PROCESS EVALUATION

New Construction Program

Final Report

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ABSTRACT AND KEY WORDS

The overall goal of this two-year process evaluation of the New Construction Program (NCP) at NYSERDA is to assess the effectiveness of its efforts to meet new goals under Energy Efficiency Portfolio Standard funding. This report reflects the results of a two-year review, which included document review, extracts from the Buildings Portal database, and in-depth interviews with: 14 key NYSERDA staff; nine Outreach Project Consultants (OPCs) and 13 Technical Assistance (TA) providers; and 201 building owners and representatives from their design teams, representing 144 projects entering the NCP under PONs 1222 and 1501. Recommendations for the program include finding ways to: be more timely and to better synchronize with participating project schedules; ensure that new staff and contractors are well oriented to NCP processes and philosophy; and to have NCP management address tensions among program goals. In addition, the first phase of the evaluation revealed further topics that need attention in the second phase research.

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EXECUTIVE SUMMARY

INTRODUCTION AND PURPOSE

The **New York Energy $mart**[SM] programs are funded by a System Benefits Charge (SBC) that is paid by electric and natural gas customers of New York's investor-owned utilities. All customers who pay into the SBC are eligible to participate in the programs, which are administered by The New York State Energy Research and Development Authority (NYSERDA), a public benefit corporation established in 1975.

During 2008, several changes arising from the New York State Public Service Commission's (PSC's) Energy Efficiency Portfolio Standard (EEPS) proceeding have affected NYSERDA's **New York Energy $mart**[SM] Program portfolio and evaluation efforts. The PSC's June 23, 2008, EEPS Order called for an increase in SBC collections and a ramp-up of program efforts. NYSERDA complied with the PSC's Order by submitting a Supplemental Revision to the SBC Operating Plan, incorporating approximately $80 million per year in additional funds for five new or expanded Fast Track programs, as well as for general awareness, administration, and evaluation associated with those programs.

The mission of the New Construction Program (NCP) is to permanently transform how new commercial buildings are designed and constructed. The program also must meet demand reduction goals. To achieve its mission and goals, the NCP offers owners and their design teams technical assistance and incentives to incorporate greater levels of energy efficiency and green building features into new buildings and those undergoing substantial renovation.[1] The four pathways through NCP – Pre-Qualified, Custom Measure, Whole Building Design, and Green Building Option – offer customers various strategies to design and construct more energy efficient commercial buildings. The incentives and technical assistance associated with the Whole and Green Building paths are structured to encourage the highest level of energy savings and may also include green features.

The central Fast Track goal of the NCP is to achieve greater savings, while at the same reducing program costs from an average of 22¢ per kWh to an average of 16¢ per kWh, compared to the previous Program Opportunity Notice (PON). To meet this goal, the NCP has taken steps to change its incentive structure to attract higher levels of efficiency and whole building approaches; developed a new marketing plan; and expanded efforts to reach a larger share of the market.

The goal of the two-year process evaluation of NCP is to assess the effectiveness of these Fast Track efforts. The following conclusions and recommendations are based upon a review or program materials and database information and in-depth interviews with NCP and other NYSERDA staff, outside consultants working with the program (i.e., Technical Assistance (TA) providers and Outreach Project Consultants (OPCs), and owners and design teams of NCP projects.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion: **The NCP has taken and is taking steps to improve timeliness and to better synchronize project and program schedules, including improved communication, standardization of technical analysis and reports, and accelerating the TA contracting process.** While progress has been made in these areas, findings from this research suggest further improvements are needed. Just over one-half of the NCP participants who were interviewed recommended that the NCP process should be streamlined or that the program's timeliness should be improved. Program staff, OPCs, and TA providers also report synchronization and timing need to be improved, especially at the front-end of projects where key decisions about energy efficient design are being made.

> ***Recommendation:*** **The NCP should continue its efforts to ensure that projects are enrolled at the optimal time and that early participation steps are streamlined and as timely as possible.** In their efforts to streamline the program, NCP staff should revisit every review or approval step

[1] The NCP also assists with multifamily projects pursuing LEED® certification and works in concert with the Industrial and Process Efficiency Program (IPE) to fund "projects that improve energy efficiency and productivity of manufacturing processes and data centers in new or substantially renovated facilities" (Program Brochure).

in its process flow to see if any can be shortened or removed. The next process evaluation of NCP should conduct this type of review if streamlining remains a central issue for the program. To improve timeliness and synchronization, several TA providers suggested that very interested design teams should receive interim design assistance and reporting services prior to the final technical assistance report. These TA providers believe these interim services positively influence building design and energy savings. NCP staff should investigate how these interim steps might become more standardized. Finally, some NCP staff members suggested that new program paths be explored. For instance, they wondered if new paths were needed to serve particular customer situations, such as an express path, a first-time project path, or a path that matches very motivated design teams with the best TA providers in the program.

Conclusion: **Both increased OPC and NYSERDA commercial sector marketing efforts are generating substantially more leads than the program has seen before.**

Recommendation: OPC marketing should be continued and the program should continue to track its results, including the conversion rate of leads to applications.. In addition, the new NYSERDA Solutions campaign should be continued and the results tracked, since initial tracking suggests it is generating interest and leads. The marketing efforts need to be carefully watched so that the volume of projects remains manageable within program resources.

Conclusion: **Tension continues to exist between market transformation and market leadership goals for NCP and its savings acquisition goals.** Many TA providers, and some staff, voiced concerns that that the program's ability to influence maximum energy savings and advance leading edge whole building design is declining. They noted that the change from a whole building Total Resource Cost (TRC) test[2] to an individual measure TRC test is compromising the market transformation and market leadership intent of the whole building path. These TA providers and staff members also said it can be difficult to explain the consequences of the shift in the TRC test, and that customers seeking to do leading edge integrated design may find NCP incentives disappointing for advanced design options. Finally, they said design teams are becoming more sophisticated about energy efficient design and that if NCP wishes to lead the market toward the next level of high performance buildings, it needs to incorporate better support for innovative design.

Recommendation: To avoid unexpected results for participants seeking to employ integrated whole building designs, NCP staff members, OPCs, and TA providers need to continue to develop effective ways to explain the consequences of the shift in the TRC test. In addition, staff could consider developing alternative ways to encourage higher performance designs despite the current application of the TRC. Finally, NCP should consider conducting an empirical analysis to explore the effects of the TRC on project scope, design, cost, and market transformation.

Conclusion: **NCP continues to struggle with how to serve small buildings. At the same time, new marketing efforts appear to be attracting more small projects. NCP needs more effective and cost-effective ways to work with smaller buildings**.

Recommendation*:* While NCP has made substantial progress in its efforts to develop an advanced analysis tool designed to foster deeper, cost-effective savings for smaller buildings, documentation and other steps need to be taken to finalize and implement the package. Completing this analysis tool should be a high priority, especially given the surge in smaller building applicants.

Conclusion: **The effectiveness of key NCP elements varies, particularly those that depend upon TA provider performance, such as scoping meetings and technical reports. Findings across all respondent groups suggest that inconsistent TA provider performance impedes NCP efforts, especially since the most sophisticated customers expect TA providers to combine the highest levels of technical ability, knowledge, and communication skills.**

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[2] The TRC test is used in both the custom and whole building paths within NCP. The whole building TRC test assesses the cost-effectiveness across all efficiency measures planned for a new building. A whole building TRC test, for instance, would allow leading edge, but less cost-effective, high efficiency measures to be offset by more standard and cost-effective high efficiency measures.

***Recommendation**:* NCP staff members should assess individual TA provider performance in scoping meetings and throughout the technical assistance process and devise training strategies that will help TA providers better influence efficiency decisions. For example, high performing TA providers could inform the design and delivery of a training package for TA providers whose skills need improvement. One staff member suggested such training could change "order takers" to "game changers."

Section 1:

INTRODUCTION

The **New York Energy $mart**[SM] programs are funded by a System Benefits Charge (SBC) that is paid by electric and natural gas customers of New York's investor-owned utilities. The programs are available to all customers that pay into the SBC. The New York State Energy Research and Development Authority (NYSERDA), a public benefit corporation established in 1975, began administering the SBC funds in 1998 through NYSERDA's **New York Energy $mart**[SM] Program.

During 2008, several changes arising from the New York State Public Service Commission's (PSC's) Energy Efficiency Portfolio Standard (EEPS) proceeding have affected NYSERDA's **New York Energy $mart**[SM] Program portfolio and evaluation efforts. The PSC's June 23, 2008, EEPS Order called for an increase in SBC collections and a ramp-up of program efforts. NYSERDA complied with the PSC's Order by submitting a Supplemental Revision to the SBC Operating Plan, incorporating approximately $80 million per year in additional funds for five new or expanded Fast Track programs, as well as for general awareness, administration, and evaluation associated with those programs.

The New Construction Program (NCP) is one of NYSERDA's Fast Track programs. It "offers technical support to building design teams and financial incentives to building owners to effect a permanent transformation in the way buildings are designed and constructed in New York State."[3] The NCP addresses a multifaceted and technically sophisticated market segment in which projects are likely to be driven by tight deadlines.

With EEPS Fast Track funding, the NCP has been working to meet the following goals:

1. Increase NYSERDA's capacity to use whole building design analysis to maximize the energy efficiency of all systems within a building
2. Increase the total number of Technical Assistance providers (TA providers) available
3. Offer additional energy performance incentives through a tiered approach, with the highest incentives being available for projects that achieve performance improvements more than 30.1% above current New York State Energy Conservation Construction Code requirements
4. Target larger, more complex high energy consuming projects (e.g., supermarkets, data centers) to yield a higher level of energy savings per project
5. Increase the focus on industry leaders among various market segments to better promote the program and create examples for others in these market segments
6. Serve smaller projects more cost-effectively

The NCP operated under Program Opportunity Notice (PON) 1222 until December 31, 2009; at the start of 2010, it began operating under PON 1501. Overall, with the change to EEPS funding and PON 1501, program staff report that the NCP has agreed to do more with less under the EEPS funding. This has translated into a number of specific program changes intended to produce greater efficiencies, including:

- **Lowering dollar levels per incentive.** Although the overall project caps remain similar, PON 1501 rates are about 67% of rates offered under PON 1222.
- **Adjusting the tiered incentive structure.** This revised structure was designed to attract and reward projects that achieve higher levels of efficiency, particularly a greater share of whole building projects. The highest tier rewards buildings for achieving 30.1% or better above code.
- **Changing the baseline to ASHRAE 90.1.2007.** When PON 1501 was developed, the state energy code was being revised, and the proposed code baseline energy standard was unknown.

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[3] New Construction Program – Financial Incentives Program Opportunity Notice (PON) 1501, July 2010.

- **Dropping total program costs from the previous rate.** Total program costs have been dropped from 22¢ to 16¢ per kWh.

Since EEPS, NCP staff report pursuing other program design and implementation steps that they hope will steer the program toward greater efficiencies and savings, including the following[4]:

- Expanding marketing strategies through greater use of NCP Outreach Project Consultants (OPCs) and a broader marketing campaign.
- Growing NCP presence in New York City to serve that large and complex market.
- Increasing the NCP pool of TA providers, especially for customers in Consolidated Edison and National Grid service territories.
- Requiring new TA providers to demonstrate expertise in computer simulation modeling and green building services.[5]
- Increasing program communication among staff, OPCs, and TA providers.
- Standardizing aspects of NCP technical analysis and reporting.
- Taking steps to streamline the Program's contracting processes.
- Developing strategies to reach a larger share of smaller projects.
- Strengthening certification requirements and simplifying incentive structures for green building services.[6]

The overall focus of this two-year process evaluation is to assess how key NCP changes in design and operation, as outlined above, have affected the program's progress toward its goals under EEPS Fast Track Funding.

After the Executive Summary and this Introduction, this report is organized into the following sections:

Section 2: Program Description

Section 3: Evaluation Approach and Methods

Section 4: Key Findings – NYSERDA Staff Interviews

Section 5: Key Findings – OPC and TA Interviews

Section 6: Key Findings – Program Participant Interviews

Section 7: Conclusions and Recommendations

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[4] The effects of various NCP efforts to meet Fast Track savings goals will be examined later in this report.

[5] While previous solicitations for TA services did not require these areas of expertise, several firms were able to provide them.

[6] According to the key program contract on this evaluation, the NCP now requires that LEED and 'Collaborative for High Performance Schools' (NY-CHPS) projects receive certification before green incentives are paid.

Section 2:

PROGRAM DESCRIPTION

As a mature program at NYSERDA, the NCP has been in continuous operation since 2000. Through technical assistance and financial incentives, it encourages owners, developers, and design teams of new commercial and institutional buildings – and buildings undergoing substantial renovations – to achieve higher levels of energy efficiency and green building features (including their design, construction, and operation).[7] The NCP's long-term objective is to permanently transform the way that these building projects are designed and constructed.[8] As one TA provider put it, "One of the goals is to help people think differently."

The NCP also responds to the state's demand reduction needs, which have ebbed and flowed throughout its lifetime; currently, the emphasis is on reducing kilowatt hours consume rather than lowering peak kilowatt demand. Still, the most recent logic model indicated that the state has experienced a growing and acute need to reduce demand especially in the Con Edison service territory. Thus, the current PON 1501 set separate and higher project incentive caps for projects within the Con Edison service area to address this demand disparity between regions.

These three key groups work together to deliver NCP services:

- **NCP staff** – oversees all aspects of the program and coordinates its contractors
- **Technical Assistance Providers (TA providers)** – are approved by and under contract with NYSERDA, to work closely with owners and design teams to suggest and analyze energy and green building improvements
- **Outreach Project Consultants (OPCs)** – also approved by and under contract with NYSERDA, OPCs market the program and shepherd customers through its various steps; help participants to apply to the program;[9] coordinate and participate in scoping meetings and green design charrettes[10]; coordinate with TA providers and review their scopes of work; perform post-construction inspections; and more generally answer participant questions and address their needs

NCP staff also work with internal and external groups to conduct marketing, outreach, and evaluation of the program.

NCP participants can choose to follow one of four paths through the program:

- **Pre-Qualified Measure Approach** – is for simple or small projects in which incentives are preset for common, straightforward measures. This approach is not emphasized in program materials because NCP wishes to encourage more integrated and high efficiency building designs.
- **Custom Measure Approach** – calculates individual incentives for a variety of measures. It is best used when projects have progressed beyond the design development phase or where computer simulation to calculate savings and benefits is not needed or cost-effective.

