



ComEd Large C&I Pilot Program Evaluation Report

FINAL
Energy Efficiency / Demand Response Plan:
Plan Year 8 (PY8)
(6/1/2015-5/31/2016)

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Commonwealth Edison Company

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E. EXECUTIVE SUMMARY

This report presents a summary of the findings and results from the process evaluation of the PY8 Large C&I Pilot (Large C&I Pilot or Pilot) program. In PY7 ComEd began to offer a Large C&I Pilot program intended to encourage the implementation of large scale energy efficiency measures by ComEd's largest customers. The primary focus of the PY8 evaluation was on process issues, since this program has only had one enrollee who did not complete a project or gain any savings to date; no impact evaluation was conducted. The main objectives of this process evaluation were to determine: (1) why there is a lack of program enrollment, and (2) do ComEd's current offerings provide adequate energy efficiency programming for large customers?

E.1. Results Summary

Navigant interviewed 20 companies that were eligible to participate in the Large C&I Pilot program, but did not participate (*referred to as "respondents"*), in order to answer the following key research questions:

1. What are the barriers to enrollment in this program?
2. Is the program needed?
3. Do ComEd's current offerings provide adequate energy efficiency programming for large customers?

The barriers to entry reported by the respondents are similar to the barriers to entry in the Smart Ideas for Your Business (SIFYB) program:

1. Those respondents who do not generally participate in the SIFYB program reported the same barriers to participation in the Large C&I Pilot program as with SIFYB – this generally focused on budgetary or resource allocation issues.
2. Respondents who use SIFYB stated the Large C&I Pilot program did not have enough additional benefits for them to participate.

The Large C&I Pilot program allows additional flexibility, but those who are not already participating in the SIFYB programs indicated they would require additional support from ComEd in order to participate (these comments specifically focused on engineering support or additional guidance on the actual rebate process). For example, one participant explained that they want more expertise from ComEd hoping ComEd would review the customer's facility and ask whether the customer considered alternative technologies identifying prescriptive or custom program options with rebates. Another participant reported they felt that ComEd engineers did not have specific expertise to identify improvements to large operations comparable to their business. Two participants reported they use the energy assessments from ComEd and would like to keep that support. Also, two participants reported they do not have the internal resources (either engineering or administrative) to participate in the ComEd programming. ComEd may consider increasing the high-level technical engineering, outreach, and administrative rebate support to their large customers to address this resource issue. Further, ComEd could consider increasing the Large C&I Pilot program budget cap, but this may be limited by overall project cost-effectiveness.

Finally, the respondents indicated general satisfaction with the current SIFYB programs offerings from ComEd.

E.2. Findings and Recommendations

The following provides insight into key program findings and recommendations.¹

Finding 1. Respondents report the same barriers to enrolling in both the SIFYB and the Large Pilot program - a lack of engineering, administrative, or monetary resources. ComEd has provided dedicated outreach since PY6 for eligible Large C&I program customers, and the program also provides engineering and application support. Customers have suggested they are not fully aware of all the support available to them, and some noted they would prefer more support.

Recommendation 1. To increase participation in the energy efficiency programming for large customers, ComEd may consider increasing the high-level technical engineering, outreach, and administrative rebate support. ComEd should continue outreach to their largest customers to ensure large customers are aware of the support offered by ComEd.

Recommendation 2. Provide large customers with support to measure energy efficiency savings so that they feel comfortable getting involved with the program.

Recommendation 3. Consider offering select prescriptive offerings for larger projects (e.g., one customer requested additional prescriptive offerings for chilled water systems).

Finding 2. Respondents report awareness of the Large C&I program; some respondents reported they were unsure of the differences between the Large C&I Pilot program and the SIFYB. ComEd outlines the differences in the Large C&I Pilot program materials and customer outreach.

Recommendation 4. Additional communications highlighting the differences and benefits of the Large C&I Pilot program may help these unsure customers.

Satisfaction with SIFYB

Finding 3. Respondents report general satisfaction with the SIFYB programs

Finding 4. Participants report they would like changes or clarity on application or engineering requirements for the SIFYB programs.

