Evaluation of Illinois Energy Now Smart Energy Design Assistance Program

June 2012 through May 2013

Prepared for: Illinois Department of Commerce Economic Opportunity

Prepared by:



ADM Associates, Inc. 3239 Ramos Circle

Sacramento, CA 95827 916.363.8383

Final Report: March 2015

Contact:

Donald Dohrmann, Ph.D., Principal 775.825.7079 dohrmann@admenergy.com

Prepared by:

Crystal Jewett 916.363.8383 crystal@admenergy.com

Steven Keates, P.E. 916.363.8383 steven@admenergy.com

Jeremy Offenstein, Ph.D. 916.363.8383 jeremy@admenergy.com

Table of Contents

Executive Summary	ES-1
1.Introduction	1-1
2.Estimation of Net Savings	2-1
3.Process Evaluation	3-1
4.Conclusions and Recommendations	4-1
Appendix A: Smart Energy Design Assistance Center Decision Maker Survey	A-1
Appendix B: Decision Maker Survey Responses	B-1

List of Figures

Figure 2-1 Final Sample Savings Extrapolated to SEDACP Population	2-5
Figure 3-1 Process Evaluation Overview	3-2

List of Tables

Table ES-1 Net Savings by Measure for EPY5/GPY2 Participant Sample	2
Table ES-2 Summary of Net kWh and kW Savings for SEDAC Program EPY5/GPY2	2
Table ES-3 Summary of Net Therm Savings for SEDAC Program EPY5/GPY2	2
Table ES-4 Summary of Net Savings from EPY5/GPY2 Electric and Gas Projects	3
Table 1-1 Sample Interval Process for EPY5/GPY2 Projects	1-4
Table 2-1 Free Ridership Scores for Combinations of Indicator Variable Responses	2-4
Table 2-2 Net kWh/kW Savings Summary EPY5/GPY2	2-6
Table 2-3 Net Therm Savings EPY5/GPY2	2-6
Table 2-4 Cumulative Net Savings by Program Year	2-6
Table 3-1 Participation for EPY5/GPY2 by Business Sector	3-4
Table 3-2 EPY5/GPY2 Program Participation by Utility Service Provider	3-4
Table 3-3 Respondent Role in Decision Making Process	3-5
Table 3-4 How Respondents Learned of the SEDAC Assessment Opportunity	3-6
Table 3-5 Respondent Organizational Funding for Energy Efficiency	3-7
Table 3-6 Respondent Organizational Equipment Purchase Process	3-7
Table 3-7 Financial Methods Used by Respondent Organizations	3-8
Table 3-8 Organizational Policies and Procedures for Energy Efficiency	3-9
Table 3-9 Respondent Reported Barriers to Measure Implementation	3-1
Table 3-10 Reasons for Measure Implementation Delays	3-2
Table 3-11 Persistent Barriers to Implementing Specific Measures	3-2
Table 3-12 Participant Satisfaction with Selected Program Elements	3-3
Table 3-13 Knowledge of Program Staff during Participant Interaction	3-4
Table 3-14 Participant Satisfaction with Program Staff Assistance	3-5
Table 3-15 Clarity of Application Information	3-5
Table 3-16 Acceptability of Application Process	3-6
Table 3-17 Feedback Regarding Onsite Energy Assessment Staff	3-6
Table 4-1 Summary of Net kWh and kW Savings for SEDACP EPY5/GPY2	4-1
Table 4-2 Summary of Net Therm Savings for SEDACP EPY5/GPY2	4-1

Executive Summary

This report presents the results of the impact and process evaluations of the Smart Energy Design Assistance Center Program (SEDACP), an energy efficiency program administered by the Smart Energy Design Assistance Center (SEDAC) and operated by the University of Illinois Building Research Council with partnership with the 360 Energy Group. The program is sponsored by the Illinois Department of Commerce and Economic Opportunity (DCEO). This report presents results for program activity during the period from June 2012 through May 2013, a period defined as electric program year 5 and natural gas program year 2 (EPY5/GPY2). Participants in SEDACP receive a building energy assessment and an accompanying report that recommends measures to reduce energy consumption at the facility.

The main features of the approach used for the evaluation are as follows:

- Data for the evaluation were collected through a review of program materials, interviews with SEDAC Program staff members, surveys and follow-up conversations with SEDACP participants, and site visits with SEDACP participants.
- An engineering desk review was performed on program measures to verify net savings estimates associated with energy efficiency projects implemented by SEDACP participants.

ADM contacted a sample of participants who received a building assessment to determine the following:

- Whether the participants had implemented any of the recommendations;
- Whether the participants had received incentives through a utility or DCEO program to implement the recommendations;
- The influence of the building assessment on the decision to implement the recommendations;
 and
- Additional technical details of the project.

Savings were estimated for non-incented projects that were influenced by the building assessments. Thus, estimated savings were net of the total gross program savings in that they excluded projects that received incentives or were not influenced by the building assessments. The savings impact estimation process involved a review of the available measure inputs and follow-up calls and site visits with the appropriate participant and facility management staff members. The evaluators referred to the Illinois Statewide TRM, the Ohio TRM, eQUEST energy simulation software, and ASHRAE in order to estimate savings for each measure type. The Illinois Statewide TRM was the primary reference for the evaluation.

Table ES-1 presents the net savings for sampled sites for each measure and maintenance category that achieved net savings within the EPY5/GPY2 sampled participant group.

Total Sampled Net Savings Measure Category Therm kWhkWEnvelope 717 1,410 1.3 **HVAC** 60,120 4,748 1.0 Lighting 152,029 1.8 Motors 3,681 Controls 1,956 15,877 Energy efficient appliances 71 2,075 0.0 Total 7,491 235,192 4.1

Table ES-1 Net Savings by Measure for EPY5/GPY2 Participant Sample

The total net savings for the sample shown above were extrapolated to estimate savings attributable to SEDACP for all program participants. Table ES-2 presents the net kWh and kW savings by utility for SEDACP during EPY5/GPY2 for facilities that receive electric service from SEDAC Program investor utilities. It should be noted that as some participants were serviced by non-program electric utilities such as municipal utilities, electric savings generated through these participants were not attributable to SEDACP investor utilities.

Table ES-2 Summary of Net kWh and kW Savings for SEDAC Program EPY5/GPY2

Program Component	Realized Net kWh Savings	Realized Net kW Savings
Ameren	544,028	9.6
ComEd	1,210,654	21.3
Total	1,754,682	30.9

Table ES-3 presents the net therm savings by utility for the SEDAC Program during EPY5/GPY2 for facilities that receive gas service from SEDAC Program investor utilities. It should be noted that as some participants were serviced by non-program gas utilities such as municipal utilities, gas savings generated through these participants were not attributable to the SEDAC Program investor utilities.

Table ES-3 Summary of Net Therm Savings for SEDAC Program EPY5/GPY2

Program Component	Realized Net Therm Savings
Ameren	36,377
Nicor	57,408
Peoples	23,304
North Shore	9,094
Total	126,183

The total net energy savings of the SEDAC Program during EPY5/GPY2 are summarized in Table ES-4. During this period, net energy savings totaled 1,754,682 kWh and 30.9 kW. Net gas savings totaled 18,858 therms.

Table ES-4 Summary of Net Savings from EPY5/GPY2 Electric and Gas Projects

Savings Level	Total Net Savings*		
	kWh	kW	Therm
Per Participant	7,662	0.1	568
Extrapolated to EPY5/GPY2 Participants	1,754,682	30.9	126,183

^{*}Savings totals do not include savings that were attributable to non-EEPS utilities such as municipalities.

The following section presents a summary of key findings from the process and impact evaluations of the EPY5/GPY2 SEDAC Program. These conclusions and recommendations are based on a combination of research activities including participant surveys, interviews with program staff, and reviews of program tracking data, documentation, and prior evaluation reports.

The following is a summary of key conclusions from the EPY5/GPY2 evaluation of the SEDAC Program:

- **Program staff proactively addressed emerging issues:** Program staff appears to have the necessary resources and procedures to identify and address emerging program issues in a timely manner. SEDAC staff closely monitors program performance and has consistently made mid-year improvements to the program in order to minimize weaknesses and increase program potential. This includes modifying program marketing, adding program components, hiring staff, and shifting program priorities.
- Participant follow-up procedures are increasingly extensive and sufficient: SEDAC regularly communicates with past participants and keeps records of implementation activity in order to internally assess program effectiveness. Additionally, the existing follow-up procedures with past participants act to encourage additional energy efficiency implementation and to further assist customers with questions and issues. This communication structure likely contributes to strong working relationships between SEDAC and its participants, and helps to achieve energy savings long after assessment reports are delivered.
- Program marketing is strategic and multi-faceted: SEDAC marketing has been modified to emphasize normative messaging and included peer effects, including case studies of successful energy efficiency projects. Additionally, the inclusion of educational presentations and workshops helps to increase program awareness while improving energy efficiency literacy in the customer base. SEDAC conducts marketing and outreach

to a variety of customer segments, including private and public entities, as well as both new buildings and existing facilities.

- Participant satisfaction remains high: The evaluation findings suggest that the SEDAC Building Energy Assessment Program is a highly valuable resource for public and private sector entities. Participants were particularly satisfied with the amount of information provided through the assessment report and by program staff members, and very few participants experienced negative issues with the program.
- Impact Savings Directly Attributable Continue to be Limited: As with prior years, verified savings attributable to SECACP were relatively small compared to the total savings associated with all of the measures recommended by SEDACP. Many participants received incentives from other programs for their ECRMs, and some participants indicate that they would have implemented the ECRMs without SEDAC assistance. This is not unexpected, given that a primary purpose of the program is to inform participants of the availability of incentives for making efficiency improvements.

ADM provides the following recommendations based on the EPY5/GPY2 evaluation:

- Assess whether report delivery can be expedited: A small percentage of program participants indicated that the length of time between the onsite assessment and the delivery of the report is too long. A few participants indicated that if the report had been delivered sooner, they may have been able to implement additional energy efficiency projects. Although the majority of participants appeared satisfied with the existing report delivery lead time, SEDAC should ensure that customers are fully aware of the expected timeline and may benefit from expediting delivery for any customers who express dissatisfaction with this element.
- Ensure that participants are informed of available financial incentives: A small percentage of participants reported that they did not have enough information to identify and apply for relevant financial incentives for their recommended ECRMs. SEDAC currently provides fairly extensive information regarding the availability of financial incentives, but the participant follow-up calls are likely an opportunity to ask participants whether they need any additional information about incentives. Some participants may need to be reminded of which incentive programs are available and how to apply for them.

1. Introduction

This report presents the results of the impact and process evaluations of the Smart Energy Design Assistance Program offered by the Illinois Department of Commerce and Economic Opportunity (DCEO). This report presents results for program activity during the period from June 2012 through May 2013.

1.1 Description of Program

The SEDAC Program provides participants with design assistance reports that detail energy cost reduction measures (ECRMs) which have been deemed appropriate for the participant. The reports list ECRMs individually, but rather than encourage the participant to invest in individual measures, the recommendations bundle cost-effective measures that result from interactive effects attainable when the building is analyzed as a whole. Cost-effective strategies are those bundles of ECRMs where the internal rate of return on the investment is greater than the discount rate and where the net present value of the investment is greater than zero.

The Smart Energy Design Assistance Program provides services at no cost to participants. The program currently offers four levels of assistance to participants:

- Level 1 Initial Consultations: This first level is designed to allow participants to have informative interactions with program staff and industry professionals in order to convey the benefits and overall structure of the SEDAC Program. Participants are able to ask questions and seek technical assistance regarding the potential for energy efficiency improvements in their facilities, and may consider the value of advancing to additional program levels.
- Level 2 Energy Audits: In this phase of the program, participants with existing facilities receive a site visit and in-depth consultation, while participants who are planning to renovate or construct new facilities receive a professional review of their building plans. SEDAC performs an analysis of building usage requirements and specific facility characteristics, resulting in a ranking of potential ECRMs. SEDAC then provides the results of this analysis to the participant along with detailed suggestions related to project design. The recommendations incorporate the whole-building approach to energy efficiency by grouping cost-effective measures that create synergistic effects when implemented together. Participants can then discuss the potential energy savings associated with proceeding to the design assistance phase of the program with SEDAC.
- Level 3 Design Assistance: This level is composed of an in-depth building analysis that is designed to identify the expected savings and costs from individual energy cost reduction measures (ECRMs) in the participant facility. The design assistance process incorporates energy simulation modeling, evaluation of each potential ECRM, and a life cycle cost analysis for the measures. SEDAC uses simulation software such as eQUEST

and TRACE 700 to model facility baselines and measure the energy effects of implementing individual ECRMs. The participant is then presented with a feasibility report detailing the costs and energy benefits associated with the recommended energy efficiency improvements.

■ Level 4 Implementation Support: This supplementary program phase is available to participants who encounter difficulties with implementing the projects identified through the previous program levels. In these cases, SEDAC provides guidance related to the financial and operational aspects of implementation, including contractor selection, final design specifications, and project cost management.

SEDAC communicates with participants who have completed one or more phases of the program. This communication allows SEDAC to further assist participants in their implementation process and to potentially expand the scope or efficiency of the existing projects. Additionally, SEDAC uses information from past participant projects to perform future cost analyses and design assistance plans for new participants. SEDAC maintains contact with previous participants to increase implementation of energy cost reduction strategies already identified, and incorporates the added benefits of the incentives into the cost analyses conducted for new participants.

Throughout the assistance process, SEDAC informs participants of available energy efficiency incentives that will reduce the cost of the recommended measures. SEDAC directs participants to Illinois Energy Efficiency Portfolio Standards (EEPS) incentive programs in order to support them in their implementation of energy efficiency improvements. Additionally, some participants are referred to the SEDAC Program through their involvement with the existing EEPS incentive programs. While some measures implemented through the SEDAC Program are associated with an EEPS incentive, participants are able to install measures without the assistance of an incentive. The SEDAC Program claims savings only for those projects completed as a result of the SEDAC consultation that do not receive additional EEPS financial assistance.

During the June 2012 through May 2013 period, 237 projects were assessed by the program.

1.2 SEDAC Savings Methodology Overview

SEDAC applies the following steps to estimate the savings for the recommended efficiency improvements:

1) SEDAC constructs a baseline model using TRACE 700 or eQuest software products. These computer programs perform an hourly building energy simulation, which calculates the amount of energy (and the resulting utility cost of that energy) that the building is expected to use over an entire typical weather year. Model inputs include building geometry and orientation, wall and roof details, window area and type, type of heating and cooling system, type of lighting, local weather information, and schedules regarding lighting usage, internal equipment usage, and occupancy. This "baseline"

computer model shows the buildings estimated annual energy consumption and utility cost.¹

- 2) SEDAC performs a computer analysis of energy cost reduction measures (ECRMs). The recommended ECRMs are generated after reviewing and discussing the baseline building plans or inspection report. The baseline computer model is changed to reflect the implementation of these ECRMs, and the computer model generates the resultant energy consumption and expected utility costs. Some ECRMs are evaluated externally from the model since the model does not cover all circumstances.
- 3) The estimated savings and the additional costs of implementing all analyzed ECRMs are evaluated in a life cycle cost analysis.
- 4) ECRMs that have favorable economics are bundled together and re-modeled against the baseline for which any interactions between ECRMs are accounted.

1.3 Impact Evaluation Approach

The overall objective for the impact evaluation of the SEDACP was to estimate the electric and natural gas savings that resulted from projects completed as a result of the program and that do not receive additional EEPS financial assistance.

The M&V approach was based on the following features:

- Selection of a representative sample of program participants;
- Telephone interviews to identify participants who implemented energy efficiency measures for which they did not receive an incentive;
- Telephone verification of claimed measures at sampled sites; and
- Site-level savings extrapolation to Program level savings.

1.3.1 Data Collection Procedures

A sample of participants in the SEDAC Program for EPY5/GPY2 were surveyed by telephone or online to ascertain what energy efficiency measures they implemented (with or without receiving an incentive) since the energy audit was performed. These participants were also asked questions about plans to implement ECRMs in the future, about program satisfaction and other process evaluation-type questions. In total, 85 facility staff and/or key decision makers that had received SEDACP reports were surveyed.

Introduction 1-3

¹ For existing buildings, the baseline is taken as the existing systems, and the full costs of the electricity cost reduction measures are analyzed. For new construction or renovation, the baseline is determined from design drawings and code requirements and the incremental costs of report recommendations are analyzed.

