

**New Jersey's Clean Energy Program
Energy Efficiency Committee Meeting
Wednesday, March 13, 2013
Hosted by Honeywell – BPU, Trenton**

Introductions

ENEROC Market Potential Study

Presenter: David Costenaro (EnerNOC)

Presentation/Handout: New Jersey Market Assessment, Opportunities for Energy Efficiency. Addendum: Sector-Level Budget Development. Preliminary Results

1. The State of NJ engaged EnerNOC Utility Solutions in 2012 to conduct an energy efficiency market potential study. This work is an addendum to that study, meant to find appropriate budgets to attain the kWh and therm savings identified in the study. Budget estimates will be developed for both electric and natural gas programs in both the residential and non-residential sectors. Continued work is planned to drill into the sector level estimates available today and make specific program recommendations.
2. Slide 3 – Anne Marie Perracchio (NJNG) asked if there is another full report with additional details that supports this report that would be available before the comment period ends in April. Dave said yes it will be ready by then. Kenji Takahashi (Synapse Energy, Representing Rate Counsel) - What are the basis's for the development of different costs noted on this slide? How does it compare to NJ's experience? Dave notes there is some benchmarking and comparison slides later on in the presentation. EnerNOC benchmarked against EIA data for electric utilities, but there was not a gas data source they could find. It is broken down in incentive vs. non-incentive and benchmarking data for other utilities and programs. They also have program data from past NJ programs. In addition, they also apply best practices from other clients and studies.
3. Slide 4 –The Residential portfolio is grouped into one generic program to be able to develop preliminary results to get some guidance and ideas of where they are at. This is an ongoing refinement. They have 2 portfolios – a high and a low so they can get a range of deliverables. Note: Semantics issues – Mike Ambrosio (AEG) noted what EnerNOC uses to define measurable costs, NJ uses to define incremental costs. Dave Costenaro added for example, full measure costs for a furnace could be \$5k, but the incremental costs would only be \$1K or \$2K depending on the efficiency levels and they are talking about the incremental measure costs here.
 - a. Anne Marie Perracchio (NJNG) – Were the furnace standards assumed to go into effect for 2012 that have now been 'vacated' part of this assessment? Dave was not sure and will look into, noting it would be a different baseline if it was taken under consideration.
 - b. Kenji Takahashi (Representing Rate Counsel) – For the cost assumption it would be really helpful if EnerNOC gave a table where they compare their own cost assumptions for the different costs with the actual spending by NJCEP. Noting it would all the ability to know how to modify the existing spending cut down. Dave responded they can certainly be clearer about percentage budget allocations relative to past history. Kenji requested incentives as a percent of measure cost if possible.
4. Slide 5 - As you can see the past and current plan are doing relatively well compared to averages. It looks to be an efficiently run program compared to national average.
5. Slide 6 –Alice Napoleon (Representing Rate Counsel) – When you say residential incentives as a percentage of residential budget, are you considering incentives by NJCEP or also by the utilities as well? Dave responded that they are not drawing that distinction. This is all energy efficiency activities in NJ; same blanket delivery mechanism and method for all.
 - a. Dave Costenaro (EnerNOC) - Foot note on this slide is about 'incremental'. What EnerNOC is talking about here is the first year savings. Some might be accustomed to seeing costs like 2 or 3 cents per kWh, which are over a lifetime savings. So what you are doing is looking at first year costs and amortizing it over the lifetime of the measure. So that is the difference between the incremental or first year kWh and the lifetime kWh. He wanted to make sure everyone understood that.
 - b. Mike Ambrosio (AEG) – It just seems counterintuitive that the residential programs seem to be half the price on the kWh than the non residential. In NJCEP experience it has been the opposite. What drives or explains that? Dave agreed saying there are a few things that impact that. If they are trying to achieve all of the potential they have identified in the C/I market it is going to mean moving into

deeper, more expensive measures and going beyond what has been done historically. Another item is the LED's are moving into the portfolios of C/I and they are not quite yet cost effective on some of the residential applications. Additionally, they have not carved things out and put anything into specific program buckets yet. For example, the Home Performance program will have a higher cost for running the program.

