

10. Energy Efficiency

Conservation Contingency Plan

Honorable Eric T. Schneiderman, Senator

The State Energy Plan does make some strides toward the badly needed development of effective conservation programs.

I cannot endorse a Plan that calls for the continued increase in the use of fossil fuels. The Energy Plan outlines only one way to control electric prices – build more power plants. Energy efficiency, energy independence, and conservation must be put on an equal footing with the building of new power plants. The Energy Plan should be amended to reduce our reliance on large polluting facilities. New York needs a Conservation Contingency Plan.

Sierra Club, Atlantic Chapter

The State Energy Plan should set goals to increase investment in energy efficiency and conservation. The Energy Plan should contain a conservation contingency plan. The Energy Plan should aggressively promote development of clean renewable electric generation and reduce our dependence on nuclear power (including the closure of Indian Point). The Energy Plan should contain proposals to improve transportation options, and should promote environmental quality through prioritizing conservation.

New York City Environmental Justice Alliance

A conservation contingency plan is necessary. In times of tight reserve margins, which tend to be in the summer in New York State and in New York City, as well, high electricity demands the fastest, cheapest, and cleanest methods of ensuring adequate supplies as well as true conservation and efficiency measures. It was done effectively in California. They thought they would have blackouts occasionally, far less after they put those measures into effect.

Scenic Hudson, Inc.

New York needs a conservation contingency plan that can be implemented in time of emergency or periods of peak demand that will inevitably result in price spikes for New York. The Draft State Energy Plan should lay out such a plan.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Sierra Club, NYC Group

A plan that would utilize conservation and efficiency measures to meet energy needs during periods of high demand and low reserves must be included in the Draft State Energy Plan. Such efforts as were shown to be highly successful in California during the recent severe energy disturbances must not be overlooked in New York State. And a proposal for a parallel plan should be included.

Sierra Club, Long Island Group

The Draft State Energy Plan should include conservation contingency to be implemented in time of emergency situations. California did it and they saved electricity in large amounts.

Federated Conservationists of Westchester County, Inc.

We do need a conservation contingency plan. If we had one in place we could move much more quickly toward the kind of savings that California was able to achieve last year.

Response: The State Energy Plan aggressively supports energy efficiency and renewable energy as a means to meet growing demand and encourage energy diversity. This commitment is evidenced by the Energy Planning Board's recommendations in Section 1.3 of the State Energy Plan. For information about those State energy efficiency programs that are similar in concept to a conservation contingency plan, see Section 3.2 of the Energy Plan. Increased energy efficiency, in effect, reduces the State's need for energy generated from coal, oil, natural gas, and other sources thereby reducing environmental emissions that would occur during the generation process.

New York's rapid efficiency deployment initiative, known as the Coordinated Energy Demand Reduction Initiative, consists of several short-term demand reduction programs developed by the New York State Public Service Commission (PSC), the New York Independent System Operator (NYISO), NYSERDA, and the State's investor-owned utilities. The rapid deployment program provides a combination of awareness activities, incentives, and assistance to help consumers reduce their electricity demand during critical peak times. The program offers direct benefits to participants while ensuring reliable electricity system operation and moderating wholesale electricity prices.

The Electricity Assessment, Section 3.4 of the State Energy Plan, describes several actions taken by the State to develop rapid efficiency deployment to meet needs during critical times. In March 2001, the PSC approved several programs designed to

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

reduce peak demand for electricity in Con Edison's service area. The PSC also directed all of the State's investor-owned utilities to submit plans to implement customer incentive programs to reduce peak demand. The PSC subsequently approved these programs and tariffs to implement them. These actions allowed ESCOs and utility supply customers to take advantage of new demand reduction programs offered by the NYISO. By the end of August 2001, approximately 680 megawatts of demand reduction had registered in the NYISO's Emergency Demand Response Program that provided as much as 475 megawatts of demand reduction during system emergencies in 2001.

The NYISO's Day Ahead Demand Response Bidding Program similarly provided opportunity for relief during summer 2001, with as much as 375 megawatts of reduction available in a given hour from parties registered to participate in this program.

In addition, the System Benefits Charge programs administered by NYSERDA reduced demand by about 80 megawatts. Additional savings resulted from plans developed to reduce government energy usage during peak periods, from public appeals, and from implementation of other utility programs.

The PSC also required utilities to prepare detailed public awareness plans describing their steps to raise awareness and inform customers on the load and capacity status and describing actions that consumers can take to control their energy use. Special focus was on the business community where the greatest results are expected in the shortest amount of time.