Recommendation 5. ComEd should continue outreach to their largest customers to ensure large customers are aware of the support and rebates offered by ComEd.

¹ Numbered findings and recommendations in this section are the same as those found in the Findings and Recommendations section of the evaluation report for ease of reference between each section.

1. INTRODUCTION

1.1 Program Description

ComEd's Large C&I Pilot (Large C&I Pilot or Pilot) program is intended to encourage the implementation of large scale energy efficiency measures by ComEd's largest customers (i.e., those with over 10 MW peak demands). This program is designed to provide increased flexibility, accommodate the complexity of large-scale energy efficiency projects, establish expedited approval mechanisms, and provide increased certainty in funding availability. ComEd customers are charged a monthly "Energy Efficiency Programs" charge on their monthly electric bill (Rider EDA) which is used to fund the Large C&I Pilot program. ComEd tracks the amount of Rider EDA charges paid by participants during Plan Years 7 through 9. Project funding for participants in the Large C&I Pilot program is limited to the lesser of (1) 67 percent of project cost, (2) 60 percent of Rider EDA charges, or (3) \$0.40/verified annual kWh. A participant may submit a project at any time within the three year planning period, given that the project will be completed within the three year period. Once a participant is enrolled in the program, they are no longer eligible to participate in any other SIFYB programs. For participants enrolled in the first three months of the plan cycle, Rider EDA funds will be tracked retroactively to the beginning of the plan cycle. For other customers, funds will be tracked from the date of enrollment.

This program is offered to customers in the "greater than 10 MW" customer class. However, if participant enrollment from this class does not use the entire Large C&I Pilot program budget, ComEd may offer the program to the "5MW – 10MW" customer class that is affiliated with the initial qualified customer class. If the program budget still remains unallocated, ComEd may repeat this process with the "1MW – 5MW" customer class (affiliated with the initial qualified customer class). A \$5 million dollar/per annum budget cap will be adhered to if the program extends to customers below 10 MW.

1.2 Evaluation Objectives

The Evaluation team identified the following key researchable questions for PY8.

1.2.1 Impact Questions

No impact evaluation was conducted for this program.

1.2.2 Process Questions

1. What are the barriers to enrollment in this program?
2. Is the program needed?
3. Do ComEd's current offerings provide adequate energy efficiency programming for large customers?

2. EVALUATION APPROACH

This process evaluation consisted of a program manager interview with two managers and large customer interviews (referred to as respondents since there were no participants in the program). We conducted telephone interviews with non-participating large customers (respondents) to better understand why customers are not enrolling in the program. We also conducted telephone interviews with program managers to understand the program design and outreach conducted thus far. The process evaluation analyzes the qualitative data collected during the interviews. We conducted 20 interviews out of the 44 eligible customers, rather than the planned 14 interviews, so to obtain as much detail and information as possible.

The core data collection activities included interviews with non-participants who were eligible to participate in the Large C&I Pilot program. The full set of data collection activities is shown in the following tables.

Table 2-1. Primary Data Collection Activities

What	Who	Target Completes	Completes Achieved	When	Comments
In Depth Interviews	Program Manager/Implementer Staff	1	1	September 2016	One interview with 2 program managers
Telephone Survey	Eligible Non-Participants	14	20	September 2016	<ul style="list-style-type: none"> • Interviewed 6 additional respondents for increased accuracy and detail • Contacted 45% of eligible customers

3. PROCESS EVALUATION

The barriers to entry reported by the respondents are similar to the barriers to entry in the Smart Ideas for Your Business (SIFYB) program:

1. Those respondents who do not generally participate in the SIFYB program reported the same barriers to participation in the Large C&I Pilot program as with SIFYB, which generally focused on budgetary or resource allocation issues.
2. Respondents who use SIFYB stated the Large C&I Pilot program did not have enough additional benefits for them to participate.

