

Case 07-M-0548 - EPS PROCEEDING

Joint Utilities¹ Response to Staff's Questions to the Parties

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?*

The State's objective of a 15% reduction in electric consumption from "forecasted levels by the year 2015" is an aggressive goal that may be achievable if there is an increased focus on resource acquisition programs effectively coordinated with ongoing market transformation programs (which includes improvements in building codes and appliance standards). The achievement of this goal will require the proper mix of the two programs to capture all available energy efficiency opportunities, but with a greater emphasis on resource acquisition. To be successful, resource acquisition programs must be (i) tailored to the unique and varying needs of customers located throughout New York State; (ii) designed to address barriers that prevent customers from investing in energy efficiency on their own; (iii) compatible with existing New York resource systems and markets (e.g., NYISO); and (iv) frequently reevaluated over time as new technologies are introduced and so that lessons learned from program evaluation efforts can be fed back into the implementation process. Under this approach, all customer sectors would have the ability to benefit from a combination of program services.

¹ The Joint Utilities are Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., KeySpan Energy Delivery New York and KeySpan Energy Delivery Long Island, National Fuel Gas Distribution Corporation, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc. and Rochester Gas & Electric Corporation. Individual utilities also intend to provide additional information about the conditions in their service territories at various points in this proceeding to facilitate an overall program design that will be responsive to diverse needs across the State.

As explained in further detail in the response to Question 14, the electric and gas utilities in New York State are uniquely positioned to deliver energy efficiency measures and programs that meet the varying needs of customers located in different areas of the State. The utilities have proven records of achievement and can leverage existing customer relationships to deliver these services effectively and efficiently. Consideration should also be given to utilizing NYSERDA's capabilities for research, development and demonstration, and market transformation activities in support of the State's energy efficiency policy objectives.

Moreover, the Joint Utilities recommend that a goal of the proceeding should be to preliminarily determine the "suite" of actions, programs and measures that will best attain the chosen annual reduction target model. This will require quantification (as informed by measure persistence) of the benefits and the costs for all potential actions, programs and measures, as well as some form of optimization analysis to ensure that the goals are being achieved through the most effective approach. The working group process proposed by the Joint Utilities will be helpful in developing the details necessary for review in this proceeding. The Joint Utilities do not take any position at this time as to the most appropriate types of analyses to be used, but individually reserve the right to address these topics further as the EPS Proceeding continues. The type of sector by sector analysis could differ for each utility.

It is clear, however, that the actions, programs and measures having the greatest value should be given the highest priority, taking into consideration the specific characteristics of each utility service area. It is also important that the Commission allow for continued adjustment during this multi-year program.² As explained herein, the Joint Utilities submit that it is only through a comprehensive measurement and verification ("M&V") program that it can be learned which programs deliver the most measurable

² If implementation of EPS programs begins in 2008, about seven years would be available to achieve the 2015 target reductions. *See* Case 07-M-0548, *Benefits and Costs and Bill Impacts of Energy Efficiency Program for 15 Percent Reduction in Electricity Usage by 2015*, New York State Department of Public Service Preliminary Staff Analysis (issued June 1, 2007).

savings in the most cost-effective manner. It is through the review of these “real-world” results that it can best be determined how to proceed to achieve the State’s goal.

The unique characteristics of each utility’s service area and customers need to be taken into consideration not only in determining the actions, programs and measures to be implemented but also in increasing services to energy consuming sectors that may be currently underserved by the existing portfolio of energy efficiency programs (e.g., computer data centers).

2. *What is a reasonable goal for natural gas energy efficiency programs?*

The same general goals and the same general analytical approach described above for electric efficiency should be applied to natural gas efficiency, recognizing that there may be differing data limitations for gas. Generalized theoretical studies of possible gas consumption reduction need to be informed by local market conditions, as the results actually achievable will likely vary with the characteristics of each utility service area and the customers in those areas. The Joint Utilities accordingly submit that it is premature to establish a numerical statewide natural gas efficiency goal.

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)?*

The Joint Utilities believe that it is premature to address long-term statewide “program specific goals,” until there has been more detailed focus on the actual programs that may be included has been reached and results from the benefit/cost analyses in this proceeding are available. The working group process proposed by the Joint Utilities can be used to facilitate these objectives. It may also be desirable to consider establishing preliminary program specific goals for at least the initial five years of the program.

