New Jersey's Clean Energy Program Energy Efficiency Committee Meeting March 11, 2014 BPU, Trenton

Program Coordinator and Regulatory Updates Betsy Ackerman. Sherri Jones. Mike Ambrosio

Betsy Ackerman opened the meeting with the following disclaimer: *This EE meeting is an opportunity for stakeholders and other interested parties to have open, frank discussions regarding policy and issues confronting the energy efficiency community that are within the jurisdiction of the board. These meetings are intended to address issues of general concern. Staff cannot comment on, or provide answers to questions in regard to pending applications or petitions. Information provided and positions developed during these meetings may or may not form the basis of staff recommendations to the board. By law, statements made by staff cannot bind the board in its decisions. Only the board can make decisions on these matters at its open public meetings. While attendees may choose to record or take notes during this meeting, please refrain from interrupting the flow and tenor of the discussions with questions pertaining to your note taking.*

Updates on Filings, Board Orders and Regulatory Items

Betsy Ackerman: The Program continued to have increased participation, thanks to the Market Managers and the contractors involved.

- Increased participation and expenditures (since 2011) total around \$100M.
- In FY14, Ms. Ackerman hopes to see the budget fully expended, even closing down programs, in order to send a message of success to the State house.

Board Orders:

- Petition by the Sierra Club will be on this month's agenda.
- 1 C&I incentive over \$500,000.

Discussion of NJCEP Program Administrator RFP / Transition Status

- No update on the Program Administrator RFP. Betsy plans to go to the Board in May seeking contract extensions.
- As per Governor's budget address, the clean energy program is being looked to for 68 million dollars in fiscal year 2015. CEP is also being asked to contribute to resiliency up to \$50M. Mike Winka will share additional details when they are available.
- Mike Ambrosio added that the plan is to continue with current lineup of programs.

FY15 Funding Levels

Staff anticipates there is enough left in the budget to get through to the end of the fiscal year, and enough flexibility to move money from one program to another. All programs are currently on track to remain open until June.

Betsy is developing a single year CRA budget. Multiple years will not be proposed until Staff has something more to inform the process (like evaluations). Evaluations

will likely occur in FY15. Both the CRA budget and the FY15 programs and budgets will be presented at the same Board meeting.

Residential Programs - Honeywell Team

Fiscal Year 2014 Program Results

WARM & COOLAdvantage Statewide Results

- Warm Completions- 98% with a goal of 106%
- Cool Completions- 95% with a goal of 113%
- HVAC Completions- 98% with a goal of 107%
- Still seeing influx of heating participation from severe winter season.
- Energy savings on track.

Residential New Construction

- Enrollments- 82% with a goal of 93%
- Completions- 79% with a goal of 82%
- Enrollments, completions and energy savings slightly down from last month, but still on target to program goals.
- Slowed response is attributed to seasonal changes.

Question by Betsy Ackerman: As projects are completed, will the energy savings number go up?

Answer: No, the data does include committed projects as well. The data also includes multi-family buildings (which can influence participation and energy savings numbers).

Energy Star Products

- Washer Completions: 138% with a goal of 148% goal
- Refrigerator Completions: 64% with a goal of 69%
- Lighting Completions: 119% with a goal of 125%
- LED bulbs comprise 15% of units, up from 9% in 2012

Home Performance with Energy Star (HPwES)

HPwES is ahead of goal, with 61% of the budget expended. Each year since 2012, enrollments and completions have increased.

- 3,648 completions in FY 2014 (96% of YTD goal)
- 83% of enrollments take advantage of the 0% HPwES financing
- cuGreenLoan Pilot update: 5 contractors participating, 1 completion (during February) and 11 enrollments
- HPwES continues to enroll new contractors, and has seen well-attended training sessions (both in-person and webinar).

SEP Funding and Pipeline Summary

• This is the end of the 5 year cycle for SEP funding, and money will not carry over. An application is under development for FY15 funding.

Question by Betsy Ackerman: The time of home renovation seems like the time for upgrading equipment, as well. Is there any way to incorporate the HPwES program while renovation is happening, to take advantage of the walls being open?

Answer: As long as it's not an addition, once a shell is built—we can do testing. If it's an addition—which it normally is—there is no good way to take advantage of the construction to upgrade. Also, an addition may increase energy usage, rather than decrease.