- c. Randy Solomon (Sustainable New Jersey) – At what point do you start to detail program buckets? Dave responded that they have the analysis frame and they are starting to talk about the program list now with the Board of Public Utilities. They want to have it ready for the April deadline.
 - d. Anne Marie Perracchio (NJNG) – Going back to assumptions page - As you shift from the electric slide to the gas slide how do you reconcile between the two as some of NJCEP is focused on the whole house/building and not one or the other? NJCEP does not have a separate gas and electric portfolio and some programs are a 'blended'. Is there is another assumption on how they decide the split the electric and gas? Dave responded that they did the potential assessment agnostic of any division, it was all together and how much potential there was in the electric sector and how much in the gas. The way they are allocating budget is based on the BTU's saved. They are taking the dollars and dividing it up for the BTU's saved. Each of the programs will have both savings. They can slice and dice it any way they want to. Anne Marie said she was still struggling with how they were developed in the first place. Dave responded if a measure itself has both gas and electric savings like if the BTU is 40/60 then they apply 40 to electric and 60 to the gas. Anne Mare wanted to know how they get to the 40/60 split; what is it based on? Dave responded that a therm is 100 BTU's and a kWh is 3.41 BTU's at the meter, but at the source it is 11 something BTU's so for each of those shell measures they have savings value and put that together and figure out which percent is gas and electric. It is a clear analytical method for allocating the savings and the dollars. Anne Marie asked if the full report will have this information. Dave responded that yes the information will be available.
 - e. Kenji Takahashi (Representing Rate Counsel) – He says he believes the approach they use is fine, but he does not agree that they should use it for other administrative costs, because there would be a synergy effect and they should not double count, which is what is happening if you tie it to electric and gas at the same time. Dave asked for clarification asking if they should not divide the administrative costs the same way you would divide the incentive costs. Kenji said right. Adding that maybe you do not have to have any additional costs just to get more savings from one side or the other. Dave said what they are saying is to get a ceiling insulation measure for instance , to get that measure across the finish line you need a certain incentive and that takes a certain amount of administrative costs. You have not broken it out by fuel yet. Then you take what percentage is allocated to the gas and electric and divide it out. So it is not duplicated.
6. Slide 7 – Dave Costenaro - Note: There is a discrepancy on the costs per therm between the residential and non-residential. They need to investigate and drill into that. Mike Ambrosio said at a very high level it looks like residential savings about doubles in 4 years and the non-residential goes up by a factor of almost 3. What drives the significant increase that becomes available of that 4 year period? Then Mike realized the budget doubles so that can account for some. Dave said he will have to look into it.
 - a. Randy Solomon (Sustainable New Jersey) – Especially because on the other slide it says the budget doubles and the savings triple and then another slide it says you are having to move to a less cost effective higher up on the tree sort of speak. Dave said they will look at it.
 - b. Randy – Noted that the residential tends to have a high opportunity cost because you have to do with audits as an entry way and recruitment is expensive. He said he assumed EnerNOC is taking into consideration the nature on how the audits are paid for on the Home Performance program has changed. Dave – at this point we do not have an explicit audit cost in this data.
 7. Slide 8 – Janja Lypse (CSG) asked for under incentive costs, under residential what is the reason for the budget changes between 2013 and 2015? Dave responded that what he thinks what is going on is there are some standards changing and new technologies are coming in with decreasing costs. These are the kind of types of things they really need to drill down into and smooth them out.
 - a. Question on the phone was what is the explanation of the non-incentive costs also dropping as well? Dave said everything is scaled together.
 8. Slide 12 – Dave Costenaro - Comparing historical data. The next step is to hone in on what the range is. Note: 2012 savings on this chart are as of 2012 3rd quarter.
 - a. Kenji Takahashi (Synapse Energy, Representing Rate Counsel) – For the program costs, what is the data flow? Kenji said he has a different budget and spending which he got from the previous CRA

process. Mike Ambrosio (AEG) responded saying that the number Kenji is looking at is totally spending which includes EDA, Renewable Energy Programs and OCE oversight. The numbers Dave is working with is the energy efficiency spending only which is only a subset of the number Kenji is looking at. Mike checked these numbers and they line up.

