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November 17, 2010

Kristi Izzo
Secretary of the board
Board of Public Utilities
New Jersey
Two Gateway Center, Suite 801
Newark, NJ 07102

Re: 2011 New Jersey Clean Energy Program Budget and Programs
Docket No. EO07030203

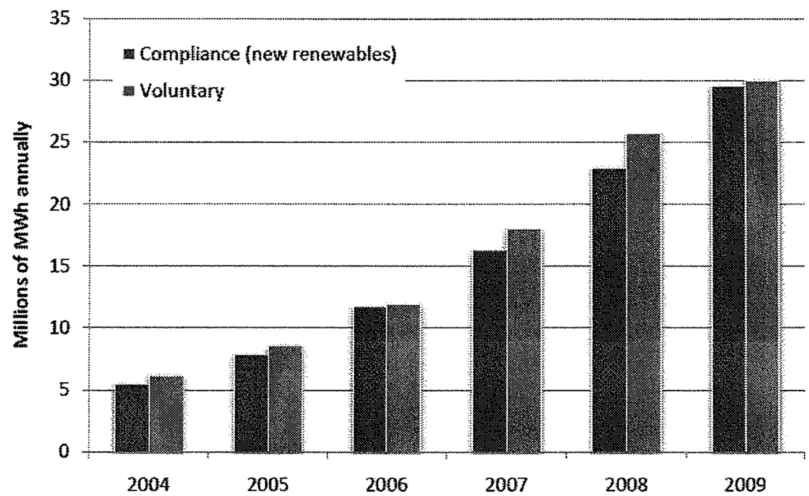
Dear Ms. Izzo:

3Degrees Group, Inc. is pleased to submit the following comments in response to the Staff's straw proposal for the 2011 New Jersey Clean Energy Program Budget and Program. 3Degrees is impressed with Staff willingness to explore creative options to support renewable energy cost effectively. We look forward to seeing final rules.

3Degrees offers comments today in support of the voluntary market for renewable energy in New Jersey. Currently, across the country today, many organizations, households, government agencies, farms, other businesses, and houses of worship voluntarily purchase "green power"—renewable electricity or renewable energy certificates (RECs). This is happening as part of the Clean Power Choice Program as well, though 3Degrees agrees that making changes to the program will attract more investment from private companies to educate consumers, drive voluntary participation in Clean Energy Choice, and ultimately support more local and regional renewable energy. Furthermore, 3Degrees believes that this can be done with most costs borne by utility marketing partners, thus limiting or eliminating expenses incurred by the New Jersey Clean Energy Program budget.

On the following page, you can see how important the voluntary market is to renewable energy development across the country:

Comparison of compliance and voluntary markets for renewable energy, 2004–2009[1]



The voluntary market has been an important driver of clean energy development across the United States, and in New Jersey. It's been responsible for millions of dollars in new investment. The voluntary market grew by 62% in 2004, 37% in 2005, 41% in 2006, and 53% in 2007. According to the National Renewable Energy Laboratory (NREL) voluntary demand for renewable energy exceeded the combined state renewable electricity standard requirements for new renewable generation from 2004 through 2009, as demonstrated by NREL data showing that voluntary purchases in 2009 totaled an estimated 30.0 million MWh and is expected to continue to be a significant source of demand for renewable energy moving forward.

3Degrees believes that programs like New Jersey Clean Energy Choice are a vital source of stable demand for renewable energy, and respectfully requests that the New Jersey Clean Power Choice Programs are continued in 2011 and beyond, including policy support that encourages targeted public and private investment to ensure their success. 3Degrees plans to submit separate comments regarding planning to transition Clean Energy Programs in 2011.

Thank you for your consideration of these comments.

Sincerely,

Adam Capage

Adam Capage
Vice President, Utility Partnerships
3Degrees

[1] Bird, Initials, & Sumner, Initials. U.S. Department of Energy, National Renewable Energy Laboratory. (2010). *Green Power Marketing in the United States: A Status Report (2009 Data)* (NREL/TP-6A20-49403). Golden, Colorado: Retrieved from http://apps3.eere.energy.gov/greenpower/pdfs/49403.pdf

November 15, 2010
Contact: jim.kapsis@opower.com

COMMENTS BY OPOWER, INC. TO THE DRAFT FY11 BUDGET FOR NEW JERSEY'S CLEAN ENERGY PROGRAM

OPOWER, Inc. ("OPOWER"), an energy efficiency company, respectfully submits the following comments to the New Jersey Board of Public Utilities ("BPU") on its draft 2011 budget. At the request of President Lee Solomon, OPOWER submits these comments as a follow up to its in-person testimony at the BPU on Wednesday, November 10, 2010.

Currently partnering with 43 utilities across 21 states, including seven of the ten largest U.S. utilities, OPOWER is using its behavior-based Home Energy Report program to help residential households reduce energy consumption by 1.5 and 3.5 percent annually. When deployed to 100,000 households over three years, OPOWER's program saves roughly 75 GWh of energy – significantly more than other efficiency measures. At a cost of 3 – 5 cents/kWh, it also among the most cost effective programs in the market

Following are: A) Two recommendations respectfully submitted for BPU's consideration; B) A discussion of potential energy and dollar savings in NJ from behavior-based programs; C) Supporting information on behavior-based programs.

A) Recommendations

Recommendation #1 for BPU Consideration: ***Include Behavior-Based Programming***

OPOWER requests that language be included in the FY11 budget that would permit funds, including but not limited to the $30 million competitive grant program, to be spent on behavior-based energy efficiency programs. Furthermore, we request that utilities and their agents be explicitly permitted to apply for such funds jointly. This permission is necessary because behavior-based programs require access to consumer energy usage data, which are controlled by the utilities. The Office of Clean Energy does not have access to this information and, therefore, could not establish a behavior-based energy efficiency program without both utility and agent participation.

Recommendation #2 for BPU Consideration: ***Develop NJ Technical Resources Manual***

To encourage transparent, verifiable energy savings, BPU should develop a comprehensive set of guidelines for measuring the impact of energy efficiency programs, also known as a Technical Resources Manual (TRM). A TRM defines the proper method for calculating savings for specific measures across the residential, commercial, and industrial sectors. A New Jersey TRM would provide the BPU and NJ taxpayers with clearer insight into how estimates of energy savings are generated. Regulators in states with Technical Resources Manuals, including **Pennsylvania, Vermont, and Massachusetts**, are more confident than those without them that the efficiency savings claimed by their utilities are real and verified.

Measures typically fall into two broad categories:

- *Asset-based (installed measures)*: algorithms are assigned for each individual measure in order to calculate deemed savings values. Examples of asset-based programs include CFL light bulbs, energy efficient appliances, and electric motors.

- *Non-Asset based (non-installed measures):* for programs where a deemed savings approach is insufficient or not feasible, the TRM establishes protocols for how to measure program setup and net impact. Examples of non-asset based programs include behavior-based programs, home energy audits, and large-scale plant expansions.

A TRM not only provides clarity in measuring and reporting savings, but also regulatory certainty for all stakeholders. In short, a TRM ensures that ratepayer money is being spent to generate cost-effective savings that provide net economic benefits to ratepayers.