Specific Energy Efficiency Recommendations

Renewable Energy Works

The State Energy Plan fails to adequately address very important energy issues. Ninety-five percent of the State's primary energy is imported amounting to a seventeen billion dollar drain on the economy. The distribution system is vulnerable to devastating weather events and terrorist attack. The burning of fossil fuels for generation and transportation is responsible for air pollution, mounting health problems, acid rain, and global climate change. U.S. DOE reports that our energy distribution system is woefully inefficient, wasting roughly half of our energy inputs. All these deficiencies could be resolved with currently available energy conservation and renewable energy technologies. The Energy Plan should address these important issues. The first step in addressing these issues should be energy efficiency because it is the fastest and most cost-effective

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

approach. Deregulation, while attempting to reduce utility rates, has done little to advance the state of energy efficiency in the State. The Energy Plan must change this situation.

Examples of steps to be taken include reinstatement of energy efficiency rebate programs for simple and effective appliance upgrades, such as old inefficient refrigerators and washing machines. New York's voluntary ENERGY STAR® standards reduce a new home's energy consumption by 30 percent. These standards should become the new state energy standards. The low-income weatherization program should be expanded and opened to higher-income families on a cost-shared basis, perhaps with funds from a natural gas system benefits charge.

Great Lakes United

The Draft State Energy Plan should provide financial incentives for energy companies to undertake conservation programs, financial penalties for failure to meet targets, research and development on new efficiency opportunities and a time line for phasing in the highest achievable appliance and equipment efficiency standards, subsidies to support retrofits through, for example, a systems benefit charge.

Ashok K. Trikha

The draft energy plan does not have the short term and the long term vision to grapple with the reality of a dwindling fossil supply. The situation shows a lack of advance planning, a failure to conserve, as well as a failure to install new (energy) sources.

New York will need to change the Plan to show vision, leadership and determination to provide clean and affordable energy. The loudest message to the Draft Energy Plan is to increase energy efficiency in every sector of the economy.

Natural Resources Defense Council (NRDC)

The challenge is to think in a more integrated fashion about the role that demand side measures can play in providing reliable electricity at low cost while protecting the environment. NRDC believes it is very, very important that we fully integrate demand side strategies into our energy policy. That is not happening at this point.

Response: Energy efficiency can contribute to energy security, improve fuel diversity, and reduce environmental emissions. As discussed in Section 3.2, Energy Efficiency Assessment, the State Energy Plan aggressively supports using energy efficiency to help New York State deal with these difficult issues.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

New York is already taking some of the steps laid out as examples.

- Numerous programs in New York State provide incentives for energy-efficient appliances, lighting and new homes. The Keep Cool program, which was offered statewide last summer, offered \$75 for each consumer who surrendered their old room air conditioner and replaced it with a new ENERGY STAR® model. Approximately 40,000 old, inefficient air conditioners were turned in as a result of this program.
- New York is in the process of amending its Energy Conservation Construction Code. When the amendments are adopted in summer 2002's energy code for commercial and residential buildings will be among the most progressive in the country.
- NYSERDA has also expanded upon the existing low-income programs that cover households with less than 60 percent of State median income by opening its low-income energy affordability programs up to households with less than 80 percent of State median income.

Utilities are required to collect a System Benefits Charge from electricity transmission and distribution customers. The SBC is collected from all investor-owned utilities, and the majority of the funding is administered by NYSERDA. This approach ensures a more cohesive set of energy efficiency programs than could be offered by individual energy companies.

Citizens Campaign for the Environment

New York State should implement sensible energy efficient outdoor lighting policies.

Green Party Broome County

Thermostats should be set lower in state buildings.

Response: Governor Pataki's June 2001 Executive Order 111 calls for energy efficiency improvements in all State agencies. These entities are required to seek ways to reduce energy use by 35 percent by 2010 relative to 1990 levels. The Executive Order calls for the implementation of efficiency practices for buildings operations and maintenance. These practices could include tuning heating, ventilation, and air conditioning equipment so that it operates more efficiently. Additional information on the Executive Order can be found on in Section 3.2, Energy Efficiency Assessment, of the State Energy Plan.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Innovative Energy Solutions (IES)

IES feels there should be increased incentives for corporations through rebates or tax incentives to get the people of the State to reduce their energy consumption. Rather than developing new processes to generate power for these communities, controls should be put in all facilities in the State of New York, a regulatory committee set up to provide a benchmark for these people and guide to follow in updating and retrofitting existing facilities. Many people would be put to work doing this.

Response: Several programs offered in New York State provide incentives to encourage the adoption of energy efficiency measures or practices. From 1990 to 2001, more than \$2.9 billion were spent on energy efficiency programs aiming to reduce energy consumption in all major sectors, including corporations. Section 3.2 of the State Energy Plan provides specific information on these programs and their achievements.

The University at Binghamton

Is there a Governor's executive order or something similar to the order signed in 1992 by Harry Spindel [Sp.?] that sets heat and light levels for university buildings. That would be a great deal of help, because if you can pull out a state-signed piece of paper, that helps a lot.

Response: The New York State Energy Conservation Construction Code establishes design conditions for heat and light in all buildings in the State except those in New York City, which has its own building and energy code. For example, the code's lighting power limits set the maximum watts per square foot for buildings. The code also sets maximum and minimum indoor design temperatures for heating and cooling.

