



# 2013 Annual Report

New York Independent System Operator

**SYNERGY IN ACTION**

*Realizing Interconnected Initiatives*

# The NYISO Mission

The mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public good and provide benefit to consumers by:

- *Maintaining and enhancing regional reliability*
- *Operating open, fair and competitive wholesale electricity markets*
- *Planning the power system for the future*
- *Providing factual information to policy makers, stakeholders and investors in the power system*

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# I. MESSAGE

## From the Board Chair/President/CEO

As the NYISO continued its stewardship of New York's electric system, the year 2013 saw significant progress in our efforts to achieve "system synergy," the coming together of interrelated initiatives. We met unprecedented challenges to the electric grid; enhanced regional cooperation and market efficiency; incorporated advanced technologies in a new, state-of-the-art Power Control Center; and completed related, statewide Smart Grid advancements.

### **Optimizing Existing Resources**

By performing as designed, New York's electric system reliably met an all-time record peak load during a particularly long and sweltering heat wave in July. Record-breaking weather conditions tested reliability, but also highlighted the importance of working together – and across traditional boundaries – to meet emerging challenges.

Our Broader Regional Markets plan and interregional planning initiatives such as the Eastern Interconnection Planning Collaborative have fostered cross-boundary cooperation and produced changes in market designs that make better use of existing resources. In 2013, we gained approval of market-to-market coordination with neighboring grid operator PJM. That significant step is lowering costs for consumers and strengthening reliability because it makes available a larger pool of potential resources.

### **Advancing Technology to Enhance Reliability**

Smart Grid advancements in 2013 also helped address the challenge of record-breaking levels of demand. In June, we completed our statewide Smart Grid project that installed synchrophasor technology as well as capacitor banks in strategic locations. This three-year endeavor involved partnering with the transmission-owning private utilities and public power authorities of New York and was funded in part by a U.S. Department of Energy grant.

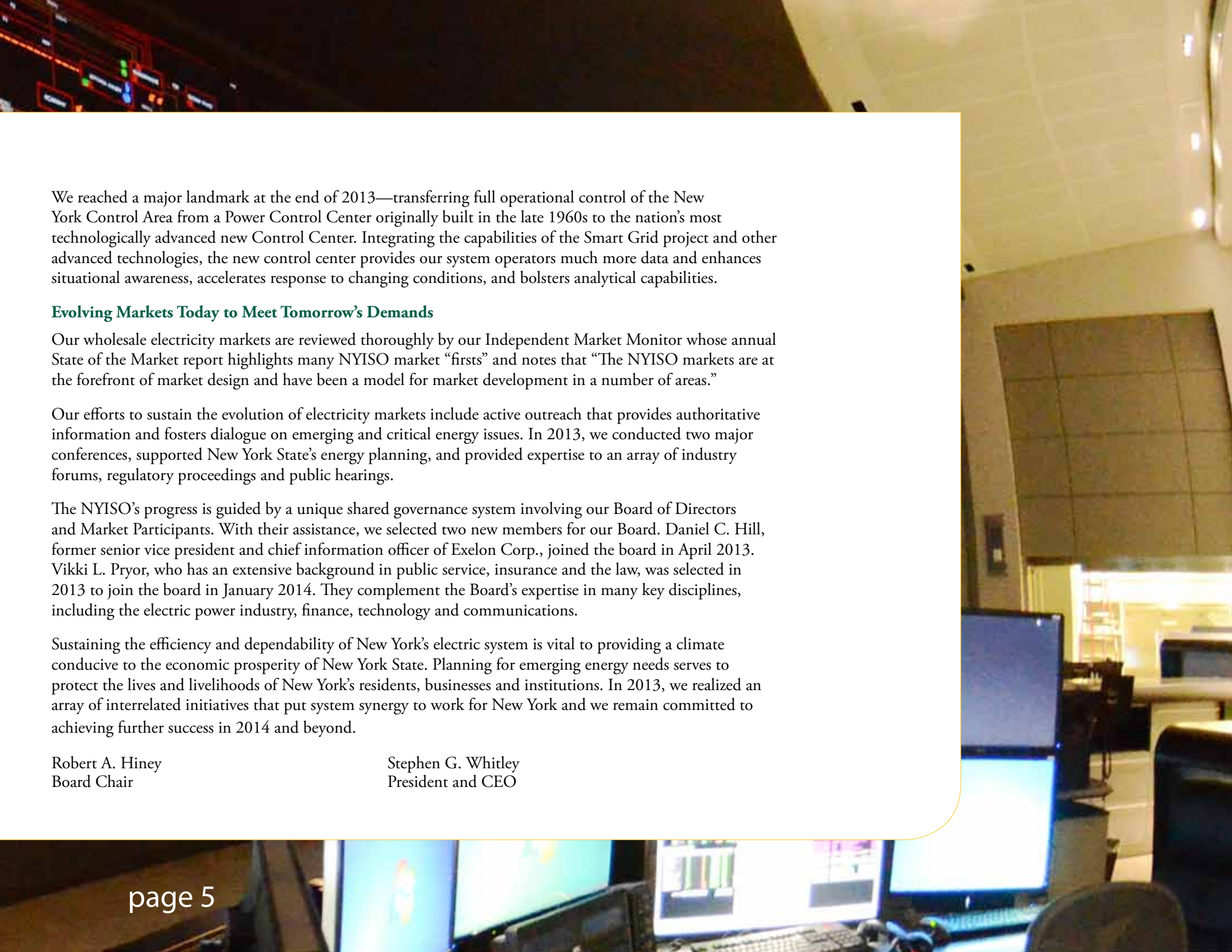


**Robert A. Hiney**



**Stephen G. Whitley**





We reached a major landmark at the end of 2013—transferring full operational control of the New York Control Area from a Power Control Center originally built in the late 1960s to the nation’s most technologically advanced new Control Center. Integrating the capabilities of the Smart Grid project and other advanced technologies, the new control center provides our system operators much more data and enhances situational awareness, accelerates response to changing conditions, and bolsters analytical capabilities.

### **Evolving Markets Today to Meet Tomorrow’s Demands**

Our wholesale electricity markets are reviewed thoroughly by our Independent Market Monitor whose annual State of the Market report highlights many NYISO market “firsts” and notes that “The NYISO markets are at the forefront of market design and have been a model for market development in a number of areas.”

Our efforts to sustain the evolution of electricity markets include active outreach that provides authoritative information and fosters dialogue on emerging and critical energy issues. In 2013, we conducted two major conferences, supported New York State’s energy planning, and provided expertise to an array of industry forums, regulatory proceedings and public hearings.

The NYISO’s progress is guided by a unique shared governance system involving our Board of Directors and Market Participants. With their assistance, we selected two new members for our Board. Daniel C. Hill, former senior vice president and chief information officer of Exelon Corp., joined the board in April 2013. Vikki L. Pryor, who has an extensive background in public service, insurance and the law, was selected in 2013 to join the board in January 2014. They complement the Board’s expertise in many key disciplines, including the electric power industry, finance, technology and communications.

Sustaining the efficiency and dependability of New York’s electric system is vital to providing a climate conducive to the economic prosperity of New York State. Planning for emerging energy needs serves to protect the lives and livelihoods of New York’s residents, businesses and institutions. In 2013, we realized an array of interrelated initiatives that put system synergy to work for New York and we remain committed to achieving further success in 2014 and beyond.

Robert A. Hiney  
Board Chair

Stephen G. Whitley  
President and CEO

## II. 2013 Year in Review

### Reliability

There is no more vital resource than the reliable and sustained availability of electric power in New York State, making possible the lives and livelihoods of 19.2 million residents and the operation of thousands of businesses and organizations. Reliable power supplies and dependable power quality are vital to keeping and creating jobs in New York.

#### **ALL-TIME SYSTEM PEAK**

We achieved the pinnacle of satisfying reliability requirements in the summer of 2013—meeting an all-time record summer peak demand.

As 47 of 50 states experienced temperatures of at least 90 degrees during the exceptionally hot week of July 15, New York reached an historic peak demand of 33,956 megawatts (MW).

Our initiatives are working together to meet significant challenges. Competitive markets provided strong incentives for generating plants to be up and running during critical periods. Demand response programs to reduce usage during peak periods were activated each day of the heat wave—in the high-demand southeastern New York regions during the first days of the week, and statewide on Thursday and Friday.

*“You might not know it, but a nonprofit organization helped you retain your electricity during that big heat wave last week...”*

*“The nonprofit chooses the best deals for consumers. It also makes sure enough power is available, partly through programs that can conserve power when the heat is really on — literally...”*

*“And New York Independent System Operator appears to be doing its job: watching out for consumers.”*

*Watching Out for Our Interests, Press-Republican (Plattsburgh, NY), July 25, 2013*

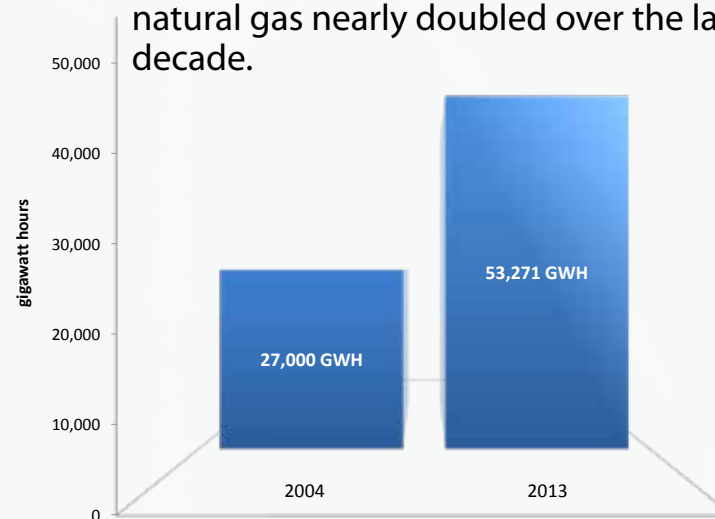
Timely technological and market design projects completed only a few weeks before the heat wave assisted performance. Capacitor banks installed throughout the state as part of our large-scale Smart Grid project helped assure steady statewide voltage performance. Enhanced scarcity pricing, approved by FERC in early July, sent strong signals to encourage resource availability during the peak demand conditions.

### **ELECTRIC-GAS COORDINATION**

Natural gas has been the fuel of choice for electric generation in the past few years. More than 70 percent of proposed additions to the generating capacity in the state are projects that would be fueled by natural gas or dual-fuel power plants capable of using natural gas or oil.

The NYISO Electric and Gas Coordination Working Group, established in January 2012, addresses operational, planning and market design issues to ensure coordination among market participants, natural gas utilities, pipeline operators and other key industry stakeholders. In 2013 the NYISO commissioned a comprehensive study focusing on gas-related infrastructure adequacy in the New York Control Area. While the area has experienced increasing congestion on gas transport paths in recent years, expected expansions bringing additional gas to market will significantly increase infrastructure capability, particularly in the vulnerable downstate region.

In New York, electricity generated by natural gas nearly doubled over the last decade.



*“... this complex symphony of energy that the NYISO directs has only become more difficult because of the popularity of natural gas in New York...”*

*As the engineers in the NYISO’s control room ponder how to keep the lights on, they now have to worry about how to keep the natural gas flowing into New York. “*

*Keeping the lights on, Times Union (Albany, NY), February 21, 2013*



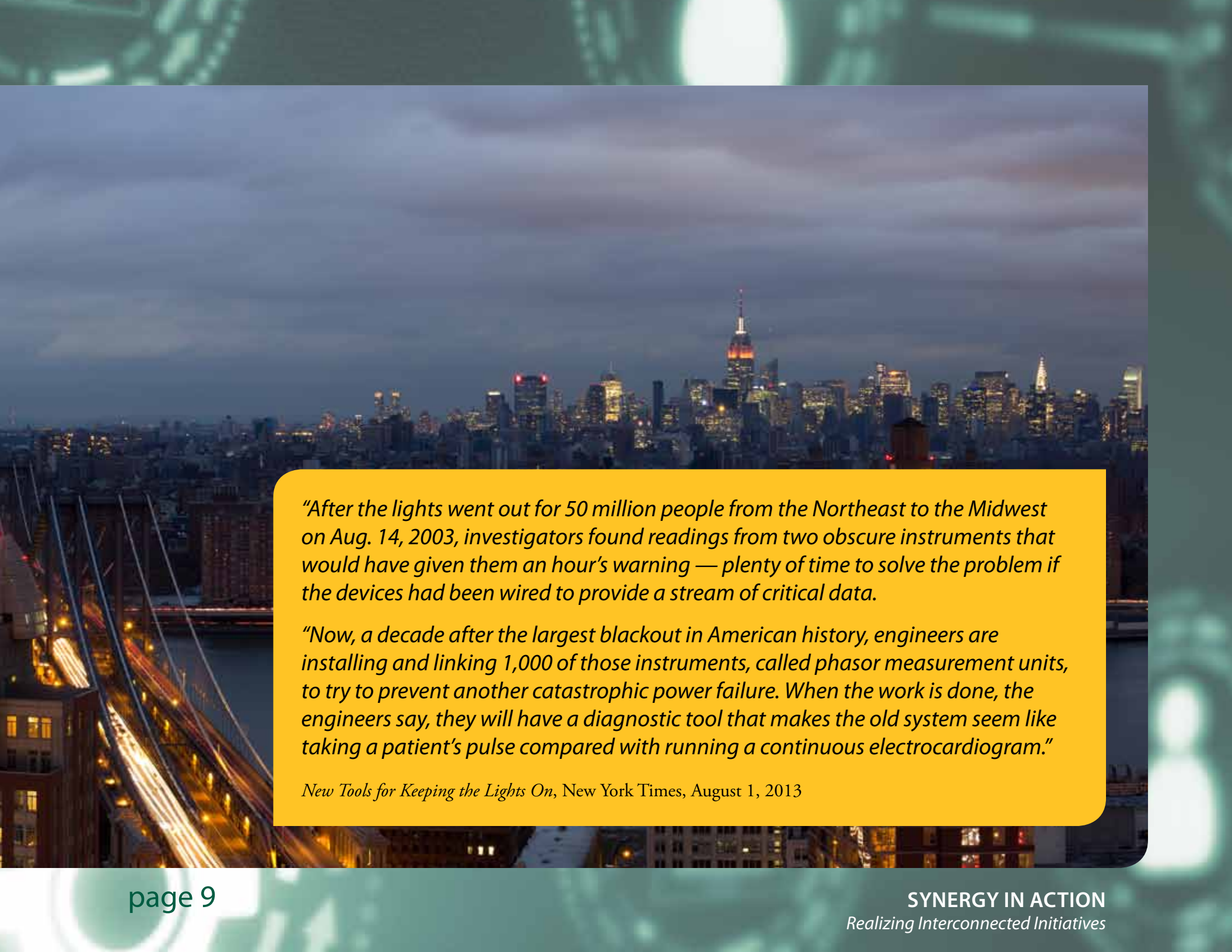
## **NORTHEAST BLACKOUT: 10 YEARS LATER**

Many people remember where they were on August 14, 2003, when the lights went out for more than 50 million residents from the Midwest to the Northeast, including various parts of New York State. The blackout was triggered by transmission line faults in Ohio and exacerbated by the communications and data isolation of regional electric grids.