B) Potential Energy and Monetary Savings For NJ Households

Behavior-based programs would deliver *significant, immediate, and cost-effective* savings to ratepayers across New Jersey. Provided below is an illustrative chart which outlines the estimated impact of behavior-based programs for the state of New Jersey when run in several different scenarios (e.g. electric only, gas only, and dual-fuel). These scenarios highlight how New Jersey ratepayers would benefit in terms of number of jobs created[1], amount of energy and money saved per household. As the chart indicates, a behavior-based program like OPOWER's could save each New Jersey household included an average of about $30 to $40 a year. Thus, for about a $10 investment by the state, behavior-based programs can put 3-4 times that amount back in the pockets of New Jersey ratepayers. Unlike other efficiency measures, which amortize their savings over a lifetime, behavior-based programs have a one-year payback period.

[1] Job creation estimates are based on studies from the American Council for an Energy Efficient Economy and the Political Economy Research Institute.

November 15, 2010
Contact: jim.kapsis@opower.com

Electric Program

	100,000 households	500,000 households	1,000,000 households
TRC (range)	3.0-3.4	1.7-2.1	1.1-1.5
GWh saved statewide	28.19	76.83	95.10
Statewide $$ savings	$3,665,090	$9,988,420	$12,467,000
Individual $$ savings	$10-40	$10-40	$10-40
New Jersey Jobs Created	38	96	128

Gas Program

	100,000 households	500,000 households	1,000,000 households
TRC (range)	2.0-2.3	1.4-1.6	1.1-1.3
therms saved statewide	1,951,206	6,239,268	9,763,365
Statewide $$ savings	$2,536,568	$8,111,048	$12,731,375
Individual $$ savings	$10-30	$10-30	$10-30
New Jersey Jobs Created	33	107	168

Combined Electric/Gas Program

	100,000 households	500,000 households	1,000,000 households
TRC (range)	2.5-2.7	1.5-1.8	1.1-1.4
therms saved statewide	950,603	3,000,634	4,481,682
GWh saved statewide	12.38	36.41	43.22
Statewide $$ savings	$3,196,856	$10,985,519	$18,099,468
Individual $$ savings	$12-35	$12-35	$12-35
New Jersey Jobs Created	35	118	189

Important to note is that these estimates are only over one year. Over time, the impact of behavior-based programs is expected to increase.

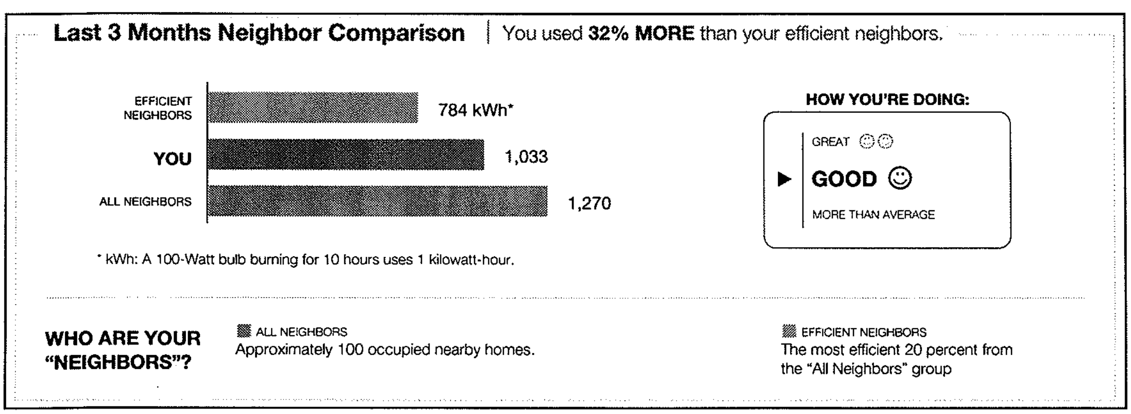
C) SUPPORTING INFORMATION ON BEHAVIOR-BASED PROGRAMS

I. Behavior-based messaging creates measureable energy savings.

Behavior is the single largest untapped efficiency resource. The reason is straightforward – behavior impacts almost every facet of energy use in the home or business.[2] For example, the value of an energy star washing machine is reduced if the consumer views the "Energy Star" label as a license to use the hot cycle. Furthermore, adjusting behavior is often the only way for renters to realize meaningful energy savings, for example by remembering to turn off the television when they leave a room or lowering the thermostat when they leave for work. By providing tailored information to each individual household, behavior-based programs, like OPOWER's, motivate large numbers of customers across all demographics to take actions that result in measurable, large-scale energy savings.

OPOWER's approach to energy efficiency is organized around two concepts – motivating behavior change, and providing relevant, targeted information to the motivated consumer. Relying on utility supplied data, OPOWER's program translates individual usage patterns into meaningful insights coupled with targeted action steps.

OPOWER's Home Energy Reports provide recipients with a context for understanding their energy use. OPOWER does this by dynamically creating a 100-home comparison group for each house that only compares homes of similar square footage. Home comparison groups are further defined by a number of customizable variables, including proximity (e.g., within 0.25 miles) and census and climate data. Years of behavioral science research have demonstrated that peer based comparisons is a highly motivating way to present information. A sample neighbor comparison module is shown below.



[2] McKinsey and Company. *Unlocking Energy Efficiency in the US Economy*. Page 22

Second, customers receive individually targeted savings tips based on their energy usage patterns, housing characteristics, and demographics. Instead of presenting customers with a thick booklet of ideas on how to save energy, OPOWER presents customers with only several of the most relevant and immediately actionable suggestions on how to save. For example, OPOWER would not suggest that a renter insulate his apartment, but might recommend smart thermostats to owner-occupied homes with high heating bills.

Key Facts about behavior-based programs:

Cost-Effective: Behavior-based efficiency changes are generated cost effectively – on average, OPOWER's program costs $.03/kWh saved. This means that by including Home Energy Reporting in its energy efficiency portfolio, New Jersey utilities can generate significant, large-scale energy savings at very low cost.

Broad Participation Rate and Equal Savings Across Demographics: OPOWER uses an "opt out" program design with an emphasis on mailed reporting. Mailed reports enable New Jersey's utilities to engage the majority of targeted customers and enable the delivery of large-scale energy savings. By using mail, behavior-based messaging reaches all demographic groups, including low income and elderly populations. This means that utilities could engage as much as 85% of participants - far more than other efficiency measures.[3] This high participation rate means that small savings on a per household basis add up to significant savings in aggregate. Furthermore, all groups benefit equally from home energy reports, with no statistical difference between rich and poor, old or young, owners or renters.

15-25% Lift For Other EE Programs: Moreover, behavior-based programs can maximize the value of other investments in New Jersey's portfolio. OPOWER has demonstrated a 15%-25% increased participation rate in utility-sponsored efficiency programs. This means that other programs in the 2011 efficiency budget, such as residential HVAC or Home Performance by Energy Star, will likely see a double digit percentage increase in participation.

Reduces Rebound Effect: Behavior-based programming also helps improve the return on other energy efficiency investments by preserving their initial energy savings gains. Research shows when consumers install energy efficient hardware such as a furnace or light bulbs, they often operate this equipment more intensively. This phenomenon is commonly known as the "rebound" effect. A recent study by McKinsey and Company showed that consumers receiving insulation upgrades on average increased their indoor temperatures one to three degrees Fahrenheit higher than before. Together, this added

[3] Summit Blue. *Impact Evaluation of OPOWER SMUD Study*. September 2009. <http://www.opower.com/LinkClick.aspx?fileticket=naU7NN5-430%3d&tabid=72>

up to a 15%-30% decrease in energy savings.[4] A study done by the American Council for an Energy Efficient Economy (ACEEE) showed that people who install efficient lights lose 5%-12% of the expected energy savings by leaving them on longer.[5] Behavior-based programs minimize the risk of the "rebound" effect by maintaining efficient behavior. When customers are engaged about their energy usage, they are more likely to ensure that their habits do not change.

