

NOTICE OF APPEAL

The Independent Power Producers of New York, Inc. (“IPPNY”), on behalf of its members that are also members of the New York Independent System Operator’s (“NYISO”) Management Committee (“MC”) and who are hereinafter individually identified,¹ hereby appeals to the MC the December 13, 2002 Business Issues Committee’s (“BIC”) denial of Motion # 2 to approve a demand curve proposal, as presented by NYISO staff to the BIC (“DC Proposal”).

The Appellants respectfully request that the MC approve the DC Proposal because it is critically necessary to remedy fundamental flaws inherent in New York’s existing installed capacity (“ICAP”) market design. As recognized by the staff of the Department of Public Service (“DPS”) and its Chief of Regulatory Economics, Mr. Mark Reeder,² the NYISO and many others, the existing ICAP market design is fatally flawed. Due to the inelastic capacity market, the existing ICAP market design drives down ICAP market clearing prices well below levels necessary to sustain an efficient generation market, when the capacity market is even slightly long, and drastically undervalues the benefit of additional capacity beyond the administratively chosen 118 percent minimum installed reserve requirement (“MIR”). The flaws inherent in the existing ICAP market design have become readily apparent in the past year and a half, as ICAP prices have steadily dropped far below the levels necessary to induce new entry or, indeed, to retain needed existing generation. The flaws in the current ICAP market design cause the capacity market to fail to provide the price signals needed to induce new entry, hinder associated reliability benefits and benefits to the competitive energy markets, and undermine the incentive of parties to enter into long term capacity contracts.

After lengthy discussions during numerous working group meetings to develop a method to fix the flaws in the current ICAP market design, the demand curve was the sole proposal that parties identified that remedies those flaws. The DC Proposal more realistically represents the true value to the system of ICAP by varying the price of ICAP depending upon the actual quantity of capacity procured. As explained below and in the attached affidavit of

¹ These members (collectively, the “Appellants”) are identified on Attachment I.

² See Proposed Resource Demand Curves for NYS, NYC, and LI, NYDPS, presented at the November 12, 2002 ICAP Working Group meeting; Mark Reeder, Government Intervention Into Wholesale Electric Markets To Assure Generation Adequacy (November 6, 2002) (“*Government Intervention*”).

Mr. Mark D. Younger, the DC Proposal will provide more accurate price signals that will induce construction of new and retention of needed existing capacity in New York. Correction of the flaws in the existing ICAP market design now is critical, especially in light of the NYISO's call for the addition of approximately 7,100 MWs of generating capacity in New York by 2005.³

I. THE EXISTING ICAP MARKET DESIGN IS FATALLY FLAWED.

The current New York ICAP market reliability rules promulgated by the New York State Reliability Council ("NYSRC") require Load Serving Entities ("LSEs") to purchase sufficient generation capacity to cover their forecasted peak load plus a minimum required reserve amount, currently set at an additional 18 percent margin, to meet reliability requirements (*i.e.*, 118 percent of forecasted peak load).⁴ LI LSEs are required to purchase a minimum of 93 percent of their ICAP requirements from LI suppliers and NYC LSEs must purchase a minimum of 80 percent of their ICAP requirements from in-City suppliers.⁵ LSEs can secure these requirements via bilateral contracts or by participating in a six-month capability period auction (or "strip auction") and/or in monthly auctions. If an LSE fails to reach the 118 percent MIR, the NYISO is required to enter the LSE's shortfall into a deficiency auction. The NYISO bids on the LSE's behalf at a price equal to an administratively determined "deficiency charge." If the NYISO is deficient of capacity, the auction will clear at the deficiency charge. Pursuant to the NYISO's tariff, for the Summer 2003 Capability Period, the NYISO must set the deficiency charge at three times the levelized carrying cost of a gas turbine ("GT").

Because the current ICAP rules result in both supply and demand converging at an artificially-designated point, during times of even slight excess capacity supply, prices in the ICAP market have spiraled towards zero.⁶

³ Power Alert II – New York's Persisting Energy Crisis, Report by The New York Independent System Operator (March 27, 2002) at 5.