In the past decade, many grid and communications improvements have been put in place across the country, including federal reliability standards administered by the Northeast Electric Reliability Corporation (NERC) and enforced by the Federal Energy Regulatory Commission (FERC).

The NYISO's \$74 million Smart Grid project completed in 2013 strengthens situational awareness and responsiveness. Phasor measurement units installed throughout the state relay system conditions to grid operators 60 times per second—360 times faster than previously available—and increase information from neighboring electric grids. This helps operators identify unusual or serious conditions beyond New York.



A nighttime photograph of the New York City skyline, featuring the Empire State Building and other illuminated skyscrapers. In the foreground, a bridge with light trails from traffic is visible. A large yellow text box is overlaid on the right side of the image.

*“After the lights went out for 50 million people from the Northeast to the Midwest on Aug. 14, 2003, investigators found readings from two obscure instruments that would have given them an hour’s warning — plenty of time to solve the problem if the devices had been wired to provide a stream of critical data.*

*“Now, a decade after the largest blackout in American history, engineers are installing and linking 1,000 of those instruments, called phasor measurement units, to try to prevent another catastrophic power failure. When the work is done, the engineers say, they will have a diagnostic tool that makes the old system seem like taking a patient’s pulse compared with running a continuous electrocardiogram.”*

*New Tools for Keeping the Lights On, New York Times, August 1, 2013*

# Markets

Markets bring together buyers and sellers of electric energy, capacity, and related product and services.

The NYISO's competitive wholesale electricity markets contribute to New York's energy, environmental, and economic landscapes. In the competitive market era, New York's electric system has developed greater generation availability, added generation and interstate transmission in areas of the state that need it most, and initiated new demand-response capabilities. There have been dramatic reductions in power plant emissions and the development of wind, solar and energy storage resources.

## **GREATER SYNERGY, STRONGER RELIABILITY**

Extensive work completed during 2013 led to FERC approval of revisions to the capacity markets.

The reset of the installed capacity demand curve is a process that takes place every three years. A related change established a new capacity zone to address power needs in the historically energy-stressed southeastern New York region.

Both measures approved by FERC improve system reliability by providing more effective economic signals for developers to invest in the state, particularly where resources are most needed during periods of high demand.

*"The energy and ancillary services markets establish prices that reflect the value of energy at each location on the network. They deliver significant benefits by coordinating the commitment and dispatch of generation to ensure that resources are started and dispatched each day to meet the system's demands at the lowest cost."*

*2013 State of the Markets Report for the New York ISO Markets  
Potomac Economics, May 2014*

## GENERATION AND ENERGY RESOURCES

Southeastern New York, in particular, has benefited from markets' success in attracting new generation, transmission and demand-side resources. Since 2000, market incentives have spurred the development of 10,000 MW of new generation in the state, with 80 percent of that located in the southeastern region. That area of greatest need has also been the beneficiary of all 1,600 MW of new interstate transmission that has been built during the same time period. Demand response resources, capable of providing approximately 1,500 MW of capacity in 2013, were used in Southeastern New York throughout the weeklong heat wave that resulted in the record peak demand set in July 2013.

## AIDING THE ENVIRONMENT

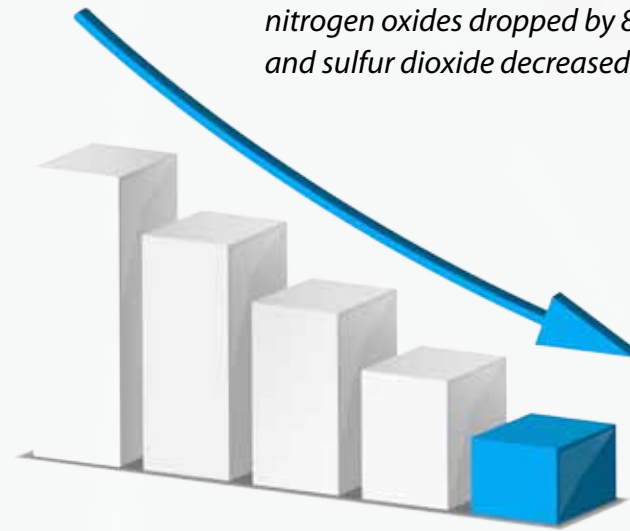
The NYISO has been a national leader in implementing market measures that have encouraged the development of wind energy and other renewable resources like solar and energy storage.

Wind capacity in the state grew from 43 MW in 2003 to 1,634 MW in 2013. Innovations on the NYISO's part have included integrating wind power into the economic dispatch processes and establishing a centralized wind forecasting system. Market design changes have paved the way for wind and solar development: They are defined as variable energy resources, which exempts them from traditional "under generation" penalties.

NYISO market design changes also have facilitated new energy storage technologies, such as flywheel systems and advanced batteries, as frequency regulation providers.

New York State's air quality has improved with electricity markets complementing environmental standards to encourage new, cleaner power plants and operating efficiencies.

*Since 2000, power plant emissions for carbon dioxide declined by 37 percent, nitrogen oxides dropped by 80 percent and sulfur dioxide decreased by 94 percent.*



*"With its continued efforts to efficiently integrate wind on to the grid, the NYISO has demonstrated its ability to innovate in order to optimize the performance of our evolving electric fleet."*

Jackson Morris, Pace Energy and Climate Center, January 2013



## **BROADER REGIONAL MARKETS**

The NYISO is expanding grid perspectives as we broaden the horizons of wholesale electricity markets to benefit consumers across a wider region by enhancing regional coordination and maximizing available resources.

Strides made in mending differences among the interconnected grids increase the efficiency of existing power resources and reduce costs for power consumers. These initiatives, projected to save New Yorkers \$193 million a year and collectively save the region \$362 million annually, began with federal approval in 2010.

The NYISO has worked with nearby regional systems and grids in Canada to develop ongoing planning and analyses around more efficient interregional scheduling practices and power flows, as well as more cost-effective solutions for transmission system constraints.

The pioneering activation of market-to-market congestion relief between the NYISO and neighboring grid PJM (serving Pennsylvania, New Jersey, and Maryland) was a landmark event in 2013. In the first year, the initiative is provided an estimated \$4.7 million in savings. Benefits include lower overall congestion, more consistent prices across the two wholesale electricity markets, and greater reliability due to the larger pool of resources available to both systems.

Interregional planning efforts have run concurrently with the broader regional market initiatives. The Eastern Interconnection Planning Collaborative (EIPC), whose members include grid operators in 24 states and provinces in the Mid-Atlantic, Midwest, New England regions and Canada, began with federal funding in 2010. In 2013 EIPC brought on board representatives of the gas industry as part of a working group to explore gas-electric coordination.





## CONTINUED COMPETITIVENESS

The NYISO's Independent Market Monitor, Potomac Economics, found in 2013, as in previous years, that NYISO markets "are at the forefront of market design and have been a model for market development ..."

Further in its annual State of the Market report Potomac noted that our markets "provide substantial benefits to the region by ensuring that the lowest-cost supplies are used to meet demand in the short term and by establishing transparent, efficient price signals that govern investment and (plant) retirement decisions in the long term."

The average wholesale electric energy price in 2013 was \$59.13 per megawatt-hour. This marked a 30 percent increase from 2012's record-low of \$45.28 per megawatt-hour. The 2013 price remained below the 14-year annual average of approximately \$64 per megawatt-hour.

"Higher natural gas prices were the main reason for higher electricity prices in 2013, particularly in the winter months when tight gas supplies in Eastern New York increased generation costs," the State of the Market report stated.



**NYISO market transactions totaled \$7.72 billion in 2013; slightly higher than the historic annual average of \$7.36 billion**

# Planning

As grid operations and energy policy goals have grown in scope and complexity, the NYISO's planning responsibilities have expanded to also encompass regional and interregional perspectives, keeping the best interests of consumers and other stakeholders at the forefront. Our planning takes place in concert with multiple stakeholders including market participants, government authorities, and neighboring power grids.

## **COMPREHENSIVE PLANNING**

We use a 10-year planning horizon to forecast energy needs and required resources, but we are also responsive to developments in the continually evolving energy landscape.

Intensive planning takes place on several levels, including for system reliability, infrastructure economic considerations, and anticipating and satisfying current and long-term public policy requirements.

We issued our sixth Comprehensive Reliability Plan (CRP), which identifies electric system needs and resources through the year 2022. It concluded that additional transmission and generation resources will be required over the study time frame to meet consumers' energy needs and that sufficient market-based solutions have been proposed to satisfy them.

*"The NYISO has in place both reliability and economic planning processes that forecast needs and upgrade opportunities looking out over 10 years. The Energy Highway initiative is not intended to replace these processes, but rather to supplement them."*

*New York Energy Highway Blueprint,  
October 2012*

## **CONGESTION ANALYSIS**

We conduct extensive economic analysis of transmission congestion on the state's bulk power system and the potential costs and benefits of alleviating it. These issues are illuminated in the comprehensive Congestion Analysis and Resource Integration Study (CARIS) that the NYISO develops with extensive stakeholder input.

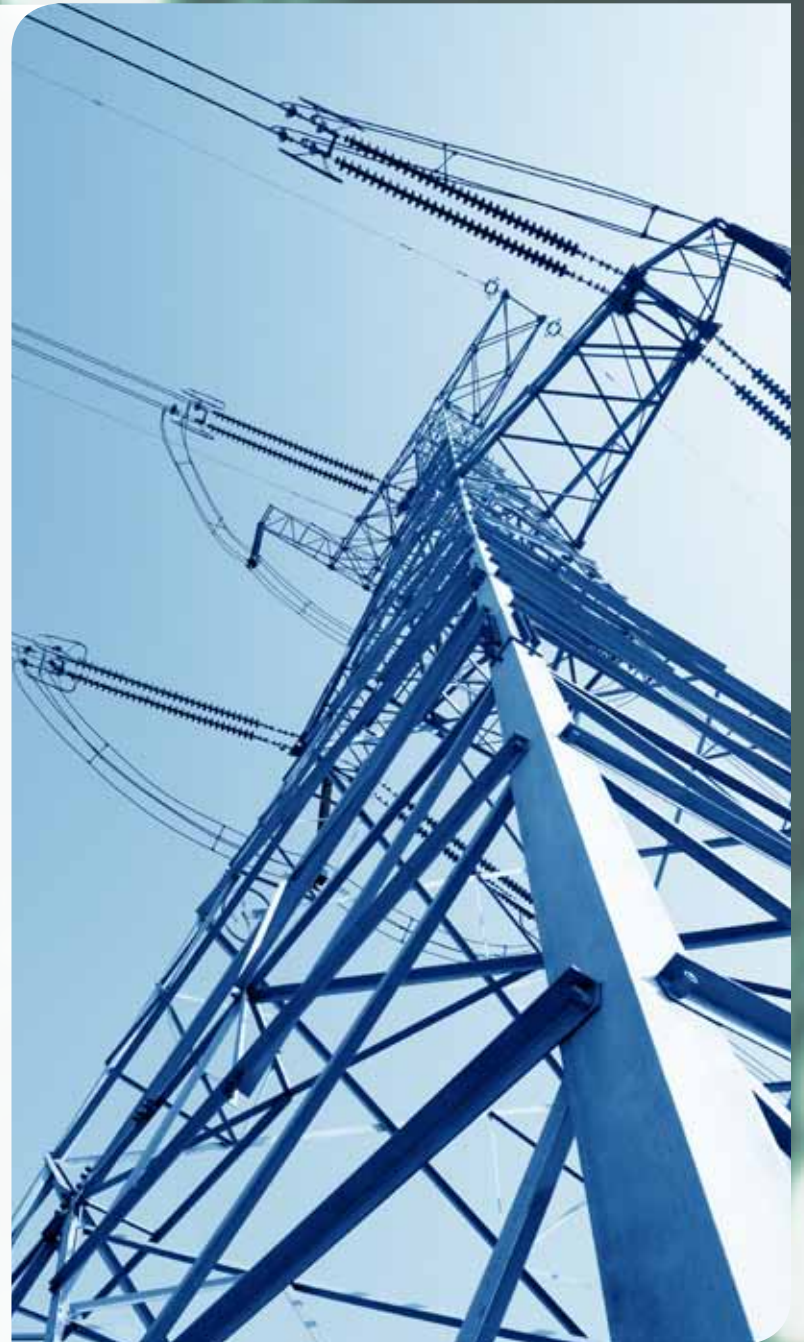
In 2013, the first phase of the CARIS study was completed and disseminated. It pointed out the most congested parts of New York's bulk power system. All or parts of the high-voltage transmission path from Oneida County through the Capital Region and south to the lower Hudson Valley are considered congested. The CARIS process analyzed generic transmission, generation and demand response solutions in these regions that could ultimately yield savings for power consumers by enabling less costly power to reach them.

In the second phase of the study, developers are invited to propose specific transmission projects to address congestion and the NYISO conducts cost-benefit analyses for each of them.

## **NEW YORK'S ENERGY BLUEPRINT**

The NYISO is integrally involved with significant New York State government energy initiatives. We contribute analyses and perspective as an advisory member of New York State's Energy Planning Board.

In addition, our planning activities contribute to Governor Cuomo's New York Energy Highway initiative. Its objectives include adding 3,200 MW of new generation and transmission funded by public-private investment of up to \$5.7 billion.





# Technology

We are dedicated to devising and incorporating the most up-to-date and relevant technologies to manage the electric grid and wholesale energy markets, in the process benefitting consumers, stakeholders and the economy of New York State.

Here again, we saw synergistic advantages in technological achievements that built a smarter grid, activated the nation's most sophisticated power control center, and shared grid information across a broader region.

