

New Jersey's Clean Energy Program
Energy Efficiency Committee Meeting
Tuesday, June 16, 2009
Hosted by Honeywell - CSG/Iselin

Attendees: Dave Holland (Honeywell), Scott Sillars (Isles Inc.), David Wolk (Honeywell), Roger Kliemisch (TRC), Karen Paine (TRC), Jeremy Kirsch (Positive Energy), Patrick Stanton (Positive Energy), Kyle Haddock (EIC/Comfort Home), Jeffrey Miller (Quadrillion RE), Mike Winka (NJBP), Mike Ambrosio (AEG), Joe Gennello (Honeywell), Mark McGrann (McGrann Assoc), Mary Sheehy (NJHMFA), Tamaria Green (NJHMFA), David Hill (VEK), Brian Bovio (Bovio Heating), Ronald Bovio (Bovio Heating), Julie deSeve (CSG), Ray Evangelista (411 Energy Services), Jono Donahue (Fuel Merchants), George Kraemer (US Energy Renovations), Kristin DelPino (CSG), Owen Hyland (Donnelly Energy Solutions), Steven DeFranco (Johnson Controls), Brian Dolan (Intellidyne), Ed Schwartz (Green Living Solutions), Norman Gibbs (Energy Smarts NJ), Scott Schoen (Beehive HTG), Jill Sherako (EH&CC), Deane Evans (NJIT), Yennairra Ortiz (Honeywell), Rachael Fredericks (PSE&G), Elaine Bryant (PSE&G), Maren Haus (RCGB)

By phone: Tom Donadio (JCP&L), Chelsea Albucher (City of Newark, NJ), Ruben S. Brown (The E Cubed Company), Joseph Carlamere (TRC), Raymond Evangelista (411energyservices.com), Will Lawes (Lawes Home Comfort Specialists), Michael Perri (A.J. Perri), David C. Pirtle (Pepco), Stephen Fichter (Fichter Construction), Max Chang (Synapse Energy Economics, Inc. on behalf of Rate Counsel), Clif Payne (CMC Energy), Jaci Trzaska (Rutgers University – CEEEP)

Program Coordinator and Regulatory Updates

Presenters: (Mike Winka and Mike Ambrosio)

- Updates on Filings, Board Orders and Regulatory Items
 - Last Monday the Board approved revision to the 2009 programs and budgets.
 - Most significant changes were to the Home Performance Program.
 - Holding meetings with HMFA and utilities to coordinate all efforts and details.
- State Economic Stimulus Plans
 - Board did not act on the utility filings last Monday
 - Staff is working with utilities trying to negotiate a settlement and hopefully will be presented to board on July 1.
- Market Manager/Utility Coordination
 - Asking for contract extension for Market Managers
- Federal Stimulus Funding (just for energy efficiency programs not solar).
 - There are other programs proposed for the federal funding.
 - Clean energy program is currently only for customer that contribute into the fund.
 - Some \$ going to HMFA

- Once new programs are up and running it will be seem-less as to who is paying for the incentives.
- Municipalities or deliverable fuel customers that do not contribute to the program will be able to participate using Federal Stimulus dollars.
- Treasury is keeping the budget for Federal Stimulus dollars separate from Clean Energy dollars.
- Should be getting approval for the programs around July 12.
- Board has been running updates meetings for municipalities.
- 500 municipalities will be given a form to that will direct them to apply so that they can double their incentives through the Clean Energy Program.

2010 Draft Budget presented by Mike Ambrosio

Rutgers Center for Green Buildings (Jen Senick)

Contract with State of NJ to write a Green Buildings manual.

- Collecting best business guidelines.
- Component of any green building manual is piloting it with actual programs on the ground.