Betsy Ackerman: Is there any way to adapt an already-existing program for these inbetween renovation stages? Not only "new construction", as it is a poor new construction environment. Is there a missed opportunity here?

• Discussion on these matters set for FY 2015.

Hurricane Sandy Response Update

WARMAdvantage- 168 rebates

COOLAdvantage- 59 rebates, 738 Central A/C rebates

- 3.1 million dollars in incentives paid (calculated with central air).
- Under 3 million dollars in incentives paid (calculated without central air).

Commercial & Industrial Programs - TRC Team

Fiscal Year 2014 Program Results

Retrofit

- Participation and energy savings consistent, with a few peaks ("peaks"=up to 800 applications received) during incentive program changes, as well as during Hurricane Sandy.
- 236 applications received in February.
- 14% remaining of the current budget.
- Completed projects are on trend to complete very strong through the year.

New Construction

• Participation trending down with some peaks.

Interjection by Betsy Ackerman: Any thoughts on why?

Speculation by Brian DeLuca: It is a poor economic climate for new construction. Possibly there is some cannibalism with the P4P New Construction portion of the program. There has been in uptick in P4P applications, so that program may be providing balance.

- 16 applications received in February.
- 35% remaining of the current budget.
- Note: budget-wise, new construction can take up a large chunk of the budget even for just one project.

Direct Install

- Participation consistent with peaks.
- Weather accounts for dip in project completions.
- 46 new applications received in February.
- 40 approvals/commitments.
- 78 approved-for-payment projects.
- 18% remaining of the current budget.

Combined Heat & Power/Fuel Cells (CHP)

- Rate of applications for this program is slow and sporadic.
- 2 applications were received in FY2014 (\$822,235 incentive value)
- 1 of those applications was received this month (March).
- 86% remaining of the current budget.

Past Fuel Cell Program Data

Small-scale CHP (Jan. 2012-June 2013):

- 12 applications approved (4.1 MW; \$6.5 million incentive value). *of these...*
 - -7 projects purchased equipment.
 - -2 projects installed.
- 11 cancelled, rejected, or expired. *of these...*
 - -1 recently re-applied.

P4P-CHP (Jan. 2010-December 2011):

- 6 applications approved (5.8 MW; \$2.8 million incentive value). *of these...*
 - -5 projects installed.
 - -1 cancelled, rejected, or expired.

Pay for Performance Existing Buildings

- Spike in applications from January 2014.
- 31 new applications received in February.
- 1 new ERPs received.
- 4 new installations approved.

Question from Mike Ambrosio: What is the typical timeframe to get an ERP, and then an approval? How many of those would we expect to be ready for approval by the end of the fiscal year? Why would a project be cancelled?

Brian DeLuca: Applications from the spike in January have a low chance of being approved by end of the fiscal year. Approval typically happens in months, not weeks,

after the initial application. Regarding cancellations, it is rare, but a possible example is if a customer isn't qualified based on past performance of their energy usage. Another issue is if an application for multiple buildings is submitted as one, application isn't signed, etc.

Pay for Performance New Construction

- 2 new applications received in February.
- 1 new proposed ERPs received.
- 1 new ERP approve (\$440,458 incentive value).
- No as-built ERPs/installations approve.
- 28% remaining of the current budget.

Local Government Energy Audit

- 8 applicants in February, representing 29 projects.
- 3 approved RFPs in February, representing 8 projects.
- 17 audit reports approved in February (175 for the FYTD).
- 50 audit reports currently under review.
- 27 new project approvals/commitments (\$59,345).
- 17 projects approved for payment.
- 19% remaining of the current budget.

Large Energy Users Pilot

Data spike during enrollment period, then a flat line as participants cannot enroll during closed period. During fiscal year 2014, there is now an open enrollment (so the data here does not show spikes).

- 6 enrollments in January.
- 1 enrollment cancellation.
- 3 FEEPs received and under review.

Hurricane Sandy Response Update

As of February 28, 2014:

- 1,389 applications received.
- 759 committed.
- 427 applications approved for payment.

Environmental savings benefit:

• NJ Clean energy program has saved 1,973,218 metric tons of CO2.