II. Behavior-based programs are proven to generate measureable and verifiable results.

OPOWER's Home Energy Reporting program has been consistently effective in each deployment to date. Every utility with at least six months of results has achieved energy savings between 1.5% and 3.5%. These results have been consistent across electric and gas utilities, as well as in winter-peaking, summer-peaking, and mild climates.

Figure 1 shows the consistency of savings that utilities have achieved through OPOWER's program:

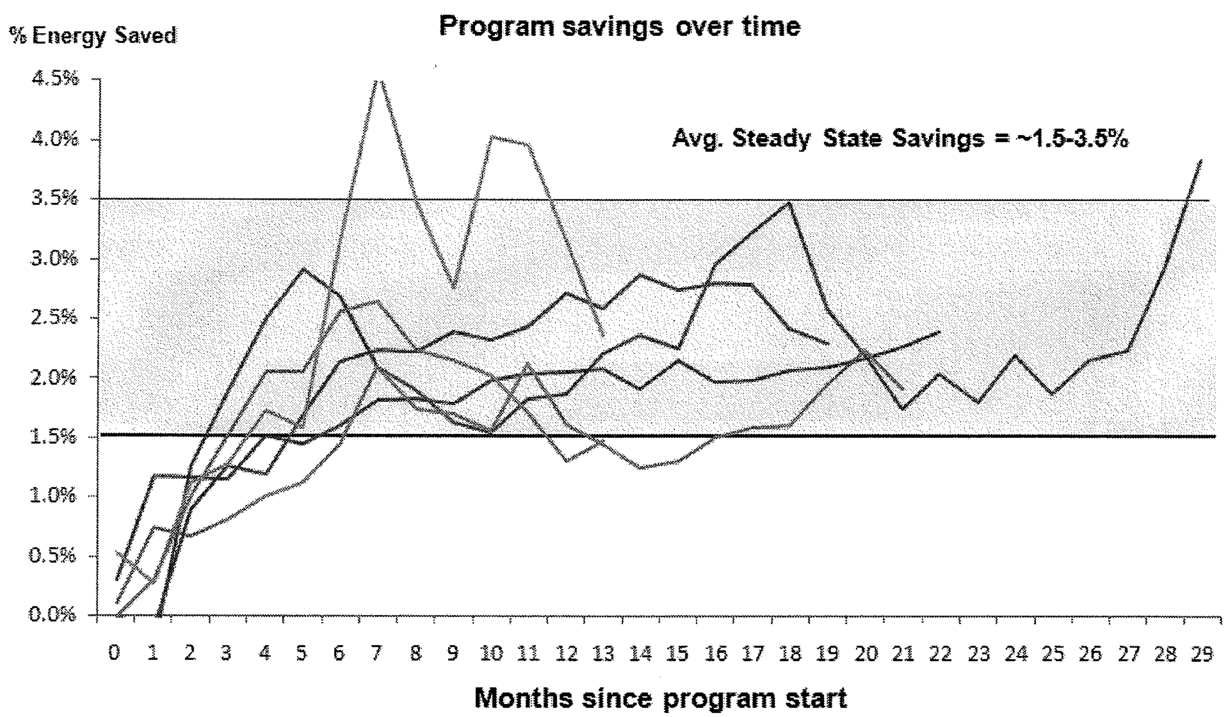


Figure 1: Results from OPOWER's Home Energy Reporting Program

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[4] McKinsey and Company. *Unlocking Energy Efficiency in the US Economy*. July 2009. Page 33

[5] USA Today. *Consumers Can Sabotage Energy Savings Efforts.* March 2009. <http://www.usatoday.com/money/industries/energy/2009-03-22-energysavings_N.htm>

These results have been verified by several leading authorities in the field. Summit Blue, an industry leading evaluation firm, has verified OPOWER's impact in Sacramento, California.[6] Professor Ian Ayers, of Yale University, has verified behavior-based programming's impact with in Washington State.[7] Professor Hunt Allcott, of the Massachusetts Institute of Technology, has verified savings with Connexus Energy in Minnesota.[8] Moreover, Professor Allcott and Professor Sendhil Mullainathan, of Harvard University, published a discussion of the behavior-based approach in *Science*.[9] In each case, the studies have not only verified the results of OPOWER's program, but have concluded that behavior-based programs are a simple and cost-effective source of energy savings.

III. The results of behavior-based programs can be accurately measured through experimental design

The results of OPOWER's Home Energy Reporting are measured using a simple test and control methodology. By using test and control groups, OPOWER is able to isolate and cleanly evaluate the impact of its program.

For example, consider SMUD's behavior-based program. Together with OPOWER, SMUD launched its behavior-based program to 35,000 homes, while maintaining a 50,000 home control group. The two groups were randomly selected and had no statistically significant difference in their energy consumption prior to deployment. Since deployment, the impact has been clear – over twenty months, behavior-based messaging has decreased consumption by 2.5% in the test group. Because the groups are, in the aggregate, identical—except that one group receives OPOWER's reports while the other does not—the difference in energy savings may safely be attributed to OPOWER's Home Energy Reporting.

This test and control methodology is explicitly endorsed in the California Evaluators Protocols and the guidelines for the National Action Plan for Energy Efficiency, which was jointly produced by the US Department of Energy and the Environmental Protection Agency.

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[6] Summit Blue. *Impact Evaluation of OPOWER SMUD Study*. September 2009. <http://www.opower.com/LinkClick.aspx?fileticket=naU7NN5-430%3d&tabid=72>

[7] Ayres, Ian. *Evidence from Two Large Field Experiments that Peer Comparison Feedback Can Reduce Residential Energy Usage.* July 2009. Available online at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1434950>

[8] Alcott, Hunt. *Social Norms and Energy Conservation.* February 2010. Availabe online at: <http://web.mit.edu/allcott/www/Allcott%202010%20Social%20Norms%20and%20Energy%20Conservation.pdf>

[9] Alcott, Hunt and and Sendhil Mullainathan. *Behavior and Energy Policy.* Science. March 2010. Available online at: <http://web.mit.edu/allcott/www/Allcott%20and%20Mullainathan%202010%20-%20Behavioral%20Science%20and%20Energy%20Policy.pdf>

IV. Leading states are including behavior-based programs in their efficiency portfolios.

The strong, verified results behavior-based programs have been central to the support of regulatory authorities in several states for utility filings that include large behavior-based savings. Although behavior-based programs have become a critical efficiency resource in many states, decision makers in Massachusetts, Minnesota, and California have been particularly strong in their support for utilities including behavior-based programs in their efficiency portfolios.

- Massachusetts – The Massachusetts Department of Energy Resources ("DOER") is allowing IOUs in Massachusetts to count savings generated by OPOWER's program towards their state-mandated energy savings targets. In a filing approving these goals, the DOER noted that, "one successful organization upon whose work the Program Administrators [utilities] would like to build is Positive Energy [now OPOWER], a corporation that is committed to persuading consumers to save energy through a combination of technology, analytic direct marketing, and behavioral science."[10] In total, OPOWER's programs will account for 24% of the residential efficiency portfolio for electric consumption and 20% for gas.