NJGBM Project Tasks

- Develop NJ Green Building Manual
- Develop implementation analysis and recommendations
- Develop an on-going input and feedback systems of Technical Advisors and User Groups

Green Building Manual Development

Impact Areas:

- Sustainable Site Planning
- Safeguarding Water & Water Efficiency
- Energy efficiency and renewable energy
- Conservation of materials and resources
- Indoor environmental quality

Methodology:

- “Eco-Efficiency”
- Cumulative Impacts

Technical Guidance & Resources:

- Case Studies
- Calculation Tools
- Illustrations/Diagrams

Administration:

- Verification & Documentation

Ongoing Performance Evaluation:

- Evolution of Guidelines

Priorities & Organization

- **Green Residential Module:**
 - Evolve *NJ Green Home Remodeling Guidelines V 1.0* to next level

- Establish performance levels and bundled strategies by project type (e.g., kitchen & bath, finished basement, major addition)
- Calibrate against case studies in Guidelines
- Develop New Home Construction Guidelines based on Climate Choice Pilot
- **Green Commercial Module:**
 - Develop guidance for existing buildings
 - Establish performance targets and recommend bundled strategies by project type (e.g., roof replacement, site improvements, lighting upgrades, controls, energy systems)
 - Utilize case studies to illustrate different approaches for different building types (e.g., warehouses, office space, retail space)
 - Develop guidance for new commercial construction

Proposed Pilot

- Existing commercial building retrofits/remodels
- New commercial building construction
- Existing residential retrofits/remodels (NJ Green Remodeling Guidelines – June 2009)

Proposed Pilot – Tasks & Timeline

1. Recruit Pilot Project participants and host Focus Groups
2. Conduct kick-off interviews
3. Collect building performance data and conduct post-occupancy survey work
4. Analyze Building Performance Data and Perform Life Cycle Costing Analysis
5. Refine Performance Metrics and Recommended Strategies
6. Develop Case Studies and Demonstration Projects

Positive Energy, Jeremy Kirsch: (Jeremy@positiveenergyusa.com)

Introducing Positive Energy

- Innovative Home Energy reporting platform is deployed with 15 utilities across the country
 - Reach customers through paper reports, online and in the customer service center: multi-channel
 - Partner with utilities to drive residential energy efficiency
 - Gas, Electricity, dual-fuel
 - The platform is driven by a combination of software, behavioral science, and data-driven marketing

Across the country industry leaders are telling us the same thing—now is the time to move beyond infrastructure and engage the customer.

Here's why:

1. **Customers are biggest untapped EE resource**
 - Behavior change in measurable and verifiable
 - 32 billion kWh available today at cost of 3¢ / kWh saved
 - Cost of 50¢/ Therm saved
2. **Realize the promise of the Smart grid**

- Give customers real visibility into their usage
 - Sophisticated analytics to identify savings opportunities
 - Peak demand reductions without time of use pricing tariffs or in-home displays
3. **Strategic Imperative**
- Revolutionize the user experience
 - Strengthen and broaden the services you provide to your community

Behavior science: power of social norms is real (\$\$\$, Environment, Citizenship, Neighbors)

“Turn off AC & Turn on Fan” study performed in California

Cost-effective residential energy savings

- Hundreds of thousands of customers are proving that behavior changes real, sustainable, and a critical part of a utility portfolio
- Highly impactful, highly cost-effective residential efficiency program

Rigorous Measurement

- Test vs control methodology is implemented to isolate impact of the reports
 - *kWh savings from behavior change*
 - **Increased participation** in marketed efficiency programs
 - **Peak demand** reduction
 - Customer education & **satisfaction**

Typical High-level Program Structure

- Positive Energy’s Program is one which can accelerate the residential EE program efforts of both the NJ utilities and NJ OCE
 - Service Territories Analyses
 - Usage + 3rd-party data analysis
 - Offline Reporting
 - Normative Analysis
 - Utility programs
 - OCE programs
 - Online Tools
 - Capture active users
 - AMI-ready
 - M & V analysis & reporting

Why utilities are working with Positive Energy

- **They are an industry leading company**
 - 40 person team (and growing) with world-class partners
 - Rapidly expanding our already proven platform with \$5M+ in R&D in 2009
 - 15 utility partners; we’re already serving 500K+ residential customers
- **Together with their utility partners we are learning from millions of data points nationwide.**

- On track to provide reports to 1.5 Million homes by end of 2009
- Proprietary analytics and algorithms continuously improve with scale

Commercial/Industrial Programs

Presenter: TRC Team

Update on Current Commercial/Industrial Programs

Existing Programs

Results through May 2009 presented

New Construction

Schools

Existing Construction

P4P (received 16 applications, approved 14)