## SMART GRID

In 2013, working in concert with New York's transmission-owning utilities and power authorities we completed a major statewide Smart Grid project funded in part by the U.S. Department of Energy. It involved installing capacitor banks and phasor measurement units on the bulk transmission system. The geographically expansive effort, completed a few weeks before the summer's record-breaking peak demand, contributed to the system's successful performance. The phasor measurement units improve operators' ability to see and respond to issues on the grid, relaying system conditions 60 times per second — 360 times faster than before.

*"They are two words that every power grid operator learns and strives to put to use every day, and the subject of a New York smart grid effort adding phasor measurement units on the transmission system throughout the state: **situational awareness.**"*

*N.Y. aims to enhance grid resilience, awareness  
Megawatt Daily, June 20, 2013*



## UNPARALLELED VISIBILITY, RAPID RESPONSE

The centerpiece of our technology and infrastructure advancements has been the design, construction and operation of what many believe is the nation's most advanced power grid control center. In December 2013 we transferred operational control of the grid to the new complex.

The center's 2,300-square foot video wall is North America's largest utility installation. It displays a massive representation of New York's electric grid, with more than 3,000 live status points showing line flows and limits, transformer loading and generator output and much more. For the first time, in furtherance of our gas-electric coordination mission, major gas facilities are depicted as well as electric.

Elected officials and industry leaders have noted that the new Control Center will be a boon for New York's economy and job competitiveness; in addition to the construction and staff jobs already provided, the control center enhances power reliability that is critical to businesses, including the high-tech sector.

The center replaces the older power control center built in 1969 by the NYISO's predecessor, the New York Power Pool. That facility was upgraded to serve as a fully redundant, alternate control center, housing a new, more energy efficient data center and further insuring strengthened grid reliability.



# Authoritative Information

We continue to serve as a model ISO for those wishing to learn about state-of-the-art market design, planning and grid operations. Further, our website provides a broad array of energy-related publications, conference presentations, fact sheets, newsletters, and other informative materials. Central to these is the annual publication of the *Power Trends* report, which looks at the forces and factors affecting New York's energy future.

In 2013, NYISO senior leadership and staff provided more than 90 presentations, speeches and testimony to state, regional and international energy industry conferences, regulatory proceedings and other public forums.

## **LEADING THE DIALOGUE ON ENERGY ISSUES**

Two major conferences organized by the NYISO in 2013 attracted more than 500 participants and featured remarks and broad-ranging discussion by policy makers, regulators, market participants, influential consumers, and energy industry leaders.

*From the NYISO's inception in 1999 through the end of 2013, more than 4,562 visitors representing hundreds of companies from 86 nations around the world have toured our operations. Among those visiting the NYISO in 2013 were representatives from electric utilities, grid operators, and energy officials.*





**EXPLORING HISTORIC INDUSTRY CHANGE:  
ISO ENERGY CONFERENCE**

“*Navigating Change*,” held in Boston in May, was co-sponsored with ISO-New England. Key topics included emerging challenges such as the implications of the expanding role of natural gas as a fuel for power generation, increasing worldwide concerns about cybersecurity as grid technology expands, and various approaches to upgrading and modernizing aging electric system infrastructure.

Featured speakers included Rhode Island Governor Lincoln Chafee, New York Power Authority President Gil Quiniones, and Verizon cybersecurity specialist Ernie T. Hayden.

Panel topics explored:

- ◆ *New York Energy Highway Initiative*
- ◆ *Future of the power grid*
- ◆ *Environmental regulations, technology and smart grid progress*
- ◆ *Continued development of renewable resources*
- ◆ *Growth of social media and cloud computing to leverage smart grid technologies and encourage energy efficient behavior*

Among the many energy issues discussed at the *Navigating Change* conference, it was clear that there is no set path in delivering one-stop solutions. In concluding the conference NYISO President and CEO Steve Whitley noted, “No one has invented a GPS device to navigate the dynamic changes we all face today. But I am confident we are up to the challenge.”





## **SURVEYING THE CHANGING LANDSCAPE: DISTRIBUTED ENERGY RESOURCE WORKSHOP**

In December, the burgeoning field of Distributed Energy Resources (DER) attracted a full house to a NYISO-sponsored workshop, featuring thought-provoking discussion of the implications of DER for the bulk power system, competitive wholesale electricity market and energy consumers.

Commonly referred to as smaller-scale, on-site power generation and storage technologies, DERs can supply all or a portion of the end-user customer's electric load. These technologies also may inject power into a transmission and distribution system or a non-utility local network operating in parallel with the utility grid. Related technologies include solar photovoltaics, combined heat and power or cogeneration systems, microgrids, wind turbines, microturbines, back-up generators and energy storage.

Featured speakers at the workshop included:

- ◆ *New York State Public Service Commission Chair Audrey Zibelman*
- ◆ *Mason Emmett, Deputy Director of the Office of Energy Policy and Innovation at FERC*

The DER Workshop set the stage for the NYISO's comprehensive review of the issues and opportunities presented by distributed energy resources.



# III. 2013 NYISO Board of Directors *as of December 31, 2013*

**Robert A. Hiney, Board Chair**

*Former Executive Vice President for Power Generation of the New York Power Authority (NYPA)*

**Michael B. Bemis**

*Former President of Exelon Power and President of Energy Delivery for the Exelon Corporation*

**Ave M. Bie**

*Partner in the law firm of Quarles & Brady and former Chair of the Wisconsin Public Service Commission*

**Daniel C. Hill**

*Former Senior Vice President and Chief Information Officer (CIO) of Exelon Corporation*

**Alfred F. Boschulte**

*President of AFB Consulting, specializing in strategic planning and operating margin improvements for telecommunications firms*

**Erland E. Kailbourne**

*Chairman of the Board of Financial Institutions, Inc. and its subsidiary Five Star Bank*

**James V. Mahoney**

*President and CEO of Energy Market Solutions, Inc. and former President and CEO of DPL Inc., a regional energy and utility company*

**Thomas F. Ryan, Jr.**

*Former President and COO of the American Stock Exchange*

**Stephen G. Whitley**

*President and CEO – New York Independent System Operator*

**NOTE:** *Anastasia Song served as a member of the NYISO Board of Directors through June 2013. Vikki L. Pryor filled the vacancy in January 2014.*





*left to right sitting - Ave Bie, Michael Bemis, Robert Hiney, Stephen Whitley*

*left to right standing - Alfred Boschulte, Thomas Ryan, Vikki Pryor, Daniel Hill, James Mahoney, Erland Kailbourne*



## IV. 2013 NYISO Leadership Team: Corporate Officers *as of December 31, 2013*

**Stephen G. Whitley**

*President and CEO*

**Rick Gonzales**

*Senior Vice President and Chief Operating Officer*

**Richard Dewey**

*Senior Vice President and Chief Information Officer*

**Rana Mukerji**

*Senior Vice President, Market Structures*

**Henry Chao**

*Vice President, System and Resource Planning*

**Jennifer Chatt**

*Vice President, Human Resources*

**Diane L. Egan**

*Board Secretary and Corporate Secretary*

**Robert E. Fernandez**

*General Counsel*

**Cheryl Hussey**

*Vice President and Chief Financial Officer*

**Emilie Nelson**

*Vice President, Market Operations*

**Thomas J. Rumsey**

*Vice President, External Affairs*

**Wesley Yeomans**

*Vice President, Operations*

# V. Shared Governance

Under its unique shared governance system, the NYISO is governed jointly by an independent Board of Directors working with Market Participants – transmission owners, generation owners, other suppliers, end-use consumers, public power and environmental parties.

The NYISO has three standing stakeholder committees: the Management Committee, the Business Issues Committee and the Operating Committee. These collaborative groups provide stakeholders with the opportunity to participate in forums where issues regarding the administration of the markets, the operation of New York's bulk electricity grid, and future system planning are discussed, debated, and voted on.

The 2013 shared governance process involved 261 meetings of committees, subcommittees, task forces and working groups. By maintaining an open, collaborative process soliciting and considering diverse points of view, the various elements of the NYISO's mission and expanding roles are better understood by all who participate. This interdependent system and commitment to consensus building is an invaluable asset as the NYISO moves forward to meet and master future challenges.

## Committee Chairs and Co-Chairs *as of December 31, 2013*

### **Management Committee**

Bart Franey – *Chair, National Grid*

Alan Ackerman – *Vice Chair, Customized Energy Solutions*

### **Business Issues Committee**

Deidre Altobell – *Chair, Con Ed*

Brad Kranz – *Vice Chair, NRG*

### **Operating Committee**

Scott Leuthauser – *Chair, HQ Energy Services US*

Andrew Antinori – *Vice Chair, NYPA*

# VI. Market Participants *as of December 31, 2013*

3M Company	Bayonne Energy Center, LLC	CCI Rensselaer LLC
AB Energy NE Pty, Ltd.	BBPC, LLC, d/b/a Great Eastern Energy	CCI Roseton LLC
Abest Power & Gas, LLC	BJ Energy LLC	CECONY-LSE
ABN Energy, LLC	Black Oak Energy LLC	Censtar Energy Corp
AC Energy, LLC	Bluco Energy, LLC	Central Hudson Gas & Electric Corp.
Accent Energy Midwest II LLC dba IGS Energy	Blue Pilot Energy, LLC	Centre Lane Trading Ltd.
AG Energy, L.P.	Blue Rock Energy, Inc.	Champion Energy Services, LLC
Aggressive Energy, LLC	Bluefin Electricity Trading II LLC	CHI Power Marketing, Inc
Agway Energy Services, LLC	BNP Paribas Energy Trading GP	Chief Energy Power, LLC
Albany Energy LLC	Borex Hydro Operations Inc	Citigroup Energy Inc.
Aleph One, Inc.	Bounce Energy NY, LLC	Citizens Choice Energy, LLC
Allegany Generating Station, LLC	BP Energy Company	City of Niagara Falls
Alpha Gas and Electric, LLC	Brookfield Energy Marketing LP	City Power & Gas, LLC
Ambit New York, LLC	Brookfield Renewable Energy Marketing US LLC	City Power Marketing, LLC
American Power & Gas, LLC	Broome Energy Resources, LLC	Clear Choice Energy, LLC
Ameristar Energy LLC	Brown's Energy Services LLC	Clearview Electric, Inc.
Amherst Utility Cooperative (AUC)	Bruce Power Inc.	Cobalt Capital Partners III, LLC
Amplified Power & Gas, LLC	Buy Energy Direct, LLC	Columbia Utilities Power, LLC
AP Gas & Electric (NY), LLC dba APG&E	Calpine Energy Services LP	Commerce Energy, Inc. d/b/a Amigo Energy
AP Gas & Electric (TX), LLC	Canadian Wood Products - Montreal Inc	Con Edison Solutions, Inc.
Astoria Energy II, LLC	Canandaigua Power Partners, LLC	ConocoPhillips Company
Astoria Energy LLC	Canastota Windpower LLC	Consolidated Edison Co. of New York, Inc.
Astoria Generating Company L.P.	Cargill Power Markets, LLC	Consolidated Edison Energy, Inc.
Astral Energy LLC	Carr Street Generating Station LP	Consolidated Hydro New York, Inc.
Atlantic Energy, LLC	Carthage Energy, LLC	Constellation Energy Commodities Group, Inc.
Axon Energy, LLC	Castleton Commodities Merchant Trading L.P.	Constellation Energy Power Choice, Inc
Barclays Bank PLC	Castleton Power, LLC	Constellation NewEnergy, Inc.
Barclays Services Corporation	Cayuga Operating Company, LLC	Copperwood Energy Fund, LP



Corporate Services Support Corp.  
County of Erie NY  
County of Niagara NY  
Covanta Niagara, LP  
CP Energy Marketing (US) Inc.  
Credit Suisse (USA), Inc.  
Cummins Inc  
Cutone & Company Consultants, LLC  
DB Energy Trading LLC  
DC Energy LLC  
DC Energy New York, LLC  
Demand Response Partners, Inc.  
Demansys Energy LLC  
Direct Energy Business, LLC  
Direct Energy Marketing Inc  
Direct Energy Services, LLC  
Dominion Retail, Inc.  
DTE Energy Supply, Inc.  
DTE Energy Trading Inc  
Dynamis ETF, LLC  
Dynasty Power Inc  
Dynergy Danskammer, LLC  
Dynergy Marketing and Trade, LLC (DMT)  
Eagle Creek Hydro Power, LLC  
Eagle Power Authority, Inc.  
Eagle Power, LLC  
East Coast Power and Gas, LLC  
East Coast Power, LLC  
EDF Industrial Power Services (NY), LLC  
EDF Trading North America, LLC  
Edison Mission Marketing & Trading, Inc.  
EDP Renewables North America LLC  
eKapital NY, LLC  
Eligo Energy, LLC  
Eligo Energy NY, LLC

Emera Energy Services Subsidiary No. 1, LLC  
Emera Energy Services, Inc  
Emera Energy U.S. Subsidiary No. 1, Inc.  
Emera Energy U.S. Subsidiary No. 2, Inc.  
Empire Generating Co, LLC  
Empire Natural Gas Corp.  
Energetix, Inc.  
Energy Connect, Inc.  
Energy Conservation and Supply, Inc.  
Energy Cooperative of America, Inc dbaEnCoop of NY  
Energy Curtailment Specialists, Inc.  
Energy Limited Inc  
Energy Plus Holdings LLC  
Energy Services Providers, Inc dba NY Gas&Electric  
Energy Spectrum Inc.  
energy.me midwest, llc  
EnergyMark, LLC  
EnerNOC, Inc.  
Enerwise Global Technologies, Inc  
Entergy Nuclear Fitzpatrick, LLC  
Entergy Nuclear IP-2 LLC  
Entergy Nuclear IP3, LLC  
Entergy Nuclear Power Marketing LLC  
Entergy Solutions LLC  
Entra Energy LLC  
Erie Boulevard Hydropower LP  
Erie Wind, LLC  
ESL Federal Credit Union  
ETC Endure Energy LLC  
Ethical Electric Benefit Co. d/b/a Ethical Electric  
Exelon Generation Company LLC  
Family Energy Inc  
FC Energy Services Company, LLC  
First Choice Energy, Inc.