Of those participants that completed the survey, ADM staff attempted to contact a sub-sample (37 in total) of participants who had indicated during the survey they had implemented a recommended ECRM but had not received an incentive for that ECRM. ADM was able to verify *ECRMs as installed without an incentive* at 13 of these facilities via a follow up phone interview with the facility staffer. These calls also served to verify and evaluate the implementation of recommended ECRMs in order to complete engineering analyses.

The aforementioned criteria had to be met in order to evaluate impact savings that were directly attributable to the SEDACP and not to another utility or DCEO incentive program. All 58 other survey respondents had either received incentives or had not yet implemented the recommendations. During evaluation efforts for PY4, ADM was able to conduct two on site visits for PY5 projects.

Sample IntervalQuantityTotal EPY5/GPY2 projects237Facility staff surveyed85Facility staff that indicated measures were implemented w/out an incentive (final sample)37Net Savings Project Analyses Completed13On-site visits conducted2

Table 1-1 Sample Interval Process for EPY5/GPY2 Projects

Participants were also asked about questions related to the process evaluation during telephone and/or onsite interviews.

1.3.2 Data Collection and Estimation of Sample Site Gross Savings

ADM staff accomplished three tasks during the follow-up telephone interviews:

- First, the implementation status of all measures was verified by interviewed participants. Evaluation staff members verified that the energy efficiency measures were indeed installed and that they still function properly.
- Second, evaluation staff members collected information regarding any details necessary for savings calculation. Data were collected based on the measure input requirements of the data sources being referenced for the particular measure.
- Third, evaluation staff members interviewed the contact personnel at a facility to obtain additional information on the project, such as project timing and other background details in order to further inform the savings estimation process.

1.4 Process Evaluation Approach

This section presents the key tasks that were included in the process evaluation for the program year.

1.4.1 Review Program Documentation

To begin the process evaluation effort, the evaluators reviewed documentation and data for the SEDAC Program. Reviewed documentation included program and service descriptions, information hosted on the SEDAC website, and applications for SEDAC services.

In addition, the evaluators reviewed participant tracking records. These data were used for several purposes:

- Preliminary analysis of the characteristics of the participant populations, to be used for planning purposes and to provide an increased understanding of program participation;
- Developing sample frames for the participant population; and
- Extracting information about participant facility types and the types of businesses represented by program participants.

1.4.2 Conduct Program Staff Interviews

The evaluators conducted interviews with SEDACP management staff. The general purpose of these interviews was to gain insight into program operation, performance, and delivery in the context of EPY5/GPY2, to identify changes or improvements that were made to the program since EPY4/GPY1, and to discuss current program strengths, weaknesses, and opportunities.

More specifically, topics addressed by these in-depth interviews included:

- Any changes to program organization;
- Updates on marketing and promotional activities;
- Perspectives on the characteristics of EPY5/GPY1 participants or potential participants;
- Strengths and weaknesses of the program;
- Areas where the program may need to be changed or strengthened; and
- Anticipated changes to the program.

Information obtained through these interviews was used to develop an understanding of program operation, identify trends in program performance, and further inform the impact evaluation of the program.

1.4.3 Conduct Participant Surveys

The evaluators collected data from SEDAC Program participants for the process evaluation by means of a telephone and email survey. The goal of these surveys was to obtain a detailed

understanding of the participants' perspective of the SEDAC Program, their decision making processes for implementing measures, their perceptions of the process, the effect of the energy audits on their knowledge and behavior, and the benefits they perceive.

The sample design was based on data on program participation provided by DCEO. In total, 85 EPY5/GPY2 SEDAC participants responded to the participant survey.

The content of the survey focused on the following issues:

- Awareness of the program;
- Motivations for participating in the program;
- Factors that influenced the participant to enroll in the program;
- Participant satisfaction with the program;
- Participant suggestions for program improvement;
- Whether the participant has engaged in energy efficient practices since participating in the program;
- Whether the participant implemented energy efficient measures (and received or did not receive an incentive) since participating in the program; and
- Firmographics and demographics.

The results from the participant survey are used to inform both the impact and process components of the evaluation. Project implementation information gathered through the survey informs the savings analysis and identifies participants for analyst follow-up telephone calls. The survey also provides insight into the participant perspective, allowing the evaluators to identify trends in program performance and any issues regarding program structure, operation, and delivery that may require attention.

1.5 Organization of Report

This report on the impact and process evaluation of the Smart Energy Design Assistance Center Program for the period June 2012 through May 2013 is organized as follows:

- Chapter 2 presents and discusses the methods used for estimating net savings for measures installed under the program.
- Chapter 3 presents and discusses the results obtained from the process evaluation of the program.
- Appendix A provides a copy of the questionnaire used for the participant survey.
- Appendix B presents tabulated results from the participant survey instrument.

2. Estimation of Net Savings

This chapter addresses the estimation of kWh, peak kW, and therm reductions resulting from measures installed in facilities (with no incentive received) that obtained energy audits through the Smart Energy Design Assistance Center Program during the period of June 2012 through May 2013. This period is defined as electric program year 5 and natural gas program year 2 (EPY5/GPY2). Section 2.1 through section 2.4 describes the steps taken to identify energy saving projects and calculate the resulting energy savings.

2.1 Review of Participant Interviews

ADM staff conducted telephone and on-site interviews with SEDACP participants that served as the initial source for data regarding projects implemented during EPY5/GPY2. In total, 85 SEDACP participants were surveyed. In order to guide the savings estimation process, surveyed participants were asked about two principal issues:

- If they partially of fully implemented ECRMs that were recommended in the audit reports; and
- If they received an EEPS funded incentive (utility or DCEO program) for the ECRMs that they implemented.

Participants who indicated that they did not receive an incentive for measures they partially or fully implemented were identified as potential savings projects, and ADM attempted to contact them for a follow-up interview. Participants that indicated that they received incentives for measures they implemented from the SEDAC audit reports from utilities and/or DCEO were eliminated from consideration when calculating impact savings directly attributable to the SEDACP.

During the follow-up interviews, participants provided information related to measures installed and equipment changes implemented after participating in the energy audit portion of the program, along with any available inputs for estimating savings such as measure type, facility square footage, and other details. The evaluators reviewed the interview findings to identify all measures that would potentially generate savings attributable to SEDACP for the EPY5/GPY2 program year.

Projects where more detail was required and not available to complete an impact evaluation, or survey respondents² that indicated they installed an ECRM but that ADM was not able to verify, were still included in the sample n for the purposes of extrapolating savings to SEDACP's population. This eliminated the possibility of 1) attributing savings to ECRMs that survey respondents indicated they received incentives for or did not implement at all; and, 2) omitting

_

² For the purposes of this sample, one facility staff member/survey respondent represents one project or facility.

savings for ECRMs that were implemented without incentives but for a variety of factors³, ADM was not able to complete engineering analyses for impact savings.

2.2 Selection of Data Sources for Project-Level Savings Calculation

Upon completion of the data collection process, the evaluators performed a desk review of the available data and determined the optimal savings calculation methodology. The evaluators referred to several sources in order to estimate savings for each measure type due to the comprehensive scope of measure types included in the SEDAC program. Deemed savings values and stipulated calculation procedures from the Illinois Statewide TRM were the primary means for estimating savings. For measures not included in the Illinois Statewide TRM, other sources and methods were referred to. These other sources included procedures outlined in the Ohio TRM, the use of eQUEST energy simulation software, and ASHRAE handbooks.

2.3 Estimating Program-Level Net Savings

This section provides a detailed explanation of how net savings were calculated for the EPY5/GPY2 program year.

2.3.1 Implementation Lag Time

During interviews with EPY5/GPY2 participants, the evaluators found that there was typically a lag between when participants received the SEDAC audit report and when they chose measures for implementation and completed the implementation. Typically, this lag time was about six months to two years, with most facilities toward the latter end of that range. The lag is partially a reflection of the public sector entities that participate in the program. Decision making about the recommendations and budget approvals can take significant time because multiple stakeholders (e.g., governing boards, budgeting committees) are typically involved in making these types of decisions. Thus, it is a reasonable and conservative assumption that the savings reported as attributable to the SEDACP will not be fully realized until approximately two program years after the audit reports have been issued. For example, facilities that had received reports in EPY5/GPY2 were only recently (i.e., during EPY7/GPY4) finishing the implementation of ECRMs. Therefore, EPY5/GPY2 projects realized savings in EPY7/GPY4 and EPY6/GPY3 projects achieve full savings in EPY8/GPY5.

2.3.2 EPY5/GPY2 Program Free Ridership

After savings were analyzed for facilities/projects who reported implementing recommendations for which they did not apply for or receive an incentive, several criteria were used to determine the portion of the project's savings for a particular project that should be attributable to the audit

_

³ The largest factor that contributed to incomplete impact analyses were non-responses from facility staff for the attempts at a follow up interview.

component of the program. In other words, ADM calculated free ridership (FR) scores for each recommended ECRM verified as installed. The three factors used to determine the portion of the projects savings attributable to the program are:

- Plans and intentions of firm to install a measure even without the support provided through the building energy assessment component of the program
- Influence that the building energy assessment had on the decision to install a measure
- A firm's previous experience with a measure installed under the program

For each of these factors, rules were applied to develop binary variables indicating whether or not a participant's behavior showed free ridership. These rules made use of answers to questions on the decision maker survey questionnaires.

The first factor required determining if a participant stated that his or her intention was to install an ECRM even without the program. Two binary variables were constructed to account for customer plans and intentions: one, based on a more restrictive set of criteria that may describe a high likelihood of free ridership, and a second, based on a less restrictive set of criteria that may describe a relatively lower likelihood of free ridership.

The first, more restrictive criteria indicating customer plans and intentions that likely signify free ridership are as follows:

The respondent answered "yes" to the question: "Did you have finalized plans to install the [ECRM Category] before receiving the SEDAC Building Energy Assessment?" and "Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment?"

The second, less restrictive criteria indicating customer plans and intentions that likely signify free ridership are as follows:

The respondent answered "yes" to the question: "Did you have finalized plans to install the [ECRM Category] before receiving the SEDAC Building Energy Assessment?" and "No" or "Don't know" to the question: "Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment?"

The second factor required determining if a customer reported that the information provided in the energy assessment was influential to his or her decision to complete the energy saving project. The criterion indicating that program influence may signify a lower likelihood of free ridership is that either the respondent answered "very important" or "somewhat important" to the question "How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the [ECRM Category]?"

The third factor required determining if a participant in the program indicated that he or she had previously installed an ECRM similar to one that was recommended to them in the building energy assessment. The criteria indicated that previous experience may signify a higher

likelihood of free rider ship is the respondent answered "yes" to the question "Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient equipment similar to the [ECRM Category] at your facility?"

The four sets of rules just described were used to construct four different indicator variables that address free ridership behavior. For each customer, a free ridership value was assigned based on the combination of variables. With the four indicator variables, there were 11 applicable combinations for assigning free ridership scores for each respondent, depending on the combination of answers to the questions creating the indicator variables. The following table displays each possible combination along with corresponding free ridership values.

Indicator Variables Had Plans and Had Plans and Intentions to Influence of Audit Free Ridership Had Previous Intentions to Install Measure Recommendation on Score Install Measure Experience with Decision to Install without without Program? Measure? Program? Measure? (Definition 1) (Definition 2) Y N/A N N 100% Y Y 100% N/A N Y N/A Y Y 100% Y N/A Y N 67% N N Y Y 67% N Y N N 33% N Y Y N 0% N Y Y Y 33% N N N Y 33% N N N N 0% Y N N N 0% Y Y 0%

Table 2-1 Free Ridership Scores for Combinations of Indicator Variable Responses

2.3.3 EPY5/GPY2 Program Net Savings

After conducting follow-up phone interviews and evaluating impact savings via desk reviews for EPY5/GPY2 projects, the calculated savings were then extrapolated to the program population. The total sample n of projects represented facilities for which the evaluators were able to confirm no savings occurred or some savings occurred with certainty⁴, and also the survey respondents that indicated they did not receive incentives for installed ECRMs. The final sample was comprised of 37 projects. The method ADM used to arrive at the final sample n of projects is illustrated in Figure 2-1.

⁴ Impact savings, whether or not they were calculated as zero, were confirmed for a total of 13 facilities.

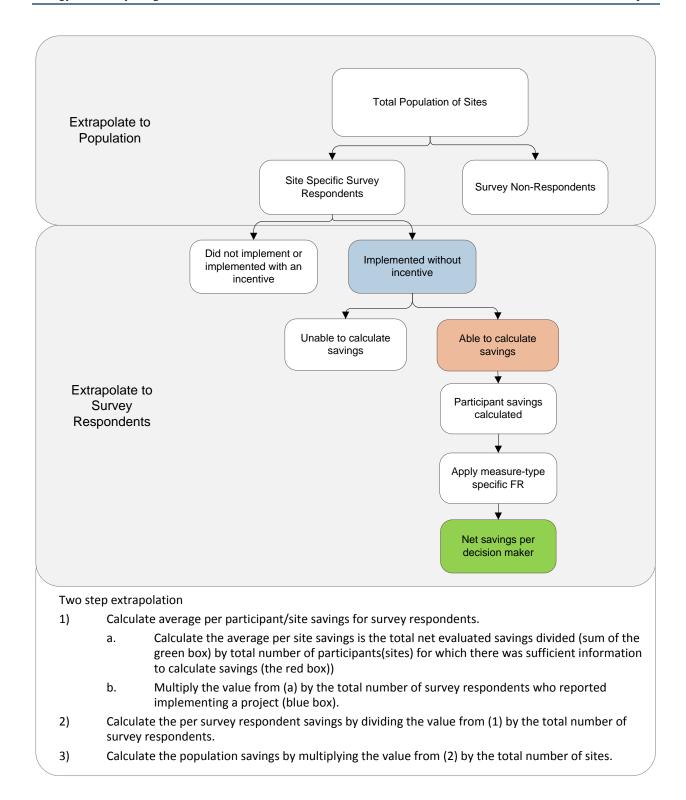


Figure 2-1 Final Sample Savings Extrapolated to SEDACP Population

2.4 Net Savings Summary

This section presents the results of the impact evaluation from the methodology described in the preceding sections.

As shown in Table 2-2, the realized net electric savings for the EPY5/GPY2 program year totaled 1,754,682 kWh and 30.9 kW.

Program EPY5/GPY2 Realized kW Net Savings

Ameren 544,028 Total EPY5/GPY2 Realized kW Net Savings

1,210,654

1,754,682

21.3 30.9

ComEd

Total

Table 2-2 Net kWh/kW Savings Summary EPY5/GPY2

As shown in Table 2-3, the realized net natural gas savings for the EPY5/GPY2 program year totaled 18,858 therms.

Program Component	Total EPY5/GPY2 Realized Therm Net Savings
Ameren	36,377
Nicor	57,408
Peoples	23,304
North Shore	9,094
Total	126,183

Table 2-3 Net Therm Savings EPY5/GPY2

Cumulative savings for PY4/GPY1 and PY5/GPY2 are given in Table 2-4 below.

Program Year	Verified Therm Net Savings	Verified kWh Net Savings	Verified kW Net Savings
PY4/GPY1	17,131	1,776,875	647.6
PY5/GPY2	126,183	1,754,682	30.9
Cumulative Total	143,315	3,531,557	678.5

Table 2-4 Cumulative Net Savings by Program Year

3. Process Evaluation

This chapter discusses results of the Smart Energy Design Assistance Center Program process evaluation for EPY5/GPY2. The purpose of the process evaluation is to assess the structural, operational, and managerial perspective of the Program in order to identify program strengths, weaknesses, and opportunities. This evaluation is based upon analysis of program structure and surveys with participating SEDAC participants, interviews with SEDAC staff members, and review of program tracking data and other documentation.

This chapter begins with a summary and discussion of the results from the EPY5/GPY2 SEDACP participant survey. The chapter continues by highlighting and discussing the outcomes of in-depth interviews conducted with SEDAC staff members who are responsible for managing the SEDAC Program.

3.1 Evaluation Objectives

The process evaluation examines program operations and results throughout the operating year, and to identify potential program improvements that may prospectively increase program efficiency or effectiveness in terms of participation and satisfaction levels. This process evaluation was designed to document the operations and delivery of the SEDAC Building Energy Assessment Program during EPY5/GPY2. Figure 3-1 provides an overview of the evaluation process, including the research activities performed.