Direct Install (completed request for qualification, firms selected)

To hit street beginning of July

LGEA (receiving completed audits for review)

Budget Breakdown Presented

Funding Recommendations

- Increase Direct Install, LGEAP, TEACH and Pay for Performance budgets
- Increase Sector Specific budget
 - Add more Sectors – datacenters, chain accounts, technology specific
 - Expand technical offerings
- Maintain Schools, New Construction, and Retrofit budgets

Existing Programs – Policy Enhancements

- Increase BPU approval level to \$250K (per meter)
 - Reflects changes in make-up of Programs (P4P, LGEAP)
 - Consistent with prior approach when cap was \$200K, Board approved items > \$100K
 - Speeds up process (currently, projects can't start until they are preapproved at three levels...MM, PC and BPU)
- Propose guidelines related to handling (single-metered) campus-type clients, for example:
 - Need to benchmark building
 - Develop multi-year plan for addressing installation
 - Develop specific M&V for campuses
- LGEAP – Change procedures to allow ability to assign payment direct to audit firm
- Offer LGEA audit-type service to not-for-profits
- TEACH - Increase quantity of kits to 1 per school
 - For schools that participated in TEACH, and have installed efficiency measures within the following 12 months, provide a post installation benchmark with recognition for improvements.
- Allow multiple measure bonus for lighting and lighting controls

- Drives customers to look at both simultaneously, more savings/bldg
- Increase multiple measures bonus to 15%
- Direct Install – Financing options?
 - Something to make it easier on the back end to off-set out of pocket expenses.

New Programs

- Commercial Audit Program – reimburse 50% for audit cost and if owner moves ahead with improvements within 6 months, reimburse balance
 - Audits performed by Partner Network
- Retro-commissioning – test systems, make recommendations for improvements
- Clean and Tune HVAC Maintenance Program
 - Identifies old equipment through this service
 - Provide incentives to purchase existing old HVAC equipment if new equipment meets specific thresholds
 - Drive proactive change-outs to higher efficiency equipment
 - Tie in existing utility demand response program (where applicable)
 - Delivered through contractor network

Newer Technologies

- Propose prescriptive level incentives for the following technologies:
 - LED Lighting
 - LED street lighting / outdoor lighting (pilot program)
 - Refrigerator case LEDs
 - ECM motors (fractional under 1HP)
 - Electric injection molding machines
 - Occupancy thermostats (hotels, etc.)

Mike Ambrosio asked that TRC take a look at the current SmartStart program to see if the rebate levels should change. Program has been inexistence for years and rebate levels may not make the best sense.

Q: How are transformers and chilled water being looked at?

A: Under custom. TRC sees some but not a lot of requests for this.

Q: Anything on commercial side for customer that do not pay into the program?

A: As part of the AARA asking for \$ to be set aside for this.

LGEA

P4P

Direct Install

Q: What is anticipated for Direct Install for 2010?

A: Started discussions on this. Need to monitor participation and trends carefully.

Residential Programs

Presenter: Honeywell MM Team

Update on Current Residential Programs

Existing Programs

Results through May 2009 presented

Cool Advantage

155 completions

Warm Advantage

1322 completions

Washers program is strong

Dehumidifier program is strong (215 % of program goal)

CFL (now a year round program) nice start for 2009 161% of goal

New Construction (enrollments) currently trending ahead of goal

New Construction (completions) above target

Home Performance w/Energy Star Statewide results at 614 program audits to date 114% of goal

Home Performance w/Energy Star Completions on target

HVAC Program COOL Advantage QIV Pilot

- Quality Installation Verification
- Verification of Proper Charge and Air Flow for Increased Efficiency
- 2006 SEER Baseline increase to 13 SEER hits marketplace 2008
- Studies report units installed with improper charge and air flow
- QIV Kick Off June 2009
- New Installs (COOLAdvantage) and Existing Units

HVAC Program WARM Advantage SDHW Pilot

- Solar Domestic Hot Water Pilot
- Purchase and installation of solar domestic water heating systems
- For electric water heating customers
- SDHW Pilot Roll out Q3 2009
- \$1200 rebate

