

**New Jersey's Clean Energy Program
Energy Efficiency Committee Meeting
Thursday, February 19, 2009
Hosted by TRC at CSG/Iselin**

In Person:

Frank Reilly (TRC)	Linda Wetzel (AEG)	David Wolk (Honeywell)
Roger Kliemisch (TRC)	Mike Ambrosio (AEG)	Dawn Chaplin (Honeywell)
Karen Paine (TRC)	Ben Adams (McGrann)	Scott Sillars (Isles Inc.)
Mary Sheehy (NJHMFA)	S Lynn Sutcliffe (Energy Solve)	Paul Madden (SJG)
Deane Evans (NJIT)	Chris Bitters (Energy Solve)	Jamal Garner (NJ BPU),
Gabe Nathanson (NJHMFA)	Jonathan Cozens (Energy Solve)	Sharon Wolfe (NJ BPU)
Rachael P Fredericks	Sam Leone (Conifer Realty)	
Arthur Pearson (The E Cubed Company)		

Via Phone:

Greg Coleman (TRC)	Cliff Payne (CMC)	Elaine Bryant (PSE&G)
Diane Zukas (TRC)	Jeremy Kirsch (Positive Energy)	Anne-Marie Peracchio (NJNG)
Dave Nichols (Rate Counsel)	Rick Marx (EAM)	Dave Klockner
Fred Hauber (EES)	Chris Granda (VEIC)	Frank K (?)
Sherri Jones (NJ BPU)	Robert (?)	

Program Coordinator and Regulatory Updates

Presenter: Mike Ambrosio

1. **Recent Filings, Board Orders and Regulatory Updates:**
 - a. Four utilities have filed energy conservation packages (PSE&G, SJG, NJNG and ETG). The other utilities are forthcoming (these filings are available on the NJ BPU website).
 - These programs are to compliment the current programs not to compete.
 - A schedule will be set to review these and to process quickly so programs can hit the street quickly.
 - b. The 2009 budget has been signed
 - Some of the new programs are in the process and some have kicked off already.
 - TRC contract mods are still pending.
 - Working towards kicking off direct install for March.
 - Honeywell working with board staff to announce all program changes and start dates.
2. **State Economic Stimulus:**

- a. Meeting held 2/18/09.
 - Board Staff expectation is about \$30 million. Followed by \$60 million once the 1st \$30 million has been spent.
 - Looking for shovel ready projects.
 - Staff proposed they are going to put out significantly enhanced incentives for renewable energy.
3. **Market Manager/Utility Coordination Sessions/Plans:**
4. **Federal Stimulus Funding:**
5. **Bill 1185 Status/Planning:**
 - a. No information available.
6. **Sustainable Jersey Coordination:**
 - a. Develop and promote a certification program for municipalities that want to go green, control costs and save money, and take steps to sustain their quality of life over the long term.
 - b. Honeywell and TRC are coordinating with the League of Municipalities to come up with tiered incentives.
 - c. It is a scoring system that is applied to communities to earn points for energy efficiency activities.
 - d. If a municipality brings residents to participate in programs they can earn points.
 - e. For more information see <http://www.sustainablejersey.com/>.

Other Items:

- Conversation needs to happen over the next few weeks on ideas on what can be done to ramp these programs up quickly to spend the money. Everyone needs to look at how the money can be spent. Discussion needed on new & different programs from the OCE programs. It was mentioned having a larger incentive for lighting controls.
- Tax clearance certificate few may present issues for C/I program
 - New \$75 fee.
 - Is it possible that program can pay for fee?
 - How can we prepare for this?
 - Federal & State Government strongly support energy efficiency but this is another obstacle for C/I customers.

Solar Hot Water Project

Presenter: Sam Leone from Conifer Realty, LLC

Who is Confier?

