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November 18, 2005

VIA ELECTRONIC FILING

Honorable Magalie R. Salas, Secretary
Federal Energy Regulation Commission
888 First Street, N. E.
Room 1-A209
Washington, D.C. 20426

Re: Docket No. AD05-17-000 – Notice Requesting Comments On Wholesale And Retail Electricity Competition

Dear Secretary Salas:

For filing, please find the Notice of Intervention and Comments of the Public Service Commission of the State of New York in the above-entitled proceeding. Should you have any questions, please feel free to contact me at (518) 474-7663.

Very truly yours,

/Sean Mullany
Sean Mullany
Assistant Counsel

Attachment

UNITED STATES OF AMERICA
ELECTRIC ENERGY MARKET COMPETITION
INTERAGENCY TASK FORCE
AND THE
FEDERAL ENERGY REGULATORY COMMISSION

Notice Requesting Comments On Wholesale And Retail Electricity Competition	) Docket No. AD05-17-000))

NOTICE OF INTERVENTION AND COMMENTS OF THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK

The New York State Public Services Commission (NYPSC) submits these comments pursuant to the Notice Requesting Comments (NRC) issued October 13, 2005. The NYPSC submits its comments in compliance with Rule 214 of the Federal Energy Regulatory Commission's (FERC or Commission) Rules of Practice and Procedure.

Copies of all correspondences and pleadings should be addressed to:

Sean Mullany Assistant Counsel Public Service Commission of the State of New York Three Empire State Plaza Albany, NY 12223-1350 sean_mullany@dps.state.ny.us	Rajendra Addepalli Manager, Staff ISO Team Office of Economic Development and Policy Coordination Public Service Commission of the State of New York Three Empire State Plaza Albany, NY 12223-1350 rajendra_addepalli@dps.state.ny.us

EXECUTIVE SUMMARY

The NYPSC welcomes this opportunity to participate in the Electric Energy Market Competition Task Force's (Task Force) study and analysis of competition within wholesale and retail electric energy markets. We are actively involved in facilitating the transition to competitive wholesale and retail electric markets within New York State by working with the market participants, the New York Independent System Operator, Inc. (NYISO), the New York Reliability Council, and most importantly the consumers and communities within our State. These comments provide our experiences in making this transition, and identify some of the key areas the Task Force should consider.

The NYPSC worked with the New York vertically-integrated utilities to restructure their business plans. Essentially all of their generation assets were sold to unaffiliated privately-owned entities, while the utilities (Transmission Owners (TOs)), retained their transmission and distribution assets. The divestiture of generation plants was designed to reduce the vertical market power of the TOs to more vigorously support competition in the wholesale generation market. The new privately-owned generation owners became wholesale competitors and bid their supply into the New York Independent System Operator, Inc. (NYISO).

The NYISO, created in 1999, was charged with administering a competitive wholesale energy market, with the paramount responsibility of ensuring the reliability of

the bulk power system while performing an economic dispatch of generation resources. The NYISO accomplishes these responsibilities by performing a least-cost economic dispatch of generation resources, while taking reliability criteria and transmission constraints into account. Although generation suppliers bid their marginal costs of generation, all suppliers selected for dispatch are paid the market-clearing price, adjusted for transmission losses and congestion costs.

To ensure adequate generation resources, the load serving entities are required to pay for sufficient capacity through an installed capacity (ICAP) payment, which compensates generators for their availability. This market design helps ensure sufficient supply is available in a competitive marketplace. The NYISO also utilizes an annual Comprehensive Reliability Planning Process to forecast the reliability needs of the bulk transmission system on a 10-year horizon, with a preference for market-based solutions, but with the certainty of a regulatory backstop solution implemented by TOs in the event a market-based solution does not materialize.

The NYPSC has sought the development of robust retail competition by supporting key initiatives, such as increased customer choice, lower barriers to market entry for energy service companies (ESCOs), a level playing field for all suppliers, effective dispute resolution protocols, essential consumer protections, innovative pricing and services, ease of customer migration among suppliers, and price/value comparisons. The benefits of a competitive retail electric market include the availability of both fixed and variable pricing, availability of multi-year contracts, the provision of

environmentally-friendly (i.e., green) energy, and the ability to choose suppliers.

Our experience has shown that retail competition in New York has developed to a greater extent for large use customers. Statewide, the market share of ESCOs serving larger customers is higher than those serving smaller customers. However, to date, there are seventy-four suppliers in New York with at least seven competitive suppliers serving residential electric customers in each major utility franchise area. We fully expect the retail market to be more robust as consumers are made aware of the opportunities that ESCOs provide.

Demand-side programs have long been in effect in New York, as discussed below. Moreover, distributed generation has been encouraged by the State Legislature and the NYPSC. We anticipate that the use of these approaches will grow.

Finally, New York has worked to meet the growing needs of its residents and businesses using a number of approaches as described herein. Competitive wholesale and retail markets have worked well to meet New York's goals and we would wholeheartedly support federal initiatives to compliment our work in New York.

Overview Questions

1. What are the critical elements or attributes of competition in wholesale electricity markets that the Task Force should examine?

To serve load reliably, wholesale electricity generation must be tightly coordinated; for example, total generation must match total load at all times, and transmission lines must not be overloaded. This coordination is accomplished by central

dispatch, under the direction of a system operator (which can be a vertically integrated utility, a tight power pool, or an independent system operator such as the NYISO).

To serve load efficiently, dispatch should attempt to minimize production costs, subject to reliability constraints. Economic dispatch accomplishes this by selecting suppliers with the lowest marginal costs, adjusted for transmission losses and congestion.

In a competitive wholesale market, prices should be comparable among sellers at any given time and location. In New York, this is accomplished by paying all suppliers the market-clearing price, adjusted for transmission losses and congestion. Under this approach, in a competitive market suppliers have an incentive to bid their marginal costs, which permits the NYISO to carry out an economic dispatch. Alternative approaches may prove inefficient: If suppliers are paid their own bids, they will be discouraged from bidding their marginal costs, rendering economic dispatch impossible; as a result production costs will likely increase, ultimately at the expense of consumers.

