
Appendix A: Glossary

ACRONYMS AND ABBREVIATIONS

AC: Air conditioner

A&E: Architecture and engineering firms

AD: Advanced diagnostics

AHP: Assisted Home Performance with ENERGY STAR[®]

AIA: American Institute of Architects

AMP: Assisted Multifamily Program

ASERTII: Association of State Energy Research and Technology Transfer Institutions

ASHRAE: American Society of Heating, Refrigerating, and Air Conditioning

ASME: American Society of Mechanical Engineers

AUSA: Association of the United States Army

B/C: Benefit-cost

B/I: Business and institutional

BPI: Building Performance Institute

Btu: British thermal unit

Cx: Commissioning

C/I: Commercial and industrial

CBO: Community-based organization

CEE: Consortium for Energy Efficiency

CEM: Residential Comprehensive Energy Management Program

CFL: Compact fluorescent light

CHG&E: Central Hudson Gas & Electric Corporation

CHP: Combined heat and power

CIPP: Commercial/Industrial Performance Program

CO: Carbon monoxide

CO₂: Carbon dioxide

Con Edison: Consolidated Edison Company of New York, Incorporated

CSG: Conservation Services Group, Inc.

CSP: Curtailment service provider

DCV: Demand control ventilation

DEC: New York State Department of Environmental Conservation

DEGI: Dispatchable Emergency Generation Initiative, a component of the Peak Load Reduction Program (PLRP)

DG: Distributed generation

DHCR: New York State Division of Housing and Community Renewal

DI: Low-Income Direct Install Program

DOE: United States Department of Energy

DPS: New York State Department of Public Service

DR: Demand response

DCV: Demand control ventilation

ECIPP: Enhanced Commercial/Industrial Performance Program

EDRP: New York Independent System Operator Emergency Demand Response Program

EES Energy Efficiency Services

EESAT: Electrical Energy Storage Applications and Technology

EMEP: Environmental Monitoring, Evaluation, and Protection Program

EMP: **ENERGY STAR**[®] Multifamily Building Program

EPA: United States Environmental Protection Agency

EPRI: Electric Power Research Institute

ERO Electricity Reliability Organization

ESA: Electrical Storage Association

ES: ENERGY STAR®

ESCO: Energy services company

ESPM: ENERGY STAR® Products and Marketing

ESS: Energy Smart Students

ET: Enabling Technology for Price-Sensitive Load Management

EUR: End-Use Renewables Program

FERC: Federal Energy Regulatory Commission

FlexTech: Flexible Technical Assistance Program

FR: Freeridership

GW: Gigawatt

GWh: Gigawatt hour

HEAP: Home Energy Assistance Program

HERS: Home Energy Rating System

HFI: Homeowner Financing Incentive

HPD: New York City Department of Housing Preservation and Development

HPwES: Home Performance with ENERGY STAR®

HTR: Hard-to-reach

HTS: High temperature superconducting

HUD: United States Department of Housing and Urban Development

HVAC: Heating, ventilation, & air-conditioning

ICAP: New York Independent System Operator Installed Capacity Program

ISO: Independent system operator

IDC: Integrated Data Collection

IM: Interval Meters Program, a component of the Peak Load Reduction Program (PLRP)

IRDD: Industrial Research, Development, and Demonstration Program

kW: Kilowatt

kWh: Kilowatt hour

LC/S: Load Curtailment and Shifting Program, a component of the Peak Load Reduction Program (PLRP)

LED: Light emitting diode

LEED™: Green Buildings Leadership in Energy and Environmental Design

LI: Low Income

LIFE: Low-Income Forum on Energy

LIHEAP: Low-Income Home Energy Assistance Program

LIPA: Long Island Power Authority

LNG: Liquefied natural gas

LSE: Load-serving entity

M&V: Measurement and verification

MCAC: Market characterization, assessment, and causality analysis

MF: Multifamily

MMBtu: Million British thermal units

MOU: Memorandum of Understanding

MW: Megawatt

MWh: Megawatt-hour

NAAQS: National Ambient Air Quality Standard

Nat'l Grid: National Grid

NBI: New Buildings Institute

NCP: New Construction Program

NCQLP: National Council on Qualifications for Lighting Professions

NEEP: Northeast Energy Efficiency Partnerships

NEI: Non-energy impacts

NEMA: National Electrical Manufacturers Association

NextGen: Next Generation of Energy Efficient End-Use Technologies Program

NOx: Nitrogen oxides

NSTAR: See Glossary of Terms.