Savings claimed for OPOWER's program by National Grid (MA)

	Total kWh saved	Number of Households	Total Annual kWh saved per HH
2010	26,000,000	100,000	260 kWh
2011	52,000,000	200,000	260 kWh
2012	74,520,000	300,000	248 kWh

Due to the initial success of the program, in September 2010 National Grid expanded its portfolio with OPOWER to include 425,000 homes total. With this expansion, OPOWER will be serving nearly half of National Grid's Massachusetts service territory.

- Minnesota – Minnesota's OES has approved two of the state's largest utilities, Centerpoint Energy and Minnesota Energy Resources Corporation (MERC) to count savings generated by OPOWER's programs to their state-mandated energy efficiency targets.

[10] Massachusetts Joint Statewide Three-Year Electric Efficiency Plan: 2010-2012. Page 238

Savings claimed for OPOWER's program by Centerpoint Energy (MN)

	Total Mcf Saved	Number of Households	Total Annual Mcf saved per Household
2010	85,250	50,000	1.71 Mcf
2011	127,875	75,000	1.71 Mcf
2012	139,035	100,000	1.71 Mcf

After reviewing filings including OPOWER's program, OES was effusive in its praise of behavior-based programming:

> *OES Staff are pleased to see that CPE [Centerpoint Energy] will be starting the Residential Home Energy Reports project in 2010. Recent evaluations of programs across the country and in Minnesota suggest that home energy reports are a cost-effective way to educate customers and encourage energy saving behavior. CPE plans to include 225,000 residential customers, approximately 30 percent of the Company's residential customers, in this program by the third year of its triennial plan. This project is also expected to be one of the largest drivers of new energy savings in the Company's Residential Segment. CPE's program provider, Positive Energy [now OPOWER], reports that customers receiving a home energy report typically reduce their energy use by 1.5 to 3 percent. Based on this information, the Company estimates that households receiving home energy reports will reduce their energy use by 1.55 percent or 1.71 MCF annually. OES Staff believe that this is a reasonable assumption at this time. In future filings, the energy savings claimed by the Company should reflect the actual energy savings associated with the project based on measurement and verification by Positive Energy [now OPOWER].*[11]

- California – In a landmark decision in April 2010, the California Public Utilities Commission concluded that behavior-based efficiency should be an efficiency resource for the state's investor-owned utilities. In reaching its conclusion, California examined four independent evaluations of OPOWER deployments, addressed head-on common concerns about double-counting, and solicited input from stakeholders of all kinds. In approving behavior-based savings, the Commission commented, "It is essential that we create a regulatory environment

[11] Minnesota Office of Energy Security. *Proposed Decision.* October 2009. Page 23. Behavior-based programming was approved in the Final Decision dated November 23, 2009.

in which potential game-changing efforts such as these innovative behavioral-based strategies can flourish. Today's decision does this."[12]

V. Behavior-based programs can complement the rest of the 2011 Portfolio

The New Jersey 2011 efficiency budget contains an ambitious plan to deliver significant energy savings in New Jersey. The portfolio of programs includes a complete set of rebates and incentives designed to help New Jersey citizens save money by helping them purchase energy efficiency appliances, as well as finance solar and wind renewable projects.

Moreover, behavior-based programs can maximize the value of other investments in New Jersey's portfolio. Increasingly, it appears that when consumers install energy efficient hardware such as a furnace or light bulbs, they operate this equipment more intensively. In other words, behavior disrupts efforts to save energy because consumers using their appliances more heavily. This phenomenon, commonly known as the "rebound" effect or the "take-back" effect, has been well documented. A recent study by McKinsey and Company showed that consumers receiving insulation upgrades on average increased their indoor temperatures one to three degrees Fahrenheit higher than before. Together, this added up to a 15%-30% decrease in energy savings.[13] USA Today also reported on the same phenomenon — a study done by the American Council for an Energy Efficient Economy (ACEEE) showed that people who install efficient lights lose 5%-12% of the expected energy savings by leaving them on longer.[14]

Behavior-based programs mitigate the "rebound" effect by maintaining efficient behavior. When customers are engaged about their energy usage, they are more likely to ensure that their habits do not change. In this way, behavior-based programs can help realize and enhance the value of other investments outlined in the 2011 efficiency budget.

VI. Conclusion

Behavior-based efficiency is a proven, measurable, and cost-effective source of efficiency that has the potential to deliver immediate savings in New Jersey while enhancing the effectiveness of other programs already underway. OPOWER encourages the Commission to incorporate behavior-based programming in the 2011 efficiency budget and to consider developing a Technical Resources Manual for New Jersey to provide additional transparency on the cost-effectiveness of efficiency programs.

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[12] California Public Utilities Commission. CPUC Adopts Protocol To Count Savings from Behavior-Based Energy Efficiency Programs. April 8, 2010.
<http://docs.cpuc.ca.gov/PUBLISHED/NEWS_RELEASE/116078.htm>
[13] McKinsey and Company. *Unlocking Energy Efficiency in the US Economy*. July 2009. Page 33
[14] USA Today. *Consumers Can Sabotage Energy Savings Efforts*. March 2009.
<http://www.usatoday.com/money/industries/energy/2009-03-22-energysavings_N.htm>

November 15, 2010
Contact: jim.kapsis@opower.com

Sincerely,

Michael Sachse
General Counsel &
Senior Director for Government Affairs

Jim Kapsis
Director of Market Development &
Policy Strategy

AE Construction Questions/Answers 11-19-2010

1. How much is the BPU (HPWES program) charged to carry the $10,000 no interest loan for ten years?

The BPU/OCE pays the full buy down amount on all 0% loans not paid by New Jersey Natural Gas, South Jersey Gas and Elizabethtown Gas. That mainly includes loans in PSE&G territory, but also it includes all-electric homes and homes with no gas upgrades. BPU is charged for paying the interest rate buy down from an unsecured market interest rate at the time to 0% interest rate. That buy down amount ranges based on the market conditions (Fannie Mae pricing) as well as the customer's credit rating. At this time, the average buy down amount is approximately $4,300 per customer for the 10 year 0% loan.

2. How is this reported/ accounted for in the program spread sheets?

The loan buy down is an incentive payment and is reported like all other incentive payments.

Why does EFS immediately sell the loan to other banks? Looks & sounds a lot like the banking issues that got us into the current recession.
EFS is part of a non-profit organization with a mission of supporting energy efficiency. The loan product that EFS offers is the Fannie Mae Energy Loan. As a non-profit organization, and not a bank or a loan servicer, EFS does not have the capacity or ability to retain and portfolio these loans, nor is this the design of the product. The Fannie Mae Energy Loan is designed to allow lenders the opportunity to support energy efficiency through a stream-lined, easy to use loan product, and purchases all of the Energy Loans its lenders make to portfolio and service.

3. Are EFS rates competitive with the current interest rates for this type of home equity loan? Current rates for these types of loans are at 3-4%. How much are they charging?

The loan that EFS offers, the Fannie Mae Energy Loan, is an unsecured loan, which is more comparable to a credit card in terms of its ease of application/use, than a home equity loan or HELOC (line of credit). Home Equity Loans are secured against your property, and require an appraisal and title search, and there are typically fees, points or closing costs that must be covered by the borrower to obtain such a loan; borrowers must also have enough equity in their home to be eligible for the Home Equity Loan/Line. The rates charges by EFS for unsecured loans are comparable to other such loans in the marketplace.