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7 NYSERDA also offers incentives through the NCP for the Industrial and Process Efficiency (IPE) program. Incentives offset up to 50% of the costs of energy efficiency improvements to manufacturing processes and data centers in new or substantially renovated facilities.

8 NCP also assists with multifamily projects (minimum of four stories and at least five units) pursuing LEED® certification.

9 According to the NCP website, "Green Design Charrettes are meetings between stakeholders of a construction project with the purpose of exploring green building opportunities and feasibility."

10 Green design charrettes are meetings between stakeholders of a construction project with the purpose of exploring green building opportunities and feasibility.

- **Whole Building Design Approach** – is for projects entering the program no later than the schematic design phase, when interactions among energy efficiency improvements are analyzed to see their impact on overall building energy use.
- **Green Building Option** – encourages design and construction of healthy, energy-efficient, and resource-conserving buildings.

NCP measure incentives are based upon the anticipated energy performance of the building and pay for a large share of the incremental costs of installing higher efficiency equipment or features. A tiered approach provides increasing incentives for projects achieving higher levels of energy performance. Potential participants are encouraged to enter the program during the early design phase to reap the largest incentives and benefits.

The NCP also provides financial incentives for technical assistance services, including incentives for design teams with projects using the Whole Building Design or Green Building approach, and incentives for building commissioning.[11] Technical assistance is provided to participants by TA providers from the NYSERDA-approved list of firms. TA providers work with project teams to analyze the potential for energy savings, peak demand reduction, and green building options achievable through r energy efficiency measures and design features. Participants share in the cost of technical assistance to identify energy saving opportunities. Additional technical assistance is available to help participants meet requirements for Leadership in Energy and Environmental Design (LEED®) certification,[12] or to comply with the NY-CHPS (spell out first) guidelines for school buildings.[13]

NCP assistance is offered on a first come, first-served basis subject to funding availability. As shown in Table 2-1, current funding is available through PON 1501 (and its revisions), which runs through December 30, 2011, or until program funds are exhausted.

Table 2-1. Recent NCP PONs

Number	PON Name	Dates	Notes
1501	New Construction Program Financial Incentives	Applications accepted January 4, 2010, through December 30, 2011	EEPS and SBC funding apply; individual incentives lowered, although same project caps in place
1222	New Construction Program Financial Incentives	Ended December 31, 2009	SBC funding only; incentives for the Industrial Process Efficiency (IPE) program were added October 2009

According to PON 1501, the major changes from PON 1222 to PON 1501 included the following:

- Increased funding for NCP
- Changes in the TA provider cost-sharing structure
- Changes in incentive tiers for the whole building path
- Changes in green building services
- Added incentives for natural gas efficiency measures (under Revision 1)

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[11] Commissioning within NCP is a process to vet the energy performance of new commercial buildings to make sure the energy systems operate according to their intended design and are operating optimally.

[12] LEED is the rating system developed by the U.S. Green Building Council.

[13] "These voluntary guidelines, known as the 'Collaborative for High Performance Schools' (NY-CHPS), were created through a joint effort of New York State Education Department and NYSERDA. NY-CHPS will help schools develop and maintain learning environments that contribute to improved academic achievement while reducing operating costs and protecting and conserving our natural resources." – NYSERDA press release, September 27, 2007.

- Stoppage of bonus incentives, including those for demand response and super-efficient chillers
- Designation of the program baseline as ASHRAE 90.1-2007

In September 2011, as part of a statewide economic development initiative, applicants to NCP began applying through the New York State Consolidated Funding Application (CFA) process. This "one-stop" process allows projects to be matched with all New York funding sources for which they might qualify.[14]

Once the application reaches NCP, an OPC works with the applicant through the entire program process. OPC involvement varies based upon the type of project and the program path. TA providers may also be called upon to work with project owners and design teams to suggest and analyze design options; again, the use of TA providers depends upon the type of project and program path. Final incentives are awarded based upon post-installation inspections that verify that planned measures were installed, and are operating as expected.

[14] Since this change in the application process occurred after primary research ended for this evaluation, its effects upon the program could not be fully evaluated. However, one staff member who tracks program applications said that, while NCP had fewer applications in the first month after CFA was instituted, applications had rebounded in subsequent months.

Section 3:

EVALUATION APPROACH AND METHODS

3.1 EVALUATION APPROACH

The overall goal of the 2010-2011 process evaluation for the NCP is to help program staff, contractors, and NYSERDA assess the effectiveness of NCP's Fast Track efforts. This process evaluation was conducted in two phases. Each phase included document review; use of information from the NCP project tracking database (Buildings Portal); and in-depth interviews with NCP staff, OPCs and TA providers, and owners and their design teams. The remainder of this section describes the methods used for the 2010-2011 NCP process evaluation.

3.2 METHODS

3.2.1 Introduction

The overall strategy for this evaluation was to interview a representative set of key NCP actors on a rolling basis over a two-year period, with more interviews completed in the second year, as more projects entered under the new PON 1501 and new OPCs and TA providers come on board. Table 3-1 shows that 237 in-depth interviews were completed for this evaluation, with sample sizes meeting or exceeding their goals, except for cancelled project participants.[15] The interviews were spread among NYSERDA staff, OPCs, TA providers, and owners and design team members from 109 active and 35 cancelled projects (projects that dropped out). Taken together, the results of these interviews reveal a very robust picture of NCP from the perspectives of its key actors.

Table 3-1. Interviews Conducted

NCP Interview Groups	Estimated Population	Two Year Goal	Year 1 Completes	Year 2 Completes	Total Completed
Staff	16 (12 FTE)	12	7	7	14
OPCs	2 firms/20 contacts	9	3	6	9
TA providers	14 firms/30 contacts	12	4	9	13
Active Projects: Owners	250	66	22	62	84
Active Projects: Design Teams	500	66	19	57	76
Cancelled Projects: Owner	<100	33	0	31	31
Cancelled Projects: Design Teams	<100	32	1	9	10
Total		**230**	**55**	**183**	**237**

In-depth interview guides were tailored for each of the interview groups (see Appendix A), with similar guides used for OPCs/TA providers and owners/design teams.. Interviews were conducted over the telephone and lasted between 30 minutes and 1½ hours. In some cases, interviews were recorded and transcribed; in other cases, interviewers entered responses onto the interview instruments. Open-ended data were content analyzed and, where needed, coded and entered into a database for further analysis. Close ended data were pre-coded, entered into a database, and analyzed using a standard statistical software package – Statistical Package for the Social Sciences (SPSS).

[15] In general, interviews with representatives from cancelled projects were hard to obtain, especially interviews with design team members, despite strong efforts on the part of the evaluation team. The cancelled projects design team group was abandoned with NYSERDA and DPS approval. Many of the projects that drop out do so at an early phase, often due to projects being stopped. Thus, design team involvement was often limited, and many didn't recall their participation in NCP.

3.3 SAMPLING

3.3.1 NYSERDA Staff, OPCs, and TA Providers

Respondents from staff, OPC, and TA groups were selected from lists that NCP staff provided. Some interviews were unique for each year, while other key contacts, such as the program manager, were interviewed twice. NCP staff varied in their level of experience, their responsibilities in the NCP, and their locations (both Albany and New York City). Additional NYSERDA staff interviews included the energy code coordinator and the marketing specialist working with the NCP. OPCs and TA providers also reflected a range of firms, professional and project experience, and locations.

3.3.2 NCP Project and Respondent Profiles

The sampling strategy for NCP projects was complex. It was revised over the two years, based upon new information, including new projects becoming eligible for inclusion and the transfer of some projects from PON 1222 to PON 1501. It was designed, overall, to be as representative as possible of the two year period, and to yield an in-depth look at NCP projects and the key market actors that affect them. To be eligible for inclusion in the population, participants had to have at least accepted an NCP incentive offer. In addition, the projects needed to be mutually exclusive from those used in the Energy Analysis impact evaluation that was being conducted concurrently with this process evaluation.

Project data used to complete the sampling and interviewing process were stored in several places in the Building Portals database, which tracks project contacts, attributes, and progress through the program. In constructing and updating the sample, the data from these various places were retrieved and compiled into a separate database, fed into a statistical package (SPSS), and analyzed so that a composite picture of the population of projects could be constructed.

Projects were divided into three PON groups: PON1222, transfers from PON1222 to PON1501, and PON1501. Projects were also separated into active[16] and cancelled project for each PON group. Key characteristics of the projects were summarized – including project size, program path, utility serving the project (Con-Ed versus non Con-Ed), building type (Commercial, Non-Profit, Educational, Industrial/ Manufacturing, and Other), and construction type (New, Renovation/ Reconstruction) Then, using a computer-generated procedure, an initial random sample of the eligible population of projects for each group was chosen. Frequencies and cross-tabs of their key characteristics were compared with the overall population for representativeness. Several iterative adjustments were made throughout the two year evaluation to improve the fit of the sample to the population characteristics.

To the extent possible, the owner and a design team member were both interviewed for each project. This proved infeasible, however, for most partial participants since many projects were short-lived and design team members often had limited involvement with them.

Table 3-2 profiles the projects in the sample by a variety of attributes, presenting these attributes overall and comparing them among active and cancelled projects. An analysis of the Building Portals database shows that the total sample of projects used in this research mirrors the overall population of eligible projects fairly well in terms of size, program path, service area, construction type, and building sector. Thus, just less than one-half of the projects were smaller (under 30,000 square feet); a minority of projects were in the pre-qualified path (15%); two-thirds of projects were not in the Con-Ed services territory; just over one-half of projects were new buildings rather than major remodels of existing buildings; and projects were spread out over various market segments, with commercial and institutional buildings (e.g., schools, government) each comprising about one-third of the projects. Multi-family and agricultural projects make up very small proportions of the projects in the sample. Finally, just under one-quarter of projects were registered for LEED® certification.

Several findings suggest that larger, more complex, and LEED registered new construction projects are less likely to drop out than smaller, more prescriptive projects. This difference in drop-out rates may reflect the higher level of services and incentives that NCP provides to larger, more complex projects.

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[16] Active projects included those projects in any stage of NCP and those that were complete.

Table 3-2. Attributes of Sampled Projects

Project Attribute	Active		Cancelled		Total	
Square Footage	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Under 30,000 SF	48	44%	17	49%	65	45%
Greater than 30,000 SF	61	56%	18	51%	79	55%
NCP Path	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Pre-Qualified	13	12%	9	26%	22	15%
Custom	44	40%	12	34%	56	39%
Whole Buildng	52	48%	14	40%	66	46%
Service Area	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Not Con-Ed	74	68%	20	57%	94	65%
Con-Ed	35	32%	15	43%	50	35%
Construction Type	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
New	62	57%	17	49%	79	55%
Major Renovation	47	43%	18	51%	65	45%
Building Sector	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Commercial–Wholesale/ Retail	39	36%	9	26%	48	33%
Education	16	15%	9	26%	25	18%
Government	12	11%	4	11%	16	12%
Non-Profit	16	15%	3	9%	19	13%
Industrial/Manufacturing	11	10%	5	14%	16	11%
Health Care	11	10%	2	6%	13	9%
Multi-Family	1	1%	3	9%	4	3%
Agriculture/Forestry	3	3%	0	0%	3	2%
LEED Registered	**Frequency**	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
No	81	74%	30	86%	111	77%
Yes	28	26%	5	14%	33	23%
Number of Projects	**109**		**35**		**144**	

Section 4:

KEY FINDINGS – NYSERDA STAFF INTERVIEWS

4.1 INTRODUCTION

The findings in this section are based on 14 in-depth interviews (seven each year, with some duplication of respondents) with NYSERDA staff members involved with NCP in various capacities, including marketing, project management, and senior management. The questions used in the interviews may be found in Appendix A.

Findings for the topics covered in the interviews are discussed using the following categories:

- **NCP Strengths** – areas where there is general and positive consensus about program practices
- **NCP Areas to Improve** – areas where most respondents reported being concerned about the effectiveness of NCP practices
- **Mixed Views** – areas where respondents noted both positive and negative views about program practices
- **Upcoming Evaluation Issues** – areas where it is too soon to determine how well new program initiatives are working

These same general categories have been used throughout the report to organize input from OPCs, TA providers, and NCP Participants. Quotes from respondents are used to illustrate findings.

4.2 NCP STRENGTHS

4.2.1 Staff Member Views on NCP Progress and Challenges

During the 2009 to 2011 period, the program ramped up to meet its expanded savings goals through a number of mechanisms. Based upon staff projections[17] , NCP appears to be on target to meet its electric and gas savings goals, as illustrated in Figure 4-1 and Figure 4-2, below. The purple line in each figure shows the monthly progression of the NCP savings goal as designated by DPS. The other three lines capture estimated savings at three levels of uncertainty, based on potential dropout rates of projects. Even at the highest level of uncertainty (a 40% dropout rate), electric savings are tracking closely to the goal. For gas savings, estimates even at the highest rate of uncertainty exceed the savings goal, which, according to staff can largely be attributed to the large number of applications, limited incentives, and lower goals (maybe something more appropriate than “lower goals”).

[17] Because NCP projects are often of long duration, staff developed savings projections based upon estimated savings from project applications each month, plus encumbered and paid savings, and other adjustments. The calculation for electric savings is: Cumulative new monthly application SF (square feet) x 2.61 kWh/SF x dropout factor x 1.26 combined realization rate & net to gross (NTG) factors) + encumbered + paid = kWh savings, converted to megawatt hours (MWh). The 2.61 is the historic program average savings/SF based on 1161 paid projects. The calculation for gas savings is similar, except that NCP uses .099 therms/SF and a .09 combined realization and NTG rate.

