

Comments of the National Association of Energy Service Companies (NAESCO)
On the Draft Energy Efficiency Strategy for New Jersey
Achieving the Master Plan Goals
A NEEP Report
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Submitted by:

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Introduction

The National Association of Energy Service Companies (NAESCO) appreciates the opportunity to submit these comments to the New Jersey Board of Public Utilities (BPU) and to the Northeast Energy Efficiency Partnerships (NEEP) on the “**Draft Energy Efficiency Strategy for New Jersey**” (Draft).

NAESCO's current membership of about 75 organizations includes firms involved in the design, manufacture, financing and installation of energy efficiency and renewable energy equipment and the provision of energy efficiency and renewable energy services in the private and public sectors. NAESCO members deliver about \$5 billion of energy efficiency, renewable energy and distributed generation projects each year – about equal to all of the energy efficiency projects delivered by all US Electric Distribution Companies (EDCs) combined, according to a recent report by the Lawrence Berkeley National Laboratory.

NAESCO numbers among its members some of the most prominent companies in the world in the HVAC and energy control equipment business, including Carrier, Honeywell, Johnson Controls, Siemens, Trane and TAC Energy Solutions. Our members also include some of the nation's largest EDCs: Pacific Gas & Electric, Southern California Edison, New York Power Authority, and TU Electric & Gas. In addition, ESCO members include affiliates of several EDCs including ConEdison Solutions, FPL Energy Services, Pepco Energy Services, Constellation Energy Products and Services, Energy Systems Group and Direct Energy. Prominent national and regional independent members include AECOM Energy, AMERESCO, Atlantic Energy, Burns & McDonnell, Chevron Energy Solutions, CLT, Comfort Systems, CTS, EnergySolve Companies, EPS Capital, GDC/Unalite, NORESKO, Onsite Energy, Science Applications, Synergy Companies, UCONS, and Wendel Energy Services.

NAESCO member companies have delivered hundreds of millions of dollars worth of energy efficiency energy efficiency, renewable energy, demand response and distributed generation projects to New Jersey institutional, government, industrial, commercial and residential customers for almost two decades.

In addition to the project delivery experience of its members, NAESCO has served on a number of advisory groups that assist the administrators of energy efficiency programs in several states, including:

- The New York SBC Advisory Group, which is appointed by the New York Public Service Commission to review and transmit the quarterly evaluation reports for the New York energy efficiency programs administered by the New York State Energy and Research Development Authority (NYSERDA).
- The Program Advisory Groups for three California utility energy efficiency programs;
- The Leadership Group of the National Action Plan for Energy Efficiency;
- The New York City Energy Policy Task Force;
- The Energy Efficiency Task Force for the Western Governors Association Clean and Diversified Energy Advisory Committee; and,
- The New York State Regional Greenhouse Gas (RGGI) Operating Plan Advisory Group.

NAESCO's experience serving on these advisory groups, (as well as its experience in state proceedings that are developing new energy efficiency programs in North Carolina, South Carolina, Indiana, Oklahoma, Michigan, Illinois, Florida and Pennsylvania during the past year) provide some perspective on the development of effective energy efficiency programs that may be useful to the New Jersey Board of Public Utilities.

Summary of Comments

NAESCO complements NEEP and the other authors of this Draft, which contains a number of interesting new ideas and a good summary of an overall energy efficiency strategy for New Jersey. NAESCO is particularly interested in further exploration of NEEP's concept of treating large commercial buildings that are occupied by a number of tenants as a set of small commercial customers that can be served with direct install programs.

However, NAESCO believes that key sections of the Draft are built on an inaccurate description of the ESCO industry and that this inaccuracy leads NEEP to propose a program delivery structure for large customers that, based on recent history, is likely to fail. NAESCO urges the Board to revise this proposed energy efficiency delivery structure in order to reinforce, rather than attempt to supplant, the ESCO business model and to fully exploit in New Jersey the capabilities of the ESCO industry infrastructure for the benefit of all ratepayers.