The Large C&I Pilot program allows additional flexibility, but those who are not already participating in the SIFYB programs indicate they would require additional support from ComEd in order to participate (these comments specifically focused on engineering support or additional guidance on the actual rebate process). For example, one participant explained that they want more expertise from ComEd hoping ComEd would review the customer's facility and ask whether the customer considered alternative technologies identifying prescriptive or custom program options with rebates. Another participant reported they felt that ComEd engineers did not have specific expertise to identify improvements to large operations comparable to their business. Two participants reported they use the energy assessments from ComEd and would like to keep that support. Also, two participants reported they do not have the internal resources (either engineering or administrative) to participate in the ComEd programming. ComEd may consider increasing the high-level technical engineering, outreach, and administrative rebate support to their large customers to address this resource issue. Further, ComEd could consider increasing the Large C&I Pilot program budget cap, but this may be limited by overall project cost-effectiveness.

Finally, the respondents indicated general satisfaction with the current SIFYB programs offerings from ComEd.

3.1 Thoughts on the Large C&I Pilot Program

The most common reason for not participating in the Large C&I Pilot program as cited by the survey respondents was that they are already leveraging the Smart Ideas for Your Business program. The survey respondents also stated that (1) they already fully utilize the SIFYB programs, (2) they would like to keep the engineering support associated with the SIFYB, or (3) the Large C&I Pilot program seems limited compared to the SIFYB programs. Only two participants reported to have no projects in the SIFYB program while considering participation in the Large C&I Pilot program. Overall, the responses indicate satisfaction and intent to continue with the SIFYB programs.

Some respondents (three of twenty respondents) stated they felt the process of engaging with the SIFYB programs was time consuming or arduous and, thus, they were not motivated to participate in the new Large C&I Pilot program since they were not planning to participate in any ComEd energy efficiency programs. Three respondents had no thoughts on the Large C&I Pilot program design.

The respondents' initial thoughts on the pilot are listed by frequency in the table below.

Table 3-1. Respondent Thoughts on Pilot

Thoughts on Pilot Cited by Respondents	Frequency
Prefer Current Programs	
Limited compared to SIFYB programs - no monetary advantage	3
Would like to keep ComEd engineering support	2
Prefer a peak demand response program	2
Limited compared to SIFYB program - generally	1
Already participating fully in Smart Ideas	1
Would like more prescriptive offerings rather than custom	1
Resource Issues	
Request for more expertise and support from ComEd	3
Difficulty getting internal funding/overall approval	2
Difficulty measuring savings to apply for programs	1
Lack of internal resources - time and funding	1
Other	
No thoughts	3
Bad experience in the past with SIFYB	3
Doesn't see how the programs differ	1
The ComEd programs are too restrictive - advocating for self - direct	1

Source: Navigant Analysis

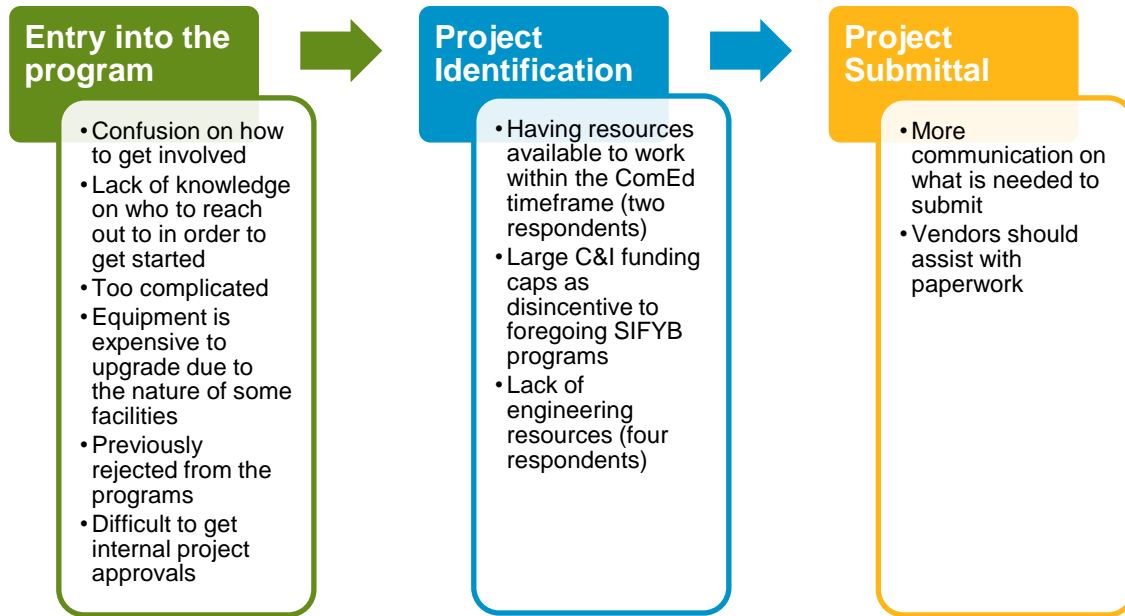
Navigant concludes it is likely that some respondents did not participate in the Large C&I program for the same reasons they have not participated in the SIFYB program. Those respondents did not indicate they would like additional flexibility in program design, but rather additional support from ComEd - particularly high-level technical engineering support on how to claim savings on energy efficiency projects.

