

NEW YORK STATE
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission)
As to the Policies, Practices and Procedures)
For Utility Commodity Supply Service to) Case 06-M-1017
Residential and Small Commercial and)
Industrial Customers)

Responses of the New York Independent System Operator, Inc.
to the Commission's
April 19, 2007, Request for Responses

The New York Independent System Operator, Inc. ("NYISO") is the not-for-profit corporation established in 1999 to facilitate the restructuring of New York State's electric industry. The NYISO is charged with administering New York State's wholesale electricity markets and operating the State's high voltage electric transmission system. Last year, NYISO market volume was \$8.6 billion; since its inception, the NYISO has managed a market volume of \$50 billion. The NYISO appreciates this opportunity to share its comments on the Public Service Commission's ("PSC's") important policy initiative.

In the course of investigating electric utility hedging practices, the PSC has opened a second phase of this proceeding to consider whether integrated resource planning should be used to establish public policies and objectives as guides for future New York electricity infrastructure investment. In this new phase, the PSC is also considering the use of long term contracts to facilitate the entry of new resources in order to further these policy goals. By way of background, the PSC reiterated its consistently held belief that:

The development of competitive markets, where feasible, will assist in assuring the provision of safe and adequate utility services at just and reasonable rates.

The NYISO agrees with this fundamental premise. New York should strive for a future in which competitive market structures guide electricity infrastructure investment in a manner that effectuates broad state energy policy. However, such a future requires the state to look at energy policy in all sectors and engage in broader range policy development. For example, a state policy to reduce energy consumption in the transportation sector can affect both that sector directly and the electricity sector. An example is the impact on electric load growth of the potential use of plug-in hybrid cars.

The NYISO is positioned to help the state in this process, and is in a unique position to assist in such an effort. The NYISO can provide reliable information and useful

expertise in the design of mechanisms to effectuate new energy policies. A market-based approach to implement state-determined policy objectives is the best opportunity to meet the state's needs in an efficient manner. Such an approach will shift much of the risk of unnecessary or excessive investment, less efficient power plant performance and inadequate risk management from consumers to investors.

INTRODUCTION

New York's wholesale electricity markets were developed as a means of implementing state policy. These markets, and the NYISO, can continue to be useful tools for efficiently implementing state energy policy, as such policy evolves over the years.

The PSC, in collaboration with the Federal Energy Regulatory Commission ("FERC"), brought about the divestiture of almost all of the state's power plants by the then vertically integrated utilities. They did so with the expectation that competition, to the extent it could be introduced into wholesale electricity markets, would serve the interests of the state's consumers better than a regulatory "substitute for competition." Working with FERC, the regulated utilities and potential market participants, the PSC helped fashion markets for New York in which competition could exist. New York's markets are now consistently held out as among the most advanced in the nation. The PSC and others have concluded that the markets have served the state well.¹

The wholesale markets in New York already accommodate both long and short term bilateral contracts. In fact, over half the supply of electricity and capacity in New York is currently provided pursuant to bilateral contracts. Thus, the policy issue to be considered by this Commission is not whether long term contracts are compatible with New York's markets, but whether to adopt policies specifically designed to encourage them, what objectives they should serve and, if new policies are to be adopted, what their parameters should be.

As the PSC has previously recognized, power-supply contracts can provide Load Serving Entities ("LSEs") with useful hedges against the risk of future price fluctuations. They can also mitigate market power by removing the market incentives a supplier may otherwise have to withhold supply to raise spot prices. Moreover, such contracts can facilitate new supplier investment by providing a stable revenue stream as a basis for securing construction financing.

¹ See: *A Cost-Benefit Analysis of the New York Independent System Operator: The Initial Years*, Susan F. Tierney, Edward Kahn, March 2007; *Extended Comments of Angela Beehler, Wal-Mart Stores, Inc.*, Conference on Competition In Wholesale Power Markets, FERC Docket No. AD07-7-000 (submitted on March 13, 2007); and *Staff Report on the State of Competitive Energy Markets: Progress To Date and Future Opportunities*, New York State Department of Public Service, March 2, 2006.