First Commodities International Inc.  
Flanders Energy LLC  
Flat Rock Windpower II LLC  
Flat Rock Windpower LLC  
Franklin Power LLC  
Freeport Electric  
Frontier Utilities Northeast LLC  
FTR Energy Services, LLC  
Fulcrum Retail Energy New York, LLC d/b/a Tara Energy  
Galaxy Energy, LLC  
Galt Power Inc.  
Gateway Energy Services Corporation  
GDF Suez Energy Marketing NA, Inc  
GDF Suez Energy Resources NA, Inc  
GDF SUEZ Retail Energy Solutions, LLC dba Think Energy  
GenOn Energy Management, LLC  
Glacial Energy New York, Inc.  
Global Energy LLC  
Great Bay Energy III, LLC  
Great Bay Energy IV, LLC  
Green Mountain Energy Company  
Green Mountain Power Corporation  
Greenlight Energy Inc  
GRG Energy LLC  
Gridway Energy Corp.  
Griffiss Utility Services Corporation  
Gulf Oil Limited Partnership  
Hampshire Paper Co., Inc.  
Hanissim Capital, LLC  
Hardscrabble Wind Power LLC  
Hess Corporation  
Hess Energy Marketing, LLC  
Hess Small Business Services, LLC

HIKO Energy, LLC	Lockport Energy Assoc.	Niagara Generation, LLC
Homer City Generation, L.P.	Long Island Power Authority	Niagara Mohawk Power Corp.
HOP Energy, LLC	Lumens Energy Supply LLC	Niagara University
Howard Wind LLC	Lyonsdale Biomass, LLC	Niagara Wind Power, LLC
HQ Energy Services (US)	M&R Energy Resources Corp.	Nine Mile Point Nuclear Station, LLC
HSBC Bank USA	Macquarie Energy LLC	Nissequogue Cogen Partners
Hudson Energy Services, LLC	Madison Windpower, LLC	Noble Altona Windpark, LLC
Iberdrola Renewables, LLC	MAG Energy Solutions Inc.	Noble Americas Energy Solutions LLC
IDT Energy, Inc	Major Energy Electric Services, LLC	Noble Americas Gas & Power Corp
Indeck Energy Svs of Silver Springs	Marathon Power LLC	Noble Bliss Windpark, LLC
Indeck-Corinth LP	Marble River, LLC	Noble Chateaugay Windpark, LLC
Indeck-Olean LP	Mercuria Energy America, Inc	Noble Clinton Windpark I, LLC
Indeck-Oswego LP	Merrill Lynch Commodities, Inc.	Noble Ellenburg Windpark, LLC
Indeck-Yerkes LP	Midwest Energy Trading East LLC	Noble Wethersfield Windpark LLC
Independence Energy Group LLC	Mitchell Supreme Fuel Co.	NOCO Electric LLC
Innovative Energy Systems, Inc.	Model City Energy LLC	North American Power and Gas LLC
Innoventive Power LLC	Modern Innovative Energy, LLC	North Eastern States, Inc
Integrays Energy Services of New York, Inc.	Monroe County NY	North Energy Power, LLC
Integrays Energy Services, Inc.	Monterey NY, LLC	Northbrook Lyons Falls, LLC
International Paper Company	Morgan Stanley Capital Group, Inc.	Northbrook New York LLC
Iron Energy LLC dba Kona Energy	MPower Energy LLC	Northern States Power Company
Islip Resource Recovery Agency	Nationwide Energy, LLC	NRG Power Marketing LLC
J Aron and Company	Negawatt Business Solutions	NuEnerGen, LLC
J. P. Morgan Ventures Energy Corporation	NetPeak Energy Group LLC	NYSEG Solutions, Inc.
Jamestown Board of Public Utilities	New Athens Generating Company LLC	Oasis Power, LLC d/b/a Oasis Energy
Just Energy New York Corp	New Wave Energy Corp	Occidental Chemical Corp.
Kaleida Health	New York Industrial Energy Buyers, LLC	Occidental Power Services Inc
Kinkaid Capital Corporation	New York Municipal Power Agency	OCP Resources, LLC
Kiwi Energy NY LLC	New York Power Authority	Ontario Power Generation Energy Trading, Inc.
L&L Energy, LLC	New York State Electric & Gas Corp.	Ontario Power Generation, Inc.
Lakeside New York, LLC	Next Utility Energy LLC	Orange & Rockland Utilities, Inc.
Lavand & Lodge, LLC	NextEra Energy Power Marketing, LLC	ORU-LSE
Lexington Power & Light, LLC	NextEra Energy Services Massachusetts, LLC	Pacific Summit Energy LLC
Liberty Power Holdings LLC	NextEra Energy Services New York, LLC	Palmco Power NJ, LLC
Linde Energy Services, Inc.	Niagara Frontier Transportation Authority	Palmco Power NY, LLC

People's Power & Gas LLC  
Pepco Energy Services  
Perigee Energy, LLC  
Phoenix Energy Group, LLC  
Planet Energy (New York) Corp  
Plant-E Corp.  
Plymouth Rock Energy, LLC  
Power City Partners, L.P.  
Powerex Corporation  
PPL EnergyPlus, LLC  
PSEG Energy Resource & Trade, LLC  
Public Power, LLC  
Pure Energy Inc  
R.E. Ginna Nuclear Power Plant, LLC  
Rainbow Energy Marketing Corp  
RBC Energy Services LP  
Red Wolf Energy Trading, LLC  
ReEnergy Chateaugay LLC  
Reliant Energy Northeast, LLC  
Riverbay Corporation  
Robison Energy, LLC  
Rochester Gas & Electric Corp.  
Royal Bank of Canada  
S.J. Energy Partners, Inc.  
Sanctorum Energy Inc.  
Saracen Energy East LP  
Saracen Power LP  
Saranac Power Partners, L.P.  
SBR Energy, LLC  
Schools & Municipal Energy Cooperative (SMEC)  
Select Energy, Inc.  
Selkirk Cogen Partners, L.P.  
Seneca Energy II, LLC  
Seneca Power Partners, L.P.  
SESCO Enterprises LLC

Sheldon Energy LLC  
Shell Energy North America (US), L.P.  
Siemens Industry, Inc  
Sithe Independence Power Partners L.P.  
Smart One Energy, LLC  
Sol Energy, LLC  
Solios Power LLC  
Somerset Operating Company, LLC  
South Jersey Energy Company  
South Jersey Energy ISO1, LLC  
South Jersey Energy ISO2, LLC  
South Jersey Energy ISO3, LLC  
South Jersey Energy ISO4, LLC  
Spark Energy, L.P.  
Spartan Electricity Futures, Inc  
Sperian Energy Corp  
SREC Generating Company, Inc  
Starion Energy NY, Inc  
StatArb Investment LLC  
State of New York - OGS  
State of New York - OGS Municipal  
State of New York - SUNY  
State of New York - SUNY Buffalo  
Stephentown Spindle, LLC  
Sterling Power Partners, L.P.  
Stony Creek Energy LLC  
Stream Energy New York, LLC  
Superior Plus Energy Services Inc  
Synergy Biogas LLC  
Syracuse Energy Corporation  
TC Ravenswood, LLC  
TEC Energy Inc.  
Tenaska Power Services Co.  
Texas Retail Energy, LLC  
The Dayton Power and Light Company

Time Warner Inc.  
Tops Markets, Inc.  
Trademark Merchant Energy, LLC  
TransAlta Energy Marketing (U.S.) Inc.  
TransCanada Power Marketing, Ltd.  
Triton Power Company  
TrueLight Commodities, LLC  
Twin Cities Power, LLC  
Twin Eagle Resource Management, LLC  
U.S. Energy Partners LLC  
UGI Energy Services, Inc  
University of Rochester  
Utility Expense Reduction, LLC  
Velocity American Energy Master I, L.P.  
Verde Energy USA New York, LLC  
Village of Hilton  
Village of Rockville Centre  
Viridian Energy NY, LLC  
Viridity Energy, Inc.  
Virtual Power Hedging, LLC  
Vitol Inc.  
Watchtower Bible and Tract Society of New York, In  
Western New York Wind Corp.  
Wheelabrator Hudson Falls, LLC  
Wheelabrator Westchester, L.P.  
Windy Bay Power, LLC  
WM Renewable Energy, LLC  
XO Energy NY, LP  
XOOM Energy New York, LLC  
XOOM Energy, LLC





## Independent Auditors' Report

### **The Board of Directors**

**New York Independent System Operator, Inc.:**

### **Report on the Financial Statements**

We have audited the accompanying financial statements of New York Independent System Operator, Inc. which comprise the statements of financial position as of December 31, 2013 and 2012, and the related statements of activities, and cash flows for the years then ended, and the related notes to the financial statements.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinion***

In our opinion, the financial statements referred to above present fairly in all material respects, the financial position of New York Independent System Operator, Inc. and the results of its operations and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Albany, New York  
March 14, 2014

**KPMG LLP**

## Statement of Financial Position

*December 31, 2013  
and 2012*

<b>Assets</b>	<b>2013</b>	<b>2012</b>
Current assets:		
Cash and cash equivalents	\$ 47,745,703	43,304,540
Restricted cash	604,091,333	335,744,418
Accounts receivable – net (note 2)	110,495,816	6,867,609
Prepaid expenses	6,632,371	6,059,965
Regulatory assets – current portion (note 3)	—	1,999,522
Other current assets	39,143	210,792
Total current assets	<u>769,004,366</u>	<u>394,186,846</u>
Noncurrent assets:		
Regulatory assets (note 3)	12,511,584	16,802,444
Property and equipment – net (note 4)	124,896,857	101,710,411
Other noncurrent assets (note 7)	5,329,483	7,853,676
Total noncurrent assets	<u>142,737,924</u>	<u>126,366,531</u>
Total	<u>\$ 911,742,290</u>	<u>520,553,377</u>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 328,604,680	119,669,931
Market participant security deposits	389,780,555	234,068,551
Market participant prepayments	6,553,030	2,148,389
Working capital reserve (note 10)	33,008,965	33,014,603
Long-term debt – current portion (note 6)	27,152,961	27,674,341
Regulatory liabilities – current portion (note 3)	7,582,953	1,253,357
Deferred revenue (note 11)	5,209,576	4,358,125
Other current liabilities (note 8)	1,879,320	2,184,757
Total current liabilities	<u>799,772,040</u>	<u>424,372,054</u>
Noncurrent liabilities:		
Accrued pension liability (note 8)	2,030,119	5,031,928
Accrued postretirement liability (note 8)	3,087,905	5,027,984
Regulatory liabilities (note 3)	7,230,016	6,578,991
Other noncurrent liabilities (notes 7 and 8)	21,102,061	18,724,947
Long-term debt (note 6)	78,520,149	60,817,473
Total noncurrent liabilities	<u>111,970,250</u>	<u>96,181,323</u>
Commitments and contingencies (note 12)		
Total liabilities	<u>911,742,290</u>	<u>520,553,377</u>
Unrestricted net assets	—	—
Total liabilities and net assets	<u>\$ 911,742,290</u>	<u>520,553,377</u>

See accompanying notes to financial statements.



# Statements of Activities

December 31, 2013  
and 2012

	<u>2013</u>	<u>2012</u>
Revenues:		
Rate Schedule 1 tariff charge	\$ 146,951,582	145,159,810
Grant revenue (notes 13 and 14)	8,942,426	15,554,109
Planning studies revenue	2,867,211	2,252,893
Fees and services	1,073,961	940,368
Interest income	6,000	4,005
	<u>159,841,180</u>	<u>163,911,185</u>
Operating expenses:		
Compensation and related benefits (note 8)	73,053,490	69,904,942
Professional fees and consultants	21,730,017	20,029,274
Depreciation and amortization	22,707,964	19,573,767
Maintenance, software licenses and facility costs	16,879,278	17,243,537
Federal energy regulatory commission fees	10,951,756	11,007,320
Grant expenses – New York transmission owners (note 13)	4,864,596	10,091,002
Administrative and other expenses	4,093,293	4,273,282
Telecommunication expenses	3,704,215	4,809,169
Interest expense	2,971,226	2,954,414
Insurance expense	2,785,320	2,810,703
Training, travel, and meeting expenses	1,938,976	1,396,045
Northeast power coordinating council fees	283,927	240,034
Change in fair value of interest rate swaps and caps (note 7)	(6,122,878)	(422,304)
	<u>159,841,180</u>	<u>163,911,185</u>
Change in unrestricted net assets	—	—
Unrestricted net assets, beginning of year	<u>—</u>	<u>—</u>
Unrestricted net assets, end of year	<u>\$ —</u>	<u>—</u>

See accompanying notes to financial statements.

## Statements of Cash Flows

December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
Cash flows from operating activities:		
Change in unrestricted net assets	\$ —	—
Adjustments to reconcile change in unrestricted net assets to net cash provided by operating activities:		
Depreciation and amortization	22,707,964	19,573,767
Loss on disposition of assets	28,826	428,215
Change in operating assets and liabilities:		
Increase in accounts receivable and prepaid expenses	(104,200,613)	(2,495,286)
(Increase) decrease in restricted cash	(268,346,915)	13,510,750
Decrease (increase) in regulatory assets	1,049,229	(2,791,259)
Decrease other assets	2,695,842	813,941
Increase in accounts payable and accrued expenses	208,631,299	22,296,109
Increase in market participant prepayments	4,404,641	849,850
Increase (decrease) in market participant security deposits	155,712,004	(33,343,984)
Decrease in working capital reserve	(5,638)	(10,959)
Increase (decrease) increase in regulatory liabilities	5,618,008	(982,530)
Increase in deferred revenue and other liabilities	4,585,006	10,018,894
Net cash provided by operating activities	<u>32,879,653</u>	<u>27,867,508</u>
Cash flows from investing activities:		
Acquisition of property and equipment (including capitalized interest)	<u>(45,619,786)</u>	<u>(40,150,034)</u>
Net cash used in investing activities	<u>(45,619,786)</u>	<u>(40,150,034)</u>
Cash flows from financing activities:		
Proceeds from revolving credit facility loan	4,000,000	9,000,000
Repayment of revolving credit facility loan	(4,000,000)	(9,000,000)
Repayment of 2007 – 2010 budget facility loan	(9,785,714)	(16,385,714)
Proceeds from 2011 – 2013 budget facility loan	24,200,000	25,800,000
Repayment of 2011 – 2013 budget facility loan	(17,433,334)	(8,333,333)
Proceeds from 2011 Infrastructure Loan	—	7,419,046
Repayments of 2011 Infrastructure Loan	—	(10,659,278)
Proceeds from 2012 Infrastructure Loan	21,155,637	17,582,715
Repayment of Mortgage and Renovations loans	(955,293)	(897,227)
Net cash provided by financing activities	<u>17,181,296</u>	<u>14,526,209</u>
Net increase in cash and cash equivalents	4,441,163	2,243,683
Cash and cash equivalents – beginning of year	<u>43,304,540</u>	<u>41,060,857</u>
Cash and cash equivalents – end of year	<u>\$ 47,745,703</u>	<u>43,304,540</u>
Supplemental disclosure of cash flow:		
Information – cash paid during the year for interest, net of capitalized interest	\$ 2,936,187	2,917,938
Noncash operating activity:		
Change in pension and postretirement liabilities	\$ 6,603,766	428,958
Noncash investing activities:		
Property and equipment additions which were accrued but not paid	\$ 5,700,096	5,396,646
Property and equipment additions previously accrued which were paid	5,396,646	3,535,742

See accompanying notes to financial statements.