Market rules for energy and resource adequacy must be transparent, so that customers and investors will have confidence in the competitiveness of the market and can rely on market prices for making efficient decisions on consumption and investment. Suppliers must be free to enter and compete fairly with existing suppliers; they must also be free to exit if they cannot cover their going-forward costs.

Finally, market power must be mitigated, by structural means if possible (*e.g.*, multiple non-pivotal suppliers within a market defined by adequate transmission), or else by behavioral rules and procedures (such as cost-based bid caps).

2. What are the critical elements or attributes of competition in retail electricity markets that the Task Force should examine?

Desirable attributes of retail competition include increased customer choice, low barriers to market entry and exit, a level playing field for all market participants, effective dispute resolution protocols, equivalent consumer protections regardless of commodity provider, unfettered access by energy services companies (ESCOs) to monopoly distribution services across customer classes, opportunities for competitive suppliers to offer innovative pricing, products and services, ease of migration to and among competitive suppliers, price/value comparison visibility, and balance of consumer ease of switching suppliers with protections against unauthorized switches

3. What benefits have occurred because of competition in wholesale and retail electricity markets? What additional benefits are expected? What benefits were forecasted and have not occurred? Why? What harms have occurred because of competition in wholesale and retail electricity markets?

Wholesale competition has established efficient and transparent prices across New York, which are posted on the NYISO's website. The existing transmission grid is now fully utilized to maximize the transfer of lower cost power, thus reducing otherwise higher costs downstate. Higher prices in eastern and downstate New York have attracted investment in new generation in those locations and interest in new transmission lines into those areas.

Divestiture of generation plants has reduced vertical market power concerns in New York. In some cases, divestiture has rationalized plant ownership. For example,

under deregulation, New York's six nuclear plants were sold to two companies each operating large fleets of nuclear plants. Because the new owners specialize in nuclear plant operations, they should be able to provide added expertise and oversight to improve operations at these unique and critical facilities.

NYISO has developed programs for price-responsive load and distributed generation which have resulted in increased participation by demand response providers in the New York Control Area.[1] During periods of extreme weather or other system emergencies, these resources provide valuable alternatives to involuntary curtailments and help reduce the costs of serving the remaining load. For example, in 2002, the NYISO was able to call on these resources to help avoid voltage reduction and/or load shedding.

Locational marginal pricing and Unforced Capacity (UCAP)-based Installed Capacity pricing give generators incentives to be available when the bulk power system most needs them. The availability of generators during peak periods increased to 90.3 percent of the time during the summer months versus 86.5 percent prior to NYISO operation. The duration of nuclear unit maintenance outages has been greatly reduced while their reliability has improved since the inception of NYISO market operations. More specifically, the average capacity factor for nuclear units has increased from

[1] As of October 18, 2005, the NYISO had enrolled 1794 participants, representing 1120 MW, in its Special Case Resources (SCR) Installed Capacity (ICAP) Program. There were 917 participants, representing 597 MW, in the NYISO's Emergency Demand Response (EDRP) Program, and 19 participants, representing 394 MW, in its Day Ahead Demand Response Program (DADRP).

approximately 60 percent prior to 2000 to approximately 90 percent currently. New efficient generating units, such as the East River, Ravenswood, Bethlehem and Poletti projects, are replacing older less efficient units. Moreover, additional alternative-fueled generation in response to high natural gas prices is anticipated.

Retail competition has developed to a great extent for large use customers. Statewide, the market share of ESCOs serving these customers is higher than those serving lower use customers.[2] Results for low use customers vary depending on a number of factors, including franchise size and the particular practices of individual distribution utilities.

Benefits of competitive retail electricity markets include availability of both fixed and variable pricing, availability of multi-year contracts, the provision of environmentally friendly ("green") energy, and the ability to choose suppliers based on whatever additional criteria consumers value. Innovation in pricing and bundling of additional energy and other services for consumers are expected to increase as markets mature and additional infrastructure and systems are created.

In some respects, the rate of progress in retail competition has been slower than anticipated. Primarily due to small margins, competitive retail suppliers have had to choose their markets carefully and expand more slowly than was expected. However,

[2] In New York State, as of September 2005, 492,213 electric accounts have switched to a competitive supplier for their energy commodity. Over thirty-seven percent of all customer load has migrated to competitive suppliers and over seventy-four percent of all large time-of-use electric customer load has migrated. Statewide about six percent of residential customers have switched to an ESCO for their electric commodity. Higher migration levels have been achieved in certain service territories.

growth has been steady and continues.

4. What are the major public policy concerns that the Task Force should examine in its review of competition in wholesale and retail electricity markets?

Transparent prices are necessary for the efficient operation of the market and provide essential information to investors and customers. In reviewing market structures, the Task Force should be concerned about energy-only competitive wholesale markets. Energy-only competitive markets rely solely on energy prices to finance new generation. In a mature market with sufficient price-responsive load, such a design could be workable. However, given current low levels of price-responsive load, an energy-only design may lead to unacceptably high levels of involuntary curtailments (e.g. rolling blackouts), particularly in the major load pockets such as in New York City and Long Island.

To mitigate this risk, the NYISO requires all load serving entities (LSEs) to procure sufficient levels of installed capacity to meet traditional reliability standards (1 loss of load in 10 years), including locational requirements for LSEs serving the major load pockets. While there are costs associated with the installed capacity requirement, the higher level of reliability benefits customers by reducing the risk of involuntary curtailments as well as reducing price spikes in the energy markets.

Another policy concern is fuel diversity. Fuel shortages (*e.g.*, droughts which limit hydropower, or disruptions to natural gas production and/or distribution) can severely impact electricity markets. Most base-load gas-fired generation in New York is

dual-fuel, i.e. generators are able to switch from natural gas to oil. Studies are underway to determine if dual-fuel requirements or other measures are needed to ensure fuel diversity. New York has also adopted a Renewable Portfolio Standard that should contribute to fuel diversity.