In addition, any program supported with public funds will require reliable M&V to establish both the potential to save energy as well as demonstrate the realization of expected savings. The M&V results should be used as a basis for program adjustments during the implementation of this multi-year program. Similarly, any program implemented as an alternative to electric generation, electric and/or gas transmission, and electric and/or gas distribution facilities should also be expected to deliver reliable, measured and verified results.

4. *What load forecasting models and methodologies should be used in developing and refining the objectives of the EPS Proceeding?*

The Joint Utilities suggest that the load forecasts developed by the NYISO be the starting point and the source of load forecast information that is used to establish the 15% reduction in energy by 2015. This is desirable in that the NYISO forecast is a recognized forecast that is coordinated on a statewide basis. However, the NYISO forecasts do not necessarily incorporate all factors that may be relevant to forecasting the effects of programs currently being considered by the Commission and individual utilities. It is further suggested that adjustments may be appropriate to reflect significant changes in the economy and/or public policy objectives that may occur be properly accounted for over time in the load forecast. Moreover, in utilizing load forecasts, the “natural” load growth must be separated from the impact of both NYSERDA and NYISO demand response and/or energy efficiency programs which have already been taken into account by such forecasts. The longer-term goals in the EPS Proceeding may need to be refined in response to these currently undefined factors.

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?*

The Joint Utilities suggest that there are many sources of other national, regional, state and municipal government and private initiatives that can inform decision-making in this proceeding and help meet the objectives of the EPS Proceeding. Some of the Joint Utilities are participants in some of these initiatives and/or have experience implementing programs that take advantage of this available experience and expertise. Although not intended to be exhaustive, nor necessarily directly applicable, the following are offered as possible sources.

- The American Council for an Energy-Efficient Economy (“ACEEE”), *available at* <http://www.aceee.org>, is a nonprofit organization “dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection.”
- The Building Performance Institute (“BPI”), *available at* <http://www.bpi.org>, headquartered in Malta, New York, supports the “development of a highly professional building performance industry through individual and organizational credentialing and a rigorous quality assurance program.”
- The California Energy Commission (“CEC”), *available at* <http://www.energy.ca.gov>, is California’s primary energy policy and planning agency. Among the Commission’s responsibilities are the promotion of energy efficiency through appliance and building standards and the development of energy technologies and support of renewable energy.
- The Consortium for Energy Efficiency (“CEE”), *available at* <http://www.cee1.org>, is a nonprofit organization founded in 1991 that works with its North American members to “promote the use of energy-efficient products, technologies and services.” The

goal of CEE is to induce lasting structural and behavioral changes in the marketplace.

- GasNetworks, *available at* <http://www.gasnetworks.com>, is a collaborative established in 1997 consisting of local natural gas companies serving residential and commercial and industrial customers throughout the New England. Its mission is to “work with governmental agencies and affiliates to promote energy efficient technologies, create common energy efficiency programs, educate consumers and promote contractor training and awareness of ever-changing natural gas technologies.”
- The Mid-Atlantic Distributed Resources Initiative (“MADRI”), *available at* <http://www.energetics.com/MADRI/index.html>, was established in 2004 by the public utility commissioners of Delaware, District of Columbia, Maryland, New Jersey and Pennsylvania, along with the U.S. Department of Energy, U.S. Environmental Protection Agency, Federal Energy Regulatory Commission and PJM Interconnection. MADRI’s mission is to “identify and remedy retail barriers to the deployment of distributed generation, demand response and energy efficiency in the Mid-Atlantic Region.”
- The National Action Plan for Energy Efficiency (the “Action Plan”), *available at* <http://www.epa.gov/cleanenergy/actionplan/eeactionplan.htm>, contains policy recommendations for “creating a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations.” The Action Plan was developed by over fifty leading organizations representing key stakeholders whose work

was facilitated by the U.S. Department of Energy and U.S. Environmental Protection Agency.

