

Central Hudson Gas & Electric Corp Commercial Lighting: Process Evaluation Summary

Evaluation Conducted by: Applied Energy Group (AEG), *DATE:* December 2011

PROGRAM SUMMARY

The Small and Mid-Sized Commercial Electric Programs, operational since May 18, 2009, offered incentives to non-residential electric customers to purchase and install a variety of energy efficiency equipment including motors, HVAC equipment and lighting. Following the initial process evaluation performed by an independent evaluation contractor Applied Energy Group (AEG), in 2009 and 2010, the programs were restructured and the Small and Mid-Sized Commercial Lighting Programs were re-launched November 1, 2010.

The Small and Mid-Sized Commercial Lighting Programs encourage small and mid-sized commercial customers to replace existing inefficient lighting with energy efficient interior lighting and lighting controls. Participants receive a free energy audit conducted by Alliance Energy Solutions (“Alliance”), the third-party program implementer. Incentives cover up to 70 percent of the equipment and installation costs. A financing program initiated by Central Hudson, and approved by the New York Department of Public Service (“DPS”), provides zero percent financing to cover the remaining equipment and installation cost. From the customer perspective, the Commercial Lighting Program is a single program offering identical incentives and measures, utilizing one marketing plan, and a single implementation contractor. The program remains separate for Central Hudson program tracking and DPS reporting purposes only. Therefore, the Small and Mid-Sized Programs are evaluated jointly.

EVALUATION OBJECTIVE AND HIGH LEVEL FINDINGS

AEG designed the 2010 – 2011 process evaluation to examine the restructured programs processes and customer responses to the programs. The evaluation identifies methods used for gathering data and measuring program results; and makes recommendations for program improvements. To arrive at the final recommendations, AEG performed the following tasks:

- Reviewed program materials and data.
- Reviewed program tracking methods.
- Updated program logic model and assessed program flow.
- Conducted interviews with Central Hudson staff and third-party program implementer, Alliance Energy Solutions.
- Conducted a focus group with installation contractors.
- Conducted surveys and site visits with participating customers.

The Small and Mid-Sized Commercial Electric Programs are on target to meet the New York DPS approved energy savings goals, based on energy savings estimates derived from the *New York Technical Manual*. The Mid-Sized Commercial Program has exceeded the energy savings target, achieving 121 percent of the 10,676 MWh goal. The Small Commercial Program has achieved 75 percent of the 40,266 MWh goal. An impact analysis to determine actual energy and demand savings achieved through the program will be completed in 2013.

The Small and Mid-Sized Commercial Programs have performed well since the restructuring in November 2010. Participation has increased, due to the incentives and financing as well as Central Hudson efficiency program staff, Alliance and the lighting installation contractors

Other key findings include:

- Between 5,000 and 6,000 potential customers have been made aware of the programs.
- Approximately 2,500 audits have been conducted.
- Approximately 1,300 customers have participated in the programs.
- Approximately 75 percent of mid-sized and 85 percent small commercial participants would not have participated in the programs without Central Hudson's incentive.

EVALUATION RECOMMENDATIONS AND PROGRAM ADMINISTRATOR RESPONSE

The following recommendations were made by the evaluators conducting this study. Central Hudson's initial response to these recommendations is also summarized below and will be tracked over time.

Recommendation 1: Alliance and Central Hudson host a workshop for the Alliance salespeople and installation contractors. The workshop should:

- **Review the Program and Participation Process.** The Alliance salespeople and lighting contractors need to be well-versed in the program requirements and processes.
 - The Alliance salesperson should explain the program highlights and overall process to prospective participants prior to conducting the lighting audit.
 - After the audit, the Alliance salesperson should review the audit results and proposed scope of work with the prospective participant. The salesperson should also fully describe the program processes (e.g. the lighting equipment will be directly delivered to the site by Grainger), including the timeline and the parties involved.
 - The installation contractor should be able to explain all program requirements and processes to the participant, as well as be able to provide an Alliance contact for any additional issues.
- **Review the Lighting Audit Process.** The Alliance salespeople and lighting contractors need to discuss prior issues with lighting audits, particularly regarding the type or quantity of lighting ordered. A sample audit should be reviewed and discussed to determine the origin of these issues and solutions to improve the audit process.

Alliance and Central Hudson should closely monitor installations to ensure that these issues are resolved. The goal is not to completely eradicate errors, but to streamline the participation process and increase communications so the number of issues is minimized. If the issues continue, additional steps need to be taken to rectify the issue.

Response to Recommendation 1: Alliance and Central Hudson worked together to help participants and contractors understand the program. Central Hudson worked closely with Alliance auditors to make sure that the audit conducted was accurate and the customer was well educated on the savings potential in their facility. For this program, Alliance is no longer our program provider. Our new implementation contractor takes an active role in making sure contractors and customers are well aware of program offerings. All of the auditors have been trained to be able to explain the reason for the type of lighting and the different opportunities the customer may have not only in this program but other programs Central Hudson offers.