The implementation contractor (Leidos) kept records of their outreach to those customers who were eligible for the Large C&I Pilot program. Leidos conducted outreach through webinars, through email, and by phone. Leidos was able to confirm that 34 of the 44 eligible participants were aware of the program. Navigant found that those contacts who were previously confirmed as aware of the Large C&I Pilot program remained aware of the Large C&I Pilot program. Some of the eligible companies have new energy efficiency contacts and those contacts were unaware of the Large C&I Pilot program.

3.2 Barriers and Satisfaction with SIFYB

When asked for the barriers to participating in the SIFYB program, the respondents had a variety of answers, presented graphically below. Four respondents did note lack of engineering resources was a barrier to their participation. ComEd may consider offering additional engineering support and outreach to their large customers to address the barriers identified by the respondents

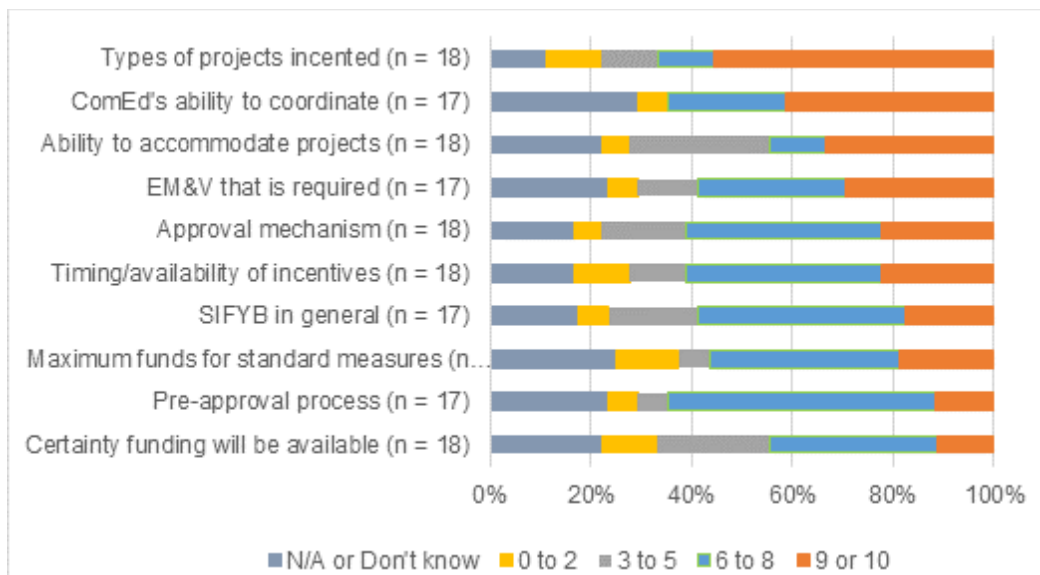
Figure 1. Barriers to Participation in the SIFYB Program



Source: Navigant Analysis

Respondents report satisfaction with the SIFYB programs – 59 percent of respondents rated the SIFYB programs a 6 or higher on a 10 point scale (where 10 is “very satisfied”) (18 percent answered N/A or don’t know and 24 percent rated the program as a 5 or lower). Respondents report the lowest satisfaction with funding certainty and ComEd’s ability to accommodate their projects. Navigant notes that the Large C&I Pilot program was designed to address these two programmatic components; however, it appears the Large C&I program funding caps and lack of engineering support may hold greater importance to respondents. Additionally 11 respondents indicated funding available through the SIFYB was adequate while 4 did not.