Figure 4-1. NCP Projected Progress toward Electric Savings Goals (September 2011)

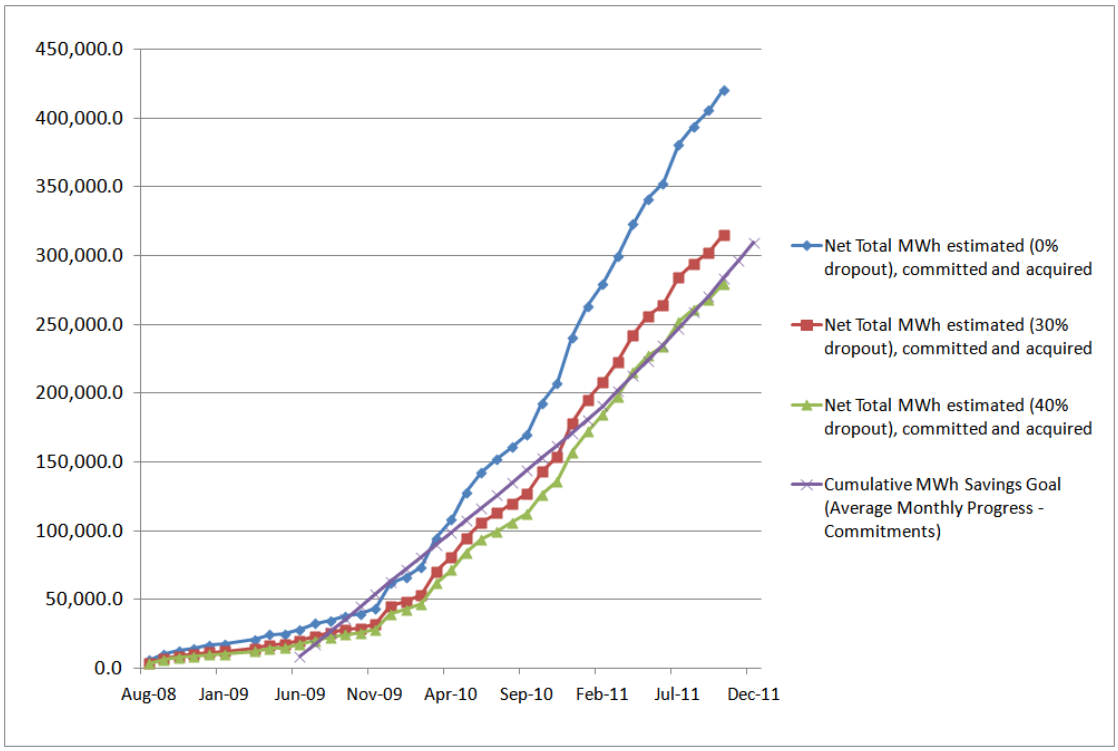
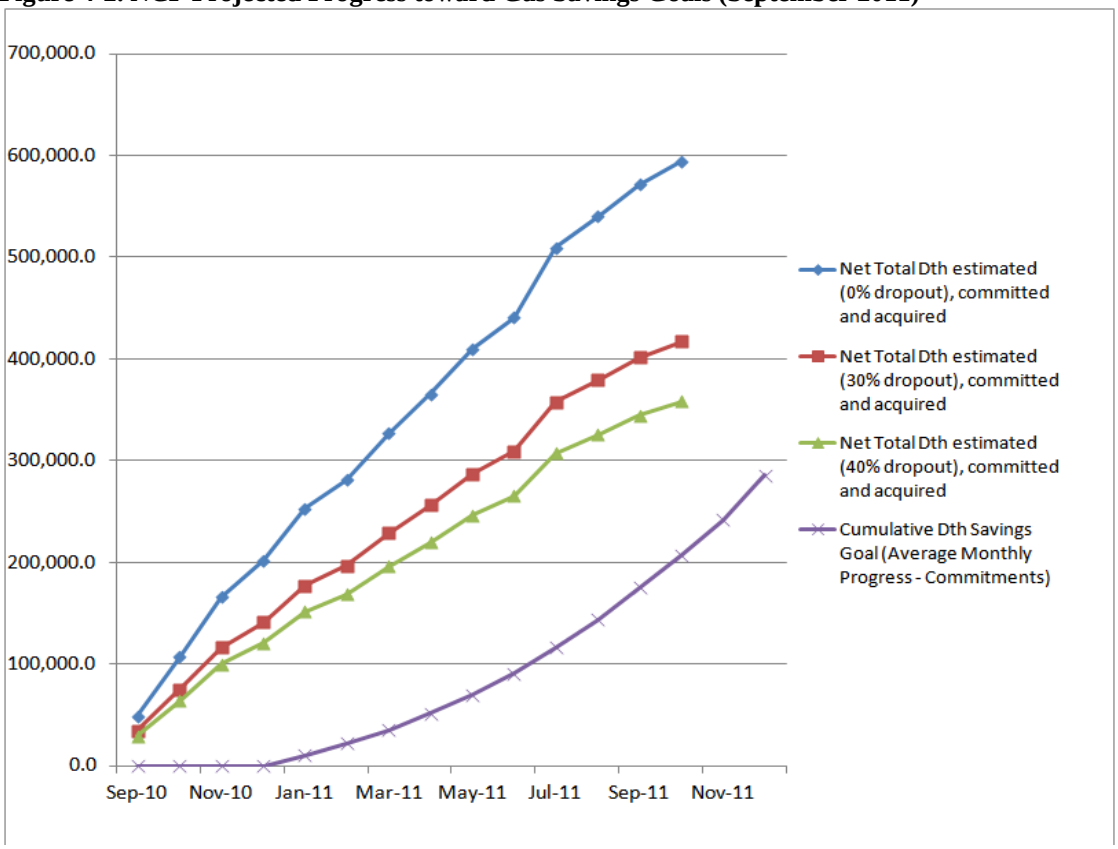


Figure 4-2. NCP Projected Progress toward Gas Savings Goals (September 2011)



Staff members know that the NCP is meeting its goals and hope that its success will position the program well for new funding. While staff members value that NCP balances a sometimes less than comfortable combination of market transformation and savings acquisition goals, they are all report they are committed to making the program succeed..

Based upon the first round of interviews with NCP staff members, the interim report for this evaluation noted a variety of potential issues for NCP given the changed under PON 1501. Each of these issues is described and updated in the bullets below.

- **Lower NCP program incentives**. In the first round, staff members said they had not heard much "kicking and screaming" from customers, and it appears this is still the case.
- **Greater DPS review and oversight.** While staff members mentioned this as a potential issue for NCP in the first round of interviews, it did not surface as an issue in the second round.
- **Increased competition among TA providers due to a change in the TA contracting structure.** This did not surface as an issue in the second round.
- **Increased OPC marketing.** Overall, staff members see this as a positive development that is reaping rewards for the program.
- **Change from a whole building Total Resource Cost (TRC) to an individual measure TRC[18].** In the first round, staff members were concerned that this change could result in lower savings and incentives for some projects. This result appears to be true, especially for projects trying to adopt more leading edge, integrated design approaches, and new technologies. Staff members report the new TRC interferes with the program's market transformation goals. At the same time, they say they accept the need to achieve the required savings. They also report that the change in the TRC makes it more difficult to distinguish the benefits of the whole building path from those for the custom path (where a whole building TRC was not available).

4.2.2 Staff Member Views of Staff and Contractor Expertise

As in the first round of interviews, when asked about the strengths of the NCP, several staff members immediately said "the people." They pointed to many positive attributes of NCP staff, OPCs, and TA providers that included their collective commitment to saving energy, their willingness to work hard and do whatever is needed, and their ability to work as a team. One staff person praised his colleagues by saying "[Staff members are] very smart hardworking bunch. It's gratifying to work with them from the ground up."

During the second round of interviews staff members tended to emphasize the high quality of the technical assistance that the program offers – that it is flexible, objective, and encourages the installation of measures that provide long term savings. They noted that TA providers bring in jobs that would not be at NCP otherwise. At the same time, some staff members pointed out that TA provider skills vary and thus the quality of their services also vary; they said they would like to see more consistently outstanding work.

4.2.3 Staff Member Views of Marketing

NCP staff report that marketing has not been a strong focus for NCP in the past because the demand for program services was so great. However, given the increased demand for savings and the reduced incentives, NCP has been developing, and launched, marketing efforts that are reaping strong rewards. NCP staff members report that leads and applications for the program are picking up dramatically with marketing ramping up. Applications for 2011 through August were running about 56 per month, with a high of 91 in March, compared to average of 40 per month in 2010 and 38 per month in 2009.

NCP has taken a two-pronged approach to marketing:

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[18] The TRC applies only to the custom and whole buildings paths for NCP. For prequalified measures, TRC is factored into the prequalified incentive structure.

1. Taking part in a NYSERDA umbrella marketing effort for commercial/industrial programs that is branding the effort in terms of look, feel, messaging, and media, with a single-themed message -- measurable results. This marketing campaign was launched in July 2011.
2. Allowing OPCs to be more proactive marketers.

To increase effective marketing, program staff members and NYSERDA's marketing and communication department have been working hard to develop a marketing plan and to put it into action. A market-level survey was conducted and the results used to inform commercial programs about the attitudes, motivations, barriers, and desired messages of key target audiences (not including A&E firms). Staff members noted, "One of the big things is trying to bring consistency" to marketing and to build marketing from the perspective of customer needs and requirements.

The use of OPCs as proactive markets also appears to be generating leads and applications. The uptick in savings projections from projects corresponds with the onset of OPC proactive marketing, as an NCP staff member explained:

- *"Presentations and lead generation increased starting in the summer of 2010 when we started pushing the OPCs, and even more so in fall 2010 when the OPCs hired dedicated marketers to beat the bushes."*

Another boon to marketing – and programmatic efforts more generally – is that staffing has been increased and stabilized in the New York City office. Staff members report that the increased and reliable presence of NCP staff in the New York City office, coupled with regular visits between Albany and the city, are producing good results.

4.2.4 Staff Member Views of Data Tracking for NCP

Several respondents talked about the positive evolution of the Building Portals data-tracking system for the NCP. During the first round of interviews, respondents pointed out that the former database was difficult to use and to update. In contrast, staff members in the second round complimented the usefulness of the Building Portals Database, saying that it is comprehensive, up-to-date, and accessible. Given that project managers need to track many projects at the same time, they feel that having such a database is an essential program management tool.

4.3 NCP AREAS TO IMPROVE

4.3.1 Staff Member Views of NCP Timing and Responsiveness

Issues involving NCP timing, responsiveness to customer deadlines, and slow turnaround times were central to discussions with staff members during both rounds of interviews. Staff members understand that the window of to influence design is short and they agree the process could be more streamlined. The program management has been working to enable TA providers to be contracted more quickly so that they can have a greater influence on building design. Other steps to improve streamlining in the past year include more standardization in modeling approaches for projects and in the reports that TA providers supply to participants.

Overall, though, most staff members still say more streamlining is needed, based upon their own observations and feedback from participants. They talked about a number of interrelated factors that affect the speed of the program and its challenges in meeting specific project schedules. They noted that the NCP process is complex and has many steps. They also said projects might have many actors that need to be coordinated. Finally, they noted that staff and contractors get behind due to the large number of projects that need attention simultaneously. Taken together, these factors can result in slow turnaround times for contracting and report reviews, including Notices to Proceed and technical reports.

Several staff members also noted that new commercial buildings have their own scheduling stresses apart from the NCP, causing them to speed up and slow down, or even stop for a while. These project uncertainties, in turn, increase the synchronization challenges for NCP.

4.3.2 Staff Member Views of Customer and Market Feedback

As in round one interviews, staff members said that formal feedback from customers was limited. While they report they do get quite a bit of informal feedback from customers and through the OPCs and TA providers, they also say that collecting participant feedback is not a strong component of the project manager role. Staff members did recognize that meeting EEPS goals would require more emphasis on marketing, which in turn makes customer insights are more important than ever. One manager mentioned he is going to encourage his staff to get out in the field more and talk with customers.

4.4 MIXED VIEWS

4.4.1 Staff Members Views of Coordination among Implementers of NCP

Apart from the timing challenges of coordinating the varied actors who take part in the NCP process, staff members talking about coordination among all those who deliver NCP: OPCs, TA providers, staff, Focus Contractors, and Energy Smart Community Coordinators (ESCCs). All these actors need to be able to operate consistently on behalf of the program and to clearly understand the authority and limitations of their roles. Staff members said that sometimes this coordination works very well, but that it still needs to be improved.

Respondents noted that the concerted efforts to have regular meetings with staff, OPCs, and TA providers are producing positive results in terms of consistent and high quality operation of the program. Still, with change being an ongoing facet of NCP, staff members report that it is difficult to keep everyone operating according to the same assumptions.

In terms of coordination with other programs at NYSERDA, NCP routinely coordinates successfully with R&D and with the Industrial Process Program (IPE), which is operated jointly in some respects, since IPE's incentive requests flow through the NCP. Staff members report that overall the coordination is going well. Still, they noted that some issues remain such as defining the division between NCP and IPE responsibilities on some projects.

4.4.2 Staff Members Views of Serving Small Projects

In round one interviews, staff member assessments of the program's ability to serve smaller projects varied and was fairly limited. However, staff members acknowledged that finding cost-effective methods to serve smaller projects and still achieve high performing buildings presents challenges. They said that a smaller project can demand as much attention – and take as many resources – as a larger one, but that the savings are much less.

In round two interviews, as new marketing efforts have brought more applications from smaller projects, staff members say that serving these customers effectively has taken on a higher priority. One staff member mentioned that NCP is still exploring the "advanced core performance program" as a way to serve smaller buildings more cost-effectively and in a more timely way. This software program fosters deeper savings in small projects, through the use of more standardized analysis approaches, and is designed to reduce the expense of individualized technical assistance.

4.4.3 Staff Members Views of the Consolidated Funding Application (CFA)

During the final interviews for this evaluation, a new wrinkle surfaced for NCP. For several years, the NCP application has become more simplified and recently customers were able to apply to NCP on-line. Past evaluation results showed the application process worked smoothly for applicants.

However, to increase access to funding sources, the state developed the Consolidated Funding Application (CFA), which NCP applicants now must use. While the application is on-line, NCP staff members thought the CFA would likely make the application process longer and more complicated for many NCP participants. Staff members noted some problems did surface with the CFA but that they or OPCs have been helping applicants navigate the new application process. Staff members reported a dip in applications in the first month since the CFA, but said that demand for the program was beginning to bounce back in subsequent months.

Section 5:

KEY FINDINGS – OPC AND TA PROVIDER INTERVIEWS

5.1 INTRODUCTION

This section on the NCP's strengths, areas to improve, mixed viewpoints, and current issues facing the program. These findings are based on in-depth interviews with nine OPCs and 13 TA providers, with seven interviews conducted in 2010 and 15 conducted in 2011. Overall findings are based on all the interview results, but changes in perspective between the two years are noted where relevant. The views of these groups overlap those of staff, adding depth to the findings.[19]

5.2 OPC AND TA PROVIDER VIEWS OF NCP STRENGTHS

The OPCs and TA providers consistently highlighted three NCP strengths:

- The opportunity to influence building design
- The expertise and commitment of staff and consultants
- Financial incentives available through NCP

In the first round of seven interviews, NCP longevity was also one of the strengths identified. When considering all the interview responses, longevity of the program did not consistently come up as a key strength, although respondents did positively refer to it in different ways, such as when they talked about the experience of staff and consultants.

