

To: New York Public Service Staff
Interested Parties on the Listserve regarding an Energy Efficiency Portfolio
Standard
Judge Stein, ALJ
From: Public Energy Solutions
Date: July 11, 2007
Re: I/M/O Case 07-M-0548 – EPS Proceeding
Response to Staff’s Questions to the Parties

General:

Staff has requested that interested parties provide response to twenty-four questions regarding the goals, program elements, implementation costs and benefits calculations and funding of energy efficiency initiatives to be considered for implementation in New York in response to escalating energy consumption and concerns over climate change. Public Energy Solutions (PES) is an energy services provider headquartered in Englewood, New Jersey which has a particular interest in these proceedings and specific experience and expertise in the delivery of targeted demand side management programs to market and geographic niches in urban settings. Currently PES is the largest provider of such targeted DSM services to Consolidated Edison under multi-year contracts for load reduction in its Brooklyn, Manhattan and Westchester load centers. Under the terms of the existing contracts, PES has undertaken to permanently reduce electrical load from specified load centers wherein the Company is paid after performance is verified by a third party and, by the nature of performance contracts, is subject to penalties for failure to perform or for the measure to persist.

PES believes Judge Stein has guided the parties to conclude the path for efficiency first and that Staff has identified the correct areas for interested parties to direct their comments at this stage of the deliberation. It believes, however, that upon review of the comments from this data request more areas of discussion will emerge and as such, suggest that Staff prepare to engage in at least one more round of data gathering throughout the proceeding in order that the best thoughts of the interested parties can be brought forward in the light of public discussion.

With respect to PES’s willingness to work with Staff more extensively, our Company would welcome the opportunity to participate directly with Staff and or in the context of issue working groups to flesh out and propose program designs that meet the needs of the citizenry of New York.

As a preamble to our answers, PES believes that there are a few Guiding Principles that should be considered as Efficiency Portfolio Standards are being considered and have set them forth below:

1. Payment for Demand Side Management efficiency and response should be made when and if performance is 1) required 2) delivered and 3) measured in order to

- minimize the risk that payers have purchased an unnecessary or overpriced resource whether that resource is paid for through rates or another social collection mechanism.
2. Wherever possible, program development and administration should be centralized and standardized across the state or even region in order to facilitate economic delivery and fulfillment of programs to the widest audience at the highest level of transparency and with the lowest administrative burden.
 3. The selection of the cost/benefit analysis tools must have as a primary objective to assure that programs are compared on a risk adjusted basis to the paying party to assure that programs do not incentivize unexpected behavior.

STAFF'S QUESTIONS TO THE PARTIES
with Public Energy Solutions' Responses

GOALS:

1. What approaches hold the greatest potential to contribute to New York achieving the overall target of 15% electricity consumption reduction by 2015? Are there any energy consuming sectors and markets that are currently underserved by the existing available portfolio of energy efficiency programs and services in New York State? How should those deficiencies be addressed in implementation initiatives?
 - a. *PES believes that the best way to meet the immediate goals of 15% reduction in electricity consumption by 2015, an unprecedented amount of reduction, involves aggressive program implementation of building retrofit efficiency and demand response programs coupled with the longer lead time impact to be gained from increased building code requirements and appliance efficiency standards.*
 - b. *Specifically, PES believes that Energy Suppliers should be required to supply energy with an increasing component of energy efficiency using a Portfolio Standard that has proven itself workable in the field of renewable energy. In order that the efficiency investments can be independently financed and thus paid for when and if delivered. The industry will require a rule that establishes the requirement for an efficiency portfolio for a number of years into the future and an alternate compliance price to be paid by the Suppliers in the event that they fail to procure sufficient efficiency. PES proposes that a period of ten years rolling into the future is sufficient time to give comfort to the investment community and that the alternate compliance price could be established in a manner which protects the payers by equaling the clearing price of energy and capacity plus an agreed upon environmental externality adder. The payments*

would be made based upon measured savings over time in the case of energy efficiency or reductions in the case of demand response. This approach places supply, efficiency and response on equal financial footing with supply options and assures that no under or over payments are being made by the payer.