Utility Updates

No utility updates.

DOE Presentation: Ely Jacobsohn / Caroline Hazard

Home Performance with Energy Star

Ely Jacobsohn begins by thanking everyone involved in making the HPwES program a success.

HPwES place in residential ecosystem:

- "Better Buildings" residential network and solutions center is in place to facilitate peer exchange and research using online searchable database, with information from Better Buildings neighborhood program and HPwES.
- "Building America" is a research program in place to build ties between HPwES and its sponsors.
- "Home Energy Score" is a recognizable assessment used in project reports, completion, and labeling.

Ely encourages sponsors of HPwES to use the above tools.

Recent Achievements of the HPwES program:

- Completed over 337k projects since 2002.
- 52 sponsors nationwide completed projects since 2013.
- Q4 of 2013 was best quarter in history for HPwES.
- Over 2k contractors and added 8 new sponsors (since 2012).

Value for homeowners:

• Decrease in energy consumption and lower cost

Savings Impact:

• HPwES saved 219k metric tons of CO2 in 2012.

Ely thanks New Jersey for providing consistent data, using streamlined administrative tactics, and actively pursuing new approaches for marketing, financing, and training. He also addresses Betsy to say that the DOE is interested in implementing/revising a program to include remodeling (harking back to the earlier discussion).

Potential markets for HPwES:

- Some markets are eliminated for the program based on these markets not being in sponsor territory.
- Point for consideration: program reaches a number of 68 million, with the ability to cover just 28 million.

Growth Strategy:

- Deliver program consistently.
- Provide resources.
- Recruit new sponsors.
- Expand opportunities for stakeholder participation.
- Reduce number cost to allow for more sponsor participation

4 areas to grow & expand HPwES footprint:

- Delivery method strategy—DOE is looking to support a variety of methods for improved home performance.
- Labeling (to gain a wide recognition, such as the energy star logo).
- Demonstrating value through data and quality assurance.

Caroline steps in to speak about the progression of HPwES since the DOE picked up the program. Version 1.0 of the program had inconsistencies, and the DOE is looking

to clarify the process.

Version 1.5:

- Full online guide (100 pages of information, approaches, etc. with 3 pages of check-listed sponsor requirements).
- Sponsors will have a year to meet new requirements

Some new items in the sponsor guide:

- Logo must be used on all consumer facing materials.
- Clarity on required qualifications.
- Compliance with local building codes, permits, and equipment specs.
- Installation must be completed by qualified workers
- Visual verification of testing

Complete is information available on the *Energystar.gov/hpwes_sponsors* website.

ACI Meetings and Conferences will be in Detroit this April.

Question by Mike Ambrosio: What kinds of things are you thinking of in order to grow the program, but within incentive budget?

Answer by Ely Jacobsohn: One approach can be to diversify market—in other words, have the dominant players become supportive players (example: certain utilities should act as supportive entities, rather than having one utility dominate the market).

Ely Jacobsohn also mentions changing the structure of rebates to make programs more appealing (altering messaging, re-framing "rebates" as "payments").

EPA Presentation: Casey Murphy

Energy Star Verified HVAC Installation

Casey Murphy stated there is growing recognition that most people in HVAC industry ignore quality installation, which results in less energy efficient systems. When there is a high demand of HVAC installation, with poor quality installation, the result is inconsistent energy savings.

Current Energy Star Quality Installation Program:

• Requires sponsorship and does not mandate quality installation.

Limited adoption due to:

• High administrative cost (for contractor recruiting and training) and significant differences in how units operate, depending on contractor methods of installation.

Quality installation (QI) issues:

- Homeowners assume QI is inherent to a unit change-out.
- Homeowners are sensitive to costs (meaning: if there is a higher cost associated with QI, homeowners are more likely to choose a lower cost installation without QI promised).
- High efficiency equipment only as good as its method of installation.

How to address these issues:

- Design a platform where energy programs aren't bearing full cost of infrastructure development.
- Homeowners can be made to understand QI.
- Contractors can make business decisions that include QI investments

Question: What is under the umbrella of QI?

Answer: Proper sizing, airflow testing, sealing ducts, etc.—all verified by third party.