- b. Kenji – Curious to know how EnerNOC divides the budget into electric and gas saving. Dave thinks they did a per BTU's saved allocation. Mike Ambrosio said for some programs it is relatively easy and they get the rebated information from TRC and Honeywell and apply the rebate ratios to all other related costs. Others, such as the whole house program it is not as clean, but they still try and get the best information they can on what the split is and apply an allocation factor.
9. Slide 13 - Kenji Takahashi (Synapse Energy, Representing Rate Counsel) said it looks like the data is about historic savings and it looks like it is very, very cost effective, but that according to the AEG benchmark study they found the opposite and that NJCEP was one of the most expensive programs. Dave responded that it is a good point and they went through and removed a lot of erroneous EIA data, but that Kenji is right and the data it is self reported from the utilities so you have to take it with a certain amount of grain of salt, but this data is scrutinized and they are relying on that. Dave would be interested in seeing the AEG report. Mike Ambrosio (AEG) said he would have to go back to look at the results and that he does not think it is necessarily inconsistent with this information. They did it by program assessment so some programs were higher, somewhere lower and some were consistent. Mike would like to spend a little more time to see what part of that report can be directly compared to this.
- a. Joe Gennello (Honeywell) – In setting the incentive levels for this program did they take into consideration of transition from incentives to loans? David - This is something they plan to look at in the refined report. The loans themselves do not create any new measures and there are not any savings related to loans. However, money is being set aside. He does not know what this would be categorized as. However, they do want to include it. It might manifest itself as part of the administration cost.
10. Slide 15 – Anne Marie Perracchio (NJNG) – One piece we do not see here is Combined Heat and Power (CHP) and also NJCEP wanted to investigate a retro commissioning filing which was put on hold because of transition issues. She asked Dave to comment on those 2. Dave responded that CHP did not fall under the scope of the project which is it not here and that maybe it could be considered in the same bucket as renewable programs from this assessment perspective. They can work with the BPU and figure out what to do there. Retro commissioning has been typically very small and EnerNOC has heard that efforts for retro commissioning have been met with mixed reviews in NJ and elsewhere. They took the retro commissioning savings and measures that they had and put it in the SmartStart customs program. They can chat with the BPU if they want to change or break that out.
- a. Joe Gennello (Honeywell) asked for a clarification of dates. Mike Ambrosio (AEG) said that on this report we see years and somewhere in 2012 we were switching to fiscal years and 18 month programs. Starting July 1 we are going to have fiscal years that go from July to July. He asked Dave if these calendar or fiscal years? Dave said they started it as a January through December year and have not changed that yet.
 - b. Randy Solomon (Sustainable New Jersey) – The D/I Program is a whole building approach and it does not deal with shell issues, so some people would not consider it a whole building or holistic approach. He asked if EnerNOC agrees in this or is this just a semantics issue. Dave says they want to make sure the measures can be made quickly.
 - c. Randy Solomon asked about the analysis for market potential and what sort of analysis EnerNOC is doing. Is it part of the analysis to look at the actual universe of buildings and measures in NJ and see what has been achieved so far to drive the potential or is it more driven by program availability? Dave responded that is more of the former. He added that the study they did before they looked at the latest survey data they could find and what was done in NJ and put that into the model to see what opportunities remain and what the adoption rates and achievables could be. Randy asked if this is something that is available for this study and Dave said yes. Randy asked if D/I and P4P breaks out by sector? Dave said the data is broken down by building type like office vs. grocery vs. health. That is the level. He will make a note to perhaps have some tables in the data for this. Randy responded that Sustainable Jersey is also doing a study where they will have an inventory of the local government buildings. They agreed to trade thoughts. Mike Ambrosio added that the EnerNOC study is not meant to lead to a specific, detailed program design and that it is intended to support the funding level for the next 4 years. It is to help to provide tools and building blocks for funding. All the same/normal discussions will occur in program design.

11. Slide 16 – Anne Marie Perracchio (NJNG) –There is a question if the low income Comfort Partners program was required by law. Overall comments back from the group that it is not specifically required by law. Ann Marie then asked, anyone looked at the trajectory of the program with trying to meet the Clean Energy Master Plan and Global Warming from these larger policies. With these larger policies was there any assessment of the savings projected coming from these policies from this study and does it put us on the trajectory of meeting these goals of the act or what percentage comes from this or comes from somewhere else? Mike Ambrosio said that is a bigger question beyond Dave.
 - a. Randy suggests to never use the term “social engineering”.
12. Mona Mosser (BPU) – Wondered why the Large Energy Users pilot is separate from C/I portfolio. Dave said one of the recommendations would be to incorporate that LEU pilot and integrate it into the current program offerings so there isn't too much for them to try to understand. If it can be folded into the programs it could lessen confusion that may impact participation.