Future investors will assess whether the markets reflect rational economic considerations. In order to maintain the interest of private sector investors in building new energy infrastructure in New York, such contracts should be limited to economic investments. That is, long term contracts should not be structured to produce substantially more revenue than would be available in NYISO markets unless such payments are necessary to pursue specific state energy policy goals that are not priced in NYISO markets. Uneconomic investment supported with regulatory cost-recovery will tend to crowd out private investment in both the short and long term. Given the high electric demand in New York's downstate region, and the increasing need for the power sector to reduce its emissions to meet existing and pending environmental regulations, the PSC should not act in a way that will result in reduced private sector investment in meeting either the State's reliability needs or the PSC's policy goals. The probable introduction of "plug-in hybrids" in the transportation sector may result in changes in load factor, raising issues of how to meet that demand and making private investment even more important in fulfilling state energy objectives.

Integrated planning should focus on establishing policy goals such as reduced emissions, increased use of renewable generation or consistency with national strategic energy goals. To the extent that these characteristics or desired outcomes are not priced in existing NYISO markets, the state may need to encourage investments that support these policy objectives. Such encouragement, however, should be as compatible as possible with the state's electricity markets. The preferred means of implementing the state's goals should be through market mechanisms.

The state's implementation of its Renewable Portfolio Standard ("RPS") is a good example of NYISO/state collaboration in the development of a market mechanism to advance a state goal -- to increase renewable generation to 25% by 2013. The NYISO analyzed the reliability and market implications of significant wind investment and modified its market rules to ensure that they could accommodate the greater investment in wind generation proposed for New York. The NYISO also participated with the state in the design of the single procurement model whereby the state, through competitive bidding, enters into long-term purchase contracts for unbundled renewable energy attributes ("RECs") with new generators.

This procurement strategy is a good example of using a long-term contract to support new electricity investment that might not happen without that incentive, while maintaining the effectiveness of market forces. The revenue the RECs provide is only a small portion of a renewable resource's necessary income and the resource must participate in the NYISO markets to maximize the value of its investment. That is, even with a contract for its RECs, the developer of renewable energy actively participates in the capacity and energy markets acquiring revenue through these markets to cover its costs and ensure a reasonable return on its investment.

Any state integrated planning process should recognize the NYISO's established Comprehensive Reliability Planning Process, which identifies infrastructure needed to

maintain reliability, as well as its early-stage economic planning process, which is being adopted pursuant to a FERC order.

New York's wholesale electricity markets provide a welcoming environment for the development of renewables and for promoting energy efficiency and demand response. As mentioned, the RPS has encouraged construction of new wind resources through the use of market forces. New York's demand response programs have been among the most successful in the country, and the NYISO places a high priority on advancing such programs.

Several of the structured markets neighboring New York are developing what they term forward capacity markets. The NYISO and its market participants are exploring the desirability of implementing similar markets in New York, and a number of the issues being explored by the PSC in this proceeding should take that possibility into account.

No discussion on the subject of electric energy supply in New York can overlook the fact that the state's power plant siting legislation, Article X of the Public Service law, has lapsed, leaving power plant development subject to the vagaries of local zoning and to the State Environmental Quality Review Act. The absence of comprehensive siting legislation represents a substantial institutional barrier to resource development in New York.

The NYISO looks forward to working with the PSC and interested stakeholders to develop and implement the energy and environmental policies determined as necessary to guide future energy procurement decisions.

ANSWERS TO QUESTIONS POSED BY THE PUBLIC SERVICE COMMISSION

The PSC's questions are listed below followed by the NYISO's response.

1. Should there be a statewide integrated resource planning process to examine long term electricity resource needs? To what extent or in what manner would a statewide integrated resource planning process build on or parallel existing reliability planning processes?. What time frame should be examined in such a process and what issues should be considered? What is the role of the utilities and other interested parties in the process? How should the process differ from any previous integrated resource planning processes? What processes should be adopted, if any, to ensure that resource portfolios at the utility and statewide level satisfy overall planning objectives and public policy considerations? How should immediate concerns and long range considerations be addressed?