- The Northeast Energy Efficiency Partnerships (“NEEP”), *available at* <http://www.neep.org>, is a regional nonprofit organization founded in 1996. It’s mission is “to promote energy efficiency in homes, buildings and industry in the Northeast U.S. through regionally coordinated programs and policies that increase the use of energy efficient products, services and practices, and that help achieve a cleaner environment and a more reliable and affordable energy system.”
- The U.S. Green Building Council (“USGBC”), *available at* <http://www.usgbc.org>, is a nonprofit organization comprised of leaders from the building industry sector “working to promote buildings that are environmentally responsible, profitable and healthy places to live and work.” The USGBC established the Leadership in Energy and Environmental Design (“LEED”) Green Building Rating System™.

Additional sources to consider include existing NYISO Demand Response Programs, energy efficiency portfolio standard activities of other states (e.g., Connecticut RPS Class III, Illinois Energy Efficiency Portfolio Goal, Pennsylvania Alternative Energy Portfolio Standard (“AEPS”) Tier II) and ongoing research efforts by the Electric Power Research Institute (“EPRI”).

Efforts should be made to solicit input and recommendations from the aforementioned organizations so that their experience in energy efficiency best practices and initiative development can be shared with the parties in this proceeding and, to the extent appropriate, assist the parties in developing recommendations for future program plans for New York’s EPS.

The impact of these other initiatives should be counted and measured in the same manner as EPS initiatives. Where savings can be explicitly identified, they should be counted toward the specific program.

6. *The Commission instituted a pilot natural gas efficiency program within Consolidated Edison Company of New York, Inc.'s (Con Edison) service territory. 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. NYSEDA filed that study on June 22, 2006, and it was then issued for comment. Subsequently, NYSEDA 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 Commission's and NYSEDA'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. In the statewide study, NYSEDA 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. In its discussion of the total resource cost test and price effects, the Statewide Study prepared by Optimal Energy, Inc.³ disagrees with the Commission's conclusion in the Con Edison Demand Management Order⁴ (at 31) that price effects, i.e., the effect of energy efficiency on market prices, are not properly includible in the total resource cost test. The Joint Utilities agree with the Commission's conclusion in the Demand Management Order that "[w]hile demand management programs may lead to reductions in the price of electricity, those price effects are not resource savings. If the market clearing price falls due to the effects of a demand management program, consumers of electricity could obtain a benefit in terms of lower payments to generators. This benefit equates to a monetary gain to consumers, but it is offset by a monetary loss to generators. Thus, the reduction in price represents only a redistribution of money from one group to another, it does not result in any societal resource savings. Accordingly, market price effects are not properly included in the total resource cost test."⁵

The Commission further noted, however (at 33), that "[i]f the program is determined not to be cost-effective under the total resource cost test, NYSEERDA and Con Edison may then add consideration of the effect of the program on energy market prices (energy and capacity) to their analyses. If the program will aid in reducing energy market prices and the addition of this benefit to the resource benefits under the total resource cost test makes the program cost-effective, it may then be pursued."

Further, the Joint Utilities are concerned that the Optimal Report may overstate the benefits and underestimate the cost of achieving gas efficiency and may not be appropriate as the sole basis for designing a program. At a minimum, the Joint Utilities propose that the working group addressing benefit/cost analyses should review the study results and determine their applicability to this proceeding.

³ Natural Gas Energy Efficiency Resource Development Potential in New York, Prepared for NYSEERDA by Optimal Energy, Inc., et al., at 2,16,17 (October 31, 2006) (the "Optimal Report").

⁴ Case 04-E-0572, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulation of Consolidated Edison Company of New York, Inc. for Electric Service*, Order on Demand Management Action Plan (issued and effective March 16, 2006) (the "Con Edison Demand Management Order").

⁵ However, this relationship regarding price neutrality as expressed by the Commission may not hold for natural gas as New York State is a net importer of natural gas.

b. Generally, the Joint Utilities believe that the total resource cost test is relevant in determining the cost effectiveness of efficiency programs. The Joint Utilities note, however, that the total resource cost test does not determine the most cost effective method for achieving efficiency (e.g., building codes and appliance standards vs. efficiency programs) and that a theoretical total resource cost study is never as good as a post-implementation study that measures actual costs and actual results. Here, the Commission is proposing the adoption of a multi-year plan. The Joint Utilities believe that there should be comprehensive M&V for each year of the plan and that the real world achievements of any program or plan should be used to inform the continued development of the plan.