**(1) Summary of Significant Accounting Policies**

**(a) Business Description**

The New York Independent System Operator, Inc. (NYISO) was formed in April 1997 and commenced operations on December 1, 1999. NYISO is incorporated in the state of New York as a not-for-profit organization. NYISO assumed the responsibilities of its predecessor, the New York Power Pool (NYPP), which had coordinated the reliability of New York State's electric power grid for more than 30 years. Formed as a result of Federal Energy Regulatory Commission (FERC) policies, NYISO monitors a network of 11,000 circuit miles of high-voltage transmission lines and serves approximately 360 market participants.

NYISO's mission, in collaboration with its stakeholders, is to serve the public interest and provide benefit to consumers by maintaining and enhancing regional reliability, operating open, fair and competitive wholesale electricity markets, planning the power system for the future, and providing factual information to policy makers, stakeholders and investors in the power system. The NYISO facilitates fair and open competition in the wholesale electricity markets in which electricity and related services are purchased and sold on the basis of competitive bidding. Billing invoices are issued by NYISO to each market participant to settle transactions occurring in the NYISO markets.

NYISO is governed by an independent board of directors, as well as a committee structure consisting of market participant representatives. In addition to FERC oversight, NYISO is also subject to regulation in certain aspects by the New York State Department of Public Service.

**(b) Basis of Accounting and Presentation**

The accompanying financial statements have been prepared on an accrual basis of accounting in accordance with U.S. generally accepted accounting principles.

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include the useful lives of fixed assets, recoverability of regulatory assets, the valuation of derivative instruments, and reserves for employee benefit obligations.

**(c) Regulatory Accounting**

NYISO's financial statements are prepared in accordance with generally accepted accounting principles for rate-regulated entities, Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) Topic 980, *Regulated Operations*. As such, regulators may permit specific incurred costs, typically treated as expenses by unregulated entities, to be deferred and expensed in future periods when it is probable that such costs will be recovered in customer rates. Incurred costs are deferred as regulatory assets when NYISO concludes that it is probable future revenues will be provided to permit recovery of the previously incurred cost. A regulatory liability is recorded when amounts that have been recorded by NYISO are likely to be refunded to customers through the rate-setting process.



**(d) Revenue Recognition**

Settlements of market participants' energy transactions are not reflected in NYISO's Statements of Activities since they do not represent revenues or expenses of NYISO, as NYISO merely acts as an intermediary in the settlement process. In this role, NYISO receives and disburses funds to/from market participants for each settlement period.

Effective July 1, 2012, NYISO's two FERC-approved tariffs, the Open Access Transmission Tariff (OATT) and the Market Administration and Control Area Services Tariff (Services Tariff), were amended to clarify NYISO's role as the single counterparty to market participant transactions in the NYISO markets. For all market participant transactions in the NYISO markets, flash title passes through NYISO immediately prior to passing to the ultimate buyer and seller of the product. This arrangement reinforces NYISO's authority to continue to net a market participant's offsetting financial positions in NYISO markets for credit and billing purposes; provides clarity in NYISO's legal standing to pursue collection from a bankrupt market participant; and, also complies with the FERC directives on credit policy requirements for competitive wholesale electricity markets.

NYISO's tariffs allow recovery of NYISO's capital requirements, operating expenses and debt service costs through a surcharge assessed to market participants. The revenue from this surcharge, Rate Schedule 1, is earned when energy is scheduled and dispatched. Market participants are then billed for such charges in the subsequent settlement period's invoice.

NYISO's Rate Schedule 1 includes a timing mechanism that effectively meets the requirements of an alternative revenue program set forth in ASC Topic 980, *Regulated Operations*, Subtopic 602, *Revenue Recognition*. Accordingly, revenue is recognized for net financing obligations and capital costs incurred during the reporting period based on the revenue requirement formula in the tariffs. NYISO has recorded an Other Noncurrent Liability of \$14,376,435 and \$9,463,626, respectively, in the accompanying 2013 and 2012 Statements of Financial Position in connection with this rate-making recovery mechanism.

Revenues recorded as planning studies revenues arise from billing and collection services in the study service agreement process performed by NYISO. These revenues are offset by the corresponding study expenses, recorded in operating expenses, which were incurred in performing such studies. A portion of the deposits related to planning studies are nonrefundable and recorded as revenue when received.

**(e) Government Grants**

NYISO recognizes government grants when there is reasonable assurance that NYISO will comply with the conditions attached to the grant arrangement and the grant will be received. Government grants are recognized in the Statements of Activities in the period in which NYISO recognizes the related costs for which the government grant is intended to compensate.

**(f) Cash and Cash Equivalents**

NYISO considers short-term marketable securities with original maturities of three months or less to be cash equivalents. The cash equivalents at December 31, 2013 and 2012 were held in certificates of deposit and money market accounts invested primarily in short-term U.S. government obligations. NYISO's cash and cash equivalents consist primarily of funds accumulated for the working capital reserve, for general operating purposes, and amounts for funding employee benefit plans. In accordance with certain loan agreements, NYISO is required to maintain compensating balances.

**(g) *Restricted Cash***

Restricted cash consists primarily of market participant security deposits held in escrow accounts, amounts prepaid by market participants in advance of settlement billing dates, amounts collected on settlement invoices, amounts due to market participants for overcollections on the voltage market, amounts collected for Transmission Congestion Contract (TCC) auctions, and amounts deposited for planning studies. Security deposits are invested at the market participant's choice in money market funds or short or intermediate-term bond funds. NYISO presents changes in restricted cash in the operating activities section of the Statements of Cash Flows instead of in the investing activities section. NYISO has determined that this classification is more suitable to the nature of its operations.

**(h) *Other Assets***

Other assets consist primarily of timing differences on certain rate-making recoveries, the fair value of interest rate swap agreements, noncurrent prepaid expenses, and miscellaneous receivables.

**(i) *Property and Equipment***

Property and equipment are recorded at cost. NYISO capitalizes property and equipment additions in excess of \$5,000 with a useful life greater than one year. Depreciation is computed on the straight-line method over the assets' estimated useful lives of three to five years, except for building and building improvements, which are depreciated on a straight-line basis over 20 years. When assets are retired or otherwise disposed of, the cost and related depreciation are removed, and any resulting gain or loss is reflected in expense for the period. Repairs and maintenance costs are charged to expense when incurred.

Labor, overhead, interest, consulting, and related costs incurred to acquire and develop computer software for internal use are capitalized and amortized using the straight-line method over three years. Costs incurred prior to the determination of feasibility of developed software and following the in-service date of developed software are expensed.

NYISO capitalizes the interest cost as part of the historical cost of acquiring certain assets.

Long-lived assets are recorded at cost, and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. Management is not aware of any events or changes in circumstances that would necessitate a review of any long-lived assets as of the years ended December 31, 2013 and 2012.

**(j) *Working Capital Reserve***

In order to maintain the liquidity and stability of NYISO's markets, NYISO has accumulated a working capital fund through amounts charged to market participants under the Rate Schedule 1. Any change to NYISO's working capital needs would be billed to market participants in future Rate Schedule 1 charges. Market participants are entitled to interest on their principal contributions to the working capital reserve. Each market participant is allocated interest based on the respective ratio share of each market participant's principal contributions to the total working capital fund. Accumulated interest on the working capital fund is distributed annually to market participants.

**(k) Market Participant Prepayments**

Amounts received from certain market participants who do not provide an alternate form of financial assurance and must prepay their obligations to NYISO in advance of settlements billing dates are recorded as market participant prepayments. Also, certain market participants choose to make advance payments to the NYISO to be applied to future settlement invoices.

**(l) Deferred Revenue**

Advance payments from developers for planning studies, and funds received from FERC for the purpose of enhancing NYISO's surveillance capabilities are reflected as deferred revenue. Fees for participation in NYISO's governance process are billed to market participants in advance of the year for which they apply and are amortized over the related governance period. All such unamortized amounts are also included in deferred revenue.

**(m) Income Taxes**

NYISO has been recognized by the Internal Revenue Service as an organization described in Internal Revenue Code (The Code) Section 501(c)(3) and is generally exempt from income taxes under Section 501(a) of the Code. During the calendar years 2013 and 2012, no unrelated business taxable income was generated by NYISO, and therefore no disclosure is made for federal or state income taxes.

The NYISO has determined prior to recording any benefit in the financial statements that it is more likely than not that the tax position will be sustained upon examination by the appropriate taxing authorities, as required by the *Accounting for Uncertainty in Income Taxes* Topic of the FASB ASC. A tax position is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon settlement.

**(n) Fair Value**

NYISO utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. Fair value is determined based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between the observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 inputs: Unadjusted quoted prices in active markets for identical assets or liabilities that NYISO has the ability to access at the measurement date
- Level 2 inputs: Other than quoted prices included within Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability
- Level 3 inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for a situation in which there is little, if any, market activity for the asset or liability at the measurement date

The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest-level input that is available for that particular financial instrument.



NYISO's financial instruments consist primarily of cash and cash equivalents, restricted cash, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses, short-term and long term debt, and benefit plan assets such that carrying value approximates fair value. The fair value of derivative instruments and benefit plan assets is discussed in notes 7, and 8, respectively.

**(o) Pension and Other Postretirement Benefit Plans**

NYISO has a defined benefit pension plan covering certain of its employees upon their retirement. The benefits are based on years of service and employee's compensation during the five years before retirement. NYISO also sponsors a defined benefit medical plan for retired employees and their dependents. NYISO records annual amounts relating to its pension and postretirement plans based on calculations that incorporate various actuarial and other assumptions, including discount rates, mortality, assumed rates of return, compensation increases, turnover rates, and healthcare costs and trend rates. Assumptions are reviewed on an annual basis and modifications are made to the assumptions based on current rates and trends. The effect of modifications made to those assumptions utilized in recording its obligations under its plans are reasonable based on its experience and market conditions.

The net periodic costs are recognized as employees render the services necessary to earn the pension and postretirement benefits. Unamortized amounts that are expected to be recovered in rates in future years are recorded as a regulatory asset or liability. See note 8 for additional information.

**(p) Concentration of Credit Risk**

Financial instruments that subject NYISO to credit risk consist primarily of market settlement invoices and Rate Schedule 1 revenue due from market participants. As provided in the OATT and Services Tariff, NYISO reviews the creditworthiness of market participants, who are required to either maintain certain financial statement criteria and/or approved credit ratings, to post specified financial security in an amount sufficient to cover their outstanding liability to NYISO, or to prepay their obligations in advance of settlement billing dates.

NYISO's tariffs establish specific periods for the adjustment of settlement invoices and for market participant challenges to amounts billed for a particular service period. Settlement invoices can be adjusted for up to four months after the date of the monthly invoice issuance, and these invoices can be challenged for an additional one month after the issuance of all settlement adjustment invoices. Subsequent invoices issued during the settlement adjustment period "true up" amounts previously billed. After all true-up invoices are issued during the settlement adjustment period, market participants may challenge the amounts billed for a particular service period. If NYISO agrees with the provisions of the challenge, a final invoice is issued for that service period. As a result, NYISO is exposed to credit risk until all settlement adjustment and final invoices for each service period are finalized and liquidated. As of December 31, 2013, the adjustments and true-ups of all settlement invoices through March 2013 were completed. However, in the event of a market participant default and bad debt loss, Rate Schedule 1 of the OATT allows NYISO to recover bad debt losses from all remaining market participants on future invoices.

**(q) Derivative Instruments**

NYISO recognizes all derivative instruments as either assets or liabilities in the Statement of Financial Position at their respective fair value. The fair values of NYISO's derivative instruments are quoted by external sources. The changes in the fair value of these derivatives are recorded as a change in fair value of interest rate swaps in the Statement of Activities. Due to NYISO's regulated rates,

any changes in fair value of these derivative instruments are recorded as either Other Current Assets or Other Noncurrent Liabilities, as appropriate. As payments on these derivative instruments are recorded, they are classified as interest expense.

NYISO uses derivative instruments primarily to hedge the cash flow effects of fluctuations in its interest rate costs. NYISO is exposed to credit loss in the event of nonperformance by the commercial banks under the interest rate swap agreements. The credit risk related to hedge agreements is limited to the cost to NYISO to replace the aforementioned hedge arrangements with like instruments. NYISO monitors the credit standing of the counterparties and anticipates that the counterparties will be able to fully satisfy their obligations under the hedge arrangements. See note 7 for additional information.

## (2) Accounts Receivable

NYISO's accounts receivable at December 31, 2013 and 2012 consisted of the following:

	<u>2013</u>	<u>2012</u>
Billed:		
Current-due settlement invoices	\$ 96,162,494	—
Past-due-settlement invoices	1,572,296	997,376
Grants billed receivables	540,780	889,486
Miscellaneous billed receivables	154,173	290,846
Reserve for doubtful accounts – past-due settlement invoices	—	(996,466)
	<u>98,429,743</u>	<u>1,181,242</u>
Unbilled:		
Centralized TCC 2 year auction	9,121,948	—
Rate Schedule 1 revenue for December	1,867,864	4,128,477
Grants unbilled receivables	276,788	1,283,112
Miscellaneous unbilled receivables	799,167	274,472
Replenishments of working capital reserve	306	306
	<u>12,066,073</u>	<u>5,686,367</u>
Total	<u>\$ 110,495,816</u>	<u>6,867,609</u>

NYISO invoices market participants weekly for settlement charges and Rate Schedule 1 revenue. Current due settlement invoices represent amounts invoiced on December 31, 2013 and due to be collected on January 2, 2014.

Past due settlement invoices as of December 31, 2013 are expected to be recovered in 2014. Rate Schedule 1 of the OATT allows NYISO to recover bad debt losses from market participants and provides guidance on the provisions of such recoveries. NYISO's reserve for doubtful accounts at December 31, 2012, results from past due settlement invoices related to a subsidiary of Enron Corporation. During 2013 it was

determined that NYISO distributions under the Market Participant's Chapter 11 bankruptcy proceedings were substantially complete. Therefore, the reserve for doubtful accounts was eliminated.