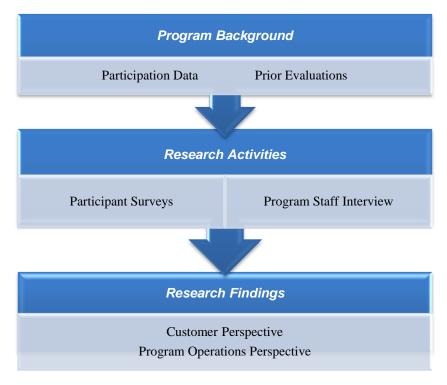


Figure 3-1 Process Evaluation Overview

Key research questions to be addressed by this evaluation of EPY5/GPY2 activity include:

Does the current SEDAC organizational structure have the resources to meet program needs?

Is the SEDAC Building Energy Assessment Program effectively engaging participants and meeting their energy efficiency and educational needs?

Did the SEDAC Building Energy Assessment Program reduce barriers to increased energy efficiency project implementation?

Has the program been improved in order to either address previous weaknesses or to capitalize on its strengths?

During the evaluation, data and information from several sources were analyzed to achieve the stated research objectives. Insight into the participant perspective on the program was developed from a telephone and email survey of SEDAC assessment participants. The internal organization and operational efficiency of program delivery was examined through analysis of interviews conducted with SEDAC staff, as well as a review of program documentation such as promotional literature and participant tracking data.

3.2 Summary of Primary Data Collection

- Participant surveys: Participant surveys serve as the foundation for understanding the participant perspective. The participant surveys provide participant feedback and insight regarding participant experiences with the SEDAC Building Energy Assessment Program. Respondents report on their satisfaction with the program, detail their motivations and the factors affecting their decision making process, and provide recommendations related to improving the program. For EPY5/GPY2 of the SEDAC Building Energy Assessment Program evaluation, 85 assessment participants responded to the participant telephone survey.
- Interviews with Smart Energy Design Assistance Center (SEDAC) staff members: Interviews with staff members from DCEO's implementation partner SEDAC provide insight into various aspects of the program and its organization. These staff members also provide information regarding recent organizational and procedural improvements that have been implemented in order to enhance program efficiency and effectiveness. For the SEDAC Building Energy Assessment Program evaluation, the evaluators conducted in-depth interviews with key staff members from SEDAC who were directly involved with program design, management, and delivery.

3.3 Summary of Program Participation Levels

This section outlines the overall participation rates and utility distribution of participation for the SEDAC Building Energy Assessment Program for EPY5/GPY2. The values provided in this section of the chapter are based on program tracking data exports, which included participant details for multiple program years.

The following table displays the number of building energy assessment reports that were provided to participants in EPY5/GPY2, by business sector. In EPY5/GPY2 of the SEDAC Building Energy Assessment Program, there were 237 assessment reports provided to a combination of nonprofit, private, and public business facilities. Public sector participants were the most common participating business sector with 161 reports, followed by private businesses with 45 reports and finally nonprofit participants with 31 total reports.

This distribution is fairly consistent with participation rates from prior program years, although the share of participating public sector organizations has increased from approximately 55% for EPY1 through EPY4/GPY1 to 68% in EPY5/GPY2.

Business Sector	Number of Participants
Nonprofit	31
Private	45
Public	161
Total	237

Table 3-1 Participation for EPY5/GPY2 by Business Sector

In terms of the distribution of utility services across program participants, ComEd was associated with the highest number of energy assessments through SEDAC among the electric providers in EPY5/GPY2 with 158, followed by Ameren with 71. Nicor was associated with the most energy assessments among gas service providers in EPY5/GPY2 with 101, followed by Ameren with 64. The distribution of assessments among gas providers differs from prior years, as Ameren previously accounted for more SEDAC Energy Assessment participants than Nicor. This shift is likely due to the fact that SEDAC has added staff to specifically focus on recruiting participants from the Nicor service territory.

Table 3-2 EPY5/GPY2 Program Participation by Utility Service Provider

Electric	Gas EEPS Utility					
EEPS Utility	None	Ameren	Nicor	North Shore	Peoples	Total
None	-	7	1	-	-	8
Ameren	8	57	6	-	-	71
ComEd	7		94	16	41	158
Total	15	64	101	16	41	237

3.4 Participant Outcomes

A telephone and email survey was conducted to collect data about participant decision-making, preferences, and opinions of the SEDAC Building Energy Assessment Program. In EPY5/GPY2, 237 participants received an energy audit and associated measure recommendations in their facilities through the program. In total, 85 participants from EPY5/GPY2 responded to the survey.

3.4.1 Respondent Role in Decision Making

In order to determine individual respondents' involvement with the implementation of ECRMs in their facilities, participants were asked about their specific roles. Thirty-nine percent of respondents reported that they were the main decision maker in the implementation process, while a majority (57%) indicated that they assisted with the ECRM implementation decision. Only four percent of respondents stated that they were not directly involved with the decision making process.

What was your role in the decision making process	Response	Percent of Respondents (n=85)
to implement the recommended energy cost	Main decision maker	39%
reduction measures (ECRMs)?	Assisted with the decision	57%
(LCINIS):	Was not part of the decision process	4%

Table 3-3 Respondent Role in Decision Making Process

Similarly, a majority of respondents (88%) stated that they were involved in completing the SEDAC energy assessments application. These results are very similar to those obtained for previous program years, and continue to suggest that nearly all of the survey respondents had either influenced the ECRM implementation or observed and participated in the decision making and planning activities that preceded the implementation.

3.4.2 Program Awareness and Information Channels

SEDAC Building Energy Assessment Program participants were asked how they initially learned about the SEDAC Building Energy Assessment opportunity. As shown in the table below, respondents provided a wide range of responses. Many respondents indicated that they first heard about the assessment opportunity directly from SEDAC, including through SEDAC representatives (15%), an email from SEDAC (11%), and the SEDAC website (6%). Additionally, a portion of the 18% of respondents who cited a workshop or seminar as their initial source of information about the energy assessments were likely referring to a SEDAC seminar.

Several respondents specified methods of hearing about the program that were not listed on the survey, including the Illinois Board of Education, the U.S. Green Building Council, and their city hall. These results suggest that information about the SEDAC energy assessments is being distributed across a wide array of channels. This may be beneficial in reaching a variety of decision makers and business types.

	Response	Percent of Respondents* (n=82)
	Other (please describe)	23%
	During a workshop or seminar	18%
	Friend or colleague	17%
	From a representative of Smart Energy Design Assistance Center (SEDAC)	15%
	Email from SEDAC	11%
How did you first learn about SEDAC Building	Past experience with the program	10%
Energy Assessments?	A DCEO representative mentioned it	7%
	The DCEO Website	7%
	Vendor or contractor	7%
	The SEDAC Website	6%
	From a utility representative	6%
	Illinois County Board Association	4%
	Utility materials (website, monthly bill)	4%
	Don't know	1%

Table 3-4 How Respondents Learned of the SEDAC Assessment Opportunity

3.4.3 Organizational Structure and Decision Making

In order to gauge participants' organizational structures, priorities, and behavioral processes, survey respondents were asked to answer several questions regarding the characteristics of their energy efficiency decision making procedures.

Respondents asked how their organization funds energy efficiency improvements, and some individuals provided multiple responses. Respondents most commonly indicated that the funds are taken from the general operation and maintenance budget (71%), while a third of respondents fund these improvements through a capital request.

Respondents who use a capital request were then asked whether there is a dollar threshold at which a capital request must be submitted; the majority of these respondents indicated that a threshold does exist and provided dollar thresholds ranging from \$1,000 to \$100,000. The average capital request threshold was approximately \$21,000. When asked how long it typically takes for a capital request to be approved, respondents provided time frames ranging from one week to a year or more.

Only 10% of respondents reported that they have dedicated funding for energy efficiency projects. In addition to the listed options, 13% of respondents reported that they primarily fund

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

energy efficiency improvements through a combination of grants and rebates. This distribution of responses is very similar to that of prior program years.

	Response	Percent of Respondents* (n=82)
How does your organization fund energy	Funds are taken from operation and maintenance budget	71%
efficiency improvements?	Through a capital request	33%
	Dedicated funding for energy efficiency projects	10%

Table 3-5 Respondent Organizational Funding for Energy Efficiency

Other

Respondents were then asked to provide information regarding the approval process for equipment purchases in their organizations. As shown in the table below, a majority of respondents (56%) indicated that they follow procurement rules that are specific to their organization.

With regard to specific approval processes, 38% of respondents indicated that the process depends on the amount of the purchase, while 23% stated that an open bid is required. Only 2% of respondents indicated that they use a specific vendor, which is lower than the 10% of respondents who provided this answer in prior years.

As with prior evaluation years, these results suggest that participants likely do not have consistent working relationships with equipment vendors and that many participants are required to follow specific regulations when making project decisions.

Table 3-6 Respondent Orga	unizational Equipment Purchase Proces	SS
		Perce

	Response	Percent of Respondents* (n=82)
	Follow procurement rules specific to our organization	56%
What is the approval process for equipment	Depends on the amount of purchase	38%
purchases in your organization? (Select all	An open bid is required	23%
that apply)	Follow state or federal procurement guidelines	20%
	Required to select lowest bidder	16%
	Other	13%
	Use a specific vendor	2%
	Don't know	0%

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

In order to gather further information regarding energy efficiency investment requirements and priorities, respondents were asked which financial methods their organizations use for evaluating energy efficiency improvements. The responses to this question for EPY5/GPY2 were nearly identical to participant responses from prior program years, with the most common financial method being simple payback, followed by initial cost and initial rate of return.

Respondents reporting the use of simple payback or internal rate of return were asked to provide information about their payback periods and rate thresholds; the average reported payback period was 4.1 years while the average reported rate of return was 25%. It should be noted that some responses to these follow-up questions were unusually high or low (e.g. "100%" for estimated rate of return), and some respondents may not have been aware of their organization's specific financial requirements.

Table 3-7 Financial Methods Used by Respondent Organizations

Which financial methods	Response	Percent of Respondents* (n=82)
does your organization	Simple Payback	73%
typically use to evaluate	Initial Cost	68%
energy efficiency	Internal rate of return	41%
investments?	Life cycle cost	46%
	Don't know	1%

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

When asked about which policies or procedures they have in place for making energy efficiency improvements, the majority (72%) of respondents reported that they have staff responsible for monitoring or managing energy usage. Respondents were able to provide more than one response, and 44% stated that their facility has defined energy saving goals but relatively fewer respondents (13%) indicated that their facilities have carbon reduction goals. Sixteen percent of respondents reported that their facility does not have any policies or procedures in place for making energy efficiency improvements, which is a similar portion of participants as prior years.

	Response	Percent of Respondents* (n=82)
Which of the following policies or procedures does your organization have in place regarding energy efficiency improvements at this facility? (Select all that apply)	A person or persons responsible for monitoring or managing energy usage	72%
	Defined energy saving goals	44%
	A specific policy requiring that energy efficiency be considered when purchasing equipment	44%
	Carbon reduction goals	13%
	Other (please specify)	10%
	None of the above	16%
	Don't know	0%

Table 3-8 Organizational Policies and Procedures for Energy Efficiency

3.4.4 Barriers to Energy Efficiency

In order to gain insight into potential challenges and opportunities related to improving the appeal of energy efficiency, respondents were asked to provide information regarding any perceived barriers to making energy efficiency improvements. When asked, approximately 70% of respondents indicated that their organization faces one or more such barrier.

As shown in the table below, a majority (54%) of these respondents reported that insufficient funding for making improvements is a barrier to their facility's energy efficiency. This was by far the most common response in EPY5/GPY2 as well as in prior years, which continues to suggest that any incentives or no-cost services provided by energy efficiency initiatives would be highly valued and effective in motivating organizations to implement improvements.

In contrast, only two percent of respondents indicated that a lack of information about energy efficiency is a barrier, which suggests that participants are well-informed of potential projects and would not necessarily implement more energy efficiency initiatives if given additional guidance. Thus, any customers who have received a SEDAC energy assessment but have not yet implemented the full scope of recommended projects are likely limited by internal funding or financial requirements.

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

Table 3-9 Respondent Reported Barriers to Measure Implementation

	Response	Percent of Respondents* (n=57)
	Insufficient funding for improvements	54%
	Other	13%
What harriers does your	Approval processes that slow or make purchasing difficult	11%
What barriers does your organization face in making energy efficiency improvements?	Current equipment that is too new to be replaced with more efficient equipment	10%
	Incentive program time requirements	9%
	Schedules that dictate when equipment is to be replaced or maintained regardless of efficiency levels	5%
	Lack of information on energy efficient equipment and practices	2%
	Don't Know	0%

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

During the survey, respondents were asked various questions regarding the energy efficiency measures that they had implemented as a result of the SEDAC Building Energy Assessment. Through these questions, respondents were asked to identify any measures that they had not yet implemented but that they may implement in the future. Respondents were then asked why they had not implemented these measures. Responses were highly consistent with those of respondents from prior program years.

As shown in the table below, these respondents most commonly reported (62%) that they do not have sufficient funds to implement the remaining measures, while 41% stated that their organizations currently have other priorities for capital improvement projects. Only 10% of respondents indicated that estimated project savings were not sufficient.

	Response	Percent of Respondents* $(n=58)$
For the ECRMs that you have	Insufficient funds to implement the project(s)	62%
not implemented, but may implement in the future, why	Other priorities for capital improvement projects	41%
have you not implemented	Other	17%
them yet?	Delays in getting approval for the project(s)	12%
	Savings not great enough to make the project a priority	10%
	Don't know	0%

Table 3-10 Reasons for Measure Implementation Delays

Respondents also indicated measures that they had not installed and were unlikely to install in the future. When asked why they do not plan to implement these measures, half of these respondents reported that they do not have sufficient funds to implement the projects. Thirty-nine percent of respondents indicated that they have other priorities for capital improvement projects, while 28% stated that the estimated savings were not high enough to justify the cost.

These responses differ from those of prior years, where a majority of respondents who did not plan on implementing one or more project reported that the estimated savings for these projects were too low. Thus, overall lack of funding may be more of a barrier than cost-effectiveness for participants in EPY5/GPY2, although both issues relate to financial requirements and the distinction may not be significant.

	Response	Percent of Respondents* (n=36)
For the recommended ECRMs	Insufficient funds to implement project(s)	50%
that you do not plan on implementing, why do you not plan on implementing them?	Other priorities for capital improvement projects	39%
(Select all that apply)	Savings not great enough to justify the cost	28%
(Control of the same of Page)	Other	22%
	Don't know	6%

Table 3-11 Persistent Barriers to Implementing Specific Measures

3.4.5 Participant Satisfaction with the Program

Respondents were asked about their levels of satisfaction with selected aspects of the assessment, performance with any installed measures, and their overall program experience.

Responses were provided on a scale from very dissatisfied to very satisfied. The following table shows participant satisfaction by each selected program element. Overall, participants reported

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

high satisfaction levels for all program elements, most notably with the professionalism of SEDAC staff members and with the usefulness of the energy assessment. This is very similar to the satisfaction results obtained from participants of prior program years. Ninety-seven percent of the survey respondents were either satisfied or very satisfied with their overall program experience, and very few of the respondents indicated dissatisfaction with any of the program elements.

Respondents were relatively more dissatisfied with the information provided regarding available financial incentives, with a total of eight percent of respondents providing a rating of *dissatisfied* or *very dissatisfied*.

	Satisfaction Rating (n=82)				
Element of Program Experience	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
The professionalism of the SEDAC staff or representative who performed the assessment	87%	9%	3%	0%	1%
Overall experience with the SEDAC Building Energy Assessment Program	82%	15%	2%	0%	1%
The usefulness of the assessment report	72%	22%	5%	0%	1%
The amount of time it took to complete the building energy assessment	65%	28%	4%	2%	1%
The steps you had to take to get through this program	59%	34%	6%	0%	1%
The information provided on financial incentives to implement recommendations	51%	37%	4%	4%	4%

Table 3-12 Participant Satisfaction with Selected Program Elements

Respondents who reported being dissatisfied with one or more elements of their experience were asked to elaborate on the reasons for this dissatisfaction. With regard to the financial incentive information provided via the assessment, a few respondents explained that they were either not aware of available financial incentives or did not have enough information to actually apply for such incentives. Specific commentary included:

"It's not completely clear how to apply for incentives and how to know what incentives are out there."