The NYISO does not operate long-term forward markets, relying on market participants to hedge their positions through bilateral contracts or unregulated forward markets. However, unregulated forward markets have been slow to develop. Some parties advocate requiring market participants to purchase most electricity products in forward markets and limiting the use of spot markets. Longer-term markets should provide greater price stability, but robust spot markets are necessary for efficient market balancing.

As the Commission has urged, long-term planning is crucial to successful competitive markets. Given the long lead times required to site and build new generation or transmission lines, New York is developing long-term (10-year) plans to ensure minimum levels of generation and transmission needed for reliability. NYISO's planning process encourages merchant investment and relies, in the first instance, on market-based projects to provide needed new capacity, but recognizes that if the market does not respond there must be a regulatory backstop. Thus, the TOs are responsible for developing solutions in the event the market fails to provide minimum levels of reliability.

Finally, the potential for market power in generation and retail supply must be

studied and remedied. New York utilities voluntarily divested most of their generation to unaffiliated entities, which mitigated vertical market power and ensured a level playing field. This also created a complete separation of transmission ownership from generation ownership, which has facilitated efficient wholesale competition and reduced the need for unwieldy regulatory oversight of the interaction between transmission owners and generation owners.

5. In what significant ways do wholesale and retail electricity markets differ from other energy or commodity markets? What implications do their differences have for public policy?

Electricity cannot be readily stored; as a result, generation must match load at all times. This requires tight coordination of generators across each control area via central dispatch. The dispatcher may be a vertically integrated utility, a tight power pool, or an independent system operator. Typically the dispatcher selects the lowest-cost generators available to serve the load subject to reliability constraints.

Price volatility is a concern in energy commodity markets. The marginal cost of supply, and thus the efficient price of electricity, can increase suddenly if an increase in load (or outage of a low-cost generator) requires the operation of a higher-cost supplier. A closely-related policy concern is demand elasticity. Most retail electricity consumers have neither the means nor the incentive to continuously monitor real-time prices, and to adjust their consumption accordingly. To the extent that load is not responsive to real-time prices, other measures may be required to ensure reliability and efficiency. We note

the Energy Policy Act of 2005, Section 1252, encourages the consideration of time-based rate schedules and metering.

Central dispatch must take account of "congestion" when transmission limits are reached, and operate higher-cost generation to avoid potential overloads. Transmission limitations create load pockets and when there are limited numbers of suppliers to serve the load within a given area, there are increased risks of market power being exercised by generators within the load pocket. The marginal cost of supply, and thus the efficient price of electricity, can be radically higher in a load pocket because some of the load must be served by local generation. Thus, market power, especially local market power, is a significant issue that needs to be monitored and mitigated.

Wholesale Market Questions

B. Generation Ownership:

1. How has ownership of electric generating plants changed over the past 10 years?

2. In the past 10 years, when generations assets have been sold or transferred, how much capacity was sold or transferred to a) utility or utility affiliates, b) existing non-utility market participants; c) new market participants?

New York utilities have divested practically all of their generating plants over the past 10 years. Most divested generation was sold to new market participants (i.e., new to New York's electricity market).[3] Long Island generation was sold to KeySpan and the

[3] According to the NYISO's 2005 Gold Book, Load and Capacity DATA (Table III-2), as of April 1, 2005, the major owners (i.e., over 1000 MWs) were as follows: AES (1278 MW); Con Ed (1599MW) (including IPPs like Linden Cogen); Constellation (2325MW); Dynegy

power generated was committed to the Long Island Power Authority, a state authority, under a long-term contract.

3. How much existing merchant or non-utility generation assets have been sold or transferred? What were the reasons for these transactions?

Over the past few years, there have been several sales of merchant generation assets to other merchant generators.

4. How much existing capacity has been sold or transferred to utilities and converted to rate-based assets? Of those how many were previously affiliated with a utility and how many were purchased from other entities?

None.

C. Generation Adequacy:

1. How is generation adequacy addressed in each region or system? Is there a specific enforceable requirement that load serving entities or market participants must meet? How is planning for generation adequacy conducted?

Prior to the utility divestiture of generation (restructuring), the utilities were required to provide sufficient capacity to serve their forecast summer peak load, including sufficient capacity reserves so that the expected loss of load (due to inadequate generation) would occur no more than once in ten years. After restructuring, the New York Reliability Council established reserve margins that all load serving entities (LSEs) are required to meet. Moreover, locational capacity requirements are in place for New

(1702MW); Entergy (2862MW); KeySpan (4225MW) (Long Island generation was committed to the Long Island Power Authority under a long-term contract); KeySpan Ravenswood (2386MW) (NYC generation); Mirant (1590MW); NYPA (6107MW); NRG (4279MW); Reliant (2098MW); Sithe (1217MW).

York City and Long Island. LSEs serving load in New York City and on Long Island must procure a specified minimum portion of their capacity from local generation. If an LSE fails to procure sufficient capacity prior to each month, the NYISO enforces the requirement by charging the LSE a Supplemental Supply Fee for the deficiency and using the funds to procure the required capacity.[4]

To establish transparent market prices, the NYISO operates capacity spot markets as well as monthly and 6-month (strip) forward markets. The NYISO's spot markets incorporate predetermined "demand curves" which obligate LSEs to procure capacity at prices consistent with supply and demand, as described in answer to question 11. This market design helps stabilize capacity revenues to generators, improves adequacy of supply, and mitigates potential market power in the capacity market.

The NYISO plans for reliability as part of its comprehensive resource planning process. The NYISO has started to forecast reliability needs up to 10 years in advance, and will publish its findings annually. The NYISO and the market participants have established a process for ensuring that reliability needs will be met by new generation, transmission, and/or demand-side resources.

2. Has new generation construction kept pace with demand growth in the state or market region? If not, why not? What are the most important factors that affect whether generation will be built?

New generation has kept pace with demand growth in New York; moreover, most

[4] See Services Tariff Section 5.14.1(c), sheet 158.

new generation has been located where it is most valuable, in the Hudson Valley and southeastern New York.

