

Before the Federal Energy Regulatory Commission
Docket No. AD08-9-000

Technical Conference on
Review of Wholesale Electricity Markets

Prepared Comments of

Karen Antion

Board Chair and Interim Chief Executive Officer,
New York Independent System Operator

Good morning, Chairman Kelliher and Commissioners. Thank you for this opportunity to speak with you on behalf of the New York Independent System Operator. My goal today is to present an overview of how and why the NYISO was established and to describe the progress we've made toward enhancing reliability, securing adequate supply, and promoting market efficiency. I will also discuss the challenges we anticipate and the steps we are taking with our Market Participants and regulators to address those challenges. Dr. Patton, the NYISO's Independent Market Advisor, will discuss the highlights of his most recent assessment of the NYISO's wholesale electric markets.

Neither the federal or state government mandated formation of the NYISO. In a proceeding conducted by the New York Public Service Commission our stakeholders reached a consensus to establish a wholesale electricity market administrator and independent system operator for the state's bulk power system. New York's stakeholders decided to base the state's electric markets on locational marginal

pricing that would promote competition, improve efficiency, and transfer the risk of owning generation from consumers to investors.

Similarly, FERC's Order 888 didn't mandate separation of power plants from transmission. Nevertheless, New York opted for divestiture of generation by the investor-owned utilities. This unbundling has helped ensure a level playing field, particularly among suppliers, who can compete on equal footing to develop and operate New York's generation fleet.

The member systems of the New York Power Pool, in response to Order 888, filed to establish the NYISO in 1997 and on December 1, 1999, we went live with a full spectrum of competitive wholesale markets. Our stakeholders expected the NYISO to provide non-discriminatory grid access for generation, provide accurate price signals and transparency, prevent abuses of market power, and maintain or enhance system reliability. That is what we have done.

From its inception, the NYISO has implemented perhaps the most sophisticated electricity markets in the U.S. in which Market Participants buy and sell approximately a dozen different wholesale electricity products. Further, the NYISO's day-ahead and real-time markets are fully co-optimized across energy, operating reserves and regulation. In implementing the New York market structure, we have been able to:

1. Provide prices that reflect the value of electricity at over 300 locations on the network;
2. Commit the lowest total cost resources to meet demand each day while maintaining system reliability; and
3. Maintain resource adequacy to match system electricity demands.

The NYISO's markets have grown in size and sophistication, and today include platforms for demand response and virtual trading of energy as well as generation.

The NYISO's locational based market price signals are transparent and provide important information about when and where to invest in

new resources. To ensure accurate market signals, we have also incorporated scarcity pricing concepts.

Restructuring in New York has allowed us to maintain system reliability and permit customers to enjoy higher value from existing resources. New York State consumers have benefited from the improved availability of power plants, especially nuclear power plants. This is largely due to significantly improved plant availability. In fact, the New York State Reliability Council has concluded that the installed reserve margin for New York could safely be reduced from 18 percent at the NYISO's inception to 15 percent today. That is the rough equivalent of over 1000 megawatts of generating capacity that consumers did not have to purchase in order to meet reliability standards.

The markets in New York have also attracted new investment. Since the NYISO's inception, over 6,000 megawatts of generation has been built. And almost all of that generation is in the locations where it is most needed. Moreover, two new merchant transmission lines that

can carry 990 megawatts now connect southeastern New York to its neighbors to the North and the South.

NYISO's competitive markets have provided non-discriminatory grid access and encouraged development of renewable resources.

Quoting from a letter sent to the Commission by the American Wind Energy Association last year, "Well-structured regional wholesale electricity markets operated independently allow far greater amounts of renewable energy and demand response resources to be integrated into the nation's electric grid." According to AWEA, 73 percent of installed wind capacity is located in independently administered markets that have only 44 percent of the potential for wind powered generation. Of the over 23,000 megawatts of proposed generation in the NYISO's interconnection queue, just under 8,000 are wind resources.

New York's restructuring has benefited the state by enabling the growth of demand response mechanisms. In the hot summer of 2006, the NYISO recorded a new peak of almost 34,000 megawatts

on August 2nd. Its demand response programs delivered the equivalent of 1,000 megawatts of power that did not have to be produced by power plants. Thus, in periods of extreme system stress, NYISO demand response programs have demonstrated their value in maintaining an uninterrupted supply of electricity. Indeed, NYISO's Comprehensive Reliability Planning Process considers demand response along with generation and transmission solutions to meet reliability criteria.

Prior to divestiture, New York's generation was owned by a limited number of investor owned utilities, essentially regulated monopolies. While the purchasers' ownership of these assets remains concentrated, New York has effectively reduced the risks of market power through its robust market monitoring and mitigation program. We have also taken the necessary steps to identify and address potential market manipulation.

In a time when we are experiencing a global credit crisis, it is important to say a few words about the NYISO's credit policies.

NYISO stakeholders transact approximately \$10 billion in electricity trades annually, yet we have minimized defaults without creating undue barriers to entry through a regular process of refining our credit and collateral requirements.