Casey Murphy introduces Energy Star Verification Installation program (ESVI), as well as third-party QI organizations (like H-QUITO) as solutions.

ESVI program structure:

- EPA reviews/approves H-QUITO application, as well as a third party verification energy star sticker, and energy star HVAC QI certificate.
- Contractors can partner with Energy Star to be labeled on the website and searched for by anyone specifically seeking an Energy Star certified contractor.
- The goal is to build trust (with both clients and homeowners), sell value-based services, and create more leads.

Tie-in with EE programs:

- Easier recruitment.
- Increased confidence of cost and energy savings.
- Less administrative burden.
- More focus on marketing.
- Better potential for market transformation.
- Consistent delivery.

Tie-in with HPwES:

- Streamlined offerings.
- Generation of leads.
- Different business models for customers at different stages in the buying and installation process.

Complete information available on the following websites:

Energystar.gov/hvacVI

Energystar.gov/index.cfm?c=hvac_install.hvac_install_program_development hvacVI@energystar.gov

Mike Ambrosio: What types of things are you looking at when you say "proper installation" on the A/C side?

Casey Murphy: Examples are air duct sealing and proper sizing during installation.

Question: What's the interest in the marketplace for organizations to become involved in H-QUITO?

Casey Murphy: Organizations on the home performance side are interested, but concerned over volume of potential business.

Final note: H-QUITO would not necessarily do the verification work, but extend the

verification work to non-profit providers.

Other Business, Next Meeting

April 8th – next meeting day

Name	Company	In Person	By Phone
Ackerman, Elizabeth	BPU	X	
Adams, Ben	MaGrann Assoc.	X	
Ambrosio, Mike	AEG	X	
Anekstein, David	Goodman Manufacturing		Х
Athawale, Rasika	Rutgers		Х
Bowen, Mark	Franklin Synergy		Х
Burke, Kevin	Honeywell	X	
Carpenter, Joseph	NJ DEP	X	
Colander, Brandi	Opower	X	
DeLuca, Brian	TRC	X	
DeSeve, Julie	CSG		X
Desimpel, Tom	CMC ENERGY SERVICES	X	
Donohue, John	Fuel Merchants Assoc		X
Ellman, Susan	NJNG	X	
Fahey, Bud	Optimal Energy	X	
Fisk, Andrew	CSG	X	
Gennello, Joe	Honeywell	X	
Georgi, Anthony	HUS	X	
Giblin, Billy	Nexant, Inc.		X
Grossman, Bruce	SJG	X	
Heise, Dani	Techniart – Energy Saving Outlet		Х

Hendricks, Mahogany	BPU	Х	
Hutchinson, Ed	Hutchinson Mech. Services		Х
Jones, Sherri	BPU	X	
Lesch, John	Eneractive Solutions		Х
Liaukus, Christine	TICN		Х
Lupse, Janja	CSG	X	
Marx, Rick	EAM Assoc.		Х
McIntosh, Carolyn	BPU		Х
Miller, Ashley	TRC		Х
Muench, Amanda	TRC	X	
Murdoch, Jay	Owens Corning		Х
Napoleon, Alice	Synapse Energy Economics Representing Rate Counsel		Х
Paine, Karen	TRC		Х
Palmer, Bill	Kamson Corp	X	
Pecora, Tom	Honeywell	X	
Perracchio, Anne-Marie	NJNG	X	
Pollack, Avi	Energy Analysis Group		Х
Rozanova, Valentina	TRC		Х
Ryan, Jerry	NJNG	X	
Schmidt, Ed	MCR		Х
Schwartz, Stephen	Lime Energy	X	
Sherako, Jill	Eastern Heating and Cooling Council	X	
Sparrow-Hood, Walt	PSE&G		
Sparrow-Hood, Walt	PSE&G	X	
Stanish, Jeff	Opower		Х
Steele, Allison	Encentiv Energy		X
Swift, Don	CSG	X	

Tantillo, Cheryl	Elizabethtown	X	
Teng, Elizabeth	BPU	X	
Vieiva, Mario	New Millennium Lighting	x	
Wetzel, Linda	AEG	X	
Wong, Doug	BC Express Inc		Х
Zoppa, Bob	CSG		Х
Zukas, Diane	TRC		Х