5.2.1 OPC and TA Provider Views of the Opportunity to Influence Design

OPCs and TA providers most frequently identified the opportunity to influence building design as a core strength of NCP. They appreciated the opportunity to work with design teams and owners, consider options, and contribute to more efficient building designs. As one respondent said:

- *"Even if we do not give incentives, the opportunity to talk about efficiency… up front, from a 3rd party…is invaluable to the customer."*

Respondents said that the whole building design path provides the greatest opportunity to influence building design. The TA providers in particular prefer this approach because it allows them to work with a client, conduct what-if analyses, look at the whole building rather than individual measures, and optimize savings. Most, if not all, of the TA providers and OPCs would agree with the following sentiment:

- *"[The] process of whole building is the best feature of this program. [It is the] Right way to do it. . . NYSERDA is a leader in this market."*

Respondents emphasized that for the whole building path to be optimized and to avoid a higher proportion of free riders, projects need to be involved early, and the client needs to be motivated. If the project design has advanced to the point where it is difficult to make changes or the client is just interested in getting an incentive, then the ability to influence the design and the value of the design assistance is diminished. In addition, OPCs and TA providers report that overall the program needs to better meet the timing needs of clients, since there may be a small window to influence the building design before decisions are made and the design is set.

Respondents identified the scoping meetings, where key project actors meet with OPCs and TAs to examine the energy efficiency potential of a participating building, as one of the most important aspects of the NCP's whole building approach. As one person said, the "scoping meeting is a really great tool…where everyone is open-minded" and where those in attendance both learn new things and make important decisions about the building's efficiency. He continued on to say that, "I have rarely seen a job that did not

[19] If needed, quotes have been edited to ensure the content is clear.

change as a result of the scoping meeting. That is, without any analysis – [it's] just the experience in the room."

The OPCs and TA providers highlighted factors that contribute to the success of the scoping meeting, including:

- OPC screening of the client to clarify what they want from the analysis and to ensure the client is in the right NCP path.
- OPCs preparing TA providers to make sure they know the project and come to the meeting with a list of efficiency options to consider.
- The experience and expertise of the TA. OPCs emphasized that TA providers need to be immediately credible at presenting efficiency options and encouraging the design team to consider them.
- OPCs facilitation skills (need to be strong/well developed?) to ensure information sharing and different options are brought up.

To ensure the momentum achieved in scoping meeting is maintained, the TA provider need to prepare a scope of work, NCP staff needs to approve it, and the client needs to agree and sign the contract before the TA provider receives a notice to proceed with the technical analysis. Then the TA provider needs to obtain project information from the design team for the technical analysis and report. Delays can occur at any point in this process. TA providers and OPCs report these delays in this part of the NCP process can take weeks or months. In the meantime the design may be moving forward and the ability to influence the design is declining. Respondents emphasized being timely during this period is crucial to the success of influencing design choices, particularly those involving energy efficiency.

Some TA providers emphasized they often have the most influence on clients when they engage with them at interim steps in the process, prior to the final report that must reflect the final design and document the incentives NCP will provide. They say these steps are not part of the formal NCP process steps and it is not clear to what extent all the TA providers engage in them. However, they have found some clients are willing to consider more options and make more design changes toward energy efficiency if they receive interim reports.

Two TA providers described this interim reporting as follows:

- *"The interim reporting phase is important in driving energy improvement. Our interim report looks nothing like [a] final report that is meant for NYSERDA purposes and is not customer friendly. It's not feedback, just incentive numbers."*
- *"Early in design we provide a design review and recommendations on how to improve energy performance as well as basic functionality and O&M. Some teams love it, brainstorm, update design, open a dialog with the owner, and update the design."*

The OPCs and TA providers identified factors that were making whole building analysis more difficult, including lower incentives, more stringent energy codes, and better building designs. However, TA providers in particular thought the value of the whole building design path and their own ability to influence building design is declining, primarily due to the change in the TRC test from a whole building to an individual measure approach. A ruling from the Public Service Commission now requires all individual energy efficiency measures to pass the TRC test, which limits the value of considering measures on a whole building basis. As one TA provider noted:

- *"TRC reduces the model to a measure by measure basis and ignores whole building results."*

The custom measure path is an alternative to the whole building design path. It does not require the development of a whole building energy model, but uses simpler tools to analyze the energy savings and the incentives for each measure. Many TA providers and OPCs noted that the quality of the tools for this path has improved and that it is the appropriate path for many projects. As one TA provider explained:

- *"The custom path works pretty well, especially with reduced incentives and implications of the TRC. That's the direction we are pushing more projects. Upfront analysis costs aren't as high,*

which helps with TRC. Incentives are not as good, but net can be more reasonable than whole building."

5.2.2 OPC and TA Provider Views: Expertise and Commitment of NCP Staff and Consultants

In different ways, the OPCs and TA providers said the NCP staff and consultants are a key asset for the program and noted that NCP staff members care greatly about their work that they do. As one Technical Provider said:

- *"People at NYSERDA and the consultants are committed. They like saving energy…. It is not just a job. It is from a value base. That is rewarding."*

OPCs and TA providers also talked about the experience and expertise of NCP consultants and that over time NCP has been able to develop a strong pool of these consultants. Both OPCs and TA providers say they are confident about the capability of their cohorts. They said that if you bring the right mix of consultants together on a project, the results will be positive. However, some TA providers noted that technical experience among TA providers varied, that some lacked adequate experience or skills, and that the quality of services to some clients suffered as a result.

5.2.3 OPC and TA Provider Views of Incentives

The OPCs and TA providers said that NCP's incentives were the primary reason customers participated. Even though incentives have gone down, they believe these incentives still provide value to customers. As one OPC described the program: "It's a no brainer…. They gain knowledge. They save thousands of energy dollars. And they get an incentive for it." While the TA providers and OPCs said they believe design assistance is a primary strength of NCP, they also said clients tend to see design assistance as secondary to the incentives. Notably, only a few OPCs and TA provided mentioned the value to customers of the long-term savings associated with energy efficiency investments.

5.3 OPC AND TA PROVIDER VIEWS OF AREAS TO IMPROVE

The OPCs and TA providers all agreed that improving timing and streamlining NCP processes is the key opportunity for increasing NCP effectiveness. They also identified a need to serve smaller projects more effectively. These are the same areas for improvement highlighted by TA providers and OPCs in the 2010 interviews. While TA providers and OPCs described a variety of minor improvements to various aspects of NCP, the following two areas received the most attention.

5.3.1 OPC and TA Provider Views of Timing and Streamlining of NCP Processes

The most common improvements that OPCs and TAs suggested for NCP were to reduce the time and effort it takes for projects to move through the NCP delivery process and to develop better ways to synchronize program steps and requirements with the pace of participating projects. They agreed the NCP process has too many steps, which lead to many opportunities for delays. They report the NCP process limits their ability to provide input and information to customers at the optimal time in the building design process.

Respondents during the first round said the application was simple and the turnaround time for applications had improved. However, both OPCs and TA providers expressed concern about the common, on-line Consolidated Funding Application (CFA) that recently went into effect, replacing the existing NCP application. They said the CFA had too many questions; was not specific to NCP; that it might make it more difficult to help owners apply; and that it might add to delays in getting projects processed and into NCP. Overall, some TA providers and OPCs thought the CFA would discourage participation in NCP.

Respondents identified other places in the NCP delivery process where delays can occur.

- **The time between the scoping meeting and the notice to proceed:** Delays in paperwork can add significantly to the time it takes to get technical assistance started. One person described this as the "sweet spot" where they can "engage the design team early on."
- **The request for project information from the design team**: Slow-downs occur in when TA providers request information from design teams and those teams do not send the requested information in a timely manner. This in turn slows down the technical analysis.

- **The reporting and review process for the technical assistance report**: Some noted that the reporting templates that NCP has created for technical reports have improved the process, but others believe the templates are not working. Some OPCs indicate the quality of TA reports varies significantly. TA providers, on the other hand, say they are spending increased time dealing with minor review comments from multiple reviewers.

Another factor that contributes to delays is ongoing and sometimes frequent changes in the program, such as revisions in incentive calculations. The TA providers are particularly sensitive to changes, because it often means they have to redo work. One OPC described this situation:

- *"NYSERDA changes the rules of the game. For the current PON there have been five revisions [in two months] to the incentive calculator that TA providers use to generate incentives. TA firms don't budget to make those changes."*

TA providers also want more clarity and consistency on program policy (for instance, what is allowable within program rules), but say that different program managers may see "different takes on the same situation." They note that they "can't go to an applicant and say we know for sure" how to interpret the program rules.

Respondents brought up a variety of other issues related to synchronizing and timing. In particular, one TA provider described the mismatch between the design process for projects and the NCP technical assistance process:

- *"Getting in early and providing work early [is optimal], but the program protocol pulls in the opposite direction. The report requires the final design, but if you understand how buildings are conceived, designed, bid, constructed, you want to have input in conceptual and design phases."*

Respondents report that even when TA work is done early, the report completed, and the incentive offer made, changes can still happen that will affect the incentive offer. Re-analyzing the savings is a problem because the TA may not be available and the OPC is not qualified to do the analysis. Respondents noted that the process needs to account for these types of changes, with a few suggesting that funds could be encumbered, but the final incentive offer not made, until the design is final. One TA also suggested that a contract for early design assistance could be awarded to allow the TA to work with the design team during the period before the notice to proceed with the TA work is issued.

When asked why they think project owners and design teams don't participate in NCP, OPCs and TA providers said that some customers think the time and cost needed to participate in NCP is not worth the benefits. Other respondents said that some architects and engineers may not be interested because they do not want someone "looking over their shoulders" or it involves extra work that was not covered in their fees.

Overall, OPCs and TA providers say the NCP process is too complicated and time consuming. They say these factors discourage potential participants and disenchant current participants. They are aware these issues are perennial ones, and recognize they are not easy to resolve because savings need to be demonstrated. When asked to recap the most important issues to address for NCP service delivery, TA providers and OPCs said NYSERDA needs to be more timely in response to their request and to simplify requirements and paperwork, as illustrated by the following quotes:

- *"Timeliness of getting responses from NYSERDA has been one of the major sticking points. One of the PMs has a day in the office where they allow time for conference calls with firms to address issues – [it's an] excellent process."*
- *"We end up filing extension requests a lot. Pretty tedious process and they added some more requirements. You do not want us spending all our time on paperwork."*

5.3.2 OPC and TA Views of Serving Smaller Projects Effectively

Everyone interviewed recognized the challenge of serving smaller projects. OPCs and TA providers agree each project requires a minimum amount of effort regardless of size. However, smaller projects can require a higher level of effort due to smaller and less sophisticated design teams, while the buildings produce less

energy savings. One TA said that, based on current NCP project data, about 30 percent of the projects were less than 20,000 square feet, representing only 3 percent of total floor space for NCP projects.

Some reported that the incentives for small projects were less significant than those for larger projects and that these incentives had become even less significant. While they said it made sense to limit incentives and services to smaller projects due to smaller savings, this makes serving these projects more difficult. A few TA providers suggested that they tend to lose money on small projects.

There were not a lot of comments about how to more effectively serve small projects. One TA suggested the need to develop a more simplified process, using the Pre-qualified Approach more often for smaller projects, and moving smaller projects to the Existing Facilities Program, which focuses on pre-qualified measures.

5.4 OPC AND TA PROVIDER MIXED VIEWPOINTS

5.4.1 Improving: Custom Measure Approach

In 2010, OPCs and TA providers had mixed views about the Custom Measure Approach, expressing a range of opinions and sometimes positive and negative comments in the same response. This year most respondents said the NCP customer measure tools had improved in the past year and a half and that "*no one is afraid to use them anymore.*" These positive views also coincide with a belief that the Custom Measure Approach is the favored technical assistance path for many projects. Still, they suggested further improvements, primarily that the approach be able to cover more technologies and suggesting which measures currently without tools could be included in the Custom Measure Approach.

5.4.2 Improving: Communication and Coordination

While OPCs and TA providers expressed mixed views about coordination, roles, and relationships, their views on these topics in the 2011 interviews were more positive than in 2010, with most saying these aspects of NCP had improved. They particularly noted that NCP staff members were making greater efforts to be responsive to their requests and questions, and this was effort has improved program timing and consistency. They credited program staff members with instituting better communication protocols, including group e-mails and regular conference calls.

OPCs and TA providers were positive about the skills of all the people they work with to deliver NCP. Not surprisingly, those most satisfied with coordination and communication within the program tended to have established long-term working relationships with each other.

Still, OPCs and TA providers are concerned about NCP processes and receiving consistent direction about program rules and requirements. The overriding concern with the NCP process is the number of steps required to participate in the program and the time it takes to go through those steps. A few respondents commented about reports sitting on someone's desk for months or a notice-to-proceed seemingly getting lost. While they acknowledge these situations are not the norm, they do happen.

Both OPCs and TA providers cited some concerns about receiving different interpretations of program rules from NCP program managers (and also among OPCs). TA providers also noted that program changes occur often. They say the changes don't always filter down to everyone and that the volume of changes makes it challenging to maintain consistency and quality.

The most prominent comments about consistency came from TA providers and the review of technical reports. They said they receive conflicting comments from multiple reviewers and that resolving these conflicts can be time consuming and even frustrating if they believe the comments do not impact on results. On the other hand, OPCs noted they have no authority over TA providers, but that they are responsible for doing quality control on their work, which can vary considerably.

OPCs and TA providers suggested these steps to improve communication for NCP:

- Reduce the number of steps in NCP processes
- Reduce the number of people that review reports

- Have a central place TA providers and OPCs can access information on demand. This can include documentation of consistent answers and processes along with changes in the program
- Have more conference calls where all the OPCs or TA providers are involved when it is important to communicate important changes in policy and procedures[20]

5.4.3 Of Concern: The Ability of NCP to Influence Design

When OPCs and TA providers were asked "How well do you think NCP is able to meet its goal of accelerating the inclusion of energy efficiency and green building features in the design construction and operation of commercial, industrial, and institutional buildings?," views tended to be positive but diverse. TA providers, compared to OPCs, expressed more concerns about the ability of the program to influence design.