PROGRAM ELEMENTS:

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)?*

Building codes and appliance standards are effective tools for “locking-in” energy efficiency practices that have improved as a result of energy efficiency program efforts and, in general, evolving improvements in building practices. One factor in successful energy efficiency program implementation will be education and training on building code and appliance standard requirements for designers, installers, trades, code officials and others. However, the focus of EPS-related funding should not be on building codes and appliance standards; rather, the focus should be on direct demand resource acquisition.

It will, however, be important to consider how future changes to building codes and appliance standards might impact the design and implementation of efficiency programs under the EPS. Such changes may create a need for a change in the baseline against which the proposed energy efficiency program is compared and benefits and costs are quantified. The result is that some measures which might be cost-effective offerings

today may no longer be cost effective when new building codes and appliance standards are put in place.

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?*

Outreach and education are important activities that, when carefully undertaken, lead to increases in program participation and changes in customer behavior. Without outreach and education to “prime the pump,” there would be less participation in programs. Outreach activities should take into account the unique attributes of each target market. For example, in some neighborhoods, it may be desirable to utilize marketing materials in a language other than English. General awareness advertising can also be helpful when attempting to raise consciousness about energy efficiency and renewable energy opportunities. Expanding education about energy efficiency and climate change in primary and secondary school settings may also be a highly effective way to promote changes in household energy use.

Education-based initiatives can also be a fundamental part of outreach program efforts. For example, programmable thermostats or advanced metering programs require customer education in order to ensure that customers maximize their use. Also, energy efficiency practices can be reviewed with a homeowner when retrofit opportunities are identified.

In general, every EPS project or program should include a marketing or customer recruitment plan to encourage active customer participation in the specific project or program. In many instances, it may prove to be desirable for several projects or programs, both gas and electric, to be marketed jointly. The entities that commit to deliver the energy and capacity savings from each project or program should have the flexibility to tailor a specific marketing and recruitment program to the individual circumstances of a service area, customer group or utility. Due to the nature of energy

efficiency projects and products, tailored and targeted marketing and recruitment activities likely will often achieve greater efficiencies than a more generic outreach effort.

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?*

Reductions in energy use directly reduce the costs of the commodity (gas or electric) purchased by customers. The fixed costs to serve customers are not, however, affected, as those are sunk costs. For new commercial and industrial customers, broad-scale incorporation of energy efficiency into a new facility may permit the supplying utility to provide smaller, less costly service interconnections. For most utilities, residential consumers all have virtually the same service interconnections, and hence, the same costs to serve, in relation to distribution.

As such, the most economically effective rate designs will provide price signals as accurately and contemporaneously as possible in relation to the consumption of the commodity. This concept implies that time variant rate designs should be preferred for commodity rates. There are, however, alternatives to conventional metering, which the Commission is considering in the pending Advanced Metering Infrastructure (“AMI”) Proceeding.⁶

In addition, the Commission should consider eliminating uneconomic existing rate designs for delivery services that incorrectly collect fixed costs through variable rate elements. Those rate designs are legacies of bundled rates and vertically-integrated utility services and cause customer confusion because they send incorrect price signals

⁶ Cases 94-E-0952, 00-E-0165 and 02-M-0514, *Competitive Metering*, Order Relating to Electric and Gas Metering Services (issued and effective August 1, 2006).

implying that reductions in commodity use reduce the fixed costs to serve for distribution services.

Further, the Commission has issued an order on revenue decoupling⁷ that requires all electric and gas utilities to develop proposals for true-up based delivery service revenue decoupling mechanisms (“RDM”) at the time of their next rate case, or in an on-going rate case if one exists. To complement an RDM, which only removes a potential disincentive to energy efficiency, the Commission should make EPS program implementation a profitable activity for the utilities by putting in place carefully designed shareholder incentive mechanisms such that utility shareholder interests would be aligned with the State’s policy objectives and would result in greater penetration of energy efficiency initiatives.

The Joint Utilities also recommend that the Commission allow the utilities that implement EPS Programs for their customers to expense all associated costs, so that revenues and expenditures are well-matched. This could be achieved with an EPS bill adjustment factor subject to annual reconciliation.

