



Connecticut Department of

**ENERGY &
ENVIRONMENTAL
PROTECTION**

Bureau of Energy and Technology Policy

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**2012 CONSERVATION AND LOAD MANAGEMENT
DEEP
EVALUATION, MEASUREMENT AND VERIFICATION STUDY DRAFT REVIEW 2012-01
September 6, 2012**

Introduction

As part of its oversight role in the evaluation study process of ratepayer funded C&LM programs established in Section 33(d)(4) of PA 11-80, the Department of Energy and Environmental Protection (DEEP or Department) Bureau of Energy and Technology Policy (BETP) reviews each independent evaluation study of a C&LM program, queries the Evaluation Contractors on various aspects of the study in a technical meeting, and issues an Evaluation, Measurement and Verification (EM&V) Study Review and associated Recommendations on each evaluation study.

An independent evaluation study was conducted by the Nexus Market Research (NMR) and Tetra Tech consulting firms, which evaluated The United Illuminating Company's Behavior Pilot Program (UI BPP Study or Study). The UI BPP Study was managed under the supervision of the Energy Efficiency Board (EEB) Evaluation Consultant, Dr. Kim Oswald, and the final draft was filed by the EEB on May 17, 2012. On May 31, 2012, the Office of Consumer Counsel (OCC) filed a request for a technical meeting, pursuant to Section 33(d)(4) of Public Act 11-80. In a letter dated June 29, 2012, the Public Utilities Regulatory Authority (PURA) delegated this motion request to the DEEP BETP.¹ Pursuant to a Notice of Technical Meeting dated July 19, 2012, DEEP held a transcribed technical meeting on August 7, 2012, at DEEP's offices, Ten Franklin Square, New Britain, Connecticut to review the results of the UI BPP Study.²

Messrs. Robert Baumgartner and Christopher Mayhew, representing Tetra Tech, and Dr. Lisa Wilson-Wright, representing Nexus Market Research (together, the Evaluation Contractors), comprised the panel that presented the highlights of the Study. The presentation was followed by questions from DEEP staff, OCC, and other parties.

¹ The UI BPP and the PURA letter can be found on the DEEP PURA and BETP websites by clicking the following links: [UI's BPP Report and PURA letter](#).

² Transcripts for the August 7, 2012, Technical Meeting can be obtained from United Reporters, Inc. at (866) 534- 3383 or through their website at: www.unitedreporters.com.

Study Design

The Study is a “process study”, which evaluated the “customer experience” of residential customers who participated in a behavioral pilot program in the UI service territory for approximately eight months during 2011. There were 6060 customers enrolled in the program, of which 419 were volunteers or “opt-in” customers, and 5641 were auto-enrolled. Another 10,000 customers were assigned to the control group. The Study evaluates the responses of the auto-enrolled participants only. The Evaluation Contractors conducted a survey of 100 respondents in September/October 2011, and conducted three focus group discussions with a total of 23 participants in December 2011. Study, pp. 2-1 – 2-3.

Participants received a brochure and other explanatory information on the program and the first monthly Home Energy Reports (HERs). The HERs measures electricity use, presents a comparison to the electricity use of 100 “neighbors” and offers suggestions for reducing energy usage as well as other energy information including the HERs program web site address. Customers received HERs each month for approximately eight months.

The Study investigated whether customers were satisfied with the program, and whether or not the program motivated residential customers to adopt more energy saving activities in their homes. Specifically, the Study assessed: the awareness and customer engagement with the HERs, extent to which participants found the HERs program information and website to be useful; actions participants reported in response receiving the monthly HERs report; customer satisfaction and program changes that could increase customer satisfaction; and impact on customers’ impressions of UI. The Study did not measure or evaluate the impact of participating in the UI BPP on residential energy use of the participants. Study, pp. 1-2 – 1-4.