"They weren't clear enough with information on who to contact and [what] I would need to provide to receive an incentive."

The only other open-ended commentary regarding program dissatisfaction was related to the time it took to receive the assessment report. The respondent providing this feedback explained

[&]quot;We just weren't aware of the incentives that were available."

that it had taken three to four months to receive the report, which did not allow enough time to incorporate the suggested projects into the organization's quarterly budget.

It should be noted that the commentary discussed above represents a small percentage of respondents, and that the majority of respondents provided positive and complimentary statements when asked about their program experiences.

3.4.6 Participant Satisfaction with Program Staff Interactions

In addition to the initial list of program elements, respondents were asked a series of questions specifically regarding their experiences with program staff and with the program application process.

Nearly three-quarters (73%) of respondents reported that they had interactions with program staff during the course of completing the building energy assessment. These respondents were then asked to indicate how knowledgeable the program staff was about any issues discussed during the assessment process. As shown in the table below, more than 90% of respondents reported that program staff members were either very or fairly knowledgeable during these discussions, and two percent of respondents stated that staff members were not at all knowledgeable.

Table 3-13 Knowledge of Program Staff during Participant Interaction

	Response	Percent of Respondents (n=60)
How knowledgeshle were	Very knowledgeable	77%
How knowledgeable were program staff about the issues you discussed with them?	Fairly knowledgeable	15%
	Somewhat knowledgeable	5%
	Slightly knowledgeable	0%
	Not at all knowledgeable	2%
	Not sure	2%

Following this, these respondents were asked to indicate their satisfaction with program staff members' ability to address questions or concerns. Overall, respondents were highly satisfied with both the timeliness and thoroughness of program staff in addressing questions and concerns. Respondents were relatively more satisfied with the thoroughness, as five percent of respondents indicated that it had taken too long for questions or concerns to be addressed.

Satisfaction Rating (n=60)Element of Program Experience Very Very Satisfied Neutral Dissatisfied Don't know Dissatisfied Satisfied The amount of time it took program staff to 2% 70% 23% 0% 2% 3% address questions or concerns How thoroughly program staff addressed 2% 73% 20% 3% 0% 2% questions or concerns

Table 3-14 Participant Satisfaction with Program Staff Assistance

3.4.7 Participant Feedback on SEDAC Application Process

Survey respondents who had worked on completing the energy assessments application were also asked a series of questions in order to gain feedback on the application process. First, these respondents were asked about the clarity of available information regarding how to complete the application. The following table shows that the majority of respondents found the available information to be completely or mostly clear, while 13% of respondents found the information to be only somewhat clear. Only one respondent reported that the information was not at all clear.

Table 3-15 Clarity of Application Information

Thinking back to the application process, please rate the clarity of information on how to complete the application. Would you say the information was	Response	Percent of Respondents* (n=72)
	Completely clear	36%
	Mostly clear	50%
	Somewhat clear	13%
	Not at all clear	1%
	Don't know	0%

Respondents were then asked to rate the acceptability of the application process, including the ease of finding out how to apply for energy assessments, the ease of using the application form, the time it took for the application to be approved, and the overall application process. As shown in the table below, each of these aspects was rated as *completely acceptable* by a majority of respondents. Responses were less favorable for the time taken to approve applications, followed by the ease of using the application form.

	Satisfaction Rating (n=72)				
Element of Program Experience	Completely acceptable	Somewhat acceptable	Somewhat unacceptable	Completely unacceptable	Don't know
The ease of finding how to apply for the energy assessments	72%	15%	1%	3%	8%
The ease of using the application form	71%	22%	3%	3%	1%
The time it took to have the application approved	71%	15%	3%	6%	6%
The overall application process	78%	18%	1%	3%	0%

Table 3-16 Acceptability of Application Process

3.4.8 Participant Feedback on Energy Assessment Staff

In order to gather information about the quality of service provided during the onsite energy assessment, respondents were asked to provide feedback about the program representatives who had visited their facilities. Ninety-six percent of survey respondents reported that a program representative had completed an onsite visit as part of the energy assessment.

As shown in the following table, these respondents were asked to agree or disagree with a series of statements about the representative's courteousness, efficiency, and effort in avoiding business disruption. Responses were provided on a scale of *completely agree* to *completely disagree*.

More than 90% of respondents completely agreed with the statements provided, indicating that the quality of service provided during the onsite energy assessments was very high. Instances of *completely disagree* were limited to two respondents; these two respondents stated *completely disagree* for each of the provided statements. When asked what the program representative could have done differently, both of these respondents stated that nothing could have been done differently. Overall, these responses suggest that there are few, if any, issues with the onsite energy assessments that are being performed.

Table 3-17 Feedback Regarding Onsite Energy Assessment Staff

Statement Regarding Program Representative	Level of Agreement (n=79)				
	Completely agree	Somewhat agree	Somewhat disagree	Completely disagree	Don't know
The program representative was courteous	95%	3%	0%	3%	0%
The program representative was efficient	95%	3%	0%	3%	0%
The program representative minimized disruption to our business	91%	6%	0%	3%	0%

3.4.9 Additional Open-ended Feedback

At several points during the survey, respondents were given an opportunity to provide openended feedback regarding their perspective on the effectiveness and overall structure of the SEDAC Building Energy Assessment Program. Some of this feedback was focused on specific program areas or procedures, while other commentary related to the program as a whole.

As with prior years, many of the respondents used these opportunities to provide praise for the program and to emphasize the benefits that their organization has gained from working with SEDAC. Examples of this type of feedback include:

"I would like to say keep up the good work, it really helps schools like ours because sometimes you are so busy trying to get through the day and maintain things and you don't have time to think of energy saving measures; this is a blueprint to get us to energy savings."

"We're very grateful and pleased to participate in a program made available to us. Since the assessment all we have to do is complete the step-by-step process that's been recommended."

"...the program staff is very knowledgeable, friendly and accommodating and just very helpful, and they were as excited as I was to redo this old building."

"I was extremely satisfied with the professionalism of staff and the product that we received, the end result being the SEDAC Level 3 energy assessment. We are using that now as our guide."

"I think it's a great program and I'm glad we found out about it and I'll continue to use the report going into the future."

Finally, a few respondents provided comments related to changes that could be made to the program for future years. As with prior years, several participants provided recommendations that were more related to overall DCEO measure incentives than to the SEDAC Building Energy Assessment Program. Examples of participant recommendation feedback include:

"If they could make more of an effort to educate the Board members along with individual subjects that represent the organization or company it would help tremendously. We need someone to effectively act as a go between that can give a thorough and unbiased opinion."

"... the analysis of energy efficiency savings should be about two things: analysis and finding solutions. The analysis was ok but the solutions on how to deal with it [were] not handled with equal importance."

"The only thing that sticks out is the amount of time it took to get the report; it really should have been at a more compressed time to be useful."

3.4.10 Participant Recommendations and Overall Impressions

The results of the participant survey for EPY5/GPY2 are fairly consistent with past results, and suggest that the SEDAC Building Energy Assessment Program is a highly valuable resource for public and private sector entities. Participants were particularly satisfied with the amount of information provided through the assessment report and by program staff members, and very few participants experienced negative issues with the program.

The main areas of potential program improvement from the participant perspective are the length of time between the onsite assessment and the delivery of the report, and the amount of information regarding available financial incentives for the recommended energy improvements.

In terms of participants' ability to implement recommended measures, lack of sufficient funding appears to be the main barrier to implementation. However, several respondents noted that they would continue to use the energy assessment report as a guide in future years when additional funding may become available.

Participants reported learning about the SEDAC Building Energy Assessments Program from a wider range of sources than was reported for previous years, which suggests that program awareness has increased over time. Many participants learned about the program from a source other than SEDAC, and it appears that several public sector entities are promoting the program to their member organizations and/or affiliates.

3.5 Program Operations Perspective

This section summarizes the core findings of the interview that was conducted with SEDACP program management staff.

In order to gather information regarding the operational efficiency and program delivery process for SEDACP, an in-depth interview was conducted with three key program management staff members from SEDAC.

In order to follow-up on findings and topics discussed during prior evaluations, these staff members were asked about the organization, program goals, roles, communication, promotion, barriers, and energy opportunities associated with the SEDACP. Below is a summary of the findings from the interview:

3.5.1 Overall Focus

Program staff discussed SEDAC's goals, noting that the program's goals during the past several years have remained consistent: to increase the number of energy assessments and

to improve the quality of assessments. Overall, program staff explained that the majority of SEDAC's activities and processes are focused on generating additional assessments, resulting implementations, and energy savings.

3.5.2 Marketing and Outreach

- Marketing emphasizes available incentives: Program staff noted that SEDAC has continued to promote energy efficiency rebates and incentives in conjunction with the energy assessments. This marketing effort focuses both on SEDAC programs and on DCEO programs. For example, SEDAC promotes the new construction component of SEDAC's Design Assistance program, but also directs customers towards the DCEO New Construction Program.
- Marketing has focused on normative messaging and peer effects: Program management staff reported that SEDAC has modified its marketing approach to have a greater focus on normative messaging and the peer effect. This has involved including case studies of past projects in SEDAC's "Spotlight on Savings" newsletter and adding normative messages to follow-up emails. This updated approach is designed to highlight actual implementations and encourage new participants to proceed with projects by presenting them as feasible and worthwhile.
- SEDAC conducts extensive public sector outreach: Program staff reported that SEDAC provides several educational workshops that are targeted towards the public sector. These workshops are funded by DCEO, and are designed to improve energy literacy among public sector entities and to encourage energy efficiency improvements and/or participation in the SEDAC Building Energy Assessments Program. Additionally, SEDAC occasionally receives requests to conduct presentations from organizations that want to increase program awareness among their associated facilities and partners. Although the SEDAC Building Energy Assessments Program targets both public and private entities, SEDAC does not typically receive such presentation requests from private sector customers.
- Educational objectives have been developed: Program staff reported that SEDAC has increased its attention towards the educational aspect of energy efficiency in order to improve energy efficiency literacy among both private and public organizations. In order to develop educational tools for the program, SEDAC administered a survey to various organizations and gained feedback regarding what topics would be of interest to potential energy assessment participants.

3.5.3 Program and Project Management

■ Participant follow-up procedures are extensive: SEDAC staff noted that in previous years when the program was smaller, individual project leaders were responsible for all

follow-up activities with energy assessment recipients. However, substantial program expansion and an increasing list of past participants require additional resources in order to address customer needs and encourage energy efficiency improvements. In order to address this, SEDAC has hired a new staff member who is responsible for following-up with energy assessment recipients and for encouraging implementation within the participant base. This position provides a customer service resource, and increases the amount of personal contact and attention to past participants.

Currently, project leaders still engage in follow-up activities with some customers in order to take advantage of established relationships. This communication structure is designed to provide consistent contact with past energy assessment participants while allowing project leaders to focus on current projects.

- Program staff proactively addressed emerging issues: When asked about the program's ability to remain flexible and address issues as they arise, program staff noted that SEDAC is continually assessing the program to identify its strengths and weaknesses. One example of this relates to the fact that the SEDAC Building Energy Assessments Program has encountered difficulties in achieving gas savings in the Nicor service territory. Program staff acknowledged this issue and explained that SEDAC has hired a staff member who is solely focused on generating participation and savings from Nicor projects. Additionally, SEDAC closely monitors the number of projects that exist within the Nicor service territory and has monthly discussions regarding the status of these projects. In general, SEDAC staff noted that if they identify a specific utility territory that is under-represented, they will increase outreach and focus resources on that area.
- A Retro-commissioning Mini Program has been added: Program staff discussed the Retro-commissioning Mini program that was initiated during EPY5/GPY2, noting that the program has grown significantly since its inception. The Retro-commissioning Mini program provides organizations with the opportunity to receive RCx services even if they do not meet the requirements of the main Retro-commissioning Program. Additionally, SEDAC staff noted that the Retro-commissioning Mini program is one of several services that a facility may be directed to after completing the building energy assessment process.

3.5.4 Participant Trends

New construction participation has increased: SEDAC staff also mentioned that recently there has been increased participation from customers in new buildings. While the majority of program participants represent existing buildings, SEDAC has increased its emphasis on recruiting new buildings into the assessments program and directing these participants towards the DCEO New Construction Program.

• Implementation timelines are extensive: Interviewed program staff explained that since initiating the program in 2004, SEDAC has found that project implementation typically takes place over the course of several years rather than immediately. This is mainly due to many participating entities either not having the requisite funds to implement all recommended measures at once, or being required to send projects through a lengthy approval process. In order to accommodate these long lead times, SEDAC maintains periodic communication with past energy assessment participants and continues to encourage and assist them in project implementation. This follow-up process typically continues until the participant reports that they have installed every measure, indicates that they are not planning to install any further measures, or if the owner or business occupying the facility changes. This allows SEDAC to track project implementation for all current and past participants.

4. Conclusions and Recommendations

This section presents a review of the key findings of the impact and process evaluations.

4.1 Impact Evaluation Results

The results of the impact evaluation are provided in this section. Net electric savings for EPY5 totaled 1,754,682 kWh and 30.9 kW. Net gas savings for GPY2 totaled 18,858 therms.

Table 4-1 Summary of Net kWh and kW Savings for SEDACP EPY5/GPY2

Program Component	Realized Net kWh Savings	Realized Net kW Savings
Ameren	544,028	9.6
ComEd	1,210,654	21.3
Total	1,754,682	30.9

Table 4-2 Summary of Net Therm Savings for SEDACP EPY5/GPY2

Program Component	Realized Net Therm Savings
Ameren	36,377
Nicor	57,408
Peoples	23,304
North Shore	9,094
Total	126,183

4.2 Key Findings and Recommendations

The following section presents a summary of key findings from the process and impact evaluations of the SEDAC Program during the EPY5/GPY2 period. These conclusions and recommendations are based on a combination of research activities including participant surveys, interviews with program staff, and reviews of program tracking data, documentation, and prior evaluation reports.

The following is a summary of key conclusions from the EPY5/GPY2 evaluation of the SEDAC Program:

Program staff proactively addressed emerging issues: Program staff appears to have the necessary resources and procedures to identify and address emerging program issues in a timely manner. SEDAC staff closely monitors program performance and has

- consistently made mid-year improvements to the program in order to minimize weaknesses and increase program potential. This includes modifying program marketing, adding program components, hiring staff, and shifting program priorities.
- Participant follow-up procedures are increasingly extensive and sufficient: SEDAC regularly communicates with past participants and keeps records of implementation activity in order to internally assess program effectiveness. Additionally, the existing follow-up procedures with past participants act to encourage additional energy efficiency implementation and to further assist customers with questions and issues. This communication structure likely contributes to strong working relationships between SEDAC and its participants, and helps to achieve energy savings long after assessment reports are delivered.
- Program marketing is strategic and multi-faceted: SEDAC marketing has been modified to emphasize normative messaging and included peer effects, including case studies of successful energy efficiency projects. Additionally, the inclusion of educational presentations and workshops helps to increase program awareness while improving energy efficiency literacy in the customer base. SEDAC conducts marketing and outreach to a variety of customer segments, including private and public entities, as well as both new buildings and existing facilities.
- Participant satisfaction remains high: The evaluation findings suggest that the SEDAC Building Energy Assessment Program is a highly valuable resource for public and private sector entities. Participants were particularly satisfied with the amount of information provided through the assessment report and by program staff members, and very few participants experienced negative issues with the program.
- Impact Savings Directly Attributable Continue to be Limited: As with prior years, verified savings attributable to SECACP were relatively small compared to the total savings associated with all of the measures recommended by SEDACP. Many participants received incentives from other programs for their ECRMs, and some participants indicate that they would have implemented the ECRMs without SEDAC assistance. This is not unexpected, given that a primary purpose of the program is to inform participants of the availability of incentives for making efficiency improvements.