NTG: Net-to-gross

NYC: New York City

NYCA: New York control area

NYES: New York Energy SmartSM Program

NYESC: New York Energy SmartSM Communities

NYESLH: New York ENERGY STAR[®] Labeled Homes

NYISO: New York Independent System Operator

NYPA: New York Power Authority

NYS: New York State

NYSEG: New York State Electric and Gas Corporation

NYSERDA: New York State Energy Research and Development Authority

NYSRC: New York State Reliability Council

NYWEA: New York Water Environment Association

O&M: Operations and maintenance

O&R: Orange and Rockland Utilities, Incorporated

OPC: Outreach project consultant

OTDA: New York State Office for Temporary and Disability Assistance

PDRE: Permanent Demand Reduction Effort, a component of the Peak Load Reduction Program (PLRP)

PEM: Premium-Efficiency Motors Program

PET: Program Efficiency Test

PLC: Power line carrier

PLRP: Peak Load Reduction Program

PM: Particulate matter

PON: Program Opportunity Notice

POP: Point-of-purchase

PSC: New York State Public Service Commission

PT/LM: Program Theory and Logic Modeling

PV: Photovoltaic

QA: Quality assurance

QC: Quality control

R&D: Research and development

RD&D: Research, development, and demonstration

RAC: Room air conditioner

RCx: Retrocommissioning

ResTech: Residential Technical Assistance Program

RFP: Request for Proposals

RG&E: Rochester Gas and Electric Corporation

RPS: Renewable portfolio standard

RTO: Regional transmission organization

RTP: Real time pricing

RTU: Rooftop unit

SBC: System benefits charge

SCLP: Small Commercial Lighting Program

SEC: Smart Equipment Choices Program

SEER: Seasonal energy efficiency ratio

SIR: Standard Interconnection Requirements

SO: Spillover

SO₂: Sulfur dioxide

TA: Technical assistance, Technical Assistance Program

T&D: Transmission and distribution

TECA: Training, Education, Certification and Awareness

TEP: Technical Evaluation Panel

TMET: Total Market Effects Test

TREAT: Targeted Residential Energy Analysis Tools

TSP: Technical service provider

TTW: Through-the-wall air conditioner

V/C: Value/cost analysis

VEIC: Vermont Energy Investment Corporation

VSD: Variable speed drive

WAP: U.S. Department of Energy Weatherization Assistance Program

WNI: Weatherization Network Initiative

GLOSSARY OF TERMS

A

Acid Deposition Reduction Program: Regulations issued by the New York State Department of Environmental Conservation that result in reducing emissions of the harmful acid rain pollutants sulfur dioxide and nitrogen oxides.

Adjusted gross savings: NYSERDA-reported savings adjusted with M&V realization rates.

Aggregator: An entity that brings customers together to (1) buy electricity in bulk to increase customers' buying power and (2) benefit from programs with participation requirements that exclude small customers.

Allies: Service providers involved in projects that are funded through the **New York Energy SmartSM** Program.

Attribution: The assertion that a program is responsible for observed or measured effects. (Used interchangeably with causality.)

Avoided cost: The cost of power that a load serving entity avoids by not generating or purchasing the power from another source.

Awarded funds: Funds that have been contracted, approved for contracting, or set aside as a result of incentive applications.

B

Base case: The first step in macroeconomic analysis. The base case is an estimate of the impacts that system benefits charge funds would have had on New York's economy if the funds had been retained by customers of the participating utilities.