The NYISO supports broad state resource planning across several sectors. The NYISO's Comprehensive Reliability Planning Process ("CRPP") provides an evaluation of the electric infrastructure needed for reliability and can serve as a

basis for understanding future electric needs once policy decisions on future fuel use and procurement policies have been made. Through an annual cycle of CRPP studies and reports, the NYISO looks out ten years to identify those areas of the state where new resources are necessary to maintain a reliable bulk power grid and the timeline within which those resources will be needed. The CRPP depends, in the first instance, on the market to respond to its identified need(s) and looks to the regulated Transmission Owners and others to propose back-stop solutions in the event that the market does not propose adequate solutions to the identified reliability needs.²

Any State resource planning effort should also account for the information shared in the NYISO's economic planning process. The NYISO reports on historic congestion and maintains on its website detailed information on system congestion to inform market participants of economic opportunities to invest in infrastructure improvements and other resources.³ Both these NYISO processes provide useful platforms on which to build an evaluation of State policy objectives that require resource additions that go beyond reliability-only resources. Any State-conducted resource planning process should build on the existing processes rather than duplicating efforts by implementing a separate process to examine needed infrastructure investment.

Once cross-sector energy policies have been determined, the State resource planning process can identify those policy priorities and goals that are not yet priced in New York's markets, but which should be achieved over a ten-year planning horizon. Such an effort should:

- Identify State policies that should be implemented through electricity infrastructure investment in new generation or transmission construction or through energy efficiency and demand response;⁴*

² *The planning process also provides that the NYISO will conduct reliability and congestion analyses of alternative energy projects at the request of the PSC.*

³ *The NYISO and its stakeholders are currently reviewing the economic planning process in response to FERC Order 890, which, among other things, directed the NYISO to comply with nine planning principles. One of these directed the NYISO to provide a series of economic studies to its market participants to evaluate transmission congestion and opportunities to address congestion with transmission, generation and demand side resources. We encourage the Department of Public Service Staff to continue to participate in the NYISO economic planning process and use the information gleaned to inform the policy making initiatives growing out of this proceeding.*

⁴ *In designing these policies, the State should recognize the ability of a variety of resources to meet them, including generation, transmission, demand management and efficiency measures. We encourage the PSC to develop its policies in a manner that does not preclude any supplier that is qualified to deliver the desired resources, from offering them.*

- *Identify and develop, as necessary, market mechanisms that will fulfill these State policies. The RPS is an example of using market forces to address an identified State policy;*⁵
- *Avoid centralized determinations of resources necessary to achieve goals in favor of developing goals and allowing market mechanisms to satisfy them; and*
- *Involve all interested stakeholders.*

In some, emergency situations when the market does not produce prompt results, governmental action may be necessary to protect the public. The NYISO's experience in soliciting market mechanisms to satisfy identified needs may ameliorate these occurrences.

2. Should major regulated electric utilities be required or encouraged to enter into long-term contracts, with existing generators, proposed generators, and other entities, that facilitate the construction of new generation, the development of additional energy efficiency, the development of additional renewable generation resources, the re-powering of existing generation, or the relief of transmission congestion? Should such contracts be entered into for the purposes of improving fuel diversity, mitigating market power, or furthering environmental policies?

Long-term contracts with all suppliers (both new and existing) can benefit consumers by hedging the risk of future price fluctuations. They can also mitigate market power since a supplier that has sold its energy in a long-term forward contract will have less or no incentive to withhold the supply to raise short-term prices. Hence, encouraging such contracting and removing barriers including reducing the risk that such long-term contracts will be deemed imprudent is beneficial. Additionally, hedging requirements for LSEs mandated by regulatory agencies can help maintain active bilateral contracting in NYISO markets.

However, such contracts may not be an appropriate vehicle for fulfilling all of the PSC's policies, particularly with respect to new investment. To the extent that the State can devise strategies that allow LSEs or investors to meet state-determined policy goals and objectives through market-based purchases or investment, consumer costs will be lower and the acquisitions will meet the goals and objectives in an economically efficient manner. Developing supply-portfolio goals that LSEs can meet using their own acquisition strategies, is an example of implementing state policies in a manner that drives efficient, market-oriented, compliance mechanisms.