ADM provides the following recommendations based on the EPY5/GPY2 evaluation:

Assess whether report delivery can be expedited: A small percentage of program participants indicated that the length of time between the onsite assessment and the delivery of the report is too long. A few participants indicated that if the report had been delivered sooner, they may have been able to implement additional energy efficiency projects. Although the majority of participants appeared satisfied with the existing report delivery lead time, SEDAC should ensure that customers are fully aware of the expected

- timeline and may benefit from expediting delivery for any customers who express dissatisfaction with this element.
- **Ensure that participants are informed of available financial incentives:** A small percentage of participants reported that they did not have enough information to identify and apply for relevant financial incentives for their recommended ECRMs. SEDAC currently provides fairly extensive information regarding the availability of financial incentives, but the participant follow-up calls are likely an opportunity to ask participants whether they need any additional information about incentives. Some participants may need to be reminded of which incentive programs are available and how to apply for them.

Appendix A: Smart Energy Design Assistance Center Decision Maker Survey

Hello. My name is, and I am calling on behalf of the Illinois Department of Commerce and Economic Opportunity. I am calling regarding your facility's participation in the Smart Energy Design Assistance Center, or SEDAC, Energy Assessments Program. May I speak with [Contact Name]?
Our records indicate that you received a Building Energy Assessment and that you received a report of the assessment in [Month/Year of Report Sent Date]. This report included recommendations for energy cost reduction measures, or ECRMs, for a facility located at [Facility Location].
Do you recall receiving this report? () Yes () No () Don't know
Is there someone else who is more familiar with your organizations participation in the Building Energy Assessment program and the report that you received? () Yes (go to next) () No (Thank and terminate interview)
Please provide the name and contact information for this person Name: Phone: Email:
 What was your role in the decision making about whether to implement any of the recommended energy cost reduction measures (ECRMs)? () Main decision maker () Assisted with the decision () Was not part of the decision process (<i>If checked, go to 2A</i>)
2. Who was the main decision maker? If multiple people were responsible for the decision, please provide the name of the person you think is most knowledgeable about the decision making process to implement the ECRMs.
2A. What is this person's telephone number?
2B. What is this person's email address?
[Thank the contact and terminate interview]

3. Which of the following, if any, does your organization have in place at [Facility Location]? (Select all that apply)
() A person or persons responsible for monitoring or managing energy usage
() Defined energy saving goals
() A specific policy requiring that energy efficiency be considered when purchasing equipment
() Carbon reduction goals
() Other (please specify)
() None of the above
4. How does your organization fund energy efficiency improvements? (Do not read list. Use as
possible prompts. Select all that apply)
() Through a capital request (If checked, go to 4A, then 4B)
() Funds are taken from operation and maintenance budget
() Dedicated funding for energy efficiency projects() Other
4A. Is there a dollar threshold for when a project requires a capital request? If so, what is
it?
4B. How long does it take to receive approval for the capital request?
5. What is the approval process for equipment purchases in your organization? (Do not read list.
Use as possible prompts. Select all that apply)
() An open bid is required
() Required to select lowest bidder
() Use a specific vendor
() Depends on the amount of purchase
() Follow state or federal procurement guidelines
() Follow procurement rules specific to our organization
() Don't know
() Other
6. Does your organization face any specific barriers to making energy efficiency improvements?
() Yes (If checked, go to 6A)
() No
() Don't know
6A. What barriers does your organization face in making energy efficiency
improvements? (Do not read list. Use as possible prompts. Select all that apply)
() Insufficient funding for improvements
() Lack of information on energy efficient equipment and practices
() Approval processes that slow or make purchasing difficult
() Schedules that dictate when equipment is to be replaced or maintained regardless of efficiency levels
() Incentive program time requirements

	 () Current equipment that is too new to be replaced with more efficient equipment () Don't know () Other
7.	 (Only ask for public sector organizations) Is your organization able to utilize incentive or grant payments you receive for energy efficiency improvements or are the payments placed into a general fund? () We are able to use the incentive payments for additional facility improvements, including additional energy efficiency improvements () Incentive payments return to the facility general operating fund
	() Incentive payments go into the state general revenue fund() Don't know() Other
8.	Which, if any, of the following financial methods does your organization use to evaluate energy efficiency investments? (<i>Do not read list. Use as possible prompts. Select all that apply.</i>) () Initial Cost () Simple payback (<i>If checked, go to 8A</i>) () Internal rate of return (<i>If checked, go to 8B</i>) () Life cycle cost (<i>If checked, go to 8C</i>) () None of these
	8A. What payback length of time do you normally require in order to proceed with an energy efficiency project? Please provide either a specific value or an estimated range.
	8B. What rate of return do you normally require in order to proceed with an energy efficiency project? Please provide either a specific percentage or an estimated range.
	8C. What discount rate do you normally apply when determining life cycle costs? Please provide either a specific value or an estimated range.
9.	How did you first learn about SEDAC Building Energy Assessments? (Do not read list. Use as possible prompts. Select all that apply.) () A DCEO representative mentioned it () The DCEO Website () The SEDAC Website () Email from SEDAC () From a utility representative () Friend or colleague
	 () From a representative of Smart Energy Design Assistance Center (SEDAC) () During a workshop or seminar () Past experience with the program () Other (please describe)

statements:

a. The program representative was courteous

10.	Why did you decide to have a building energy assessment completed through the program?
11.	Did you work on completing the application for the program, including gathering any required documentation? () Yes (If checked, go to 11A, 11B, 11C) () No () Don't know
	 11A. Thinking back to the application process, please rate the clarity of information on how to complete the application. Would you say the information was(Read list) Not at all clear (If checked, go to 11A1) Somewhat clear (If checked, go to 11A1) Mostly clear Completely clear Don't know
	11A1. What information, including instructions on forms, needs to be further clarified?
	11B. Using a scale of <i>completely unacceptable</i> , <i>somewhat unacceptable</i> , <i>somewhat acceptable</i> , and <i>completely acceptable</i> , how would you rate the following
	a. the ease of finding how to apply for the energy assessments on SEDAC's
	website b. the ease of using the application forms c. the time it took to have the application approved e. the overall application process
	11C. Did you have a clear sense of whom to go to for assistance with the application process?() Yes() No() Don't know
12	 Did a program representative complete an onsite visit as part of the energy assessment? () Yes (If checked, go to 12A) () No () Don't know
	12A. Now I would like to ask you about the onsite assessment. Using a scale of completely disagree, somewhat disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following

() Very clear() Somewhat clear

() Don't know

() Somewhat unclear (if checked, go to 13C1) () Very unclear (if checked, go to 13C1)

	b. The program representative was efficientc. The program representative minimized disruption to our business
	12A1. What, if anything, could the program representative have done differently during the onsite visit to improve your experience with the program?
13.	Did you review the building energy assessment report that you received? () Yes (If checked, go to 13A, 13B, 13C) () No () Don't know
	13A. How easy or difficult was the building energy assessment report to understand? Would you say(<i>Read list</i>) () Very easy to understand () Somewhat easy to understand () Somewhat difficult to understand (<i>If checked, go to 13A1</i>) () Very difficult to understand (<i>If checked, go to 13A1</i>) () Don't know
	13A1. Do you have any suggestions for how the information in the building energy assessment report could be presented more clearly?
	 13B. Did the building energy assessment report present sufficient information for you to make a decision about whether or not to implement the recommendations? () Yes () For the most part (if checked, go to 13B1) () No (if checked, go to 13B1) () Don't know
	13B1. What additional information would you need to help you make a decision?
	13C. After reviewing the report, was it clear how you could apply for financial incentives for the recommended energy saving improvements? Would you say (<i>Read list</i>)

13C1. Do you have any suggestions for how to make the information on available incentives more clear?

We would like to know if you have implemented any of the measures recommended in the SEDAC Building Energy Assessment report for the [FACILITY LOCATION] and if you received a financial incentive from a DCEO or utility energy efficiency program to implement the recommendations. By utility, we are referring to Ameren Illinois, ComEd, Nicor, North Shore Gas, or Peoples Gas.

14. [Repeats for each Category of ECRM] For the following [Category of ECRM] recommendations that you received through the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not recommendations that you are planning to implement.

	Have Implemented with an Incentive	Have Implemented without an Incentive	Have Not	Don't Know
ECRM 1	()	()	Implemented ()	()
ECRM 2	()	()	()	()
ECRM 3	()	()	()	()
ECRM 4	()	()	()	()
ECRM 5	()	()	()	()
ECRM 6	()	()	()	()
ECRM 7	()	()		()

[Repeat Q15 – Q18 for each measure type implemented without an incentive]

15.	What was the main reason for not applying for an incentive for the [Category of ECRM
	recommendations that you implemented. (Do not read list. Use as possible prompts)?

- () Didn't know whether equipment qualified for financial incentives
- () Equipment did not qualify for financial incentives
- () Too much paperwork for the financial incentive application
- () Financial incentive was insufficient
- () Didn't have time to complete paperwork for financial incentive application
- () Didn't know about financial incentives until after equipment was purchased
- () Other reason (please describe):

16. Did you have finalized plans to install the [category of ECRM] before receiving the SEDAC Building Energy Assessment?

() Yes (If checked, go to 16A)

() No

	() Don't know
	16A. Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? () Yes () No () Don't know
17.	How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the [category of ECRM]? Would you say(Read list) () Very important () Somewhat important () Slightly important () Not at all important () Don't know
18.	Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient equipment similar to the [category of ECRM] at the facility? () Yes () No () Don't know
_	a Q19 and Q20 for certain ECRMs: lighting, HVAC, motors, pool equipment, refrigeration, er/water heating, compressed air, energy efficient appliances]
19.	Did your implementation of the [category of ECRM] recommendations involve replacing existing [category of ECRM] that was still operational? () Yes (If checked, go to 20) () No () Don't know
20.	How old was/were the old [category of ECRM]?

[Ask Q21 and Q22 if implemented any recommendations without an incentive]

21. We would like to know a little more about all of the recommendations you implemented without an incentive.

If the implemented recommendations involved equipment installations please tell us what equipment you installed, how much you installed, and what you replaced.

If the implemented recommendations involved maintenance or building operation changes, please describe those changes.

22. Could you provide the contact information for the person who is most kn the recommendations you implemented?	owledgeable about
Name:	
Telephone:	
Email:	
[Ask Q23 if implemented any recommendations with or without incentive]	
23. Did you seek additional assistance from program staff for implementing	the
recommendations?	
() Yes	
() No	
() Don't know	
23A. What implementation assistance did you seek? (Do not read list. Us prompts. Select all that apply)	se as possible
() Finding alternative financing assistance	
() Bid process support	
() Additional design assistance	
() Additional assistance estimating energy savings	
() Additional assistance estimating cost reductions	
() Other (Please specify)	
23B. Did you get the additional assistance you needed?	
() Yes	
() No	
() Don't know	
24. Did you implement any of the recommended ECRMs in buildings that di energy assessment through the program? () Yes (if checked, go to 24A) () No	d not receive an
() Don't know	
24A. What ECRMs did you implement in other buildings?	
24B. What is the address or addresses of the building or buildings wh ECRMs were implemented?	ere the additional
24C. Did you apply for or receive an incentive to implement these addition () Yes	onal ECRMs?
() No	
() Don't know	

	24D. How important was the information that you received in the SEDAC Building Energy Assessment to your decision to implement the ECRMs in another facility? Would you say(<i>Read list</i>) () Very important () Somewhat important () Neither important or unimportant () Somewhat unimportant () Very unimportant
	24E. How important was your experience with the ECRMs that you implemented at the building assessed by SEDAC to your decision to implement the ECRMs in another facility? Would you say(<i>Read list</i>) () Very important () Somewhat important
	() Neither important or unimportant
	() Somewhat unimportant
	() Very unimportant() Did not implement any ECRMs at the building assessed by SEDAC
	() Did not implement any ECKWIS at the building assessed by SEDAC
25.	Have you implemented any additional energy efficiency projects that were not recommended in the SEDAC Building Energy Assessment because of your experience with the SEDAC Building Energy Assessment Program? () Yes (if checked, go to 25A) () No () Don't know
	25A.What are these additional projects?
	25B. Did you apply for or receive a utility or Illinois DCEO incentive for the project(s)?() Yes() No() Don't know
	25C. Was the project implemented at the same facility (or facilities) as the energy efficiency measures that you received the SEDAC Building Energy Assessment for?() Yes
	() No; What is the address for the location where the project was implemented?
	() Don't know
	25D. How important was the information that you received in the SEDAC Building Energy Assessment to your decision to implement this additional project(s)? Would you say(<i>Read list</i>)() Very important() Somewhat important

	() Neither important or unimportant() Somewhat unimportant() Very unimportant
	 25E. How important was your experience with the recommended ECRMs that you implemented to your decision to implement this additional equipment project(s)? Would you say(Read list) Very important Somewhat important Neither important or unimportant Somewhat unimportant Very unimportant
[Ask 26.	Q26 if did not implement all recommendations] For the ECRMs that you have not implemented, do you intend to implement them in the future?
	() Yes (If checked, go to 26A) () Some of them (If checked, go to 26A and 26B) () No (If checked, go to 26B) () Don't know
	 26A. For the measures you are planning to implement, why have you not implemented them yet? (Do not read list. Use as possible prompts. Select all that apply) () Delays in getting approval for the project(s) () Insufficient funds to implement the project(s) () Other priorities for capital improvement projects () Savings not great enough to make the project a priority () Other (Please specify) () Don't know
	 26B. For the recommended ECRMs that you do not plan on implementing, why do you not plan on implementing them? (Do not read list. Use as possible prompts. Select all that apply) () Insufficient funds to implement project(s) () Other priorities for capital improvement projects () Savings not great enough to justify the cost () Other () Don't know
27.	Did you have any interactions with program staff during the course of completing the building energy assessment? () Yes (If checked, go to 27A, 27B, 27C) () No () Don't know
	27A. How knowledgeable were program staff about the issues you discussed with them?

Appendix A A-10

Would you say...(Read list)

 () Not at all knowledgeable () Slightly knowledgeable () Somewhat knowledgeable () Fairly knowledgeable () Very knowledgeable () Not sure
 27B. How satisfied or dissatisfied are you with how long it took program staff to addre your questions or concerns? Would you say(<i>Read list</i>) Very satisfied Satisfied Neither satisfied nor dissatisfied Dissatisfied Very dissatisfied Don't know
27B1. How long did it take to receive a response from program staff?
 27C. How satisfied or dissatisfied are you with how thoroughly program staff addresse your question or concern? Would you say(<i>Read list</i>) () Very satisfied () Satisfied () Dissatisfied () Dissatisfied () Very dissatisfied () Don't know

- 28. How would you rate your satisfaction with the following using the following scale Very Satisfied, Somewhat Satisfied, Neither Satisfied nor Dissatisfied, Somewhat Dissatisfied, or Very Dissatisfied? (If "Somewhat Dissatisfied" or "Very Dissatisfied" for any, go to 28A)
 - The steps you had to take to get through the program
 - The amount of time it took to complete the building energy assessment
 - Professionalism of the SEDAC staff or representative who performed the assessment
 - The usefulness of the assessment report for identifying ways to save energy
 - Information provided on financial incentives to implement recommendations
 - Overall experience with the SEDAC Building Energy Assessment Program
 - 28A. Please explain in what ways you were not satisfied with one or more aspects of the program.
- 29. Do you have any other comments that you would like to relay to DCEO or SEDAC about energy efficiency or about their programs?

Appendix B: Decision Maker Survey Responses

As part of the evaluation effort, an email and telephone survey was administered to Smart Energy Design Assistance Center Program participants who received a energy audit through DCEO. This survey provided the information used in Chapter 3 to estimate free ridership and potential savings for projects in the SEDAC Program. However, the survey also provided more general information pertaining to the making of decisions to improve energy efficiency by Program participants.

Each participant was interviewed using the survey instrument provided in Appendix A. During the interview, a participant was asked questions about (1) his or her general decision making regarding purchasing and installing energy efficient equipment, (2) his or her knowledge of and satisfaction with the SEDAC Program, and (3) the influence that the SEDAC Program had on his or her decision to install energy efficiency measures (e.g., lighting measures, HVAC measures, maintenance and operation improvements).

The following tabulations summarize participant survey responses. Three columns of data are presented. The first column presents the number of survey respondents (n) associated with each response. The second column presents the percentage of survey respondents associated with each response.

