STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of New York on March 19, 2008

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman
Patricia L. Acampora
Maureen F. Harris
Robert E. Curry, Jr.
Cheryl A. Buley

CASE 07-M-0548 - Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard.

ORDER ADOPTING AND APPROVING ISSUANCE OF FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT

(Issued and Effective March 24, 2008)

BY THE COMMISSION:

On May 16, 2007, the Commission instituted a proceeding to explore and develop the means by which the State's electric energy consumption can be decreased by 15% from expected levels by the year 2015, including development of an electric and natural gas Energy Efficiency Portfolio Standard, and to establish measures implementing that standard.

On June 11, 2007, the Commission issued a Notice Inviting Comments on a proposed Environmental Assessment Form (EAF) prepared by its Staff.[1] Staff subsequently prepared a draft Generic Environmental Impact Statement (GEIS) for the Commission's consideration. Pursuant to 6 NYCRR, Section 617.6(a)(4), the draft GEIS

[1] The Commission is Lead Agency for the review of this action pursuant to the State Environmental Quality Review Act (SEQRA). There are no other "involved agencies" and the action contemplated is an "unlisted action," both as defined in 6 NYCRR, Section 617.2.

was treated as an EAF for the purpose of determining significance. After considering the draft GEIS and the public comments received, the Commission concluded that the establishment of an Energy Efficiency Portfolio Standard may have a significant effect on the environment and, therefore, directed preparation of an environmental impact statement.[2] The action involves changes in policy, practices and economic arrangements affecting energy usage. Direct adverse environmental impacts are not expected from implementation of energy efficiency policies, but there may be potential secondary impacts that will result. The Commission determined that preparation of a broad-based GEIS would be more appropriate than a site-specific environmental impact statement because the proposed action by itself would not involve any activities that will cause a direct affect on the environment at any specific location. Rather, the action may create circumstances that subsequently induce activities that may affect the environment.

By Order issued on November 9, 2007, the Commission determined that the Draft GEIS comported with the requirements of SEQRA and accepted it as complete. A Notice Of Completion of Draft Generic Environmental Impact Statement was published in the NYS Environmental Notice Bulletin on November 14, 2007 and comments were accepted until the close of business on December 14, 2007.

PUBLIC COMMENT

Two sets of comments, one by the New York State Department of Environmental Conservation (DEC) and the other by the Joint Utilities (JU) were received during the 30-day comment period. All of the substantive comments have been summarized and addressed in the Final GEIS. Where appropriate, and as noted in the responses to the comments, revisions were made to the Draft GEIS.

DISCUSSION

The Final GEIS identifies and analytically addresses the environmental impacts related to the potential Energy Efficiency Portfolio (EEPS) policy and responds

[2] Case 07-M-0548, supra, Order Concerning Determination of Significance and Draft Generic Environmental Impact Statement (issued November 9, 2007).

to all of the substantive comments provided on the Draft GEIS. Substantive changes made to the Draft GEIS are described in an attachment to the Final GEIS. These generally take the form of updates in response to comments from parties on the Draft GEIS, descriptions of major filings in the EEPS proceeding made after the issuance of the Draft GEIS, and updates resulting from further refinements to cost, benefit, and emission reduction analyses.

CONCLUSION

The Final GEIS is a complete and comprehensive assessment of the potentially significant adverse impacts, as well as the benefits, associated with the development and implementation of an Energy Efficiency Portfolio Standard. It conforms to the requirements of SEQRA, and properly responds to all comments provided on the Draft GEIS. For these reasons, the Commission accepts it as the Final GEIS for the proposed action of adoption and implementation of an EEPS policy.

The Commission orders:

1. The Final Generic Environmental Impact Statement, attached, is declared complete and is accepted by the Commission as the Final Generic Environmental Impact Statement for the proposed action of developing and implementing an Energy Efficiency Portfolio Standard.

2. A Notice of Completion of Final Generic Environmental Impact Statement shall be issued by the Secretary and published in the Environmental Notice Bulletin in accordance with the requirements of 6 NYCRR Part 617.

3. This proceeding is continued.

By the Commission,

(SIGNED) JACLYN A. BRILLING
Secretary

FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT

In

CASE 07-M-0548 – Proceeding on Motion
of the Commission Regarding an
Energy Efficiency Portfolio Standard

Prepared by:

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The Action in Case 07-M-0548 is the Adoption and Implementation of an Energy Efficiency Portfolio Standard (EEPS) in New York State.

Area Affected by Action: New York State

Date of Issuance: March 24, 2008

Agency Contact Person: Alice Miller (518) 474-2350

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EXECUTIVE SUMMARY

By an order issued May 16, 2007, the New York State Public Service Commission instituted Case 07-M-0548 regarding an Energy Efficiency Portfolio Standard (EEPS) (Instituting Order).[1] The Instituting Order establishes a target goal for electricity of a 15% reduction in usage by 2015 compared to the projected level for that year. It also initiated further investigation into a comparable resource acquisition program for natural gas that would include setting an energy efficiency goal for natural gas. The Action to be undertaken by the Commission does not include direct approval for the siting or construction of any facilities nor does it involve any permit approval, permit modification, or funding, now or ultimately from any other government agency.

The objective of the proceeding is to balance cost impacts, resource diversity, and environmental effects by decreasing the State's energy use through increased conservation and efficiency. In addition, to ensure that the Commission's programs succeed, these objectives also will have to be addressed in Commission efforts to meet the State's needs for comprehensive energy planning. EEPS objectives can be attained in a variety of ways: examples from New York and other jurisdictions include a centrally-administered statewide program such as the System Benefits Fund administered by NYSERDA; a requirement that all electric and natural gas distribution companies purchase a minimum percentage of their resource needs through energy efficiency resources; solely by competitive load-serving entities; or through creation of a State efficiency utility.[2]

The purpose of the proceeding is to design an EEPS to meet the targets for energy efficiency which, along with additional renewable resource development and other programs, decreases the State's dependence on fossil fuel-based generation and imported fuels, and reduces its greenhouse gas

[1] Case 07-M-0548, Proceeding On Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order Instituting Proceeding (issued May 16, 2007).

[2] Efficiency Vermont, for example, was created in 2000 by the Vermont legislature and the Vermont Public Service Board as a statewide provider of energy efficiency services.

emissions. In addition, the EEPS should reduce customer bills, stimulate State economic development, and create jobs for New Yorkers.

In August 2007, Department of Public Service Staff (Staff) issued a "Preliminary Proposal for Energy Efficiency Program Design and Delivery" (Staff's Report). This report presents general principles applicable to both natural gas and electricity programs and for all customer classes that reflect the knowledge and experience gained from energy efficiency programs and providers in New York State and nationwide. The report also describes current program delivery practices as well as descriptions of potential changes for the future. It also identifies new programs and enhancements to existing energy efficiency programs, by customer class and fuel type, which can be implemented quickly on an interim basis in early 2008 through the end of 2009 to accelerate the deployment of energy efficiency resources. Staff presented updated information in reports issued on November 26, 2007 and December 3, 2007.[3]

On February 11, 2008, the Administrative Law Judges (ALJs) issued a "Ruling Presenting Straw Proposal," which was accompanied by a Technical Appendix that was subsequently revised on February 20, 2008.[4] The Straw Proposal identifies the wedges of energy usage reduction that could be aggregated to accomplish the goal of a 15% reduction of electric energy from that projected to be used in New York State by the year 2015. The Straw Proposal addresses quantification of a baseline and target benchmarks for electric energy efficiency gains. Although it does not identify individual programs to be pursued, it does delineate resources to be allocated to various program administrators. It introduces a Tariffed Installation Program (TIP), a system for on-bill financing that can be used with private sector investment. The Straw Proposal also recommends target goals for various program administrators, which were set forth in detail in the

[3] Other major filings in the case that address the concept of a two-phase approach, with preliminary programs implemented quickly while longer term solutions are developed, include a New York State Energy Research and Development Authority (NYSERDA) document entitled "Energy Efficiency Portfolio Standard White Paper (dated September 10, 2007); a document entitled "A State-Wide Plan to Achieve the Electric Reduction Targets of the 15 By 15 Policy", filed by Central Hudson Gas & Electric Corporation on January 19, 2008; and a letter by Community Environmental Center filed on January 24, 2008.

[4] The Technical Appendix to the ALJs' Straw Prooosal is attached as Appendix C to this document.

Technical Appendix. The analysis associated with the Technical Appendix also examined the impact these proposals would have on emissions, showing reductions by pollutant type.

The benefits of energy efficiency include: forestalling the building of new generation; reducing use of finite fossil fuels; reducing customers' energy bills; developing independent energy sources for New York State to reduce energy imports; and mitigating the environmental impacts of burning fossil fuel for energy, including greenhouse gas emissions. In addition, more efficient use of energy has the potential to foster economic development and job growth by encouraging in-state technology advances to deliver energy efficiency programs to consumers.

If the program objectives are achieved, multiple benefits will accrue to customers. The benefits of the program (for measures implemented from 2008 through 2015, with certain benefits continuing until 2025) are estimated to be about $12 billion (present value in 2008 dollars) and include: savings of $6.5 billion in payments for energy that would no longer be needed or consumed; energy price reductions resulting in further cost decreases of $2 billion; reduced capacity charges of $3 billion; emission reductions of 6,741 tons of NO_x, 7,346 tons of SO_2; and 8,891,602 tons of CO_2 in 2015; and increased economic development associated with the creation of approximately 37,000 jobs by 2015 for program implementation.

Benefits from efficiency measures are expected to last more than 15 years; the preliminary Staff analysis assumed that benefits would last only 10 years. As a result, benefits are likely to be even greater than Staff's initial estimates.

Among the considerations in Case 07-M-0548 is development of an EEPS target for the natural gas industry. Establishment of that target will allow a more precise estimate of benefits. At this time, two studies -- Staff's Report and a 2006 Optimal Energy, Inc. Study (Optimal Gas Study)-- provide some sense of the possible scope of benefits of a natural gas EEPS. Given certain target assumptions, the Optimal Gas Study concluded that investments of $80 million per year in a five-year natural gas energy efficiency program would result in net

benefits to the economy of $1.1 billion and that for every dollar invested in energy efficiency, $2.48 would be returned to the economy. Customer bill savings through 2016 were estimated to be $293 million; that program scenario would result in lifetime reductions of 16 million metric tons of CO_2, 2000 metric tons of SO_2, and 1800 metric tons of NO_x.

The proposed Action is expected to result in numerous economic, environmental, and customer benefits. The benefits are correlated to the degree of funding and implementation of the energy efficiency programs. Direct adverse environmental impacts are not expected from implementation of energy efficiency policies. However, there could be potential secondary impacts.

The energy efficiency programs being considered as part of the EEPS fall into several categories. Some involve new and retrofit building construction, others will result in lighting and equipment retrofits. In general terms, disposal of replaced equipment is not a new or additional impact; however, disposal of the materials may be accelerated relative to their normal life expectancy. Most equipment and lighting is eventually replaced, so incentives to encourage that replacement would only result in earlier disposal of inefficient equipment. Any of the energy efficiency programs that create incentives to build new energy efficient buildings are not likely to cause more or less waste from construction. Retrofit building construction projects could add to solid waste disposal, but some would be an acceleration of disposal that would eventually occur in the absence of the EEPS.

Implementation of an EEPS will not directly cause any new construction, disturbance of land, or result in any significant adverse environmental impacts. Any secondary consequences that result in an increase in waste materials, such as obsolete and inefficient appliances and equipment or construction and demolition debris, are closely regulated. Therefore, no additional regulation or mitigation is necessary.

In the event that increased costs resulted from adoption of an EEPS, some customers might exercise their option to use alternative fuels. Those customers – primarily customers with on-site generators – are regulated by NYS Department of Environmental Conservation (DEC), which regulates

emissions from such generators. Regulation of those generators and emissions from whatever fuel the customer uses are not affected by this Action. If significant environmental impacts from on-site generators are identified, then the appropriate regulatory and enforcement agencies are the DEC and local permitting authorities.

EEPS program costs will be dependent on the reduction target and the types and details of the program selected to achieve that target. A preliminary estimate of costs and benefits of the interim energy efficiency programs that have been identified for early implementation is provided in Staff's Report. Staff's preliminary analysis indicates that a combination of enhanced energy efficiency programs and significantly upgraded building codes and appliance efficiency standards could achieve approximately 64% of the EEPS electric goal by 2012 at annual costs ranging from $126 million in 2008 to approximately $417 million in 2015.

The target level for gas efficiency reductions has not been established, but there are estimates that provide some insight into the potential costs and benefits based on a hypothetical target level. The Optimal Gas Study evaluated the economic implications of the Program Scenario Potential and estimated the program cost by 2016 would be approximately $400 million. The overall cost benefit ratio was 2.48 and the net benefit would be $1.1 billion. As the target level and details of the gas EEPS are developed, better program costs and benefits can be calculated.

The EEPS has the potential to increase indirectly the industries and services necessary to supply and install energy efficient equipment and to increase demand for services required to evaluate, retrofit, construct, and monitor the energy efficiency measures encouraged by the EEPS. Quantification of the economic benefits of increased manufacturing and services related to energy efficiency measures cannot be estimated until the details of the programs are developed and a schedule is established for meeting the goals of a particular program.

There are also potential indirect employment impacts that could result from new businesses established or expanded to meet EEPS program

needs. Any new workforce in a community, whether it involves manufacturing, construction or other services, can affect local retail, supply and secondary service businesses.

The purpose of this Action is to reduce energy consumption in New York State. As illustrated in Staff's Report and the ALJs' Technical Appendix, an EEPS has the potential to reduce New York's 2015 electric energy requirement by about 27,000 GWh per year, which would correspond to a peak load reduction of almost 5,500 MW. By reducing peak load, New York could avoid the need for approximately 6,390 MW of installed capacity. The natural gas target for reductions is being developed, but according to initial studies, estimated gas savings could be 15,204 MDth and peak day load reductions could be 100 MDth by 2016.