Benefit/cost analysis (B/C): Estimating the benefits of programs relative to their delivery costs. The general B/C ratio is the cumulative net present value of benefits divided by the cumulative net present value of costs.

Biomass: Materials that are biological in origin, including living and dead organic material. Biomass can be used as fuel and is available on a renewable basis through natural processes and as byproducts of human activities.

Btu (British Thermal Unit): The standard unit for measuring quantity of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit.

C

Callable: Short term load curtailment that can be requested by the New York Independent System Operator to maintain system reliability when generation resources become scarce.

Capacity: The volume of electrical power measured in megawatts needed to meet the expected demand for electricity.

Carbon dioxide (CO₂): The primary greenhouse gas associated with climate change and produced from the combustion of all fossil fuels.

Causality: The assertion that a program is responsible for the observed or measured effects. (Used interchangeably with attribution.)

Clean Air Mercury Rule: On March 15, 2005, EPA issued the Clean Air Mercury Rule to permanently cap and reduce mercury emissions from coal-fired power plants. With this rule, the United States is the first country in the world to regulate mercury emissions from utilities.

Clean Air Interstate Rule: A federal program that will permanently cap emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) in the eastern United States, including New York. When fully implemented, the Clean Air Interstate Rule will reduce SO₂ emissions in affected states by more than 70 percent and NO_x emissions by more than 60 percent from 2003 levels.

Co-funding: Financial and in-kind services contributions to the **New York Energy SmartSM** Program by sources outside NYSERDA that are necessary to ensure the Program as designed achieves the expected benefits. It is assumed that the expenditures would not have been made by the external contributors in the absence of the Program.

Combined heat and power (CHP): The use of single sources to provide heat energy and generate electricity for industrial and commercial productions and processes.

Commissioning: The process of ensuring that systems in new construction projects are designed, installed, functionally tested, and capable of being operated and maintained according to the original design intent and the building's operational needs.

Committed funds: Funds that have been set-aside for a **New York Energy SmartSM** program or project but have not been awarded to a contractor or customer.

Confidence interval: Error is involved whenever an experiment is run or people are sampled for a survey. Confidence intervals estimate the amount of error involved in data. The larger the confidence interval the less precision is implied in the analysis.

Cost recovery fee: A fee assessed by New York State for services to public authorities. The fee is determined by the New York State Division of Budget and imposed and collected by the New York State Department of Taxation and Finance.

Cumulative annual savings: Savings realized in a single calendar year from all installed measures.

Cumulative program savings: The sum of the savings realized across the life of the program. For example, a measure completed in January 2001 that delivers 100 kWh per year of annual savings will have delivered 500 kWh of cumulative program savings through December 31, 2005. The measure will continue to deliver annual savings of 100 kWh per year in subsequent years for the life of the measure.

Curtail, curtailable, curtailment: A customer's deliberate short-term reduction in electricity use, usually in response to a call by the New York Independent System Operator (NYISO) to maintain system reliability.

Custom measure: An energy efficiency measure that has been designed to meet specific performance criteria and application requirements and for which no widely available commercial product or application is available.

Customer-sited Tier: The component of the Renewable Portfolio Standard that includes electricity generated "behind the meter" by facilities that are not economically competitive with Main Tier technologies. Customer-sited resources include fuel cells, photovoltaics, anaerobic digesters, and wind resources of 300 kW or less.

Cycle time: The interval between a solicitation's due date and the date of contract signing. The interval is spent reviewing proposals, selecting winning bidders, and reaching agreement with proposers on specific work scopes and contract terms.

D

Daylighting: Daylighting is an energy efficiency measure that involves placing windows and other transparent media and reflective surfaces so that, during the day, natural light provides effective internal illumination.

Deemed savings: Savings associated with commonly adopted measures and that do not require measurement and verification for individual projects.

Deemed-savings database: A database developed for NYSERDA by its M&V contractor and used by six **New York Energy SmartSM** programs. The deemed savings database contains results from a comprehensive review of stipulated savings of more than 400 measures.

