STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF THE FILINGS OF THE COMPREHENSIVE RESOURCE ANALYSIS OF ENERGY PROGRAMS PURSUANT TO SECTION 12 OF THE ELECTRIC DISCOUNT AND ENERGY COMPETITION ACT OF 1999	))))))	BPU Docket Nos. EX99050347, EO99050348, EO99050349, EO99050350, EO99050351, GO99050352, GO99050353, GO99050354
IN THE MATTER OF THE REVIEW TO EVALUATE AND MAKE RECOMMENDATIONS CONCERNING THE STATEWIDE ADMINISTRATION OF ENERGY ENERGY EFFICIENCY AND CUSTOMER-SITED RENEWABLE ENERGY PROGRAMS	)))))	BPU Docket No. EX01070447

<u>REVISED</u> REPLY COMMENTS ON THE DAVIES ASSOCIATES FINAL REPORT AND RECOMMENDATIONS ON COMPREHENSIVE RESOURCE ANALYSIS PROGRAMS

PREPARED BY DR. DAVID NICHOLS ON BEHALF OF
THE NEW JERSEY DIVISION OF THE RATEPAYER ADVOCATE

Seema M. Singh, Esq.
Acting Director and Ratepayer Advocate
31 Clinton Street, 11th Floor
P.O. Box 46005
Newark, New Jersey 07101

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REPLY COMMENTS ON THE DAVIES ASSOCIATES FINAL REPORT AND RECOMMENDATIONS ON COMPREHENSIVE RESOURCE ANALYSIS PROGRAMS

Prepared by Dr. David Nichols on Behalf of the
New Jersey Division of the Ratepayer Advocate

1. REVIEW

1.1 Background. On June 7, 2002, the Ratepayer Advocate filed my Comments reviewing the Davies Associates Incorporated (DAI) Report of April 2002 (the Report) and commenting on related matters. In these Reply Comments I expand on some of my Comments on the basis of information and views raised in the comments of other parties.

1.2 Overall comment. My overall comment remains, in brief:

- The Report provides a thorough analysis of the administration of CRA programs. The Board should consider its recommendations on administration. However, DAI was remiss to propose no method to open up the process of administering energy efficiency programs to serious participation by non-utility parties.
- DAI gained a good understanding of the customer-sited renewable energy program, and wisely recommended removing natural gas fuel cells from it.
- The Report did not adequately understand the CRA energy efficiency (EE) programs, and misread the Electric Discount and Energy Competition Act (EDECA) goals and objectives relating to EE programs.

1.3 Assessment of energy efficiency programs. My assessment of CRA programs in the area of energy efficiency needs to be supplemented with some additional information about existing programs. In addition, I was wrong to state in my Comments that the New Jersey Clean Energy Collaborative's (NJCEC, or the Collaborative) EE portfolio includes "no programs" to incent C&I customers to pursue energy efficiency retrofits at their facilities. The Commercial/Institutional/Industrial Construction Program has such a feature in one of its components which makes available incentives for qualifying higher efficiency equipment in existing facilities. However, it does need supplementing.

The following table succeeds Table 1 in my Comments. In my program recommendations in Section 3 below, and consistent with my Comments, I propose three new EE programs, with initial annual budgets:

- **A small C/I program** to provide energy efficiency retrofits to small customers in targeted economically disadvantaged areas, at $3 to $5 million/year program cost.
- **Pay-for-savings program.** A broad program for the entire C/I sector, based on a performance contracting approach in use by the New York State Energy Research and Development Authority (NYSERDA), at $13 to $19 million/year.
- **A broad residential EE retrofit program.** To fill an obvious void in the current CRA offerings, I propose a $4 to $6 million/year program.