Mike Mercincavage

The University at Binghamton has worked with an inventor who has developed an electronic ballast that consumes about 40 percent of what a standard wound transformer ballast uses and has monitoring capabilities in the form of photo diodes or cells that can monitor the ambient light level in the room and automatically adjust. I would like to see a closer relationship between NYSERDA and inventors trying to create something like that.

Response: NYSERDA's Lighting Research and Development (R&D) program works closely with inventors to develop such products and works with New York State manufacturers to develop innovative and energy-efficient lighting products. The Lighting R&D program has helped commercialize over a dozen new lighting technologies. The R&D program also helps fund demonstration, testing, and evaluation efforts that would

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

otherwise not be affordable for small to medium-sized companies. In this way, the Lighting R&D Program addresses both technical, informational, and financial barriers to new product commercialization activities.

Frank Bertoni

I believe a program similar to California that gives away energy saving bulbs as well as solar and wind incentives should be a major part of conserving our energy and reducing our dependence on foreign oil.

Response: Several of the energy efficiency programs currently offered in New York State promote the use of compact fluorescent light bulbs. Examples include NYSERDA's Residential Appliances and Lighting and Home Performance with ENERGY STAR® programs and Long Island Power Authority's Residential Lighting and Appliances program. These programs are based on the concept of market transformation or market development. Therefore, rather than simply giving away free light bulbs, these programs promote consumer awareness of the benefits of more efficient lighting and offer incentives to mid and upstream market participants to encourage the purchase of high-efficiency compact fluorescent light bulbs. This approach is expected to lead to greater, more widespread benefits than a simple give-away program.

Several of the energy efficiency programs currently offered in New York State also offer incentives for renewable technologies like photovoltaics (PV). For example, the **New York Energy SmartSM** Loan Fund provides reduced-interest financing for residential and business customers to purchase and install PV systems. The **New York Energy SmartSM** program also trains and assists installers of photovoltaic systems.

Binghamton Mayor Richard Bucci

Binghamton is involved in several energy efficiency projects that were partially funded through system benefits charge programs such as a regional power purchasing alliance of municipalities and various energy reduction strategies such as high efficiency traffic signals. Binghamton encourages you to continue to build on these programs, expand them if you can, and especially in the area of making power generated outside our borders available.

Response: NYSERDA is building on the energy efficiency programs offered during the initial SBC funding period. In January 2001, the Public Service Commission approved another five years of SBC programs (through June 30, 2006) and increased funding to \$150 million annually. NYSERDA will continue to offer Technical Assistance

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

programs, including rate analysis and aggregation projects to assist government, schools and other customers with installing metering and other equipment to enable aggregated commodity purchase.

Cancer Action

The word conservation does not appear very frequently in the State Energy Plan. Specifics are lacking in the State Energy Plan. For example, agriculture and dairy farming are not addressed. If New York State government were to provide tax credits for the infrastructure changes that are made by farmers to conserve energy, something specific and significant would be addressed.

There should be an educational feature in the State Energy Plan, educating people of the need to conserve. For each school group, grade one through grade twelve, one additional teacher would be hired for every 75 students to teach a class in Environmental Science, Conservation, and Ecology – whatever would be appropriate at their level of understanding.

Response: Energy conservation is covered extensively in the State Energy Plan's discussion of energy efficiency, Section 3.2.

Energy efficiency in agriculture and dairy farms is addressed through the SBC-funded Technical Assistance Program and Loan Fund. Farmers are provided with cost-shared professional studies to help identify opportunities to improve efficiency and reduced-interest financing to install energy efficiency measures like variable speed drives and plate precoolers.

Several of the State's energy efficiency programs have an educational component. An SBC-funded New York solar schools program will provide \$1.75 million to install 50 small photovoltaic systems on schools and develop curricula on solar panels. This program will also involve a coordination system for schools with PV systems to exchange data on how these systems are operating. NYSERDA makes materials available to classroom educators on energy efficiency education for New York State's K-12 children.

Peter King

I would favor a really aggressive approach toward funding for energy efficiency in buildings, especially throughout the State university system.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Response: All the major energy efficiency programs currently operating in New York State aggressively support energy efficiency in buildings and building systems. The schools and universities of the State University of New York (SUNY) are eligible for assistance through NYSERDA-administered system benefits charge programs and have participated in numerous projects. The State EnVest program is currently involved with projects at several State university campuses, including those at Cobleskill, Geneseo, Stonybrook, and Delhi. State EnVest provides energy efficiency improvements to these facilities through energy performance contracting. For more information on these programs and assistance for educational facilities, refer to NYSERDA's web site at www.nyserda.org.

The New York Power Authority has invested nearly \$110 million in more than one hundred energy efficiency projects at SUNY and City University of New York campuses and at community colleges.