Innovative energy pricing and utility rate designs have the potential to better align energy supply and demand. Dynamic pricing options could be included in the portfolio of demand response measures encouraged by the EPS. To be both accepted by customers and effective in producing changes in energy usage and load, such options should, among other characteristics, be (i) available to as many customers as possible where economically justifiable; (ii) designed to leverage available technologies; and (iii) designed to accommodate the opportunities and needs of diverse customer groups where applicable. Commodity rate design and pricing initiatives should take into consideration

⁷ Cases 03-E-0640 and 06-G-0746, *Potential Electric and Gas Delivery Rate Disincentives Against the Promotion of Energy Efficiency, Renewable Technologies and Distributed Generation*, Order Requiring Proposals For Revenue Decoupling Mechanisms (issued and effective April 20, 2007).

the likelihood that load shapes and critical target periods⁸ may vary from location to location and/or over time. They should also be designed to be compatible with other demand response measures, such as the NYISO demand response programs, utility or curtailment service provider (CSP) load control programs and utility-sponsored programs.

Where cost effective, advanced metering infrastructure (“AMI”), could facilitate this pricing and these rate designs to all customers on an individual utility basis. AMI requires a substantial capital investment that might be offset by operating cost savings, depending on the specific circumstances of each utility.⁹ AMI could also provide information for EPS measurement and verification.

Energy tariffs should not recognize or differentiate between the relative levels of energy efficiency designed into new buildings.¹⁰ The administrative complexity of tailoring rates to differing levels of energy efficiency among the many different building types constructed in New York State would make this proposal impractical.

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

⁸ Critical target periods are typically the periods when load is greatest at a state, zonal, or local level; when prices are highest; or both. Programs designed to reduce load during critical periods may reduce market prices, reduce the need for peaking generation resources, provide ancillary services, reduce transmission congestion or reduce distribution load on load-limited facilities. Critical target periods typically last only a few hours and typically cannot be predicted more than a day or so in advance.

⁹ However, without AMI, it may be impractical to bring the benefits of dynamic pricing to residential and all but the largest commercial and industrial customers, as dynamic pricing requires the ability to track individual customer usage over short time intervals (e.g., 5 minutes, 15 minutes or one hour), the ability to communicate prices that may change from hour to hour and the ability to confirm or disprove rapid customer responses to price signals. (On the electric side, measurement and verification of the effectiveness of dynamic pricing is likely to require 5-minute to 15-minute data, while the ability to provide ancillary services requires one-minute to 5-minute data. Hourly data is likely to be acceptable for tracking gas response to price signals.) AMI can also combine with load control, in-home displays, pre-paid meters and other technologies to improve the effectiveness of pricing as well as other energy efficiency and demand response programs.

¹⁰As previously noted herein, effective rate designs will provide price signals as accurately and contemporaneously as possible in relation to commodity use and therefore effectively account for differing levels of energy efficiency in buildings.

efficiency programs, should be integrated into overall strategies and plans to reach energy usage reduction targets?

See the responses to Questions 8 and 12.

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)?

All customer classes that have contributed funding for EPS programs or will do so in the future should be eligible to participate in the programs. Customer classes that do not contribute to the funding should be excluded from program participation.

The EPS should not inadvertently discourage demand response for natural gas; this means that it should not discourage dual-fuel or interruptible customers from continuing to provide these important system capabilities in those service territories where such responses are needed to manage system peaks. In fact, just as it will be important for the electric EPS to encourage electric demand response, the value of the natural gas EPS will be enhanced when it encourages gas demand response. Further, when the peak demand for natural gas can be reduced and thereby ameliorate spikes in gas prices, spikes in the marginal price of electricity during peak periods should also be ameliorated to the extent that electricity prices remain substantially driven by natural gas prices, resulting in a benefit to all customers. In service territories where there are insignificant system peak constraints, the EPS should not inadvertently encourage the installation or use of dual-fuel facilities, particularly when natural gas is likely the most environmentally beneficial fuel choice for the specific end-use application.

It is also important to prevent the cost of the EPS program from having the unintended consequence of customers switching from natural gas to oil or propane, or from discouraging customers from using the most appropriate energy source for any particular end-use.

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?*

Demand response has been proven to be an important asset to the New York State electric system, just as interruptible loads are important to the gas system. Unlike other customer-side resources, demand response is flexible and can be targeted on short notice, which are vital characteristics for maintaining reliable electric and gas service. The responsiveness of these resources may be even more valuable as state and local load shapes shift with changes in customer energy usage patterns and end-use technologies (e.g., plug-in hybrid electric vehicles, gas-fired Distributed Generation, large scale storage).