⁵ *The NYISO remains interested in exploring an even more market-friendly RPS implementation process and will propose introducing greater competition among renewable resource providers in the 2009 RPS review process.*

Long term contracts to facilitate new investment should be used only if the investment is otherwise economic (i.e., the investment would not require contract payments substantially higher than prevailing energy and capacity payments). In some circumstances, described in greater detail below, uneconomic contracts for the purpose of satisfying a well-defined policy goal that is unattainable with market-driven investment alone may be warranted. As a general matter, however, the PSC should avoid requiring the use of long term contracts for investments that would have been uneconomic in the NYISO markets.

Uneconomic contracts will ultimately impose substantial risks and unnecessary costs on consumers, and often create unforeseen consequences. For example, the regulatory contracts that resulted from the mandatory purchase requirements of the Public Utility Regulatory Policies Act, and the minimum six-cent-per-kilowatt-hour contracts that resulted from state legislation, illustrate the disadvantages of long term contracts to procure resources outside the rigors of market forces. Both these efforts led to investments in facilities the market would not have built, in locations the market would not have chosen, and proved to be economically burdensome for consumers. While encouraging long-term regulatory certainty for needed infrastructure improvements may be a laudable undertaking, the PSC should be cautious and avoid creating a situation in which long-term contracts lead to another series of “stranded costs.”

Although uneconomic investment may lower market prices in the short-term, the surplus generation it creates for the region will soon dissipate as load grows, generation retires, imports diminish and exports grow. At that point, market prices will return to pre-investment levels and consumers in the out-of-market contract will be paying higher costs. Moreover, even in the short-term, consumers being served under the uneconomic contract may have higher all-in costs. If the depressed market prices cannot support private market-based investment, new privately funded projects will disappear. Over the long-term, the State’s willingness to impose policies that override market functions is likely to act as a deterrent to future private investment. Additionally, one of the principle advantages of private investment in response to market signals is that the risks of new investment, including the risk of cost over-runs, are shifted from the consumer to the investor.

As stated earlier, long-term contracts used to pursue a well defined state energy goal may be necessary even if uneconomic. If used, they should be designed to be compatible with competitive markets. Contracts for differences that require the supplier to continue to participate in the NYISO’s markets can be useful acquisition instruments that preserve market forces while offering a steady revenue stream.⁶

⁶ *Contracts for differences provide for the delivery of a product at a specified price benchmarked against a market price. When the market price is less than the contract price, the buyer pays the supplier the difference, when the reverse is true; the supplier pays the buyer the difference.*

Long term contracts can supply an additional revenue stream to encourage investment in a market friendly manner as long as the facility continues to participate in wholesale electric markets. Such contracts should be designed to maximize the extent to which the seller obtains revenue through wholesale market performance. In effect, the contract provides a specified product (energy or capacity) to the buyer at an agreed price while requiring that the seller still perform as a wholesale market participant to maximize the value of its resource. The seller does this by providing additional capacity and energy when such products are economic, maximizing the resources's availability in the market and optimizing its maintenance schedules to avoid being off-line when energy or capacity is valuable and priced as such.

The purchase of unbundled renewable energy attributes in the RPS program is an example of a long-term contract that encourages new resources while requiring that such resources depend upon NYISO markets to maximize the value of their investment. This process may also serve as a model for pursuing other energy goals.

Long term contracts may not be necessary to preserve reliability in New York State. As discussed above, decisions on what is needed to maintain reliability should be made in the context of the NYISO Comprehensive Reliability Planning Process.

3. Should Load Serving Entities other than utilities, including the New York Power Authority and the Long Island Power Authority, be required or encouraged to enter into long-term contracts as described above? What role, if any, might entities other than Load Serving Entities play in such resource procurement?