The data in the Study, which consist of a list of people and their phone numbers of the HERs participants, were received from UI. OPower did the screening of the residential customer database and selection of customers who met the screening criteria, and selected customers to be placed into the control versus the treatment group (HERs participants). The Evaluation Contractors then narrowed down the data to obtain a random sample of HERs participants for the telephone interview and the selection of participants in the focus group. Tr., pp. 13, 42-44, 48.

Study Findings and Recommendations

The Study found a high customer awareness but moderate customer engagement with the HERs program. More than 40 percent of respondents could not remember any specific energy saving suggestion reported in the HERs. Many focus group respondents were not aware that the HERs had a second (back) page or a program web site to access more information. Study, pp. 1-2, 3-3; Tr., p. 41.

A majority of survey respondents found the HERs information only somewhat useful, not very useful, or not at all useful. Twenty-seven percent of respondents found the report very useful, somewhat higher than the 22 percent who responded that the HERs provided no useful information. On a scale of 1 to 5, respondents gave the program an average of 3.0. Study, pp. A- 2 and A-8.

Although the study did not measure actual energy savings, survey respondents were asked to report on the difference in their electric use resulting from participating in the UI BPP. More than three quarters, 78 percent, reported about the same or a little less; 5 percent reported a lot less, and 17 percent reported a little more or a lot more. Study, p. A-6.

Some respondent and focus group participants found the “neighbor group” comparisons confusing and discouraging. Many focus groups participants did not understand how the “neighbor group” was composed or why their own energy consumption was higher than the “neighbor group”. Some focus group members believed that the information in the HERs was too general to offer the guidance needed to lower energy bills. Study, pp. 4-9 and 4-10, Tr., p. 35.

Based on the evaluation findings, the Study contains the following recommendations:

- Provide more explanation of how the “neighbor” comparison group is selected and how to interpret the neighbor comparisons.
- Develop a strategy that will motivate (and perhaps reward) customers for visiting the Program website and establishing an on-line account, which may enable program implementers to provide more tailored energy saving tips and analysis.
- Offer and encourage auto-enrolled customers to take the opportunity to receive HERs by email. For some, receiving HERs by email might increase the likelihood they will access the Program website, which could also lead to establishing an on-line account.
- Provide some form of recognition for households that decrease electricity use, even if they do not qualify for a “Great” or “Good” rating on the HER, which will help to maintain motivation among “high use” households relative to their neighbor comparison group.
- Provide auto-enrolled “high use” customers more detailed diagnostic information on why their electricity use is higher than the average of their neighbor comparison group. In addition to the HERs, UI might develop a targeted offer of the Home Energy Solutions Program for these customers, indicating that this program will provide them with specific diagnostic information on why their household electricity use is higher than some of their neighbors. Study, p. 1-4.

Written Responses to the Study

UI and EEB Evaluation Committee each submitted written responses to the Evaluation Contractors' Recommendations (Response to UI BPP), dated April 20, 2012. In addition, Opower, Inc., the vendor that implemented the HERs Report, submitted its comments (Opower Comments), dated April 5, 2012.

Department Analysis

The Department has reviewed the survey and focus group responses and the presentations of the Evaluation Contractors, which revealed that customers were somewhat engaged and moderately satisfied with their participation experience in the UI BPP. However, some reported confusion and suspicion over which households were considered "neighbors". Some customers also indicated that the information reported in the monthly HERs was too general, and that customers would benefit from more customized information to assist them in reducing their household energy use. Tr., pp. 15-21. The Department notes that customer satisfaction with the Home Energy Solutions (HES) program is considerably higher; UI indicated that approximately 95% of its HES participants were satisfied or very satisfied with the program. Tr., pp. 66-67. The Department believes that the UI BPP, as designed, lacks sufficient customer enthusiasm, and is too self-contained and isolated from the HES program and weatherization efforts. Any behavior based program should be integrated with and should direct customers to participate in the HES program.