Price signals from the energy and capacity markets are the most important factors in affecting whether merchant generation will be built. Transmission constraints lead to higher prices in the Hudson Valley and southeastern New York, encouraging new merchant generation in these regions. New York's market design incorporates demand curves for installed capacity and operating reserves, to provide more gradual and predictable price responses to tightening markets. These provide market participants with advance warning of potential shortages, providing a lead time for efficient response. Moreover, regulatory certainty increases predictability and encourages investment.

The energy market is very important for resource adequacy. Energy markets need to be designed to have the ability to signal scarcity prices at times when the system is in a shortage or near shortage mode. For example in New York, price responsive demand sets a high energy market price at times when it is called upon. Furthermore, in New York, a demand curve for operating reserves has recently been incorporated into the energy market design. It yields high scarcity prices for the energy market at times of shortage or near shortage in which the system is running low on operating reserves. Scarcity prices offer a potentially significant financial inducement to investors considering entering the market with new investment in generation.

4. What generation facilities have been installed in the past five years? What was the experience in the process?

More than 3,700 MW of new, efficient generation has been installed since the NYISO's markets opened in December 1999. 1,000 MW of new capacity is expected to enter commercial operation in New York City in 2006. (SCS Astoria (500MW); New York Power Authority Poletti (500MW).

9. What incentives do competitive suppliers have to maintain adequate reserve capacity?

Competitive suppliers (generators) receive compensation for making installed capacity and operating reserves available. Failure to meet these obligations result in forfeiture/reduction in payments.

10. What incentives or responsibilities do load serving utilities have to maintain adequate reserve capacity?

All LSEs are required to procure adequate installed capacity, including reserve margins determined by demand curves (as discussed below). Failure to do so results in a deficiency charge payment by the LSE.

11. How can competitive markets assure adequacy of generation supply? How is reserve sharing to meet state or regional generation adequacy standards accomplished in competitive markets? How can other institutions/market processes provide an effective substitute for reserve sharing?

Competitive markets depend upon prices to signal the need for generation. Capacity markets should be designed so that capacity prices increase gradually as

capacity markets tighten, to signal market participants in advance and give them time to respond efficiently. In New York, the sloping demand curve feature of the capacity markets signals the need for new generation.

The NYISO's original installed capacity market design included a "vertical demand curve," i.e., a fixed minimum requirement with a very large penalty on loads for deficiencies ("deficiency charge"). However, so long as excess capacity was available to the Statewide capacity market, capacity prices were severely depressed. Moreover, any supply above the requirement went unsold and suppliers received nothing for their capacity, which provided generators with a strong incentive to retire marginally economic generation facilities. Because of the lack of interested investors in new generation in 2000 and 2001, there was a concern that a wave of retirements could leave the State dangerously short of capacity in a few years. Most significant was the concern that the New York City capacity market was tight and prices were near the estimated cost of new capacity. Unfortunately, investors indicated that they were unwilling to count on these capacity payments for financing new construction, because of their fear that even a small excess supply would cause the capacity market price to collapse, leaving much of the investment dependent upon energy prices alone.

Moreover, the vertical demand curve provided an incentive for generators to withhold enough capacity to create an artificial deficiency. Suppliers would then be free to charge up to the deficiency charge of $477 per kW-year.

To improve the performance of the capacity market, in 2003 the NYISO replaced

the vertical demand curve with a gradually sloped demand curve. If the available supply is greater than the minimum requirement, additional capacity is procured, but at a lower price. This reduces price volatility and mitigates potential market power in the capacity market.

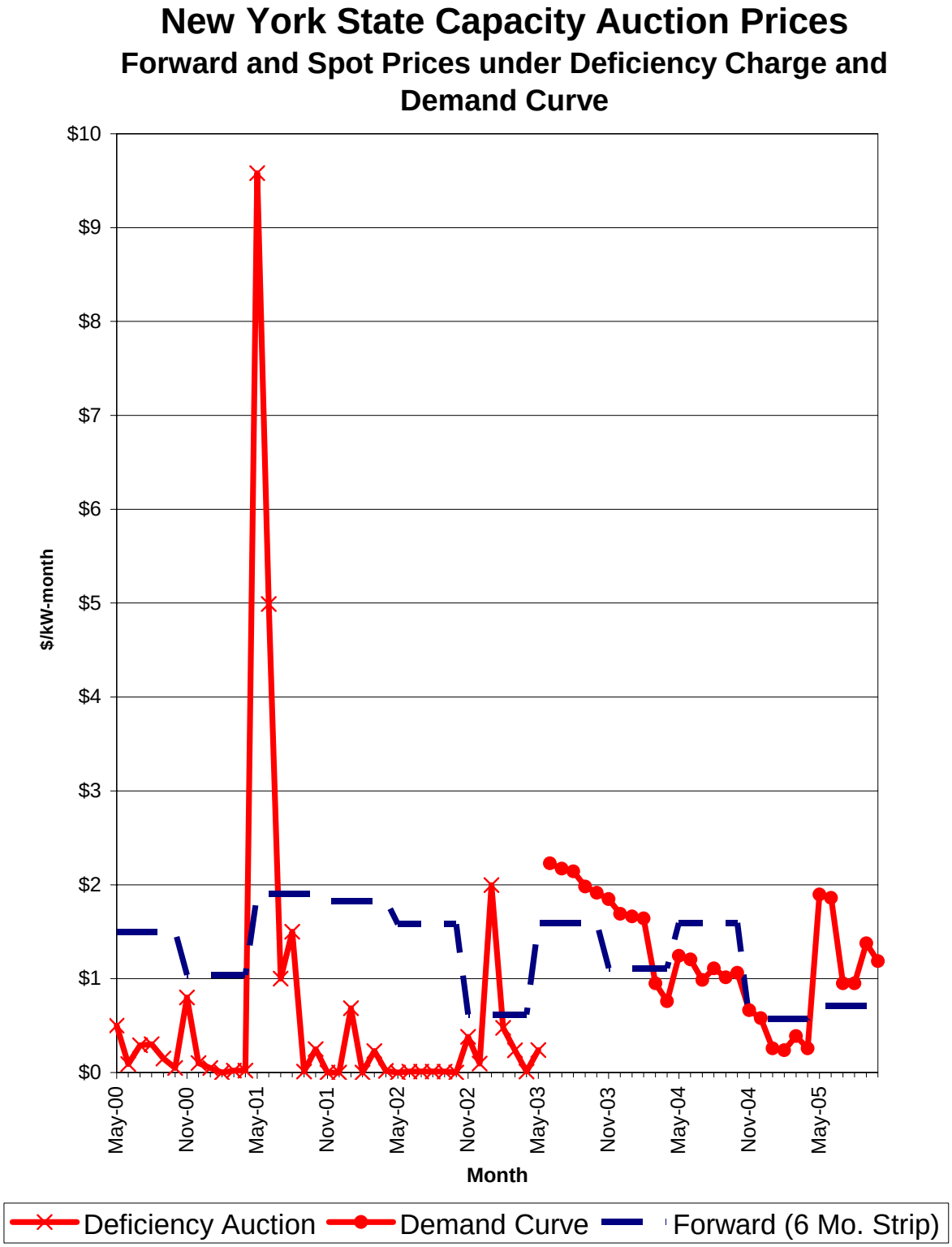
The chart below shows that, since the introduction of the Sloped Demand Curve in June 2003, spot market prices in New York are reasonably stable and predictable; forward prices (from the 6-month strip auctions) are consistent with expected spot prices; and all supply receives a payment, instead of generators with "excess" capacity receiving nothing. Despite the continued tight capacity market in New York City, merchant supply has been bid into the capacity market at reasonable prices, and has not been withheld to create an artificial deficiency. In addition, there has been an increase in the number of bilateral contracts for capacity.