1.0 COMPLIANCE WITH NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA)

The purpose of SEQRA is to incorporate consideration of environmental factors into the planning, review, and decision-making processes of New York State as well as regional and local government entities. SEQRA requires all governmental entities to determine whether the actions they undertake, fund, or approve may have a significant impact on the environment. If it is determined that the Action may have a significant adverse impact, then the government entity must prepare (or request to be prepared) an Environmental Impact Statement (EIS). The intent of SEQRA is to give appropriate weight to the protection and enhancement of environmental, human, and community resources in determining public policy by incorporating into a government entity's planning and decision-making process a suitable balance of social, economic, and environmental factors. SEQRA does not, however, require that environmental factors be the sole consideration in decision-making.

No government entity involved in an Action may undertake or approve an Action until it has complied with the provisions of SEQRA, but SEQRA does not change the existing jurisdiction of that entity. It also allows these entities to impose substantive conditions upon the Action to ensure

compliance with SEQRA. These conditions, however, must be practicable and reasonably related to impacts identified in the EIS.

1.1 Preparation of a Generic Environmental Impact Statement – Purpose and Scope

SEQRA allows preparation of a Generic Environmental Impact Statement (GEIS) in several circumstances, including consideration of an entire program or plan having wide application or restricting the range of future alternative policies or projects.[5] A GEIS may be broader and more general in scope than a site- or project-specific EIS. The GEIS should include the logic and rationale of the choices advanced, and may be based on conceptual information. The GEIS, as appropriate, may also identify the important elements of the natural resource base, as well as existing and projected cultural features, patterns, and character. SEQRA requires completion of a draft GEIS, which is made available for public comment; subsequently, the lead agency considers the comments and then prepares a final GEIS prior to reaching a decision on the Action under consideration.

On June 11, 2007 the New York State Public Service Commission (PSC or Commission) issued a notice that invited comments on a draft Environmental Assessment Form (EAF) and declared itself lead agency for purposes of environmental quality review of this Action. Comments were accepted until July 26, 2007. The FGEIS addresses the matters raised in those comments.

At a regular session of the Commission on November 7, 2007, the PSC considered an evaluation prepared by its staff concluding that the adoption and implementation of a energy efficiency portfolio standard generally has numerous positive environmental and social benefits; however, there may also be potential secondary impacts that could result in adverse effects on the environment. The Action involves potential changes in policy, practices, and economic arrangements affecting the choice and development of new and

[5] The required contents of an EIS are listed in the regulations that implement SEQRA (6 NYCRR Part 617.9 and 617.10) and generally provide the structure for an EIS, including a GEIS.

existing energy efficiency programs. The Commission determined that preparation of a broad-based GEIS would be more appropriate than a site-specific EIS because the proposed Action by itself would not involve any activities that would cause a direct effect on the environment at any specific location. Instead, the Action would likely create circumstances that could induce activities affecting the environment statewide. Preparation of a GEIS will allow the Commission to analyze and consider, in general and conceptual terms, impacts that may occur as a result of the Action, and to evaluate those impacts.

Notice that the Action may result in significant environmental impacts, and a determination that the Draft GEIS comported with the requirements of SEQRA, was issued on November 9, 2007. The notice was published in the NYS Environmental Notice Bulletin on November 14, 2007.

1.2 Process and Procedures

Preparation of the Draft GEIS and collaborative meetings and technical conferences of the parties in Case 07-M-0548 were conducted simultaneously and, in part, addressed issues related to those discussed in this DGEIS. Those meetings and conferences are expected to result in further enhancements to the record in Case 07-M-0548. Subsequent to publication of the Notice of Completion of the DGEIS, parties were invited to submit comments by December 14, 2007 thus allowing a 30 day comment period. Two sets of comments were received, one set from the Joint Utilities and another set from DEC. Comments have been addressed in the FGEIS. Appendix A includes the DGEIS page references, the comments, and the responses. In addition, the FGEIS has been revised to include recommendations emanating from the collaborative meetings, proposals by NYSERDA (dated September 10, 2007 and November 1, 2007) and Central Hudson (dated January 19, 2008), and the Straw Proposal issued by the ALJs in February 11, 2008. Appendix B lists these changes made to the Draft GEIS.

2.0 DESCRIPTION OF THE PROPOSED ACTION

The Instituting Order establishes a target goal of a 15% reduction in electricity usage in 2015 compared to the projected level for that year. The Instituting Order also initiated further investigation into a comparable resource acquisition program for natural gas that would include setting an energy efficiency goal for natural gas.

In the Instituting Order, the Commission identified the following threshold issues to be considered in the design of an EEPS:

a) Examining critical design options for the near and longer term, including cost-effectiveness, and whether certain types of efficiency programs are best administered centrally while others are more suited to delivery by utilities, competitive load-serving entities, or others;

b) Measuring and comparing the expected benefits and costs of various design options;

c) Integrating generic Commission determinations with existing and new programs developed in individual rate cases;

d) Considering and prioritizing end-user efficiency programs, market transformation approaches, research and development, and generation, distribution and transmission efficiencies, including the efficiency potential of distributed generation;

e) Developing target goals and timetables for natural gas usage efficiency;

f) Developing energy efficiency programs to ensure that all New Yorkers, especially those with low incomes, have the opportunity to benefit from lower bills resulting from lowered usage, and taking environmental justice concerns into consideration in program design;

g) Assessing best practices to integrate demand response technology and utility rate incentives into program design to encourage customers to shift usage and reduce peak loads;

h) Addressing coordination of the development of energy efficiency resources with other State initiatives as well as with New York City and other municipal and local energy efficiency programs; and

i) Ensuring transparent and technically sound methods for monitoring and verifying net energy savings, benefits, and costs, as well as assessments of customer satisfaction and program efficacy.

The Action to be undertaken by the Commission does not include direct approval for the siting or construction of any facilities nor does it involve any permit approval, permit modification, or funding now (or ultimately) from any other government agency.

2.1 Location

New York State.

2.2 Background and History of the Proposed Action

2.2.1 General Energy Efficiency Background

The State has implemented several different policies over the years to realize the benefits of using the electricity sold in New York State with optimum efficiency. These policies have led to the implementation of a series of programs, variously termed energy conservation, energy efficiency, or demand side management (DSM).[6]

New York has fostered DSM since the mid-1980s, when the Commission ordered major electric utilities to design DSM programs on a limited scale. In 1990, the Commission instituted comprehensive programs for DSM and integrated resource planning that realized considerable savings in electricity usage. Between 1990 and 1996, these programs resulted in estimated savings of 5,744 GWh of energy, reducing concomitant capacity needs by 1,374 MW.[7] Programs emphasized energy efficiency and frequently employed financial incentives (e.g., customer rebates) targeted directly at end-use electricity consumers. At the time, although most of the State enjoyed ample electric generation capacity, DSM was considered an important component of resource planning, necessary to reduce the long-term need for new generation.

[6] NYSERDA, New York State Energy Fast Facts, http://www.nyserda.org/Energy_Information/energy_facts.asp.

[7] Expenditures for these DSM programs totaled $1.23 billion.

In the mid-1990s, almost all new generation resources were fossil fuel-based.[8] In 1998, in conjunction with electric industry utility restructuring, New York established the System Benefits Fund, financed through assessment of a System Benefits Charge (SBC) on customer bills. The SBC funds energy efficiency programs administered by the New York State Energy Research and Development Authority (NYSERDA). NYSERDA reports that SBC programs from 1998 to 2006[9] have saved an estimated 2,362 GWh, resulting in concomitant capacity savings of 1,091 MW.[10] Those same programs saved almost 29 Mdt of natural gas. From 1987 to 2006, the New York Power Authority (NYPA) reports it spent more than $1 billion on energy efficiency programs, realizing savings of 9,046 GWh and concomitant capacity savings of more than 200 MWs. The Long Island Power Authority (LIPA) has also implemented energy efficiency programs, with savings between 1999 and 2006 of 1339 GWh (150 MWs) at a cost of about $204 million.

With respect to the pricing of electricity, the Commission requires that the State's largest electricity users be subject to hourly commodity service pricing.[11] Hourly pricing offers customers time-differentiated price information to encourage usage reduction when demand and costs are high, enabling end-use customers to realize more accurately the economic benefit of their own conservation efforts. This program provides energy service companies, meter service providers, and meter data service providers the opportunity to offer customers technologically sophisticated rate and service options to take advantage of hourly prices.

In April 2007, the Commission established policies on revenue decoupling, which will be examined and implemented in upcoming utility rate

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[8] This remained the case until the Commission adopted the Renewable Portfolio Standard (RPS) in 2004.

[9] SBC expenditures, as of the end of 2006, have totaled $772 million.

[10] New York State Energy Research and Development Authority, New York Energy $mart Program Evaluation and Status Report, year ending December 31, 2006, Final Report 2007.

[11] Case 03-E-0641 - Mandatory Hourly Pricing for Commodity Service, Order Denying Petition for Rehearing and Clarification in Part and Adopting Mandatory Hourly Pricing Requirements (issued April 24, 2006).

cases.[12] Revenue decoupling is designed to remove financial disincentives to pro-active utility participation in energy efficiency initiatives.

The Commission has acted to encourage development of environmentally appropriate generation through the Renewable Portfolio Standard proceeding (RPS).[13] The Commission adopted the RPS in 2004, with the goal of increasing the amount of renewable energy used to meet electric energy requirements in the State from approximately 19% to 25% by the year 2013, with 1% to be provided by a voluntary green energy market.

2.2.2 Energy Efficiency Portfolio Standard Background

The potential to respond to the State's energy needs with economic efficiency and increased awareness of the environmental and climate costs of burning fossil fuels for energy,[14] and of the price of dependence upon imported energy sources, is leading to a renewed emphasis on sustainable economic growth and a more efficient use of electricity and natural gas. At this juncture, the Commission is revisiting its energy efficiency policy. Based upon analysis of the electric energy efficiencies achieved under previous and current programs, studies of New York State's energy efficiency potential, and preliminary cost and benefit data, the Commission determined that realizing the State's energy efficiency potential and reducing New York's electricity usage 15% from expected levels by 2015 may be in the public interest.

Energy use in New York State is increasing. From 2004 to 2005 alone, New York's electricity sales increased 1.3% and natural gas end-user consumption increased 2.2%; efficiency reductions did not keep pace. Electricity consumption is projected to increase approximately 1.3% per year through 2015.[15] The 1.3% increase in electricity sales between 2004 and 2005 was

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[12] Cases 03-E-0640 and 06-G-0746 - Delivery Rate Disincentives – Order Requiring Proposals for Revenue Decoupling (issued April 20, 2007).

[13] Case 03-E-0188, - Retail Renewable Portfolio Standard, Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004). The RPS excluded energy efficiency resources in establishing its goal of generating 25% of the electricity sold in New York from renewable resource-fueled generation.

[14] See Massachusetts v. Environmental Protection Agency, __ U.S. __, 127 S. Ct. 1438 (April 2, 2007).

[15] NYISO 2007 Load and Capacity Data, p. 4.

computed on a weather-normalized basis using data from the 2005 and 2006 NYISO "Load and Capacity Data" (L&C) reports. By comparison, using data from the 2006 and 2007 NYISO L&C reports, the change in weather-normalized load from 2005 and 2006 was -0.3%. That reduction was most likely driven by cyclical changes that are experienced in upstate service territories. While the short term consumption levels experienced a slight reduction over the 2005 to 2006 time frame, the NYISO's long term projection of its energy requirements in 2015, as contained in the 2006 and 2007 L&C reports, grew by 0.5%. Natural gas consumption is expected to increase at an average annual rate of about three quarters of one percent between 2007 and 2016, according to the federal Energy Information Administration. With current trends, by 2015 electric energy usage in New York State is estimated to top 183,000 GWh annually, nearly 13% higher than current levels. Given volatile fossil fuel prices, concerns about greenhouse gas emissions, the vulnerability of the electrical system to supply disruption, and the need for new investment in infrastructure and supply, New York's existing efforts to promote energy efficiency need review, and the most effective methods for increasing energy efficiency[16] need to be determined. The EEPS proceeding has been instituted to accomplish these objectives.

The objective of the proceeding is to balance cost impacts, resource diversity, and environmental effects, by decreasing the State's energy use through increased conservation and efficiency. In addition, to ensure that the Commission's programs succeed, these objectives will have to be addressed in Commission efforts to meet the State's needs for comprehensive energy planning.

EEPS objectives can be attained in a variety of ways: examples from New York's and other jurisdictions include a centrally-administered statewide program such as the System Benefits Fund administered by NYSERDA, a requirement that all electric and natural gas distribution companies purchase a minimum percentage of their resource needs through energy

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[16] The efficient use of energy can result in using less energy (for example, through use of energy-saving appliances or housing stock, or managing the use of energy) to provide the same level of services.

efficiency resources; solely by competitive load-serving entities; or through creation of a State efficiency utility. In addition, the Commission could consider regional or municipal collaborative input or assistance in program administration, or the deployment of various new technologies.

The purpose of the proceeding is to design an EEPS to meet the targets for energy efficiency which, along with additional renewable resource development, and other programs, decreases the State's dependence on fossil fuel-based generation and imported fuels, and reduces its greenhouse gas emissions. An EEPS should be designed ultimately to reduce customer bills, stimulate State economic development, and create jobs for New Yorkers.