OPCs and TA providers report that the NCP has been successful and that it has had significant influence on transforming energy efficiency choices in the new construction market in New York. Respondent opinions differed, however, on the extent to which the program is currently able to influence building design.[21] Some see the NCP as more of a rebate program, where incentives are calculated and pay for energy improvements that people are already intending to do. More than one-half of the TA providers in this year's interviews report that the NCP's ability to influence building design is declining. They say this is due to lower incentives, the change in the TRC test, and that the market for energy efficiency is maturing, in part due to more stringent codes but also due to designers paying more attention to energy efficiency. These ideas are reflected in the comments below:

- *"Incentives are not as high - so not as much pull to make improvements. . . Design teams already incorporate as many energy efficient measures as they can. There is nothing for us to do. LEED® and NCP have been around for number of years. It's a question of how much further can we go?"*
- *"I think 50% of the design teams are already there; the other 50% – we are having influence. Not a poor reflection on the program. Energy efficiency is more prevalent. Sometimes we are just incentive calculators. If the designs are good, no reason why those projects shouldn't get rewarded. But maybe that's not exactly the intent of program."*

5.5 2011 EVALUATION ISSUES OF SPECIAL NOTE

Two topics that were highlighted for the 2011 evaluation work were the transition of NCP to PON1501 and the new marketing activities that took place in 2011. We asked OPCs and TA providers about these topics in our 2011 interviews. Says 2010 and 2011 below

5.5.1 OPC and TA Provider Views on the Transition to PON1501

During interviews conducted with OPCs and TA providers in 2010, most reported that it was too early to tell how the NCP would fare under PON 1501 because they had limited experience it so far. They wondered how the lower incentives in PON 1501 would affect the program.

In our 2011 interviews, OPCs and TA providers expressed concern that lower incentives would make NCP less attractive to owners. OPCs and TA providers said the transition from PON 1222 to PON 1501 had been somewhat difficult, especially if they had been involved with moving projects from PON 1222, with higher incentives, to PON 1501 with lower incentives[22]. TA providers and OPCs said it was challenging to explain to participants that they were going to receive incentives that were 30% to 50% less than what they expected. They also felt this unexpected change hurt their reputations and the reputation of NCP. The TA

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[20] Future process evaluations of NCP might further probe the effectiveness of existing communication mechanisms, including the program's Decision Log, which documents program changes; the program's advisory notices, which are issued on a regular basis; and regular or periodic meetings, such as a weekly meeting with OPC directors.

[21] The ability of the program to influence design also was raised in relation to timing issues.

[22] This occurred because funding under PON1222 ran out.

providers also noted the shifting of projects from one PON to another resulted in the need to redo technical analyses. They added this extra work was not budgeted.

As with other groups, the OPCs and TA providers also expressed concern about the change in the TRC analysis (which occurred about the same time as PON 1501) from a allowing a whole building TRC test to requiring that individual measures meet the test. Most respondents were concerned about the limits it places on the whole building and integrated design approaches.

5.5.2 New Marketing Activities

In our 2010 interviews, TA providers and OPCs had some awareness of the new marketing plan and activities that were being developed for NCP, but they had little specific information about it. In the 2011 interviews, TA providers still had limited knowledge about new marketing efforts, noting that they typically have limited involvement in direct NCP marketing. Still, they tended to say they thought NCP marketing efforts were working.

The OPCs interviewed in 2011, however, were enthusiastic about the new marketing efforts that began in the fall of 2010 and which rely heavily on OPCs. They said they welcomed the opportunity for OPCs to be a crucial marketing arm for NCP and believe these marketing activities are generating a lot of program applications. They also noted they are glad the marketing efforts have a specific budget.

When asked to suggest how to improve marketing, TA providers and OPCs had limited ideas. They emphasized marketing needed to focus on architects, engineers, and owners, since these are the people are the first to know about a building project first.[23] A few suggested that relationship-based marketing strategies were key to reaching these audiences, such as presenting the program to A&E firms and sponsorship and networking at relevant events.

[23] Note: Program marketing does focus on these audiences.

Section 6:

KEY FINDINGS – PARTICIPANT INTERVIEWS

This section presents findings from in-depth interviews with 201 NCP participants (owners, developers, and design team members) representing a total of 144 NCP projects. This section first presents data that profiles the respondents. Then, the report discusses how participants rated various NCP elements, based upon close-ended ratings and open-ended questions and probes.

The ratings divide assessment of program elements by areas of strength, mixed ratings, and areas needing improvement, using these fairly stringent criteria:[24]

- To qualify as an area of strength for NCP, based on close-ended ratings, at least70 percent of respondents needed to give that element the top rating (e.g. Very Satisfied).
- To qualify as a 'mixed rating,' 50-69 percent of respondents gave the top rating.
- To qualify as an area needing improvement, less than 50 percent of respondents gave the top rating.

In addition to frequencies, responses were also cross tabulated by key variables to determine if significant differences surfaced between groups. Key variables included the following:

- Role in project: Owner or design team member
- Type of project: Active or cancelled
- NCP Path: Pre-Qualified, Custom, or Whole Building
- Applicable PON: PON 1222, transfer from 1222 to 1501, or 1501

Differences between the groups are not reported unless a statistically significant difference was found.

6.1 RESPONDENT PROFILE

Table 6-1 profiles NCP participants in terms of the size of their projects and the PON under which they participated. Overall, 56% of respondents were involved with large projects while 44% were involved with small projects. One-half of respondents participated under PON 1222, 20% were transferred from PON 1222 to PON 1501 due to financial constraints of the program, and 28% of respondents participated under PON 1501. The proportions for size of project and applicable PON did not vary significantly by key variables.

Table 6-1. Respondent Profile: Size of Project and Applicable PON

Type of Respondent (n =201)	Frequency	Percent
Small Projects < 30,000 -64,500 SqFt	89	44%
Large Projects > 64,500 SqFt	112	56%
Applicable PON	**Frequency**	**Percent**
PON 1222	104	50%
PON 1222 transfer to PON 1501	41	20%
PON 1501	56	28%

[24] Stringent criteria were applied because previous evaluations show that the target audience of owners and design teams expect very high levels of customer and technical service and that less than high service would be a barrier to participation. In addition, analysis of open-ended reasons for ratings shows that ratings before the 'very' level often reflect mixed views of that program attribute. Finally, NCP program staff, OPCs, and TAs say that very high levels of service is key to program success.

Table 6-2 continues the respondent profile. Thirteen percent of respondents had projects in the pre-qualified path of NCP, while 38% were in the custom path and 49% in the whole building path. As suggested by the profile of projects, respondents with projects in the pre-qualified path were significantly more likely to have a cancelled project (42%) than were respondents with projects in the custom (18%) or whole building paths (15%).

The table also shows that respondents were interviewed at various stages in the NCP process. Given the long duration of many new construction projects, the goal was to gather participant reactions to NCP as they progressed through it rather than wait to gather their reactions when the projects were completed. The notable exception to this was the cancelled projects, where the time lag between dropping out and the interviews was often longer (although projects still were served under the same PONs). Between the short duration in NCP and the longer time lag, many respondents had limited recollection of the program.

The bottom portion of the table shows respondent self-reports on the design stage of their projects when they entered the program. Most respondents reported they entered the program when their projects were at an early stage – either during conceptual design (46%) or before the end of schematic design (25%). Entering NCP at these stages allows projects to be eligible for whole building design services.

Table 6-2. Respondent Profile: NCP Path, Stage in NCP, Design Phase at Entry

Attribute	**Frequency**	**Percent**
Project Path (n=201)		
Pre-Qualified	28	13%
Custom	77	38%
Whole Building	98	49%
Stage in NCP Process (n=201)	**Frequency**	**Percent**
Cancelled project	41	20%
Initial meetings complete	13	7%
Incentive offer accepted/project not under construction	14	7%
Project under construction	52	26%
Project completed NCP inspection	6	3%
Project completed commissioning	5	3%
Project completed, waiting for payment	18	9%
Project completed, incentive paid	54	27%
Point in Design Process at Program Entry (n=199)	**Frequency**	**Percent**
Conceptual Design	93	46v
Schematic Design	50	25%
Design development	19	10%
Construction drawings	17	9%
Other (late-stage)	18	9%
Don’t know	2	1%

As Table 6-3 shows, just over one-half of participants (51%) reported they were participating in NCP for the first time. A small proportion of respondents reported they were newly aware of NCP (13% said less than two years). However, most had been aware of NCP for some time, with one-half of respondents saying they had known about the program for 2-5 years, and another 31% saying they had known about it for over 5 years.

Table 6-3. Respondent Profile: Past Participation, Awareness of NCP

Only NCP Project to date? (n=201)	Frequency	Percent
Yes	85	42%
No	103	51%
Don't Know/No Answer	13	7%
How long aware of NCP? (n=201)	**Frequency**	**Percent**
Under 2 years	27	13%
2-5 years	101	50%
Over 5 years	62	31%
No answer	11	6%

6.2 AREAS OF NCP STRENGTH

6.2.1 Understanding of NCP's Goals

When asked about the purpose of NCP, respondents gave three major types of answers, all of which are congruent with the goals of NCP:

- Provide incentives for energy efficiency projects (60%)
- Conserve and reduce energy use (35%)
- Get projects involved at the beginning to encourage maximum energy efficiency (34%)

Another purpose surfaced less often but it is one that NCP staff should find especially pleasing. Nine percent of respondents said that the program wants to educate participants that the long-term savings from efficiency investments are greater than the up-front investment costs..

6.2.2 Sources of Information about NCP

When asked where they first found out about NCP, the three largest sources of information were:

- Professional meetings and contacts (34%)
- NYSERDA specific sources (website – 9%; staff person-13%; OPC/TA – 5%; participation in another NYSERDA program – 10%)
- A&E firms with participating projects (18%)

These findings reflect how participants found out about NCP prior to NYSRDA's overall commercial and industrial marketing campaign launched in July 2011 and, for the most part, the proactive use of OPCs in marketing and finding leads.

6.2.3 Reasons to Participate and Benefits of NCP

While 70% of respondents said they were motivated to participate because of financial savings, 29% reported they were motivated by saving energy and being green, while another 17% said they wanted to participate because of the expert modeling and design help available to them through the program. Again, these motivations match the goals and messaging of NCP.

When asked about the primary benefit of participation, incentives and savings were again at the top of the list (67%). Notably, however, the importance of having access to energy efficiency through better design approaches was close behind at 44%, while another 11% said that a primary benefit was the education they received and the ability to apply what they learned to their own marketing efforts.

While many participants said they already knew about energy efficient design (46%) prior to taking part in the program, 24% said they learned more about energy efficiency through the NYSERDA process and another 24% said they learned about specific energy efficient products as a result of participating.

6.2.4 Awareness of NCP's Basic Features

Since the interim report showed that almost all participants (97%) were aware NCP offers financial incentives, this question was not repeated in the second round of interviews. As Table 6-4 shows, most NCP participants are familiar with the program's range of offerings, with large majorities knowing it serves both new buildings and major renovations (87%), provides TA and energy analysis services (92%), and supports green buildings (84%). Somewhat smaller proportions were familiar with the program's incentives for building commissioning (77%), and the availability of design team incentives (76%).

Table 6-4. Awareness of NCP Features

Have you heard that NCP.. ('don't knows' excluded)		
Serves New Buildings Only, Major Renovations Only, or Both? (n=190)	**Frequency**	**Percent**
Both	166	87%
New buildings only	21	11%
Major renovations only	3	2%
Provides Basic technical assistance services and incentives for energy analysis? (n=190)	**Frequency**	**Percent**
Yes	175	92%
No	15	8%
Provides Green Buildings Services and Incentives? (n=199)	**Frequency**	**Percent**
Yes	160	84%
No	30	18%
Provides Design Team Incentives? (n=197)	**Frequency**	**Percent**
Yes	140	76%
No	45	24%
Provides Incentives for Building Commissioning? (n=197)	**Frequency**	**Percent**
Yes	142	77%
No	42	22%

6.2.5 Ease of Application

The program areas discussed in this section reflect areas where participants reported high levels of satisfaction with program elements. As shown in Table 6-5, participants agreed with other program actors that the application process usually presented few challenges, with 63% reporting the process was very easy and another 28% saying it was somewhat easy. When asked the reasons behind their ratings, most respondents said the form was short, simple, and straightforward. A number of respondents noted that when they needed additional information, that NYSERDA OPCs helped them fill in the holes. A notable minority simply reported they had others fill out the application. Only a few said they found the application tedious or that it was hard to gather the required information.[25] As one respondent summed up his positive rating: "Because I could do it fairly easily and because the OPC helped us."

[25] After these interviews were completed, the application process changed. In October 2011, applicants to NYSERDA programs will apply for services and funding through the Consolidated Funding Application.

Table 6-5. Ease of the Application Process

How Easy Was The Application Process? (n = 144, 'don't knows' excluded)	Frequency	Percent
Very easy	91	63%
Somewhat easy	39	27%
Neither easy nor hard	6	4%
Somewhat hard	5	4%
Very hard	3	2%

Note: Percent totals may not equal 100% due to rounding.

6.2.6 Areas of Strong Satisfaction

Table 6-6 shows several areas of strong satisfaction with the NCP. Just over three-quarters of participants (77%) gave their OPCs the highest satisfaction rating and less than 10% were dissatisfied. When asked to give the reasons behind their ratings, participants often mentioned that OPCs facilitate communication among the various project actors (e.g., owner, TA, contractor); that they spoke the right language for the job at hand (e.g., "engineer"); and that they knew the program process and could help applicants navigate it. As one participant said, it was a "good process management -- so pleasant it was painless."

When asked if they had any suggestions for improving OPC services, many respondents simply said "no" or that their experience with OPCs had been good. Some, however, said OPCs needed to work more quickly, to be more timely, to improve their communication skills, and to check more frequently on the status of projects and paperwork. For instance, one participant said that they were notified in December that an offer letter was to be issued shortly, but as of June no letter had arrived.

The NCP inspection process and green building services also received high marks, with over 70 percent of respondents giving each program element a very satisfied rating. For the green building services, participants praised the knowledge of NYSERDA staff and OPCs and were very pleased about the added incentives. As one person put it:

- *Mostly that it was holistic and gives the design team some direct incentive to improve the design, helps get over the barrier of pursuing LEED ® certification.*

Table 6-6. Areas of Strong Satisfaction

Level of Satisfaction with. ('don't knows' excluded)		
Overall OPC Services (n=156)	**Frequency**	**Percent**
Very satisfied	120	77%
Somewhat satisfied	24	15%
Neither satisfied / unsatisfied	2	1%
Somewhat dissatisfied	6	4%
Very dissatisfied	4	3%
Inspection Process (n=51)	**Frequency**	**Percent**
Very satisfied	36	71%
Somewhat satisfied	12	24%
Neither satisfied/dissatisfied	1	2%
Somewhat dissatisfied	2	4%
Green Building Services (n= 28)	**Frequency**	**Percent**
Very Satisfied	22	79%
Somewhat	5	18%
Neither satisfied/dissatisfied	1	4%

Two other measures of satisfaction – how likely a participant was to recommend the NCP to others or to participate again – were also very positive (Table 6-7). A large majority were very likely to recommend the NCP (88%) or participate in it again (89%). While some other results show that participants may find aspects of NCP less than satisfying, these data show that by the end of the process, most participants are willing to champion the program. Crosstab results show that designers were significantly more likely to say they would participate again in NCP than owners (95% to 79%). Not surprisingly, participants with active projects, compared to those with projects that were cancelled, are more likely to recommend NCP to others (87% to 69%).

