

**NYSERDA Residential
Emerging Technology and Accelerated Commercialization (ETAC)
Advisory Committee Meeting
August 7, 2012
1:00pm–4:00pm
NYSERDA Board Room
Albany NY**

Attended in Person:

- Cliff Babson, Four Points Energy Solutions
- Katya Carman, GE
- John D’Aloia, NYS Dept. Public Service
- Jeff Irish, Hudson Valley Clean Energy
- Jeremy Snyder, Lighting Research Center
- Eric Werling, U.S. Dept. of Energy
- Joe Borowiec, NYSERDA R&D
- Lee Butler, NYSERDA Multifamily
- Liz Hanna, NYSERDA EES
- Ryan Moore, NYSERDA RES
- Paula Rosenberg, NYSERDA
- Pete Savio, NYSERDA EES
- Marsha Walton, NYSERDA R&D
- Jim Quirk, NYSERDA RES
- Chris Coll, NYSERDA RES
- Mishel Filisha, NYSERDA RES

Attended via Conference Call:

- Rick Bain, Cree
- Cristina Coltro, Con Ed
- Mike Dunleavy, RECAP
- Damian Hodkinson, True Energy Solutions
- Maureen Mahle, Steven Winter Associates
- Lisa McLearn, GE
- Rich Rattray, Sylvania
- Frank Sharpe, EPRI
- Hal Smith, Halco
- Kevin Stack, NE Green Building Consulting
- Paula Traynor, EPRI

Attended via Video Conference:

- Scott Kessler, NYSERDA RES

Materials Distributed Prior to the Meeting:

- 1) Meeting Agenda (PDF)
- 2) NYSERDA Residential ETAC Advisory Committee Meeting Slides- Aug 7, 2012 (PDF)
- 3) ETAC Webpage DRAFT (PDF)
- 4) OSRAM SYLVANIA Residential Lighting Options Applications (.ppt/PDF)
- 5) GE LEDs for NYSERDA 8-7-12 Presentation (PDF)
- 6) Link to: Selecting and Installing LED Lighting for Residential Applications, LRC 8-7-12 (PDF)

I. Welcome and Introductions

Chris Coll welcomed everyone and began the meeting by stating that the meeting will be recorded and posted to the NYSERDA website to provide transparency in the planning process for the residential ETAC initiative. Meeting attendees introduced themselves.

Chris Coll reminded the group that at the previous meeting on June 8, 2012, a general overview of the Residential Emerging Technology and Accelerated Commercialization (ETAC) program was provided. Today’s meeting will focus on ETAC initiative developments since that time. Additionally, four guests will present information on emerging solid state lighting design and products. Finally, the group will discuss the first ETAC Program Opportunity Notice (PON) regarding lighting demonstrations.

II. Updates on the Development of the Residential ETAC Initiative

a. Website

A webpage devoted to the residential ETAC initiative will be housed on the NYSERDA Residential Energy Services webpage. The ETAC webpage will provide a description of the initiative and will also feature a clearinghouse of parties interested in participating in demonstration projects, intended to facilitate the creation of demonstration teams through a clearinghouse. The webpage also lists the Advisory Committee members and provides access to materials from the Advisory Committee meetings including minutes, copies of presentations, and video recordings of the meetings.

Announcements such as the release of a demonstration PON, reports and case studies, will also be posted to the webpage. Additionally, there will be a section for Frequently Asked Questions, which is currently under development. A draft of the webpage was distributed to the Advisory Committee in advance of the meeting. Comments and suggestions on the layout and content of the webpage should be directed to Chris Coll at czc@nyserda.org.

b. Demonstration Participants Clearinghouse for Interested Parties

An online Demonstration Partner Clearinghouse for parties interesting in participating in ETAC demonstration projects is being developed to help facilitate the formation of teams to respond to the demonstration PONs. The primary criterion for inclusion in the Clearinghouse requires that contractors, builders, and installers be NYSERDA affiliates in good standing. There will be exception provided, for example if a potential demonstration participant is from a sector not represented by NYSERDA's portfolio of programs.

The Clearinghouse will provide a list of parties interested in participating in demonstrations. It would be incumbent on proposers to select possible team members from the clearinghouse and work with them to submit a demonstration proposal.

c. Outreach to Potential Demonstration Participants

Outreach to NYSERDA partners will be conducted through traditional program communications vehicles such as webinars, conference calls, and email. Strategies for targeted outreach to potential demonstration participants not already affiliated with NYSERDA are being considered. The public announcement of the Program Opportunity Notices (PON) will also provide opportunity to reach potentially interested parties.

d. Identifying Additional Emerging Technologies for ETAC Consideration

While the first demonstration projects through the residential ETAC initiative will focus on solid state lighting, NYSERDA will be seeking input from stakeholders, including the Advisory Committee, on emerging technologies and products to focus future demonstrations. For the purpose of the NYSERDA ETAC initiative, an emerging technology is defined as a technology/practice that is commercially available with a proven strategy for successful installation/completion. Products utilized must be previously tested, licensed, code compliant, and exceed minimum standards. Performance data for these technologies/practices should already be available, including analysis and measurement/verification that assists in better understanding performance or reducing barriers to wider scale deployment in the market.