2.2.3 EEPS Staff Proposals

In August 2007 Department of Public Service Staff issued a Preliminary Proposal for Energy Efficiency Program Design and Delivery.[17] Section II of Staff's report presents general principles applicable to both natural gas and electricity programs and for all customer classes. The principles reflect the knowledge and experience gained from energy efficiency programs and providers in New York State and nationwide. Section III of the report describes current program delivery practices as well as descriptions of potential changes for the future. Section IV of the report identifies new programs and enhancements to existing energy efficiency programs, by customer class and fuel type, which can be implemented on a fast track beginning in 2008 to accelerate the deployment of energy efficiency resources. The most current version of the "fast track" programs is listed below with indications of customer classes to be served and a notation as to whether the individual programs provide savings of natural gas or electricity.

[17] New York Department of Public Service Staff Preliminary Proposal For Energy Efficiency Program Design and Delivery, August 28, 2007 (Staff Report). This proposal was subsequently updated via filings on November 26 and December 3, 2007.

A. Residential Energy Efficiency Programs[18]

1. Residential New Construction-Single and Multifamily Housing (electric and gas)
2. Statewide Residential Lighting Program (electric)
3. Residential ENERGY STAR® HVAC, Including Efficient Gas Equipment (electric and gas)
4. Home Performance with ENERGY STAR® (electric and gas)
5. Low Income Residential Energy Efficiency and Weatherization (electric and gas)
6. Multifamily Building Home Performance with an Emphasis on New York City (electric and gas)

B. Commercial and Industrial Energy Efficiency Programs

1. New Commercial Buildings – Whole Building Design (electric and gas)
2. Small Business Direct Installation Program (electric and gas)
3. Existing Commercial Buildings with Commercial Focus (electric and gas)
4. Flex Tech Including Industrial Process Improvements (electric and gas)

C. Residential, Commercial and Industrial Sectors

1. Appliance and Equipment Standards and Building Codes (electric and gas)

Section V of the report addresses evaluation and monitoring. For an effort as large as the EEPS proceeding to succeed, there is a need for rigor and uniformity in program evaluation to ensure that energy efficiency improvements are fully realized. It is also essential that costs and benefits be compared in a reasonable and accurate manner. This section identifies the need for clear directions, presented in an easy-to-use format, for those performing evaluation and monitoring work.

Unlike electric energy efficiency, where a goal of a 15% reduction compared to the 2015 forecast has already been established, a natural gas energy efficiency goal still needs to be developed. Section VI of the report presents ideas for establishing a natural gas energy efficiency goal to be reached by 2015.

[18] The program names listed on this page reflect the latest version of Staff's "Fast Track" proposals, issued on December 3, 2007.

The report also addresses a number of ideas that do not fit into traditional end-use program models or would require planning and refinement to achieve. Many of these ideas have the potential for large, long-term energy savings. Attachments 1 and 2 to the report capture these concepts, dividing them into short-term and long-term efforts. Attachment 3 of the report summarizes Staff's preliminary benefit cost analysis for the proposed fast track programs which were subsequently updated in later filings.

2.2.4 Independent Energy Efficiency Service Provider Proposals

Various independent energy efficiency service providers have also proposed marketing services and technologies that do not necessarily require ratepayer funding to enable market penetration. At a symposium hosted by the New York Independent System Operator (NYISO) on June 27, 2007 and an Overview Forum held by the EEPS ALJ on July 19-20, 2007 (both attended by many of the parties participating in the EEPS proceeding), speakers described a wide range of services and end user technologies with the potential to help New York State achieve its energy efficiency targets via actions in the marketplace. The Commission may consider implementation of some or all of these services and technologies within the EEPS proceeding.

Service proposals included: tradable energy efficiency certificates ("white tags"); performance contracting; and demand response programs. Technology proposals included: advanced metering to manage and control demand response initiatives, as well as to provide real-time pricing information to consumers; micro-combined heat and power (CHP) systems; solar thermal technology for heat and hot water; energy curtailment and management technology; distributed generation; and electricity storage systems.

2.2.5 NYSERDA Filings

On September 10, 2007, NYSERDA filed a document in the EEPS proceeding entitled "Energy Efficiency Portfolio Standard White Paper" (White Paper). In that document NYSERDA proposed use of a collaborative structure to build on stakeholders' strengths. It recommends that "[e]ach program administrator would offer complementary programs with no duplication of effort or

market confusion thereby simplifying administration and delivery of energy efficiency programs and services." (Page 1) It proposes an initial effort during 2008 and 2009 that would build on existing program experience while a longer-term structure for energy efficiency would be developed.

Like the August 2007 Staff proposal, the White Paper contains guiding principles for achieving a 15 by 15 target. It describes a proposed governance structure that would include a State Energy Planning Board. Other items discussed included: potential funding resources, centralized service platforms, program areas, and a summary of barriers and issues.

On November 1, 2007, NYSERDA filed a document entitled "Identification of Fast-Track Energy Efficiency Programs and Additional Funding and Savings Opportunities." This document identifies 11 NYSERDA programs that, according to NYSERDA, could immediately be expanded to produce additional energy efficiency savings, along with associated budgets and projected energy savings. This list includes a number of areas Staff had identified for expansion in its "fast track" proposal. NYSERDA's program choices are:

A. Commercial and Industrial Energy Efficiency Programs

1. High Performance New Construction
2. Existing Commercial Buildings
3. Process Improvements
4. Technical Assistance
5. Financing
6. Market Development

B. Residential Energy Efficiency Programs

1. New York ENERGY STAR® Homes
2. EmPower New York
3. ENERGY STAR® Market Support
4. Multifamily Building Performance
5. Home Performance with ENERGY STAR®

The program information for each program included a program description and an identification of roles for other entities, including utilities.

2.2.6 Working Group Reports

The ALJs in the EEPS Proceeding established four working groups that examined specific topics and developed reports which they distributed to all parties in December 2007. Below is a summary of the topics covered by each of the Working Groups.

Working Group 1: *Charge – Address Overall Governance Structure and Potential Funding Options for EEPS*

Group 1 focused most of its attention on developing governance models for the long-term EEPS effort. The group reviewed five existing energy efficiency procurement models and developed six proposed approaches. The group reached consensus on criteria for evaluating the governance models. Group 1 also addressed cost allocation and recovery and funding of EEPS initiatives.

Working Group 2: *Charge: Inventory existing electric and gas programs; review geographic potential for each program; identify/assess program barriers, gaps, and opportunities; and describe potential new or expanded energy efficiency programs to identify program attributes, characteristics, etc.*

Group 2 developed an inventory of energy efficiency programs in New York State and programs in other jurisdictions using a common template to describe program characteristics. It also developed a list of attributes that programs

should have; identified gas program opportunities and barriers; catalogued data that would be useful in designing energy efficiency programs; and made recommendations based on its review and analysis.

Working Group 3: *Charge: Define 15 by 15 energy savings goals for electricity and natural gas; establish guidelines, roles and responsibilities for monitoring and evaluation; and establish benefit/cost test guidelines.*

Group 3 analyzed various approaches for establishing a baseline for measuring progress toward accomplishment of the 15X15 goal for electricity. The group also addressed monitoring and evaluation, recommending use of the Total Resource Cost test for program evaluation and recommending creation of a statewide Evaluation Task Force that would develop protocols to be adopted by all Program Administrators.

Working Group 4: *Charge: The group focused on these areas: emerging technologies, demand response and peak load reduction, and transmission and distribution efficiencies.*

Group 4 made recommendations in the areas listed above. The group addressed a wide range of options and called for encouragement of promising emerging technologies, use of advanced metering, smart grid technology, and analysis of opportunities to improve the performance of New York State's transmission and distribution infrastructure.

2.2.7 Consensus Recommendation[19]

On January 10, 2008, various organizations filed a document on administration recommendations for implementation of the EEPS programs.

[19] The following parties signed the Consensus Recommendation: Natural Resources Defense Council; Pace Energy Project; City of New York; Association for Energy Affordability, Inc.; Consolidated Edison Company of New York, Inc.; KeySpan Energy Delivery New York and KeySpan Energy Delivery Long Island, National Fuel Gas Corporation; Niagara Mohawk Power Corporation d/ba National Grid; New York State Electric & Gas Corporation; Orange and Rockland Utilities, Inc.; Rochester Gas and Electric Corporation; and New York Power Authority.

While it did not make any recommendations about programs to be offered, it did suggest the use of regional partnerships that would be staffed by designated stakeholders. Each of these regional partnerships would perform strategic planning for energy efficiency within its designated region. The Public Service Commission would review and/or approve the strategic plans and associated documents and receive regular reports from the partnerships on their progress.

2.2.8 Central Hudson Filing

Central Hudson filed a report in the EEPS proceeding on January 19, 2008 entitled, "A State-wide Plan to Achieve the Electric Reduction Targets of the 15 by 15 Policy." The report builds on Staff's fast track proposals and information on energy efficiency expectations of state agencies, known as the Clean Energy Collaborative, provided to the EEPS parties by NYSERDA in a "letter report" on November 30, 2007. The work of the Clean Energy Collaborative would not achieve the 2015 goal for electricity savings and Central Hudson's proposal addresses that "efficiency gap," proposing that the gap be filled with a combination of Staff "fast track" and utility-led programs.

Central Hudson's proposal calls for beginning an aggressive statewide efficiency effort right away. It recommends that in addition to the programs identified by Staff the following utility-led programs should be implemented:

1. Appliance programs
2. Lighting programs
3. HVAC programs
4. Small commercial programs
5. Low-income programs
6. Agriculture
7. Residential home audits
8 Large commercial and industrial

The proposal includes estimated costs and savings associated with these programs and included provision for initial start-up, marketing, and outreach. It contemplates a two-step process (now through 2011 and 2012-2015) that would allow for mid-course correction.

2.2.9 ALJs' Straw Proposal

On February 11, 2008, the ALJs in the EEPS proceeding issued "Ruling Presenting Straw Proposal" for comment.[20] According to the ALJs, the Straw Proposal "draw[s] on the proposals and work of Staff, the parties, the Working Groups, and the Clean Energy Collaborative to identify the wedges of energy usage reduction that will aggregate to accomplish the goal set forth by the Commission in the Instituting Order: a 15% reduction of electric energy from that projected to be in usage in New York State by the year 2015, with comparable reductions in end-user consumption of natural gas." (Page 1)

The Straw Proposal addresses quantification of a baseline and target benchmarks for electric energy efficiency gains. It does not identify individual programs to be pursued for the utilities but does recommend adoption of NYSERDA's November 1, 2007 fast track proposal, with NYSERDA allocating funds to any existing programs that, in its determination, are capable of being expanded, with the allocation to new programs expected to conform proportionally to NYSERDA's November 1 filing. The Straw Proposal introduces a Tariffed Installation Program (TIP), a system for on-bill financing that can be used with private sector investment. It also proposes target goals for various program administrators, which are set forth in detail in a Technical Appendix (see Appendix C of this document). The analysis associated with the Technical Appendix also examines the impact these proposal would have on emissions, showing reductions by pollutant type. A copy of that Technical Appendix is attached to this document as Appendix C.

The Straw Proposal recommends a "cooperative hybrid model" to underscore the expectation that NYSERDA and the utilities would coordinate their programs and incorporate into their plans, the input and needs of all

[20] EPS Aministration, Consensus Recommendaiton of Natural Resources Defense Council et.al., January 10, 2008.

stakeholders. The Straw Proposal explains that "[t]he model is hybrid in the sense there are important roles both for NYSERDA and the utilities."

The Straw proposal also proposes funding mechanisms, evaluation, measurement and verification, governance and overall EEPS structure, and actions appropriate for immediate implementation upon Commission adoption of the EEPS. The Technical Appendix provides an estimate of reductions to emissions levels of NO_X, SO_X, and CO_2.

2.3 Public Need and Benefits - Electric and Natural Gas

The benefits of energy efficiency include forestalling the building of new generation; reducing use of finite fossil fuels; reducing customers' energy bills; developing independent energy sources for New York State to reduce energy imports; and mitigating the environmental impacts of burning fossil fuel for energy; including greenhouse gas emissions.[21] In addition, more efficient use of energy has the potential to foster economic development and job growth by encouraging in-state technology advances to deliver energy efficiency programs to consumers.

Among the benefits of an expanded energy efficiency initiative is the reduction of greenhouse gas emissions resulting from electric generation. Studies estimate that the power generation sector contributes approximately 25% of the State's total greenhouse gas emissions. At least since 2002, reduction in greenhouse gas emissions has been a goal of State energy planning.[22] DEC regulations implementing the Regional Greenhouse Gas Initiative (RGGI), require New York to cap or limit the total carbon dioxide (CO_2) emissions from power plants to recent levels beginning in 2009 through 2015[23] and then to begin

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[21] The Summary for Policymakers of Working Group III of the Fourth Assessment Report of the U.N. Intergovernmental Panel on Climate Change, released May 4, 2007, called for immediate mitigation of climate change, using available technology, by the adoption of energy efficiency and other measures to reduce reliance on fossil fuels. See http://arch.rivm.nl/env/int/ipcc/.

[22] The last New York State Energy Plan adopted greenhouse gas emission reduction goals of 5% reduction from 1990 levels by the year 2010 and, by 2020, a 10% reduction from 1990 levels.

[23] RGGI is an initiative led by a consortium of Northeast region states that requires member states, including New York, to cap or limit the total CO_2 emissions from power plants to recent levels beginning in 2009 through 2015, and then to reduce them.

to reduce CO_2 emissions incrementally over a four-year period to achieve a 10% reduction by 2019. Attaining the 15% reduction in electricity usage by 2015 using efficiency resources will greatly facilitate reaching RGGI goals.