4. How many HPWES job have been applied for/ approved under the reduced incentive program guidelines (Total Energy $3,000 incentive for 25% minimal energy efficiency improvement) since its inception?

That information is posted on the NJCEP website and can be found at the following web address:

http://www.njcleanenergy.com/residential/programs/home-performance-energy-star/home-performance-funding-cycle-reports

As of November 15th, the Program has received 375 applications and approved 324 applications since reopening on July 29, 2010. 83% of the applications as well as approvals met the 25% TES.

5. Why isn't a better reporting (breakdown of the costs) provided? As "Home Performance Contractors" we are required to breakout every individual cost to the homeowner in our contracts why isn't the BPU held to the same standard?

There are regulations that govern what can and cannot be provided. The current reporting is in line with reporting available for other NJCEP Programs. However, you can explain what additional data you may find helpful to the contractor community. This can be added to the agenda at the December Contractor Working Group meeting which has been tentatively scheduled for 12/9 and invitations will follow.

6. I also think a report showing the number of active Contractors and amounts paid to each (Company names don't necessarily have to be included) would be very helpful to gauge the program. In that way we could see if most of the funding was going to a few companies or if it was fair disturbed among the participating contractors. Limiting the amount of project each company could compete (50 possible) in a given year would also level the playing field and fairly distribute the limited funding now available.

The Program posts the number of active contractors and number of projects completed form the inception of the Program and to date at the following URL: http://www.njcleanenergy.com/residential/tools-and-resources/tradeally/approved_vendorsearch/?id=57&sret=&srem=&start=1&letter=H

This can be found on the NJ Clean Energy webpage, under Residential section, under Home Performance with Energy Start, under certified contractors. Once there, it provides you a list of all contractors and under each of their contact information, there is the "Recent Projects: xx number".

7. Why was the Home Performance with Energy Star budget cut so severely (38% reduction) when most other programs received only minimal cuts?

All NJCEP Programs have seen budget cuts since the beginning of 2010 and these reductions will clearly continue into 2011. The Market Manager is proposing that a comparable number of homes will be completed in 2011.

8. Why weren't Administration & "Rebate Processing, Inspections and Other Quality" budget reduced by the same percentages/margins?

The Market Manager has proposed a 36% reduction in non-incentive costs across all programs from 2010 to 2011.

9. Why has the BPU decided to downsize HPWES (such an important program, good for the consumer, excellent overall energy savings, economy stimulation, in line with NJ's energy reduction goals and excellent track record prior to April 2010 restructuring) ? An important program like this one should grow with time not be reduced with such extreme measures.

The allocation of Clean Energy funds to the Residential Energy Efficiency budget have been reduced from 2010 to 2011. The Home Performance with Energy Star Program will receive the greatest portion of incentive dollars in 2011.

New Jersey Office of Clean Energy (OCE)
and Board of Public Utilities (BPU)

In response to your invitation for comments we have attached a letter with supporting data in support of the NJREMI Program.
As one (1) of only two NJREMI Certified manufacturers we have a well vested interest in this program. The expansion of our operations within the State of New Jersey is contingent upon your commitment to the funding and support of this program.
Please take a moment to review our position and share this with all the decision making authorities. We will also be presenting this position to several other officials, governing bodies and authorities within the State.

If you have any questions, comments or concerns, please feel free to contact us directly.

Thank you for your consideration.

Simone du Boise, AIA, LEED AP, CGC

Robert Caputo

Dan Downey

Denise Donahue

COMMUNITY ENERGY®

November 17, 2010

Kristi Izzo
Secretary of the Board
State of New Jersey Board of Public Utilities
Two Gateway Center, Suite 801
Newark, NJ 07102

Re: Docket No. EO07030203, Comments regarding the proposed 2011 New Jersey Clean Energy Program (NJCEP) budgets and programs

Dear Ms. Izzo:

Community Energy is pleased to submit the following written comments in addition to my testimonial provided at the Public Hearing on November 10, 2010 regarding Docket No. EO07030203.

Please contact me with any questions regarding these comments at either 347.850.2735 or Tess.Barton@CommunityEnergyInc.com

Thank you for the opportunity to comment and for the continued support of the Clean Power Choice Program. Community Energy looks forward to continuing to build a clean energy future in New Jersey.

Sincerely,

Tess C. Barton
Director, Marketing and Business Development

Community Energy, Inc. Comments regarding Docket No. EO07030203

Community Energy (CEI) is one of the three suppliers for the State of New Jersey's Clean Power Choice Program. Since 2005, CEI has served the majority of customers enrolled in the program. Currently supplying approximately 7,000 customers, CEI offers two different product options. Our more popular product option with just over half of our subscription is the New Jersey Wind product, sourced entirely from the Jersey-Atlantic Wind Farm in Atlantic City. Our other product option includes regional wind and hydro, along with one percent New Jersey solar. The program has been a success thus far and we continue to receive enrollments, even despite the economic recession.

The voluntary market for renewable energy enables eligible ratepayers to support renewable energy above and beyond the Renewable Portfolio Standard, making the compliance requirements the floor for renewable energy. Without a voluntary option, the compliance requirements serve as the ceiling for the amount of renewable energy to be developed. Approximately 15,000 New Jersey ratepayers have already decided to put their own dollars behind making the RPS a floor. In order to facilitate the opportunity for further growth of renewables, customers need a utility-endorsed, on-bill option to support clean power.

CEI understands that the draft budget does not include administrative costs for maintaining the Clean Power Choice Program. Community Energy's recommendation is to make available the minimal funds to continue administrative support of the program, in order to continue to provide New Jersey ratepayers a qualified renewable energy product sourced from local and regional sources that increases the amount of renewable energy above and beyond state requirements. Such programs can operate with minimal support from utility and state partners.

If allocating this budget is not an option, CEI proposes to funnel a small percentage of program sales (between 1% and 3%) proportionally to the utilities in order to cover program costs. By doing so, the Clean Power Choice Program will continue under the current structure, with suppliers providing program marketing. This will allow the program to cover its own administration costs and will not rely on state funding or ratepayer subsidization.

Community Energy thanks the Board, the Office of Clean Energy, Honeywell, and the participating utilities (ACE, JCP+L, PSE&G, and RECO) for their continued support of the program.

From: Goldenberg, Steven [SGoldenberg@foxrothschild.com]
Sent: Wednesday, November 17, 2010 4:57 PM
To: Mike Ambrosio; michael.winka@bpu.state.nj.us
Cc: joseph.sullivan@bpu.state.nj.us
Subject: Comverge/Demand Response

Mike/Mike--Recognizing that today is the cutoff for comments regarding the OCE budget, I would appreciate if you would accept this as a comment requesting that a budgetary placeholder be carved out for demand response programs. I don't recall seeing any specific line items established for DR and would urge you to do so.

As you know, Comverge representatives chaired the Demand Response Working Group that was the source of the highly successful C&I Demand Response Pilot Program in which 300 MW of DR was procured at a very modest cost to ratepayers. Comverge would like the opportunity to work with you to develop other programs to further the State's energy conservation goals, reduce ratepayer costs and environmental impacts, and increase system reliability. To that end, we considered it advisable to forward this email today to allow you to take the potential development of DR programs into account as you finalize the Clean Energy budget.