Table 6-7. How Likely to Recommend NCP or Participate Again

How Likely Are You To.. ('don't knows' excluded)		
Recommend NCP to Others (n=183)	**Frequency**	**Percent**
Very likely	161	88%
Somewhat likely	13	7%
Neither likely/nor Unlikely	0	0%
Somewhat unlikely	4	2%
Very unlikely	5	3%
Participate in NCP Again (n=182)	**Frequency**	**Percent**
Very likely	162	89%
Somewhat likely	8	4%
Neither likely/nor Unlikely	0	0%
Somewhat unlikely	4	2%
Very unlikely	8	4%

6.3 AREAS TO IMPROVE

This section describes those areas of NCP that participants thought could be improved. Again, the benchmark for success within each element is that at least one-half of participants it the highest rating (e.g., very clear). In addition, follow-up remarks, when available, provided insights into customer perspectives on needed changes.

6.3.1 Clarity of Program Steps and Services

While the application process got high marks from most participants, many initially did not fully understand the NCP program steps and requirements, nor did they understand how specific program services that matched their projects. These ratings (shown in Table 6-8) suggest that participants' first impressions of the NCP could generate confusion and questions; they also underscore the importance of the OPCs' role as the people who shepherd participants through a somewhat challenging process.

Table 6-8. Clarity of Program Steps

Initially, How Clear Were…('don't knows' excluded)		
NCP's Program Steps and Requirements? (n=181)	**Frequency**	**Percent**
Very clear	56	31%
Somewhat clear	86	48%
Neither clear/unclear	6	3%
Somewhat unclear	25	14%
Very unclear	8	4%
Services for Projects Like Yours? (n=184)	**Frequency**	**Percent**
Very clear	75	41%
Somewhat clear	76	41%
Neither clear/unclear	2	1%
Somewhat unclear	24	13%
Very unclear	7	4%

6.3.2 Helpfulness of the Scoping Meeting

Scoping meetings, and the technical assistance they provide, are a cornerstone of NCP services for more complex buildings. These meetings largely depend upon the skills of TA providers (with support from OPCs) and are intended to be of the highest quality and helpfulness so that design decisions can be influenced toward adopting greater energy efficiency. As Table 6-9 shows, ratings of the scoping meetings show that one-quarter of respondents who participated in one did not rate their experience as helpful, 38% rated the meeting as somewhat helpful, and 39% rated the meeting as very helpful.

When asked why they gave the ratings they did, respondents pointed out both positive aspects of the scoping meeting and areas that needed improvement. Those who said the meeting was very helpful tended to say that the meeting was essential in having all project actors reach alignment on project goals ("We went over everything and everyone was on the same page about what was possible."), and that the meeting clarified program incentives and technical assistance that was available to them. Several also said that the meeting was a positive exchange of ideas, advice, and guidance that led in some cases to influencing the final design.

Those who said the meeting was somewhat helpful tended to say the meeting clarified the program and incentive options ("aligned some of the things we were trying to achieve with the incentives available) or validated models that had already been completed. Those who gave the meeting neutral or less positive ratings almost uniformly said the meeting was not necessary because it was too late in the process; that it wasted their time, or that they knew more than the TA providers that were present.

Respondents who had attended a scoping meeting were asked an additional probe: "Were there any benefits from the scoping meeting not related to saving energy." Respondents said the scoping meetings:

- Introduced the team (which did what?)
- Clarified NYSERDA processes
- Set roles and responsibilities (to help make the process more clear?)
- Aligned project goals (project goals with NCP goals?)
- Assisted with LEED
- Validated the design

Table 6-9. Helpfulness of the Scoping Meeting

Was the scoping meetng. . . (n=122) ('don't knows' excluded)	Frequency	Percent
Very Helpful	47	39%
Somewhat Helpful	46	38%
Neither Helpful/Unhelpful	13	11%
Somewhat Unhelpful	11	9%
Very Unhelpful	3	4%

6.3.3 TA Reports and Influence

Table 6-10 reveals some further aspects of TA provider performance that offer opportunities for improvement – satisfaction with the final technical assistance report and the value of TA provider services in influencing energy performance. The final technical assistance report not only intends to capture the essence of the technical services that NCP has provided, it also intends to present information that encourages the adoption of energy efficiency measures. If it is not clear and communicative, it doesn't serve its purpose well. Almost one in five respondents said they were dissatisfied with the report, and another one-third said they were somewhat satisfied. "Somewhat satisfied" ratings often reflect both positive and negative views on a topic. However, this is one of the few questions in the participant survey without a follow-up, so specific feedback is not available on this question.

The value of the influence of technical assistance services on energy efficiency choices also falls short of what NCP would like its TA providers to accomplish. Almost one-third of participants gave TA influence a negative or neutral rating. Participants who said technical assistance greatly influenced their building designs tended to say that TA providers gave good recommendations and that they validated the design, plans, and equipment participants were considering. Respondents also credited TA providers with providing them needed cost-benefit and savings analyses.

Respondents who gave somewhat valuable and neutral ratings tended to say that the technical assistance validated their existing designs, plans, and equipment; they rarely said the assistance persuading them to consider new options. Those who said the service was not too valuable or not at all valuable often said the services came too late in the process or were not timely. As one respondent said, "They took so long to get it to us that the building had been designed and bid already."

Table 6-10. TA Contributions

Final Technical Assistance Report (n=92)	Frequency	Percent
Very satisfied	42	46%
Somewhat satisfied	30	33%
Neither satisfied/dissatisfied	1	1%
Somewhat dissatisfied	11	12%
Very dissatisfied	8	9%
Value of TA Services in Influencing Energy Performance (n=69)	**Frequency**	**Percent**
Very valuable	9	36%
Somewhat valuable	4	33%
Neither valuable/not valuable	8	12%
Not too valuable	23	6%
Not at all valuable	25	13%

6.3.4 Payment Process

As Table 6-11 shows, only 34% of participants reported they were very satisfied with the process that occurred between the inspection of their buildings and being paid; in addition, 31% of respondents were dissatisfied. Dissatisfaction centered on the length of time it took to get all issues resolved and payment made: "I took too long to get the payment, six months. That was when they changed the rules."

Table 6-11. Satisfaction with the Payment Process

Payment process (n=32)	Frequency	Percent
Very Satisfied	11	34%
Somewhat satisfied	9	28%
Neither satisfied/dissatisfied	2	6%
Somewhat dissatisfied	8	25%
Very dissatisfied	2	6%

6.3.5 Synchronization and Timing

When asked what key recommendation they had for improving NCP, 28% said they had no recommendations and that it was a good experience. However, 31% of respondents said they wanted to see the NCP process streamlined and 23% said they wanted to see the timeliness to their projects improved. As with the first round of interviews, participants with more complex projects, and in the whole building path, say the process and timing of NCP services is often not in sync with the building development process. A number of participants said their projects could not wait for the NCP process. Other participants noted that the ability of the NCP process to be responsive to varying design and construction timeframes is limited and that this lack of nimble timing may decrease the windows of opportunity available for choosing high efficiency options.

The findings from the previous section about the timing problems with delivery of TA reports underscore what appears to be a persistent issue that has many contributing factors. To create the building model, the design team needs to provide drawings and building information that may not be available early in the design process. When this building information is available later in the design, the ability of the TA process to influence the design is limited. A project can also be delayed for extended periods, so TA work can be complete and an incentive offered, but the project is on hold. One participant said that he had learned with NCP that you have to "apply very early in the project to get anything before you go to construction [when]

it's hard to make any changes. Even though we apply early in schematic design, we don't usually get the input we need for the design process until the design is almost done."

6.4 MIXED VIEWS

This section presents information about the NCP where results suggest program gaps or areas for improvement, but which carry both positive and some negative ratings.

6.4.1 Awareness and Satisfaction

This section presents a variety of other program attributes that received mixed ratings of satisfaction but where the proportion of most positive ratings ranged from 50% to 69%. Overall, these ratings suggest that the services that participants receive through the NCP may vary considerably and that there is room for greater consistency and improvement. These mixed reviews are of key NCP services: TA consulting, technical assessments, the incentive offer, and the commissioning process.

Fifty-eight percent of respondents who used TA services gave those TA providers a very satisfied rating, while 28% were somewhat satisfied, and 15% were neutral or dissatisfied. Those who were very satisfied often said the TA providers were knowledgeable and provided good guidance through the program steps. Other common reasons for high levels of satisfaction were that TA providers were responsive and proactive; that they were good communicators; and that they were timely.

Participants who gave somewhat satisfied ratings said TA providers were knowledgeable. These participants also expressed concerns about timeliness, responsiveness, and communication. From the neutral ratings on down, most remarks related to issues with TA providers not being responsive, timely, or communicative.

Table 6-12. Mixed Satisfaction Ratings

Level of Satisfaction with …		
Technical Assistance Services (n=120)	**Frequency**	**Percent**
Very satisfied	69	58%
Somewhat satisfied	33	28%
Neither satisfied / unsatisfied	5	4%
Somewhat dissatisfied	6	5%
Very dissatisfied	7	6%
Technical Assessment Process (n=96)	**Frequency**	**Percent**
Very satisfied	55	57%
Somewhat satisfied	25	26%
Neither satisfied/dissatisfied	5	5%
Somewhat dissatisfied	7	7%
Very dissatisfied	4	4%
Incentive Offer (n= 78)	**Frequency**	**Percent**
Very satisfied	42	54%
Somewhat satisfied	22	28%
Neither satisfied/dissatisfied	5	6%
Somewhat dissatisfied	7	9%
Very dissatisfied	2	3%
Commissioning Process (n=32)	**Frequency**	**Percent**
Very satisfied	20	63%
Somewhat satisfied	5	16%
Neither satisfied/dissatisfied	1	3%
Somewhat dissatisfied	2	6%
Very dissatisfied	4	13%

6.5 REASONS FOR CANCELLED PROJECTS

NCP staff has long believed that most projects that drop out of the program do so for reasons beyond the control of the program such as the owner's inability to obtain financing, to get zoning or regulatory approvals, and changes in the market. The results from the 41 owners and architects representing 35 cancelled projects confirm that the majority of cancelled projects (70%) were outside program control and resulted from owners either cancelling projects or putting them on hold (Table 6-13). The reasons for the remaining project cancellations suggest the customer and NCP staff members, OPCs, or TA providers may have had differing expectations about what the program could provide the project.

Table 6-13. Why Projects Drop Out of NCP

Reasons Given (n = 38)	Frequency	Percent
We cancelled the project	19	58%
We put the project on hold and the PON ran out	4	12%
Project not a good fit/no incentives available	6	18%
NYSERDA cancelled – too much residential	4	12%
NYSERDA processes took too long	4	12%
Applied late and did not want to slow down to meet program requirements	1	3%

Note: Mutiple response item; percentages may total more than 100%

6.6 UPCOMING ISSUES

The NCP staff collaborating with the evaluation team on this research wanted to find out if the structure of the technical assistance payment served customers well. Under PON 1501 and the majority of previous PONs for NCP, the program shares the cost of technical assistance with the customer and pays the first $5,000. The customer pays their portion of the cost six months after the TA study is completed. When asked how important it was to maintain this program feature, reactions varied (Table 6-14), with the bare majority of respondents saying the arrangement is not important. Just over one-third of participants (39%) said the feature was a very or somewhat important factor in deciding whether to participate in the NCP, but only 13% said it was very important. On the other hand, 52% said the feature was not too or not at all important.

Table 6-14. Importance of TA Payment Feature in Deciding to Participate in NCP

Importance (n = 112)	Frequency	Percent
Very important	15	13%
Somewhat important	29	26%
Neither Important or Unimportant	3	3%
Not too Important	25	22%
Not at all Important	33	30%
DK/NA	7	6%

Section 7:

CONCLUSIONS AND RECOMMENDATIONS

Conclusion: **The NCP has taken and is taking steps to improve timeliness and to better synchronize project and program schedules, including improved communication, standardization of technical analysis and reports, and accelerating the TA contracting process.** While progress has been made in these areas, findings from this research suggest further improvements are needed. Just over one-half of the NCP participants who were interviewed recommended that the NCP process should be streamlined or that the program's timeliness should be improved. Program staff, OPCs, and TA providers also report synchronization and timing need to be improved, especially at the front-end of projects where key decisions about energy efficient design are being made.

> ***Recommendation:*** **The NCP should continue its efforts to ensure that projects are enrolled at the optimal time and that early participation steps are streamlined and as timely as possible.** In their efforts to streamline the program, NCP staff should revisit every review or approval step in its process flow to see if any can be shortened or removed. The next process evaluation of NCP should conduct this type of review if streamlining remains a central issue for the program. To improve timeliness and synchronization, several TA providers suggested that very interested design teams should receive interim design assistance and reporting services prior to the final technical assistance report. These TA providers believe these interim services positively influence building design and energy savings. NCP staff should investigate how these interim steps might become more standardized. Finally, some NCP staff members suggested that new program paths be explored. For instance, they wondered if new paths were needed to serve particular customer situations, such as an express path, a first-time project path, or a path that matches very motivated design teams with the best TA providers in the program.

Conclusion: **Both increased OPC and NYSERDA commercial sector marketing efforts are generating substantially more leads than the program has seen before.**

> ***Recommendation:*** OPC marketing should be continued and the program should continue to track its results, including the conversion rate of leads to applications.. In addition, the new NYSERDA Solutions campaign should be continued and the results tracked, since initial tracking suggests it is generating interest and leads. The marketing efforts need to be carefully watched so that the volume of projects remains manageable within program resources.

Conclusion: **Tension continues to exist between market transformation and market leadership goals for NCP and its savings acquisition goals.** Many TA providers, and some staff, voiced concerns that that the program's ability to influence maximum energy savings and advance leading edge whole building design is declining. They noted that the change from a whole building TRC test[26] to an individual measure TRC test is compromising the market transformation and market leadership intent of the whole building path. These TA providers and staff members also said it can be difficult to explain the consequences of the shift in the TRC test, and that customers seeking to do leading edge integrated design may find NCP incentives disappointing for advanced design options. Finally, they said design teams are becoming more sophisticated about energy efficient design and that if NCP wishes to lead the market toward the next level of high performance buildings, it needs to incorporate better support for innovative design.