⁴ In addition, the NYISO requires LSEs in Long Island ("LI") and New York City ("NYC") to comply with local ICAP reliability rules.

⁵ The discussion herein is equally relevant in the context of local reliability requirements and the Statewide requirement. For simplicity, we will address our discussion primarily to the Statewide requirement.

⁶ Mr. Reeder notes that "[m]arket participants often talk about the 118% reserve level as a cliff, and use the term 'falling off the cliff' to represent what happens to price when reserves grow to exceed the target." *Government Intervention* at 9.

Conversely, when sufficient capacity to meet the MIR is not available in the market, ICAP prices increase to the deficiency charge, as LSEs compete with each other to secure sufficient ICAP.

As discussed in the attached affidavit of Mr. Mark D. Younger, the market clearing price for ICAP for the February 2002 through January 2003 period was approximately \$14.89/kW/yr for the Rest of State market (“ROS”), translating to a clearing price of approximately \$2.90/MWh for an upstate customer with a 70% load factor.⁷ In contrast, if sufficient ICAP were not available to meet the MIR, the deficiency charge starting next year will result in rates for ICAP for the ROS of \$255/kW/yr, translating to approximately \$49.10/MWh for an upstate customer with a 70% load factor.⁸ Over the long run, the ICAP market will need to clear at the deficiency rate once every three or four years due to the low ICAP prices during periods of essentially any excess supply and the deficiency rate being set at three times the cost of a GT.⁹

The result is that the current ICAP market is either boom or bust; it induces extremely high ICAP prices during deficiency and extremely low prices at times of any surplus capacity. This structure harms resource reliability, because it discourages generators – particularly those peak suppliers whose revenues come almost exclusively from ICAP payments – from remaining in the New York energy market. Moreover, Mr. Reeder acknowledges the boom-bust cycle in ICAP prices benefits no one because the revenue streams are not likely to be predictable enough to allow investors and lenders to rely on them for planning and financing new capacity. In addition, the boom-bust cycle undermines incentives for parties to execute long-term contracts for ICAP supply. LSEs and generators would have great difficulty in reaching agreement on a long-term price for ICAP because the existing ICAP market design would ensure that LSEs could purchase ICAP at extremely low prices at some point in the future and that generators could receive extremely high ICAP revenues at some point in the future, as well. Thus, the large potential bid/offer spread makes it risky for regulated LSEs to enter long term agreements due to the potential for subsequent prudence disallowances.

⁷ Younger affidavit at ¶ 7.

⁸ *Id.* at ¶ 10-11.

⁹ *Id.* at ¶ 13.

II. THE DC PROPOSAL IS ESSENTIAL TO REMEDY EXISTING ICAP MARKET DESIGN FLAWS.

The DC Proposal, a concept initially proposed by the DPS, essentially is an adjustment to the existing, administratively set 118 percent MIR vertical demand curve, to incorporate a more gradual slope that appropriately and rationally values additional capacity in the market beyond the 118 percent minimum requirement. The demand curves in the NYISO's DC Proposal are based on the cost of new entry of GTs¹⁰ and the decreasing value of ICAP above the MIR in the three ICAP regions in the State: Statewide, NYC and LI. The DC Proposal would replace the existing deficiency auction with a "spot auction."¹¹ LSEs would certify all of the capacity they had contracted for as bilaterals and obtained through the strip and monthly auctions. Suppliers with uncommitted capacity would be free to offer their ICAP into the spot auction and would be able to specify the price of their offer. The NYISO would submit the demand curve as the range of price/quantity combinations that the LSEs would be willing to pay for capacity. The price and quantity of ICAP that the LSEs would be obligated to secure would be set at the point that the aggregate offers of supply and the bids of the LSEs cross on the demand curve.