- Developer, Owner, and Manager of quality affordable rental communities
- Ranked among the largest affordable rental housing developers in the Country and State.
- Almost 2000 apartments in NJ and 10,000 nationally

Linden Lake

- 82 Rental Units; Senior Apartments; Redevelopment Project; Infill Housing; Green Building; Solar PV & Solar Hot Water System

Linden Lake Apartments/Conifer's Solar Hot Water Case Study

- Solar Hot Water System Piping; All plumbing insulated and well labeled; Solar hot water storage tanks; High efficiency boilers assisted/replaced by solar hot water system

Cost of Solar Hot Water

- | | |
|-------------------------------------|-----------------|
| • Original proposal amount - | \$ 89,000 |
| • Additional roofing considerations | \$ 3,000 |
| • Water/Ice Shield | \$ 1,500 |
| • Hot/Cold Water Mixing Valve- | \$ 15,000 |
| • MEP/Architect Review | <u>\$ 3,000</u> |
| • Total Installation Cost | \$115,000 |

What is the Hot Water For?

- 70 One Bedroom, One Bath Apartments; 12 Two Bedroom, One Bath Apartments
- Common Area Laundry with 8 Commercial Washers
- All Other Common Area Hot Water Uses
 - Salon; Public Restrooms; Community Room Kitchen Area

What is in the system?

- Solar Hot Water Roof Panels
 - 16 Heliodyne 4foot x 10foot panels - Total of 640 sq feet of roof space
- Circulators to cycle glycol through panels and hot water storage tanks
- Storage tanks – two 400 gallon tanks in addition to two existing planned 400 gallon tanks for common hot water
- Mixing valve between solar storage tanks and main common hot water tanks to keep temperature stable.
- System is generally maintenance free.

Benefits of Solar Hot Water

- Environmental Impact
 - Reduced greenhouse gas emissions

- Reduced non-renewable energy dependence
- Reduced Operating Costs
 - Natural gas expenses drastically reduced
 - Average summer/fall gas bills \$200-\$400! (About 1/4th comparable non-solar property)
 - Annual gas bill estimated at \$13,000-\$15,000 – includes common area heating
 - Annual gas bill at comparable sized non-solar and **less energy efficient** building is \$30,000-40,000

Tenant Paid versus Common Hot Water

- Common Hot Water systems make sense if many apartments in one building.
- HMFA Published Utility Allowances for Tenant Paid Hot Water
 - 2008 Allowances would have been \$21,384
 - That is more than our total gas expense for entire year!
- It is generally more efficient to provide common hot water with solar hot water assist for most buildings of this type.

Current Incentives

- Federal Renewable Energy Tax Credit
 - 30% Tax Credit & also eligible for accelerated depreciation

Why Are Additional Incentives Needed?

- Competitive Structure of LIHTC Financing
 - Limited Access to “Soft” Money
 - TIEBREAKER
- Uncertain Economic Climate
 - Developers looking to cut upfront costs as much as possible – even if it means less revenue later on.
 - Most additional funding, if any, will be directed towards items that ensure project is attractive and leasable.
- Federal Renewable Tax Credit not always of use
 - Typical Low Income Housing Tax Credit (LIHTC) projects structured with 99% General Partner (Investor)
 - Need to structure deal up front for investor consideration of Federal Renewable Energy Tax Credit
 - This makes it difficult for LIHTC projects to add solar or other renewable once construction has started.
- Not all projects created equally for Solar Hot Water

- Linden Lake was a perfect project to try Solar Hot Water – prime site orientation, large roof area, large supply of hot water needed within one building, and adequate funding to implement out of contingency reserves.
- Many sites pose a greater challenge for evaluating the cost effectiveness of Solar Hot Water implementation.