Raise Per Capita Spending for Energy Efficiency

Environmental Advocates

The Draft State Energy Plan should call for an investment in energy efficiency conservation and demand management at a level of \$25 per year, per capita, through the system benefits charge, utility programs, and programs of the New York Power Authority and Long Island Power Authority.

Peter Zadis

The final Energy Plan should increase investment in energy efficiency and clean power.

Western New York Sustainable Energy Association

We should close the gap between New York and other states by raising efficiency spending to at least \$25 per person per year. We're now around thirteen in New York State.

UPROSE

The Draft State Energy Plan needs to address the need for reduction, conservation, and increased funding for energy efficiency and conservation programs. The State Energy Plan encourages NYPA and others to build more power plants, instead of concentrating on reducing energy use. New York spends less than half of what Massachusetts, Connecticut, and New Jersey spend on a per capita basis on these programs.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Green Party of New York State

We support the establishment of specific goals within the Draft State Energy Plan for energy efficiency including investing at least \$25 per year per capita or approximately 450 million for energy conservation and demand management.

Environmental Advocates

The Draft State Energy Plan should call for an investment in energy efficiency conservation and demand management at a level of \$25 per year, per capita, through the system benefits charge, utility programs, and programs of the New York Power Authority and Long Island Power Authority.

Response: The various states investing in energy efficiency programs have different populations, different baseline levels of energy efficiency, and different program portfolios. Therefore, investments cannot be strictly compared on a per capita basis. New York's investments may be lower on a per capita basis, but the State has a large population, is already the most energy efficient in the continental U.S. (on a per capita basis), and is investing in many commercial and industrial market transformation programs that have significantly larger gains for the investments versus rebate-based programs.

Incentive and SBC Programs

Annie Wilson Miquet

I believe that the energy demand is increasing by one and one half percent and that NYSERDA's budget should be increased to meet or exceed that need.

Battery Park City Authority

Battery Park City believes SBC charges should be increased.

Response: In January 2001, the New York State Public Service Commission extended the system benefits charge (SBC) programs through June 2006 and increased funding from \$78.1 million to \$150 million a year. At this time, the Energy Planning Board is making no recommendations regarding extending and increasing SBC charges.

New York Chapter Association of Energy Engineers

The State Energy Plan should make a reasoned case for clearly quantified goals and progress milestones for energy efficiency and renewables based on a minimum of \$750 million in system benefits charge (SBC) funding through 2006 and leverage two to

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

three times this amount in private finance. Goals should be expressed clearly in terms of electrical capacity to be achieved (megawatts and gigawatt hours)

Response: Section 3.2 of the State Energy Plan, the Energy Efficiency Assessment, provides megawatt and gigawatt hour projections for the system benefits charge (SBC) funding through 2006. Experience to date with the SBC-funded **New York Energy SmartSM** program indicates that the ratio of external spending to **New York Energy SmartSM** funds is 3.1 to 1. (See *New York Energy SmartSM Program Evaluation and Status Report: Report to the System Benefits Charge Advisory Group – Initial Three Year Program*, January 2002.) For every dollar of SBC funds spent by the **New York Energy SmartSM** program, an additional 3.1 dollars of external investment in energy efficiency is leveraged. While the ratio of external spending to SBC funds cannot be predicted with certainty through 2006, it is expected to be comparable to the first three years of the program.

In addition to the projected program achievements discussed in the Draft State Energy Plan, the State Energy Plan includes measurable goals for energy efficiency for all sectors and fuels of 25 percent below 1990 levels by 2010. The goal for energy efficiency is specified in trillions of Btus of primary energy use per unit of Gross State Product.

New York Chapter Association of Energy Engineers

We recommend that you create a system benefits charge for natural gas. There is no efficiency program for natural gas.

Response: The issue of whether a system benefits charge (SBC) should be created for natural gas was aired and is pending before the New York State Public Service Commission in Case 00-M-0504 – Proceeding on Motion of the Commission Regarding Provider of Last Resort Responsibilities, the Role of Utilities in Competitive Energy Markets, and Fostering the Development of Retail Competitive Opportunities. Electric SBC funds currently support energy efficiency programs to reduce the use of natural gas and petroleum when linked to projects that reduce electricity consumption.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Executive Order

Western New York Sustainable Energy Association

We should strengthen Executive Order 111. Our concern is that it will not be fully and aggressively implemented. The guidelines have weakened in one key respect. The executive order says that all state agencies should reduce energy consumption by 35 percent by the year 2010 compared to 1990, and the guidelines remove that pressure on each agency to do that and just says the State. That's a very big difference. Each agency should be held to that standard.

Better Queens Environment (BQE)

The Governor's Executive Order 111, which requires State facilities to operate with ten percent renewables by 2005 and 20 percent by 2010, is a step in the right direction, but firmer strides need to be taken. The ten and 20 percent goals should apply to all energy generation and consumption, public and private.