- c. Programs offered through the private sector have frequently created an underserved market in the mid and small commercial sectors and in the residential sector. Utilities have filled the gap with low income programs, appliance rebate programs and Small C&I rebate programs. PES believes that this set of initiatives will be neither sufficient in the future to cause action or provide the necessary security to the paying public that the savings have actually occurred and that the payments made have been correctly risk adjusted. To this end, PES believes that targeted programs, using the portfolio standard approach, above, could be effective, where exclusive awards for underserved market sectors are made and overseen by a central administrator. RFP's issued for specified markets in specified territories on a competitive price basis would be used to assure that markets are served at the lowest price.*
 - d. Finally, PES recognizes that utilities may have distribution constraints and corresponding upgrade expenditures that could be cost effectively avoided through targeted DSM. To this end, PES suggests that Utilities could offer avoided distribution constraint adders to the awarded contracts for energy and capacity reductions on a performance basis in order to focus the awardees on the network section requiring relief. The adders could be less than or equal to the avoided construction cost on a levelized basis.*
 - e. Tags or certificates would remain the property of the Developer until surrendered to the Supplier or Administrator in the case of a Target DSM Award.*
2. What is a reasonable goal for natural gas energy efficiency programs?
 - a. Though PES recognizes that no program has yet been implemented that has achieved such a large reduction, however, suggests that until otherwise analyzed, a 15% reduction by 2015 is a good target.*
 3. What are the most appropriate methods and processes for establishing program specific goals and for measuring progress towards long term goals (including program monitoring, measurement, and evaluation)?

- a. As mentioned above, PES believes that a central program office of administration is the correct approach if New York is going to reach its goals in controlled manner. To that end, a process of program development should occur under the direction of Staff so that state goals are established. An independent third Party administrator should be sought and selected to manage the operations and progressive upgrade of the programs together with establishing and administering the measurement protocols. Finally, the State and its Agencies should require periodic outside evaluation of the programs, the Administrator performance and comparative performance of New York as compared to peer states. Review and adjustments should be made on a two year rolling basis.*
4. What load forecasting models and methodologies should be used in developing and refining the objectives of the EPS Proceeding?
 - a. PES believes that others are more qualified to discuss this issue at this time, though it reserves the right to comment at a later date.*
5. What other national, state, and municipal government and private initiatives would help New York meet the objectives of the EPS Proceeding? In what ways can we leverage the impact of these initiatives to help us meet the objectives of the EPS Proceeding? How should the impact of these initiatives be counted and measured?
 - a. PES believes that others are more qualified to discuss this issue at this time, though it reserves the right to comment at a later date.*
6. The Commission instituted a pilot natural gas efficiency program within Consolidated Edison Company of New York, Inc.'s (Con Edison) service territory.¹ As part of that pilot program, the Commission directed the New York State Energy Research and Development Authority (NYSERDA) to prepare a study of the natural gas energy efficiency potential within Con Edison's service territory. NYSERDA filed that study on June 22, 2006, and it was then issued for comment.² Subsequently, NYSERDA prepared a study entitled "Natural Gas Efficiency Programs Resource Development Potential in New York," which was issued on October 31, 2006 and is available on both the

¹ Cases 03-G-1671 and 03-S-1672, Consolidated Edison Company of New York, Inc. - Gas and Steam Rates, Order Adopting the Terms of a Joint Proposal (issued September 27, 2004).

² Case 03-G-1671, supra, Notice Soliciting Comments (issued August 14, 2006) (Con Edison Notice).

Commission's and NYSERDA's web sites. In considering issues associated with a Con Edison electric efficiency/demand management program, the Commission specified how the total resource cost test should be applied to measure the cost effectiveness of measures under that program.³ In the statewide study, NYSERDA used a different benefit/cost approach to measure cost effectiveness.

- a. Please comment on the appropriateness of the approach used in the statewide study.
- b. If a different test of cost effectiveness should be used (i.e., other than the total resource cost test), what test should be adopted and why?

If you have not already commented on this previously, please provide your observations, critiques, and other comments on the data, assumptions, methodologies, and analyses used to develop the estimated potential savings and benefits in the statewide study.