The NYISO strongly recommends that the state not adopt the use of long term contracts by governmental entities such as NYP&A and LIPA as the principle mechanism for implementing its policy objectives. Contracts for investments that would have been uneconomic in the wholesale markets can shift substantial costs and risk to consumers over the long term. If used to pursue necessary policy goals, these contracts should be designed to encourage the supplier to maximize the value of its investment in the NYISO markets by maximizing its availability, providing capacity and energy when such products are economic, optimizing maintenance schedules and otherwise making the most of its market opportunity. That strategy avoids placing risks on the customer that the market would have placed on the investor.

The State should require all similarly situated load serving entities, including public authorities and municipalities, to implement public policy goals and objectives determined appropriate for power sector acquisition. All other things being equal, broad participation enhances the efficiency of the acquisition process. Implementation details may differ from LSE to LSE depending on extrinsic factors such as existing purchase portfolios, location of customer base, and size.

The NYISO recognizes that certain emergency situations may arise in which only prompt governmental action can protect the public, but such action should only be considered if market mechanisms cannot react in time.

4. Should resource procurement, as described in Question 1, be coordinated on a statewide basis? What regulatory oversight, if any, would be appropriate?

The PSC should coordinate any integrated resource planning statewide. Coordinated strategies can maximize market participation and, as mentioned, increase the efficiency of the procurement strategy. The outputs from the NYISO's reliability and economic planning processes can provide key data to assist the PSC's policy and implementation decisions.

5. What barriers, if any, exist that discourage long-term contracts for development of new electricity resources? What other barriers exist, if any, for the development of new electricity resources? Should incentives beyond what exist today be created to encourage entry into long-term contracts generally, or to foster the development of any particular type of resource? How could those incentives be structured consistent with the goal of acquiring the most cost-effective resources?

Regulatory uncertainty, the risk an investment would be found to be imprudent, and the newness of the restructured markets may create barriers to new, economic, long term contracts. The lack of confidence in estimates of future retail load can also lend uncertainty to the economic benefit of long-term procurement. The PSC can foster economic long-term contracts by establishing clear policy goals and implementation criteria by which such contracts will be judged. Under current conditions, a regulated purchaser runs the risk of imprudency if a contract proves, in retrospect, to have been ill advised but cannot benefit if the contract proves to be beneficial to consumers. The PSC should consider establishing criteria by which an investment may be judged reasonable. Such criteria could include the extent to which the investment is pegged to market value and was competitively sought.

Incentives can successfully be used to foster development of resources that satisfy well-specified policy objectives. Incentives should not dictate the type of acquisition instrument (long term contract, contract for differences, spot market purchases) but should provide financial encouragement for the acquisition of the desired resources to meet policy goals. Incentives that require providers to compete to supply the desired product can produce efficient prices. The RPS for renewable attributes is a good example of both these mechanisms. It used a Request for Proposals to solicit and select competitively-priced new entrants and awarded long term contracts for renewable attributes. Attribute-suppliers continue to participate in NYISO markets to maximize the value of the resource.

This process fostered competitively-priced new wind resource development within the context of the wholesale electric market.

6. Should constraints be imposed that would, under certain circumstances, restrict the resource types eligible for long-term contracts, limit the length of contract terms or establish the content of other contract conditions? What steps should be taken to limit any anti-competitive impacts long-term contracts might create?

Few constraints should be necessary for long-term contracts with new and existing supply that are used as financial hedges. Contracts necessary to support new infrastructure investment should be required to be economic (consistent with prevailing market signals) unless they are satisfying a specified policy objective. This protects the consumer and the resource supplier.

Because some market participants operate in both competitive and regulated markets, care must be taken to ensure that a competitive environment is preserved. Regulated entities should be precluded from shifting contestable market costs into their regulated business.

7. Should restrictions or guidelines be imposed on the resource procurement practices employed in selecting the resources that would be acquired under the long-term contracts?

The NYISO recommends that the PSC not limit its resource procurement mechanisms to long term contracts. If long term contracts are used, they should provide a stream of revenues that is comparable to those expected in the NYISO markets and should continue to expose the supplier to market forces. Resource procurement strategies that allow LSEs or investors to meet state-determined policy goals and objectives through market-based purchases or investment lower consumer costs and fulfill the State's goals and objectives in an economically efficient manner.