> ***Recommendation:*** To avoid unexpected results for participants seeking to employ integrated whole building designs, NCP staff members, OPCs, and TA providers need to continue to develop effective ways to explain the consequences of the shift in the TRC test. In addition, staff could consider developing alternative ways to encourage higher performance designs despite the current

[26] The TRC test is used in both the custom and whole building paths within NCP. The whole building TRC test assesses the cost-effectiveness across all efficiency measures planned for a new building. A whole building TRC test, for instance, would allow leading edge, but less cost-effective high efficiency measures to be offset by more standard and cost-effective high efficiency measures.

application of the TRC. Finally, NCP should consider conducting an empirical analysis to explore the effects of the TRC on project scope, design, cost, and market transformation.

Conclusion: **NCP continues to struggle with how to serve small buildings. At the same time, new marketing efforts appear to be attracting more small projects. NCP needs more effective and cost-effective ways to work with smaller buildings**.

Recommendation*:* While NCP has made substantial progress in its efforts to develop an advanced analysis tool designed to foster deeper, cost-effective savings for smaller buildings, documentation and other steps need to be taken to finalize and implement the package. Completing this analysis tool should be a high priority, especially given the surge in smaller building applicants.

Conclusion: **The effectiveness of key NCP elements varies, particularly those that depend upon TA provider performance, such as scoping meetings and technical reports. Findings across all respondent groups suggest that inconsistent TA provider performance impedes NCP efforts, especially since the most sophisticated customers expect TA providers to combine the highest levels of technical ability, knowledge, and communication skills.**

Recommendation*:* NCP staff members should assess individual TA provider performance in scoping meetings and throughout the technical assistance process and devise training strategies that will help TA providers better influence efficiency decisions. For example, high performing TA providers could inform the design and delivery of a training package for TA providers whose skills need improvement. One staff member suggested such training could change “order takers” to “game changers.”

APPENDIX A:

INTERVIEW GUIDES

NYSERDA NEW CONSTRUTION PROGRAM (NCP)

STAFF INTERVIEW GUIDE

FINAL: 6-23-2011

Name Date

Title

Phone E-mail

INTRODUCTION

[Note: The narrative is for guidance and often will not be delivered verbatim.]

Today I want to talk with you about various aspects of the New Construction Program. I'm a member of the process evaluation team; our job is to examine how well NCP is operating and to provide constructive feedback and recommendations. In this capacity we are interviewing Program staff, OPCs, TAs, and other key contacts about their experience with NCP. We interviewed NCP staff a little over a year ago and delivered an interim report last fall. We want to check in with staff again now so that their views can be included in a final process evaluation report due out this fall. For many of these questions we'll ask you to comment on how NCP has changed over the last year or so.

This interview is confidential. Do you have any questions before we start?

First, please tell me about your background with the New Construction Program or NCP.

1. What are your position and responsibilities?

2. How long have you worked with NCP and in what capacities?

PROGRAM DESIGN

Now I want to ask you about program's current intent and design. Please feel free to give us your in-depth thinking on these questions.

3. Currently, what would you say are the highest priority goals for NCP? How is NCP addressing each of these goals and how would you assess your progress on each one?

4. How have NCP goals changed, if at all, over the past year or so? If changed: How has this affected your work? What changes in goals, if any, do you see for NCP in the future?

5. What challenges have you faced, if any, in transitioning from PON 1222 to the PON 1501? How have you met these challenges?

Now I'd like to ask you more about program coordination.

6. How effective is coordination among the various key parties delivering NCP – including OPCs, TAs, and NCP program and marketing staff? Would you say coordination among the parties has gotten better, stayed the same, or gotten worse? If better/worse: What has gotten better/worse and why? What improvements to coordination, if any, do you suggest?

   How does NCP coordinate with other programs at NYSERDA? (**Probe: Industrial and Process Efficiency Program**) How would you describe the effectiveness of this coordination? Would you say coordination with other programs has gotten better, stayed the same, or gotten worse over the past year? If better/worse: What has gotten better/worse and why? What improvements, if any, are needed between NCP and other NYSERDA programs?

   Are there any outside entities or organizations that NCP works closely with? How effective are those relationships and have these relationships changed over the past year or so?

PROGRAM MARKETING

7. How has the market for NCP services changed over the past year or so?

8. Overall, how effective is the marketing for NCP (both through the marketing department and by staff)? Over the past year, has the marketing for NCP gotten better, stayed about the same, or gotten worse? If better/worse: What has gotten (better) (gotten worse) and why? Are there improvements you would suggest to marketing for NCP?

PROGRAM DELIVERY AND PARTICIPATION

Now let's talk more about program delivery and participation.

9. How well does the application process work? (**Probe: Is the process timely, manageable?)** In the past year, has anything about the application process gotten better, gotten worse, or has it stayed about the same? If better/worse: What has gotten (better) (gotten worse) and why? Are there improvements you would suggest to the application process?

10. How would you assess the adequacy of coverage of NCP across the state, and particularly in non-Con-Ed and Con-Ed areas? Has the coverage gotten better or worse? If better/worse: What has gotten (better) (gotten worse) and why? Do you have any suggestions for improving NCP coverage?

11. How would you assess the effectiveness of the Pre-Qualified Path? What improvements, if any, would you suggest for this path?

12. How would you assess the effectiveness of the Custom Measure Path? Has the effectiveness of this path gotten better, stayed about the same, or gotten worse over the past year? If better/worse: What has gotten (better) (gotten worse) and why? Are there improvements you would suggest to this path? What improvements, if any, would you suggest for this path?

13. How effective is the Whole Building Design Path? (**Probe: Use of scoping meetings.**) Has anything gotten better or worse about using this path over the past year, or are things about the same? If better/worse: What has gotten (better) (worse) and why?

    How would you assess the value to clients of the technical assistance that the program provides? Over the past year, has this assistance gotten better, stayed about the same, or gotten worse? What, if anything, could make the technical assistance more valuable?

    Which steps do you think are the most important for fostering maximum savings for each project in the While Building Design path?

    What experience do you have with measures dropping out of consideration or not being installed?

14. Finally, have your worked with projects in the Green Buildings path? (**Probe: Use scoping meetings**) How important are Green Building services to the success of NCP? Why? Has anything gotten better or worse about using this path over the past year, or are things about the same? If better/worse: What has gotten (better) (worse) and why?

    How would you assess the value to clients of the green building technical assistance services? Over the past year, has this assistance gotten better, stayed about the same, or gotten worse? What, is anything could make the green building technical assistance more valuable?

    Which steps are the most important for fostering maximum savings for each project in the Green Buildings path?

    What experience do you have with measures dropping out of consideration or not being installed for projects in this path?

15. How well does NCP provide commissioning and benchmarking support? Have these services gotten better, worse, or stayed about the same over the past year? What improvements, if any, would you suggest for benchmarking and commissioning services?

16. Overall, given all we've talked about, how would you assess the effectiveness of NCP's current program delivery approach? Would you say the program's effectiveness has gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What further improvements are needed to program delivery if any?

PROGRAM MANAGEMENT

The next few questions are about NYSERDA's internal processes for NCP.

17. How effective is project tracking? (**Probe: How well does the project database work for your needs? For needs outside the program, such as evaluation?**) Has tracking of projects gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for program tracking and reporting?

18. How well does the contracting and payment process work for NCP(contractors) (participants)? (For each one) Has the payment process for NCP (contractors) (participants) gotten better, worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for the payment process?

19. How well does the program handle the flow and volume of projects? Has this aspect of the programs gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for handling the flow and volume of projects?

20. Are there any other program management issues that you would like to mention? If so, what suggestions do you have for resolving these issues?

TARGET AUDIENCE RESPONSE

Now I have a few questions about the feedback you get from your target audiences.

21. Based on your observations, what insights do you have about current participants in NCP – such as their primary reasons to participate, barriers to their participation, satisfaction with the program, program challenges and benefits, etc? Has anything changed about participants over time?

22. How adequate is the current level of customer feedback and tracking? Has the level of feedback gotten better, worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why?

23. What insights do you have about firms or owners that don't participate in NCP?

24. What feedback do you have from customers about their experience with NCP, including their primary reasons to participate, barriers to participation, satisfaction with the program, program challenges and benefits, etc?

CONCLUSION

Finally, I'd like have you summarize a few things for me about NCP.

25. How adequate are the resources to meet program demand? Over the past year or so, have resources for NCP gotten better, stayed about the same, or gotten worse? If better/worse: What has gotten (better) (worse) in terms of resources and why? Are there further resources NCP needs?

26. How well do you think NCP is able to meet its overall goal of accelerating the inclusion of energy efficiency, renewable energy sources, and green building features in the design construction and operation of commercial, industrial, and institutional buildings? Has NCP's ability to meet this goal over the past year or so gotten better, gotten worse, or stayed about the same? If changed: What has gotten (better) (worse) and why? What would help NCP better meet the goal of accelerating efficiency, use of renewables, and green buildings?

27. What would you say are the greatest strengths of the program?

28. What would you say are the most important areas that need improvement?

29. Are there any other comments or suggestions about NCP that you would like to add that we haven't covered in this interview?

THANK YOU!

NYSERDA NEW CONSTRUTION PROGRAM (NCP)

OPC/TA IMPLEMENTERS INTERVIEW GUIDE

FINAL: 6-23-2011

Name Date

Title

Phone E-mail

INTRODUCTION

[Note: The narrative is for guidance and often will not be delivered verbatim.]

Today I want to talk with you about various aspects of the New Construction Program. I'm a member of the process evaluation team; our job is to examine how well NCP is operating and to provide constructive feedback and recommendations. In this capacity we are interviewing Program staff, OPCs, TAs, and other key contacts about their experience with NCP. We interviewed them [OPCs and TAs] about a little over a year ago – during March and April of 2010 – and we want to check in with them [OPCs and TAs] again now. For many of these questions we'll ask you to comment on how NCP has changed over the last year or so.

This interview is confidential. Do you have any questions before we start?

1. First, how would you describe your position and responsibilities with NCP? How long have you worked with NCP? About what percent of your work week is devoted to NCP?

2. Do you work for any other programs at NYSERDA? If so: Which ones? Have you encountered any benefits, or any challenges, due to working with multiple programs? (Add if needed: First, the benefits? Now the challenges?)

PROGRAM GOALS

Now I want to ask you about program's current goals. Please feel free to give us your in-depth thinking on these questions.

3. In the past year or so, what have you been hearing from NCP staff about the highest priority goals for the program? How have NCP goals changed, if at all, over the past year?

4. How have the current high priority goals affected how you work with NCP, if at all? If affected: What might be done, if anything, to make your efforts more effective in meeting these goals?

5. As NCP has transitioned from PON 1222 to the PON 1501, what are the key challenges you have faced as a TA/OPC, if any? How have you resolved these challenges?

PROGRAM COORDINATION AND CAPACITY

Now I'd like to ask you more about program coordination and the program's capacity to meet demand.

6. How effective is coordination among the various key parties delivering NCP – including OPCs, TAs, and NCP staff? Over the past year or so, would you say coordination and consistency among the parties have improved, stayed about the same, or gotten worse? If better/worse: What has gotten (better) (worse) and why? Are there any improvements you'd suggest to coordination among the parties that deliver NCP?

Do you have any experience with coordinating NCP services with other NYSERDA programs, such as the Industrial and Process Efficiency program? If so: How well does that coordination work?

PROGRAM MARKETING

My next questions are about program marketing.

7. (If associated with NCP over time) How has the market for NCP services changed over the past year or so?

8. Overall, how effective is the marketing for NCP (both through the marketing department and by staff)? Over the past year, has the marketing for NCP gotten better, stayed about the same, or gotten worse? If better/worse: What has gotten (better) (gotten worse) and why? Are there improvements you would suggest to marketing for NCP?

PROGRAM DELIVERY AND PARTICIPATION

Now let's talk more about program delivery and participation. Please let me know if any of these questions don't apply to your work with NCP.

9. How well does the application process work for NCP? (**Probe: Is the process timely, manageable?**) In the past year, has anything about the NCP application process gotten better, gotten worse, or has it stayed about the same? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, are needed for the application process? How would you assess the adequacy of coverage of NCP in non-Con-Ed and Con areas? Has the adequacy of coverage gotten better or worse in either of these areas? If better/worse: What has gotten (better) (worse) in (non-Con-Ed areas) and/or (Con-Ed area) and why?

10. Have you worked on projects that have gone through the Pre-Qualified Path? If so: How well do you think this path works? What, if anything, could improve the Pre-Qualified path?

11. Have you worked with projects in the Custom Measure path? If so: How well do you think this path works? Has anything gotten better or worse about using this path over the past year, or are things about the same? If better/worse: What has gotten (better) (worse) and why? Do you think the technical assistance for this path provides value to the client? How? What, if anything, could be improved?

12. Next, have you worked with projects in the Whole Building Design path? If so: How well does this path work? (**Probe: What do you see as the purposes of the scoping meetings? How effective are these meetings for encouraging greater energy efficiency? How would you improve their effectiveness?**) Has anything gotten better or worse about using this path over the past year, or are things about the same? If better/worse: What has gotten (better) (worse) and why?

    How would you assess the value to clients of the technical assistance that the program provides? Over the past year, has this assistance gotten better, stayed about the same, or gotten worse? What, if anything, could make the technical assistance more valuable?

    Which steps do you think are the most important for fostering maximum savings for each project? What experience do you have with measures dropping out of consideration or not being installed?

13. Finally, have your worked with projects in the Green Buildings path? How important are Green Building services to the success of NCP? Why? Has anything gotten better or worse about using this path over the past year, or are things about the same? If better/worse: What has gotten (better) (worse) and why?

    How would you assess the value to clients of the green building technical assistance services? Over the past year, has this assistance gotten better, stayed about the same, or gotten worse? What, is anything could make the green building technical assistance more valuable?

    Which steps are the most important for fostering maximum savings for each project in the Green Buildings path? (**Probe: How effective are the scoping meetings for buildings in this path? Why?**)

    What experience do you have with measures dropping out of consideration or not being installed for projects in this path?

14. How well does NCP provide commissioning and benchmarking support? Have these services gotten better, worse, or stayed about the same over the past year? What improvements, if any, would you suggest for benchmarking and commissioning services?

15. Overall, given all we've talked about, how would you assess the effectiveness of NCP's current program delivery approach? Would you say the program's effectiveness has gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What further improvements are needed to program delivery if any?