In designing the parameters of New York's Demand Curves, careful consideration was given for managing potential rate impacts to loads. For example, the reference prices of the Demand Curves (which are based on the cost of building a new peaking unit) were subject to a three-year phase-in. Consideration of available supply, including ample imports, led us to forecast spot prices that would have minimal immediate rate impacts. The spot market prices, post-Demand Curve, have been generally consistent with forward prices prior to its implementation; the principal impact was to pay a consistent price for the "excess" capacity, rather than paying $0 and hoping it would not cause generation to retire.

These stable and reasonable prices have helped existing older plants, except those that were retired for environmental reasons, remain in operation. The Demand Curve has also ensured capacity payments for almost 1000 MW of distributed generation and interruptible load.

As for the long-term goal of improving the effectiveness of the capacity market in attracting new generation investment, a definitive test of that effectiveness is premature. The generation market in the Eastern United States, and therefore in New York, is currently in a surplus capacity state. As such, while a few merchant plants have been completed since the introduction of the Demand Curve, statewide prices from the Demand Curve are low and are properly signaling a lack of demand.[5] The true test will only come when the need for new generation is on the near-term horizon and investors decide whether to enter the market in time to satisfy that need. We have not yet come to that point.

[5] In the tight New York City capacity market, the financial incentives provided by the Demand Curve have been supplemented by requests for proposals by Transmission Owners for long-term contracts. The New York City location capacity market provides only limited financial assurances for large merchant plants, since, even with the benefit of a sloped demand curve, adding 500 MW of capacity will decrease the price by one-third.


New York State Capacity Auction Prices
Forward and Spot Prices under Deficiency Charge and Demand Curve
$10
$9
$8
$7
$6
$5
$4
$3
$2
$1
$0
$/kW-month
May-00
Nov-00
May-01
Nov-01
May-02
Nov-02
May-03
Nov-03
May-04
Nov-04
May-05
Month
Deficiency Auction
Demand Curve
Forward (6 Mo. Strip)

D. Transmission Investment and Regulation:

1. What are the most important factors that affect whether transmission will be built? What are ways to improve the process? What difficulties have transmission owners had in upgrading or building new transmission facilities? What are the prospects for merchant transmission?

The most important factor affecting whether transmission will be built is an established need. The pre-eminent basis for need is system reliability, including the ability to serve new load. Transmission can also be justified if it provides economic benefits that exceed costs. Once the need has been established, it is necessary to consider a valid design that optimizes facility size and minimizes land use and environmental impacts; a clear, predictable siting process; and an assured method of cost recovery.

New York State has directed its efforts toward harmonizing these different considerations to ensure the transmission system is designed, constructed and operated in a way that meets the critical needs of system reliability and effective market functioning. The NYISO has recently put in place a planning process that will identify both reliability needs and congestion of the bulk transmission system. New York State's policy is to rely on the market first to address reliability needs.

The ability to site facilities within a reasonable time period is a factor affecting construction of needed transmission. The NYPSC has a well-documented siting process that ensures prompt and responsive siting for transmission lines. N.Y. Pub. Serv. Law Art. 7. The NYISO's planning process will be a key input to informed decisions on

facilities siting. Obviously, reasonable cost recovery is a key component.

Interconnection projects and required reliability upgrades have proceeded without significant problems. One new merchant transmission project is already in-service in New York and another such project is expected to be in service by 2007. Both are based on long-term contracts backed by the Long Island Power Authority.

The principal difficulties facing merchant transmission projects include incomplete market rules for allocating property rights to new investments; the impact of large projects on market prices;[6] and the failure to recognize external benefits of new transmission facilities (*e.g.*, improved competition though expanded markets). The NYISO is sponsoring a forum on December 1, 2005, to examine the needs of merchant transmission developers and identify mechanisms to improve market signals for appropriate system expansion and upgrades.

2. Over the past 10 years, what have been the trends in investments in transmission by utilities by state or region? Are there any prevailing patterns in transmission investments in upgrades and replacement of existing plant versus new lines, interconnections, automation? Have these patterns of investment shifted over this period? Are there any projected changes in patterns of transmission investment over the next 5 years?

Historically, New York's transmission system was designed to move hydro power from the north and west portions of the state to load centers in the southeast. The growth of intermediate load centers across the state has led to a trend towards smaller, more

[6] Large projects can drive market prices down, drastically reduce market revenues from congestion payments, and thereby undermine the economic viability of the proposal.

geographically disbursed generation. Few major transmission facilities have been required during this time to maintain an adequate, reliable system. Transmission is being constructed to accommodate interconnection of new generation and growing load. However, there has not been a need for the construction of major new 345 kV lines to move power across the state since the New York Power Authority constructed the Marcy South project in the late 1980s to move power from central New York to southeastern New York.