Inaccurate Description of ESCO Industry

The Draft, on page 70, contains the following description of ESCOs:

“On the other hand, ESCOs are by their very nature limited to certain project types. Indeed, ESCOs have very high customer acquisition costs. They are usually asked to provide prospective customers with something nearing a guarantee of energy savings, meaning that ESCOs themselves need to be extremely confident in the project’s profitability – a confidence that requires facility audits and detailed energy and cost estimates. All of these activities result in upfront costs for the ESCO, even before a contract is signed. As a result, ESCOs seek out only the most cost-effective measures, and this may not lead to a comprehensively efficient building design.”

NAESCO is uncertain where NEEP got its information, but it is an inaccurate description of how ESCOs develop projects and of the comprehensive nature of most ESCO projects. We refer the authors of the Draft to a recent report published by the Lawrence Berkeley National Laboratory (LBNL) that documents the current state of the ESCO industry and its typical projects.¹

According to LBNL, US ESCOs will this year deliver more than \$5 billion of projects – approximately equal to the aggregate output of all of the utility energy efficiency programs in the US. These projects include the full range of energy efficiency, water efficiency, customer-sited renewables, distributed generation, demand response, commissioning and retro-commissioning, advanced metering, advanced control and information technologies. Contrary to the Draft that states that ESCO projects deliver only the most cost-effective measures, (what is sometimes referred to as “cream-

¹ A Survey of the U.S. ESCO Industry: Market Growth and Development from 2000 to 2006, May, 2007, LBNL # 62679, available at: http://eetd.lbl.gov/ea/EMS/EMS_pubs.html

skimming”), ESCOs in fact deliver comprehensive projects integrating multiple energy efficiency measures that are cost effective because these projects are typically a blend of short payback measures like lighting retrofits with longer payback items like new boilers, chillers and renewable energy systems. NAESCO member companies have, for example, delivered projects that range from the largest customer-sited solar photovoltaic installations in the country to comprehensive retrofits of tens of thousands of mobile homes. Some ESCOs now include sustainable operations improvements, such as daytime cleaning and non-toxic cleaning chemicals, or long-term building performance monitoring based on advanced metering, as part of their projects.

NAESCO and its member companies have spent the last twenty-five years working in virtually every state in the country to expand the list of efficiency measures that are permitted by enabling legislation for use in institutional performance contracting projects, to open new sources of private sector financing for these projects, and to extend the allowable project contract term to facilitate more comprehensive projects. The ESCO business model is to develop and implement the most comprehensive project possible, not a project that is limited to a few short-payback measures, because ESCOs make more money delivering large, comprehensive projects.

The Draft quote cited above also contains a description of the ESCO project development process that seems to question the validity of that process and transforms a positive for the customer into a negative. The report suggests that detailed energy audits and cost estimates (Investment Grade Audits) are a problem related to the inherent limitations of the ESCO business model, rather than a necessary step in the development of a project, and a confirmation for the customer of the economics of the project scope. How, we would ask, would someone propose to develop a comprehensive multi-measure project without a detailed energy audit and cost estimate to serve as an implementation plan? The Draft also seems to imply that the guarantee of savings that is often offered by an ESCO is a bad thing, rather than a confirmation to the customer that the project savings calculations are reasonable and the proposed measures will, in fact, generate sufficient energy savings to repay the project costs during the term of the contract.

The Draft also mischaracterizes the financial risk incurred by the ESCO in

delivering the Investment Grade Audit, which is typically performed after the ESCO has been selected in a competitive procurement process and has signed a project development contract with the customer. The Investment Grade Audit contract typically specifies that the customer will either go ahead with the project, in which case the cost of the audit becomes a component of the total project cost, or will pay the ESCO a pre-negotiated price for the audit and terminate the project.

In summary, the ESCO business model is a successful model whose key components have been refined through more than 25 years of market competition and which has delivered more than \$35 billion of projects across the country since 1990. NAESCO respectfully suggests that this proven business delivery model, implemented by an infrastructure of ESCO companies already in place in New Jersey, should be the foundation of the Energy Efficiency Strategy envisioned in the Draft.