NYSERDA program staff has done a preliminary survey of existing emerging technology initiatives and have found that there are ongoing assessments of the following technologies across the country: heat pump water heaters, ductless mini split heat pumps, home energy management systems, zero net energy homes, near zero energy homes, radiant cooling, water-cooled air conditioning, R-5 windows. While NYSERDA would like to avoid duplication of activities where possible, there are certain technologies and products where performance can depend on climate. In these cases, it would be appropriate for NYSERDA to demonstrate such technologies and products.

In addition, a Request for Information (RFI) will be developed and released by NYSERDA in late 2012 to assist in identifying technologies to be addressed by the residential ETAC initiative beyond 2012. The results of the RFI will be presented to the Advisory Committee for input on the focus of future demonstration initiatives.

III. Presentations-Emerging Solid State Lighting Design and Products

To help guide the planning process for the solid state lighting demonstration PON, NYSERDA invited industry experts to provide the Advisory Committee with a better understanding of solid state lighting in the residential sector. Representatives from lighting research and manufacturers provided the committee with a discussion on solid state lighting applications in residential sector, the products that are currently available on the market, and market barriers that manufacturers see.

The committee heard from the following presenters:

a. Lighting Research Center, Jeremy Snyder

b. Cree, Rick Bain

c. Sylvania, Rich Rattray

d. GE, Katya Carman and Lisa McLear

The following points were brought up by the presenters:

- Payback periods will depend on time of use. Greater times of use, such as those seen in the commercial sectors, will yield the faster paybacks.
- The compatibility of existing lighting controls such as dimmers can vary with LED lamps, impacting the performance of the lamp. There isn't an industry standard for dimming. Manufacturers have a compatibility matrix to help consumers identify the appropriate dimmer and lamp configuration.
- The barriers to widescale market adoption of LEDs that were identified include:
 - upfront cost,
 - consumer and builder education,
 - and the lack of adequate controls.
- The Lighting Research Center will release an update to the Lighting Pattern Book in early 2013, which will include residential lighting designs for the incorporation of solid state lighting.

Each of the powerpoint presentations are available on the ETAC webpage, in addition to a video recording of the Advisory Committee meeting.

IV. First ETAC Demonstration--Lighting

Lighting will be the subject of the first NYSERDA residential ETAC demonstration. The demonstration opportunity will be announced through a Program Opportunity Notice (PON).

a. Schedule and Timeline

The target date for release of the PON is late September 2012, with a deadline for proposals of late October 2012. It is expected that the process for reviewing proposals and awarding funding will take place through early December 2012. It is expected that demonstration projects will commence shortly after the award.

b. Program Opportunity Notice (PON) Components

The components of the PON will include: a program description, a summary of objectives, due date, criteria for proposals, evaluation criteria, and available funding.

c. Criteria for Proposals

The Advisory Committee discussed the criteria for proposals during the last committee meeting.

- Identify all team members and provide qualifications
- Include demonstration sites
- Include plans for evaluating/measuring impact (Quantitative and qualitative data)
- Include strategies for technology transfer
- Proposals should be a “team” effort
- To the extent possible, the proposal should reflect a comprehensive/whole-house approach to energy efficiency
- Identify market barriers or infrastructure deficiencies
- Include cost-sharing

d. Review and Evaluation of PONs

The evaluation and scoring of PONs will be based on the comprehensiveness of the project proposed, total project cost, cost effectiveness, adequacy of data collection/instrumentation plans, statewide impact, whether the plan addresses market barriers or infrastructure deficiencies, and technology transfer plan.

Advisory Committee members offered additional suggestions for the development of the PON:

- It was suggested listing specific barriers to technology integration on the PON and requiring proposers to address which of these barriers they intend to overcome.
- A further suggestion was made to list the limitations or peculiarities of the technology upfront, so that proposers can directly address how they are going to handle these limitations or peculiarities.
- Another suggestion is to consider the economic development potential, particularly for New York State, in the assessment of the proposal.

V. Adjourn

a. Wrap up

Advisory Committee meeting minutes and materials will be distributed via email and will be available on the NYSERDA Residential ETAC webpages as they are developed.

b. Next meeting

The next meeting of the residential ETAC Advisory Committee will be announced following the release of the demonstration PON, but it is expected to be in the December 2012 timeframe.