Demand reduction: A lessening in the amount of energy drawn by end-use customers from the grid.

Demandside: See Market actor: Downstream or demandside.

Distributed generation (DG): Small generation facilities using a range of technologies, including reciprocating engines, small and micro-turbines, fuel cells, photovoltaic arrays, wind, and other renewable energy sources.

Dual enthalpy economizer: A type of economizer that restricts economizer cooling to times when the heat content (enthalpy) of the outside air is less than the heat content of the return air.

E

Economizer: Control systems that are installed on mechanical cooling systems such as packaged rooftop units and outdoor air handlers and that save cooling energy by using outside air as a first stage in cooling.

Electric energy savings: Reductions in customers' annual KWh consumption.

Encumbered funds: **New York Energy SmartSM** funding that has been awarded for an energy efficiency project but has not been paid to the contractor or customer under contract.

End user: A person or entity that purchases or uses electricity at a site.

Energy burden: The percentage of household income used to pay for energy.

Energy efficiency measures: Energy-efficient products that are promoted through the **New York Energy SmartSM** Program. Installing energy efficiency measures rather than standard products results in energy and cost savings.

Energy services company (ESCO): Load serving entities, retail load aggregators, providers of comprehensive energy services, and formal groups of such entities that provide various services for customers in New York such as: matching buyers and sellers of electric power, tailoring physical and financial instruments to suit customers' needs, and developing, installing, and financing projects that are designed to reduce customers' energy and maintenance costs. NYSERDA's ECIPP program includes A&E firms, contractors, and manufacturers among ESCOs eligible for incentives.

F

Freeridership: A term for in-program impacts (*e.g.*, energy savings) that would have occurred in the absence of the program and without program incentives.

Fuel cell: An electrochemical device to convert chemical energy directly into electricity.

G

Gigawatt: One billion watts.

Gigawatt hour: A measure of electricity consumption equal to 1,000,000,000 watts of power over a period of one hour.

Green marketing: The sale of green power in competitive markets where multiple suppliers offer diverse products and services.

Green power: Energy from indefinitely available resources and whose generation has zero or negligible environmental impacts, whether through reduced emissions or minimal environmental disruption. Such sources of energy include: wind, wave, tidal, small scale hydropower, biomass, landfill gas, geothermal power, and solar.

Grid: A network for the transmission of electricity.

Gross savings: The reduction in energy and power requirements enjoyed by customers participating the **New York Energy SmartSM** Program (Program). Gross savings do not account for secondary effects that occur outside the Program nor do they systematically consider degradation and removal of equipment.

I

Incentives: Monetary and non-monetary awards offered to encourage consumers to buy energy-efficient equipment and to participate in programs designed to reduce customers' energy use.

Incremental cost: The cost of energy-efficient equipment less the cost of comparable standard-efficiency equipment.

Infrastructure development: Increasing the supply of energy efficient products to facilitate competition among end-use customers.

Inputs: Resources available to a program that include money, staff time, volunteer time, and existing knowledge.

Installed Capacity Program (ICAP): A New York Independent System Operator (NYISO) demand-response program in which generators and load serving entities are capable of supplying and reducing their demand for energy to ensure that sufficient energy and capacity are available to meet the State's reliability rules.

Installed measures: Energy efficiency measures that have been installed in end-use applications as the direct result of one of the **New York Energy SmartSM** programs.

Integrated Data Collection (IDC): A survey technique that garners participation feedback in nearly real time on market characterization and attribution/causality. IDC is usually integrated with standard program implementation and program paperwork.

Interval meter: A meter that captures, stores, and communicates energy-use information.

K

Kilowatt: One thousand watts.

Kilowatt hour: A measure of electricity consumption equal to 1,000 watts of power over a period of one hour.

L

Leveraged funds: Financial expenditures and in-kind services made by sources outside NYSERDA that would have occurred in the absence of the **New York Energy SmartSM** Program. Leveraged funds supplement NYSERDA funds such that their effectiveness and benefits are increased beyond what **New York Energy SmartSM** Program funding alone could have achieved.