2009 Appliance Early Retirement Program

Refrigerators/Freezers Recycling

Program Goals

- Retire 20,000 old, inefficient refrigerators and freezers by December 31, 2009.
- Launch program in July 2009.
- Support a NJ infrastructure by creating local jobs
- Offer participants a \$30 rebate and hassle-free removal of all eligible, working refrigerators and freezers

Customer Eligibility

1. Customer must be a residential electric customer of one of the following NJ utilities: Atlantic City Electric, JCP&L, PSE&G, Rockland Electric and Electric
2. Customer of municipal electric utilities do not qualify
3. Appliance types include refrigerators and freezers
4. Maximum 2 units per customer per year
5. Valid for period from July 15, 2009 through December 31, 2009. Unit must be picked up within this time frame.
6. Refrigerator/Freezer size limited to 10 – 30 cu. ft.
7. Refrigerator/ must be operational at time of pick up
8. Refrigerator unit must be owned by customer
9. No age restriction
10. Refrigerator must have clear access path for removal

Vendor Selection

- RFP requesting proposals for Refrigerator/Freezer recycling services
- RFP sent to recognized organizations
- Two proposals received: JACO & ARCA
- JACO awarded recycling services

Vendor Selection Criteria

- Experienced high volume recycler of refrigerator/freezer units
- Comprehensive plan to begin collection of units in July
- Proven marketing plan to drive goal
- Supports a NJ infrastructure by creating local jobs
- Preference for a NJ recycling facility
- Quick start up - take advantage of summer peak collection periods
- Strong tracking/reporting capabilities
- Cost effective recycling services

Progress to Date

- JACO Award Letter – 6/3/09
- Complete agreements/T&C – 6/11/09
- Draft marketing materials – 6/12/09
- Review with marketing team - 6/17/09
- Secure recycling facility – 6/30/09
- Begin unit collection – Mid July

2010 Residential Programs, High Level Overview

Purpose of Plan

- Combines high level plan with program details
- Plan elements same as 2009 Compliance filing
 - Program designs
 - Budgets
 - Marketing plan

- Goals
- Program changes will be “evolutionary, not revolutionary”
- How to:
 - include plan for transition to utilities
 - incorporate E3 and Fed Stim Programs

Draft Timeline for Honeywell Filing

- | | |
|-------------------------------------|--------------|
| • EE committee introduction | June 16 |
| • Program suggestions to HW: | June 23 |
| • High-level budget confirmed | Late June |
| • Plan overview to OCE staff: | July 7 |
| • Plan overview to EE committee: | July 14 |
| • Plan overview to CEC: | July 31 |
| • Complete draft plan to OCE staff: | August 13 |
| • Final Overview to EE Committee | August |
| • Last Edits | Early Sept |
| • Complete final plan filed w/BPU: | September 24 |

Res EE Programs Overview

- HPwES
 - Significant participant increase
 - Strengthen/Open Contractor Training and Support
 - Explore alternative/segmented program models
- RNC
 - Complete transition to open rater market
 - Continue tiered approach with focus on Tier 3
- HVAC
 - Implement results of QIV pilot
 - Evaluate Solar H2O program and incentives
 - Explore transition to Whole House
- Products
 - Pursue consumer electronics/set top box options
 - Continue/expand GNJRT activities
- Community Partners
 - Further develop Sustainable Jersey partnership
 - Pursue in-depth community partnerships
 -

Cross-Program Issues

- Enhance scope of marketing function
 - Increase ability to take advantage of PR opportunities
- Develop community partners capabilities
- Continue focus on cross-program integration
 - Between residential programs
 - Between res efficiency and C&I efficiency
 - Between res efficiency and renewables

Transition to Utility Administration

- Objectives
 - Avoid disruption to established program relationships,
 - Support establishment of statewide entities for the delivery of coordinated EE and RE programs
 - Define roles for market managers under new arrangement,
 - Help to define opportunities for utilities to personalize statewide programs, without individualizing them.

Q: For customers that do not pay into the program through their utility will they be able to participate?

A: Have to pay into the fund to receive benefits from the fund.

Next Meeting:

Tuesday, July 14 at 9:45 a.m. (subject to change)