Figure 2. Respondent Satisfaction Rankings by Program Component



Source: Navigant Analysis

3.3 Areas for Improvement Reported by Customers

The majority of respondents did not have ideas for improvements to the Large C&I Pilot program (13 of 20 respondents). Two respondents stated they did not see that the Large C&I Pilot program had any advantages over the SIFYB programs.

Suggestions for improvements mentioned by the respondents included:

- Easier pre-approval
- Cut the overall participant costs of the program (i.e., reduce amount required to pay into the energy efficiency fund)
- Extend timeline overall

Navigant notes the suggestions above may indicate customers' lack of understanding of the Large C&I program because (1) pre-approval is recommended, not required, for the program, and (2) the Large C&I Pilot program does have an extended timeline of three years.

The participants were also asked about improvements to the SIFYB program. Participant responses centered on the three topics outlined below:

1. Changes or clarity on application or engineering requirements
 - ComEd should provide additional targeted information to customer on incentives available and clarity on who to contact with questions
 - Engineering firms are too optimistic on savings - ComEd should vet engineering firms offering rebates as a part of upgrade package
 - ComEd should simplify application forms - difficult to verify lighting eligibility through design light consortium
 - Customers would like additional clarity of money spent and how much energy they have saved (i.e., provide ability to see how much money paid into the program and changes in energy bills through an online portal) ComEd should simplify the pre-approval process
 - The applications should be web based (two respondents)
 - ComEd should only have one point of contact for the customer
2. Changes to funding
 - Implement a self-funding program for large -users
 - Remove requirement to pay into the program
 - Remove project and site caps
3. Other
 - Publish success stories of interesting projects which were completed
 - Incentivize equipment at the end of its useful life

Navigant recognizes that many of the suggestions for improvement by customers may not be feasible, or are difficult to implement, based on the current program structure (e.g., the regulatory requirements of the state would need to be amended to reduce customers' energy efficiency funds paid or to incent projects at the end of their useful life). Additionally, ComEd does address many of these suggestions including (1) providing dedicated outreach for these customers to provide engineering and application assistance, (2) providing case studies on the ComEd website, and (3) the prior removal of site funding caps (three years ago). These findings do support recommendation 5 above, that ComEd continue outreach to ensure customers are aware of the parameters of the energy efficiency programs and the resources available to them.

4. FINDINGS AND RECOMMENDATIONS

This section summarizes the key impact and process findings and recommendations.

Large C&I Barriers and Awareness

Finding 1. Respondents report the same barriers to enrolling in both the SIFYB and the Large Pilot program - a lack of engineering, administrative, or monetary resources. ComEd has provided dedicated outreach since PY6 for eligible Large C&I program customers, and the program also provides engineering and application support. Customers have suggested that they are not fully aware of all the support available to them, and some noted they would prefer more support.

Recommendation 1. To increase participation in the energy efficiency programming for large customers, ComEd may consider increasing the high-level technical engineering, outreach, and administrative rebate support. ComEd should continue outreach to their largest customers to ensure large customers are aware of the support offered by ComEd.

Recommendation 2. Provide large customers with support to measure energy efficiency savings so that they feel comfortable getting involved with the program.

Recommendation 3. Consider offering select prescriptive offerings for larger projects (i.e., one customer requested additional prescriptive offerings for chilled water systems).

Finding 2. Respondents report awareness of the Large C&I program; some respondents reported they were unsure of the differences between the Large C&I Pilot program and the SIFYB. ComEd outlines the differences in the Large C&I Pilot program materials and customer outreach.