8. How should long-term contract costs be recovered from customers, and should different recovery mechanisms be developed based on the type of resource that is acquired under the contract, the length of the contract, or other factors?

Retail cost recovery is beyond the purview of the NYISO. However, employing reasonable economic criteria in evaluating whether such contracts were prudent will minimize the costs that must ultimately be borne by customers. Avoiding long-term contracts that include either pre-selected resources or pre-established prices such as the mandatory purchase requirements of the Public Utility Regulatory Policies Act and the legislatively required six-cent-per-kilowatt-hour contracts will avoid exposing customers to unintended consequences.

9. What procedures should be followed in reviewing a long-term contract and in establishing its qualification for cost recovery? Under what circumstances, if any, should recovery of contract costs be pre-approved?

Reasonable assurances from the regulator that contract costs meet State energy policy objectives through an approval process can help encourage LSEs to enter into contracts to hedge energy procurement costs or infrastructure investment. A determination at the time that a long term contract is approved that costs appear to be within a range of reasonableness, while not binding a future Commission to any prudence determination, could assist developers in securing investors and financing. As stated above, the PSC should consider establishing a policy of return on equity incentives and disincentives for successful or unsuccessful contracts.

The PSC should evaluate long term contracts on their economics relative to the NYISO market signals as described above. In particular, total contract costs should not exceed the near-term forecasts of energy and capacity costs. Contracts that fail under these criteria should only be supported by the State if they are achieving a well-defined policy goal, and that the additional forecasted costs are outweighed by expected public benefits. Such contracts should encourage continued participation in NYISO markets to maximize suppliers' revenue.

10. Can long-term contracts (energy and/or capacity) be harmonized with existing NYISO rules for energy and capacity markets, and with potential NYISO forward capacity markets? If so, how can they best be harmonized? What changes to NYISO market rules, if any, would be necessary or appropriate for the purpose of accommodating long-term contracts? Should NYISO market rules recognize or ameliorate the impact, if any, of long-term contracting on the NYISO capacity prices paid existing generators, or, if amelioration is appropriate, should it be accomplished through non-NYISO mechanisms?

Properly structured long-term contracts can be harmonized with NYISO markets. Indeed, at least fifty percent of current wholesale energy and capacity market activity is through bilateral contracts. The only form of long-term contracting that would be inconsistent with the NYISO markets would be widespread contracting for new generation that is uneconomic at prevailing prices and is not intended to promote a state energy policy. As mentioned, uneconomic contracting, for the purpose only of increasing supply, would drive out private investment and shift investment risks and costs from suppliers to consumers.

Long-term, uneconomic contracting is only in the public interest if it is achieving a public policy goal that is not priced in the NYISO markets such as reducing environmental externalities. If the State decides to use long term contracts to achieve policy goals that the market does not otherwise make available, the NYISO recommends the contracts should also provide the opportunity to maximize revenues by participating in NYISO markets. The state's RPS procurement mechanisms use long-term contracts to encourage new investment while remaining compatible with the wholesale market.

11. Are there any other creative solutions that might be considered to address the issues identified herein?

The NYISO encourages the Commission to be creative in developing and implementing State energy policies.⁷ Long term contracts are but one potential mechanism and one which history demonstrates should be used with caution. Approaches to implement state-determined energy policy objectives that rely on market forces, rather than long term contracts, will better shift risk from consumers to investors.

The NYISO is in a unique position to assist in what needs to be a broad integrated planning effort. The NYISO possesses expertise to assist the state to create and implement progressive, efficient, market-friendly procurement mechanisms with which to effectuate state energy policies.

⁷ *The PSC and the Department of Environmental Conservation ("DEC") may wish to coordinate their efforts pursuing state energy policy in order to find useful synergies. For example, other implementation options for the Regional Greenhouse Gas Initiative, such as imposing compliance obligations on loads rather than generators, are being explored in other jurisdictions and might prove useful in reducing the phenomenon known as "leakage."*