In 2013, NYISO conducted a Centralized TCC Two Year Auction, with the second year payment due to the NYISO in January 2014.

NYISO recovers its Rate Schedule 1 revenue in the invoice following the period of service. Therefore, a portion of unbilled Rate Schedule 1 revenues for December are billed and recovered in January of the subsequent year.

**(3) Regulatory Assets and Liabilities**

At December 31, 2013 and 2012, regulatory assets and liabilities consisted of the following:

	<u>2013</u>	<u>2012</u>
Regulatory assets:		
Funding pension benefits	\$ 8,060,193	11,773,587
Funding for postretirement benefits	—	1,527,759
Funding for deferred charges	4,451,391	3,501,098
Rate Schedule 1 transactional volume undercollections	—	1,999,522
Total regulatory assets	<u>12,511,584</u>	<u>18,801,966</u>
Less current	<u>—</u>	<u>(1,999,522)</u>
Noncurrent regulatory assets	<u>\$ 12,511,584</u>	<u>16,802,444</u>
Regulatory liabilities:		
Funding for deferred charges	\$ 5,867,404	6,578,991
Rate Schedule 1 underspending	4,740,847	681,649
Rate Schedule 1 transactional volume overcollections	2,451,526	—
Funding for postretirement benefits	1,362,613	—
Voltage support service (reactive power) market	390,579	571,708
Total regulatory liabilities	<u>14,812,969</u>	<u>7,832,348</u>
Less current	<u>(7,582,953)</u>	<u>(1,253,357)</u>
Noncurrent regulatory liabilities	<u>\$ 7,230,016</u>	<u>6,578,991</u>

***Pension Benefits and Postretirement Benefits Funding***

The pension and postretirement funding regulatory assets and liabilities reflect the unrecognized pension costs and postretirement benefit costs that would normally be recorded as a component of other comprehensive income or loss. Since these amounts represent costs or income that are



expected to be included in future rates, they are recorded as deferred noncurrent regulatory assets or liabilities for accumulated actuarial losses or gains to be recognized in future periods.

***Rate Schedule 1 Undercollections/Overcollections***

NYISO recovers its costs through a surcharge assessed to market participants via Rate Schedule 1 of the OATT and Services Tariff. To the extent that transactional volumes billed under Rate Schedule 1 fall short of or exceed the amount expected when the Rate Schedule 1 surcharge is established, NYISO reflects a regulatory asset for the undercollection amounts, and a regulatory liability for the overcollection amounts.

***Voltage Support Service***

In order to maintain acceptable transmission voltages on the New York State transmission system, certain market participants within the New York Control Area produce or absorb voltage support service (reactive power). Payments to market participants supplying voltage support service and recoveries from other market participants are assessed via Rate Schedule 2 of the OATT and Services Tariff. Differences between the timing of recoveries and payments for voltage support service that result in undercollections or overcollections are reflected as regulatory assets or liabilities. At December 31, 2013 and 2012, respectively, NYISO recognized a regulatory liability of \$390,579 and \$571,708, related to such timing differences.

***Rate Schedule 1 Underspending***

To the extent that NYISO's spending does not exceed the annual Rate Schedule 1 revenue requirement, a regulatory liability is established for the underspending amounts.

***Funding for Deferred Charges***

The NYISO recovers its annual employer cash contributions for both the pension and postretirement benefit plans via Rate Schedule 1. The amounts in funding for deferred charges represents the pension and postretirement benefit costs net of cash contributions.

**(4) Property and Equipment**

As of December 31, 2013 and 2012, property and equipment consisted of the following:

	<u>2013</u>	<u>2012</u>
Software developed for internal use	\$ 135,902,740	115,485,965
Computer hardware and software	61,179,649	54,816,807
Building, building improvements, and leasehold improvements	93,511,255	52,828,737
Work in progress	7,237,369	32,428,353
Machinery and equipment	6,875,962	4,748,123
Furniture and fixtures	3,085,848	3,054,652
Land and land improvements	2,091,376	2,091,376
	<u>309,884,199</u>	<u>265,454,013</u>
Accumulated depreciation and amortization	<u>(184,987,342)</u>	<u>(163,743,602)</u>
Property and equipment – net	<u>\$ 124,896,857</u>	<u>101,710,411</u>

Property and equipment includes interest of \$968,870 and \$330,375 capitalized during 2013 and 2012, respectively. Depreciation and amortization expense for the years ended December 31, 2013 and 2012 was \$22,707,964 and \$19,573,767, respectively.

Total capitalized labor as of December 31, 2013 and 2012 was \$6,365,999 and \$6,972,492, respectively.

**(5) Revolving Credit Facility**

On July 21, 2010, NYISO entered into a \$50.0 million Revolving Credit Facility that expired on December 31, 2013 and was replaced on October 22, 2013, with a new \$50.0 million Revolving Credit Facility with an effective date of January 1, 2014 through December 31, 2017. The proceeds from this Revolving Credit Facility are to be used for working capital purposes. Interest on borrowings under the Revolving Credit Facility is based on NYISO's option of varying rates of interest tied to either the prime rate or the London Interbank Offered Rate (LIBOR). At December 31, 2013 and 2012, respectively, there were no amounts outstanding on the Revolving Credit Facility. During 2013 and 2012, \$4.0 million and \$9.0 million in borrowings were made under this credit agreement, respectively, at an average interest rate of 1.85%.

## (6) Long-Term Debt

At December 31, 2013, the following amounts were outstanding on NYISO's long-term debt:

	<b>2012 Infrastructure loan (iv)</b>	<b>2011-2013 Budget facility loan (ii)</b>	<b>Mortgage (iii)</b>	<b>Renovations (iii)</b>	<b>Total</b>
Outstanding balance	\$ 38,738,352	49,233,333	9,914,795	7,786,630	105,673,110
Less current portion	<u>(1,139,363)</u>	<u>(25,000,000)</u>	<u>(610,246)</u>	<u>(403,352)</u>	<u>(27,152,961)</u>
Long-term portion	<u>\$ 37,598,989</u>	<u>24,233,333</u>	<u>9,304,549</u>	<u>7,383,278</u>	<u>78,520,149</u>

At December 31, 2012, the following amounts were outstanding on NYISO's long-term debt:

	<b>2012 Infrastructure loan (iv)</b>	<b>2011 - 2013 Budget facility loan (ii)</b>	<b>2007 - 2010 Budget facility loan (i)</b>	<b>Mortgage (iii)</b>	<b>Renovations (iii)</b>	<b>Total</b>
Outstanding balance	\$ 17,582,715	42,466,667	9,785,714	10,490,331	8,166,387	88,491,814
Less current portion	—	<u>(16,933,333)</u>	<u>(9,785,714)</u>	<u>(575,537)</u>	<u>(379,757)</u>	<u>(27,674,341)</u>
Long-term portion	<u>\$ 17,582,715</u>	<u>25,533,334</u>	<u>—</u>	<u>9,914,794</u>	<u>7,786,630</u>	<u>60,817,473</u>

- (i) On January 22, 2007, NYISO entered into an unsecured \$80.0 million line-of-credit facility (2007–2010 Budget Facility), the proceeds of which could be drawn until January 2011 to fund capital purchases and the development of significant projects during 2007–2010. NYISO was required to convert each year's annual borrowings to term loans, with principal and interest payments payable over three years. Interest on borrowings under this facility is based on NYISO's option of varying rates of interest tied to LIBOR plus 40 basis points for borrowings during the draw periods, LIBOR plus 65 basis points for borrowings converted to term loans, or the prime rate. Interest payments on borrowings are due monthly.

On January 23, 2007, NYISO entered into four interest rate swap agreements to fix interest payments on \$60.0 million of the \$80.0 million available on this line-of-credit facility. Under the swap agreements, NYISO will pay fixed interest rates ranging from 5.392% to 5.515% during the annual borrowing periods and 5.642% to 5.765% on the four annual term loan conversions. See additional information in note 7.

During 2007, \$15.0 million was drawn on the 2007–2010 Budget Facility, which was converted to a term loan in January 2008 with monthly principal and interest payments payable from January 2008 through December 2010. At December 31, 2010, these borrowings were fully repaid. During 2008, an additional \$16.7 million was drawn on the 2007–2010 Budget Facility, which was converted to a term loan in January 2009 with monthly principal and interest payments payable from January 2009 through December 2011. At December 31, 2011, these borrowings were fully repaid. During 2009, an additional \$18.3 million was drawn on the 2007–2010 Budget Facility, which was converted to a term loan in February 2010 with monthly principal and interest payments payable from February 2010 through



December 2012. At December 31, 2012, these borrowings were fully repaid. During 2010, an additional \$23.0 million was drawn on the 2007–2010 Budget Facility and in January 2011, the remaining \$7.0 million was drawn on the 2007–2010 Budget Facility. The \$30.0 million in 2010–2011 borrowings was converted to a term loan in February 2011 with monthly principal and interest payments payable from February 2011 through December 2013. At December 31, 2013, these borrowings were fully repaid. At December 31, 2012, the interest rate on \$5.0 million was fixed at 5.765% and the remaining \$4.8 million was at 0.860%.

- (ii) On July 21, 2010, NYISO entered into an unsecured \$75.0 million line-of-credit facility (2011–2013 Budget Facility), the proceeds of which may be drawn between January 1, 2011 and December 31, 2013 to fund capital purchases and the development of significant projects during 2011–2013. NYISO must convert each year’s annual borrowings to term loans, with principal and interest payments payable over three years. Interest on borrowings under this facility is based on NYISO’s option of varying rates of interest tied to LIBOR plus 175 basis points for borrowings, or the prime rate. Interest payments on borrowings are due monthly. On October 24, 2013, NYISO amended the interest rate on this credit facility to LIBOR plus 100 basis points. During 2011, \$25.0 million was drawn on the 2011–2013 Budget Facility, which was converted to a term loan in January 2012 with monthly principal and interest payments payable from January 2012 through December 2014. At December 31, 2013, the interest rate on \$6.7 million was fixed at 2.530% and the remaining \$1.6 million was at 1.165%. At December 31, 2012, the interest rate on \$13.3 million was fixed at 3.280% and the remaining \$3.4 million was at 1.960%. During 2012, an additional \$25.8 million was drawn on the 2011–2013 Budget Facility, which was converted to a term loan in January 2013 with monthly principal and interest payments payable from January 2013 through December 2015. At December 31, 2013, the interest rate on \$13.3 million was fixed at 3.330% and the remaining \$3.4 million was at 1.165%. At December 31, 2012, the interest rate on \$20.0 million was fixed at 4.080% and the remaining \$5.8 million was at 1.960%. During 2013, an additional \$24.2 million was drawn on the 2011–2013 Budget Facility, which was converted to a term loan in January 2014 with monthly principal and interest payments payable from January 2014 through December 2016. At December 31, 2013, the interest rate on \$20.0 million was fixed at 4.023% and the remaining \$4.2 million was at 1.165%.

On July 23, 2010, NYISO entered into three interest rate swap agreements to fix interest payments on \$60.0 million of the \$75.0 million available on the 2011–2013 Budget Facility. Under the swap agreements, NYISO will pay fixed interest rates ranging from 3.280% to 4.773%. On October 24, 2013, NYISO amended the interest rate on this credit facility to LIBOR plus 100 basis points. Due to this amendment, NYISO will pay fixed interest rates ranging from 2.530% and 4.023%. See additional information in note 7.

- (iii) On July 8, 2005, NYISO entered into two financing agreements to purchase and renovate a 140,000-square foot office building in Rensselaer, NY. The first agreement is a \$14.7 million mortgage to finance the building purchase (Mortgage), and the second agreement represents a \$10.0 million line of credit for renovations during an 18-month period, beginning in July 2005 (Renovations Loan). The Mortgage has principal and interest payments payable over 20 years, beginning September 2005. Principal and interest payments on borrowings made during the Renovations Loan draw period are payable over 20 years, beginning in January 2007. During 2005, \$14.7 million was borrowed on the Mortgage, and during 2006, \$10.0 million was drawn on the Renovations Loan. Both agreements are secured by liens on the building and subsequent capitalized renovations. Interest on borrowings under both facilities is due monthly and is based on varying rates of interest tied to LIBOR plus 100 basis points. On February 15, 2005, NYISO entered into an interest rate swap agreement on the Mortgage, which fixed the interest rate on this loan at 5.790%. On February 15, 2005, NYISO also entered into an interest rate swap agreement on the Renovations Loan, which fixed the interest rate on these borrowings at 5.960%, beginning on January 1, 2007.

- (iv) On July 8, 2011, NYISO entered into a financing agreement (2011 Infrastructure Loan) to renovate its facility in Guilderland, NY and to perform construction at its facility in Rensselaer, NY. The agreement permitted borrowings of up to \$45.0 million through July 7, 2014. The NYISO was required to make interest only payments through July 7, 2014, followed by 17 years of principal and interest payments on borrowings made during the 2011 Infrastructure Loan draw period, beginning in July 2014. Interest on borrowings under the 2011 Infrastructure Loan were due monthly and were based on varying rates of interest tied to LIBOR plus 325 basis points. The 2011 Infrastructure Loan was secured by a limited mortgage lien of \$8.0 million on the NYISO's Guilderland facility. On July 18, 2012, the 2011 Infrastructure Loan was paid off, terminated and replaced with a new unsecured financing agreement (2012 Infrastructure Loan).

On July 18, 2012, NYISO entered into the 2012 Infrastructure Loan to renovate its facilities in Guilderland, NY and to perform construction at its facility in Rensselaer, NY. The agreement permits borrowings of up to \$45.0 million through July 18, 2014. The NYISO is required to make interest only payments for up to 24 months, followed by 17 years of principal and interest payments. Interest on borrowings under the 2012 Infrastructure Loan is due monthly and is based on varying rates of interest tied to LIBOR plus 225 basis points. At December 31, 2013, the interest rate on \$33.7 million was fixed at 4.149% and the remaining \$5.0 million was at 2.419%. At December 31, 2012, the interest rate on \$16.4 million was fixed at 4.149% and the remaining \$1.2 million was at 2.460%.

On July 18, 2012, NYISO entered into an interest rate swap agreement to fix interest on \$40.0 million of the \$45.0 million available under the 2012 Infrastructure Loan. Under this swap agreement, NYISO will pay a fixed interest rate of 4.149%. See additional information in note 7.