We will reach out to you shortly to exchange ideas.

Thank you for your anticipated courtesies.

Steve

Steven S. Goldenberg
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recommending to another party any tax advice addressed herein.

Efficiency First
America's Home Performance Workforce

2011 New Jersey Clean Energy Program Budget & Programs Comments

November 17, 2010

President Lee A. Solomon
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102

Dear President Solomon,

I am writing this letter on behalf of The NJ Chapter of Efficiency First, which is a nonprofit organization which represents over 1,100 businesses nationwide, and 41 New Jersey based business owners composed of home performance contractors and energy auditors with a total of nearly 600 employees in NJ. We originally submitted formal comments on September 17, 2010 in regards to 2011 program recommendations; those recommendations were discussed by 37 contractors on a conference call we hosted on September 13, 2010, those comments are also attached.

We would like to thank CSG, Honeywell, AEG, and OCE staff for involving the contractor community in the development of 2011 HPwES program structure, and incentive levels, and discussing the contractor community's recommendations. It was refreshing to be asked for our thoughts and truly be engaged in the process to develop a workable sustainable program for all parties involved going forward. We would also like to endorse staff's straw proposal for the 2011 HPwES Program, as well as WARM and COOL Advantage. While everything that we recommended did not make it into the straw proposal. We were offered explanations why certain requests were not achievable, through the stakeholder process, and accept those reasons. Based on the information exchanged we feel that this is the best possible plan for continued sustainable success of the HPwES program in 2011. We would also like to point out that some of our membership that does business in other states pointed out to us that the NJ Clean Energy Program stakeholder process should be a model of transparency, to other states and programs across the country.

We reserve comment to endorse any one proposal for future program structure as of yet, but we would like to stress that a stable long term **would request that the Market Manager's contracts be extended 12 months instead of 6, and as soon as possible, so that we as business owners can plan with some level of certainty for the next year.** It doesn't seem feasible that any transition would be completed within 6 months, and even if achievable, would create more uncertainty in the marketplace, and would create unneeded turmoil in the peak demand months for many of our members, and other Home Performance Contractors. (In the attached we do offer some initial thoughts on the proposed possible program structures)

There is also one other very important issue to us, and that is the issue of payment timelines. **We would ask for every possible effort to be made to alleviate the current payment timeline stress by providing prefunding to the Market Manager's/EFS to help cash flow smoother to the contractor community**. We feel that the current timelines are an unreasonable burden on contractors, and ultimately hurts the program's success, as it is unviable for many contractors to shoulder this burden, thus they are unable to offer it to homeowners/ratepayers.

On behalf of Efficiency First,

Brian Bovio, National Board Member
Bovio Advanced Comfort & Energy Solutions
Sicklerville, NJ

Scott Needham
Princeton Air Conditioning
Princeton, NJ

Jared Asch, National Director
Jared S Asch
Efficiency First

EfficiencyFirst
America's Home Performance Workforce

2011 Home Performance Contractor Coalition Program Changes

To:

President Lee A. Solomon
Board of Public Utilities
Two Gateway Center
Newark, NJ 07102

Michael Winka
Director
Office of Clean Energy - NJBPU

Dear Mr. Solomon and Mr. Winka,

The past year has seen significant changes in the Home Performance with ENERGY STAR ("HPwES") Program, as well as many other programs. This has created confusion in the marketplace and the contractor community, which has adversely affected the program(s) success. While we do understand that program incentive modifications were necessary, due to budgetary restraints and market over-stimulation, the depth and breadth of the changes, in such rapid succession, along with program suspensions has caused a troubling aftereffect in the marketplace.

Efficiency First is a nonprofit organization which represents 35 New Jersey based business owners composed of contractors and energy auditors composed of nearly 500 employees.

For HPwES (or the Program(s)) to be successful the market has to be re-stimulated with a well thought out and sustainable Plan. After considerable analysis of what's required by contractors to be successful in the HPwES program as well as what we understand is available in the way of NJCE HPwES incentives we'd suggest the following to create a Homeowner friendly and sustainable program for 2011:

- **Increase 5% savings threshold to at least 10%**
  - Eliminate financing at 10%-20% level. The cost to program is out of balance with other program incentives/goals.

- **Reduce 25% savings threshold to 20%** *(We would encourage its implementation in 2010 FC2)*
  - This will line up to the Federal HomeStar Legislation. While this legislation is still pending, it makes sense to align the Federal and State regulations. Additionally, being in position to launch HomeStar quickly in NJ is critical.
  - This will reduce the barrier to entry that many homeowners are facing reaching 25% total energy savings ("TES").
    - 25% TES is hard to reach in many homes across NJ, and in some cases, impossible. In many situations, the only way to get over threshold is to add an 'on-demand' water heater. This is a

costly option for homeowners and completely offsets all incentive dollars, before any health and safety, or shell measures are addressed.

- If Homestar is passed, the BPU/OCE should have a built in flexibility to eliminate any cash incentives and only deliver financing options.
  - We feel this would be necessary to ensure program sustainability, with the anticipated uptick in demand that would come with Federal cash incentives.
  - It may be wise to have a small cash incentive available to those who do not need financing, to act as an incentive not to take the financing.
- NJ is in a prime spot, as of now, to deliver 'Gold Star' level Homestar incentives immediately, and leverage a large amount of Federal funding if we have the above in place.
  - This would allow NJOCE to get better results with less money, and bring a large percentage of Federal dollars into NJ, reducing homeowner energy use, and putting people back to work.

- **Eliminate appliance incentives** – Allow appliance savings to be utilized for total energy savings, but eliminate all cash and financing incentives. It costs at least 10% for contractors to take on the responsibility of being involved in the appliance transaction which is the current incentive level. Additionally, given current incentive levels and the associated energy savings from appliances, they really don't qualify for incentives at this point anyway. Including them on the eligible measures list only serves to confuse the marketplace further.
- **STEP 3 Comprehensive Project Incentives.** As with any other successful retail products, a customer having choices assures its success. When evaluating the incentives that aided this program's past success, as well as, what is currently hindering its success since all of the recent changes, we suggest the following:
  - **More Financing Options are Critical** – Enhanced incentives helped in 2009/2010, but we all know the real acceleration in program came from the addition of the 10 Year 0% financing. It removed the barrier to participation for many homeowners, and makes the whole house approach manageable for the owner. With the change in rebate levels, we feel more financing options are necessary to assure the success of the program. Different homes require different options and the current 'one size fits all' approach has been restrictive in selling the program. Currently, many homeowners need to come up with money out of pocket to commence an HPwES project, and many of them just do not have it in today's economic climate. Additional finance components need to incentivize a performance based approach. Just as Home Star would increase the incentives for greater energy savings, any finance option should encourage home owners to maximize energy savings.
  - **Cash Back Only Incentive** – While many need the financing, some do not, but there was never any incentive for them not to take it. With higher dollar cash back only option it would steer those who do not need financing away from the financing, and would cost the program less per project. It's our opinion, that $5,000 is the magic number to incentivize home performance, considering other programs across state (HVAC, etc...). The caveat to this would be those that need financing, hence why the lower incentive is workable when coupled with financing options. Below is a table illustrating incentive options available to a homeowner who reaches more than 20% TES, and the total incentive amounts paid by the "HPwES" Program.