27%

0%

22

0

You received the energy assessment report with recommendations for energy cost reduction measures	Response	(n=95)	Percent of Respondents
(ECRMs). This report recommended energy cost	Yes	85	89%
reduction measures . Do you recall receiving this	No	10	11%
report?	Don't know	0	0%
	·		_
To decrease decrease and the Control of the Control	Response	(n=10)	Percent of Respondents
Is there another person at your facility who we could speak with about the Energy Assessment report?	Yes	7	70%
speak with about the Energy Assessment report:	No	3	30%
	Don't know	0	0%
What was your role in the decision making process to	Response	(n=85)	Percent of Respondents
implement the recommended energy cost reduction	Main decision maker	33	39%
measures (ECRMs)?	Assisted with the decision	49	58%
	Was not part of the decision process	3	4%
	Response	(n=82)	Percent of Respondents*
	A person or persons responsible for monitoring or managing energy usage	59	72%
Which of the following policies or procedures does	Defined energy saving goals	36	44%
your organization have in place regarding energy efficiency improvements at this facility? (Select all that apply)	A specific policy requiring that energy efficiency be considered when purchasing equipment	36	44%
	Carbon reduction goals	11	13%
	Other (please specify)	8	10%
	None of the above	13	16%
	Don't know	0	0%
*Since respondents were able to select more than one r	esponse, the sum of the percentages in the ta	ble above ca	an exceed 100%
•	Response	(n=82)	Percent of Respondents*
	Through a capital request	27	33%
How does your organization fund energy efficiency improvements? (Select all that apply)	Funds are taken from operation and maintenance budget	58	71%
	Dedicated funding for energy efficiency projects	8	10%
	<u></u>	1	

Appendix B B-2

Other

Don't know

*Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

	Response	(n=82)	Percent of Respondents*
	Follow procurement rules specific to our organization	46	56%
	Depends on the amount of purchase	31	38%
What is the approval process for equipment	An open bid is required	19	23%
purchases in your organization? (Select all that apply)	Follow state or federal procurement guidelines	16	20%
	Required to select lowest bidder	13	16%
	Other	11	13%
	Use a specific vendor	2	2%
	Don't know	0	0%

*Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

	Response	(n=57)	Percent of Respondents*
	Insufficient funding for improvements	44	54%
What barriers does your organization face in making energy efficiency improvements? (Select all that apply)	Lack of information on energy efficient equipment and practices	2	2%
	Approval processes that slow or make purchasing difficult	9	11%
	Schedules that dictate when equipment is to be replaced or maintained regardless of efficiency levels	4	5%
	Incentive program time requirements	7	9%
	Current equipment that is too new to be replaced with more efficient equipment	8	10%
	Other	11	13%
	Don't know	0	0%

*Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

Is your organization able to utilize incentive or grant payments you receive for energy efficiency improvements or are the payments placed into a general fund?	Response	(n=0)	Percent of Respondents
	We are able to use the incentive payments for additional facility improvements	0	0%
	Incentive payments return to the facility general operating fund	0	0%
	Incentive payments go into the state general revenue fund	0	0%
	Don't know	0	0%
	Other	0	0%

	Response	(n=82)	Percent of Respondents*
Which financial methods does your organization	Initial Cost	56	68%
	Simple Payback	60	73%
typically use to evaluate energy efficiency investments? (Select all that apply)	Internal rate of return	34	41%
investments? (Select an that appry)	Life cycle cost	38	46%
	None of these	0	0%
	Don't know	1	1%
*Since respondents were able to select more than one r	esponse, the sum of the percentages in the ta	ble above ca	
What payback length of time do you normally require in order to proceed with an energy efficiency project? Please provide either a specific value or an estimated	Response	(n=52)	Payback time in years
range.	Average payback time		4.1
What rate of return do you normally require in order to proceed with an energy efficiency project? Please provide either a specific percentage or an estimated	Response	(n=11)	Rate of return %
range.	Rate of return		25%
			P:
What discount rate do you normally apply when determining life cycle costs? Please provide either a specific value or an estimated range.	Response	(n=10)	Discount rate %
specific value of all estimated range.	Discount rate		10%
			I 50
	Response	(n=82)	Percent of Respondents*
	A DCEO representative mentioned it	6	7%
	The DCEO Website	6	7%
	The SEDAC Website	5	6%
	Email from SEDAC	9	11%
How did you learn about SEDAC Building Energy	From a utility representative	6	7%
Assessments? (Select all that apply.)	Friend or colleague	18	22%
	From a representative of Smart Energy Design Assistance Center (SEDAC)	12	15%
	During a workshop or seminar	17	21%
	Past experience with the program	8	10%
	Other (please describe)	31	38%
	Don't know	1	1%
*Since respondents were able to select more than one r	esponse, the sum of the percentages in the ta	ble above ca	an exceed 100%.

Did you work on completing the application for the program, including gathering any required documentation?	Response	(n=82)	Percent of Respondents
	Yes	72	88%
	No	9	11%
	Don't know	1	1%
		·	
	Response	(n=72)	Percent of Respondents*
Thinking back to the application process, please rate	Completely clear	26	36%
the clarity of information on how to complete the	Mostly clear	36	50%
application. Would you say the information was	Somewhat clear	9	13%
	Not at all clear	1	1%
	Don't know	0	0%
	Response	(n=72)	Percent of Respondents*
Using a scale of completely unacceptable, somewhat	Completely acceptable	52	72%
unacceptable, somewhat acceptable, and completely acceptable, how would you rate the ease of finding	Somewhat acceptable	11	15%
how to apply for the energy assessments on SEDAC?	Somewhat unacceptable	1	1%
now to apply for the energy assessments on SEDAC.	Completely unacceptable	2	3%
	Don't know	6	8%
		<u> </u>	<u> </u>
	Response	(n=72)	Percent of Respondents*
Using a scale of completely unacceptable, somewhat	Completely acceptable	51	71%
unacceptable, somewhat acceptable, and completely acceptable, how would you rate the ease of using the	Somewhat acceptable	16	22%
application forms?	Somewhat unacceptable	2	3%
upphounon forms.	Completely unacceptable	2	3%
	Don't know	1	1%
	Response	(n=72)	Percent of Respondents*
Using a scale of completely unacceptable, somewhat	Completely acceptable	51	71%
unacceptable, somewhat acceptable, and completely acceptable, how would you rate the time it took to	Somewhat acceptable	11	15%
have the application approved?	Somewhat unacceptable	2	3%
nave the approximation approved.	Completely unacceptable	4	6%
	Don't know	4	6%
		•	
	Response	(n=72)	Percent of Respondents*
Using a scale of completely unacceptable, somewhat	Completely acceptable	56	78%
unacceptable, somewhat acceptable, and completely acceptable, how would you rate the overall	Somewhat acceptable	13	18%
application process?	Somewhat unacceptable	1	1%
application process.	Completely unacceptable	2	3%
	Don't know	0	0%

			T
Did you have a clear sense of whom to go to for	Response	(n=72)	Percent of Respondents
	Yes	64	89%
assistance with the application process?	No	6	8%
	Don't know	2	3%
			1
Did a program representative complete an onsite visit	Response	(n=82)	Percent of Respondents
as part of the energy assessment?	Yes	79	96%
us part of the energy assessment.	No	2	2%
	Don't know	1	1%
	<u>, </u>		
Using a scale of completely disagree, somewhat	Response	(n=79)	Percent of Respondents*
disagree, neither disagree nor agree, somewhat agree,	Completely agree	75	95%
and completely agree, please rate your agreement	Somewhat agree	2	3%
with the following statement: The program	Somewhat disagree	0	0%
representative was courteous	Completely disagree	2	3%
	Don't know	0	0%
Using a scale of completely disagree, somewhat	Response	(n=79)	Percent of Respondents*
disagree, neither disagree nor agree, somewhat agree,	Completely agree	75	95%
and completely agree, please rate your agreement	Somewhat agree	2	3%
with the following statement: The program	Somewhat disagree	0	0%
representative was efficient	Completely disagree	2	3%
	Don't know	0	0%
Using a scale of completely disagree, somewhat	Response	(n=79)	Percent of Respondents*
disagree, neither disagree nor agree, somewhat agree,	Completely agree	72	91%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement	Completely agree Somewhat agree	72 5	91% 6%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following statement: The program		1	
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement	Somewhat agree	5	6%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following statement: The program	Somewhat agree Somewhat disagree	5 0	6% 0%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following statement: The program	Somewhat agree Somewhat disagree Completely disagree	5 0 2	6% 0% 3%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following statement: The program representative minimized disruption to our business Did a program representative complete an onsite visit	Somewhat agree Somewhat disagree Completely disagree	5 0 2	6% 0% 3%
disagree, neither disagree nor agree, somewhat agree, and completely agree, please rate your agreement with the following statement: The program representative minimized disruption to our business	Somewhat agree Somewhat disagree Completely disagree Don't know	5 0 2 0	6% 0% 3% 0% Percent of

How easy or difficult was the building energy assessment report to understand? Would you say it was	Response	(n=82)	Percent of Respondents*
	Very easy to understand	61	74%
	Somewhat easy to understand	18	22%
	Somewhat difficult to understand	3	4%
	Very difficult to understand	0	0%
	Don't know	0	0%

Did the building energy assessment report present sufficient information for you to make a decision about whether or not to implement the recommendations?	Response	(n=82)	Percent of Respondents
	Yes	74	90%
	No	1	1%
	For the most part	7	9%

After reviewing the report, was it clear how you could apply for financial incentives for the recommended energy saving improvements?	Response	(n=82)	Percent of Respondents*
	Very clearly	43	52%
	Somewhat clearly	28	34%
	Somewhat unclearly	7	9%
	Very unclearly	3	4%
	Don't know	1	1%

For the following lighting ECRMs recommendations that you received through the building energy	Response	(n=184)	Percent of Respondents*
assessment, please indicate if you implemented them	Have implemented with an incentive	58	32%
with an energy efficiency program incentive, implemented them without an energy efficiency	Have implemented without an incentive	21	11%
program incentive, or did not implement them. Only	Have not implemented	101	55%
include recommendations that you have already implemented, not recommendations that you are planning to implement.	Don't know	4	2%

	Response	(n=15)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	1	1%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the lighting ECRMs recommendations that you implemented?	Too much paperwork for the financial incentive application	0	0%
	Financial incentive was insufficient	2	2%
	Didn't have time to complete paperwork for financial incentive application	1	1%
	Didn't know about financial incentives until after equipment was purchased	2	2%
	Other reason (please describe):	9	11%
	Don't know	0	0%

Did you have finalized plans to install the lighting	Response	(n=15)	Percent of Respondents
ECRMs before receiving the SEDAC Building Energy Assessment?	Yes	4	27%
Ellergy Assessment:	No	10	67%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=4)	Percent of Respondents
Assessment?	Yes	3	75%
Assessment.	No	1	25%
	Response	(n=15)	Percent of Respondents
How important was the information provided to you in the SEDAC Building Energy Assessment to your	Very Important	13	87%
decision to implement the lighting ECRMs?	Somewhat important	2	13%
decision to implement the righting Eckivis.	Slightly important	0	0%
	Not at all important	0	0%
Before you received the SEDAC Building Energy	Response	(n=15)	Percent of Respondents
Assessment, had you implemented energy efficient	Yes	9	60%
equipment similar to the lighting ECRMs at your facility?	No	6	40%
racinty.	Don't know	0	0%
		•	
Did your implementation of the lighting	Response	(n=15)	Percent of Respondents
recommendations involve replacing existing that was	Yes	14	93%
still operational?	No	1	7%
	Don't know	0	0%
How old was the old lighting?	Response	(n=0)	Age (years)
	Age in years		-
For the following building envelope ECRMs recommendations that you received through the	Response	(n=45)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program	Have implemented with an incentive	3	7%
	Have implemented without an incentive	16	36%
incentive, implemented them without an energy efficiency program incentive, or did not implement	Have not implemented	24	53%
them. Only include recommendations that you have already implemented, not recommendations that you are planning to implement.	Don't know	2	4%

	Response	(n=10)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	1	1%
	Equipment did not qualify for financial incentives	1	1%
What was the main reason for not applying for an incentive for the building envelope ECRMs	Too much paperwork for the financial incentive application	2	2%
recommendations that you implemented?	Financial incentive was insufficient	1	1%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	4	5%
	Don't know	1	1%
Did you have finalized plans to install the building envelope ECRMs before receiving the SEDAC	Response	(n=10)	Percent of Respondents
Building Energy Assessment?	Yes	3	30%
Building Energy Assessment.	No	7	70%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=3)	Percent of Respondents
not received the SEDAC Building Energy Assessment?	Yes	2	67%
1.000000	No	0	0%
			1
How important was the information provided to you	Response	(n=10)	Percent of Respondents
in the SEDAC Building Energy Assessment to your	Very Important	5	50%
decision to implement the building envelope	Somewhat important	3	30%
ECRMs?	Slightly important	2	20%
	Not at all important	0	0%
	T	T	ı
Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient	Response	(n=10)	Percent of Respondents
equipment similar to the building envelope ECRMs	Yes	3	30%
at your facility?	No	7	70%
·	Don't know	0	0%
For the following HVAC ECRMs recommendations that you received through the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already	Response	(n=89)	Percent of Respondents
	Have implemented with an incentive	11	12%
	Have implemented without an incentive	23	26%
implemented, not recommendations that you are	Have not implemented	51	57%
planning to implement.	Don't know	4	4%

Didn't know whether equipment qualified for financial incentives Equipment did not qualify for financial incentives Too much paperwork for the financial incentive application Too much paperwork for the financial incentive application Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives	
What was the main reason for not applying for an incentive for the HVAC ECRMs recommendations that you implemented? Too much paperwork for the financial incentive application Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives	
incentive for the HVAC ECRMs recommendations that you implemented? incentive application Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives	
Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives	
for financial incentive application Didn't know about financial incentives	
Didn't know about financial incentives	
until after equipment was purchased 3 4%	
Other reason (please describe): 6 7%	
Don't know 0 0%	
Did you have finalized plans to install the HVAC ECRMs before receiving the SEDAC Building Response (n=14) Percent Responde	
Energy Assessment? Yes 3 21%)
No 11 79%)
Would you have gone ahead with these plans had you Response (n=3) Percent Respond	
not received the SEDAC Building Energy Assessment? Yes 3 100%	6
No 0 0%	
Response (n=14) Percent Respond	
How important was the information provided to you in the SEDAC Building Energy Assessment to your)
decision to implement the HVAC ECRMs? Somewhat important 5 36%)
Slightly important 1 7%	
Not at all important 0 0%	
Before you received the SEDAC Building Energy Response (n=14) Percent Respond	
Assessment, had you implemented energy efficient equipment similar to the HVAC ECRM's at your)
facility? No 5 36%)
Don't know 1 7%	
Did your implementation of the HVAC Response (n=14) Percent Responde	
recommendations involve replacing existing Yes 8 57%)
equipment that was still operational? No 6 43%)
Don't know 0 0%	

0% 0%

			.
How old was the old HVAC equipment?	Response	(n=5)	Age (years)
	Age in years		33.0
			T
For the following commissioning/recommissioning/retrocommissioning	Response	(n=9)	Percent of Respondents
ECRMs recommendations that you received through the building energy assessment, please indicate if you	Have implemented with an incentive	0	0%
implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented without an incentive	2	200%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have not implemented	6	600%
already implemented, not recommendations that you are planning to implement.	Don't know	1	100%
What was the main reason for not applying for an incentive for the HVAC ECRMs recommendations	Response	(n=2)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	1	1%
	Equipment did not qualify for financial incentives	0	0%
	Too much paperwork for the financial incentive application	0	0%
that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	1	1%
	Don't know	0	0%
Did you have finalized plans to install the commissioning/recommissioning/retro commissioning ECRMs before receiving the SEDAC	Response	(n=2)	Percent of Respondents
	Yes	0	0%
Building Energy Assessment?	No	2	100%
Would you have gone ahead with these plans had you	Response	(n=0)	Percent of Respondents
not received the SEDAC Building Energy Assessment?	Yes	0	0%
Assessment?	No	0	0%

Appendix B B-11

No

33%

How important was the information provided to you in the SEDAC Building Energy Assessment to your	Response	(n=2)	Percent of Respondents
	Very Important	1	50%
decision to implement the commissioning/recommissioning/retro	Somewhat important	1	50%
commissioning ECRMs?	Slightly important	0	0%
	Not at all important	0	0%
Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient	Response	(n=2)	Percent of Respondents
equipment similar to the	Yes	1	50%
commissioning/recommissioning/retro commissioning	No	1	50%
ECRMs at your facility?	Don't know	0	0%
For the following controls ECRMs recommendations that you received through the building energy	Response	(n=152)	Percent of Respondents
assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency	Have implemented with an incentive	14	9%
program incentive, or did not implement them. Only include recommendations that you have already	Have implemented without an incentive	28	18%
implemented, not recommendations that you are	Have not implemented	98	64%
planning to implement.	Don't know	12	8%
	Response	(n=21)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	5	6%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the control ECRMs recommendations	Too much paperwork for the financial incentive application	2	2%
that you implemented?	Financial incentive was insufficient	1	1%
	Didn't have time to complete paperwork for financial incentive application	1	1%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	10	12%
	Don't know	2	2%
Did you have finalized plans to install the	Response	(n=21)	Percent of Respondents
recommended controls before receiving the SEDAC Building Energy Assessment?	Yes	3	14%
Danising Lifety Processment.	No	16	76%
Would you have gone ahead with these plans had you not received the SEDAC Building Francy.	Response	(n=3)	Percent of Respondents
not received the SEDAC Building Energy	Yes	1	33%
Assessment?			