Many recent studies illustrate the vulnerability of our local and regional climate.[24] New York State's temperate climate and seasonal variety contribute to the State's economy, recreation, agriculture and culture. That seasonal cycle is likely to undergo significant variation as a result of atmospheric changes. Because of the increased levels of CO_2 and other greenhouse gases that have accumulated in the Earth's atmosphere since the early days of the Industrial Revolution, the world's climate, scientists predict – and are observing – will experience shorter and milder winters, longer and hotter summers, altered growing seasons and more extreme precipitation patterns. Unchecked greenhouse gas emissions may also lead to a sea level rise sufficient to threaten the State's coastal areas.

The future path of these changes depends in large part on what is done to control the growing upward curve of greenhouse gas emissions globally. New York is currently responsible for approximately 0.6% of global CO_2 emissions, and has the opportunity to play a leading role in realizing energy efficiency as well as expanding energy generation fueled by renewable resources. These initiatives can also enhance economic development and job growth.

An August 2003 study prepared for the record in the RPS proceeding found that the State realized only one out of every seven kWh of cost-effective, achievable energy efficiency savings.[25] The study predicted that realizing even one-third of this potential would yield over $2.9 billion in net benefits to New York in five years, and over $6.2 billion by 2022.

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[24] See, for example, Climate Change in the U.S. Northeast, A Report of the Northeast Climate Impacts Assessment (October 2006), http://www.northeastclimateimpacts.org; Climate Change Impacts in the United States, the Potential Consequences of Climate Variability and Change-Overview: Northeast, U.S. Global Change Research Program, http://www.usgcrp.gov/usgcrp/Library/nationalassessment/overviewnortheast.htm.

[25] Energy Efficiency and Renewable Energy Resource Development Potential in New York State, Prepared for NYSERDA by Optimal Energy, Inc. et al. (August 2003) (the Optimal 2003 Report).

New York State possesses sufficient potential energy efficiency resources to meet its forecast increase in electricity needs and to reduce electric usage by 15% of projected levels by the year 2015. In this proceeding, the Commission will consider establishing targets and programs designed to optimize the State's efficient use of natural gas. To attain these goals, changes in appliance and building efficiency standards, LIPA and NYPA participation or concurrent programs, State facility efficiency measures, and municipal government programs will also be essential.

This proceeding will build on the foundation laid by the Renewable Portfolio Standard, the Northeast Regional Greenhouse Gas Initiative, and the System Benefit Fund, as well as investor-owned utility and State efficiency programs.

2.3.1 Summary of Benefits of an EEPS – Electricity

If the program objectives are achieved, multiple benefits will accrue to customers. Staff estimated the benefits of the program (for measures implemented from 2008 through 2015, with certain benefits continuing until 2025) to be about $12 billion (present value in 2008 dollars). Findings from Staff's June 1, 2007 study are shown below: [26]

- Savings of $6.5 billion – Savings in payments for energy that would no longer be needed or consumed;
- Price reductions resulting in $2 billion in cost savings– Reductions in average market prices of energy resulting from reduced energy consumption, and concomitant savings on remaining energy purchases;
- Reduced Capacity charges of $3 billion – Savings in capacity charges that would no longer be assessed as a direct result of peak load reductions;
- Increased economic development associated with the creation of approximately 37,000 sustained jobs by 2015 associated with program implementation.

[26] New York State Department of Public Service, Preliminary Staff Analysis, Case 07-M-0548, Benefits and Costs and Bill Impacts of Energy Efficiency Program for 15 percent Reduction in Electricity Usage by 2015, June 1, 2007. http://www.dps.state.ny.us/07M0548/07M0548_PrelimStaffAnalysis.pdf

The ALJs' Straw Proposal also addressed potential benefits. Findings from the Technical Appendix, which analyzed and quantified some of the benefits that could result from the Straw Proposal, are as follows:

- Wholesale cost reductions of 20.25%, or $1.9 billion by 2015, as compared to the 2007 baseline;
- Generation fuel price and supply risk reductions of 22.6% by 2015, as compared to the 2007 baseline;
- Reduced emissions, as compared to the 2007 baseline, as follows: - 12.68% NOx; minus 6.97% SOx; minus 17.54% CO2.

The Straw Proposal, however, does not include analysis of every potential impact and benefit associated with the EPS.

Increased use of energy efficiency programs and regulation of fossil fuel burning generation will result in direct emission reductions and subsequent environmental benefits. It is well known that the burning of fossil fuels in power plants in New York is a major contributor to increased atmospheric concentrations of CO_2. In 2005, power plants in New York burned fossil fuels that produced approximately 61 million tons of CO_2 and significant amounts of other harmful pollutants that impact the health and welfare of New Yorkers. This represents approximately one-quarter of the State's total green house gas emissions. Any comprehensive effort to curb the State's contribution to atmospheric concentrations of CO_2, therefore, must address CO_2 pollution from power plants. In addition to contributions to increased climate change, the burning of fossil fuels contributes to other air quality problems, including increases in local concentrations of NO_x, mercury, and SO_2. Air pollution has been shown to make people ill and reduce life expectancy. Programs that encourage energy efficiency or create an incentive to generate electricity from non-fossil fuel sources simultaneously address both CO_2 emissions and these other harmful pollutants.

Benefits of some efficiency measures are expected to last more than 15 years. Others, like building code enhancements and weatherization, are even longer-lasting. To be conservative, the Staff analysis assumed that benefits would last 10 years. For example, using the ten-year figure, benefits for measures commencing in 2008 would last until 2018; for measures commencing in 2015, the last year of the EEPS program, benefits would last until 2025. As a result, benefits are likely to be even greater than Staff's initial estimates.

The estimates for emissions reductions described above are based on an EEPS program mix recommended by Staff, and MWh reduction targets stated in the Straw Proposal (at page 1 of the Technical Appendix). While the Commission may adopt a different mix of programs to achieve the EEPS goals, or may revise the program mix over time, the estimates provide a sufficiently comprehensive examination to serve as a generic estimate of the expected benefits for this conceptual review.

2.3.2 Summary of Benefits – Natural Gas

Among the considerations in Case 07-M-0548 is development of an EEPS target for the natural gas Industry. Establishment of that target will allow a more precise estimate of benefits. At this time, both the Staff Report and a study conducted by Optimal Energy, Inc. (Optimal Gas Study) on the natural gas energy efficiency development potential in New York[27] provide some sense of the possible scope of benefits of a natural gas EEPS. Given certain target assumptions, the Optimal Gas Study estimated the cost and benefits of an EEPS. The study evaluated the maximum economic savings potential of natural gas efficiency resources and, more significant to our analysis, evaluated the maximum economic savings. In its evaluation of its "Program Scenario," the Optimal Gas Study concluded the program funded at $80 million per year for five years would result in $1.1 billion of cumulative customer bill savings over ten years. The program scenario would also result in lifetime reductions of 16 million metric tons of CO_2, 2000 metric tons of SO_2, and 1800 metric tons of NO_x.

[27] Natural Gas Energy Efficiency Resource Development Potential in New York, prepared for NYSERDA by Optimal Energy, Inc.; October 2006 (Optimal Gas Study).

The Staff Report evaluated and considered the Optimal Gas Study and reviewed other natural gas efficiency programs around the country in addition to the programs already underway in New York. Due to the interactive process established in Case 07-M-0548 regarding an EEPS target for natural gas, a precise calculation of benefits is not shown. Instead, the estimates above provide a scalable magnitude of expected benefits suitable for this conceptual review.

2.4 Relationship to Other Plans, Programs and Policies And Initiatives

2.4.1 Competitive Opportunities/Bypass Case (COB)

In 1994, the PSC established a proceeding to address the numerous complex issues related to providing electric service (Case 94-E-0952). Following collaborative discussions by the parties and a Recommended Decision (RD) by an Administrative Law Judge (ALJ), the PSC issued Opinion and Order No. 96-12 in May 1996, covering many topics, including the provision of a framework for the transition to competition of the commodity portion of electric service. The PSC Order addressed topics relating to the value of retail and wholesale competition, the importance of maintaining system reliability, aspects of strandable cost and its recovery, costs that may be required to be spent on public policy programs, market power issues, corporate structure, and the need for the utilities to remain the provider of last resort while also maintaining current customer protections. Retail access for customers for the commodity portion of their electricity supply was phased in, with full access for all customers available in each utility service area by July 2001.

The State's retail electric industry is fully open to customer choice and many energy service companies (ESCOs) now operate in New York. Changes in the electric market allow utility customers in nearly all areas of the State to choose their supplier of electricity, while the delivery of electricity remains the function of the local utility. The transition toward retail competition has been evolving for several years, and it is expected that further evolution will occur. To enhance customer choice, the PSC has instituted other programs including:

Net Metering **–** This program allows residential customers operating solar, wind, and farm-based biogas to net meter their consumption and generation and receive compensation if production exceeds usage over a given time period. The PSC has developed and maintains interconnection standards that apply to these systems. Policy rationale for net metering was established by the Legislature and is set forth in PSL Sections 66-j and 66-l.

Environmental Disclosure Program - The PSC requires electricity providers throughout the state to include "environmental disclosure labeling" information in electricity bills at least twice a year. The label provides information on the mix of fuels used to generate the electricity sold by their supplier over a 12-month period. Customers see the percentage of the electricity sold by their electricity provider that is derived from each fuel source as well as the air emissions (CO_2, SO_2, NO_x) relative to the State average. This information empowers consumers to make informed choices about their energy sources and is an important tool supporting green power efforts. Environmental Disclosure may also encourage generators to consider providing more green power among their supply offerings.

2.4.2 System Benefits Charge (SBC) Program

Following the opening of electricity markets to greater competition, the PSC enacted a public benefits program through which SBC funds (collected through a surcharge on delivery rates) are used to promote energy efficiency, assist low-income customers, encourage research and development (R&D) related to energy efficient and renewable technologies, and protect the environment. This program helps to ensure that electricity service is provided safely, cleanly, and efficiently, and that offering such public benefits programs beyond what competitive markets might provide will continue. This program, administered by NYSERDA, is funded through June 2011 at $175 million annually. The program provides a wide range of services to residents and businesses and includes, among other things, support for R&D activities involving renewable energy development.

2.4.3 State Energy Plan (SEP)

The 2002 SEP recommends and supports policies designed to provide New York State's citizens with fairly priced, clean, and efficient energy resources. The SEP recommends that New York maximize the use of clean and efficient energy and transportation technologies to meet the State's growing demand for energy. The SEP supports increased energy diversity, with greater emphasis on renewable energy development and improved energy efficiency, and innovations in regulatory policies that encourage and support development of competitive energy markets.

2.4.4 Executive Order 111

Issued in June 2001, Executive Order 111 requires all state agencies, departments, and authorities to seek a 35% reduction in energy use by 2010, relative to their energy use in 1990. In addition, each agency, department, and authority is required to purchase 10% of its energy from renewable energy sources by 2005, increasing to 20% by 2010. Local governments and school districts are also being encouraged to comply with the Order. As reported for 2005/2006, affected state entities have reduced the Energy Use Index 12.3% from their base year. They also procured 97,736,209 kWh of renewable energy which was nearly 4% of the total reported energy consumption by Affected State Entities.[28]

2.4.5 Acid Deposition Reduction (ADR) Program

The Acid Deposition Reduction (ADR) Program will result in regulations that will require New York's electric generation plants to reduce sulfur dioxide (SO_2) emissions by 50% below the levels required by the federal Clean Air Act Amendments of 1990. The ADR Program will also require such plants to implement year-round controls for nitrous oxides (NO_X), a substantial extension of the five-month summer ozone season controls required under current federal and State regulations. The first complete year of fully implemented NO_X controls occurred in 2005 with SO_2 controls fully phased in as of January 2008.

[28] Executive Order No. 111 "Green and Clean" State Buildings and Vehicles, State Annual Energy Report for State Fiscal Year 2005/06, June 2007, New York State Energy Research and Development Authority.

2.4.6 NO_X Set-Aside Program

The energy efficiency and renewable set-aside component of the NO_X budget-trading program provides incentives to implement electric end-use energy efficiency and renewable generation projects by allocating three percent, or about 1,200 tons, of New York's ozone-season NO_X allowance budget to eligible projects, beginning in 2003. A pilot program under which 115 tons of NO_X allowances are available for end-use efficiency projects has been in place since 1999. Projects that can be bought and sold on the open market are certified as tradable emissions allowances. This program provides a viable model for the planned development of a carbon registry for reduction credits and trading.

2.4.7 Renewable Portfolio Standard (RPS)

The RPS is a key component of New York's comprehensive greenhouse gas (GHG) reduction policy. This program will help reduce GHG emissions from the electricity-generating sector. The primary objectives of the RPS are to improve New York's environment, increase energy diversity in order to reduce reliance on fossil fueled energy sources, and to provide a competitive energy market. The RPS requires that 25 percent of the electricity purchased in New York State by 2013 be obtained from renewable energy sources. The State's current energy portfolio includes approximately 20 percent renewable generation, primarily hydroelectric. Eligible energy sources include biogas (landfill and sewage gas), biomass, fuel cells, hydroelectric, solar, tidal, and wind. The RPS creates a competitive energy market by allowing renewable generators to participate in a centralized procurement method administered by NYSERDA that solicits bids for renewable energy.

2.4.8 Regional Greenhouse Gas Initiative (RGGI)

RGGI is a cooperative effort by Northeastern and Mid-Atlantic states to reduce emissions of CO_2 – a GHG that contributes to global climate change. Climate change has the potential to raise sea level, change precipitation patterns, and impact other local climate conditions. Changing regional climate could alter forests, crop yields, and water supplies. It could also affect human health, animals, and many types of ecosystems.

To address this important environmental issue, the RGGI participating states have developed a regional strategy for controlling emissions. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The proposed cap and trade program will require electric power generators in participating states to reduce CO_2 emissions. New York State is in the process of establishing the programmatic components of RGGI.