Load: The electric power consumed at one moment in time by customers.

Load curtailment: Instantaneous, short-term (*i.e.*, several hours) reductions in power used by customers.

Load management: Activities designed to influence the timing and magnitude of customers' use of electricity.

Load serving entity (LSE): Entities, including municipal electric systems, energy services companies, and electric cooperatives that are authorized and required by law, regulatory authorization or requirement, agreement or contractual obligation to supply energy, capacity, and ancillary services to retail customers located within the New York Control Area (NYCA), including entities that take service directly from the New York Independent System Operator (NYISO) to supply their own load in the NYCA.

Load shifting: A form of electricity load management that involves shifting energy use to different time periods of the day.

Logic model diagram: Documents that discuss the logical relationships among elements within programs through diagrams constructed with boxes and circles that (1) map the step-by-step process of inputs, activities, outputs, and outcomes embedded within programs, (2) identify hypotheses and key indicators, and (3) identify potential external influences.

Low-income customer: For purposes of the **New York Energy SmartSM** Program, low-income households are those having income less than or equal to 80% of the state's median income. Median income is determined by the number of persons in the household. In 2005, 80% of the state median income for a family of four was \$55,488. The figure varies from year to year.

M

Macroeconomic benefits: The economic value added by the **New York Energy SmartSM** Program estimated by comparing the impacts of the program's expenditures and energy savings to the impacts that would have resulted had the program not been implemented and the money not been paid by ratepayers into the System Benefits Charge fund. Value added includes labor income (employee compensation and proprietor income), property income (interest, rental income, royalties, dividends, and profits), and indirect business taxes (primarily sales and excise taxes).

Main-Tier Technologies: The component of the Renewable Portfolio Standard that includes wholesale generation of electricity from renewable resources including wind, hydropower, and biomass.

Market actor: Persons, organizations, and groups that influence (*e.g.*, by buying, selling, providing services, providing information, distributing, transporting, manufacturing, consuming) the decision chain for energy-efficient and renewable products, services, technologies, and program endeavors. Types of market actors include:

- **Upstream or supply-side:** Market actors such as manufacturers, developers, and research and development organizations that provide the energy-efficient and renewable products, services, and technologies.
- **Mid-stream or market infrastructure:** Market actors who purchase energy-efficient and renewable products, services, and technologies from upstream actors and who sell them downstream to customers. Retailers, distributors, wholesalers, contractors, installers, energy services companies, designers, governmental units, building owners, commodity providers, aggregators, and architects and engineers are examples of mid-stream market actors.
- **Downstream or demandside:** Market actors who purchase and use energy-efficient and renewable products, services, and technologies. Downstream market actors include residential homeowners, small business customers, and power plant owners and operators.

Market barrier: Conditions and concepts that prevent and inhibit market adoption of energy efficient technologies, products, and services and inhibit implementation of energy efficient behaviors. Market barriers to the adoption of high efficiency and renewable measures can include: lack of awareness, knowledge, and information about technologies, products, and services; lack of availability of products and services; perceived and actual difficulty financing the higher incremental cost often associated with energy efficient and renewable products and services; and perceived risk associated with implementation of energy efficient and renewable products and services.

Market development: See, Market transformation.

Market effects: Changes in the structure of markets and in the behavior of participants in markets that reflect increased adoption of energy-efficient products, services, and practices.

Market infrastructure: See, Market actors: Mid-stream or market infrastructure.

Market price effects: Cost savings by rate payers caused by lower wholesale electricity prices.

Market sector: A group whose members display common activities and shared values. Examples include the residential buildings sector, the commercial buildings sector, and the small business sector.

Market transformation: Market states in which desired activities and behaviors have become standard practices due to the reduction in market barriers resulting from market interventions. Market transformation is apparent when market effects endure after interventions have been withdrawn, reduced, and changed. Market transformation programs are designed to induce lasting structural and behavioral changes in markets. (Used interchangeably with market development.)

