



Energy Efficiency Board Annual Retreat

Wednesday, June 22, 2016, 9:00 AM – 2:15 PM
The Lyceum, 227 Lawrence Street, Hartford, CT

MINUTES¹

In Attendance

Voting Board Members: Bill Dornbos (Chair), Taren O'Connor (Vice-Chair), Adrienne Houel, Jack Traver, Eric Brown, Ravi Gorthala, Neil Beup, Diane Duva, Mike Wertheimer

Utility Board Members: Chris Plecs, Pat McDonnell, Ron Araujo

Board Members Not in Attendance: Amanda Fargo-Johnson, Chris Ehlert, Scott Whittier

Board Consultants: George Lawrence, Les Tumidaj, Phil Mosenthal, Craig Diamond, Glenn Reed, Jeff Schlegel

Others: Craig Scott, Jesus Pernia, Jordan Schellens, John Kibee, Pam Penna Verrillo, Julia Dumaine, Ellen Rosenthal, Violette Radomski, Steve Bruno, Stan Mertz, Donna Chambers, Donna Wells, Tilak Subrahmanian, Guy West, Joe Swift, David Mcintosh, Ricardo Jordan, Marissa Westbrook, Ravi Parikh

Comparison of CT's Energy Efficiency Programs to Those in Other Northeast States - What can we learn from the comparisons? High level overview of scope and performance of CT's energy efficiency programs, and comparison to other states; comparison of some specific programs to those in other states.

Mr. Schlegel provided a presentation. He discussed CT's electric savings as a percent of sales. He said it is currently about 1.4%, which is a little over the Northeast average of 1.27%. He noted that whether combined heat and power (CHP) is included in the data changes the percentages somewhat; he noted that Massachusetts and Rhode Island include CHP, but CT does not. Mr. Schlegel then discussed the levelized cost of saved electricity. He said that CT's cost is between 4 and 5 cents per kwh, while other New England states are roughly between 3 and 5 cents per kwh. He said that CT's cost of savings is generally higher than the other New England states. Mr. Reed noted that CT spends more on oil savings, which would make its cost numbers higher. Mr. Tumidaj pointed out that more comprehensive projects (such as in CT, MA and RI) would also make the numbers higher. Mr. Schlegel said that CT gas savings as percent of sales are a little over the Northeast average beginning in 2016. He then briefly discussed electric savings in CT compared to MA. He said that CT has more costs for Residential

¹ Meeting materials are available in Box.com: <https://app.box.com/s/zaai91txh2d344e0houcsj6bspwz4ft2>

programs compared to C&I programs, and also more savings from C&I vs. Residential as compared to MA. Mr. Schlegel then discussed some key themes for enhancing CT's programs. Mr. Mosenthal presented on C&I program comparisons. There was some discussion about CHP, and whether it should become part of CT's C&LM program; currently it is not. Ms. Duva and Mr. Schlegel noted that the C&LM program does not prohibit inclusion of CHP; rather it has been a choice. It could be included if the EEB and the Companies chose to do that. Mr. Mosenthal discussed comparison of small business programs. He said that CT has more electric savings per small business participant than MA and RI, and its cost is lower per mwh. Mr. Reed presented on Residential program comparisons. Ms. Houel asked why CT's Residential gas budget was considerably lower than in MA. Three reasons were provided: 1) there are more gas customers in MA; 2) MA has double the population; and 3) MA programs devote more to gas per capita than CT does. For residential (single-family and multi-family), total MMBTU savings per participant is 14.1 in CT, and 20.3 in MA; in MA, they get more savings from oil.

C&I Target Markets: Progress and Case Studies

Overview and progress to date on the Target Market approach.

Mr. Tumidaj provided a brief presentation including key C&I program themes and an overview of the market segmentation approach. Ms. Schellens, Ms. Wells, and Mr. McIntosh provided a presentation on C&I target markets, with a focus on the manufacturing market segment. Mr. Scott, of Aero Gear, provided a presentation on his company's experience with CT's C&I programs, and provided some feedback for the Board. One suggestion was that supplier conferences (e.g. United Technologies supplier conferences) would be good venues for the C&I programs to market its services. Mr. Beup suggested that the C&I Consultants look at customer feedback and customer satisfaction issues.

Lighting Market Update, and Implications for CT's Energy Efficiency Lighting Programs

Residential market: key market trends, implications for programs.

Mr. Reed presented an overview of residential lighting policies and trends. He focused much of his presentation on the transition from CFL to LED bulbs. He suggested that the Board consider recommending an end to support for CFLs at the end of 2017 for all residential programs. He said that depending on how 2020 federal standards are implemented, there is a broader question about how much, or if, the programs should support retail residential lighting. Mr. Pernia and Mr. Mertz of CLEAResult presented on the CT and national lighting market. A key point made in their presentation was that if the "Backstop" of the Energy Independence and Security Act kicks in in 2020, halogens and CFLs likely will be phased out and incentives for LEDs might not be needed. Otherwise, LED incentives will continue to be needed.

Lighting Market Update, and Implications for CT's Energy Efficiency Lighting Programs. C&I market: key market trends, implications for programs, technology demonstration.

Mr. Lawrence provided a presentation. He highlighted that the percent of C&I energy use that is due to lighting has gone down significantly in the last 10-15 years. He said that the energy savings opportunity is in replacing inefficient 700 T8s with LED T8s. He noted that very large

savings can be achieved if you combine replacement with LED T8s with lighting controls (dimming/sensors/daylighting). He said that most of the future savings opportunity is with fixtures that integrate lighting controls, more so than with LED T8s.

Mr. Parikh of RAB Lighting provided a demonstration of an advanced lighting control system. Mr. McDonnell asked about the expected payback of these systems. Mr. Parikh said that the payback is much greater if integrated fixtures are used. He also noted that non-energy benefits should be quantified. He said that payback has not been large in the past, but he believes that will change over next few years. Mr. Kibee asked how to control persistence with advanced lighting. Mr. Parikh said they include 24/7 support for the systems, which helps with persistence. Mr. Lawrence suggested that the Companies develop a plan for advanced lighting controls, and that the plan should be included in the 2017 Plan Update. Mr. Tumidaj also suggested that a plan for advanced lighting controls should be included in the 2017 Plan Update. He also reminded the group that because lighting is going down as a percent of energy use, we need to focus as well on other C&I savings areas (e.g., HVAC). Mr. Traver agreed that we need to focus as well on HVAC and other technologies beyond lighting.

Integrated Energy Efficiency and Demand Management: Technology, Automation, and Building Performance

Mr. Schlegel provided a presentation which integrated demand management concepts with many of the themes discussed during the day. Ms. Duva said the DEEP sees the concepts presented by Mr. Schlegel as some of the most important issues that the Board and Companies should be looking at. She said that DEEP will likely be holding a workshop on this topic. She said that the demand response pilots should try to incorporate/reflect the concepts presented by Mr. Schlegel. Mr. Beup said that one of Praxair's facilities is doing some of these things, and the facility possibly could be a showcase for the Board. Mr. Mosenthal noted that policies and regulatory frameworks will need to be changed to facilitate the deployment of these types of concepts.

Wrap-up and final Board reflections

Ms. Houel noted that the day's presentations highlighted the fact that the residential and C&I markets are quite different. She asked how we can bring more of the C&I engineering/technology to homeowners? Mr. Araujo commented that there are some similarities, particularly for some small businesses. There was a brief discussion of the residential market, single-family and multi-family, and how to improve ways to provide information to residential customers, including landlords.

The meeting adjourned at 2:24 pm.