3.0 ENVIRONMENTAL SETTING

The Action in Case 07-M-0548 involves consideration of energy efficiency policies that could affect customers, utilities, load serving entities, and others in New York State with respect to energy prices and consumption. The policies are not considered to require, allow, or fund construction of physical facilities, or cause disruption to the lands and waters of New York State. Hence, a physical and physiographic description of New York State is not needed. To the extent there is any environmentally significant secondary physical construction, land disruption, or funding of such activities, the physical setting of that specific activity could be considered in the SEQRA process applicable to that action.

The New York State setting that describes, in general terms, the electricity and natural gas industry in New York State provides the context for the proposed Action.

3.1 Energy Efficiency and the Electric Industry in New York State

In New York State, there are many entities that provide energy efficiency services to customers. This section describes the roles of some of the major players, as well as annual expenditures on energy efficiency for each New York State Agency and Authority involved in delivering these services.[29]

[29] Conservation Coordination Task Force Report to the Governor and Legislature, January 30, 2007.

State Agency and Authority Energy Efficiency/Load Management Programs
12 Month Program Expenditures (In Thousands of Dollars)

Agency	Current Annual Budget	Most Recent 12-Month Program Expenditures	Most Recent 12-Month Program Commitments	Current Outstanding Commitments / Encumbrances	Most Recent Quarterly Disbursements (Expenditures)
NYSERDA	$188,232	$130,639	$133,786	$206,181	$ 29,561
NYPA	$102,806	$103,092	$106,755	$316,513	$ 34,986
LIPA	$ 36,499	$ 27,592	$ 27,592	$ ----------	$ 6,898
DHCR	$ 55,875	$ 55,299	$ 55,299	$----------	$ 18,921

NYSERDA

In the 1980's and early 1990's, energy efficiency programs in New York State were operated by the utility companies with funding included in rates paid by their own customers. In 1996, the Commission established a System Benefits Fund to support public policy initiatives not expected to be adequately addressed by New York's competitive electricity markets, including energy efficiency. The Commission designated NYSERDA as the System Benefits Charge (SBC) Program administrator.[30] NYSERDA operates SBC-funded programs under a Memorandum of Understanding with the Commission and the Department of Public Service, which oversees those programs. An independent advisory group also provides guidance on program evaluation.

In 1998, the Commission established SBC funding levels for a three-year period to provide, among other things, statewide energy efficiency programs for commercial and industrial, residential, and low income customer sectors, and energy research and development. The Commission renewed the SBC for a five-year period in 2001 with increased funding and additional focus on programs designed to achieve peak load reductions. In December 2005, the Commission extended the SBC program for an additional five-year period (7/1/2006-6/30/2011) with an annual funding level of $175 million.

[30] The New York State legislature established NYSERDA as a public benefit corporation in 1975 with the mission of conducting energy research and development programs.

The SBC energy efficiency programs are designed to serve the diverse needs of New York energy consumers from residential homeowners and tenants to manufacturing plants and commercial office buildings. With New York's programs administered through a central entity, it has been possible for resources to be consolidated, providing the ability to engage in market transformation activities that might have been difficult for a single utility to undertake. The statewide approach also has promoted consistency in program evaluation and consumer education activities.

New York Power Authority (NYPA)

NYPA is the nation's largest state-owned power-providing organization. As part of its mission, NYPA provides energy-efficiency services to its customers and to public schools and other government facilities, including projects for some customers that are served by utilities.[31] NYPA has undertaken more than 1,500 energy-efficiency projects at about 2,300 public buildings across the State. NYPA reports that it has spent a total of over $1 billion on energy efficiency programs in New York State. These measures have reduced demand by about 200 MW and lowered the electric bills of State and municipal governments by more than $93 million a year. NYPA's programs are generally designed to address all energy efficiency improvements within a building through a single, comprehensive effort.

NYPA frequently partners with NYSERDA or other entities that can provide energy efficiency resources, serving as the interface for customers seeking to obtain energy efficiency services.

Long Island Power Authority (LIPA)

LIPA is a non-profit electric service provider for Long Island. In May 1999 the LIPA Board of Trustees approved the Clean Air Initiative, a five-year $160 million effort designed to provide energy and capacity savings. The program was later expanded to a ten-year, $355 million commitment through 2008. LIPA is now in the process of reevaluating its programs with the intention of expanding its commitment to energy efficiency. LIPA has serious concerns

[31] By law, NYPA offers energy efficiency service to all schools in the state, both public and private.

with demand on peak days, so its programs place an emphasis on peak demand reduction. As with NYPA, LIPA frequently partners with NYSERDA to take advantage of its expertise. In addition, LIPA reaches out to customers to provide targeted programs to meet the needs of a local area.

Division of Housing and Community Renewal

The New York State Division of Housing and Community Renewal (DHCR) is responsible for the supervision, maintenance, and development of affordable, low-and moderate-income housing in New York State. DHCR administers the federally funded low-income Weatherization Assistance Program (WAP) in New York through which it weatherizes approximately 12,000 dwelling units each year at a cost of approximately $50 million a year. DHCR also administers the New York State HOME Program that provides funding for housing projects and encourages energy conservation improvements, and the Rent Administration Program that, among other functions, encourages use of metering in individual housing units.

Utilities

In the 1980s and early 1990s, New York State electric utilities ran large-scale energy efficiency programs that emphasized services and financial incentives, generally in the form of rebates targeted directly at their customers.[32] Utility annual spending on energy efficiency programs reached a high point of $286 million in 1992. Total utility spending during the period of 1990-1996 exceeded $1.2 billion and achieved 5,744 GWh of energy savings.

With the establishment of the SBC in 1996 and the designation of NYSERDA as the administrator, utility energy efficiency programs were scaled back significantly. Over the years, many utility employees who had been involved in energy efficiency programs were reassigned to other duties or left the companies; the expertise that had been resident at the utilities in the early 1990s has been seriously attenuated. Recently, however, the utilities have demonstrated a renewed interest in energy efficiency programs. Consolidated Edison of New York, Inc. (Con Edison) has had a targeted energy efficiency program since 2003, which uses a Request for Proposal solicitation process to

[32] Some pilot market transformation programs also were undertaken.

acquire predetermined levels of demand reduction from third party providers within a defined geographical area for the purpose of deferring planned distribution and transmission projects. As part of Con Edison's current electric rate plan, approved in March 2005, the targeted program has had a goal of achieving at least 150 MW of load reduction. Funding is capped at $112 million plus appropriate administrative and evaluation fees. Several other electric and gas utilities have proposed energy efficiency programs and revenue decoupling mechanisms as part of recent electric and natural gas rate case filings and in some cases are beginning to implement them.

Independent Energy Efficiency Services Providers

NYSERDA typically uses a competitive solicitation process to select vendors to implement its energy efficiency programs. Over the years, a well-established workforce of technical service providers has arisen in New York. These are generally private companies with expertise in one or more specific phases of the energy efficiency delivery business. Many of these companies respond to solicitations for specific NYSERDA-managed programs. In addition, DHCR distributes funds to 64 not-for-profit agencies, which provide services in every county in the State to implement the Weatherization Assistance Program (WAP).[33] These community-based organizations also have trained a well-established workforce of technical service providers.

Independent Energy Efficiency Services Providers have also introduced services and technologies into the marketplace that do not necessarily require ratepayer funding to enable market penetration. At the ISO Symposium and the Overview Forum, attended by many of the parties participating in the EEPS proceeding, speakers described a wide range of technologies with the potential to help New York State achieve its energy efficiency targets via actions in the marketplace. Ideas proposed included use of advanced meters, micro-CHP systems, energy curtailment technology, distributed generation, and electricity storage systems.

[33] Many contractors that participate in WAP delivery also work with NYSERDA to deliver the Program Empowers New York for low-income customers.

3.2 Energy Efficiency and the Natural Gas Industry in New York State

The EEPS proceeding uses as its electricity target, a goal of reducing electricity consumption by 15% from projected usage levels by 2015. The Initiating Order in the EEPS Proceeding did not, however, specify a companion goal for natural gas consumption. Instead, it stated that "targets should also be established and programs designed to optimize the State's efficient use of natural gas."[34] Further, that Order directed that the ALJ and parties should "(d)evelop target goals and timetables for natural gas usage efficiency." Staff's analysis indicates that a natural gas reduction target of 15% percent by 2015 may be feasible. It should be noted that this target applies to residential, commercial, and industrial firm load, and not total gas usage.

Some natural gas utilities currently have energy efficiency programs, and NYSERDA's electric SBC programs also result in incidental natural gas efficiencies. A higher level of commitment can produce further natural gas savings. In addition, it is expected that changes to building codes and appliance standards would boost gas savings levels.

Although there are a total of 18 natural gas local distribution companies (LDCs) in the State, several are very small. The major LDCs[35] can be divided into upstate and downstate regions, with Con Edison, O&R, KEDNY/KEDLI, and Central Hudson being considered downstate LDCs and the rest being considered upstate LDCs.

The downstate region has been experiencing steady natural gas load growth. Although use per customer has been declining due to weatherization and the replacement of outdated equipment with newer, more efficient models, new customer attachments to the natural gas system have been continuing. These attachments result from both conversion of oil or electric

[34] Case 07-M-0548 - Order Instituting Proceeding, p. 3.

[35] Those LDCs are the following: Central Hudson Gas and Electric Corporation (Central Hudson), Consolidated Edison Company of New York, Inc. (Con Edison), Corning Natural Gas (Corning), KeySpan Energy Delivery (KEDNY/KEDLI), National Fuel Gas (NFG), National Grid, New York State Electric and Gas (NYSEG), Orange and Rockland Utilities (O&R), Rochester Gas and Electric (RG&E), and St. Lawrence.

heat/hot water customers to natural gas usage and from new construction. The downstate load growth continues to constrain existing capacity. The upstate region has experienced relatively stagnant growth, with shrinking use per customer generally offset by new customer attachments, except in the case of NFG, which is experiencing shrinking throughput on an annual basis.

At the present time, National Grid, Con Edison, KEDNY/KEDLI and NFG have natural gas efficiency programs in place. Some natural gas savings have also been achieved as an indirect benefit of the electric efficiency programs administered by NYSERDA (funded by the SBC) and through the low-income weatherization programs administered by DHCR.

In its report, Staff noted several factors that should be considered when developing reasonable goals, timetables, and programs for natural gas usage efficiency.[36] First, while use per customer of electricity continues to increase due to innovations and availability of consumer products (such as computers, cell phones, high-definition televisions, etc.), use per customer of natural gas continues to decline due to the lack of new end-use applications, increased efficiency of space and water heating equipment, and building envelope improvements. Second, natural gas is an important fuel choice for the generation of electricity, including micro combined heat and power distributed generation applications. Third, some electricity applications have natural gas fueled alternatives, such as clothes drying and water heating, which are generally more efficient than their electric counterparts. Finally, natural gas competes directly in many applications with petroleum products, including residual and distillate products, but natural gas contributes considerably fewer greenhouse gas emissions than petroleum products when providing the same level of service.

The focus of the Staff analysis is on residential, commercial, and industrial natural gas usage efficiency. There is potential for increased natural gas usage from possible increased use of distributed generation, from the conversion of existing power plants to natural gas fuel from petroleum or coal, and the construction of new gas-fired power plants. That potential is not quantified in Staff's analysis.

[36] See Staff Report at p. 76.

The potential for reductions in natural gas usage due to cost-effective energy efficiency improvements consists of several elements. These include: (1) the savings to be achieved via the new energy efficiency programs; (2) savings from existing natural gas efficiency programs; (3) natural gas savings resulting from existing and possibly expanded SBC programs; and (4) savings resulting from new building codes and standards.

4.0 ALTERNATIVE ACTIONS CONSIDERED

4.1 EEPS Alternatives

Approaches to EEPS considered in Case 07-M-0548 include alternatives regarding funding mechanisms, timing of program implementation, reductions in target levels and individual program details, as well as administrative and monitoring issues. Some alternatives could affect the level of benefits but, because potential adverse impacts are limited, alternatives are not likely to change the level of impacts.

4.2 No Action Alternative

The no action alternative would preclude the expected economic and environmental benefits and, because there are no substantial adverse impacts, would not result in reduction of impacts. Energy cost and security could be compromised and some energy efficiency opportunities (e.g., new construction) will be lost.

5.0 EVALUATION OF SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

5.1 Overview of Generic Environmental Impact Analysis

The proposed Action is expected to result in numerous economic, environmental, and customer benefits. The benefits are correlated to the level of funding and implementation of the energy efficiency programs. Direct adverse environmental impacts are not expected from implementation of energy efficiency policies but there could be potential secondary impacts that will be discussed in the following sections. The energy efficiency programs under consideration as part of the EEPS fall into broad categories. Several involve new and retrofit building construction, others will result in lighting and equipment retrofits.

In general terms, disposal of replaced equipment is not a new or additional impact; however, disposal of the materials may be accelerated relative to their normal life expectancy. Most equipment and lighting is eventually replaced so incentives to encourage that replacement only result in earlier disposal of inefficient equipment. Any of the energy efficiency programs that create incentives to build new energy efficient buildings are not likely to cause more or less waste from construction. Retrofit building construction projects could add to solid waste disposal but some of this would be an acceleration of disposal that would eventually occur in any event. To recover the program costs, some energy efficiency programs could add to the cost of energy services and customers who are able to make fuel choices could opt for a different fuel with different benefits (e.g., less cost) and impacts (e.g., more emissions).

5.1.1 Impact to Air

The Action is not likely to cause any direct environmental effects, since the Action is intended to and would likely reduce the demand for electricity generated by the combustion of coal, oil, and natural gas. This in turn, should result in reductions in the emissions of sulfur dioxide, nitrogen oxides, particulates, and carbon dioxide emitted as byproducts of such combustion processes employed in the burning of fossil fuels by central generating plants. To the limited extent that the Action may cause further development of distributed generation (DG) facilities to reduce demand on the electric grid, there could be minor differential increases in ambient levels of emissions of certain criteria pollutants such as sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), and particulates.