Western New York Sustainable Energy Association

The recently released Guidelines for Executive Order 111 are not commensurate with the Order itself. For example, the Guidelines do not apply the Executive Order's requirement that State agencies achieve a 35 percent reduction in energy use by 2010 (compared to 1990) to each agency. This failure eliminates a critical measure of compliance. Also NYSERDA may not be adequately staffing the Executive Order program or conveying to State agencies the requirement that they fully comply with the Order. The great potential of the Governor's directive will be achieved only if the Guidelines are revisited and the program given some real teeth.

Response: Although the energy reduction numbers from each State entity subject to the Executive Order will be rolled up into an overall State average, each entity's performance will be individually reported to the Department of Budget and the Governor's office each year. The 35 percent statewide reduction target is very aggressive and will require the full participation of all State entities that are subject to the Order. Each State entity will be expected to seek these targets individually. The Department of Budget and the Governor's Office will then respond to any State entity that is delinquent in fulfilling the requirements of the Order.

The Executive Order, as issued by the Governor, defined NYSERDA's role as Chair of the Advisory Council. The tasks of the Advisory Council include developing Guidelines and coordinating fulfillment by each State entity subject to the Order.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

With respect to policing implementation of the Order, the Order did not empower NYSERDA to act in that capacity. The Division of the Budget and the Governor's office together will undertake that task during implementation. NYSERDA's role is very clearly stated and is limited to coordinating and facilitating implementation with individual agencies.

Consumption and Other Reductions

Honorable Harriet D. Cornell, Rockland County legislator

A basic flaw of the Energy Plan is underestimating the will of the people and their desire to conserve energy. Specific goals must be stated in the Energy Plan for reduction in energy demand. (See Response on page 10-15.)

Torne Valley Preservation Association

Conservation goals that will have a significant impact on demand should be set with real dates for meeting the goals. (See Response on page 10-15.)

Natural Resources Defense Council (NRDC)

It's important to recognize that there's just nothing in the Draft State Energy Plan that commits the state or directs the State towards a real sustainable energy future. The State should make a commitment to energy efficiency. We should reduce our electricity consumption by at least ten percent by the year 2010. (See Response on page 10-15.)

Scenic Hudson, Inc.

The State should make a commitment to energy efficiency. We should reduce our electricity consumption by at least ten percent by the year 2010. (See Response on page 10-15.)

Great Lakes United

Energy efficiency and conservation is another category we want to address. In terms of conservation, New York State should commit to at least a ten percent reduction in statewide energy demand by 2010, along with interim targets. (See Response on page 10-15.)

Environmental Advocates of New York

Environmental Advocates urges that the Draft State Energy Plan set some specific goals, such as at least ten percent reduction of statewide energy demand relative to the

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

2001 by the year 2010. The State Energy Plan should indicate how the goal will be met. (See Response on page 10-15.)

Sustainable Energy Alliance of Long Island

New York State must target more concrete and realistically attainable energy efficient and conservation targets for Long Island as well as New York State. The State must start with an overhaul of residential and commercial building codes that are seriously outdated and contribute to the enormous energy rate that is partially responsible for escalating energy demand in commercial and residential sectors.

The bulk of this initiative must target the growing number of low-income communities throughout the State to reduce and reverse the vicious cycle of energy loss in poorly insulated and maintained homes and apartments. (See Response on page 10-15.)

Sierra Club, Long Island Group; Environment Advocates of New York

The Draft State Energy Plan should include a list of energy goals and specific goals with strategies for reaching them. The goals should increase investment in and stress energy efficiency and conservation. The goals set should be reducing energy demand by ten percent over the next 10 years. It should be expanding investment in energy efficiency, conservation, and demand management.

A portion of this investment, perhaps a third, should be designated for the low-income sector. (See Response on page 10-15.)

Tom Salo

The State Energy Plan should double funding for energy efficiency, conservation and renewable energy sources. (See Response on page 10-15.)

Jo Ann Arcarese

The State Energy Plan should commit to a ten percent reduction in State energy demand. (See Response on page 10-15.)

Sierra Club, NYC Group

The Draft State Energy Plan does not place sufficient emphasis on the use of efficiency and conservation processes. A goal of at least ten percent reduction by 2012 of energy demand should be included. The investment in this program should also have significant portion designated for the low-income market. (See Response on page 10-15.)

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Long Island Neighborhood Network

The Governor should adopt a policy that sends a message to every municipality in the State of New York. Goals should be set to reduce energy usage by 10 or 20 percent, in a graduated way over a series of years. Streetlights could be retrofitted and improved. Government buildings could be retrofitted with geothermal. (See Response on page 10-15.)

Environmental Advocates of New York

The first thing the plan needs to do is increase investments in energy efficiency and conservation. A measurable goal of at least ten percent reduction in statewide energy demand by 2010 should be set through significantly expanding its programs and energy efficiency.