PROGRAM MANAGEMENT

The next few questions are about NYSERDA's management of NCP.

16. How effective is project tracking? (**Probe: How well does the project database work for your needs?**) Has tracking of projects gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for program tracking and reporting?

17. How well does the contracting and payment process work for NCP (contractors) (participants)? (For each one) Has the payment process for NCP (contractors) (participants) gotten better, worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for the payment process?

18. How well does the program handle the flow and volume of projects? Has this aspect of the programs gotten better, gotten worse, or stayed about the same over the past year? If better/worse: What has gotten (better) (worse) and why? What improvements, if any, would you suggest for handling the flow and volume of projects?

19. Are there any other program management issues that you would like to mention? If so, what suggestions do you have for resolving these issues?

TARGET AUDIENCE RESPONSE

Now I have a few questions about the feedback you get from your target audiences.

20. Based on your observations, what insights do you have about participants in NCP – such as their primary reasons to participate, barriers to their participation, satisfaction with the program, program challenges and benefits, etc?

21. How adequate is the current level of customer feedback? Has any aspect of customer feedback gotten better or worse over the past year, or has it stayed about the same? If better/worse: What has gotten (better) (worse)? How might feedback and tracking be improved?

22. What insights do you have about firms or owners that don't participate in NCP?

CONCLUSION

Finally, I'd like to have you summarize a few things for me about NCP.

23. How adequate are the resources to meet program demand? Over the past year or so, have resources for NCP gotten better, stayed about the same, or gotten worse? If better/worse: What has gotten (better) (worse) in terms of resources and why? Are there further resources NCP needs?

24. How well do you think NCP is able to meet its overall goal of accelerating the inclusion of energy efficiency, renewable energy sources, and green building features in the design, construction, and operation of commercial, industrial, and institutional buildings? Has NCP's ability to meet this goal over the past year or so gotten better, gotten worse, or stayed about the same? If changed: What has gotten (better) (worse) and why? What would help NCP better meet the goal of accelerating efficiency, use of renewables, and green buildings?

25. What would you say are the greatest strengths of the program?

26. What would you say are the most important areas that need improvement?

27. Are there any other comments or suggestions about NCP that you would like to add that we haven't covered in this interview?

THANK YOU!

NEW CONSTRUCTION PROGRAM PARTICIPANT/PARTIAL PARTICIPANT

FINAL INTERVIEW GUIDE

PHASE TWO: MARCH 1, 2011

Name	Firm Name
Phone	Email Address
Project Name/Number	
OPC	TA
Date Interviewed	Interviewer

INTRODUCTION

(Note: The narrative is for guidance and will not be delivered verbatim.)

Hello, this is _____I'm calling to talk with you about your experience with the New Construction Program (NCP) at NYSERDA (If needed: That's the New York Energy Research and Development Authority. The New Construction Program offers assistance and incentives for making new commercial buildings more energy efficient.).

I am part of a team of evaluators **under contract with NYSERDA**. Our job is to assess how well the New Construction Program is serving businesses like yours. Your advice is essential to measuring the program's success and to improving it.

The program's records show you as a(n) (owner, designer, architect, engineer, developer) for the _____project. Is that correct? [If not, correct information, including getting a referral to the right person to talk with.]

INTRO Q1 (Circle status shown in database before interviewing)

Part of our interview today will focus on (this/that) project. To double check– our records indicate that the (fill in project descriptor) project is at this point in the NCP process?

1. Dropped out of program at the _____ stage (If a partial participant: Ask questions about the program to the point where the project dropped out; then skip to Final Program Observation section, Q49
2. The initial project meetings are complete, such as a design charrette or scoping meeting, but you are waiting for analysis results and/or an incentive offer
3. An incentive offer has been accepted but construction has not yet begun
4. The project is under construction and an incentive offer has not been made
5. The project is under construction and an incentive offer has been made
6. The project has completed the NCP inspection process
7. The project has completed commissioning
8. The project is complete but you are waiting for the final incentive payment
9. The project is finished and the incentive has been paid

This interview is confidential and will take about 30 minutes. Is now a good time to talk or can we make an appointment for a more convenient time?

NOTES:

PARTICIPANT BACKGROUND

1. What is your title and your current position/responsibilities with _____(firm)?
2. How would you describe what your firm or business does?

3. About how long have you been aware of the New Construction Program at NYSERDA?

4. Is the (describe focal project) the only project where you've participated in NCP or have you or your firm participated in NCP on more than one project? (Note: Fill in as needed below)

   1 Participated in NCP just with this project

   2 Personally participated in NCP more than once

   About how many times? _____

   3 Firm participated in NCP more than once

   Including projects you have participated in, about how many overall for your firm? _____

   4 Don't know

GENERAL AWARENESS

(If appropriate, ask respondent to factor in experience across all projects if they have participated in more than one.)

5. What would you say is the purpose of NYSERDA's New Construction Program (NCP)?

6. Now could you tell me how you found out about NCP? (Write in verbatim, code later)

   Verbatim:

   Then ask: Could you also please tell me what sources of information, including the one(s) you just mentioned), were especially important in your decision to participate in NCP? [Write in verbatim, code later. Try to get as specific information as possible for each source named.]

   Verbatim:

   1 Contractor or vendor --(Specify) _____

   2 A&E firm (How – i.e., Lunch and learn)?

   3 Professional publication (specify)

   4 Profession meeting (specify)

   5 Professional contact (specify type)

   6 NYSERDA mailing, brochure, video, or other marketing materials

   7 NYSERDA Website

   8 Phone call to NYSERDA

   9 NYSERDA OPC

   10 NYSERDA TA

   11 NYSERDA staff person

   12 NYSERDA sponsored event (specify)

   13 Through another NYSERDA program (Specify)

   14 Other _____

   15 DK/NA

7. Did any particular aspects of NCP especially catch your interest and motivate you to participate? (**Probe: Who influenced the decision; what was the motivation behind the decision to participate?**)

8. Did you have any concerns about participating in NCP that made you "think twice" about participating? If so, what were they?

9. Is it your understanding that NCP serves just new buildings, just substantial renovations of existing buildings, or both?

   1 New buildings only

   2 Substantial renovations only

   3 Both

   4 DK/NA

10. Aside from incentives for energy efficiency improvements, NCP offers some other services and incentives. Could you tell me which of these NCP services and incentives you've heard about? If you are unsure, just let me know. (Read list, circle yes or no)

   1 Basic technical assistance services and incentives for energy analysis 1 Yes 2 No 3 DK

   2 Green Buildings services and incentives to assess green building opportunities and support meeting green building standards 1 Yes 2 No 3 DK

   3 Design team incentives, which help with the cost of the project architect and/or engineer for Whole Building Design or Green Building Approach Projects 1 Yes 2 No 3 DK

   4 Incentives for building commissioning -- a detailed assessment of building systems and their performance to make sure they are operating correctly 1 Yes 2 No

11. Overall, how clear did you find the NCP program steps and requirements? Would you say they were. . . .

   1 Very clear

   2 Somewhat clear

   3 Neutral (do not read)

   4 Somewhat unclear

   5 Very unclear

   6 DK/NA

12. Why did you choose _____(rating)? (**Probe: If not clear: Have program requirements become clearer over time? How did that happen?**)

13. Overall, how clear were the services the NCP offers projects like yours such as the incentives available and opportunities for technical assistance)?

   1. Very clear

   2. Somewhat clear

   3. Neutral (do not read)

   4. Somewhat unclear

   5. Very unclear

   6. DK/NA

14. Why did you choose _____(rating)?

SERVICE DELIVERY

Now I want to talk with you more specifically about the _____ project.

(Note: If available from other sources, fill in/double check as needed.)

15. What (is/was) your role with _____ (project)?

16. Please let me double-check with you about some characteristics of the _____(project):
    a. Size: square feet and # of floors _____
    b. Building type/primary occupancy and use _____
    c. Leased or owner occupied _____
17. At what point in the design process was the decision was made to participate in NCP?
    1 Conceptual design
    2 Schematic design
    3 Design development
    4 Construction drawings
    5 Other _____
18. How easy did you find the application process for NCP?
    1 Very easy
    2 Somewhat easy
    3 Neutral (do not read)
    4 Somewhat hard
    5 Very hard
    6 DK/NA
19. Why do you say _____?
20. If OPC assigned: It looks like you worked with an Outreach Project Consultant or OPC during your participation in NCP, is that correct (Put in name/firm from records _____)? If yes, how did the OPC assist with your project?
21. If yes. How satisfied were you with the services of the OPC? Would you say. . .
    1 Very dissatisfied
    2 Somewhat dissatisfied
    3 Neutral (don't read)
    4 Somewhat satisfied
    5 Very satisfied
    6 DK/NA

22 Why did you choose _____(rating)?

23. Do you have any suggestions for improving the services of OPCs?
24. If TA assigned: It looks like you also worked with a Technical Assistance (TA) contractor, is that correct? Is (Insert firm/name _____) assigned to your project? If yes for TA: How satisfied have you been with the services of the TA? Would you say you are
    1 Very dissatisfied
    2 Somewhat dissatisfied
    3 Neutral (don't read)
    4 Somewhat satisfied
    5 Very satisfied
    6 DK/NA

25. Why did you choose_____ (rating)?

26. What changes, if any, would you suggest for improving TA services? (**Probe: What advice do you have for NYSERDA to accomplish the changes you suggest?**)

27. If applicable: I also see that you attended a scoping meeting for this project? If yes, how helpful was the scoping meeting in improving the energy efficiency of your project? Would you say it was

    1 Very helpful

    2 Somewhat helpful

    4 Neutral (don't read)

    5 Somewhat unhelpful

    6 Very unhelpful

    7 DK/NA

28. Why did you choose _____(rating)?

    a. **Probe if not mentioned**: **Were there any benefits from the scoping meeting that were not related to saving energy?**

29. If participated through TA report/incentive offer: After the scoping meeting, the TA worked with the project team to conduct a technical assessment of potential energy saving approaches in your building. How satisfied were you with the process of conducting this technical assessment? Would you say you were. .

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

    5 Very satisfied

    6 DK/NA

30. How satisfied were you with the time it took between the scoping meeting and the time you received the TA Report on the potential for energy savings in your building?

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

    5 Very satisfied

    6 DK/NA

31. How valuable were the TA services, including the TA report, in influencing the energy performance of your building?

    1 Not at all valuable

    2 Not too valuable

    3 Neutral (don't read)

    4 Somewhat valuable

    5 Very valuable

    6 DK/NA

32. Why do you say (fill in rating)?

33. How satisfied were you with the incentive offer you received?

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

    5 Very satisfied

    6 DK/NA

34. Do you have any further comments to add about this part of your NCP experience – that is, the time between the scoping meeting and receiving an incentive offer? (**Probe any areas of dissatisfaction indicated in the questions above. Further probe: We are particularly interested in hearing about the timing of the services you received and how well they fit with your project's schedule.)**

35. If participated through inspection: We'd like to know if participating in NCP affects any aspects of dealing with code officials. Compared to projects that are not participating in NCP, have you noticed any changes in your dealings with code officials, either during the design review or code inspection stages of this project?

36. How satisfied were you with the inspection process? Would you say you were . . .

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

    5 Very satisfied

    6 DK/NA

37. Why did you choose_____(rating)?

38. If participated in commissioning: How satisfied were you with the commissioning process? Would you say you were . . .

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

    5 Very satisfied

    6 DK/NA

39. Why did you choose_____(rating)?

40. If finished/Incentive paid: Finally, how satisfied were you with the process between the time of (inspection and/or commissioning) of your building and when you received your incentive payment? Would you say you were . . .

    1 Very dissatisfied

    2 Somewhat dissatisfied

    3 Neutral (don't read)

    4 Somewhat satisfied

5 Very satisfied

6 DK/NA

41. Why did you choose_____(rating)?

42. If participated in Green Building Option: My records show you participated in the Green Building Option and received green building incentives. Did you have a design charrette as part of planning your green building?

1 Yes

2 No

43. How satisfied were you with the Green Building Option offered through NYSERDA? Would you say you were. .

1 Very dissatisfied

2 Somewhat dissatisfied

3 Neutral (don't read)

4 Somewhat satisfied

5 Very satisfied

6 DK/NA

44. Why did you choose _____(rating)?

FINAL QUESTIONS

(If they have experience with more than one project, ask respondent to include all experiences with NCP as they answer these next questions.)

Now I have just a few final questions.

45. What would you say is the single most valuable benefit of participating in NCP?

46. What, if anything, did you learn about designing or developing more energy efficient buildings from participating in NCP? (**Probe: How has your participation influenced your approach to building design?**)

47. How do you think participating in NCP will influence your approach to new commercial building projects in the future?

48. If involved with more than one project: Given that you have participated in more than one NCP project, could you tell me about any differences in your separate experiences with the program, either positive or negative?

49. (If worked with TA on project) Currently, after paying the first $5,000 for technical assistance services, NCP shares the cost of technical assistance 50/50 with the customer. The customer does not need to pay their portion of the cost until 6 months after the technical assistance study is completed. How important was being able to delay your technical assistance payment in your decision to participate in NCP? Would you say it was:

1 Very important

2 Somewhat important

3 Neutral (don't read)

4 Not too important

5 Not at all important

50. Why do you say (fill in) ____

51. If you had to share the cost of the entire amount of the technical assistance study, and pay your portion once the study is completed, how would this set-up affect your ability to participate in the program? (**Probe for a full answer**)

52. If Partial Participant: What were the reasons the project stopped participating in NCP at this point in the process? (**Probe: Was there anything the program could have done to prevent the project from dropping out?**)

53. How would you describe the current new commercial building market in the areas of New York where you do business?

54. Overall, what aspects of NCP do you think make it attractive to owners, developers, and design teams?

55. What aspects of NCP may discourage owners, developers, and design teams from participating in the program? (**Probe timing issues if not mentioned.)**

56. How likely would you be to recommend NCP to others? Would you say this is:

    1 Not at all likely

    2 Not too likely

    3 Neutral (don't read)

    4 Somewhat likely

    5 Very Likely

    6 DK/NA

57. How likely would you be to participate in NCP again with another building? Would you say this is. . .

    1 Not at all likely

    2 Not too likely

    3 Neutral (don't read)

    4 Somewhat likely

    5 Very Likely

    6 DK/NA

58. Can you suggest any ways that the NCP could more effectively reach potential participants? If yes, what do you suggest?

59. Finally, thinking over everything we've talked about today, what are the key recommendations you have for improving the value and effectiveness of the NCP?

THANK YOU!