On October 22, 2013, NYISO entered into an unsecured \$100.0 million line of credit facility (2014–2017 Budget Facility), the proceeds of which could be drawn between January 1, 2014 through December 31, 2017 to fund capital purchases and the development of significant projects during 2014–2017. NYISO must convert each year's annual borrowings to term loans, with principal and interest payments payable over three years. Interest on borrowings under this facility is based on NYISO's option of varying rates of interest tied to LIBOR plus 95 basis points for borrowings, or the prime rate. Interest payments on borrowings are due monthly. There were no draws on this facility during 2013.

On October 25, 2013, NYISO entered into four interest rate swap agreements to fix interest on \$80.0 million of the \$100.0 million available on the 2014–2017 Budget Facility. Under the swap agreements, NYISO will pay fixed interest rates ranging from 1.780% to 4.076%. See additional information in note 7.

At December 31, 2013, scheduled maturities of NYISO's long-term debt were as follows:

	<b>2012 Infrastructure loan</b>	<b>2011-2013 Budget facility loan</b>	<b>Mortgage</b>	<b>Renovations</b>	<b>Total</b>
2014	\$ 1,139,363	25,000,000	610,246	403,352	27,152,961
2015	2,278,728	16,166,666	647,050	428,412	19,520,856
2016	2,278,728	8,066,667	684,637	453,836	11,483,868
2017	2,278,728	—	727,364	483,225	3,489,317
2018	2,278,728	—	771,230	513,248	3,563,206
Thereafter	28,484,077	—	6,474,268	5,504,557	40,462,902
Total	<u>\$ 38,738,352</u>	<u>49,233,333</u>	<u>9,914,795</u>	<u>7,786,630</u>	<u>105,673,110</u>

#### (7) Derivatives and Hedging Activities

NYISO's derivative instruments are cash flow hedges used to manage its exposure related to changes in interest rates. The NYISO does not enter into derivative instruments for any purposes other than cash flow hedging. By using derivative instruments to hedge exposure to changes in interest rates, NYISO is exposed to credit and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes the NYISO, which creates credit risk. When the fair value is negative, the NYISO owes the counterparty and, therefore, the NYISO is not exposed to the counterparty's credit risk in those circumstances. NYISO minimizes counterparty credit risk in derivative instruments by entering into transactions with high-quality counterparties. Market risk is the adverse effect on the value of a derivative instrument that results from a change in interest rates.

In February 2005, NYISO entered into two interest rate swap agreements with a commercial bank to fix interest rate payments on the financing of a new office building purchase. The notional amount of debt on the swap agreement for the Mortgage was \$14,708,750, and NYISO pays a fixed interest rate of 5.79% on the outstanding principal amount of this financing on payments from August 2005 through August 2025. The notional amount of debt on the swap agreement for the Renovations Loan was \$10,000,000, and NYISO pays a fixed interest rate of 5.96% on payments from January 2007 through January 2027. As of December 31, 2013 and 2012, the fair value of these interest rate swap agreements was (\$1,415,734) and (\$2,364,720), respectively, for the Mortgage and (\$1,233,611) and (\$2,066,010), respectively, for the Renovations Loan, recorded in Other Noncurrent Liabilities. For the years ended December 31, 2013 and 2012, NYISO recorded fair value gains of \$1,781,385 and \$48,730, respectively, related to these two swap agreements.

In January 2007, NYISO entered into four interest rate swap agreements with a commercial bank to fix interest rate payments on the 2007-2010 Budget Facility. The notional amount of debt on the swap agreements was \$60,000,000. NYISO pays fixed interest rates ranging from 5.392% to 5.515% during the annual borrowing periods and 5.642% to 5.765% on the four annual term loan conversions from January 2008 through December 2013. As of December 31, 2013 and 2012, the fair value of these interest rate swap agreements was \$0 and (\$112,925), respectively, recorded in Other Noncurrent Liabilities. For the years ended December 31, 2013 and 2012, NYISO recorded fair value gains of \$112,925 and \$442,105, respectively, related to these four swap agreements.



In July 2010, NYISO entered into three interest rate swap agreements with a commercial bank to fix interest rate payments on the 2011–2013 Budget Facility. The notional amount of debt on the swap agreements was \$60,000,000. NYISO pays fixed interest rates ranging from 3.280% to 4.7725% through December 2016. On October 24, 2013, NYISO amended the interest rate on this credit facility to LIBOR plus 100 basis points. Due to this amendment, NYISO will pay fixed interest rates ranging from 2.530% to 4.023%. As of December 31, 2013 and 2012, the fair value of these interest rate swap agreements was (\$1,031,225) and (\$1,709,487), respectively, recorded in Other Noncurrent Liabilities. For the years ended December 31, 2013 and 2012, NYISO recorded a fair value gain of \$678,262 and a fair value loss of \$237,960, respectively, related to these three swap agreements.

In July 2012, NYISO entered into a interest rate swap agreement with a commercial bank to fix interest rate payments on the 2012 Infrastructure Loan. The notional amount of debt on the swap agreements was \$40,000,000. NYISO pays a fixed interest rate of 4.149% through July 2031. As of December 31, 2013 and 2012, the fair value of this interest rate swap agreement was \$3,258,088 and \$169,429, respectively, recorded in Other Noncurrent Assets. For the years ended December 31, 2013 and 2012, NYISO recorded fair value gains of \$3,088,659 and \$169,429, respectively, related to this swap agreement.

In October 2013, NYISO entered into four interest rate swap agreements with a commercial bank to fix interest rate payments on the 2014–2017 Budget Facility. The notional amount of the debt on the swap agreements was \$80,000,000. NYISO pays fixed interest rates ranging from 1.780% to 4.076% through December 2020. As of December 31, 2013, the fair value of these interest rate swap agreements was \$461,647, recorded in Other Noncurrent Assets. For the year ended December 31, 2013, NYISO recorded fair value gains of \$461,647, related to these four swap agreements.

	<u>Notional amount at inception</u>	<u>Notional amount at December 31, 2013</u>	<u>Fair value at December 31, 2012</u>	<u>Fair value at December 31, 2013</u>	<u>2013 Gain (loss) on market value</u>
Loan:					
2007 – 2010 Budget Facility	\$ 60,000,000	—	(112,925)	—	112,925
2011 – 2013 Budget Facility	60,000,000	39,999,984	(1,709,487)	(1,031,225)	678,262
2014 – 2017 Budget Facility	80,000,000	—	—	461,647	461,647
2012 Infrastructure Loan	40,000,000	33,709,277	169,429	3,258,088	3,088,659
Mortgage	14,708,750	9,914,795	(2,364,720)	(1,415,734)	948,986
Renovations	10,000,000	7,786,630	(2,066,010)	(1,233,611)	832,399
Total				\$	<u>6,122,878</u>

The fair value of NYISO’s interest rate swaps are determined using pricing models developed based on the LIBOR swap rate and other observable market data (Level 2 inputs).

Interest rate swaps are included in Other Noncurrent Assets and Other Noncurrent Liabilities. The following table presents the carrying amounts and estimated fair values of NYISO's financial instruments at December 31, 2013 and 2012:

	2013		2012	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets:				
Interest rate swaps	\$ 3,719,735	3,719,735	169,429	169,429
Financial liabilities:				
Interest rate swaps	\$ 3,680,570	3,680,570	6,253,142	6,253,142

**(8) Employee Benefit Plans**

***Defined Benefit Pension and Postretirement Plans***

NYISO has a defined benefit pension plan covering substantially all employees upon their retirement. Plan benefits are based on employee compensation levels and years of service, including service for certain employees previously employed by NYPP member companies. Employees become vested in pension benefits after three years of credited service. NYISO contributed approximately \$0.8 million to the pension plan in 2013. Effective December 1, 2009, NYISO adopted changes to its pension plan to end the accrual of future benefits for most employees. Certain grandfathered employees will continue to accrue benefits until attaining age 55. NYISO replaced the defined benefit accruals with equivalent contributions to employee 401(k) plan accounts after December 1, 2009.

NYISO sponsors a defined benefit postretirement plan to provide medical benefits for eligible retirees and their dependents. Substantially all employees who retire from NYISO become eligible for these benefits provided they have been credited with at least ten years of NYISO service (5 years of NYISO service for those employees hired before January 1, 2005). The benefits are contributory based upon years of service, with NYISO paying up to 50% of costs for retired employees and up to 25% for their dependents (subject to specified dollar limits). Medical coverage becomes secondary upon Medicare eligibility. Effective January 1, 2012, NYISO terminated the life insurance benefit of the postretirement plan.

Pursuant to resolutions adopted by NYISO's Board of Directors, NYISO's Retirement Board has been granted the authority to control and manage the operation and administration of NYISO's pension and postretirement plans, including responsibility for the investment of plan assets and the ability to appoint investment managers. The Retirement Board currently consists of NYISO's Chief Financial Officer, General Counsel, Vice President of Human Resources, and Controller. The Retirement Board provides reports to the Commerce and Compensation Committee of the Board of Directors on at least an annual basis.

The Company records the overfunded or underfunded position of a defined benefit pension and postretirement plan as an asset or liability, with any unrecognized prior service costs, transition obligations, or gains/losses reported as recoverable under ASC Topic 980 and recorded as a regulatory asset.

For payment of benefits under the postretirement plan, as noted above, the NYISO established a Voluntary Employee Benefit Association (VEBA) trust in January 2010. The assets held in the VEBA trust reduce the accumulated postretirement benefit obligation as reported on the NYISO's Statements of Financial Position. The VEBA trust held assets of \$4,974,167 and \$4,248,809 as of December 31, 2013 and 2012, respectively. As noted in the table below, current obligations are assumed to be paid out of the trust assets, with the remaining unfunded obligation to be reflected as a noncurrent liability.

The schedules that follow show the benefit obligations, the plan assets, and the funded status as of December 31, 2013 and 2012, and the change in benefit obligations for NYISO's pension and postretirement plans for the years ended December 31, 2013 and 2012.

	<b>Pension plan</b>		<b>Postretirement plan</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Change in benefit obligation:				
Benefit obligation – beginning of year	\$ 34,065,465	30,869,721	9,276,793	8,401,151
Service cost	282,499	320,341	840,716	695,893
Interest cost	1,161,800	1,269,658	348,792	335,081
Actuarial loss (gain)	(1,980,119)	2,593,371	(2,322,931)	(72,423)
Participant contributions	—	—	118,185	121,315
Settlements	(1,565,578)	—	—	—
Benefits paid	(431,058)	(987,626)	(199,483)	(204,224)
Benefit obligation – end of year	<u>31,533,009</u>	<u>34,065,465</u>	<u>8,062,072</u>	<u>9,276,793</u>
Change in plan assets:				
Fair value of plan assets – beginning of year	29,033,537	26,167,287	4,248,809	3,921,198
Actual return on plan assets	1,912,248	2,978,390	853,573	451,696
Employer contributions	779,201	1,000,000	—	—
Participant contributions	—	—	118,185	121,315
Settlements	(1,565,578)	—	—	—
Benefits paid	(431,058)	(987,626)	(199,483)	(204,224)
Expenses paid	(225,460)	(124,514)	(46,917)	(41,176)
Fair value of plan assets – end of year	<u>29,502,890</u>	<u>29,033,537</u>	<u>4,974,167</u>	<u>4,248,809</u>
Funded status	<u>\$ 2,030,119</u>	<u>5,031,928</u>	<u>3,087,905</u>	<u>5,027,984</u>



Amounts recognized in the 2013 and 2012 Statements of Financial Position consist of the following:

	<b>Pension plan</b>		<b>Postretirement plan</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Net actuarial loss (gain) recognized in regulatory assets (liabilities)	\$ <u>8,060,193</u>	<u>11,773,587</u>	<u>(1,362,613)</u>	<u>1,527,759</u>
Projected benefit obligation	\$ (31,533,009)	(34,065,465)	(8,062,072)	(9,276,793)
Fair value of assets	<u>29,502,890</u>	<u>29,033,537</u>	<u>4,974,167</u>	<u>4,248,809</u>
Unfunded projected benefit obligation	\$ <u>(2,030,119)</u>	<u>(5,031,928)</u>	<u>(3,087,905)</u>	<u>(5,027,984)</u>

Net periodic pension expense and other postretirement benefit costs include the following components:

	<b>Pension plan</b>		<b>Postretirement plan</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Service cost	\$ 282,499	320,341	840,716	695,893
Interest cost	1,161,800	1,269,658	348,792	335,081
Expected return on plan assets	(1,218,183)	(1,639,307)	(253,024)	(245,081)
Amortization of unrecognized prior service cost	1,955	32,460	—	—
Amortization of unrecognized (gain) loss	863,016	673,678	13,809	5,844
Settlement (gain) loss	<u>399,699</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total	\$ <u>1,490,786</u>	<u>656,830</u>	<u>950,293</u>	<u>791,737</u>

NYISO uses a December 31 measurement date for its pension and postretirement benefit plans. NYISO's accumulated benefit obligation for the defined benefit pension plan is \$31,329,863 and \$33,695,371 at December 31, 2013 and 2012, respectively.

During 2013, the sum of all lump-sum benefits paid during the year exceeded the sum of the service and interest cost components of the net periodic benefit cost for the year, resulting in the recognition of a net settlement loss of \$399,699.

The following table as of December 31, 2013 and 2012 shows the assumptions used to calculate the pension and postretirement benefit obligations and net periodic costs:

	Pension plan		Postretirement plan	
	2013	2012	2013	2012
Benefit obligations:				
Discount rate	4.30%	3.60%	4.80%	4.00%
Rate of compensation increases	3.00	3.00	N/A	N/A
Net cost or credit:				
Discount rate	3.60%	4.30%	4.00%	4.55%
Rate of compensation increases	3.00	3.00	N/A	N/A
Expected return on plan assets	4.60	6.40	6.10	6.40

Effective January 1, 2012, the retiree life insurance benefit was eliminated, and therefore, the rate of compensation assumption was not applicable for benefit obligations.

NYISO's expected rate of return on plan assets reflects anticipated returns on the pension plan's current and future assets. To determine this rate, NYISO considers historical returns for equity and debt securities, as well as current capital market conditions and projected future conditions. The long-term investment objective for NYISO's pension plan is to maximize the total return on plan assets while limiting risk, reflected in volatility of returns, to prudent levels. To that end, NYISO's Retirement Board has appointed and regularly meets with an investment advisor to review asset performance, compliance with target asset allocation guidelines, and appropriate levels of asset diversification. NYISO's investment advisor operates under written guidelines provided by NYISO, which cover such areas as investment objectives, performance measurement, permissible investments, investment restrictions, and communication and reporting requirements. During 2011, the NYISO Retirement Board began a transition towards a revised investment strategy for pension plan investments to minimize the volatility in plan investments while balancing the long-term plan returns. The transition to the revised investment strategy was completed during 2012.