Investments should be made in energy efficiency, conservation, and demand management through the System Benefits Charge, utility programs, etc. A portion of this should be targeted specifically for the low-income sector. (See Response on page 10-15.)

Hudson River Sloop Clearwater, Inc.

The State Energy Plan should include a target of overall energy reduction by 35 percent and 20 percent of electricity generation from renewable resources should be included.

Response: In 2000, energy efficiency program spending in New York State was approximately \$203 million. With the approval of a second round of SBC programs, and the continuation of several existing programs other than the SBC, funding for energy efficiency is expected to rise in upcoming years. In fact, funding for SBC, NYPA and LIPA programs alone is projected to be about \$280 million in 2002. This funding alone is 38 percent more than was spent on all major programs in 2000.

The State Energy Plan includes measurable statewide outcomes for energy efficiency (including improvements in all sectors and all fuels) of 25 percent below 1990 levels by 2010. The expectation is expressed in trillions of Btus (tBtus) of primary energy use per unit of Gross State Product (GSP). This addresses energy efficiency for all sectors and primary fuel used in the State while allowing for continued sustainable economic growth. Achieving this expectation will require significant reductions in energy use and demand. This outcome is expected based on activities that are underway and planned and have a real expectation of being realized.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

The SBC program includes energy efficiency and demand management programs. Nearly 15 percent of the eight-year SBC program budget is allocated to low-income energy efficiency and affordability programs.

Buildings; Building Codes and Standards

Cooperative Coalition to Prevent Blackouts

The State Energy Plan should encompass the objective to educate residents regarding electric capacity in the State. It should support opportunities for residential electric consumers, including those living in multifamily buildings, to form a residential electricity curtailment infrastructure capable of responding to supply and distribution emergencies, and it should stimulate technological and institutional solutions that promote price responsive load management and load control technologies within the multifamily sector.

Response: The Energy Planning Board concurs with the suggestions in the comment. Numerous recommendations in the State Energy Plan support them. See Section 1.3, Energy Policy Objectives and Recommendations, in the Energy Plan.

David Stout

Buildings use about 36 percent of all primary energy in New York State. This use must be included in the Energy Plan . There's no discussions on that subject in the Energy Plan .

The Draft State Energy Plan should require new and renovated buildings in New York State to meet the insulation requirements of the U.S. DOE as shown in their publication called Energy Savers.

New York needs a program to encourage the installation of solar hot water systems on all buildings that use hot water or heated water or processed steam.

Response: New York State recognizes the significance of building energy use. As described in Section 3.2 of the State Energy Plan, New York is currently in the process of amending its Energy Conservation Construction Code. Once the latest amendments are adopted in summer 2002, New York's building energy code will be among the most progressive in the country.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

NYSERDA's **New York Energy SmartSM** programs encourage and provide incentives for the installation of solar hot water systems. The long payback periods on these systems is a barrier that NYSERDA continues to address.

Natural Resources Defense Council (NRDC)

With respect to tighter air-conditioner standards, the State has weighed in on that issue but the State needs to do a lot, lot more than just sending a letter. In terms of the legislative, administrative, and legal struggles going on to get tougher air conditioner standards, the State really needs to step up to the plate on that issue.

Response: The State supports the U.S. Department of Energy's rule setting residential air conditioner standards at the SEER 13 level. In addition, NYSERDA, in consultation with the New York State Office of General Services, is developing minimum efficiency standards for State purchasing. These State standards will cover residential air conditioning equipment purchased by New York State.

NYPA and LIPA Should Commit to SBC Spending

New York Public Interest Research Group

The State Energy Plan laid out why energy efficiency is needed for New York State through demand management programs. LIPA and NYPA need to invest in energy efficiency, conservation, and renewables programs. What I didn't see in the Energy Plan was a call for more energy efficiency funding. Where do we find the money? Through the New York Power Authority and the Long Island Power Authority. The Governor, through the Public Service Commission, practically doubled the systems benefits charge and we should see that mirrored through LIPA and NYPA because these types of programs have worked.

NYPIRG suggests that the New York Power Authority be required to spend 150 million dollars a year, excluding the clean boilers programs for schools, for demand-side management or energy efficiency programs. LIPA should commit \$50 million a year in demand-side management programs developed through collaborative processes with the community, with local energy experts, and with groups – businesses and residents – here on Long Island.

This Energy Plan encourages NYPA and LIPA to build more mini power plants that do not have to go through the formal approval process. To retain an adequate buffer between supply and demand we must increase the funding for energy efficiency and

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

conservation programs and renewable power generation from the New York Power Authority and the Long Island Power Authority to \$150 million and \$50 million per year respectively.

Star Foundation

We think Long Island Power Authority should be encouraged to increase funding to produce energy efficiency, conservation, and renewable energy production.