Table 1
Energy Efficiency Programs -- Design & Performance Issues

Collaborative Program	Comment
Residential AC Cycling	Successful load management programs that should be maintained. It may be possible to shift the cost basis for the programs from CRA to the basic generation services. Electric distribution utilities should assess the potential for additional load management programs to help trim their costs for power to meet summer peak demands.
Residential HVAC (electric)	Saves energy and peak demand in the near term while changing the cooling market over the longer run. It is a model approach being replicated and studied in other states. The program should be continued. DAI fails to mention this important program.
Residential HVAC (gas) and water heating	Saves energy in the near term while changing the gas equipment market over the longer run. The program should be continued. DAI fails to mention this important program.
Energy Star Program	A promising residential MT program. As DAI notes, market impact information needs to be developed.
Comfort Partners	This low-income efficiency/education program is finally operating effectively, and it is critical that it continue to be, preferably through a State agency.
Residential New Construction	This is a promising new program that can help to develop a basis for eventual upgrades to the State's new construction code.
Residential Retrofit	This program is a poor substitute for the Home Energy Savings Program it replaces. The latter provided on-site audits that helped raise householders' awareness of energy use, was received with high marks by customers, and produced incremental energy savings actions by customers. A second generation HESP program should be created.
School Education Program	Evolution of programs at several utilities. A well-conceived program that helps to develop energy awareness among students and teachers. It should be continued.
Commercial/Institutional/ Industrial (C&I) Construction	This is a promising new program. It provides a wide range of technical assistance services and financial incentives toward high-efficiency design and equipment investments by builders and customers at new and existing facilities. The program should be continued.
C&I Building Operation & Maintenance	These programs are useful as far as their limited objectives go, but they do not fill the need for pay-for-savings retrofit initiatives in the C/I market. The portfolio of EE programs should be expanded as soon as feasible to include new programs to incent C&I customers to work with energy efficiency service provider companies to pursue cost-effective energy efficiency retrofits at existing customer facilities.
Compressed Air Optimization	

2. ADMINISTRATION OF CRA PROGRAMS

2.1 Deposit of SBC monies in a trust fund. DAI recommends the deposit of all SBC monies in a Board-controlled Fund. In my Comments I agreed with this recommendation. A trust fund is an important tool to help ensure that CRA programs are performed efficiently and in the public interest. Most other commenters who addressed this DAI recommendation also supported it. The Collaborative opposed it, and expressed the concern that having the monies held in such a Fund could create a "working capital" problem for the administrators of EE programs who need to expend funds on a timely basis. I believe this concern can be easily addressed in the administration of the Fund. In fact Davies' strawman proposal for performance incentives suggested that program administrators get 75% of their budget up front, which would address the need for working capital, and qualify for an additional 50% if they meet real performance targets later on. I note that NJCEC did not express concern about the opposite issue, the one actually occurring today: utilities are booking CRA revenue well in excess of what they are expending, as discussed further below.

2.2 Increased Board oversight of administrative and other costs and of EE programs. In my Comments I agreed with the Report's findings about the need for the Board to have consistent and accurate information about EE program costs. Among other issues, the Report criticized the utilities for reporting outsourced administrative costs as a contractor cost. I was surprised that the NJCEC took issue with this obvious recommendation, claiming that it would be hard to implement, onerous to contractors, and more costly in the end. If there is any business in the world that can consistently classify categories of cost once given an accounting framework for doing so, it is the regulated electric or gas utility. Getting consistency amongst utilities is the challenge if there is not a single ISA, but once done, the Board can get the information it has said it wants and the nature of which it has already clearly defined in its orders. The Collaborative is simply wrong that one cannot get meaningful administrative and overhead costs from contractors. For example, in their May comments, Evergreen Services Corp. explained how, as a contractor, they systematically track their own components of costs. I have also seen that utilities elsewhere can and do require the availability of cost information including profit and cost of service from companies bidding for utility contracts. Thus, the breakdown of administrative versus other costs can and should be part of contracts awarded.

Based on its detailed review, DAI explained that it is difficult to estimate administrative costs due to problems with utility reporting. Davies estimated that year 1 administrative costs for the utilities have been the 6.6% they reported, plus another 10% that was unreported because it was included within contractor costs (Appendix A, page 10). There is some uncertainty about the 6.6% due to different reporting protocols, DAI suggests. The Report says the unreported amount could be greater or lesser than the 10% which it estimates on a very rough basis. It appears that true administrative costs are too high, and the Board should consider how to reduce them. In this context, I note that the comments

submitted by "NJCRAEERE" say that the Quarterly Comprehensive Resource Analysis Report for 2001 shows the utilities' administrative costs at 39.6%. I have reviewed the quarterly report and do not see where NJCRAEERE got this percentage. (I sent an email to the entity identified on the Board's website as "NJCRAEERE," and received the response that it is a group of individuals with expert and business interests in CRA programs that wishes to remain anonymous.)

2.3 Reorganizing the administration of EE programs. No commenters embraced Davies' exact proposal for reorganizing the Collaborative. But if the Board does not choose to create an independent statewide administrator (ISA) for EE at this juncture, Davies' proposal is still worthy of consideration. The Report does document that inefficiencies and lack of clear lines of responsibility exist in the current management arrangements. Therefore, DAI's ideas of strengthening the management structure of the Collaborative and placing a member of the Board Staff on it merit serious consideration by the Board. However, I hope the Board also pauses to seriously consider the potential advantages of a true ISA approach, as described in my Comments.