In instances where solar, photovoltaic, wind energy, or fuel cells for DG systems are employed, no increases in ambient emissions will occur. When natural gas is used as a fuel source, minor increases in criteria pollutants may occur. With respect to localized air impacts, the DEC has regulatory permitting authority and sets limits on criteria pollutants for DG facilities of 150 kilowatts (kW) (200 horsepower) and above in non-attainment areas and 300 kW (400 horsepower) and above in attainment areas. For qualifying projects, DEC requires an analysis to determine whether exhaust emissions from qualifying

projects meet applicable national ambient air quality standards and whether there would be any potential significant adverse air quality impacts. DEC is currently considering revisions to rules applicable to existing and new distributed generation facilities.

The replacement of air conditioning and refrigeration equipment is a conceivable consequence of this Action, but the potential risks of chlorofluorocarbons (CFCs), a greenhouse gas, being released into the environment is not significant. Section 38-0107 of the NYS Environmental Conservation Law requires the capturing of CFCs prior to disposal of refrigeration or air conditioniing equipment, thereby minimizing any release into the atmosphere.

In addition, the Action considers programs that promote the use of energy efficient lighting such as compact fluorescent lights (CFLs). CFLs contain trace amounts of airborne mercury that could be released into the environment upon breakage or disposal, but is not considered to be significant. New York State has led the nation in reducing the amounts of mercury that enter the waste stream and is released into the environment. Section 27-2101 of the NYS Environmental Conservation Law created programs to reduce the use of mercury and minimize its release into the environment. The State's waste-to-energy facilities take steps to remove mercury from the waste stream. Although fluorescent light bulbs do contain trace amounts of mercury (~4-5 milligrams per bulb), the vast majority of mercury currently being emitted into the environment comes from coal-fired electric generation facilities. The electricity reductions resulting from wide spread replacement of traditional incandescent bulbs with fluorescent bulbs is likely to have a greater impact on reducing mercury emissions than any incremental releases associated with increased disposal of fluorescent bulbs.

The Action could induce dual-fueled customers, including large commercial and industrial customers, as well as on-site generators, to choose oil as a fuel source in lieu of natural gas as a result of program costs, program design, or implementation issues. This could result in an end user switching from a cleaner fuel, such as natural gas, to a less clean fuel, such as oil. The Action,

however, would not change any regulatory requirements applicable to these facilities. Fuel switching and localized impacts, if any, could occur with or without this Action (for example, if the price of natural gas increases for any reason). State and local regulations of the facilities and emissions are not changed or affected by this action.

The Action is intended to result in reduced demand for electricity in New York State and hence commensurate emissions reductions from generators. However, it is not contemplated that the Action will alter or inhibit a generator's option to sell electricity in other markets or directly affect the dispatch of existing generation. Reduced demand could affect the decisions of entrepreneurs who may have been considering generation additions, but so will a number of other factors. Under the EEPS initiative, consumption levels in 2015 would be reduced 15% below current projections. This would result in essentially zero, or perhaps slightly negative, growth over the term of the initiative. The initiative would not by itself cause generation owners to retire existing capacity or build new capacity. Because load levels and generating capacity would remain essentially constant over the long term it would be expected that current generation dispatch would not be significantly changed as a result of this action. The action will however result in a reduction of greenhouse gases relative to the levels that would occur if energy consumption, and therefore energy production, were allowed to increase at recently projected rates.

Currently, installed capacity market prices are based on the cost of entry for new capacity. If the market is long (excess supply), generators can expect that they will not cover their cost of entry. This could be a disincentive to bring new generation into commercial operation. However, other actions by the PSC and DEC are expected to make market entry more attractive. While the outcome of pending proceedings cannot be predicted, there are on-going investigations of competitive wholesale market policies. For example, on April 19, 2007, the Commission launched an inquiry into the role long-term contracts might play in the acquisition of infrastructure and other resources. Besides assisting in the financing of new infrastructure, these contracts might be designed to facilitate the realization of public policy goals such as bringing clean

new capacity on line in an environment where market prices are volatile. The PSC also provides opportunities for clean renewable generation through the RPS. Actions by the DEC regarding emission limits imposed on generating units may lead their owners to shut down the most inefficient units, thereby leaving an opportunity for the owner, or other potential developers, to fill that void and bring new, clean capacity into the state's generation mix. Although emissions reductions from energy efficiency programs have been estimated, many other economic and environmental factors, especially State and federal regulation of electric generators, will influence future emissions.

In no case is it contemplated that this Action would cause any exceedances of the ambient air quality standards for criteria pollutants or have any measurable effect on air quality overall. Therefore, it is concluded that the Action will not have a significant effect on air quality.

5.1.2 Impact to Water

The implementation of the Action would likely result in a reduction in the emission of sulfur dioxide, nitrogen oxides, and particulates that could reduce acid rain and similar chemical impacts on fragile water bodies.

5.1.3 Impact to Land

The implementation of the Action would likely not have any significant adverse impact on land drainage or soil erosion. The replacement of building materials is a conceivable consequence of this Action and could result in a modest increase in solid waste production and disposal. If new distributed generation facilities are constructed, it is likely that most will be located within or could be a possible expansion of a building’s existing footprint. New construction or any possible expansion requires local land use conformance, and must meet state and municipal performance standards and site plan approval.

5.1.4 Impact on Plants and Animals

The implementation of the Action would likely result in a reduction in the emissions of sulfur dioxide, nitrogen oxides, and particulates that could reduce acid rain and similar chemical impacts on fragile terrestrial and aquatic plant and animal species.

5.1.5 Impact on Agricultural Land Resources

The implementation of the Action would likely not have any significant adverse impact on agricultural land resources.

5.1.6 Impact on Aesthetic Resources

The implementation of the Action would likely not have any significant adverse impact on aesthetic resources.

5.1.7 Impact on Historic and Archaeological Resources

The implementation of the Action would likely not have any significant adverse impact on historic and archaeological resources.

5.1.8 Impact on Open Space and Recreation

The implementation of the Action would likely not have any significant adverse impact on open space and recreation.

5.1.9 Impact on Transportation

The implementation of the Action would likely not have any significant adverse impact on transportation.

5.1.10 Impact on Energy

The implementation of the Action would likely result in reduced demand for electricity and natural gas. However, the Action could have an indirect influence on changes in policy, practices, and economic arrangements affecting the choice and development of new generation sources and dispatch and retirement decisions of existing sources. Also, any decrease in electricity demand would likely result in a corresponding decrease in demand for fuels consumed in the generation of electricity. Because of the economic phenomenon known as price elasticity of demand, it is expected that some customers will increase their consumption of electricity in response to lower overall costs. However, given the current high price of energy commodities, it is expected that the price elasticity effect will be minimal.

5.1.11 Impact of Noise and Odor

The implementation of the Action would likely result in a reduction in noise and odors from central electric generation facilities due to reduced demand for electricity. The Action may also cause further development of distributed generation facilities. Construction and operation of these facilities

could cause localized noise impacts. It is anticipated that local municipal noise standards would apply to the construction and operation of DG facilities and that the potential for adverse impacts of sound generated and emanating to receptors outside of the facility property would be considered. Although it is conceivable that some sound may be perceptible to receptors, it is likely not to be significant.

5.1.12 Impact on Public Health

The implementation of the Action would likely result in a reduction in the emission of sulfur dioxide, nitrogen oxides, and particulates. Such a reduction could reduce asthma and other respiratory impacts on humans. In addition, indoor air quality affecting public health may benefit from optimizing the energy performance of buildings and products. The 1988 New York Solid Waste Management Act requires that discarded materials be reused or recycled before considered for disposal.

5.1.13 Impact on Growth and the Character of a Community or Neighborhood

The implementation of the Action would likely not have any significant adverse impact on the growth and the character of any communities or neighborhoods.

5.1.14 Impact on Solid Waste Disposal

To the extent the Action encourages replacement of older building materials with new energy efficient materials, the increase of solid waste disposal in landfills is not expected to be significant. The 1988 New York Solid Waste Management Act requires that discarded materials be reused or recycled before being considered for disposal. Construction and demolition debris is often source-separated and recycled at specialized facilities and any amount that eventually gets disposed of in landfills would not account for any significant increase in New York State's daily waste.

5.2 Cumulative Adverse Impacts of EEPS

There are no other long-term, short-term, cumulative, or other effects not identified above.

6.0 MITIGATION OF POTENTIAL ADVERSE IMPACTS

6.1 Program Implementation and Mitigation

Implementation of an EEPS will not directly cause any new construction, or disturbance of land or result in any significant adverse environmental impacts. Any secondary consequences that result in an increase in waste materials such as obsolete and inefficient appliances and equipment or construction and demolition debris are closely regulated and no additional regulation or mitigation is necessary.

Increased costs that result from adoption of this EEPS could cause some customers to exercise their option to use alternative fuels. Those customers – primarily customers with on-site generators – are regulated by DEC. Regulation of those generators and emissions, from whatever fuel the customer uses, are not affected by this Action. If significant adverse environmental impacts from on-site generators is identified, then the appropriate regulatory and enforcement agency is DEC and local permitting authorities.

6.2 Environmental Justice

Adoption of an EEPS is not expected to have any direct implications for new construction or environmental impacts; however, customers will continue to have a choice of fuel for on-site electric generation or the option to pursue on-site generation. A customer that can utilize multiple fuels may make an economic decision to use the least expensive fuel. If the added cost of energy efficiency programs increases the cost of using one fuel, customers could choose to fuel switch fuels or build on-site generation. To the extent such projects are initiated, in addition to licensing and permitting requirements, they may be subject to the provisions of DEC Commissioner Policy 29 – Environmental Justice and Permitting (issued March 19, 2003).

PSC consideration of an EEPS will not consider or approve any specific project at any specific site. Hence, the case-by-case review of specific projects may trigger applicability of the Environmental Justice Policy, which is dependent on geographic location, the community demographics of the project area, and existing impacts on that community. Applicability will be evaluated as future projects seek permits. In addition, the EEPS will contemplate new or

expanded energy efficiency programs that are targeted specifically to low-income customers. These programs may include, among other things, home weatherization and appliance replacement. In this manner, the EEPS may result in particular benefits for communities that have been underserved by past energy policies.

In support of the consumer education principle and the Commission's EEPS Order, DPS Staff developed a Consumer Outreach and Education/Public Participation Plan. This plan included preparing an EEPS Fact Sheet for distribution at various consumer and business events; posting of consumer information on the Commission's AskPSC.com and general websites; and conducting regional roundtables around the state. There was a wide range of participation in the roundtable discussions that covered a broad range of issues, from those affecting low income customers to impacts on industrial customers. One roundtable discussion was devoted to Environmental Justice advocates and energy efficiency issues and provided important public input to be considered in this proceeding. [37]

Below is a brief discussion of the Environmental Justice Policy and its potential applicability to projects, which, as a secondary effect, may be pursued by customers because of their perceived effect of EEPS implementation policies.

Environmental Justice Policy

DEC Commissioner Policy 29 defines Environmental Justice as the

> . . .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, regulation 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.

[37] New York State Public Service Commission, Energy Efficiency Portfolio Standard, Report on the Regional Roundtables, Case 07-M-0548

The procedures described in the Policy are to be incorporated into the DEC permit review process when DEC receives an application for an applicable permit as specified in the Policy.

When DEC receives an application for a permit covered by the Environmental Justice Policy, DEC conducts a preliminary screen to identify whether the proposed Action is in or near a potential environmental justice area, and to determine whether potential adverse impacts related to the project are likely to affect a potential environmental justice area. Depending on the outcome of the screening, DEC may provide guidance to the applicant, may require that an enhanced public participation plan be developed, or may require an analysis to ensure that impacts do not disproportionately affect potential environmental justice areas, among other requirements. The definition of disproportionate impact analysis continues to be evaluated by DEC in 2008.

Not all energy resources require permits triggering an environmental justice evaluation. However, it is conceivable that some on-site generating alternatives may meet the Environmental Justice thresholds. That determination would be made on a case-by-case basis at the time that the permit application is filed. The details of the DEC Environmental Justice Policy CP 29 can be found on DEC's website (http://www.dec.state.ny.us/website/ej/index/html) along with a guidance document titled "Tips for Preparing a Public Participation Plan pursuant to DEC Commissioner Policy CR29 – Environmental Justice and Permitting."

7.0 UNAVOIDABLE ADVERSE IMPACTS

No direct unavoidable adverse impacts have been identified.

8.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

No direct irreversible and irretrievable commitment of resources have been identified.

9.0 GROWTH-INDUCING ASPECTS AND SOCIO-ECONOMIC IMPACTS OF THE PROPOSED ACTION

9.1 EEPS Program Costs

EEPS program costs will be dependent on the reduction target and the types and details of the program selected to achieve that target. A preliminary estimate of costs and benefits of the fast track electric energy efficiency programs is provided in Staff's Report. Staff's analysis indicates that a combination of the "fast track" programs and significantly upgraded building codes and appliance efficiency standards could achieve approximately 64% of the EEPS electric goal by 2012 at annual costs ranging from $126 million in 2008 to approximately $417 million in 2015.

The target level for gas efficiency reductions has not been established but there are estimates that provide some insight into the potential costs and benefits based on a hypothetical target level. Staff reported that the Optimal Study evaluated the economic implications of the Program Scenario Potential and estimated the program cost by 2016 would be approximately $400 million. The overall benefit/cost ratio was 2.48 and the net benefit would be $1.1 billion.[38] As the target level and details of the gas EEPS are developed, better program costs and benefits can be calculated.