New York State Sustainable Energy Coalition (NYS-SEC) et al.; Stop the Barge

New York must increase the funding for energy efficiency and conservation programs and renewable power generation from the New York Power Authority (NYPA) and the Long Island Power Authority (LIPA) to \$150 million and \$50 million per year, respectively. On a per capita basis, Massachusetts, Connecticut, and New Jersey spend more than twice as much as New York on such programs.

Response: The State Energy Plan calls for NYPA and LIPA each to increase annual investment for energy efficiency programs by 25 percent and suggests that NYSERDA, NYPA, and LIPA continue to coordinate program offerings and delivery of energy efficiency services. See Section 1.3, Energy Policy and Recommendations.

Miscellaneous Recommendations

Pace University School of Law; Pace Energy Project

One of several big questions that the Draft State Energy Plan does not address and that it is imperative that the State Energy Plan answer is how much energy efficiency there should be.

The State Energy Plan should determine the correct amount to be spent on energy efficiency by calculating the costs and benefits on the margin. As long as the private and public benefits of energy efficiency exceed the costs, New York realizes benefits from each additional dollar invested. All the highly significant, but non-monetized, advantages of energy efficiency discussed above should be taken into account. The updated study of New York energy efficiency opportunities being conducted by NYSERDA should be useful in such a calculation.

Response: NYSERDA is conducting an energy efficiency potential study that will determine the technical, economic, and achievable potential for energy efficiency. The technical potential is defined as the upper limit for capacity and output theoretically

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

possible, without regard for cost, market barriers, or market acceptability. The economic potential is defined as the cost-effective portion of the technical potential. The achievable potential represents the amount of the economic potential that can be expected under various cases, from the base case that is defined as naturally-occurring efficiency only, to the maximum achievable case that is defined as the most aggressive and ambitious policy support for energy efficiency. The results of this study will help State policy makers determine the correct amount to be spent on energy efficiency. The study is currently underway, but the preliminary technical potential results only are available and will be included in the State Energy Plan.

New York Chapter Association of Energy Engineers

Of particular note is the sharp decline in investment in energy efficiency after 1994 (see Table 3, page 3-16). Since 1994, the fall off in such investment has been precipitous. Even with the addition of SBC funds (see Table 5, page 3-18), investment is no more than 50 percent of 1992 and 1993. Comparing these two tables suggests that projected investment is not sufficient to replace the retirement of previously installed measures with assumed ten-year lives. In other words, the Energy Plan actually shows a decline in electric reductions realized through energy efficiency through 2006. Certainly this implication of the Plan is contrary to policy objectives and requires specific address.

Response: Investments from the early 1990s cannot be compared to those post-1998. The nature of energy efficiency programs changed significantly with the advent of the System Benefits Charge. Programs in the early 1990s, and before, focused on demand-side management and one-time transactions, whereas the market transformation programs beginning in the late 1990s focus on building the supply chain and increasing consumer demand to bring about more widespread adoption of sustainable energy efficiency products and services. For example, the majority of projected electricity savings shown in the State Energy Plan for NYSERDA System Benefits Charge programs include only direct program participants. The more widespread energy efficiency work that is expected once markets are fully developed would have to be added to the savings shown once these data are available. Therefore, once markets are fully developed, the actual electric reductions realized through energy efficiency through 2006 and beyond could be greater than those achieved in the early 1990s.

Alix Cooper

The State's long term energy plan must be one that focuses on energy conservation and efficiency rather than excess reliance on oil and nuclear power.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Response: The State Energy Plan aggressively supports continued investments in energy efficiency and renewable energy. Increased energy efficiency and renewable energy will ultimately result in greater energy diversity and will reduce the risks associated with single fuel dependency and price volatility. Although aggressive in its support for energy efficiency and renewables, the State also supports the continued safe operation of nuclear, coal, natural gas, oil and hydroelectric generation as part of a diverse portfolio of electricity generation resources.

Better Queens Environment (BQE)

SBC money also funds “Environmental Monitoring and Analysis,” with a budget of \$2.4 million per year. The current focus is on emissions from combustion technology and on “understanding the role of local . . . air pollution . . .so that more equitable control strategies can be developed.” Which we understand to mean funding for university research projects. Cumulative effects of power plant and other emissions must be included in any attempt at understanding the issue and promoting equity. If community groups are not made partners in these SBC-funded ventures, they cannot succeed. BQE recommends that community groups share a role with funded university researchers in the creation of research agendas.

Response: NYSERDA welcomes input from community groups in developing its research agenda for the Environmental Monitoring, Evaluation, and Protection (EMEP) program. In September 2001, NYSERDA held a conference in Albany that was attended by over 200 people, including many public interest, environmental, and advocacy groups. At this conference NYSERDA held a scoping session to develop a research agenda for the EMEP program. NYSERDA then posted the draft EMEP research plan on the NYSERDA Web site (www.nyserda.org) for public comment. Although the due date noted in the EMEP posting has passed, NYSERDA would still welcome your comments as the research plan is meant to be an evolving document. NYSERDA also meets once a year with environmental public interest groups to discuss programs and opportunities for collaboration.