We believe there have been fiscal benefits to New York consumers through NYISO's operation, even though sharply increasing fuel prices have had a profound influence on the cost of electricity. In an attempt to determine the costs and benefits of restructuring in New York State, the NYISO retained the Analysis Group to study the issue. The Analysis Group's March 2007 report concluded that:

1. Significant benefits have resulted from the impacts of NYISO operation and market incentives;
2. The system-wide benefits exceeded the NYISO operating costs in every year from 2000 through 2006; and
3. In the later years the difference is hundreds of millions of dollars, or roughly five percent of system-wide production and fixed O&M costs.

Based on information contained in a 2006 study by Harvey, McConihe and Pope for PJM, the Analysis Group concluded that savings to New York's consumers were approximately \$100 million to \$200 million annually.

Over the past nine years NYISO has built a strong foundation for the future, but we will continue to face many challenges:

1. Integrating sizeable amounts of renewable resources and developing the necessary transmission facilities to deliver output from those assets.
2. Increasing fuel diversity while complying with increasingly stringent environmental regulations;
3. Fostering interregional initiatives to conform market rules so as to eliminate remaining seams and increase the scope of wholesale markets in the Northeast, thus optimizing the flow of power between control areas;

4. Examining the competitive market signals and incentives for developing infrastructure, whether transmission, demand response or generation; and finally
5. Developing market structures that will be a catalyst for introducing and expanding new technologies such as the wide spread use of hybrid plug-in vehicles and energy storage, communications, and smart grid technologies.

The NYISO and its Market Participants have developed a Comprehensive Reliability Planning Process that has effectively met the state's reliability requirements without having to resort to regulatory backstop solutions.

We are all aware of the challenges of siting transmission. New York State has not yet seen the major transmission build outs experienced by our neighbors because new natural gas plants have been located near the load centers in southeastern New York. That has postponed the need for transmission expansion within New York State, but the situation cannot continue indefinitely.

Additional transmission will surely be required in the future to ensure the security of supply, provide fuel diversity, and mitigate the sharply increasing costs of electricity. Generation from wind and other renewable sources is limited to specific locations; and the siting of nuclear or clean coal power plants is far less flexible than it is for natural gas facilities. It is our clear intent to move forward to implement a market driven, transparent process for economic transmission planning pursuant to the principles established by the Commission in Order 890. Consistent with our prior efforts, we will work collaboratively with our stakeholders to develop a consensus filing on this important issue.

We recognize that one of the ways we can impact costs is by increasing the efficiency of contiguous markets. Together with PJM, we have initiated a dialog intended to produce a mutually agreeable plan to eliminate cross-border barriers to trade, address cost-allocation issues between ISOs, and improve the overall efficiency of the Northeast markets. We will shortly expand our efforts to include ISO-NE, Ontario, Quebec and the Maritimes. We believe that this

should be undertaken in a comprehensive manner that includes market rules to support the interchange of power and facilitate the allocation of costs for future projects to those who benefit across multiple organized markets.

The NYISO will reinvigorate its efforts with its neighbors to implement joint congestion management and increase the efficiency of cross-border interchanges. Other initiatives include establishing a common data exchange protocol for the markets, supporting Market Participants' abilities to hedge congestion across control area boundaries, implementing faster and more accurate settlements across markets, and building support for robust energy futures markets.

The formation of a State Energy Planning Board by New York Governor Paterson is a positive development for the state. New York has lacked a comprehensive energy plan since 2002, but now intends to release a draft State Energy Plan in March 2009. The NYISO is committed to lending its industry expertise and technical support to

this effort. Organized markets operating with transparent price signals and non-discriminatory access are well positioned to support government's energy policy objectives such as reducing greenhouse gas emissions or achieving renewable portfolio standards.

Policy makers in New York have moved aggressively to deal with environmental issues and we concur that these issues require attention. But we must also note the environmental benefits that we wish to achieve have the potential to increase the price of energy. A further concern is that absent a comprehensive national policy New York may not fully achieve its stated goals.

We believe that the industry should investigate and encourage new technologies and use more efficient, cleaner ways to generate electricity. We are encouraged by the resurgence of interest in constructing advanced nuclear power plants and developing clean coal technologies, the latter recently endorsed by New York's Governor.

Finally, it is essential that we redouble our efforts to promote economic efficiencies through further market evolution. The NYISO conducts ongoing strategic planning initiatives and has developed a comprehensive Market Evolution Plan. Our end state vision is for competitive, liquid markets with the ability to hedge positions in both energy and capacity markets; additional opportunities for merchant transmission; demand side response and distributed energy alternatives; fair and effective credit policies; and interregional coordination of day-ahead and real-time markets.

It is clear that significant work remains to be done. The good news is that we have made meaningful progress since our inception in 1999 to develop efficient competitive markets, maintain the highest standards of reliability, and plan for the future. We have furthered the competitive agenda formulated by federal and state policy makers.

As we enter a new era of policy making on energy and climate change, the market structures we have created for wholesale electricity can be the platform to further policies such as integrating

green and renewable resources, reducing emissions, and moving vehicles from the pump to the plug.

There is no question that we face difficult challenges for the foreseeable future. You cannot pick up a newspaper or turn on television without confronting predictions about rising oil prices, economic downturn, and environmental disasters. The other side of the story is all too often lost in the bad news. We choose to come down on the side of optimism, believing that problems can be solved with commitment to a clear vision, human ingenuity, and advanced technology. We are ready to play our part in the solution.

Thank you. I look forward to answering any questions that you may have.