- a. *PES believes that the Total Resource Cost Test is the appropriate test to apply to efficiency and demand response resources with certain conditions. We do believe that the test as applied fails to capture externalities related to environmental impact of resource decisions and these should be considered for inclusion, recognizing that pricing these externalities has been in the past more of a negotiated rather than scientifically derived value. With the recent completion of phase II International Panel on Climate Change and the corresponding McKinsey study on the cost of Climate Change mitigation, the parties may find that enough data has come to light to attempt to derive an appropriate value. In addition, PES believes that price effects should be included. It believes that the price effects of efficiency are diminimus in the TRC + environmental externalities + price effects equation, but that they are the key benefit of demand response and do present net reductions in cost to society provided that supply side generation is outside of the transfer payment pool, which it believes should be the correct analysis. Generators provide a resource into a pool which distributes, consumes or avoids. When a resource is avoided, it is not consumed, never entered the pool and is thus not transferred.*

7. What role should building codes and appliance standards play in reaching New York's energy efficiency goals and should such standards vary by geographical area (i.e., metropolitan New York City versus upstate)?

³ Case 04-E-0572, Consolidated Edison Company of New York, Inc. - Electric Rates, Order on Demand Management Action Plan (issued March 16, 2006).

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- a. PES believes that stringent codes and standards are imperative to the long term goal of energy reductions. It is however, a long term process to convert building stock to higher standards. If aggressive efficiency goals are expected to remain past 2015, the only cost effective method of attainment is to construct the building stock with efficiency in mind.*
 - b. PES believes that others are more qualified to discuss the issue of geographic based building standards at this time, though it reserves the right to comment at a later date.*
8. What role should outreach and education play in an enhanced energy efficiency effort and what changes in approach should be made in various demographic or market segments from the methods now being used?
 - a. Outreach and education are best used for increased awareness and for long term culture change such as with inculcation of an efficiency consciousness with the youth and is the best role for the State to play.. It is recommended that significant effort be made on a continuous basis through 2030 and beyond in our primary and secondary schools to support the cultural change necessary to confront Climate Change issues head-on.*
 - b. The above leaves Program marketing to the enterprises delivering the programs to the public.*
9. What role could innovative rate design play in enabling greater penetration of energy efficiency and how might this vary by market segment? Should energy tariffs recognize and differentiate between the relative levels of energy efficiency designed into new buildings?
 - a. In the least, the state should consider inverted block rates as a method of discouraging usage over a base usage.*
 - b. Real time pricing based upon real time consumption information for all except for the smallest of users should be considered for near term development and deployment in conjunction with demand response capability and pricing regimes.*
10. What programmatic and outreach efforts, within and beyond the current scope of the Commission's jurisdiction, that have not been generally considered as energy efficiency programs, should be integrated into overall strategies and plans to reach energy usage reduction targets?

- a. *PES believes that others are more qualified to discuss this issue at this time, though it reserves the right to comment at a later date.*
11. Should customers of natural gas utilities served under value of service or market-based rates, such as interruptible customers, be included in the overall efficiency program? If so, what types of programs are appropriate for these customers? In what ways would a natural gas efficiency program affect the oil and propane competitive markets and what steps could be taken to eliminate or minimize such impacts (e.g., limiting the program to non-dual fuel customers)?
- a. *Yes. For electricity and natural gas customers, PES believes that the best public policy position is that all customers should be able to participate in efficiency and demand response programs regardless of whether they are being charged for Societal Benefits or not. PES believes that the decision whether or not in charge SBC's is an equity decision to be made by the state and that program participation provides benefits to society at large for which society should pay. In the case of an exempted class, the state would need to contribute on their behalf. In the case of non-electric or gas fuel users, PES believes that an SBC-like fund or surcharge should be placed on these fuels for the purpose of supporting efficiency programs for that fuel type.*
12. What role should a) distributed generation, b) demand response, and c) combined heat and power play in reaching New York's energy efficiency goals?
- a. *PES is confident from review of generally accepted literature that end-use efficiency and combined heat and power are in line with the state's public policy objectives of improving the efficiency of the energy consumption of the state and lowering the net GHG emissions of the state. As such it is confident that they should both play roles in the go-forward goals on a similar plane. It is less confident that distributed generation alone provides consistent benefits to the grid, to society and to the environment and would believe that DG needs further and closer review before it is included in top-tier program approaches.*
13. How can gas efficiency programs best compliment electric efficiency programs? Similarly, how can electric efficiency programs be adapted to serve the needs of gas customers?
- a. *Though it is not an approach that PES has observed as a proven approach, it may be worthwhile to explore Net Carbon Footprint Change as an analysis which might provide benefits to the state through fuel combination and*

switching strategies and offers this as a suggestion to be explored by a working group to include experts in the field.