Program Coordinator and Regulatory Updates

Presenters: Elizabeth Ackerman (BPU), Mike Ambrosio (AEG) and Mona Mosser (BPU)

1. Straw - Mike Ambrosio (AEG) – AEG has been working with Staff and utilizing pieces of the EnerNOC study to put together a revised CRA Straw proposal. This is one piece of it and would address the energy efficiency piece. Separately they are looking at things such as CHP, renewable energy, Staff and oversight evaluations. It is like a ‘bottoms up building’ of what funding levels would be required to support all the initiatives to what the Board wants. They have done some additional benchmarking over and above what EnerNOC did. Staff has a number of internal meetings over the next few weeks where they will hash out and bounce around proposals on funding levels. Once they come up with the funding level that Staff wants to recommend, this EnerNOC study will help them tie the savings associated with that level. Staff is still targeting the 28th for releasing the straw proposal. An Order was issued last week with a hearing schedule and procedural schedule and the Public hearing is on April 23 and then April 26th is the close of comments.
2. Fiscal year 14 programs and budgets - Mike Ambrosio's understanding is that once the Straw proposal is released on March 28th it sets the base for building the July 1st programs and budgets. It will probably limit the options of changes that could be made because of how late it is now.
3. Anne Marie Perracchio (NJNG) said we are always running on these parallel paths with items that effect each other; is there anything you can touch on (asked to Elizabeth Ackerman, BPU) on how the Straw proposal might affect the \$152M that might be lapsed to the next year. It is a question of are we are going to spin of how we might want to deal with that. Elizabeth responded that this is probably their single biggest challenge in this CRA. They are addressing that concern although she cannot go into details and asked that we all please stand by as they work their way through this.
4. Mona Mosser (BPU) – Board Orders and Regulatory Updates- On the March 20th agenda, they are working towards a settlement with Rockland Electric and have 7 or 8 of C/I rebates over \$300K that are also slated. Also changes to the 2012/13 programs/budgets for the NJCEP that were talked about last meeting.
5. Elizabeth Ackerman (BPU) - Program Administrator – They have received 2 protests to the award. They do not have a clear schedule on how long it will take to review the protests and resolutions will require. They are working internally to respond to the protests and want to do so as expeditiously as possible.
6. Alice Napoleon (Representing Rate Counsel) - Any applications for the SBC program? Carl says no. Betsy reminded everyone that the next SBC working group meeting is April 3.

Commercial/Industrial Programs

Presenters: Carl Teter and Brian DeLuca (TRC)

Presentation/Handout – C&I Market Manager EE Committee Meeting Presentation, February 14, 2013. See presentations for details.

1. 2012 -2013 Programs and Results to Date - Lisa Ward (Declared Power) – In the budget it stated there was going to be a \$5.5M reduction in this program as of 2013. Mike Ambrosio noted that it is actually what was included in the revised budget. There were a number of comments about the reduction and Staff is considering revising its recommendation based on the comments. Board is taking into consideration the lengthy time of projects.

- a. Elizabeth Ackerman (BPU) – The CRA process will continue to consider the balance the programs with the opportunity to spend immediately and the need to safeguard clean energy funds. There are programs that have longer lead times. It will be addressed in the CRA.
2. Upcoming 2013 Changes– These are program changes that were talked about previously. They did receive a rush of applications associated with the phase out of T12 replacement incentive and in the last 4 days of Feb they got over 400 applications which is what they would sometimes get in a month. The LGEA Program has been reopened to the participants that could participate last year. It is basically back to the way it was in 2012.
3. A few changes are being considered on the March agenda – 1) A couple of changes to D/I raising the kWh limit per facility and adjusting to 200kw and adjusting the per project cap to \$125k and 2) opening up the food service incentives to statewide.

Residential Programs

Presenters: Dave Wolk (Honeywell), Janja Lypse (CSG) and Jill Sherako (Eastern Heating and Cooling Council).