To design a cost-effective EPS, it will be important for the parties to this proceeding to define qualifying resources, as this question suggests. The Joint Utilities have previously recommended use of a working group for this purpose.

Distributed Generation ("DG") may be used to reduce connected load on the electric system when called upon by the NYISO in its several existing demand response programs. Broadly speaking, it does not make sense for the EPS to duplicate or add to the incentives already provided. It may make sense for the EPS to support the installation of cost-justified, *clean* DG and back-up emergency generation, on the conditions that (i) these facilities are committed to participate in NYISO demand response programs; (ii) these facilities are more efficient and have fewer emissions than central station generation; (iii) the customer continues to fund the EPS (see the response to Question 11); and (iv) utilities are able to fully recover the delivery costs associated with serving these customers.

Combined heat and power (“CHP”) offers the potential to improve efficiency of energy use overall, and it may increase the use of natural gas at a customer site while decreasing the use of natural gas to generate baseload electric capacity. To ensure the benefits of CHP are fully captured, it is important that the system be thermal-leading, with an annualized overall efficiency of 60% or greater and subject to the appropriate environmental standards. If this level of efficiency is achieved and needs are synchronized, CHP, or improvements in the energy efficiency of existing CHP, should be considered for EPS support as long as these customers continue to pay their appropriate share of delivery and EPS costs (see the response to Question 11).

13. How can gas efficiency programs best complement electric efficiency programs? Similarly, how can electric efficiency programs be adapted to serve the needs of gas customers?

Program delivery efforts that focus on both gas and electric efficiency can be coordinated by the respective delivering utility to provide such services. Many examples of successful coordination of gas and electric efficiency programs exist throughout the country. Obvious examples where coordination of services benefits the customer and reduces overall costs include, but are not limited to, (i) residential and commercial new construction; (ii) energy auditing; and (iii) heating, ventilation and air conditioning installations. Many of the organizations identified in the response to Question 5 facilitate program designs that take advantage of this coordination.

IMPLEMENTATION:

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?

The utilities are uniquely positioned to identify customer-level energy efficiency opportunities, design programs that overcome barriers to customers investing in energy efficiency, manage program efforts and oversee evaluation efforts that focus on

identifying program enhancements and actual results. As such, utilities should have a large role in the delivery of energy efficiency programs, if the state's aggressive goals are to be achieved. The advantages of energy efficiency program administration by utilities include:

- the ability to leverage existing customer relationships to identify and encourage investment in energy efficiency by (i) facilitating the engagement of local and regional businesses to implement targeted programs; (ii) creating opportunities for programs tailored to groups of local customers and their specific needs and circumstances; and (iii) utilizing existing account executives and customer-focused departments as effective ambassadors;
- the ability to use demand side management (“DSM”) for both resource acquisition and as a tool to defer capital expenditures associated with load relief projects, taking advantage of (i) the best awareness available of local loads; and (ii) engineering and financial understanding of load relief options, including the load relief planning process (e.g., substation engineering, feeder and transformer design, network design); and
- the existence of data systems and specific market research that provide proprietary account, customer and facility intelligence essential to developing successful products or programs tailored to customer needs that will result in tangible benefits.

The Joint Utilities submit that the resources procured through the main tier of the RPS individually provide orders of magnitude more capacity and energy per site than will the EPS, are not sited in customers' homes and places of business, and are not impacted by hundreds of thousands of individual participation decisions. These factors should be carefully considered when exploring procurement options under the EPS. In addition, the best way to achieve energy efficiency can vary substantially from one utility service

territory to another. As just one example, New York City has almost no large industrial facilities, while upstate New York has many. Therefore, it is likely that greater benefits from energy efficiency program efforts will be realized if utilities, with substantial knowledge of these factors, develop and implement specific EPS programs for their respective service territories.

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?

Key stakeholders should play an important advisory role in the development of programs and the administrator of such programs should work with stakeholders to enhance implementation efforts. It would be best for this coordination to take place at the utility service territory level to ensure focus on local conditions and enhance efficient delivery of services. The use of utility service territory collaboratives, as used in the existing Con Edison electric rate plan, is another model for such participation. As previously discussed, the Joint Utilities believe that they would be the preferred administrators for such collaboratives and programs. Department of Public Service Staff would participate in each collaborative and be able to monitor progress and achievements.