14. What could be an appropriate role for utilities with respect to the delivery of energy efficiency programs within their service territories? How might that role vary by market segment?
 - a. *PES believes that utilities can play an important role in delivering efficiency programs in their territory in two key ways:*
 - i. *Utilities should be allowed to participate directly in the delivery of energy efficiency programs through investment of Shareholder funds in programs and projects which are paid for through performance based initiatives(no ratepayer funds at risk)*
 - ii. *Utilities should be allowed to participate in programs awarded to bidders for markets and geographies as described in answer (1) above by providing marketing and sales support in return for rate of return adders.*
15. What role should key stakeholders play in an enhanced energy efficiency effort (e.g., Staff, Departments of State and Environmental Conservation, utilities, NYSERDA, Division of Housing and Community Renewal, NYPA, LIPA, NYISO and energy service companies), and how should they coordinate their efforts? What factors should be taken into account in determining how the implementation of various program elements should be managed and monitored?
 - a. *At the risk of the answer appearing too short and ill conceived, PES believes that a Council for the State, lead by an agency appointed for such and including material stakeholders should confer on a regular basis for the purpose of assuring that all efforts are being taken to meet the goals and objectives laid out by the State.*
16. What role should the private sector (e.g., financing and educational institutions) play in program development and implementation? How should these efforts be coordinated with utility and government entities' programs? Are there additional incentives (or tax relief) that could be provided by Federal, State and Local governments which would enable greater penetration of energy efficiency initiatives?
 - a. *PES believes that ample opportunities do and will exist for the private sector to participate in the operations of efficiency programs. With respect to the*

development of the programs, PES believes that opportunities already exist for institutions and private concerns to participate in the Stakeholder processes currently open.

17. Should utilities (or other entities) receive incentives for implementing successful energy efficiency programs? If so, what is the appropriate level and form that these incentives should take and should such incentives be performance based?
 - a. *PES believes that utilities should be able to receive rewards for implementing successful efficiency programs if and only if the utility has used its own resources and has placed itself in a position of performance accountability.*
18. What are the best methods for ensuring that low income customers have access to efficiency programs?
 - a. *The state should issue RFP's to companies to serve low income customers with an efficiency program which would likely include weatherization, lighting, heating and cooling measures.*
19. How should environmental justice be considered in program design?
 - a. *PES believes that a critical design element in all efficiency and demand response programs should be environmental justice and consistent with answer to question (6) above. PES believes that it is appropriate to include environmental benefits in the final equation of Total Resource Cost++.*
20. How should existing gas utility efficiency programs, and those under development in rate proceedings, be integrated into an overall energy efficiency effort?
 - a. *PES believes that others are more qualified to discuss this issue at this time, though it reserves the right to comment at a later date.*
21. Are there any modifications or adjustments that could be made in the current Systems Benefit Charge portfolio that would achieve higher levels of energy efficiency market penetration and saturation?
 - a. *PES believes that Societal Benefits Charges should be used to pay for efficiency and demand response when and if delivered concurrent with its delivery. As such, if this approach were implemented, the SBC would purchase much more energy efficiency on a current basis at a cost which would not induce as much rate shock as would be if the SBC funds were used to purchase the measure lifetime worth of energy efficiency benefits.*
22. How should the expected benefits and costs of various design options be measured and compared? What externalities should be included and why? What expenditures or

benefits should be characterized as transfer payments and perhaps excluded from the analysis? *Why?*

a. With the addition of environmental externalities as described above, PES supports the NYSERDA TRC ++(answer #6 above) test and approach measurement of benefits and costs and definitions of transfer payments.

23. What are the best methods for ensuring transparent and technically sound methods for evaluation of program energy savings (gross and net), non-energy benefits (e.g., economic, environmental) and program performance and administration?

a. PES believes that a central, third party administrator is the best way to keep the process transparent.

24. How should customer satisfaction and program design efficacy be assessed?

a. PES believes that independent third party audits are the best method of measurement together with annual performance reviews against goals.

25. What constitutes a reasonable level of funding for the electric and gas energy efficiency programs? How, and from whom, should the various program costs be funded, allocated and recovered?

a. PES believes that others are more qualified to discuss this issue at this time, though it reserves the right to comment at a later date.