Presentation/Handout: Residential Programs Progress Towards Goals Statewide Results YTD February 2013 and Home Performance with ENERGY STAR, February 14, 2013. Eastern Heating and Cooling Council, March 2013.

See Presentations.

1. 2012 Programs and Results to Date – Not included in the WARM and COOL numbers because they are completions are the Sandy applications on file. There are currently approximately 1,530 Sandy applications. 293 Clothes Washer, 241 Cool, 996 Warm equaling approximately \$739k of combined clean energy and Sandy rebate.
2. Joe Gennello (Honeywell) suggested a PR opportunity to have an event to issue the first Sandy rebate check.
3. CFL's – Have renewed some of the existing partners.
4. New Construction – A few interesting enrollments developments. A lot of multifamily projects caused an earlier spike. In February, just before the shift to new incentives there was a large number of applications that came in and at the same time they were looking to move funding from HVAC and then put the dollars back when the Board budget changes. Sherri Jones (BPU) asked Dave if he knew if anyone impacted by Sandy had been in contact. Dave said not that he was aware of and he did not believe they enrolled anyone yet not in Smart Growth.
5. Program changes – Increase quantities for mid-stream incentives for CEE Tier 2 clothes washers and refrigerators with retail partners and schedule additional site visits to properly educate retailers and accelerate uptake. Mona Mosser (BPU) asked when it is expected to be launched. Dave responded that there is a Board agenda meeting is the 20th and they will let them communicate as soon as the Market Manager gets the official written Board Order. From there it will depend on the different partners and what each specifically needs to get up and running. Customers of non participating retailers also need a vehicle to participate and we offer mail in options for them. The initial plan is for purchases on or after April 1, but the feedback we received from Staff was that since they were already offering these rebates to Sandy victims we should retroactively offer this statewide back to January 1 for clothes washers only.
6. Mona Mosser (BPU) wanted to announce that the Home Performance program is being honored with a Partner of the Year Sustainable Excellence award.

Other Business, Next Meeting

Next Meeting - April 9, 2013

Attendees

Name	Company	In Person	By Phone
Ackerman, Elizabeth	BPU		x
Adams, Ben	MaGrann Assoc.	x	
Ambrosio, Mike	AEG	x	
Bryant, Elaine	Birchview Efficiency		x
Carpenter, Joseph	NJ DEP	x	
Chaplin, Dawn	Honeywell	x	
Chiu, Susanna	PSE&G		x

Costenaro, David	ENEROC	x	
DeLuca, Brian	TRC	x	
Desimpel, Tom	CMC Energy	x	
Dolan, Brian	Intellidyne	x	
Donohue, John	On behalf of Fuel Merchants Assoc		x
Fisk, Andrew	CSG	x	
Flannery, Mike	MaGrann Assoc.	x	
Foster, Rebecca	VEIC	x	
Gennello, Joe	Honeywell	x	
Grossman, Bruce	SJG	x	
Jones, Sherri	BPU	x	
Lupse, Janja	CSG	x	
Markwood, Scott	O&R	x	
Marshall, Bob	NJ Energy Coalition	x	
Miller, Ashley	TRC		x
Mosser, Mona	BPU	x	
Napoleon, Alice	Synapse Energy Economics Representing Rate Counsel		x
O'Brien, Nancy	EFS		x
O'Donnell, Tony	Sustainable Jersey	x	
Palmer, Bill	Kamson Corp	x	
Parlapiano, William J. III	PECI		x
Perracchio, Anne-Marie	NJNG	x	
Rozanova, Valerie	TRC		x
Seelaus, Andrew	EMC2 Development Co. Inc		x
Senski, Robert	South Jersey Energy Service Plus		x
Sherako, Jill	Eastern Heating and Cooling Council	x	
Solomon, Randy	Sustainable Jersey	x	
Takahashi, Kenji	Synapse -Energy		x
Teng, Elizabeth	BPU	x	
Teter, Karl	TRC	x	
Trzaska, Jaci	Rutgers		x
Valora, Sam	SJG	x	
Vieira, Mario	New Millennium Lighting	x	
Wetzel, Linda	AEG	x	
Whited, Melissa	Synapse Energy Economics Representing Rate Counsel	x	
Wolk, Dave	Honeywell	x	
Zukas, Diane	TRC		x