Total Incentives Table: (Assuming All Incentives at Maximum)

Incentive Options	Cash Rebate	Approximat e Financing Buy Down	Total Customer Incentive Cost	Contractor Incentive Cost	Total Program Cost
No financing, $5,000 rebate	$5,000	$0	$5,000	$700	$5,700
$10,000 10 Year 0% Fin. & $3,000 rebate	$3,000	$5,300 +/-	$8,300	$700	$9,000
$15,000 10 Year 2.99% Fin. & $3,000 rebate	$3,000	$5,500 +/-	$8,500	$700	$9,200
$20,000 10 Year 5.99% Fin. & $3,000 rebate	$3,000	$5,600 +/-	$8,600	$700	$9,300

- **Audit Subsidies: $100 for all audits; for jobs converted to retrofits: include audit subsidy in the $700 production incentive**
  - **We believe a large part of the drop-off in program success is due to the homeowner barrier of increased audit costs.** Keeping the audit affordable is critical to stimulate Homeowner's to explore the benefits of the HPwES Program. While the $175 contractor incentive may have been too much, the current $100 incentive paid for sold projects seems counterintuitive. If a contractor secures a job, the production incentive and the job itself is the incentive. Therefore, if the contractor secures the job, the audit incentiove should be considered part of the $700 production incentive (not as an additional $100). The Audit incentive should require proper software entry, information on which homeowners were supplied with an actionable report. These incentive(s) should be disclosed to the homeowner. This model will also allow contractors to set their own price and depth of an audit.
  - The program should encourage homeowners to get Comprehensive Assessments (recognized by BPI or RESNET).

- **Production Incentives – Keep the same (Max $700).** Production incentives serve an important purpose in helping to cover program marketing and the significant extra administrative costs of doing work under program. We have estimated that $700 is the approximate additional administrative cost of a program project. Without this incentive, those additional costs would have to be passed along to homeowner, making the program even more expensive. Additionally, they provide an incentive for contractors to do comprehensive projects and it also gives the program an enticement to ensure contractors comply with QC inspection callbacks. If it came to a situation where the choice was between the contractor incentives versus additional customer incentive, we would encourage the contractor incentive for the reasons listed above. Additionally, if needed the contractor could use this incentive to entice a homeowner to participate in the program in the form of a Contractor HPw/ES discount, rebate, coupon, etc…

- **Enable homeowners to utilize WARM/COOL Advantage program rebates and Home Performance Program financing.** We feel that the current structure of all of the NJOCE programs creates a competition between programs, as opposed to a tiered approach. Most projects will need to include furnaces and air conditioners to qualify for the program. This funnels people away from WARM/COOL Advantage and therefore it makes sense to utilize that funding. There are a few different ways to do this, but the goal should be that WARM/COOL Advantage is a path to Home Performance, not a competitor. One way of doing this would be to have the current prescriptive based rebates for WARM/COOL and that amount would be deducted from any HPWES rebates, if a project reached the 20% TES level. At that point any Home

Performance rebate monies could be calculated on shell and health and safety measures only, but the financing could be used across all measures (including HVAC).

- **Remove Contractors not in Program Compliance** - We all strongly feel that there is no place in this program for anyone committing fraud, not complying with program requirements or failing to respond to QC issues. There should be a zero-tolerance policy for anyone falling into these categories. These contractors are getting the same incentives as those doing things the right way while using the majority of program resources and at the same time getting lesser results. Especially with the current situation, it is hurting the Program by allowing these contractors to continue to participate in the program at the expense of the rest of us. We feel a clear cut set of guidelines and penalties need to be developed by the program. We would be happy to offer additional input on this, but quick thoughts are as follows:

    - Contractors with multiple open QC issues that are not addressed within 30 days, should be suspended until all open matters are addressed then an additional of 60 days.
    - If a second suspension occurs in any 12 month period, the offending contractor should be suspended for a minimum of one year.
    - If they do not address QC issues, then *ALL* of their pending production incentive monies should be frozen, so that the program can utilize that money to address any open QC issues. If this situation occurs, offending contractor should be suspended for a minimum of 2 years.
    - Any of the above actions should be required to be made in person, by calling said contractor to a meeting, so that they can make their case, as to why they should not be suspended.
    - Any suspension should be able to be appealed to a 3rd party, which was not directly involved in the decision to suspend the contractor.

- **De-Couple Financing from QC Process, *especially considering recent payment issues*, and the above recommendation of removing non-compliant contractors.** On a cash back only job the contractor is paid by the customer for the work and the production incentive and ability to be in good standing with the program are the incentive to address any QC issues. This should be no different for financing projects. Contractors should be paid when the work is completed, and incentives would still be tied to QC process, and the above penalties should be invoked. However, it makes no sense to delay payment on jobs by as much as 60 days just because a job is selected for QC. The equipment was delivered, the workers were paid, and so should the contractor.

- **Future Program Incentive Modifications** - We agree incentive modifications are at times necessary to ensure continued year round Program sustainability. To make additional specific recommendations would require knowing what the budget is that we are working with. If you would share this information when it becomes available we would gladly participate with the Program Managers to develop a program that continues to achieve sustainability, energy reduction and Market Transformation.
    - Specifically we would recommend the continuation of the program working groups.
        - To be productive, the group should not be a "first come, first serve" group of contractors.
        - Contractors who understand the different processes/parties involved, have played a significant role in developing this program, have been actively involved in working with the program to help ensure its success, who have had great successes in the program, and/or have no program procedure or QC issues, should be ensured places on this group. However,

there should also be a certain number of spots reserved for smaller contractors so that their voices are heard as well, as long as they are in program compliance.

- **Continuation of Program Without Incentives** – Regardless if there are incentives available contractors should be able to submit and gain WSAs from the Program. As with other retail markets, changing incentives, rebates and financing are the normal course of business. Having this program appear to be available year round is important to the program's and the contractor's success. This will also provide validation to the customer that they are achieving the savings that they were sold. While having approval from HPw/ES program, they could utilize WARM/COOL Advantage program incentives. Saying the program is open, but that there are currently no cash/financing incentives is a better alternative than saying the program is in suspension, which leaves the marketplace at a standstill, which is detrimental to all of us. The solar program currently does something similar to this.

- **Utility Programs** - We agree that utility companies can be invaluable partners in making the programs sustainable and successful.
    - The participation of the majority of the gas utilities offering to buy down the interest rate has been the programs biggest success in our opinion. However, we feel that ANY utility programs should act as a *supplement* to any state programs, not as an option or competitor. The current structure of disparate programs in different utility territories confuses the marketplace, and increases program administration costs.
    - The non-participation of PSEG, has caused a large portion of the program's issues over the last year. Additionally, their own program acts as direct competitor to the state's programs, and in fact, has a monopoly in the UEZ's. This is a practice that cannot be allowed to continue. We feel that any utility supplements should be uniform across all territories and open market based.