Master metered: Commercial buildings with a single electric meter serving the entire building. The meter is owned by the utility company providing electricity to the building, and the building manager receives a single bill for the building's electricity use.

Measurement and verification (M&V): An evaluation modality used to: confirm that program baselines are accurately defined; ensure that energy measures are installed properly to generate the predicted savings and energy output; and determine the actual savings achieved by energy efficiency and renewable resource projects.

Megawatt: One million watts or one thousand kilowatts. Generally, one megawatt will power 1,000 homes.

Megawatt hour: A measure of electricity consumption equal to 1,000,000 watts of power over a period of one hour.

N

NSTAR: A private utility company, with the following operating units: Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company, and NSTAR Gas Company, that provides retail electricity and natural gas to customers in eastern and central Massachusetts .

National Ambient Air Quality Standard: The United States Environmental Protection Agency has established standards to control six "criteria" pollutants: carbon monoxide, lead, nitrogen dioxide, particulates, ozone, and sulfur oxides.

Net savings: The amount of energy savings attributable to a program after adjustments are made for freeridership and spillover market effects.

New York Energy SmartSM: New York's public benefits program was established by Order of the New York State Public Service Commission (PSC) in January 1998.² The program began July 1, 1998 with funds collected from customers by New York's electric utilities through a non-bypassable system benefits charge (SBC). The PSC designated the New York State Energy Research and Development Authority (NYSERDA) as the statewide administrator of most of the program funds. **New York Energy SmartSM** is the service mark name of the Program. Under this service mark, NYSERDA administers a portfolio of energy efficiency, low-income, and research and development programs.

² New York State Public Service Commission. In the Matter of Competitive Opportunities Regarding Electric Service., Opinion No. 98-3. *Opinion and Order Concerning System Benefits Charge Issues*. Issued and effective January 30, 1998. Cases 94-E-092 *et al.*

Nitrogen oxides (NO_x): Gases produced from the combustion of fossil fuels including coal, oil, and natural gas, diesel fuel, and gasoline. Oxides of nitrogen are pollutants associated with a number of environmental problems including ground-level ozone (smog), acid deposition, formation of particles, and eutrophication or oxygen depletion of water bodies associated with excessive growth of algae.

Non-energy impacts (NEI): Difficult-to-measure effects that can nevertheless be monetized and included as a percentage of energy savings. NEIs include perceived improvements in comfort, safety, and productivity.

Non-participant: Customers who are eligible but do not participate in NYSERDA programs.

O

Off-peak: Time periods when the demand for electricity by customers is relatively low.

Opinion leader: Persons and organizations viewed by members of professions as demonstrating good professional practice.

Outcome: The results of the delivery of programs, services, and products and changes in knowledge, attitude, and behavior by program participants.

Output: The immediate products from the activities of programs.

P

Participant: Individuals and entities that receive services and incentives through the **New York Energy SmartSM** Program.

Payback: The ratio expressed in years of the estimated annual savings of new measures to estimated costs. Payback can be used to determine whether measures are cost effective.

Peak demand: Electricity demand during periods of high electricity use.

Portfolio: The term used for the totality of individual programs comprising the **New York Energy SmartSM** Program.

Portfolio level: Evaluation activities that address the **New York Energy SmartSM Program** as a whole and the business and institutional, low-income, residential, and research and development program areas.

Pre-qualified measures: Energy efficiency measures with established, tested, and verified energy savings. Savings calculations for pre-qualified measures use deemed savings. See, deemed savings, deemed-savings database.

Program case: The second step in a macroeconomic analysis. The program case is the estimated economic effect on New York's economy of the complete portfolio of **New York Energy SmartSM** Program expenditures on goods and services.

Process evaluation: An evaluation modality that examines the extent to which programs are operating as intended by assessing ongoing program operations and determining whether the target population is being served.

Program Efficiency Test: The ratio of program benefits divided by NYSERDA's costs.

Program Opportunity Notice (PON): A NYSERDA solicitation approach for identifying and procuring multiple projects within specified technology areas.