Recommendation 2: Participating businesses requested that program communications be simplified. Participants communicate with up to four different groups throughout the program process, including Alliance, Central Hudson, the lighting contractor and Honeywell. We recommend that Alliance assign a project manager to each lighting project to act as the participating customer's primary contact for the duration of the project. Participants should also be encouraged to contact the project manager with any concerns or questions about the program.

Response to Recommendation 2: Central Hudson currently does not work with Alliance on this project. Our new implementation contractor has a project manager that is a customer contact as well as a Central Hudson contact.

Recommendation 3: Participating businesses and installation contractors recommended that Central Hudson consider offering incentives for additional energy efficient measures, primarily additional lighting measures, such as exit signs, occupancy sensors, outside lighting and HVAC measures. We recommend that, within the next year, Central Hudson conduct a baseline equipment study to identify the type, age and efficiency level of equipment currently being used by small and mid-sized businesses within Central Hudson's territory. The study will inform program design changes and measures to be considered for inclusion in Central Hudson's Commercial Lighting Programs.

Response to Recommendation 3: Central Hudson expanded its offering to include LED exit signs and down lights. We are currently exploring options to offer more non-lighting measures. Central Hudson's evaluation plans for 2013 do not include a baseline equipment study for the commercial sector. We did conduct a potential study for larger customers to show the savings possible in the larger commercial sector. This may be a study that needs to be done for smaller commercial customers as well. In the EEPS Statewide Research Studies and Joint Evaluations Plan, there is a recommendation for a Statewide Commercial Baseline Study. The project details are still under development by NYSERDA, DPS, and other EAG members.

Recommendation 4: Alliance has upgraded its tracking system to its current Access-based system. However, Central Hudson finds that there could be a simpler method to tracking program expenses and projected savings. Manipulating the data from Alliance's reporting format to the format needed for the monthly tracking dashboard for the New York DPS is time consuming. We recommend that Alliance modify the reporting format of the tracking system to minimize Central Hudson's time commitment associated with the New York DPS reporting requirements.

Alliance currently tracks the number of audits as well as the projects installed, energy savings, incentives and closing rate by salesperson. We recommend that Alliance also track the number of audits conducted as the data will provide additional insight into the program progress and areas to focus on.

Response to Recommendation 4: Central Hudson's current implementation contractor has an online database that provides real-time data for our electric commercial programs. This is helpful in planning and tracking purposes.

DETAILED PROCESS EVALUATION FINDINGS

The program incentives and financing are influencing non-residential customer participation in the program. More than three quarters of the program participants would not have participated in Central Hudson's programs if it weren't for the Company's incentives. Many audits have been done and extensive outreach marketing was done to make more customers aware of this program. 87% of participants said that they would recommend this program to other businesses.

EVALUATION METHODS AND SAMPLING

Between November 1, 2010 and June 30, 2011, 940 small and mid-sized businesses participated in the Small and Mid-Size Commercial Lighting Programs. Alliance provided data for all 940 participants, including business name, account number and telephone number. AEG scrubbed the participant data, removing duplicate electric Central Hudson account numbers from the participant list. The scrubbed participant data included 673 unique accounts, 610 small business customers and 63 mid-sized business customers. AEG calculated the small and mid-sized sample sizes at a 90 percent confidence interval with an error margin of +/-10 percent. The Small Commercial Lighting Program sample size was calculated at 61 and the Mid-Sized Commercial Lighting Program sample size was calculated at 18. Participants were then randomly assigned a unique identifier using Microsoft Excel's random number generator. The program participants were contacted based on the unique identifier, beginning with the smallest number.

Eighty-three (83) small business surveys were completed out of 215 businesses contacted; therefore, the survey response rate was 39 percent for small businesses. Eighteen (18) mid-sized business surveys were completed out of 63 businesses contacted; therefore, the survey response rate was 28 percent for mid-sized businesses.

AEG conducted site visits of 10 small and mid-sized business participants to assess program experience and customer satisfaction as well as verify the lighting equipment installed, as compared to Alliance's records. The site visit sample, determined based on logistics, budget and time constraints, represents 1.1 percent of program participants. The site visits were not considered representative of the entire participant population, but a statistically significant sample will be selected for site visits and metering as part of the proposed Small and Mid-Sized Business Commercial Lighting Program Impact Evaluation. A small sampling of participants were selected for on-site visits to verify the information gathered in file reviews, participant telephone surveys, implementation contractor interviews, and contractor focus groups. As such the site visits were a component of program quality assurance practices. The site visits served to confirm the initial findings of the other data gathering aspects of the program and to identify any potential weaknesses in program delivery.

AEG updated the program logic model based on interviews with Central Hudson program staff and the third-party implementer. The model shows the linkages among the program's activities, outputs, key program stakeholders and outcomes and highlights potential external influences and program inputs. There are seven main activities in the Small and Mid-Sized Commercial Lighting Programs. Outputs derive directly from program activities and include the things the program does and the people the program reaches. The seven activities include; develop program infrastructure, promote market program, perform lighting audit, process customer work order, install lighting measures, quality assurance, & evaluate program.