9.2 Economic Development Benefits

The EEPS has the potential to indirectly increase the number of industries and services supplying and installing energy efficient equipment and to increase demand for services required to evaluate, retrofit, construct and monitor the energy efficiency measures encouraged by the EEPS. Quantification of the economic benefits of increased manufacturing and services related to energy efficiency measures is not possible to estimate until the details of the programs are developed and a schedule is established for meeting the goals of a particular program.

There are also potential indirect employment impacts that could result from new businesses, established or expanded to meet EEPS program needs. Any new workforce in a community, whether it involves manufacturing,

[38] See Staff Report August 28, 2007, p. 78.

construction or other services, can affect local retail, supply, and secondary service businesses.

While employment estimates are subject to existing workforce conditions, geographic location, and general economic conditions, an estimate that 37,000 jobs could potentially be created was developed by NYSERDA staff. It is based on previous analyses of net job creation associated with existing programs. Based on those analyses NYSERDA staff estimated 1.5 jobs being created per GWh of electricity saved. NYSERDA applied a 10% loss factor to the 27,400 GWh sendout level reduction reported in the June 1, 2007 Preliminary Staff Report. Applying the 1.5 jobs created/GWh to an assumed 24,660 GWh retail load reduction resulted in a projection of 36,990 jobs being created as a result of the 15 by 15 effort.

9.3 Socioeconomic Impacts

Part of the analysis associated with the ALJs' Straw Proposal is a estimate of bill impacts on electric customers, which is presented as Appendix D. Impact levels have been calculated for 2009, 2012, and 2015 for residential, commercial and industrial customers in the service territories of all the major electric utilities in the state. Bill impacts range from approximately 0.66% (Con Edison residential customers in 2009) to an increase of 3.6% (Central Hudson industrial customers in 2015). Customers that participate in energy efficiency programs are expected to see bill savings that far exceed the bill impacts presented in Appendix D. For customers that choose not to participate in any energy efficiency programs, the calculated bill impacts are reasonable estimates of costs. Given that these are one-time costs for a multi-year proposal, and that they are relatively small as compared to inflation and fuel price fluctuations, these costs are insignificant.

10.0 EFFECTS ON ENERGY CONSUMPTION

The purpose of this Action is to reduce energy consumption in New York State. As illustrated in the Optimal studies and Staff's Proposed EEPS Design and Implementation Report, an EEPS has the potential to reduce New York's 2015 energy requirement by 27,400 GWh per year, which would

correspond to a peak load reduction of 5,487 MW. By reducing peak load, New York could avoid the need for approximately 6,390 MW of installed capacity.[39] The natural gas target for reductions is being developed but according to the Optimal Study, the results of its Program Scenario analysis estimated gas savings could be 15,204 MDth by 2016 and peak day load reductions were estimated at 100 MDth.[40]

[39] See p.2 of Staff Preliminary Analysis, June 1, 2007

[40] Optimal Gas Study, p. E-8 Section E.2.4.

11.0 LIST OF REFERENCES

Case 07-M-0548: Energy Efficiency Portfolio Standard Proceeding Final Report: Working Group IV, December 5, 2007.

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New York Department of Public Service Staff Preliminary Proposal For Energy Efficiency Program Design and Delivery, August 28, 2007.

New York State Energy Efficiency Portfolio Standard Case 07-M-0548, Final Report of Working Group 2, December 4, 2007.

New York State Public Service Commission - Case 03-E-0188 Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard, Order Regarding Retail Renewable Portfolio Standard (issued September 24, 2004).

New York State Public Service Commission - Case 07-M-0548 Proceeding On Motion of the Commission Regarding an Energy Efficiency Portfolio Standard. Order Instituting Proceeding (issued May 16, 2007).

New York State Public Service Commission, Energy Efficiency Portfolio Standard, Report on the Regional Roundtables, Case 07-M-0548.

12.0 COMMONLY USED ACRONYMS AND ABBREVIATIONS

ALJ – Administrative Law Judge
CO_2 – Carbon Dioxide
COB – Competitive Opportunities Bypass
DEC – New York State Department of Environmental Conservation
DHCR – New York Division of Housing and Community Renewal
DPS – Department of Public Service
EJ – Environmental Justice
EPA – Environmental Protection Agency
EEPS – Energy Efficiency Portfolio Standard
ESCO – Energy Service Company
GEIS – Generic Environmental Impact Statement
GHG – Greenhouse Gas
Hg – Mercury
IOU – Investor Owned Utility
IPP – Independent Power Producer
LDC – local distribution companies
LIPA – Long Island Power Authority
LSE – Load Serving Entity
MAPS – Multi Area Production Simulation Model
MSW – Municipal Solid Waste
MW – Megawatt
MWH – Megawatt hour
NO_x – Nitrogen Oxide
NYISO – New York Independent Systems Operator
NYPA – New York Power Authority
NYSDPS – New York State Department of Public Service
NYSERDA – New York State Energy Research and Development Authority
PSC – Public Service Commission
PM – Particulate Matter
PV – Photovoltaic
RGGI – Regional Greenhouse Gas Initiative
RPS – Renewable Portfolio Standard
SBC – System Benefits Charge
SEP – State Energy Plan
SEQRA – State Environmental Quality Review Act
SO_2 – Sulfur Dioxide

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APPENDIX A

RESPONSES TO COMMENTS ON THE DRAFT GEIS FOR CASE 07-M-0548

Introduction

Appendix A summarizes comments submitted on the Draft GEIS, issued November 9, 2007. A Notice of Completion of the Draft GEIS was published in the Environmental Notice Bulletin on November 14, 2007 and comments were requested to be provided through December 14, 2007. Written comments were received from two parties; responses have been provided to each substantive comment raised by these parties and the responses are presented below. Where a comment warranted clarifications, additions, or deletions from the text of the GEIS, the Final GEIS has been modified accordingly.

Joint Utilities – Letter filed December 13, 2007 (page numbers are referenced to the November, 2007 DGEIS)

Page 2: One of the benefits of the program is "increased economic development associated with the creation of approximately 37,000 sustained jobs by 2015 associated with program implementation."
JU Comment: The basis for the claimed 37,000 sustained jobs was not presented, making it impossible for the public to comment on the statement.
Response: Adoption of an EEPS could result in direct and indirect economic benefits. Energy efficiency program implementation will require a workforce to accomplish investigation, auditing, installation and in some cases manufacture and maintenance of program measures. There are also potential indirect employment effects of an increased workforce resulting from increased energy efficiency employment. Any new workforce in a community – whether service, professional, construction or manufacturing affects local retail, supply and service businesses.

The estimate that 37,000 jobs could potentially be created was developed by NYSERDA staff, based on previous analyses of net job creation associated with existing programs. Based on those analyses NYSERDA staff estimated 1.5 jobs being created per GWh of electricity saved. NYSERDA applied a 10% loss factor to the 27,400 GWh sendout level reduction reported in the June 1, 2007 Preliminary Staff Report. Applying the 1.5 jobs created/GWh to an assumed 24,660 GWh retail load reduction resulted in a projection of 36,990 jobs being created as a result of the 15 by 15 effort.

Page 11: "From 2004 to 2005 alone, New York's electricity sales increased 1.3% and natural gas end-user consumption increased 2.2%."
JU Comment: The FGEIS should clarify whether this increase was calculated on a weather adjusted basis and whether weather had a material impact on consumption. The DGEIS should also update this information for 2006 consumption.
Response: The 1.3% increase in electricity sales between 2004 and 2005 was computed on a weather normalized basis using data from the 2005 and 2006 NYISO "Load and Capacity Data" (L&C) reports. By comparison, using data from the 2006 and 2007 NYISO Load and Capacity reports, the change in weather normalized load from 2005 and 2006 was -0.3%. It is likely that the reduction was driven by cyclical changes that are experienced in upstate service territories. While the short term consumption levels experienced a slight reduction over the 2005 to 2006 time frame, the NYISO's long term projection of its energy requirements in 2015, as contained in the 2006 and 2007 L&C reports, grew by 0.5%.

Page 16: "Taking into account expected increases in emissions absent RGGI, a reduction of approximately 35% of CO_2 emissions would result by 2020."
JU Comment: The FGEIS should state what the reduction would be assuming that RGGI is in effect.
Response: The 10 states participating in RGGI agreed upon a cap (regional CO_2 budget) amounting to approximately 188 million tons of CO_2. That number is

the total amount of CO_2 that power plants in the region were expected to emit in 2009. Beginning in 2015, this cap will be reduced by 2.5 % each year, for a total reduction of 10% by 2019. When fully implemented, the RGGI program is expected to achieve a 16 percent reduction of emissions from projected business-as-usual emissions.[1]

Page 17: "An August 2003 study prepared for the record in the RPS proceeding found that the State realized only one out of every seven kWh of cost-effective, achievable energy efficiency savings. The study predicted that realizing even one-third of this potential would yield over $2.9 billion in net benefits to New York in five years, and over $6.2 billion by 2022." (citing in a footnote the Optimal 2003 Report).

JU Comment: The FGEIS should note the caveats set forth in this study. For example, the Optimal 2003 Report states on page 3-19: "If using the study's technical and economic potential analysis results in efficiency and renewable energy program or resource planning, then such additional analysis should account for future market acceptance, specific program strategies for realizing market acceptance, and the administrative costs of such programs."

In addition, the FGEIS should note that this August 2003 study was based upon information from the 1990s and other states that would need to be updated or refined to account for more recent New York State-related information before it could be used for energy efficiency planning in this proceeding. For example, Volume 3, the "ENERGY EFFICIENCY TECHNICAL REPORT**,** which provides the technical support for the Optimal 2003 Report, states on page 3-8 that "The study heavily [relies] on data from the U.S. Energy Information Administrations' 1997 Residential Energy Consumption Survey (RECS) to develop end-use disaggregations for New York." *See also* Table 3.2.1 Average New York Residential Consumption by End Use – 1997, page 3-9. In addition, the report's commercial efficiency studies were based on two Vermont studies of economically achievable efficiency potential. Vol. 3, page 3-3. Finally, the report

[1] Case 07-M-0548 – Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Notice of Determination of Significant and Completion of Draft Generic Environmental Impact Statement (issued November 9, 2007).

states that with respect to the industrial sector, it relied in part on "the 1997 Mid-Atlantic energy-efficiency study conducted by the American Council for an Energy Efficient Economy (ACEEE) were used to estimate the achievable savings potential." Vol. 3, p. 3-4.

Furthermore, Volume 3 of the Optimal 2003 Report states that "For estimates of the expected achievements from currently planned initiatives, the efficiency analysis in the three sectors relied heavily on information from NYSERDA concerning actual results to date and historical and projected initiative costs." The FGEIS should acknowledge, however, the Commission's position that these results should be accurate and reliable.[2] Indeed, most of the parties in the EEPS proceeding agree that the measurement, verification and evaluation ("MV&E") budgets for energy efficiency programs need to be increased in order to obtain more accurate results (NYSERDA currently devotes 2% of its budget to MV&E). Accordingly, it is requested that the FGEIS note that the 2003 Optimal Report may not provide the basis for reaching conclusions in this proceeding as to potential and that more updated studies may be required, which may need to be service territory specific, in order to precisely determine the energy efficiency benefits to be achieved and the potential costs of achieving those benefits.[3]

Response: The Optimal study was completed at an earlier date (2003) and referenced various sources that were current at the time. It is a study, among others, which are likely to form the basis for an EEPS as well as to mold the associated programs and goals considered in this proceeding. As appropriate, and as necessary, updated studies are ongoing or will be undertaken. Where it is cost effective, the need for additional studies, including service territory-specific studies will be decided in the context of this proceeding.

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[2] See Case 04-E-0572, tariff filing by Consolidated Edison Company of New York, Inc. to specify the procedures for calculating the lost revenues associated with the company's demand management program in compliance with the Commission Order issued March 24, 2005 in Case 04-E-0572, at 4-5 (July 24, 2006).

[3] The report also states that "the quality of underlying data used to create zonal market segmentation was necessarily lower than that used for segmenting statewide efficiency markets in each sector. Consequently, the reliability of the statewide potential estimates is superior to that associated with the zonal potential analysis." Optimal 2003 Report, Vol. 3, p. 3-2.

Page 20: Net metering "allows residential customers operating solar, wind and farm-based biogas to net meter their consumption and generation and receive compensation if production exceeds usage over a given time period."
JU Comment: The FGEIS should note that net metering provides a subsidy for residential solar, wind and farm-based biogas because the compensation provided through net metering is not equal to the benefit provided and they are exempted from paying certain delivery related costs. It is requested that the FGEIS state that customers receive "above market" compensation that "provides a subsidy for those facilities that is ultimately recovered from other ratepayers."
Response: The policy rationale behind net metering was established by the Legislature and is set forth in PSL Sections 66-j and 66-l. The net metering paragraph in the DGEIS simply describes a program based on established policy**.** The EEPS EIS is not the appropriate forum to reargue that policy. No changes are necessary to the FGEIS.

Page 21: "Each agency, department, and authority is required to purchase 10% of its energy from renewable energy sources by 2005, increasing to 20% by 2010."
JU Comment: The FGEIS should state whether the State met the 2005 goal, and if available, the incremental cost to the State in achieving that goal.
Response: For the period of NYS Fiscal Year 2005-06, NYSERDA reported that over 9,500 Affected State Entities, with over 200 million square feet have reduced the Energy Use Index (EUI) 12.32% from the base year EUI. That reduction represents 35% progress toward the 2010 goal. The EUI is expressed in BtUs/ sq. ft. and the NYSERDA method of calculating the base EUI and 2005/06 EUI achievements includes all fuels used by Affected State Entities.