2.4 Opening up the EE program process. The Board must create processes whereby non-utility parties participate in the process of EE program development and management. A number of parties commented on the complete lack of broader stakeholder representation in the Collaborative process. The National Association of Energy Service Companies (NAESCO), for example, made the important point that energy efficiency service provider representatives can contribute the viewpoint of market actors who are --or should be-- critical to designing programs that maximally leverage CRA funds in the market place. In my experience NAESCO's observation is valid. Yet energy efficiency service providers were virtually shut out when the Collaborative became the CRA administrator for EE.

It is unfortunate that the NJCEC did not see the need even for an advisory committee at the outset of the CRA programs. Now, as an alternative to the Davies recommendation of having the Collaborative a legal entity with a Board Staff person on it, the NJCEC suggests an Advisory Council made up of appropriate agency, public interest, and energy service provider interests, as well as the utilities. An Advisory Council, such as the Collaborative now suggests, can meaningfully broaden stakeholder participation, ***provided*** that processes are put in place to guarantee that it receives information on a timely basis and consults influentially in the formative and other critical stages of the program design and implementation processes. However, the participatory process would be even ***stronger*** if the Collaborative itself were opened up, with the Ratepayer Advocate and other non-utility parties directly represented. It is important to stress that tighter executive management and broader stakeholder representation are synergistic and complementary reforms. ***The Board should undertake both.***

2.5 Performance metrics and performance-based incentives for achievement of EE goals. NJCEC's comments allude to Davies' recommendations on performance incentives for the administrators of programs. However, NJCEC makes no modification

to the performance reward proposals that were presented last year in the utilities' CRA Compliance Filing Supplement No. 1. As I noted in my Comments, DAI's concept of performance incentives is opposite to that set out by the utilities. The former would have some real element of performance risk to the utilities; the latter, virtually none. NJCEC also sets out the interest of at least some utilities in receiving compensation for revenues "lost" through successful CRA programs. The proposal for lost revenue recovery seems to confirm that there is a conflict between the distribution utilities' business interests and the objectives of the CRA programs to reduce utility throughput. The Ratepayer Advocate has opposed lost revenue recovery for any CRA program.

2.6 Implications of EE spending patterns to date. The utilities' Quarterly Comprehensive Resource Analysis Report to the Board for the year 2001 shows that actual expenditures for all CRA programs statewide totaled 50 percent of the budget for calendar 2001. Committed expenditures are another 27 percent. The underinvestment is thus 23 to 50 percent depending on whether actual plus committed expenditures are considered, or just actual spending. The underinvestment is greatest for renewable energy, but it is still significant for EE. Comments submitted anonymously by "NJCRAEERE" suggested that the failure to expend funds implies shortfalls of the CRA programs generally. I would distinguish between RE and EE. Renewable energy programs are brand new to New Jersey, and it is not entirely surprising that it is taking time for program uptake to grow.

On the other hand, New Jersey has over 20 years' experience with EE. Though substantial, the level of EE funding in New Jersey, on a mills per KWh basis, is considerably less than some other states, as shown in the Davies Report, Appendix B. Given this long experience with EE, and the relatively moderate level of EE support, New Jersey's EE programs should be productively utilizing ***all*** of the available budget. Under-spending in the area of EE is an indicator of potential problems. The Collaborative may be trying to field too many discrete "market transformation" programs that take time to create and deliver. Further, the suite of Collaborative EE programs was deliberately designed to cut back on what are called "retrofit" programs, meaning initiatives that try to incent owners and operators of existing buildings and facilities to invest in energy efficiency measures that would not meet their normal budgeting or payback criteria. Experience with prior demand-side management (DSM) programs at several New Jersey utilities shows that there is a ready market for retrofit programs in New Jersey, but what is on offer now is quite limited.

In Section 3 I suggest that three new retrofit programs be offered as soon as possible, funded largely by EE budget not being spent. According to Worksheet R-A1 of the utilities' Quarterly Comprehensive Resource Analysis 2001 report, over $15 million in EE budget was neither spent nor committed. If one assumes that there will be at least $5 million in economies in the future by reducing administrative costs from the levels identified in the DAI Report, as discussed below, then there is a de facto pool of at least $20 million, which I suggest be applied to these new programs.