Appendix B B-12

No

	Pagnanga	(n-21)	Percent of
The form and and the fact of the first of the first of the fact of	Response	(n=21)	Respondents
How important was the information provided to you in the SEDAC Building Energy Assessment to your	Very Important	11	52%
decision to implement the recommended controls?	Somewhat important	7	33%
	Slightly important	1	5%
	Not at all important	0	0%
Before you received the SEDAC Building Energy	Response	(n=21)	Percent of Respondents
Assessment, had you implemented equipment similar	Yes	7	33%
to the recommended controls at your facility?	No	12	57%
	Don't know	2	10%
For the following motors and drives ECRMs			Percent of
recommendations that you received through the building energy assessment, please indicate if you	Response	(n=34)	Respondents
implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented with an incentive	5	15%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	0	0%
already implemented, not recommendations that you	Have not implemented	28	82%
are planning to implement.	Don't know	1	3%
	T		I
	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the motors and drives ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%
	T		Ι
Did you have finalized plans to install the motors and drives ECRMs before receiving the SEDAC Building	Response	(n=0)	Percent of Respondents
Energy Assessment?	Yes	0	0%
	No	0	0%
Would you have gone ahead with these plans had you			
Would you have gone ahead with these plans had you	Response	(n=0)	Percent of Respondents
Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment?	Response Yes	(n=0)	Percent of Respondents

Appendix B B-13

How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the motors and drives	Response	(n=0)	Percent of Respondents
	Very Important	0	0%
	Somewhat important	0	0%
ECRMs?	Slightly important	0	0%
	Not at all important	0	0%
			l
Before you received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment, had you implemented energy efficient equipment similar to the motors and drives ECRMs	Yes	0	0%
at your facility?	No	0	0%
	Don't know	0	0%
Did your implementation of the motors and drives	Response	(n=0)	Percent of Respondents
recommendations involve replacing existing	Yes	0	0%
equipment that was still operational?	No	0	0%
	Don't know	0	0%
How old was the old motor(s)?	Response	(n=0)	Age (years)
	Age in years		-
For the following renewable energy ECRMs recommendations that you received through the	Response	(n=3)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented with an incentive	1	33%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	0	0%
already implemented, not recommendations that you	Have not implemented	2	67%
are planning to implement.	Don't know	0	0%
	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
What was the main reason for not applying for an incentive for the renewable energy ECRMs	Equipment did not qualify for financial incentives	0	0%
	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%

Did you have finalized plans to install the renewable energy ECRMs before receiving the SEDAC Building Energy Assessment?	Response	(n=0)	Percent of Respondents
	Yes	0	0%
	No	0	0%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
	No	0	0%
How important was the information provided to you	Response	(n=0)	Percent of Respondents
in the SEDAC Building Energy Assessment to your	Very Important	0	0%
decision to implement the renewable energy	Somewhat important	0	0%
ECRMs?	Slightly important	0	0%
	Not at all important	0	0%
	,		
Before you received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment, had you implemented equipment similar	Yes	0	0%
to the renewable energy ECRMs at your facility?	No	0	0%
	Don't know	0	0%
	,		
For the following pool equipment ECRMs recommendations that you received through the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy	Response	(n=5)	Percent of Respondents
	Have implemented with an incentive	0	0%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	0	0%
already implemented, not recommendations that you	Have not implemented	2	40%
are planning to implement.	Don't know	3	60%
			1
	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
What was the main reason for not applying for an incentive for the pool equipment ECRMs recommendations that you implemented?	Equipment did not qualify for financial incentives	0	0%
	Too much paperwork for the financial incentive application	0	0%
	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%

Did you have finalized plans to install the pool	Response	(n=0)	Percent of Respondents
equipment ECRMs before receiving the SEDAC Building Energy Assessment?	Yes	0	0%
Building Energy Assessment?	No	0	0%
		•	
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
Assessment.	No	0	0%
	Response	(n=0)	Percent of Respondents
How important was the information provided to you in the SEDAC Puilding Francy Assessment to your	Very Important	0	0%
in the SEDAC Building Energy Assessment to your decision to implement the pool equipment ECRMs?	Somewhat important	0	0%
decision to implement the poor equipment between	Slightly important	0	0%
	Not at all important	0	0%
Before you received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment, had you implemented energy efficient equipment similar to the pool equipment ECRMs at	Yes	0	0%
your facility?	No	0	0%
your ractifity.	Don't know	0	0%
Did your implementation of the pool equipment	Response	(n=0)	Percent of Respondents
recommendations involve replacing existing	Yes	0	0%
equipment that was still operational?	No	0	0%
	Don't know	0	0%
How old was the old pool equipment?	Response	(n=0)	Age (years)
• • •	Age in years		0
	, ,		
For the following refrigeration ECRMs recommendations that you received through the	Response	(n=2)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program	Have implemented with an incentive	1	50%
incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	0	0%
already implemented, not recommendations that you	Have not implemented	0	0%
are planning to implement.	Don't know	1	50%

	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the refrigeration ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%
Did you have finalized plans to install the refrigeration ECRMs before receiving the SEDAC	Response	(n=0)	Percent of Respondents
Building Energy Assessment?	Yes	0	0%
Banding Energy Hosessment.	No	0	0%
Would you have gone ahead with these plans had you	Response	(n=0)	Percent of Respondents
not received the SEDAC Building Energy Assessment?	Yes	0	0%
Assessment:	No	0	0%
	Response	(n=0)	Percent of Respondents
How important was the information provided to you in the SEDAC Building Energy Assessment to your	Very Important	0	0%
in the SEDAC Building Energy Assessment to your decision to implement the refrigeration ECRMs?	Somewhat important	0	0%
decision to implement the ferrigeration Bertains.	Slightly important	0	0%
	Not at all important	0	0%
Before you received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment, had you implemented energy efficient equipment similar to the refrigeration ECRMs at your	Yes	0	0%
facility?	No	0	0%
	Don't know	0	0%
Did your implementation of the refrigeration	Response	(n=0)	Percent of Respondents
recommendations involve replacing existing	Yes	0	0%
equipment that was still operational?	No	0	0%
	Don't know	0	0%

How old was the old refrigeration equipment?	Response	(n=0)	Age (years)
13 313 was the old foringstation equipment.	Age in years		_
	Tige in years		
For the following computer power management ECRMs recommendations that you received through	Response	(n=5)	Percent of Respondents
the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented with an incentive	0	0%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	3	60%
already implemented, not recommendations that you	Have not implemented	2	40%
are planning to implement.	Don't know	0	0%
	Response	(n=3)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	1	1%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the computer power management	Too much paperwork for the financial incentive application	0	0%
ECRMs recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	1	1%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	1	1%
	Don't know	0	0%
Did you have finalized plans to install the computer power management ECRMs before receiving the	Response	(n=3)	Percent of Respondents
SEDAC Building Energy Assessment?	Yes	2	67%
	No	1	33%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=2)	Percent of Respondents
Assessment?	Yes	2	100%
	No	0	0%
How important was the information provided to you	Response	(n=3)	Percent of Respondents
in the SEDAC Building Energy Assessment to your	Very Important	2	67%
decision to implement the computer power management ECRMs?	Somewhat important	1	33%
	Slightly important	0	0%
	Not at all important	0	0%

Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient coupiment stimilar to the computer power management ECRMs at your facility? For the following boiler and water heater ECRMs recommendations that you received through the building energy assessment, please indicate if you mighemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not recommendations that you have already implemented. The commendations that you have already implemented them without an energy efficiency program incentive, or did not implement and implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented on the program incentive or did not implement them. Only include recommendations that you have already implemented. **Response** Response** Response** Response** Have implemented without an incentive 12 17%				T
equipment similar to the computer power management ECRMs at your facility? For the following boiler and water heater ECRMs recommendations that you received through the building energy assessment? For the following boiler and water heater ECRMs recommendations that you received through the building energy assessment? Response Response Response (n=72) Percent of Respondents building energy assessment of your implemented them with an energy efficiency program incentive, or did not implement them. Only include recommendations that you are planning to implement. Response Response (n=72) Percent of Respondents building energy assessment of your did not implemented with an incentive and incentive for the boiler and water heater ECRMs recommendations that you implemented? Didn't know whether equipment qualified for financial incentives Response (n=10) Percent of Respondents and incentive was insufficient 1 1% Too much paperwork for the financial incentive was insufficient Didn't know about financial incentives and incentive was insufficient Didn't know about financial incentives and incentive application build after equipment was purchased on the paper work for the financial incentive application build after equipment was purchased only and the paper work for the financial incentive application build after equipment was purchased on the paper work for the financial incentive application build after equipment was purchased build after equipment was purchased on the paper work for the financial incentives and the paper work for financial incentive application build after equipment was purchased on the paper work for financial incentive application build after equipment was purchased on the paper work for financial incentive application build after equipment was purchased build after equipment was purchased build after equipment was purchased build after equipment		Response	(n=3)	
For the following boiler and water heater ECRMs recommendations that you received through the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, or did not implemented them with an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not received the SEDAC Building Energy Assessment? No Response Response Response Response Response Response Response (n=10) Percent of Respondents Have implemented without an incentive are planning to implement. Have implemented without an incentive are planning to implement. Response Response (n=10) Percent of Respondents* Didn't know whether equipment qualified 1 1% Incentives application Too much paperwork for the financial incentives and incentive was insufficient 2 2% Didn't know about financial incentive application Didn't know about financial incentive application Didn't know about financial incentive application Didn't know about financial incentives and incentives and incentive application Didn't know about financial incentives and incentives and incentive application Response Response (n=10) Percent of Respondents Yes 1 333% No 2 550%		Yes	2	67%
For the following boiler and water heater ECRMs recommendations that you received through the building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not recommendations that you have already implemented, not recommendations that you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Did you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response (n=10) Percent of Respondents Percent of Respondents		No	1	33%
recommendations that you received through the building energy assessment; please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not received the SEDAC Building Energy Assessment? Response	management Eckivis at your facility.	Don't know	0	0%
recommendations that you received through the building energy assessment; please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not received the SEDAC Building Energy Assessment? Response				
implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not received the SeDAC Building Energy Assessment? Have implemented without an incentive 12 17% Have not implemented without an incentive 11 17% Have not implemented without an incentive 12 17% Respondents 14 when to implement 46 6 8% Percent of frespondents 19% Flow in the SEDAC Building Energy Assessment to your the SEDAC Building Energy Assessment to your the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Percent of Respondents 10 on the plant important 11 10%	recommendations that you received through the	Response	(n=72)	
efficiency program incentive, or did not implement them. Only include recommendations that you have already implemented, not recommendations that you are planning to implement. Response	implemented them with an energy efficiency program	Have implemented with an incentive	8	11%
Already implemented, not recommendations that you are planning to implement. Response	efficiency program incentive, or did not implement		12	17%
Response		Have not implemented	46	64%
What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? Too much paperwork for the financial incentive application Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know Too much paperwork for the financial incentive application Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know Too much paperwork for the financial incentive application Pinancial incentive was insufficient Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know To water heating ECRMs before receiving the SEDAC Building Energy Assessment? Response (n=10) Percent of Respondents Yes No To Somewhat important A 33% No To Somewhat important A 40% Very Important To much paperwork for the financial incentives To much paperwork for the financial inc	are planning to implement.	Don't know	6	8%
What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? Too much paperwork for the financial incentive application Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know Too much paperwork for the financial incentive application Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know Too much paperwork for the financial incentive application Pinancial incentive was insufficient Didn't have time to complete paperwork for financial incentive was purchased Other reason (please describe): 3 4% Don't know Don't know To water heating ECRMs before receiving the SEDAC Building Energy Assessment? Response (n=10) Percent of Respondents Yes No To Somewhat important A 33% No To Somewhat important A 40% Very Important To much paperwork for the financial incentives To much paperwork for the financial inc				
What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? Financial incentive was insufficient Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives until after equipment was purchased Other reason (please describe): 3 4% Don't know Don't know Too much paperwork for the financial incentive was insufficient Complete paperwork for financial incentive was insufficient Pinancial incentive was insufficient Complete paperwork for the financial incentive application Didn't have time to complete paperwork for financial incentive was insufficient Complete paperwork for the financial incentive		Response	(n=10)	
What was the main reason for not applying for an incentive for the boiler and water heater ECRMs recommendations that you implemented? Too much paperwork for the financial incentive application Didn't have time to complete paperwork for financial incentive was insufficient 2 2%			1	1%
incentive for the boiler and water heater ECRMs recommendations that you implemented? Financial incentive was insufficient 2 2%			1	1%
Didn't have time to complete paperwork for financial incentive application Didn't know about financial incentives until after equipment was purchased Other reason (please describe): Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Response Response (n=10) Percent of Respondents Yes No Response (n=3) Percent of Respondents Yes No Response (n=3) Percent of Respondents Yes No Response (n=3) Percent of Respondents Yes No Response Yes 1 33% No 2 67% Respondents Yes No 1 1 10%			0	0%
For financial incentive application Didn't know about financial incentives until after equipment was purchased Didn't know about financial incentives until after equipment was purchased Don't know Don't	recommendations that you implemented?	Financial incentive was insufficient	2	2%
until after equipment was purchased Other reason (please describe): 3 4% Don't know 2 2% Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response (n=10) Percent of Respondents Yes 3 30% No 5 50% Respondents Yes 1 33% No 1 2 67% Respondents Yes 1 33% No 2 67% Respondents Yes 1 33% No 2 67% Very Important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Somewhat important Slightly important 1 10%			0	0%
Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response Yes No Response (n=10) Percent of Respondents Yes No Percent of Respondents Yes 1 33% No Percent of Respondents Yes 1 33% No 2 67% Response How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Response Very Important Very Important Somewhat important Somewhat important 1 10%			1	1%
Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response (n=10) Percent of Respondents Yes No Response (n=3) Percent of Respondents Yes 1 33% No 2 67% Respondents Yes 1 33% No Response (n=10) Percent of Respondents Yes 1 33% No 2 67% Very Important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Somewhat important Somewhat important 2 20% Slightly important 1 10%		Other reason (please describe):	3	4%
Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response Yes No Response (n=10) Respondents Assessment? Respondents Response (n=3) Percent of Respondents Yes 1 33% No 2 67% Respondents Yes Somewhat important Somewhat important Somewhat important Slightly important 1 10%		Don't know	2	2%
Did you have finalized plans to install the boiler and/or water heating ECRMs before receiving the SEDAC Building Energy Assessment? Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response Yes No Response (n=10) Respondents Assessment? Respondents Response (n=3) Percent of Respondents Yes 1 33% No 2 67% Respondents Yes Somewhat important Somewhat important Somewhat important Slightly important 1 10%				
SEDAC Building Energy Assessment? Yes No So No So So So No So No So		Response	(n=10)	
Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Response (n=3) Percent of Respondents Yes No 2 67% Response (n=10) Percent of Respondents No Very Important Very Important Somewhat important Somewhat important 2 20% Slightly important 1 10%		Yes	3	30%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Yes No Response (n=3) Respondents Yes 1 33% No 2 67% Respondents Very Important decision to implement the boiler and/or water heating ECRMs? Somewhat important Somewhat important Somewhat important Somewhat important 1 10%	SEDITE Building Lifergy Assessment:	No	5	50%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment? Yes No Response (n=3) Respondents Yes 1 33% No 2 67% Respondents Very Important decision to implement the boiler and/or water heating ECRMs? Somewhat important Somewhat important Somewhat important Somewhat important 1 10%				
Assessment? Yes No Response (n=10) Percent of Respondents Very Important decision to implement the boiler and/or water heating ECRMs? Yes No Response (n=10) Percent of Respondents Very Important Somewhat important 2 20% Slightly important 1 10%		Response	(n=3)	
Assessment? No 2 67% Response (n=10) Percent of Respondents Very Important 4 40% Somewhat important 2 20% Slightly important 1 10%		Yes	1	33%
How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Response (n=10) Percent of Respondents Very Important 4 40% Somewhat important 2 20% Slightly important 1 10%	Assessment:	No	2	67%
How important was the information provided to you in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Response Very Important Somewhat important 2 20% Slightly important 1 10%	L	1		L
in the SEDAC Building Energy Assessment to your decision to implement the boiler and/or water heating ECRMs? Very Important Somewhat important Somewhat important 1 10%	How important was the information provided to you	Response	(n=10)	
decision to implement the boiler and/or water heating ECRMs? Somewhat important Somewhat important 2 20% Slightly important 1 10%	in the SEDAC Building Energy Assessment to your	Very Important	4	40%
ECRMs? Slightly important 1 10%			2	20%
	ECRMs?		1	10%
2 2070		Not at all important	2	20%