Program summary: Program-specific information developed from secondary research.

Program theory: The assumptions underlying programs; descriptions of how programs fit within their market context. Program theory defines how programs are expected to work and identifies intended outcomes.

Public benefits programs: Programs that promote energy efficiency and renewable energy and are funded by surcharges on energy bills. See, **New York Energy SmartSM**.

R

Realization rate: Measured and verified energy and demand savings divided by energy and demand savings claimed by NYSERDA. A rate of 1.0 means that measured and verified savings align precisely with claimed savings. A rate greater than 1.0 means that savings are under-reported, while a rate less than 1.0 means the savings are over-estimated.

Real-time pricing: A pricing mechanism for selling power to consumers in which a consumer's price is based on the spot power market price at the time of consumption.

Recommissioning: An ongoing process in existing commercial buildings that seeks to resolve operating problems, improve comfort, optimize energy use, and identify promising retrofits. Sometimes called "continuous commissioning," the process focuses on improving overall building system controls and operations under actual conditions based on existing occupancy.

Renewable resources: Naturally replenished energy sources including: biomass, hydropower, geothermal, solar, wind, and tidal action.

Request for Proposals (RFP): A NYSERDA solicitation approach for identifying and procuring projects in specific areas of interest and with a high degree of specificity. A single award is typical. See, Program Opportunity Notice (PON).

Resource acquisition: Installation of energy efficiency measures to reduce demand.

Retrocommissioning: A systematic process used for optimizing performance of systems in existing buildings by identifying and implementing relatively low-cost operations and maintenance improvements.

S

Scenario 1: A benefit-cost test that includes only resource savings such as energy, demand, fuel, and water. Scenario 1 is prescribed by the New York State Public Service Commission in its total resource cost test.

Scenario 2: A benefit-cost test that includes resource savings and market price effect benefits.

Scenario 3: A benefit-cost test that includes resource savings, market price effect benefits, and non-energy impacts.

Sector: A group whose members display similarities including common activities and shared values. Examples include the commercial, industrial, institutional, government, non-profit, farm and agribusiness, multifamily, and residential sectors.

Solicitation: A device to publicly announce funding opportunities and seek proposals for specific program activities. See, Request for Proposals, Program Opportunity Notice.

Spillover: The proportion of impacts (*e.g.*, energy savings) that occur as a result of **New York Energy SmartSM** Program activities but without program incentives.

Submetering: The measurement and billing of electric use in individual apartments in a master metered building. The meters, or submeters, are owned by the building, and the utility continues to read the building master meter and issue a single bill to the building. Submetering allows residents to pay only for their individual electric use. See, Master metered.

Sulfur dioxide (SO₂): A gas emitted into the atmosphere largely through the combustion of fossil fuels, *e.g.*, coal and oil, and diesel and gasoline. SO₂ contributes to acid rain and the formation of particulate matter.

Supply-side: See, Market actor: Upstream or supply-side.

System benefits charge: A charge on consumers' bills from electric distribution companies used to pay for certain public benefits such as assistance to low-income consumers and the delivery of energy efficiency programs.

System-wide reliability: A measure of the ability of the electric delivery system to continue operating while some lines or generators are out of service.

T

Total-Market-Effects Test: The ratio of program benefits divided by NYSERDA's and customers' costs.

Total Resource Benefits: Avoided cost benefits including electric energy and demand, fuel, and water.

Total Resource Costs: The sum of program costs and customer costs.

U

Utility service area: Defined areas designated by the New York State Public Service Commission that define utility companies' boundaries and within which companies serve end-use customers.

V

Value/cost analysis: An analytic technique that assesses the cost effectiveness of research and development programs, which are difficult to monetize.

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NEW YORK ENERGY \$MARTSM PROGRAM EVALUATION AND STATUS REPORT

REPORT TO THE SYSTEM BENEFITS CHARGE ADVISORY GROUP

FINAL REPORT

STATE OF NEW YORK

ELIOT SPITZER, GOVERNOR

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

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