Several portions of the 115 and 69 kV systems are more than sixty years old and are slated for refurbishing or rebuilding. Substation equipment is regularly upgraded to accommodate faster response times, safety and improved monitoring. These activities are expected to continue and possibly increase over the next five years. The NYISO planning process addresses whether new transmission will be needed to meet identified future reliability needs.

3. How are transmission needs of merchant generators and renewable energy projects included in regional or utility transmission planning and upgrades?

New York focuses on system planning, not just on transmission. All resources are considered and encouraged in the process. The special needs of some renewable technologies (e.g. wind) are being accommodated in the NYISO market rules and tariff.

Steps toward a regional planning process are being taken based on a protocol entered into by the NYISO, ISO-NE and PJM last year. The protocol calls for sharing base cases and performing joint studies to determine regional system needs. All three

entities have planning processes that accommodate merchant development and, therefore, their interests are incorporated into the regional process.

4. How has the establishment of Regional Transmission Organizations (RTOs) changed transmission operations, transmission planning, and investment patterns?

This question can reasonably be expanded to include ISOs along with RTOs. The three northeast ISOs/RTOs have their roots in tight pools which featured coordinated transmission operations, generation dispatch and planning. The establishment of ISOs/RTOs has (1) brought more stakeholders into the decision making process, (2) coupled system operations with markets administration, and (3) shifted operational decision-making from individual utilities to the ISO/RTO. Planning is being re-oriented from TOs just clearing their upgrade plans with neighboring systems to taking a system-wide view of needs and solutions. New York relies in the first instance on investment by merchant developers, with the transmission owner making bulk system investments only when directed by the NYISO for addressing reliability needs.

5. Within a region or RTO, is there a different process for transmission upgrades that are not required for reliability but would increase access to lower priced power in areas with economic congestion?

The NYISO has developed analysis tools and protocols intended to better measure congestion costs to allow market participants to make more informed decisions when proposing economic-based projects. Historical congestion costs are calculated both on a "state-wide" and a "path" basis. Congestion information is presented from a societal (i.e.

bid production costs) perspective, a "payments-to-generation" perspective and a "payments-by-load" perspective. The NYISO reliability planning process encourages merchants to propose projects that would simultaneously solve reliability needs and provide returns through the market.

Retail Market Questions

A. Retail Markets Overview

1. What factors or measures should the Task Force examine in reviewing state retail choice experiences? How should these factors and measures be evaluated?

See General Overview Question No. 2. The characteristics for a competitive electricity market may be measured through the use of some or all the following metrics:

- the number of customers served by competitive suppliers
- the load served by competitive suppliers
- the customer retention rate
- the number of participating competitive suppliers
- the frequency and character of complaints filed by customers and market participants, and the actions taken to resolve such complaints
- the range of services being offered
- the number and types of value-added services and synergies evident in the market

Other factors to consider may include whether a state has established uniform market rules; the existence of transactional standards such as EDI; the availability of various billing options; the ability of competitive commodity suppliers to access and use time-differentiated meter data in balancing wholesale purchases and pricing retail services; the availability of information allowing consumers evaluate competitive offers; the ease of enrollment; and the presence of adequate consumer safeguards.

2. How should the Task Force assess the performance of evolving competitive retail markets?

(See the answer to question 1 above).

3. How can the performance of competitive retail markets for retail customers be measured in the absence of competitive suppliers for residential and small business customers in many areas?

For the most part, New York has does not have this problem - customers of all sizes have competitive options in nearly all areas of the state.

B. State Retail Choice Experience

1. How have consumers benefited from retail electric competition? How have consumers been harmed by retail electric competition?

Consumers have benefited, first and foremost, because they have been provided with choice. For the first time ever, they have been allowed to select the provider of their electric commodity service. They have been able to choose from variable, indexed, fixed, and capped prices. They have been able to support "green" power either in total consumption, some base level of consumption, or some percentage of their total consumption.

Consumers have not been harmed by retail electric competition. Participation in retail access is completely voluntary and customers are free to return to their incumbent utility for commodity supply.

3. How many alternative competitive retail suppliers are currently soliciting or accepting new customers in each service area? Has the number increased or decreased since the state introduced retail choice?

The number of retail electricity suppliers continues to grow, somewhat offset by the consolidation and merging of individual smaller suppliers. There are seventy-four suppliers in New York currently serving consumers, seven of which were added in 2005. These include natural gas, electric, and combined competitive commodity suppliers. At least seven competitive suppliers are serving residential electric customers in each major New York utility franchise area and at least thirteen suppliers are serving non-residential electric customers.

4. Does the availability of alternative competitive suppliers differ among service areas, customer classes, load size, rural and urban areas, or other geographic areas, or by credit policies? If so, why? If not, why not?

The number of competitive suppliers differs among distribution utility franchise areas. However, competitive offers for all customer types are available in all major distribution utility franchise areas. For the most part, there is little data available on the impact of credit and load size on prices paid by large use customers. Such customers either purchase their electricity directly on the wholesale market or through individual contracts with retail suppliers subject to confidentiality requirements.

5. Have suppliers offered new types of products and services (e.g., time of day pricing, interruptible contracts, green power, etc.) in states where retail competition has been implemented? If so, describe the products and what customer response has been.

"Green" power is widely available in most of the State and has attracted customer response. Fixed commodity pricing and other forms of hedged pricing such as caps are being offered. The use of time-differentiated pricing requires installation of appropriate metering equipment, and potential exists for further progress in this area.

6. How do retail customers obtain information about competitive alternatives? Do retail consumers have enough information to readily make informed choices among competing suppliers?

Competition for large use commercial and industrial consumers is significant. Under New York's "Market Match" program, load data from such customers is anonymously provided to competitive suppliers, who, in turn, make offers through the internet.[7] Under New York's "Market Expo" Program, interested businesses and competitive suppliers meet and share information at a venue which is sponsored by the local distribution utility and the Department of Public Service.[8]

Lower use customers can meet with competitive suppliers at "Energy Fairs" that

[7] Case 00-M-0504, Statement of Policy on Further Steps Toward Competition in Retail Energy Markets, (issued August 25, 2004) p.17.