3. THE DESIGN AND DELIVERY OF CRA PROGRAMS

3.1 The renewable energy program and fuel cells using gas. The Report recommended ending RE program funding for natural gas fuel cells (NGFCs) and I agreed in my Comments. A number of commenters defended the inclusion of NGFCs. But not one of these pro-NGFC commenters made a case that NGFCs require ratepayer support in order to penetrate the market in New Jersey. Ballard *et al.*[1] came closest, stating that subsidized installations of NGFCs would bring down the existing capital costs through economies of scale. But even Ballard *et al.* did not explain what these capital costs are nor purport to make a case that there is no market for NGFCs without subsidies.

All of the pro-NGFC commenters referred to EDECA's definition of Class I renewable energy.[2] It is undisputed that this definition includes "fuel cells." However, there is no statutory requirement that any technology that can be encompassed within a definition must on that account be entitled to subsidy. On the contrary, better reasons than the definition itself must be set forth. DAI gave relevant reasons for defunding NGFCs in its Report, and I gave additional reasons in my Comments.

EDECA contains a renewable resource portfolio standard (RPS).[3] The RPS requires electricity suppliers to achieve minimum fractions of Class I and Class II renewable energy in their power supply portfolios. Since NGFCs can be used to meet RPS requirements, this technology will not be without policy support once it is removed from the CRA.

3.2 Energy efficiency programs. At the May 1, 2002, public hearing on the Davies Report, Commissioners Fox and Murphy asked the Ratepayer Advocate to compare current EE programs to prior programs and to comment on their performance. The tables below present a somewhat expanded response to that request from that provided in my direct Comments. Table 2 compares major new CRA programs with the major prior DSM programs. Table 3 presents my preliminary assessment of the new CRA programs. Following the tables I discuss my recommendations to create three new retrofit programs at this time.

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[1] Comments of Ballard, DuPont, Fuel Cell Energy, W.L. Gore & Associates, H Power Corporation, Hydrogen Source, Idatech, KeySpan Corporation, Nex Tech Materials, Reliant Power Systems and UTC Fuel Cells, dated June 7, 2002.

[2] C.48:3-51.

[3] C.48:3-87.

Table 2
Energy Efficiency Programs -- New and Old

Collaborative Program	Prior Program	Note
Residential Central Air Conditioner (AC) Cycling	Continued PSE&G and JCP&L programs	Load management to reduce summer peak demands
Residential Heating, Ventilating, and Air-Conditioning (electric)	Evolution of programs at the two biggest electric utilities	Efficient central AC and heat pumps with proper installation and sizing
Residential HVAC (gas) and water heating	Evolution of program at PSE&G	Efficient gas furnaces and boilers with proper sizing; efficient gas water heaters
Energy Star Program	New program aimed at residential technologies	Appliances, lighting, windows
Comfort Partners	Evolution of E-Team Partners, PSE&G; other utilities had differing programs	Residential low-income efficiency measures and education
Residential New Construction	New	"Energy Star Homes" based program
Residential Retrofit ("N.J. Energy Smart")	Replaces Home Energy Savings Program (HESP)	HESP was on-site audit, RR is remote home "audit"
School Education Program	Evolution of programs at several utilities	Provides educational materials and exercises for teachers and students
Commercial/Institutional/ Industrial (C&I) Construction ("Smart Start Buildings")	Evolution of C&I efficiency programs for existing and new facilities, especially at JCP&L	Technical assistance and financial incentives for efficiency measures
C&I Building Operation and Maintenance	Partially replaces small commercial audit programs	Building operator training and certification to promote efficient O&M practice
Compressed Air Optimization	New	Training and information in partnership with national "Compressed Air Challenge" program
The Collaborative's EE portfolio includes few retrofit programs and no pay-for-savings programs to incent C&I customers to pursue energy efficiency retrofits at their facilities.	Standard Offer to incent gas and electric energy savings through retrofits, PSE&G and some other utilities	There are no new pay-for-savings programs under the CRA to date.