- **Program Structure** - We would recommend continuing with the current "Market Manager" based approach, but would be open to the ideas of OCE structured programs, that the utilities administered, as long as they were uniform across the state, additionally the non-profit manager is something we would be open to learning more about if there was an advantage to making that change . There are certainly still issues that need to be worked out amongst all the different levels, but feel that this structure is workable and ensures market stability. We will highlight some of the benefits/concerns with some of the other approaches below.
    - **Flexibility** – No matter what structure is utilized, we feel that the Administrators need to have some authority to act quickly to avert the situation(s) we have run into earlier this year. We feel oversight is needed, and transparency to program partners, but if that was built in we could have reduced the shock to the program over the last year.
    - **OCE Structured / Utility Administered Programs** – This still creates the concern of a fractioned marketplace, but if properly structure and administered could offer some advantages.
        - **Pros** – Faster payment timelines
        - Offers some other unique opportunities (i.e. on-bill repayment) that do not exist with other structures.
        - **Cons** – The prospect of programs being "open" in some areas and "closed" in others, due to individual utility budgets.

        - Additionally, different procedures for different utilities are a major burden for the contractor community. If it can be assured that the contractor community would deal with one process, and one piece of software statewide, this concern may be lessened.
        - If not structured properly, could lead to a fractioned marketplace, and possible anti-competitive practices.
        - **While we cannot endorse this approach without some our concerns being addressed, we would be more than willing to talk to the utilities and OCE staff about how to address our concerns and exploring if this is a workable option for all parties involved.**
    - **Non-Profit Manager** – This is basically the same as the Market Manager method as far as we are concerned. The only difference is that this would be another change, and there have already been too many of them recently, so we feel stabilizing the programs with current structure would be best. However, if the Non-Profit Manager would hold the funding for the program, which could make funding more secure from state budgetary issues, and help expedite payment timelines, then making the change to this structure may be worthwhile.
    - **Utility Structured Programs** – This would create a fractioned marketplace as many contractors serve multiple utility territories. In addition, this creates the opportunity for anti-competitive practices. **We cannot endorse this approach.**
    - **Grant Based Approach** – We feel that this would act as a barrier to entry for small and medium sized businesses, and would strongly favor large companies/projects. **We cannot endorse this approach.**
    - Any utility supplements should be focused on Home Performance, not WARM/COOL Advantage. While the intention of these enhanced rebates were good, they now act as a hindrance to getting people to embrace the Home Performance approach.

- **WARM/COOL Advantage Rebates** – We agree with the Current straw proposal of reducing COOL Advantage rebate levels and suggest keeping WARM Advantage at the same. This still incentivizes consumers to make the right decision if they are in an emergency situation, but does not dis-incentivize Home Performance.
    - We feel the shifting of the COOL Advantage rebate to a manufacturer incentive is not a good idea to stimulate customers to by high efficiency AC equipment.

- **Program Administration Cost Reduction** – We would encourage any improvements to processes that reduce the administration cost of the program for both the program administrators **and** the contractor community. We would be open to discussing any such ideas program staff may have, one idea that we put forth is the following:
    - **Self-Approval** – If a proven contractor in the program wanted to take the option of being able to commence with work without a WSA generated by program staff, they should be allowed to do that.
        - This would decrease program admin costs since staff would only have to put their hands on the project at completion and only review the project once.
        - As this does put the contractor at risk to some extent it should be strictly voluntary.
        - A method of reserving funding would be necessary so that no retroactive program changes can be imposed upon said projects.

- New contractors, and those that have multiple QC issues, or paperwork submission issues would need to go through the current process, until they reached a certain level of performance.
- There would still be third party verification of the project, it would just occur at a different point in the process

It's our opinion that the approach outlined in this report will assure the viability of the Program. We also believe that, due to the extensiveness of the report it is prudent that a meeting with all involved parties be scheduled to review the plan in its entirety. It is our hope this meeting will occur in the next two weeks. Please contact us so such a meeting may be arranged. Thank you in advance for your cooperation.

On behalf of Efficiency First,

Brian Bovio, National Board Member
Bovio, Advanced Comfort & Energy Solutions
Sicklerville, NJ

Jared Asch, National Director
Efficiency First

Scott Needham
Princeton Heating and Air
Princeton, NJ

Jeff Waldman
The Green Standard
Hillsbourough, NJ

On behalf of South Jeresey HVAC Association,

Fred Hutchinson
Hutchinson Plumbing Heating Cooling
Cherry Hill, NJ

Angela Hines
Rubino Service Co.
Voorhees, NJ

EfficiencyFirst
America's Home Performance Workforce

ABOUT EFFICIENCY FIRST

Efficiency First is a national nonprofit trade association that unites the Home Performance workforce, building product manufacturers and related businesses and organizations in the escalating fight against global warming and rising energy costs. Efficiency First represents its members in public policy discussions at the state and national levels, to promote the benefits of efficiency retrofitting and to help our industry grow to meet unprecedented demand for quality residential energy improvements.

SJHVAC
South Jersey HVAC Contractors Group

ENERGY KINETICS

November 17, 2010

New Jersey Office of Clean Energy and Board of Public Utilities
Attn: Kristi Izzo, Secretary of the Board

RE: Comprehensive Energy Efficiency and Renewable Energy Resource Analysis, Programs and Budgets – Docket E007030203
Reducing Residential Heating Fuel Consumption by 25% to 40%

Energy Kinetics is a New Jersey manufacturer and recognized leader in the production of high efficiency combined heat and hot water systems and solar thermal hot water systems. We appreciate the past recognition from the NJ Clean Energy Program and Board of Public Utilities as we were named the 2008 NJ Clean Energy Small Business Leader of the Year. We were also the first commercial application in the Solar Renewable Energy Credits Pilot Only Program.

My fundamental comments concern all NJ Clean Energy Programs that relate to rebates, loan structures, and incentives where Annual Fuel Utilization Efficiency (AFUE) for boilers is used in the protocol or qualification process.

I respectfully submit the following:

First, the United States Department of Energy's Brookhaven National Laboratory, the American Council for an Energy Efficient Economy and several broad field studies have clearly indicated that AFUE is not an accurate efficiency metric for integrated heat and hot water systems, although AFUE is typically used for all boiler applications.

Secondly, the upgrade of 80%+ AFUE boilers to an Energy Star rated low mass boiler with a thermal purge control has demonstrated typical fuel reductions of 25% to 40%. Using the decades old AFUE rating standard incorrectly predicts savings of only a few percent.

This proven savings of over 25%-40% can be used to do the heavy lifting to reduce our state's residential energy consumption, so renewable energy can play a more cost effective and affordable role. Clearly, this magnitude of energy reduction can be a cornerstone of a cost effective near term plan to meet the state's goal for reducing energy consumption. This opportunity must not be ignored.

For these reasons, I respectfully submit the following action items for implementation in hydronic boiler heating systems:

1. Adopt an ENERGY STAR® qualified boiler with a temperature reset or thermal purge control in addition to all existing program qualifications.

2. Adopt the Fuel Savings Analysis[1] program and other programs that use the algorithm developed in the Brookhaven National Laboratory Study[2] to estimate savings potential for integrated heat and hot water systems in all protocols. This more accurately reflects field savings than AFUE alone, and must also apply to home energy audit calculations and payback analysis for integrated heat and hot water systems.

3. Make information regarding the savings potential of upgrading boilers to these high performing integrated heat and hot water systems broadly available to the public, weatherization and energy auditing community, and publish related information in any and all notices related to heating equipment programs.

I welcome the opportunity to provide a thorough presentation or further information related to these topics, and to help the state achieve impressive reductions in residential energy consumption.

Respectfully,

Roger D. Marran
President

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1 http://fuelsavingsanalysiscalculator.com/

2 http://www.bnl.gov/isd/documents/41399.pdf