Update on Residential Programs

Presenters: Dave Wolk, Chris Granda

Residential New Construction Program

- Three tiers, including “micro load” homes
 - Approved by BPU
- ENERGY STAR “Climate Choice” Homes
 - BOP for tier attainment
- Program change letter issued to builders
 - Roll-out meetings scheduled
 - Still on target to open rater network by 4th quarter the latest

Residential HVAC Program

- Contractor letter mailed
 - 2009 program changes in effect 4/1/09
- Quality Installation Verification (QIV)
 - Pilot design drafted, under review
 - Preparatory activities begin in March
- Solar Domestic Hot Water measure
 - Program component and implementation plan outlined
 - Incentives available in Q2

Efficient Products

- 2009 GNJRT Activities
 - \$12.6 mil proposed
 - \$4.4 mil approved
- 2009 GNJRT Partners
 - Porch light – neighborhood CFL distribution
 - Green Market Fundraising – elementary school fundraisers
 - Techniart – work place energy fairs
 - Help Light – high school students help low-income and elderly
 - Green faith – houses of worship, religious schools
 - EFI - web retail
 - Double D – mall retail kiosks

- CFL Markdowns
 - Proposals received for \$20 mil and 10.5 mil CFLs and fixtures (99% CFLs)
 - Accepted \$7.1 mil and 5.7 mil CFLs and fixtures
 - \$1.25 incentives/unit
- Phased implementation in 2009
 - Phase 1: now through August
 - Phase 2: August through end of year.

Home Performance with Energy Star

- Transition plan to new program design in review
- Program plan included seed fund to allow timely payment of Tier 2 air sealing services
 - Seed fund not viable
 - RFI for air sealing services released
 - Multiple valid responses received
 - 2009 HPwES will proceed without seed fund
- Early-mid March transition to new program design
- Opportunities for utility coordination

Community Partners

- Integrate with NJ League of Municipalities Sustainable Jersey Initiative
 - Communities earn points for sustainable actions
 - Communities earn NJCEP incentives for either participating in programs or bring residents to programs
- Coordinate with GNJRT activities
 - GNJRT targeted to Sustainable Jersey communities
 - Community support for GNJRT activities earns incentives and points

R&D

- Possible R&D projects (so far):
 - QIV augment
 - Climate Choice home monitoring
 - Warm Advantage QIV

Update on Commercial/Industrial Programs

Presenter: Roger Kliemisch, Frank Reilly

2009 SmartStart Program Changes

- Per customer threshold increased to \$500k from \$200k (as of 01/07/09 Budget Order)
- Combined Heat and Power (CHP) now integrated within Pay for Performance
- New Application Forms on web-site and in use

2009 C&I Programs

- Retrofit
- Schools
- Local Government Energy Audit Program
- TEACH
- Direct Install
- Pay for Performance (with or w/o CHP)
- New Construction (with P4P component)

Local Government Energy Audit

- 246 entities have inquired about program
- 186 have submitted initial Application Form
- 28 entities have bids and approval to start audits
 - 159 facilities approved
 - 6,619,621 square feet of space to be audited
- \$992,314 committed for these entities
- \$233,100 for other entities with proposals under review

Pay for Performance

- February 3rd, initial e-mail to potential Partners and information posted on NJ Clean Energy web-site
 - Partnership Agreement posted the same day
- February 5th/9th – two debriefing calls on RFI
 - 44 firms participated
- Marketing brochure under final review
- February 18th – initial RFI responses due

Next Actions

- Technical Evaluation Panel (TEP) to qualify respondents from first flight February 25th
- March 17th - Orientation and training of Partners
- March 18th – Applications accepted

Direct Install

- Latest version of program description and procedures completed
- Draft contractor RFP drafted and ready for review
- Full range of measures for both electric and natural gas identified
- Participating contractors selected (April) and program services delivered (May)

TEACH

Currently Enrolled Districts

- Lacey – 6 schools
 - Scheduled 1st Workshop 2/20/09 (Phase 2)
 - Buildings currently being energy benchmarked
- Metuchen – 4 schools
 - Scheduled 1st Workshop 2/23/09 (Phase 2)
 - Awaiting requested utility bills to begin benchmarking
- Bound Brook – 5 schools
 - Recruited (Phase 1) – Awaiting signed agreement

Date of next meeting

Tuesday, March 10