Table 3
Energy Efficiency Programs -- Design & Performance Issues

CRA Program	Comment
Residential AC Cycling	Successful load management programs at PSE&G and JCP&L that should be maintained. They are clearly consistent with the explicit State energy policy of promoting load management. DAI's complaint that they are not "market transformation" is irrelevant. It may be possible to shift the cost basis for the programs from CRA to the basic generation services. Electric distribution utilities should assess the potential for ***additional*** load management programs to help trim their costs for power to meet summer peak demands.
Residential HVAC (electric)	Saves energy and peak demand in the near term while changing the cooling market over the longer run. Including both better equipment and improved installation standards, this model approach is being replicated and studied in other states. The program should be continued. DAI fails to mention this important program in its assessment of "performance."
Residential HVAC (gas) & water heating	Saves energy in the near term while changing the gas equipment market over the longer run. The program should be continued. DAI fails to mention this important program in its assessment of "performance."
Energy Star Program	A promising MT program for residential appliances, lighting, windows. However, market impact information needs to be developed as soon as feasible to determine whether it is having significant market effects.
Comfort Partners	This low-income efficiency/education program is finally operating effectively, and it is critical that it continue to be, whether through a State agency or the Collaborative. DAI's comment that this program is not "market transformation" is irrelevant.
Residential New Construction	This is a promising new program that can help to develop a basis for eventual upgrades to the State's new construction code.
Residential Retrofit	This program is a poor substitute for the HESP programs it replaces. The latter provided on-site audits that helped raise householders' awareness of energy use, was received with high marks by customers, and produced energy savings actions by residential customers. The RR program has low activity levels and a design that cannot succeed. Consideration should be given instead to crafting a second generation HESP program.
School Education Program	Evolution of programs at several utilities. This well-conceived program helps to develop energy awareness among students and teachers. It should be continued.
Commercial/Institu-tional/ Industrial (C&I) Construction	This new program provides a wide range of technical assistance services and financial incentives toward high-efficiency design and equipment investments by builders and customers at new and existing facilities. The new-construction components of the program can help to develop a basis for eventual upgrades to the State's new construction code. The program should be continued.
C&I Building Operation & Maintenance	These programs may be useful as far as their limited objectives go, but they simply do not fill the need for pay-for-performance retrofit initiatives in the C/I market. The portfolio of EE programs should be expanded as soon as feasible to include such programs to incent C&I customers to work with energy efficiency service provider companies to pursue cost-effective energy efficiency retrofits at their existing facilities.
Compressed Air Optimization	

3.4 The need for pay-for-performance EE retrofit programs in commercial/industrial (C/I) markets. Those who own or operate nonresidential facilities are often not in a position to focus on opportunities to reduce energy costs through efficiency measures except in the minority of cases where energy costs are a large contributor to operating expenses. Some earlier DSM programs were designed to encourage these customers to "retrofit" their facilities -- that is, to work with efficiency experts and businesses to review equipment, building, and operating characteristics to see where improvements could be made that would reduce energy costs. In his comments on the Davies Report, Professor Lynn Stiles of Richard Stockton College helpfully detailed some of the kinds of market barriers that impede customers making energy efficiency investments that would appear to be to their advantage. Retrofit programs provide technical assistance, financing arrangements, and/or partial financial incentives to overcome barriers to action and encourage installation of EE measures and practices. Good retrofit programs reduce energy consumption at a total cost --technology cost plus program cost-- that is less than the cost of the energy supply that is saved. They are, in short, cost-effective. In cost-effectively saving energy while producing environmental benefits, such programs are good for New Jersey, as I argued in my Comments.

Beyond their direct impacts and benefits, one of the longer run objectives of C/I retrofit programs is to develop the market infrastructure of energy efficiency service providers -- individuals and companies who can work with nonresidential firms and institutions to help them scope out, install, and maintain efficiency measures. The market transformation objective is to first sustain the energy service provider infrastructure, and then, over time, to evolve it toward successfully working with C/I customers with lessening need for EE program support. Despite the fact that they were very large for a few years, New Jersey's Standard Offer (SO) programs did not aim to accomplish that objective.

The SO programs paid contractors --whether vendors like the energy service companies, or the customers themselves-- on the basis of KWh of electricity or therms of natural gas saved as a result of energy efficiency measures installed through the program. The payments were made over contract terms of five, ten or fifteen years. While some support went to efficiency in new construction, the bulk of the funds were applied to retrofit measures. (Not all of the pre-CRA programs used the SO approach. JCP&L, in particular, has had substantial C/I rebate programs for both existing and new construction.)