[8] See, e.g., Case 05-M-0332, In the Matter of Central Hudson Gas & Electric Corporation's Plan to Foster the Development of Retail Energy Markets, Order Accepting Retail Access Plan, Modifying Rate Plan, And Establishing Further Procedures (Issued June 1, 2005) p. 10.

are similar to the Market Expos held for the larger commercial and industrial customers.[9] Offers made by competing suppliers to residential customers are communicated via the internet, and organized by commodity and distribution utility service area. Individual utilities also conduct outreach and education programs.[10]

Additional information regarding "green" power providers and prices is made available through mailings and other information provided by the distribution utility and by the Department of Public Service.[11]

7. Does the state allow groups of retail customers to aggregate their electricity demand? How are they structured? What customer groups are included? Is participation on an opt-in or an opt-out basis? Has aggregation enabled consumers to benefit from retail electricity competition? If not, why not?

Aggregation is allowed, primarily through affirmative choice by customers. The Department of Public Service has been encouraging aggregation by municipalities and affinity groups, and there has been some success in the area of residential low income natural gas customers whose utility bills are paid by social services departments. The aggregation programs are still developing.

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[9] For example, an "Energy Fair" was held on October 27, 2005, in Suffern, New York, to provide residential and business customers of Orange and Rockland Utilities, Inc. information about energy service companies (ESCOs) offering competitive choices for electricity and natural gas supplies. A series of three "Energy Fairs" were held on September 27-29, 2005, in three different cities within Central Hudson Electric and Gas Corporation's franchise area.

[10] See, e.g., Case 05-M-0332, In the Matter of Central Hudson Gas & Electric Corporation's Plan to Foster the Development of Retail Energy Markets, Order Accepting Retail Access Plan, Modifying Rate Plan, And Establishing Further Procedures (Issued June 1, 2005) p. 11.

[11] See http://www.askpsc.com

C. Retail Supply Questions in States with Retail Competition

1. How does the state program address assurance of adequate generation supplies for default service customers (i.e., customers that: (a) do not choose a competitive provider, or (b) have lost their competitive supplier for whatever reason)?

In New York the default supplier is the incumbent distribution utility. Most utilities use a portfolio approach to serve the customers remaining on its service. The electric supply portfolio is made up of long-term contracts (some related to the divestiture of generation), short-term contracts, day-ahead market (DAM) purchases and real-time wholesale market purchases. There is generally no difference in the prices offered to returning customers and customers that have remained with the utility.

3. How has the development of RTOs affected the development of retail competition in the state?

The wholesale market structure (DAM and real-time wholesale pricing) facilitates participation by ESCOs in New York State. The operation of the bulk transmission system by the NYISO allows ESCOs to access the system.

4. Did the state require that the incumbent utility divest all or some of its generation assets used to serve its retail native load when retail competition was introduced? Did incumbent utilities voluntarily divest generation assets as part of restructuring to implement retail competition? Did incumbent utilities transfer ownership of generation assets used to serve native load to an affiliated entity?

In New York, the incumbent distribution utilities voluntarily divested nearly all generation. The generation plants were sold at auction and were not transferred to affiliates.

5. What has been the result of generation ownership transfers serving the state or region since the start of retail competition? Has there been a consolidation of generation ownership in the state or region?

At this time, generation ownership in the statewide market is not consolidated. Market power concerns in load pockets have been addressed by mitigation measures for divested generators in New York City, long-term contracts for suppliers on Long Island, and call contracts for generators in small upstate load pockets.

6. If a retail load serving utility no longer owns sufficient generation assets to meet its obligations to its retail customers (existing customers, or as the supplier of last resort or default service provider) what mechanism (e.g., spot market purchases, buy back or output contracts, etc.) does it use to obtain generation services to fulfill these obligations? What share of a utility's load is obtained via the different mechanisms? How are these shares trending?

For the largest use commercial and industrial customers, the trend is for the distribution utility to purchase generation in the day-ahead wholesale market (DAM) or real-time wholesale market. For small-use customers, the effective price is determined by the use of balanced supply portfolios by distribution utilities which include some longer term contracts, short-term purchases, and spot purchases.

7. How do non-utility retail service providers in the state secure access to transmission and distribution services needed to deliver power to their retail customers?

Non-discriminatory access to transmission and distribution services is provided to all suppliers via FERC and NYPSC requirements.

D. Demand Side Participation

1. How do rate structures affect the incentives of large, medium, or small electric customers to participate in demand side response programs? Does this effect differ if a state has a retail choice program?

Rate structures affect the incentives of any electric customer to participate in demand side programs. Any time-differentiated rate offers incentive to shift consumption to periods with lower rates, in order to achieve savings. This holds true whether or not a retail choice program exists. Large consumers have greater incentive to participate in demand-response, insofar as potential savings are greater.

2. What measures have states taken to make customer demand responsive to changes in availability and price of electricity supply? Do these measures differ if a state has a retail choice program?

The NYPSC recently directed utilities to file draft tariffs that would make real-time hourly pricing mandatory for their largest customer classes already subject to mandatory time-of-use rates (i.e., peak, off-peak, and shoulder time periods).[12] Further, State law requires that voluntary time-of-use rates be available for residential customers in New York. N.Y. Pub. Serv. Law § 66(27) (McKinney Supp. 2005) .

The State has also restructured its standby rates for customer-owned on-site generation in order to better align customer demand response to proper economic

[12] Case 03-E-0641, Proceeding on Motion of the Commission Regarding Expedited Implementation of Mandatory Hourly Pricing for Commodity Service, Order Instituting Further Proceedings And Requiring The Filing Of Draft Tariffs (issued September 23, 2005).

signals.[13] There is also a pilot program in New York that is exploring the use of demand responsive appliances for residential use.[14]

The NYPSC ordered utilities to do energy audits upon request of a customer in the 1970s, to do energy efficiency and load management in the 1980s with extensive programs from 1989 through about 1994, and created a System Benefits Fund in 1996 to fund energy efficiency programs, and other programs as well.