Draft Based on a Faulty Premise

It appears that the Draft authors believe that large customers don't implement energy efficiency because they are ignorant of its benefits. This premise is a familiar refrain of analysts and consultants who are not in the business of trying to sell energy efficiency projects to these large customers. ESCOs, who are in the field every day, know that large customers are aware of the benefits of energy efficiency but do not see the pricing signals or incentives that motivate them to make energy efficiency a priority. We believe that large customers can be reached with new energy efficiency programs that incorporate the right program design features and the financial incentives, not raising the volume or frequency of education campaigns that have failed for the last two decades.

The Draft Proposes to Revive a Failed Business Model

Unfortunately, the Draft proposes to create a new business model to supplant, rather than reinforce the widely successful ESCO business model. This new business model presented in the Draft appears to be composed of elements that have failed in the marketplace in direct competition with the ESCO business model.

The Draft hypothesizes, beginning on page 63, that the missing component that will catalyze the large customer marketplace is the establishment of long-term account

management relationships with these customers. This account management would be done by Energy Efficiency Service Providers or EESPs, who will provide “virtually all sales, technical analysis and other services required to originate and move energy efficiency projects to completion.” (Draft at 64) These are, of course, core functions in the ESCO business model that delivers billions of dollars of projects each year.

And who are these EESPs who are supposed to be able to perform these core functions better than the ESCOs? The Draft appears to posit that they will be drawn either from the utility large account management groups or from a new breed of energy service company that will recruit personnel from ESCOs. NAESCO does not think that either alternative is credible.

Utility Account Managers Have Failed in the Past

Utility account managers have had account management responsibility for these large customers for decades, decades during which the account managers could have enrolled these customers in utility energy efficiency programs or BPU-administered energy efficiency programs. Why will these utility account managers now be able to move their customers to implement comprehensive energy efficiency projects when they have not been able to do so in the past?

Trying to use utility account managers as point people to develop comprehensive energy efficiency projects is not a new idea but rather the revival of a failed business model. In the mid-to-late 1990s, a number of utilities attempted to create unregulated energy services businesses (utility ESCOs) that hired utility account managers in sales and development roles similar to those envisioned for the EESPs. These utility ESCOs were not able to successfully compete with non-utility ESCOs, even in their own service territories where they had the advantage of utility name recognition and reputation, and so their utility parent companies each in turn abandoned the ESCO business. Dozens of utilities went through this failed business cycle. The converted account managers were simply no match for skilled ESCO sales and project development people in open competition, and the utility ESCO management could not manage the riskiest part of the ESCO business – the project development cycle.

The converted utility account managers typically could not distinguish customers who were likely to implement projects in the near term from customers who were just looking to be educated about energy efficiency, and so the utility ESCO managers could not determine which customers warranted the investment in the arduous 12-18 month development cycle that is typical of large comprehensive projects. Consequently, the utility ESCOs tried to do what utilities normally do, which is to invest in all their customers. Their costs quickly overwhelmed their revenues and they went out of business.

It appears to NAESCO that the Draft proposes to revive this failed utility ESCO model, substituting ratepayer funds for utility shareholder capital to fund the project development cycle. We see no indication that the new EESPs will be able to distinguish real customers from “tire kickers,” and no indication that the EESPs will have the skill set necessary to move customers through the long project development cycle, rationing the expenditure on technical analyses and energy audits until the customer has made a real commitment to project development and implementation.

Skilled Sales People Won’t Jump to New EESP Companies

NAESCO also observes that the notion of startup EESP companies attracting skilled sales and development personnel from ESCOs is barely credible. To put it crassly, why would the best people leave an established ESCO, which typically offers a very good compensation package, for an untested new company with an uncertain compensation scheme? Alternately, why would we think that ESCOs, which are scouring the personnel marketplace for new sales and development staffers, would allow themselves to be outbid by EESP startups in the competition for the best new people entering the field?

Why Have ESCOs not Fully Developed the Market in New Jersey?