In addition, all other entities that serve load (i.e., LIPA, NYPA and ESCOs) will have an important role to play. LIPA and NYPA serve franchised load, and ESCOs should be allowed to participate in any energy efficiency programs through request for proposals or other kinds of solicitations (as long as necessary assurances that public funds are being properly spent can be obtained through proper M&V). As previously discussed, NYSERDA plays an important research, development and demonstration, and market transformation role and should continue to play that role.

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?*

As discussed in the prior response, the Joint Utilities believe that the best delivery method is one where there is a single administrator within a given utility service territory and further, it is the utilities that are best suited for this role. In addition, demand management collaboratives are a proven method for reaching out to different stakeholders and determining the most appropriate implementation plans. In this manner, all of the entities mentioned above could be included in program development and implementation, as advisors to program administrators.

However, as noted in the response to Question 1, the Commission should continue to look to the expertise of NYSERDA in research, development and demonstration, and market transformation activities conducted through the SBC in order to fully capture all potential energy efficiency benefits. Success by NYSERDA in those activities will facilitate and enable further successes in the EPS program.

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?*

In order to properly align utility shareholder interests with state policy objectives, utilities should be provided with strong financial incentives to wrest as much efficiency as attainable from their service territories. The premise of the EPS proceeding is that there are important societal values in achieving energy efficiency. These values need to be recognized concretely through financial incentives to produce the highest levels of efficiency that are reasonably attainable. To assure that all forces for attaining the ambitious goals are marshaled, the Commission should make energy efficiency program

delivery profitable for utilities. Shareholder incentives that are tied to the achievement of EPS program goals are an effective means of accomplishing this.

IMPLEMENTATION:

18. *What are the best methods for ensuring that low income customers have access to efficiency programs?*

The best methods for ensuring that low-income customers have access to efficiency programs include ensuring adequate funding for low-income energy efficiency program services, incorporating outreach activities that are designed to create awareness of available services in the targeted population and streamlining the participation process.

One of the challenges encountered in the implementation of the U.S. Department of Energy's Weatherization Assistance Program is that there is often a several-year waiting period for customers to receive efficiency services due to inadequate funding. It is critical that energy efficiency funding be available to supplement government funding to address these requests in a timely manner, particularly where customers are at risk of losing energy delivery services due to inability to pay their bills.

Many utilities have experienced successes in delivering energy efficiency programs to low-income customers and assisting customers in changing behaviors and lowering their energy consumption.¹¹ The utilities can be uniquely positioned to target appropriate customers for energy efficiency assistance because they have extensive information on Home Energy Assistance Program ("HEAP") participants, energy costs and usage, and payment histories, as well as a relationship with the customer. The utilities may be able to best identify those high energy-users who are low-income and experiencing financial hardships and unable to pay their utility bills, and could benefit from utility-provided energy efficiency services.

¹¹ See, e.g., National Fuel Gas Distribution Corporation's Low Income Usage Reduction Program in Pennsylvania, National Grid's Appliance Management Program in New England.

Leveraging the utilities' unique relationships with their customers may contribute to the success in reaching low-income customers most in need of energy efficiency services. Many utilities also have a long history of successfully working directly with local community organizations and service providers to deliver energy services promptly and to coordinate and leverage other sources of funding assistance for participants in their programs.¹²

19. *How should environmental justice be considered in program design?*

According to the New York State Department of Environment Conservation (“NYSDEC”) Commissioner Policy 29, environmental justice is defined as “. . .fair treatment and meaningful involvement of all people regardless of race, color, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policy. Fair treatment means that no group of people, including a racial, ethnic or socio-economic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.”