3. What mechanisms allow for the participation of load response measures – interruptible load, self-generation, demand-side management, conservation and energy efficiency measures as alternatives in wholesale electric markets and/or load serving utility resource portfolios? How has the performance of these measures been monitored?

Standby rates provide additional incentives for customer-owned generation to be available at times when it is most valuable to the system. Beyond that, the mandatory real-time hourly pricing for large use customers and time-differentiated pricing available for many other customers provide market based incentives for load reduction primarily at the system peak. Further, the distribution utilities are required to consider demand side

[13] Opinion 01-4, Case 99-E-1470, Proceeding on Motion of the Commission as to the Reasonableness of the Rates, Terms and Conditions for the Provision of Electric Standby Service, Opinion and Order Approving Guidelines for the Design of Standby Service Rates (issued October 26, 2001).

[14] Cases 02-M-0514 et al., Proceeding on Motion of the Commission to Investigate Competitive Metering for Natural Gas Service, Notice Requesting Comments on Staff Report (issued September 7, 2005), Comments of TRC (October 21, 2005) (describing the Westchester $mart Homes Pilot).

alternatives to system expansion and reinforcement.[15] New York also has a reduced delivery rate available to customers using natural gas to fuel high load factor on-site generation.

For small customers, New York requires net metering for residential photo-voltaic, residential wind, and anaerobic digester technologies. (See Question 7).

4. Have states adopted alternatives to average cost pricing to encourage demand response?

The Commission recently directed utilities to file draft tariffs that would make real-time hourly pricing mandatory for their largest customer classifications that provide service at mandatory time-of-use rates, and is encouraging time-differentiated rates for all customers**.**[16] More sophisticated metering and metering networks for use in promoting better access to consumption and demand data is the subject of current New York Commission consideration.[17]

New York State has had rate alternatives to average cost pricing to encourage demand response, both valley filling and peak clipping, since the 1930s. Widespread

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[15] See, e.g., Opinion 97-20, Case 96-E-0900, In the Matter of Orange and Rockland Utilities, Inc.'s Plans for Electric Rate/Restructuring Pursuant to Opinion No. 96-12, Opinion And Order Adopting Terms Of Settlement (Issued December 31, 1997).

[16] Case 03-E-0641, Proceeding on Motion of the Commission Regarding Expedited Implementation of Mandatory Hourly Pricing for Commodity Service, Order Instituting Further Proceedings And Requiring The Filing Of Draft Tariffs (issued September 23, 2005).

[17] Cases 02-M-0514 et al., Proceeding on Motion of the Commission to Investigate Competitive Metering for Natural Gas Service, Notice Requesting Comments on Staff Report (issued September 7, 2005).

implementation of time-of-use rates started around 1978, and various utilities have implemented various rate structures since then, including Peak Activated Rates at one utility and, starting in the 1990s, an hourly rate option for large customers.

6. How prevalent is the use of distributed resources (e.g., distributed generation and distributed energy storage) within the state?

There is no comprehensive inventory of distributed generation installations or capacity in New York. However, since 1999, New York utilities have processed 1,385 Distributed Generation (DG) projects representing 15 MW of generation under New York's Standard Interconnection Requirements (NY SIR).[18] The NY SIR was limited to DG units under 300 kVA prior to November 2004, when the capacity limit was raised to 2 MW.[19] There has also been a commitment for funding through New York's System Benefits Charge,[20] for 105 combined heat and power DG projects, representing 107 MW.

There are approximately 300 MW of small generation used for Demand Response in New York State. Most of these DG units would otherwise only be used as emergency generators in case of a full loss of grid power.

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[18] Opinion 99-13, Case 94-E-0952, Matter of Competitive Opportunities Regarding Electric Service, Opinion and Order Adopting Standard Interconnection Requirements for Distributed Generation Units (issued December 31, 1999).

[19] Case 02-E-1282, Matter of New York State Standardized Interconnection Requirements, Order Modifying Standardized Interconnection Requirements (issued November 17, 2004).

[20] Opinion 92-12, Case 94-E-0952, Matter of Competitive Opportunities Regarding Electric Service, Opinion and Order Regarding Competitive Opportunities for Electric Service (issued May 20, 1996); Opinion 98-3, Case 94-E-0952, supra, Opinion and Order Concerning System Benefits Charge Issues (issued January 30, 1998).

These programs obviously do not capture all DG that we see in New York State, but our monitoring of these efforts in recent years has shown a clear increase in activity.

7. To what extent are retail customers within the state or region increasing use of distributed resources and what types of resources are involved?

Most of the DG use in New York is by retail customers, from a wide range of resources. New York has put in place net metering requirements for the use of small photovoltaics (PV),[21] farm waste,[22] and most recently for the use of residential and farm wind electric generating equipment.[23] To date, the majority of net metering projects in New York State use photovoltaics because the state has encouraged those projects much longer than more recent types. There has been a variety of DG combined heat and power (CHP) technologies employed, mostly using natural gas. There has also been an increase in the number of DG applications using fuel cells.

E. Rising Fuel Prices

1. Are changes in prices for oil, natural gas, and coal affecting the results of competitive wholesale markets and viability of competitive suppliers and if so, how?

Over the past year, fuel prices – especially for natural gas – have increased

[21] N.Y. Pub. Serv. Law § 66-j (McKinney Supp. 2005) (added L. 1997, ch. 399, eff. August 13, 1997).

[22] N.Y. Pub. Serv. Law § 66-j (McKinney Supp. 2005) (added L. 2002, ch. 515, eff. September 17, 2002).

[23] N.Y. Pub. Serv. Law § 66-l (McKinney Supp. 2005) (added L.2004, ch. 423 eff. March 13, 2005).

dramatically, as have the NYISO's energy prices. In any competitive electricity market, rising fuel prices would be expected to produce higher wholesale prices. Under competition, prices should reflect the cost of the marginal supplier; in New York, the marginal supplier is often gas-fired, so the recent spike in gas prices would be expected to lead to a corresponding spike in wholesale energy prices.