The Evaluation Contractors stated that almost all of their communications were routed through the Evaluation Consultant, who relayed the questions to UI or Opower, then back to the Evaluation Consultant, who reported back to the Evaluation Team. The Evaluation Contractors stated that the Evaluation Consultant reviewed, commented on and approved the interview guide used to question respondents and focus group respondents. Members of the EEB, the Evaluation Committee and representatives from the EDCs were invited to the focus group interviews. Tr., pp. 45-48. At the request of OCC, the Evaluation Consultant submitted all email communications between the Evaluation Consultant and the Evaluation Contractors and UI.³ Tr., pp. 90-92. Based on its review of the correspondence, the Department believes that the Evaluation Consultant followed appropriate procedures in documenting communications with the Evaluation Contractor and with UI.

The Study includes a question in the survey that asks whether participating in the HERs program has affected the participants' perception of UI. Study, p. 1-1. This question was included at the request of the Evaluation Consultant, at the suggestion of UI. Tr., pp. 51-53. Given that there was no cost to the Study to include the question and that no question was removed from the survey because of it, the Department does not have an objection to including it in this instance. However, survey questions about

³ These notes can be found on the EEB website at
<https://www.box.com/s/2f8a1b9075a1e1440ee9#/s/2f8a1b9075a1e1440ee9/1/356992941>

the corporate image of program administrators are not the purpose of evaluation studies and ratepayer funds should not be expended for this purpose. DEEP will reiterate this point in future EEB Evaluation Committee meetings.

Given the modest customer engagement and satisfaction with the UI BPP, participants in the August 7 Technical Meeting discussed the next steps to take with regard to improving the effectiveness of residential behavioral programs. The UI BPP program was conducted for approximately 8 months and ended in late 2011. UI customers no longer receive the monthly HERs report. Tr., p. 7.

In its written comments, the EEB Evaluation Committee emphasized that UI should complete its solicitation to consider alternative approaches before committing to changes in the UI BPP approach. Response to UI BPP. Mr. Jeffrey Schlegel, Consultant for the EEB, indicated that the EEB is aware of the shortcomings – limited customer engagement and satisfaction -- of the behavioral approach in the pilot program. However, the EEB is still interested in developing a behavior-based strategy to incentivize residential customers to reduce their energy use. The EEB is addressing this issue by initiating a Request for Information (RFI), which was sent out to approximately eight vendors of residential behavioral programs, including Opower. Mr. Schlegel stated that the EEB has not yet determined what actions it will take in response to the RFI, but the EEB's near-term goal is to access more information on a variety of behavioral programs. Tr., pp. 63-66.

The Department agrees that rather than revising the current UI BPP, the EEB should consider alternative residential behavioral models and vendors that would create more robust customer engagement and a seamless link to the HES program. The Department supports the EEB's effort to consider the residential behavioral programs more broadly by initiating an RFI to view a range of program delivery strategies and vendors.

The Department has reviewed the Recommendations in the Study, and finds that they generally would improve customer satisfaction and engagement in the UI BPP and we endorse these Recommendations. However, some Recommendations are specific to the program design of the UI BPP, and as such, may not be directly applicable should the EEB select an alternative residential behavioral program and/or vendor. As it moves forward in its consideration of alternative residential behavioral programs, the EEB should incorporate the Study findings and Recommendations applicable to future behavioral program designs.

Department Recommendations

1. Any behavior based program should be integrated with and should direct customers to participate in the HES program to drive customers to pursue deeper savings.

2. Survey questions about the corporate image of program administrators are not the purpose of evaluation studies and ratepayer funds should not be expended for this purpose.
3. The Department supports the EEB's effort to consider the residential behavioral programs more broadly by initiating an RFI to view a range of customer engagement delivery strategies and vendors.
4. Although some of the Study Recommendations are specific to the program design of the UI BPP, the EEB should incorporate the applicable findings and Recommendations as the EEB moves forward in its consideration of alternative residential customer engagement program designs.