NYISO's pension and postretirement plan investments are composed of common stocks, mutual funds and commingled trust funds that are redeemable at net asset value (NAV) on a daily basis. Redemption of such investments generally requires 1 to 2 days written prior notice prior to the redemption date.

The targeted allocation and actual investment mix of the pension plan's assets are as follows December 31:

Asset category	2013		2012	
	Target	Actual	Target	Actual
Fixed income	70%	65%	70%	70%
International and emerging equities	15	16	15	16
Large cap equities	8	10	8	8
Mid cap equities	5	6	5	4
Small cap equities	2	3	2	2
Total	100%	100%	100%	100%

The targeted allocation and actual investment mix of the VEBA Trust (postretirement) plan's assets are as follows:

Asset category	2013		2012	
	Target	Actual	Target	Actual
Domestic equities	50%	57%	50%	52%
Fixed income	35	28	35	33
International and emerging equities	15	15	15	15
Total	100%	100%	100%	100%

The actual rate of return for the pension plan's assets as of December 31, 2013 and 2012 is as follows:

Asset category	Annual returns December 31	
	2013	2012
Mid cap equities	39.0%	12.7%
Small cap equities	37.1	12.9
Large cap equities	32.7	16.0
International and emerging equities	9.0	18.4
Fixed income	(0.1)	6.5
Total portfolio weighted average	6.6%	11.4%



The actual rate of return for the VEBA Trust (postretirement) plan's assets as of December 31, 2013 and 2012 is as follows:

Asset category	Annual returns December 31	
	2013	2012
Domestic equities	34.0%	11.6%
International and emerging equities	17.2	21.7
Fixed income	(2.0)	4.3
Total portfolio weighted average	19.4%	10.5%

The fair values of the pension plan assets at December 31, 2013 and 2012 are presented below:

	2013 Fair value			
	Level 1	Level 2	Level 3	Total
Domestic investments:				
Equities:				
Small cap	\$ —	943,608	—	943,608
Mid cap	—	1,705,446	—	1,705,446
Large cap	—	2,875,472	—	2,875,472
Total	—	5,524,526	—	5,524,526
Fixed income	5,743,247	13,358,245	—	19,101,492
Total	5,743,247	13,358,245	—	19,101,492
International and emerging equities	4,645,595	—	—	4,645,595
Total	4,645,595	—	—	4,645,595
Cash and cash equivalents	231,277	—	—	231,277
	\$ 10,620,119	18,882,771	—	29,502,890

	2012 Fair value			
	Level 1	Level 2	Level 3	Total
Domestic investments:				
Equities:				
Small cap	\$ —	724,253	—	724,253
Mid cap	—	1,285,626	—	1,285,626
Large cap	—	2,268,268	—	2,268,268
Total	—	4,278,147	—	4,278,147
Fixed income	5,908,661	14,269,300	—	20,177,961
Total	5,908,661	14,269,300	—	20,177,961
International and emerging equities	4,484,788	—	—	4,484,788
Total	4,484,788	—	—	4,484,788
Cash and cash equivalents	92,641	—	—	92,641
	\$ <u>10,486,090</u>	<u>18,547,447</u>	<u>—</u>	<u>29,033,537</u>

The fair values of the postretirement plan assets at December 31, 2013 and 2012 are presented below:

	<b>2013 Fair value</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Domestic equities	\$ 2,563,485	—	—	2,563,485
Total	2,563,485	—	—	2,563,485
Fixed income:				
Fixed income securities	590,540	—	—	590,540
U.S. government obligations	468,740	—	—	468,740
Mortgage-backed securities	—	166,572	—	166,572
Corporate debt securities	—	114,504	—	114,504
Total	1,059,280	281,076	—	1,340,356
International and emerging equities	876,433	—	—	876,433
Total	876,433	—	—	876,433
Cash and cash equivalents	193,893	—	—	193,893
	<u>\$ 4,693,091</u>	<u>281,076</u>	<u>—</u>	<u>4,974,167</u>



	<b>2012 Fair value</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Domestic equities	\$ 2,060,126	—	—	2,060,126
Total	2,060,126	—	—	2,060,126
Fixed income:				
Fixed income securities	587,995	—	—	587,995
U.S. government obligations	447,251	—	—	447,251
Mortgage-backed securities	—	222,227	—	222,227
Corporate debt securities	—	95,221	—	95,221
Total	1,035,246	317,448	—	1,352,694
International and emerging equities	725,035	—	—	725,035
Total	725,035	—	—	725,035
Cash and cash equivalents	110,954	—	—	110,954
	<b>\$ 3,931,361</b>	<b>317,448</b>	<b>—</b>	<b>4,248,809</b>

The assumed healthcare cost trend rates for the postretirement plan are 7.75% for 2014 decreasing to 5.0% in 2025, and 8.75% for 2013 decreasing to 5.0% in 2021. A one-percentage point change in the assumed healthcare cost trend rate would change the 2013 postretirement benefit obligation as follows:

	<b>1% increase</b>	<b>1% decrease</b>
Effect on postretirement benefit obligation	\$ 422,900	(469,600)
Effect on total of service and interest cost components	114,800	(97,100)

The following benefit payments, which reflect expected future service, are expected to be paid:

	<u>Pension plan</u>	<u>Postretirement plan</u>
2014	\$ 2,579,865	226,239
2015	2,853,252	278,554
2016	2,636,466	326,905
2017	2,217,925	390,858
2018	2,310,392	436,200
2019–2023	9,825,782	3,259,603

#### ***401(k) Plan***

NYISO has a 401(k) Retirement and Savings Plan open to all nontemporary employees. This plan provides for employee contributions up to specified limits. NYISO matches 100% of the first 3% of employee contributions, and 50% of the next 2% of employee contributions. Beginning December 1, 2009, NYISO also contributes funds to employee 401(k) plan accounts equivalent to defined benefit accruals formerly earned in the pension plan.

Employees are immediately vested in NYISO's matching contributions and become vested in other employer contributions after three years of credited service. The total NYISO contributions to the 401(k) plan were \$4,965,476 and \$4,729,255 for 2013 and 2012, respectively.

#### ***Long-Term Incentive Plan***

NYISO's Long-Term Incentive Plan provides certain members of senior management with deferred compensation benefits. Benefits are based upon the achievement of three-year performance goals established by the Board of Directors, with participants becoming fully vested and distributions payable for these deferred amounts after the completion of the audited financial statements for the third year. Beginning with the long-term incentive cycle for the period January 1, 2010 through December 31, 2012, benefits will be paid in equal installments over three years following the completion of the three-year cycle. Accrued Long-Term Incentive Plan benefits included in Other Noncurrent Liabilities at December 31, 2013 and 2012, were \$2,936,750 and \$3,008,179, respectively. The short-term portion of such liability, included in Other Current Liabilities, at December 31, 2013 and 2012, was \$1,365,759 and \$1,692,871, respectively.

#### **(9) Other Commitments**

On July 8, 2005, NYISO purchased an office building to relocate NYISO's alternate control center and to consolidate employees located in leased facilities. In connection with the purchase, management entered into a Payment in Lieu of Taxes (PILOT) Agreement with the Rensselaer County Industrial Development Agency (RCIDA) to achieve certain benefits. Per the terms of this agreement, NYISO is required to make annual payments of approximately \$185,000 for the first 10 years. The agreement is cancelable at the discretion of NYISO.

**(10) Working Capital Reserve**

At December 31, 2013 and 2012, the working capital reserve consisted of the following:

	<u>2013</u>	<u>2012</u>
Market participant contributions through Rate Schedule 1	\$ 33,000,000	33,000,000
Interest on market participant contributions	8,965	14,603
Total	<u>\$ 33,008,965</u>	<u>33,014,603</u>

**(11) Deferred Revenue**

Deferred revenue at December 31, 2013 and 2012 consisted of the following:

	<u>2013</u>	<u>2012</u>
Advance payments received on planning studies	\$ 3,919,098	2,967,811
Funds received for the enhancement of surveillance capabilities	851,278	966,914
Governance participation fees	439,200	423,400
Total	<u>\$ 5,209,576</u>	<u>4,358,125</u>

During 2012, NYISO received funds of \$1.0 million from FERC for the purpose of enhancing NYISO's surveillance capabilities. As of December 31, 2013 and 2012, \$851,278 and \$966,914 is recorded as deferred revenue, respectively.

**(12) Commitments and Contingencies**

NYISO is routinely involved in regulatory actions. In the opinion of management, none of these matters will have a material adverse effect on the financial position, results of operations, or liquidity of NYISO.

**(13) Smart Grid Investment Grant**

The NYISO received a \$37.8 million Smart Grid Investment Grant from the United States Department of Energy (DOE) partially funding the New York State Capacitor/Phasor Measurement Project for the period July 1, 2010 through June 30, 2015. The NYISO and the eight New York transmission owners (TOs) are responsible for contributing \$37.9 million in nonfederal matching funds to fully fund the \$75.7 million project. As the prime recipient of the funds, the NYISO is responsible for administering the overall project on behalf of itself and the TOs.

The NYISO and the TOs entered into a Subaward Agreement in 2010 that specifies the portion of the approved Federal grant funds that each entity is eligible to receive from the Government through reimbursement requests. Consistent with the requirements of the grant agreement with DOE, in order to receive its respective portion of the SGIG Award, each party must expend a matching amount. Under the Subaward Agreement, the NYISO's obligation to reimburse the TOs is limited to the amount that the NYISO receives from DOE in response to the TOs'

requests for reimbursement. The NYISO and the TOs are eligible to receive reimbursement for allowable costs incurred from August 6, 2009–the approved pre-award period–through June 30, 2015.

As of December 31, 2013 and 2012, \$8.8 million and \$15.4 million, respectively, are recognized in NYISO’s Statements of Activities in Grant revenue, which represents 50% reimbursement from DOE of NYISO’s and the TO’s allowable costs incurred during these respective years. Recorded in NYISO’s Statements of Activities is the TO’s 50% share of allowable costs incurred, as of December 31, 2013 and 2012, \$4.9 million and \$10.1 million, respectively, are classified as Grant expenses – New York Transmission Owners. As of December 31, 2013 and 2012, \$0.8 million and \$2.2 million, respectively, are recorded in NYISO’s Statements of Financial Position included as Accounts receivable – net.

**(14) Eastern Interconnection Planning Collaborative Grant**

On December 18, 2009, the DOE announced that the Eastern Interconnection Planning Collaborative (EIPC) would receive \$16.0 million (the EIPC Award) in federal stimulus funding to promote collaborative long-term analysis and planning for the Eastern electricity interconnection, which will help states, utilities, grid operators, and others prepare for future growth in energy demand, renewable energy sources, and Smart Grid technologies. As the prime recipient of the EIPC Award, PJM Interconnection, L.L.C. (PJM), is responsible for administering the overall project on behalf of itself and seven other “Participating Principal Investigators,” including the NYISO. The agreement with DOE for the EIPC Award was executed on July 19, 2010 and the project obligations became effective on July 16, 2010. NYISO has a separate agreement with PJM and the other Participating Principal Investigators (the EIPC Agreement) which specifies the parties’ obligations under the EIPC Award. During 2013, DOE issued an extension to this grant to cover expenditures related to a gas-electric coordination study, effective through June 2015. Consistent with the requirements of the DOE agreement, NYISO is eligible to receive reimbursement of \$0.9 million from DOE for expenditures incurred from March 1, 2010. Under the PJM agreement with the Participating Principal Investigators, PJM’s obligation to reimburse the NYISO is only for the amount that PJM receives from DOE in respect of NYISO’s request for reimbursement.

As of December 31, 2013 and 2012, NYISO recognized \$0.1 million and \$0.2 million, respectively, in NYISO’s Statements of Activities as Grant revenue.

**(15) Subsequent Events**

NYISO considers events and transactions that occur after the balance sheet date, but before the financial statements are issued, to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. NYISO has evaluated subsequent events from the statement of financial position date through March 14, 2014, the date at which the financial statements were available to be issued.







## NYISO at a Glance


The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for maintaining the safe, reliable flow of power throughout the Empire State.

The mission of the NYISO, in collaboration with its stakeholders, is to serve the public interest and provide benefit to consumers by:

- ♦ Maintaining and enhancing regional reliability
- ♦ Operating open, fair, and competitive wholesale electricity markets
- ♦ Planning the power system for the future
- ♦ Providing factual information to policy makers, stakeholders and investors in the power system

The NYISO manages the efficient flow of power on more than 11,000 circuit-miles of electric transmission lines on a continuous basis, 24 hours-a-day, 365 days-a-year. As the administrator of the competitive wholesale markets, the NYISO conducts auctions that match the retail electric service companies looking to purchase power and the suppliers offering to sell it.

In addition the NYISO's comprehensive planning process assesses New York's electricity needs and evaluates the ability of proposed power options to meet those needs. This planning process involves stakeholders, regulators, public officials, consumer representatives, and energy experts who provide vital information and input from a variety of viewpoints.




The NYISO is governed by a 10-member, independent Board of Directors and a committee structure comprising diverse stakeholder representatives. It is subject to the oversight of the Federal Energy Regulatory Commission (FERC) and regulated in certain aspects by the New York State Public Service Commission (NYSPSC). NYISO operations are also overseen by electric system reliability regulators, including the North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council (NPCC), and the New York State Reliability Council (NYSRC).

The members of the NYISO's Board of Directors have backgrounds in electricity systems, finance, information technology, communications, and public service. The members of the Board, as well as all employees, have no business, financial, operating, or other direct relationship to any market participant.

The NYISO does not own power plants or transmission lines. The NYISO's independence means that its actions and decisions are not based on profit motives, but on how best to enhance the reliability and efficiency of the power system, and safeguard the transparency and fairness of the markets.

The NYISO is committed to transparency and trust in how it carries out its duties, in the information it provides, and in its role as the impartial broker of the state's wholesale electricity markets. The *Annual Report* provides a yearly snapshot of the NYISO's performance.

The background features a complex network of glowing green lines and nodes. In the center, two interlocking gears are highlighted in a bright white glow. To the left, a laptop icon is visible within a circular node. To the right, another node contains a monitor icon. The overall aesthetic is futuristic and technological.

2013 Annual Report  
Synergy in Action - *Realizing Interconnected Initiatives*

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