mart® Program Process-Related Data Collection

Program	Data Collection Type	Purpose	Target	Key Process-Related Findings
Premium Efficiency Motors	Phone survey	**Participant Survey:** Assess reasons for participating, satisfaction, changes in practices, attitudes, awareness, and barriers.	14 participating vendors involved in Round 1 and Round 2	- Main reason for participation in the program: program might provide access to new customers. - Overall quality of the program: On a scale of 1 to 10 with 10 being the highest, best rating, the mean response was a rating of '7.4' from the survey participants.
The Great Torchiere Trade-In (part of the Residential Appliances & Lighting Program)	In-person questionnaire	**Participant Survey:** Obtain demographics of participants and hours of use for torchieres.	Consumers who participated in torchiere trade in events.	- Overall success of the program: a total of 2,019 halogen torchieres were turned in during the four Trade-In events and Home Depot sold 2,170 ENERGY STAR® compact fluorescent torchieres.
Residential Appliances & Lighting and ENERGY STAR® Awareness	Phone Survey	**Participant Survey:** Retailers reasons for participating, satisfaction with the program, change in knowledge, awareness and business practices.	Participating retailers	- Overall satisfaction with the program: 70% of the survey participants were either 'extremely satisfied' or 'satisfied' with the program. - Overall quality of the program: On a scale of 1 to 10 with 10 being the highest, best rating, the mean response was a rating of '8' from the survey participants.
Home Performance with ENERGY STAR®	Mail Survey	**Participant Survey:** Sent to homeowners who have received services of a BPI-certified contractor under this program. Survey will assess satisfaction, implementation rate of recommended measures, causality, and energy savings.	Participating Homeowners	TBD
Residential Innovative Opportunities: Software Demo	Electronic Mail Survey	**Participant Survey:** Characteristics (demographics) of CD user households.	Households who register their home energy audit CD.	TBD

Table 3-9: New York Energy $martK Program Process-Related Data Collection

Program	Data Collection Type	Purpose	Target	Key Process-Related Findings
Technical Assistance Programs	Phone Survey	**Participant Survey:** Assess the implementation rate of recommended measures and electric savings achieved.	Participants in Technical Assistance Programs	TBD
Low-Income Direct Installation Program	Phone survey	**Participant Survey:** Assess building owners reasons for participating, satisfaction with the program, change in knowledge, awareness and practices, barriers, and causality.	Participating Building Owners	- Overall satisfaction with the program: 80% of the survey participants were either 'extremely satisfied' or 'satisfied' with the program. - Overall quality of the program: On a scale of 1 to 10 with 10 being the highest, best rating, the mean response was a rating of '8.2' from the survey participants.
	Written Survey	**Participant Survey:** Assessment of non-energy benefits of improved lighting. Low-income residents report whether they have experienced any improvements in safety, comfort, etc.. due to lighting measures installed.	Low-income residents participating in the program.	Initial results indicate the following: - When compared to previous lighting quality, 77% rated new apartment lighting quality as better and 95% rated new common area lighting quality as better. - There is an overall high degree of satisfaction with work in apartment units and common areas.