Recommendation 4. Additional communications highlighting the differences and benefits of the Large C&I Pilot program may help these unsure customers.

Satisfaction with SIFYB

Finding 3. Respondents report general satisfaction with the SIFYB programs

Finding 4. Participants report they would like changes or clarity on application or engineering requirements for the SIFYB programs.

Recommendation 5. ComEd should continue outreach to their largest customers to ensure large customers are aware of the support and rebates offered by ComEd.

5. APPENDIX

5.1 Interview Guide

ComEd Large C&I Pilot Non-Participant Interview Guide

Introduction:

Hello,

My name is _____ with Navigant Consulting, calling on behalf of ComEd. Navigant was hired as an independent third party evaluator to better understand the customer response to ComEd's Large C&I Pilot program, launched two years ago. You may have received an email from Erin Daughton about this research effort. Information gathered will be used to improve the program offerings for large C&I customers. The information that you share will be anonymous and aggregated.

Would you be willing to participate?
The survey will take about 15-20 minutes

Interviewee	
Company	
Date	
Interviewer	

1. **Do you recall hearing about a Large C&I Pilot that was announced in 2014?** (If needed: The Large C&I Pilot is outside of the ComEd Smart Ideas program, and was designed to provide increased flexibility, accommodate complex projects, expedite approval mechanisms and offer increased certainty in funding availability.)

- 1. Yes
- 2. No
- 3. Don't Know
- 4. Refused

[ASK if answer to 1 includes "yes." Else Skip to 3.]

2. **How did you hear about the pilot?**

3. I'd like to take just a moment to describe the pilot to you:

- Project pre-approval is recommended, not necessarily required.
- Projects must be cost effective, using the legislatively mandated Total Resource Cost test.
- When requesting payment, you would have to submit invoices, spec sheets, metered M&V data to support savings, and the savings calculations.
- The project funding would be limited to the LESSER of
 - 67% of project cost
 - 60% of the site's eligible EE Program contributions
 - \$0.40/ verified annual kWh

A. Can you describe your initial thoughts of the pilot?

B. What changes, if any, would you suggest the pilot program design?

4. Were you involved in the decision to participate in Smart Ideas for your Business?

- 1. Yes
- 2. No
- 98. Don't Know
- 99. Refused

5. Did you have Smart Ideas projects underway when the Pilot was announced?

- 1. Yes
- 2. No
- 98. Don't Know
- 99. Refused

6. **Why did you choose to participate in the Smart Ideas portfolio of programs as opposed to the Pilot?**

7. **I'd like to learn how satisfied you are with the Smart Ideas for your Business programs, and welcome any comments you may have, or situations you'd like to share, but I also need you to rate your satisfaction on a 0-10 scale, where 0 means not at all satisfied, and 10 means extremely satisfied. How satisfied are you with:**

#	Question	Rating	Comments
A	The timing and availability of program incentives.		
B	The ability of Smart Ideas to accommodate the complexity of large-scale energy efficiency projects		
C	The types of energy efficiency projects incented by Smart Ideas		
D	The approval mechanisms for your Smart Ideas projects		
E	The level of certainty that funding will be available when your projects are eligible for it		
F	The pre-approval process that is required of Smart Ideas programs		
G	The evaluation, measurement and verification that is required of Smart Ideas programs		
H	ComEd's ability to coordinate with you about projects		
I	The maximum funds available for standard measures (50% of cost)		
J	The Smart Ideas for your Business programs in general		

8. What is your greatest barrier to participating in the Smart Ideas programs?

9. Has participating in these energy efficiency programs had any impact on your business? (Explain)

- 1. Yes
- 2. No
- 3. Don't Know
- 4. Refused

10. Do you feel the SIFYB program offerings provide adequate funding for the types of energy efficiency projects you would like to implement at your facility?

- 1. Yes
- 2. No
- 3. Don't Know
- 4. Refused

11. What changes would you suggest to the Smart Ideas programs to make it easier for your company to participate or increase your participation and/or satisfaction level?