Taken more broadly, environmental justice suggests that programs should be carefully designed to ensure that all customers in the classes that contribute funding toward proposed energy efficiency programs have an opportunity to take advantage of energy efficiency program services. For that to happen, it will be important to balance overall energy savings objectives with a portfolio of programs that provide services to all sectors, including (i) residential low-income; (ii) residential not living within a limited income; and (iii) commercial and industrial (including all non-residential customer sectors). For the proposed programs to succeed, it will be important to consider the unique barriers to participation that each segment of the population faces. Examples of these considerations include income barriers, language barriers, rental situations (e.g.,

¹² See Case 94-E-0952 *et al.*, *Low-Income Programs*, Order Establishing Conditions for the Continuation and Transfer of Low-Income Programs and Establishing System Benefits Charge Funding (issued and effective May 30, 2003).

split incentives for landlords and tenants), etc. Overcoming these barriers may result in fully funding energy efficiency services for low-income customers (i.e., no co-pay requirement), developing program outreach materials in various languages, creating benefits for both landlords and tenants, and making favorable financing options available to customers. By making program services available to all customer segments and designed to overcome identified barriers to participation, no low-income or other unique population should be adversely affected by program efforts. Indeed, all sectors will have an opportunity to participate and reap the benefits.

20. *How should existing gas utility efficiency programs, and those under development in rate proceedings, be integrated into an overall energy efficiency effort?*

The gas utilities in the state are uniquely positioned to identify customers who might benefit from natural gas energy efficiency programs and services. Programs known with sufficient certainty to be modeled as part of the studies in this case should, of course, be included in such services. Many areas of New York State have combination utility companies that provide both electric and gas services. In the other areas, “integration” can be achieved through Commission support and encouragement of cooperation and coordination between the gas and electric utility providers. The type of benefit/cost analyses contemplated by the Joint Utilities will naturally provide a kind of “integration” for overall program design and program elements that will then be implemented by the various utilities. More formalized “integration” in relation to individual program delivery does not seem particularly necessary. Routine annual reporting should provide sufficient information so that all interested parties can become aware of developments and emulate them as appropriate.

Models also exist where a dual-fuel (electric and gas) utility is able to very effectively integrate its electric and gas energy efficiency program efforts. These dual-fuel utilities are able to coordinate gas and electric energy efficiency efforts that meet the unique needs of their customers.

In summary, existing gas utility efficiency programs, and those under development in rate proceedings, can be integrated into an overall energy efficiency effort by taking advantage of the expertise residing in the utilities.

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?*

The existing SBC model was premised on the concept that central procurement of efficiency services would replicate outcomes that had been attained through utility-led efficiency programs. The funding that has gone to NYSERDA over a multi-year period and the results that have been attained should be reviewed to determine whether this model offers the best potential outcome, as compared to providing incentives to utilities to achieve deeper and broader penetration of energy efficiency throughout their service territories. Past experience has shown that utilities respond creatively to financial incentives and deliver results.

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?*

The Joint Utilities anticipate that a comprehensive benefit/cost analysis of all proposals will necessarily be undertaken in this proceeding so that the State's objectives might be attained at the lowest net present value as modified by other program goals.

All costs (participant cost shares and EPS program planning and implementation costs, program evaluation expense, and performance incentives for program administrators) should be included in the assessment of benefits and costs. The value of all resource savings over the expected life of installed measures, an assessment of non-

energy benefits, and some assessment of environmental externalities, particularly CO₂ reduction, should be included as benefits in this assessment.

With respect to program implementation, the State's aggressive goals suggest that all reasonable levels of funding be explored. Comprehensive efficiency projects rather than projects focused exclusively on single end-uses should be encouraged as long as the total project is cost-effective under the rules set by the Commission.

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?*

With respect to programs that pay incentives, the Joint Utilities submit that a comprehensive M&V program is essential to ensure transparent and technically sound methods for evaluation of program energy savings, which would then be used to determine the non-energy benefits and evaluate program performance and administration. A comprehensive M&V program can be used to assess achieved energy and non-energy benefits as well as to assess the effectiveness of program performance and administration. As needed, independent evaluations can be utilized to document results and performance with an added focus on identifying suggested program enhancements.

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

Customer surveys and process evaluations can be used to assess customer satisfaction and program design efficacy. See also the response to Question 23.

FUNDING:

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?*

As discussed in the response to Question 1, the quantification of the benefits and costs of all potential design options that could contribute to achieving available energy efficiency opportunities will need to be completed before an appropriate level of funding to reach program goals can be determined. The working groups proposed by the Joint Utilities could then identify the appropriate level of funding for electric and gas energy efficiency programs.

As discussed in the response to Question 22, the State's aggressive goals suggest that all reasonable levels of funding should be explored.