If the ESCO model is successful, why have ESCOs been unable to fully develop the potential market for energy efficiency in large customers in New Jersey? NAESCO believes that the answer to this question is that New Jersey has been hostile to ESCOs and the ESCO business model for the past decade. Most other state energy efficiency

programs have programs that are specifically designed to reinforce the ESCO business model and to help ESCOs develop and implement projects. In New York, for example, the largest single program in the NYSERDA Energy \$mart program portfolio for the past nine years has been the program now known as the Enhanced Commercial and Industrial Performance Program (ECIPP). This program has leveraged about \$95 million of project incentives, which average a little under 20% of total project costs, into \$505 million of project investments that are now producing about 961,000 MWH and 165 MW of peak demand savings each year².

In addition to providing project incentives, NYSERDA has worked with the ESCO industry to promote the ESCO model to customers and to help the ESCO industry expand the types of customers that it serves (one project involved retrofits on the milking machinery of about 150 small dairy farms) and the technologies it offers (there has been a recent emphasis on demand response technologies in the New York City area). The ESCO industry has responded by growing into a robust and diverse set of companies, ranging from branches of major international firms to local small businesses with a few employees. More than 200 ESCOs have completed projects in New York under the ECIPP and its predecessor programs.

New Jersey, by contrast, has had no performance contracting program from 1998 until this year. There has been no effort to provide the modest incentives that can catalyze large numbers of ESCO projects, and there has been no effort by the program administrators, as there has been in New York, to work with the ESCO industry to fully exploit the capabilities of the industry infrastructure in place in the state.

Furthermore, until a few months ago, New Jersey law contained confusing and contradictory provisions about the allowable term of performance contracts in state and local government buildings and the procedures by which public sector customers could enter into performance contracts. The confusion was compounded by administrative rulings that appeared to contradict some of the provisions of state law. The Legislature this year enacted corrective legislation to eliminate the contradictions and confusion, so

² New York Energy \$mart Program Evaluation and Status Report, NYSERDA, March 2008, available at: <http://www.nyserda.org/publications/default.asp>

the ESCO industry may finally have a clear legal path to the development of a large volume of public sector projects.

The Plan Should Reinforce the ESCO Business Model

NAESCO suggests that the Draft should be altered to reinforce the proven ESCO business model rather than undermine it. The efficiency utility should, as the Draft suggests, have a staff of EESPs dedicated to a program of promoting comprehensive projects in large customer facilities. This program, like that of ECIPP in New York, should develop and implement projects in conjunction with ESCOs. The EESPs' functions should be to administer the incentive program, to promote the program to customers (sometimes called market conditioning) and to provide technical assistance to customers. If the EESPs are drawn from the ranks of utility account managers, they should be utilized as the utility account managers in similar programs are used in California – to introduce the ESCO program to large customers, to help the customers understand how performance contracting works, to introduce to the customer the list of ESCOs that have qualified to deliver projects in the program, and to hold the customer's hand through the project development and implementation.

The EESPs should not usurp the functions that are better provided by competitive ESCOs: selling the projects, delivering the technical analyses and Investment Grade Audits, and implementing the projects. The process that is implied in the Draft – having the EESP provide an energy audit is the basis of a project delivered by an ESCO – is generally not helpful. Audits of large comprehensive projects performed by firms that will not implement the projects often lack the precision and rigor of an audit performed by an ESCO that has experience actually delivering projects and that guarantees project costs and savings. Customers are given an inaccurate picture of project costs and benefits, and the ESCO has to spend significant time and effort re-doing the audit and correcting the misconceptions that the audit has created in the mind of the customer about the availability of cost-effective savings in its facility. The experience, under previous audit programs where the audits are unmoored from a financing and an implementation plan, has been dismal. In nearly every instance, these audit programs result in a shelf full of audits don't result in implemented projects.

NAESCO therefore urges NEEP to rewrite this section of the Draft into a program that fully utilizes the capabilities of the ESCO business model and the ESCO infrastructure that exists in New Jersey or would come to New Jersey as they have come to states like New York, California, Texas, and Massachusetts in order to deliver energy savings across multiple customer classes. We will be happy to work with NEEP on this rewrite on an accelerated basis.

Conclusion

NAESCO urges the Board to revise the proposed program delivery structure for large customers to reinforce, rather than attempt to supplant, the ESCO business model and to fully exploit the capabilities of the ESCO industry infrastructure in New Jersey.

Respectfully submitted by,

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