The PSE&G SO program has been very large, with a total lifetime cost in the upper hundred millions of dollars. In past comments and testimonies on behalf of the Ratepayer Advocate I have argued that the Standard Offer programs were overpriced. The prices paid for saved energy were so high that in PSE&G's first (and biggest) of 3 SO programs, about 90% of the cost of efficiency projects was covered by the stream of utility payments. Thus, the amount of ratepayer funding applied to get the energy savings was not really minimized. That is history, for the SO programs are gone, except for the continuing streams of payments for measured savings of electricity or gas. But even though many customers benefited substantially from the SO programs and other C/I

programs, others did not, particularly the small to medium sized firms that participated at a lower rate. Moreover, there was too much volatility in the SO programs. In the mid 1990s they grew rapidly, yet by 2000 they wound down almost abruptly.

The need is for stable, predictable programs which utilize moderate financial incentives and which are sustained over a period of several years. What is still needed are well-designed programs which can assist more customers with efficiency retrofits and can at the same time contribute to the development of a sustainable energy service provider market in the State. For these reasons, I recommend the creation of new retrofit-oriented programs to take their place among the suite of CRA EE programs. I propose two programs: a small C/I initiative, and a pay-for-savings program for the C/I market generally.

Small C/I program. This initiative would provide energy efficiency retrofits to small C/I customers in targeted areas with high concentrations of economically disadvantaged people. This would be a "direct install" program, in which the measures recommended by the program experts and accepted by customers would be installed by program contractors who had been selected through an RFP process. To promote the dual objectives of energy efficiency and economic redevelopment, its services would have only nominal levels of participant costs. In the CRA Stipulation offered to the Board in 2000 by the group of parties that did not include the utilities, an annual budget of $5 million was developed for this program. If the amount of $20 million in total is considered available for new programs, this program could be funded at an initial $3 million/year level.

Pay-for-savings program. This initiative would be based on the performance contracting approach in use by the New York State Energy Research and Development Authority (NYSERDA).[4] The NYSERDA program entitled "Commercial/Industrial Performance Program" aims to promote performance contracting (another term for pay-for-savings) as a viable commercial practice, especially in the institutional sector, and to foster the development of the infrastructure of energy service companies. In the program, contractors --who are energy efficiency service provider companies-- are paid on the basis of KWh savings that are expected from each efficiency project based on inspection of the project installed and on early measurement of its impacts on energy use. The payment for savings resembles the SO approach, but the payments are lower in relation to the savings achieved than under any of the New Jersey SO programs. There are distinct payment schedules for: lighting measures; motor drive measures; cooling equipment and systems; and customer measure determined on a case by case basis.

[4]Information about the NYSERDA program may be obtained from the website (www.nyserda.org) or from its Director of Energy Efficiency, Mr. Brian Henderson. Note that the payments for savings listed at the website are for annual savings are for only one year of savings, paid over a two year contract period and thus are lower than those used in the N.J. SO programs. The measures installed will actually last 10-15 or more years.

The NYSERDA program has 80 participating energy efficiency service providers and has had consistency of focus for the past three years. Given the success of the NYSERDA program as described in NAESCO's comments, it may be feasible to set incentive levels in New Jersey at a slightly lower level than used in New York, and still leverage substantial EE investment. A New Jersey pay-for-savings program would also include incentives for saving natural gas. This pay-for-savings program would be broadly open to all non-residential facilities and it would be open to all qualified vendors. In the CRA Stipulation offered to the Board by the group that did not include utilities, an annual budget of $19 million was developed for this program. If the amount of $20 million in total is considered available for new programs, this program could be funded at an initial $13 million/year level.

3.5 The need for a residential survey-based EE retrofit program. In my Comments I stated that there is a need for a broad residential program to encourage existing households to understand their energy use patterns and to provide tools for taking actions to save energy. The current "Residential Retrofit" program is an energy efficiency program only in name. It is a "do-it-yourself" checklist of the uses of energy in a home, with crude estimates of possible energy savings measures, but no visit by a qualified energy surveyor to provide site-specific expertise. There is no substantial technical assistance. The Board should consider developing a broad, up to date residential program to provide:

- Comprehensive on-site energy surveys conducted by trained energy analysts.
- Introductory efficiency measures installed on site at the time of the home energy survey.
- Service to facilitate the purchase of comprehensive efficiency measures by non-low income households at market rates. Facilitation services assist householders to contact qualified contractors and proceed with arranging for efficiency improvement to their homes, provide inspection services, and identify financial programs that will work with householders to finance their investment if desired.

Annual funding at the level of $6 million, slightly below the program estimate in the CRA Stipulation offered by the non-utilities group, would be sufficient to mount a statewide program reaching out to all households irrespective of their particular heating fuel. If the amount of $20 million in total is considered available for new programs, this program could be funded at an initial $4 million/year level.