B-19 Appendix B

Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient equipment similar to the boilers / water heating	Response	(n=10)	Percent of Respondents
	Yes	3	30%
ECRMs at your facility?	No	6	60%
Delivis at your facility.	Don't know	1	10%
			1
Did your implementation of the boilers / water	Response	(n=10)	Percent of Respondents
heating recommendations involve replacing existing	Yes	2	20%
equipment that was still operational?	No	7	70%
	Don't know	1	10%
			1
How old was the old boiler / water heating equipment?	Response	(n=2)	Age (years)
equipment.	Age in years		10.5
			1
For the following compressed air ECRMs recommendations that you received through the	Response	(n=2)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented with an incentive	0	0%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	0	0%
already implemented, not recommendations that you	Have not implemented	2	100%
are planning to implement.	Don't know	0	0%
			T.
	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the compressed air ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%
Did you have finalized plans to install the	Response	(n=0)	Percent of Respondents
compressed air ECRMs before receiving the SEDAC Building Energy Assessment?	Yes	0	0%
	No	0	0%

Would you have gone ahead with these plans had you not received the SEDAC Building Energy Assessment?	Response	(n=0)	Percent of Respondents
	Yes	0	0%
Assessment:	No	0	0%
The description of the Committee on the Lorentz and the Committee of the C	Response	(n=0)	Percent of Respondents
How important was the information provided to you in the SEDAC Building Energy Assessment to your	Very Important	0	0%
decision to implement the compressed air ECRMs?	Somewhat important	0	0%
decision to implement the compressed an Eckivis:	Slightly important	0	0%
	Not at all important	0	0%
		•	
Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient	Response	(n=0)	Percent of Respondents
equipment similar to the compressed air ECRMs at	Yes	0	0%
your facility?	No	0	0%
your 11101111y.	Don't know	0	0%
Did your implementation of the compressed air	Response	(n=0)	Percent of Respondents
recommendations involve replacing existing	Yes	0	0%
equipment that was still operational?	No	0	0%
	Don't know	0	0%
How old was the old air compressor equipment?	Response	(n=0)	Age (years)
	Age in years		-
	, -		•
For the following energy efficient appliance ECRMs recommendations that you received through the	Response	(n=5)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented with an incentive	1	20%
	Have implemented without an incentive	1	20%
already implemented, not recommendations that you	Have not implemented	2	40%
are planning to implement.	Don't know	1	20%

	Response	(n=1)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the energy efficient appliance ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	1	1%
	Don't know	0	0%
Did you have finalized plans to install the energy efficient appliances ECRMs before receiving the	Response	(n=1)	Percent of Respondents
SEDAC Building Energy Assessment?	Yes	0	0%
SEDITE Building Energy Assessment.	No	1	100%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
Augusticit.	No	0	0%
How important was the information provided to you	Response	(n=1)	Percent of Respondents
in the SEDAC Building Energy Assessment to your	Very Important	0	0%
decision to implement the boiler and/or water heating	Somewhat important	1	100%
ECRMs?	Slightly important	0	0%
	Not at all important	0	0%
			1
Before you received the SEDAC Building Energy Assessment, had you implemented energy efficient	Response	(n=1)	Percent of Respondents
equipment similar to the energy efficient appliances	Yes	0	0%
ECRMs at your facility?	No	1	100%
	Don't know	0	0%
Did your implementation of the boilers / water	Response	(n=1)	Percent of Respondents
heating recommendations involve replacing existing	Yes	1	100%
equipment that was still operational?	No	0	0%
	Don't know	0	0%
How old were the old appliances?	Response	(n=1)	Age (years)
	Age in years		10.00
	Age in years		10.00

How important was the information provided to you

in the SEDAC Building Energy Assessment to your

decision to implement the power ECRMs?

1

1

0

0

50%

50%

0%

0%

For the following power generation ECRMs recommendations that you received through the	Response	(n=4)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program	Have implemented with an incentive	0	0%
incentive, implemented them without an energy efficiency program incentive, or did not implement	Have implemented without an incentive	2	50%
them. Only include recommendations that you have	Have not implemented	2	50%
already implemented, not recommendations that you are planning to implement.	Don't know	0	0%
	Response	(n=2)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	1	1%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the power generation ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	1	1%
	Don't know	0	0%
Did you have finalized plans to install the power	Response	(n=2)	Percent of Respondents
ECRMs before receiving the SEDAC Building Energy Assessment?	Yes	0	0%
Energy Assessment.	No	2	100%
			_
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
	No	0	0%
	Response	(n=2)	Percent of Respondents

Appendix B B-23

Very Important

Somewhat important

Slightly important

Not at all important

ECRMs at your facility?

0%

0

For the following smart plug power strip ECRMs recommendations that you received through the	Response	(n=6)	Percent of Respondents
building energy assessment, please indicate if you implemented them with an energy efficiency program incentive, implemented them without an energy	Have implemented with an incentive	0	0%
efficiency program incentive, or did not implement them. Only include recommendations that you have	Have implemented without an incentive	1	17%
already implemented, not recommendations that you	Have not implemented	5	83%
are planning to implement.	Don't know	0	0%
	Response	(n=1)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the smart plug power strip ECRMs	Too much paperwork for the financial incentive application	0	0%
recommendations that you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	1	1%
	Don't know	0	0%
Did you have finalized plans to install the smart plug power strip ECRMs before receiving the SEDAC	Response	(n=1)	Percent of Respondents
Building Energy Assessment?	Yes	0	0%
Building Energy Tissessment.	No	1	100%
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
	No	0	0%
	,		
How important was the information provided to you	Response	(n=1)	Percent of Respondents
in the SEDAC Building Energy Assessment to your	Very Important	1	100%
decision to implement the smart plug power strip	Somewhat important	0	0%
ECRMs?	Slightly important	0	0%
	Not at all important	0	0%
Before you received the SEDAC Building Energy	Response	(n=1)	Percent of Respondents
Assessment, had you implemented energy efficient	Yes	0	0%
equipment similar to the smart plug power strip	No	1	100%

Appendix B B-24

Don't know

For the following other ECRMs recommendations			Percent of
that you received through the building energy assessment, please indicate if you implemented them	Response	(n=4)	Respondents
with an energy efficiency program incentive, implemented them without an energy efficiency	Have implemented with an incentive	0	0%
program incentive, or did not implement them. Only include recommendations that you have already	Have implemented without an incentive	0	0%
implemented, not recommendations that you are	Have not implemented	4	100%
planning to implement.	Don't know	0	0%
			<u> </u>
	Response	(n=0)	Percent of Respondents*
	Didn't know whether equipment qualified for financial incentives	0	0%
	Equipment did not qualify for financial incentives	0	0%
What was the main reason for not applying for an incentive for the other ECRMs recommendations that	Too much paperwork for the financial incentive application	0	0%
you implemented?	Financial incentive was insufficient	0	0%
	Didn't have time to complete paperwork for financial incentive application	0	0%
	Didn't know about financial incentives until after equipment was purchased	0	0%
	Other reason (please describe):	0	0%
	Don't know	0	0%
Did you have finalized plans to install the other	Response	(n=0)	Percent of Respondents
ECRMs before receiving the SEDAC Building Energy Assessment?	Yes	0	0%
Energy Assessment:	No	0	0%
		l	l l
Would you have gone ahead with these plans had you not received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment?	Yes	0	0%
Assessment:	No	0	0%
		l .	
	Response	(n=0)	Percent of Respondents
How important was the information provided to you	Very Important	0	0%
in the SEDAC Building Energy Assessment to your decision to implement the other ECRMs?	Somewhat important	0	0%
decision to implement the other ECKIVIS?	Slightly important	0	0%
	Not at all important	0	0%
	*	1	<u>. </u>
Before you received the SEDAC Building Energy	Response	(n=0)	Percent of Respondents
Assessment, had you implemented energy efficient	Yes	0	0%
aguinment similar to the other ECDMs at your	168	0	
equipment similar to the other ECRMs at your facility?	No No	0	0%

Did you seek additional assistance from program	Response	(n=67)	Percent of Respondents
	Yes	22	33%
staff for implementing the recommendations?	No	42	63%
	Don't know	3	4%
	1	1	
	Response	(n=22)	Percent of Respondents*
	Finding alternative financing assistance	4	5%
	Bid process support	0	0%
What implementation assistance did one analy	Additional design assistance	4	5%
What implementation assistance did you seek?	Additional assistance estimating energy savings	9	11%
	Additional assistance estimating cost reductions	8	10%
	Other (Please specify)	8	10%
		•	
	Response	(n=22)	Percent of Respondents
Did you get the additional assistance you needed?	Yes	20	91%
	No	2	9%
	Don't know	0	0%
Did you implement any of the recommended ECRMs	Response	(n=82)	Percent of Respondents
in buildings that did not receive an energy assessment	Yes	13	16%
through the program?	No	63	77%
	Don't know	6	7%
	Response	(n=13)	Percent of Respondents
Did you apply for or receive an incentive to	Yes, for all of the implemented improvements	5	38%
implement these additional ECRMs?	Yes, for some of the implemented improvements	0	0%
	No	8	62%
	Don't know	0	0%
	Response	(n=13)	Percent of Respondents
How important was the information that you received	Very important	7	54%
in the SEDAC Building Energy Assessment to your	Somewhat important	6	46%
decision to implement the additional improvements?	Neither important or unimportant	0	0%
	Somewhat unimportant	0	0%
	Very unimportant	0	0%

	Response	(n=13)	Percent of Respondents
	Very important	7	54%
How important was the information that you received	Somewhat important	6	46%
in the SEDAC Building Energy Assessment to your	Neither important or unimportant	0	0%
decision to implement the additional improvements?	Somewhat unimportant	0	0%
	Very unimportant	0	0%
	Did not implement any ECRMs at the building assessed by SEDAC	0	0%
Have you implemented any additional energy efficiency projects that were not recommended in the SEDAC Building Energy Assessment because of	Response	(n=82)	Percent of Respondents
your experience with the SEDAC Building Energy	Yes	15	18%
Assessment Program?	No	64	78%
	Don't know	3	4%
	Response	(n=15)	Percent of Respondents
Did you apply for or receive a utility or Illinois	Yes, for all of the projects	3	20%
DCEO incentive for the project(s)?	Yes, for some of the projects	6	40%
	No	4	27%
	Don't know	2	13%
		•	
Was the project implemented at the same facility (or	Response	(n=10)	Percent of Respondents
facilities) as the energy efficiency measures that you received the SEDAC Building Energy Assessment	Yes	9	90%
for?	No	1	10%
	Don't know	0	0%
	Response	(n=10)	Percent of Respondents
How important was the information that you received	Very important	5	50%
in the SEDAC Building Energy Assessment to your	Somewhat important	4	40%
decision to implement the additional improvements?	Neither important or unimportant	0	0%
	Somewhat unimportant	1	10%
	Very unimportant	0	0%
	Response	(n=10)	Percent of Respondents
How important was your experience with the	Very important	4	40%
recommended ECRM'sthat you implemented to your decision to implement the additional equipment	Somewhat important	5	50%
projects?	Neither important or unimportant	1	10%
r -3	Somewhat unimportant	0	0%
	Very unimportant	0	0%

	Response	(n=58)	Percent of Respondents*
For the ECRMs that you have not implemented, but may implement in the future, why have you not	Insufficient funds to implement the project(s)	36	62%
	Other priorities for capital improvement projects	24	41%
implemented them yet? (Select all that apply)	Other	10	17%
impremented them yet. (Select air that apply)	Delays in getting approval for the project(s)	7	12%
	Savings not great enough to make the project a priority	6	10%
	Don't know	0	0%

*Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

	Response	(n=36)	Percent of Respondents*
	Insufficient funds to implement project(s)	18	50%
For the recommended ECRMs that you do not plan on implementing, why do you not plan on implementing them? (Select all that apply)	Other priorities for capital improvement projects	14	39%
implementing them: (Select all that apply)	Savings not great enough to justify the cost	10	28%
	Other	8	22%
	Don't know	2	6%

^{*}Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.

Did you have any interactions with program staff	Response	(n=82)	Percent of Respondents
during the course of completing the building energy	Yes	60	73%
assessment?	No	20	24%
	Don't know	2	2%

	Response	(n=60)	Percent of Respondents
	Very knowledgeable	46	77%
How knowledgeable were program staff about the issues you discussed with them?	Fairly knowledgeable	9	15%
	Somewhat knowledgeable	3	5%
	Slightly knowledgeable	0	0%
	Not at all knowledgeable	1	2%
	Not sure	1	2%

	Response	(n=60)	Percent of Respondents
	Very satisfied	42	70%
How satisfied or dissatisfied are you with how long it	Satisfied	14	23%
took program staff to address your questions or concerns?	Neither satisfied nor dissatisfied	0	0%
	Dissatisfied	1	2%
	Very dissatisfied	2	3%
	Don't know	1	2%

	Response	(n=60)	Percent of Respondents
	Very satisfied	44	73%
How satisfied or dissatisfied are you with how	Satisfied	12	20%
thoroughly program staff addressed your question or concern?	Neither satisfied nor dissatisfied	2	3%
	Dissatisfied	0	0%
	Very dissatisfied	1	2%
	Don't know	1	2%

	Response	(n=82)	Percent of Respondents*
	5	48	59%
On a scale of very satisfied to very dissatisfied, how	4	28	34%
satisfied were you with the steps you had to take to get through this program?	3	2	2%
	2	0	0%
	1	1	1%
	Average		4.5

*Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)

	Response	(n=82)	Percent of Respondents*
	5	53	65%
On a scale of very satisfied to very dissatisfied, how	4	23	28%
satisfied were you with the amount of time it took to complete the building energy assessment?	3	0	0%
complete the building energy assessment.	2	2	2%
	1	1	1%
	Average	•	4.6

*Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)

	Response	(n=82)	Percent of Respondents*
On a scale of very satisfied to very dissatisfied, how	5	71	87%
satisfied were you with the professionalism of the	4	7	9%
SEDAC staff or representative who performed the assessment?	3	1	1%
	2	0	0%
	1	1	1%
	Average		4.8

^{*}Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)

	Response	(n=82)	Percent of Respondents*
30d. On a scale of very satisfied to very dissatisfied,	5	59	72%
how satisfied were you with the usefulness of the	4	18	22%
assessment report for identifying ways to save	3	1	1%
energy?	2	0	0%
	1	1	1%
	Average		4.7

^{*}Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)

	Response	(n=82)	Percent of Respondents*
	5	42	51%
On a scale of very satisfied to very dissatisfied, how satisfied were you with the information provided on financial incentives to implement recommendations?	4	30	37%
	3	0	0%
	2	3	4%
	1	3	4%
	Average		4.3

^{*}Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)

	Response	(n=82)	Percent of Respondents*
	5	67	82%
On a scale of very satisfied to very dissatisfied, how satisfied were you with the overall experience with the SEDAC Building Energy Assessment Program?	4	12	15%
	3	0	0%
	2	0	0%
	1	1	1%
	Average		4.8

^{*}Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)