The EMEP program has a strong advisory structure that includes several public interest groups and organizations involved in community environmental issues, including the Center for Clean Air Policy, the Pace Energy Project, and the Northeast States for Coordinated Air Use Management (NESCAUM). In addition, through EMEP, NYSERDA is launching a new program to develop low-cost air quality monitors to address local and regional air pollution issues. NYSERDA expects to issue a solicitation in this area in June 2002. This effort is being done in coordination with the California Air

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

Resource Board, who is similarly interested in providing better data on air pollution. As part of this study NYSERDA is looking at effective ways of communicating air quality monitoring data to the general public. Several EMEP projects include aggressive community outreach and involvement. Included are an ongoing study of asthma in New York City that involved several meetings with community groups and a new study looking at nitrogen pollution in the northeast. The latter effort has sizable resources dedicated to communicating findings to the general public through a variety of outlets. NYSERDA and NYPA contributed to a major NESCAUM Clean Air Community Program at the Hunts Point Market Truck Stop to reduce local pollution through truckstop electrification. NYSERDA also teamed up with Clean Air Communities for a natural gas delivery truck program for Manhattan Beer Distributors.

Critical Comments

Diane A. Davis

With respect to the Green Buildings and FlexTech Programs, the Draft State Energy Plan does not mention the additional 10 to 30 percent cost to owners who are implementing these programs. What are the incentives to use these programs?

Response: In most cases, energy efficiency upgrades come with additional up-front costs. However, many incentives are available to implement energy efficiency measures.

First, both the FlexTech and **New York Energy SmartSM** New Construction Program (including Green Buildings) offer incentives to help defray the additional up-front costs. The FlexTech Program provides cost shared technical studies to help building owners to identify potential energy efficiency upgrades. If the owner decides to implement the recommended energy efficiency measures, they will be reimbursed for their share of the study costs. Owners choosing to implement the energy efficiency measures recommended by the FlexTech study can also receive financial incentives or reduced-interest financing through NYSERDA's other programs. Under the **New York Energy SmartSM** New Construction Program, NYSERDA provides technical assistance to building owners and financial incentives to cover up to 80 percent of the incremental cost for high efficiency measures in buildings that qualify as green under the federally established Leadership in Energy and Environmental Design (LEEDTM) program.

Perhaps the most important incentive, however, is the long-term cost effectiveness of implementing energy efficiency upgrades. All of the measures supported by the **New**

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

York Energy SmartSM program have been screened for cost effectiveness. Therefore, any additional up-front costs that are not defrayed by SBC incentives will be recouped by the building owner over the lifetime of the energy efficiency measures.

Diane A. Davis

The Leadership in Energy and Environmental Design (LEEDTM) Program is adding ten percent to 30 percent to the cost of construction projects thus costing jobs among design community professionals.

Response: Adding high-efficiency measures to qualify for the LEEDTM program can increase the initial cost of construction projects. However, these additional up-front costs will be paid back by the cost savings that accrue due to decreased energy consumption over the lifetime of the measures. Incorporating high-efficiency measures into building design is a value-added service that architecture and engineering firms can provide to their clients, thereby increasing their overall profitability. Demand for energy efficiency can actually help to create and retain jobs. For example, the \$201 million committed during the first three years of the **New York Energy SmartSM** program is expected to result in annual bill reductions of nearly \$120 million and the creation or retention of more than 2,300 jobs. These jobs are in the service and retail sectors and will be sustained for the lifetime of the energy efficiency measures.

Mirant New York, Inc.

Demand-side management ultimately is something that should be undertaken by market participants in response to proper price signals. Recognizing that there may be reason for government to encourage demand-side management at this time, the Draft State Energy Plan should look toward the future and recommend ways to phase out government's role in this area.

Response: As noted in the Energy Efficiency Assessment of the State Energy Plan, the demand-side management programs of the investor-owned utilities have been phased out and replaced with System Benefits Charge programs that primarily focus on market transformation. The **New York Energy SmartSM** market transformation programs, including Premium Efficiency Motors, New Construction, and Home Performance with ENERGY STAR[®], aim to build long term consumer demand for energy efficiency while developing the infrastructure of energy efficiency product and service providers. Where DSM programs provided incentives for one-time transactions, market transformation programs build networks of allies and build awareness and knowledge among consumers with the ultimate goal of changing practices so that energy efficient

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.

practices are adopted by the market. The **New York Energy SmartSM** market transformation programs include baseline measurements and follow up studies to assess the level to which energy efficiency is being adopted by market participants. Exit strategies are also considered for when market is fully developed and the level of energy efficiency can be sustained in the absence of government intervention.

Note: Comments are grouped according to similarity of contents, and a response may address more than one comment. In those cases, the response is placed at the end of the series of comments. Long series of comments will include a page reference to the response.