The procurement of renewable energy under Executive Order 111 was a new requirement in 2005/6 for Affected State Entities. More than half of the reporting Affected State Entities indicated at least 14% or more of their electric use was produced by renewable resources; several chose to attain early compliance with the 2010/11 goal of 20% renewable energy and several others have chosen to procure more than the minimum requirement. In sum, Affected

State Entities reported 97,936,209 kWh of renewable energy generated or renewable certificates procured. This is equal to 3.96% of total reported electrical consumption by Affected State Entities. Cost of renewable energy procured was not reported. Further information can be obtained from NYSERDA in the report, *Executive Order No. 111 "Green and Clean" Sate Buildings and Vehicles, State Annual Energy Report for State Fiscal Year 2005/2006, New York State Energy Research and Development Authority.*

Page 32: "To the limited extent that the Action may cause further development of clean distributed generation (DG) facilities to reduce demand on the electric grid, there could be minor differential increases in ambient levels of emissions of certain criteria pollutants such as sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO) and particulates."

JU Comment : The FGEIS should state its definition of "clean distributed generation" and provide the emission rates for all criteria pollutants that would apply to such definition.

Response: FGEIS text has been modified**.** Changes in the use of distributed generation are plausible with or without an EEPS. Prediction of customer choice (i.e., use of DG or not and fuel selection) is not possible given the number of factors involved in a customer's decision. Additionally, emission reductions resulting from reduced electric generation can be generally represented while the emissions changes resulting from unpredictable decisions by a multiplicity of diverse DG owners as to when they choose to operate and what fuel is used is unknowable. However, given the limited DG potential, the changes in DG emissions are likely to be small or "minor" compared to the overall emission decrease attributable to an EEPS. To the extent a DG owner chooses to generate electricity rather than purchase electricity, the DG emissions must comply with allowable state and federal requirements and limits. Currently, DEC is contemplating revision of DG emission standards for both new and existing DG facilities.

Page 34: “It is not contemplated that the Action will directly affect the dispatch of existing generation.”

JU Comment : It is unclear why reductions in usage would not be expected to have some consequences on the forecast wholesale prices as demand falls and supply moves down the supply curve. If the DGEIS statement is correct, then the FGEIS should state how it expects that the Action will result in the reduction of greenhouse gases.

Response: Under the EEPS initiative, consumption levels in 2015 would be reduced 15% below current projections. This would result in essentially zero, or perhaps slightly negative, growth over the term of the initiative. The initiative would not by itself cause generation owners to retire existing capacity or build new capacity. Because load levels and generating capacity would remain essentially constant over the long term it would be expected that current generation dispatch would not be significantly changed as a result of this action. The action will, however, result in a reduction of greenhouse gases relative to the levels that would occur if energy consumption, and therefore energy production, were allowed to increase at recently projected rates.

Page 34: “If the market is long (excess supply), generators can expect they will not cover their cost of entry. This could be a disincentive to bring new generation into commercial operation. However, other actions by the PSC are expected to make market entry more attractive. For example, on April 19, 2007, the Commission launched an inquiry into the role long-term contracts might play in the acquisition of infrastructure and other resources. Besides assisting in the financing of new infrastructure, these contracts might be designed to facilitate the realization of public policy goals such as bringing clean new capacity on line in an environment where market prices are volatile.”

JU Comment : The basis for speculating on actions the Commission may or may not take in the future is not sufficiently reliable to be included in the FGEIS as if they were facts. While it is possible that the Commission may take actions to lower supposed barriers to entry, it is also possible that it may not, and that the actions taken will not be as stated in the DGEIS.

It is recommended that this discussion be deleted from the FGEIS. If it is included, then the DGEIS should include a full discussion of this complex issue. First, the Joint Utilities note that the DGEIS does not indicate any specific adverse impact that would result from a disincentive to bring new generation into commercial operation, and accordingly there may not be a need to discuss this issue in the FGEIS. Indeed, given that one objective of the EEPS proceeding is to substitute demand resources for generation resources, it is unclear why the potential for creating a disincentive for facilities should be noted as a potential adverse impact. If, however, the FGEIS discusses this issue, then the FGEIS should note that any policy concerning the need to provide some kind of incentive for new generation facilities should be consistent with the competitive wholesale market policy adopted by the Commission and that there may be other competitive market solutions that could be adopted to encourage new entry by generation, such as forward capacity markets.

Response: The Commission proceeding to consider long term contracts was noted as an example of on-going investigations into wholesale market policies. There is no intent to predict the outcome of that proceeding or to base any facts or conclusions on its potential outcome. It is illustrative of a dynamic process; facts and merits of the policies are appropriately argued in that proceeding.

Page 36: "Because of the economic phenomenon known as price elasticity of demand, it is expected that some customers will increase their consumption of electricity in response to lower overall costs. However, given the current high price of energy commodities, it is expected that the price elasticity effect will be minimal."

JU Comment: The FGEIS should provide the basis for this statement and state its expectation as to the degree of increase in consumption if the price of energy commodities declines from their current levels. This statement seems inconsistent with the apparent absence of a forecast reduction in marginal wholesale prices.

Response: A comparison of the three scenarios set forth in the table on page 62 reveals the basis for the statement that the expected price elasticity effect will be minimal.

In Scenario One, fuel price remains constant and no energy efficiency activities or costs are undertaken or incurred. In Scenario One, the total monthly cost to the customer remains constant and there is no price elasticity effect.

In Scenario Two, fuel price remains constant but in the second year the customer makes an energy efficiency improvement that reduces monthly energy consumption by 60 units at an amortized monthly cost of $1.00. In Scenario Two, the customer's total monthly cost has gone down by $6.20. Due to the price elasticity effect, the customer might be tempted to increase its energy usage in some other manner up to the point where some of the $6.20 in savings is realized by the customer in the form of other discretionary energy usage rather than cash.

In Scenario Three, in the second year the customer makes the same energy efficiency improvement that reduces monthly energy consumption by 60 units at an amortized monthly cost of $1.00, but fuel price rises significantly over time. In Scenario Three, even with the energy efficiency improvement, the customer's total monthly cost has risen significantly to the point in the fifth year that the total monthly cost is $15.40 or 21% higher than it was in the first year. In Scenario Three, the customer is not likely to be tempted to increase its energy usage in some other manner as it already has had to absorb a 21% total cost increase on a net basis after realizing the savings from the energy efficiency improvement.

The price of energy commodities would have to decline significantly from their current levels and remain at the declined level for a long period of time before there would be any change in the expectation that the price elasticity effect will be minimal. Such an occurrence does not appear likely in the foreseeable future. Similarly, while decreased demand in the overall market due to the program would tend to moderate wholesale prices, the current high price of energy commodities would likely minimize any price elasticity effect in the overall market as overall prices would remain significantly higher than in recent past years.

Monthly Energy & Efficiency Costs by Year					
Scenario One	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**
Fuel Price	$0.12	$0.12	$0.12	$0.12	$0.12
Quantity	600	600	600	600	600
Bill	$72.00	$72.00	$72.00	$72.00	$72.00
Efficiency Cost	$0.00	$0.00	$0.00	$0.00	$0.00
Total Cost	$72.00	$72.00	$72.00	$72.00	$72.00
Scenario Two	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**
Fuel Price	$0.12	$0.12	$0.12	$0.12	$0.12
Quantity	600	540	540	540	540
Bill	$72.00	$64.80	$64.80	$64.80	$64.80
Efficiency Cost	$0.00	$1.00	$1.00	$1.00	$1.00
Total Cost	$72.00	$65.80	$65.80	$65.80	$65.80
Scenario Three	**Year One**	**Year Two**	**Year Three**	**Year Four**	**Year Five**
Fuel Price	$0.12	$0.13	$0.14	$0.15	$0.16
Quantity	600	540	540	540	540
Bill	$72.00	$70.20	$75.60	$81.00	$86.40
Efficiency Cost	$0.00	$1.00	$1.00	$1.00	$1.00
Total Cost	$72.00	$71.20	$76.60	$82.00	$87.40

NYS Department of Environmental Conservation Letter
Filed December 14, 2007

DEC Comment 1: Greenhouse gas emissions. The Department recommends that the GEIS give greater emphasis in Section 2.0 (description of the proposed action) to the substantial benefits of reductions in greenhouse gas (GHG) emissions that are expected to result from implementing EEPS programs. The Executive Summary briefly mentions the benefits of measured reductions in NOx, $S0_2$, and $C0_2$, and those benefits are mentioned in Section 2.3, Public Needs and Benefits. However, the GHG benefits should be given more emphasis and narrative depth in the body of the description of the proposed action, particularly to identify the programs likely to produce the more significant emissions reductions.

Response: The discussion of benefits of an EEPS has been supplemented in the FGEIS. Prioritizing energy efficiency programs for implementation requires a balance of economic, environmental, and technical considerations to be determined by the PSC as it implements an EEPS.

DEC Comment 2. Air pollution. Section 5.1.1, Impact to Air, states that "the Action is not likely to cause any direct environmental effects, since the Action is intended to and would likely reduce the demand for electricity generated by the combustion of coal, oil and natural gas. "We recommend that the GEIS acknowledge that the substantial benefit to clean air that will result from decreased consumption of fossil fuels is a "direct environmental effect," albeit a positive one. On the other hand, the potential increased use of distributed generation could increase emissions of pollutants generated by distributed sources, depending on the nature of the sources being used. Presently, Section 5.1.1 identities such impacts as "minor increases." However, there is presently no indication that EEPS program design parameters would mandate that such increases be minor. Therefore, we recommend that this discussion should be expanded.

Response:

Response to part a – Environmental Benefits

The discussion of environmental benefits is supplemented in the FGEIS.

Response to part b, Distributed Generation

Changes in the use of distributed generation are plausible with or without an EEPS. Prediction of customer choice (i.e., use of DG or not and fuel selection) is not possible given the number of factors involved in a customer's decision. Additionally, emission reductions resulting from reduced electric generation can be generally represented while the emissions changes resulting from unpredictable decisions by a multiplicity of diverse DG owners as to when they choose to operate and what fuel is used is unknowable. However, given the limited DG potential, the changes in DG emissions are likely to be small or "minor" compared to the overall emission decrease attributable to an EEPS. Lastly, to the extent a DG owner chooses to generate electricity rather than

purchase electricity, the DG emissions must comply with allowable state and federal requirements and limits. Currently DEC is contemplating revision of DG emission standards for both new and existing DG facilities.

DEC Comment 3. Environmental Justice. The GEIS would benefit from more discussion of environmental justice. The May 16, 2007 Commission "Order Instituting Proceeding" for the EEPS program includes, as an objective: "[development] of energy efficiency programs to ensure all New Yorkers, especially those with low income, have the opportunity to benefit from lower bills resulting from lowered usage and consider environmental justice concerns in program design." An example of such a program would be residential retrofitting and lighting upgrades. The GEIS points out that the EEPS will not consider or approve any specific project and, therefore, defers environmental justice review to the DEC for case-by-case review in the context of permitting pursuant to DEC Commissioner Policy 29 - Environmental Justice and Permitting. Such treatment limits the extent to which environmental justice is considered to only those programs requiring permits and, therefore, fails to fully "consider environmental justice concerns in program design" as required by the May 16 Order. Moreover, environmental justice policy considerations transcend traditional agency lines, which should give sufficient impetus to acknowledging the need to evaluate the potential effects, both positive and negative, of the EEPS proceeding on minority and low income communities.
Response: The FGEIS text has been amended to reflect the outreach efforts, in the form of EEPS fact sheets for distribution at outreach events, participation in business and advocacy meetings and PSC-sponsored roundtable discussions held around the state, including a focus on Environmental Justice advocates**.**

DEC Comment 4. Incorporation of working group analyses. The Department (DEC) understands that there is a likelihood for additional data submissions and impact analyses as the proceeding begins to receive and discuss the recommendations from the four main Working Groups. PSC (or DPS) should consider incorporating any such submissions and analyses in a final or supplemental EIS *(see* 6 NYCRR §617.10(C).

Response: The working group reports are available at the NYS PSC website. It is contemplated that those reports will be considered in the development of the EEPS. Appropriate data or analysis included in these reports may be incorporated in a supplemental EIS should it become necessary to prepare one.

APPENDIX B

GENERAL LIST OF CHANGES MADE TO DRAFT GEIS FOR CASE 07-M-0548

Executive Summary

- Editorial changes
- Updated cost, benefit, and emissions reductions information

1.0 COMPLIANCE WITH NEW YORK STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA)

- Amended to update chronological history of the proceeding and the SEQRA process and procedures

2.0 DESCRIPTION OF THE PROPOSED ACTION

- Updated and clarified 2006 electricity consumption figures
- Clarified RGGI and EEPS expected emission reductions
- Expanded description of benefits of emission reductions
- Expanded Net Metering rationale
- Reported 2005-6 accomplishments related to Executive Order 111
- Description of major new filings in the EEPS proceeding
- Updated cost, benefit, and emissions reductions information

3.0 ENVIRONMENTAL SETTING OF NEW YORK STATE

4.0 ALTERNATIVE ACTIONS CONSIDERED

5.0 STATEMENTS AND EVALUATION OF SIGNIFICANT ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

- Clarification of Distributed Generation discussion
- Clarification of ongoing proceedings to evaluate long term contracts

6.0 REGULATORY FRAMEWORK AND MITIGATION OF POTENTIAL ADVERSE IMPACTS

- Editorial changes

7.0 UNAVOIDABLE ADVERSE IMPACTS

8.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

9.0 GROWTH-INDUCING ASPECTS AND SOCIO-ECONOMIC IMPACTS OF THE PROPOSED ACTION

- Clarification of employment estimates
- Addition of explanation of socioeconomic impacts

10.0 EFFECTS ON ENERGY CONSUMPTION

11.0 LIST OF REFERENCES

- New References added.