For example, the NYISO's proposed cost of a GT for Statewide, \$85/kW/yr, would be set at a position on the demand curve equal to 118 percent of forecast load.¹² The NYISO currently has close to a 23 percent reserve margin in the Summer Capability period. If suppliers offered all of that capacity at prices that were equal to or below the curve, and no additional imports were offered, the market would clear at the 123 percent price point on the curve. This price, say \$55/kW/yr (or \$4.58/kW/month), would be lower than the \$85/kW/yr (or \$7.08/kW/month) GT cost, but would not approach last summer's depressed ICAP prices of \$1.46/kW/month.¹³ LSEs would be obligated to

¹⁰ The NYISO's proposed entry costs of GTs for the Statewide market are based on an E-Acumen study of four GTs that were constructed in New England that have been adjusted upwards to account for higher New York State property taxes. For LI and NYC, costs are based on recently received bids and construction experience.

¹¹ Although the demand curve applies only in the Spot Auction, it will likely directly affect the prices in the bilateral market and the strip and monthly auctions because parties will have a better sense of their payment liability if they wait for the spot auction.

¹² Actually, the curve must be raised to reflect the fact that the \$85 GT price is an annualized number and, given the excess capacity available on the system in the winter period due to ambient temperature impacts on ratings, suppliers would receive more than \$85 in the summer and less in the winter, averaging out to \$85 over the year, when the system has 118 percent supply in the summer period. This adjustment is referred to as the summer/winter adjustment.

¹³ The winter ICAP market would clear at a lower level because higher winter DMNC levels result in the same generators providing more than a 23 percent reserve margin during the winter capability period.

procure a total of 123 percent of forecast load. Conversely, if less than the MIR were offered in the spot auction, the market would clear at an amount less than 118 percent, say 116 percent, which would equate to a price in excess of the \$85 GT cost, but much lower than the deficiency charge under the current market design.

The DC Proposal is necessary to reduce the price volatility that results from the existing ICAP market design. Because the demand curve effectively eliminates the “cliff” phenomenon inherent in the current design, it would eliminate the boom-and-bust of ICAP prices that results from the current ICAP market design. In addition, the demand curve sends better price signals to the markets regarding the true value of additional capacity. The current design effectively considers all capacity exceeding what is needed to meet the 118 percent requirement as virtually worthless. Because, currently, a portion of the available ICAP is not needed to meet the State’s reliability requirements, suppliers will inevitably drive ICAP prices down in an effort to ensure that they are selected in the auction. The demand curve properly values capacity in excess of the 118 percent requirement. Conversely, when a deficiency occurs, LSEs will not be subject to the high deficiency charge payments that are needed under the current ICAP market design.

In addition, reducing volatility and establishing predictable ICAP prices would allow investors and developers to incorporate future ICAP payments as a reliable source of revenue in two ways: (1) it will better stimulate long term bilateral contracts, and (2) developers will be able to demonstrate to their investors a more stable revenue stream via the demand curve spot auction. This, in turn, would facilitate the construction of new generating facilities into the New York energy markets. Because the prices from the ICAP auctions are visible to the public, market participants would be able to rely on these values in developing long-term capacity or energy contracts. Thus, in direct contrast to the existing structure, as well as any other alternative structure under consideration, the DC Proposal meets the Federal Energy Regulatory Commission’s goals in its Standard Market Design Notice of Proposed Rulemaking to require that “resource adequacy” be addressed based on a long term horizon.¹⁴

¹⁴ *Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electric Market Design*, 100 FERC 61,138, ¶ 520 (2002).

CONCLUSION

In light of the foregoing, IPPNY respectfully requests that the MC reverse the decision of the BIC and approve the DC Proposal.

Respectfully submitted,

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Independent Power Producers
of New York, Inc.

By: _____
David B. Johnson

Dated: December 27, 2002
Albany, New York

AFFIDAVIT OF MARK D. YOUNGER

Mark D. Younger, having been duly sworn, deposes and states as follows:

1. My name is Mark D. Younger. I am employed as Vice President of Slater Consulting. My business address is 69 Werking Road, East Greenbush, New York 12061.
2. My entire professional career has been devoted to matters relating to electric generation and the development of competitive electricity markets. Before the NYISO commenced operating, I was a key participant on the NYISO Technical Team tasked with developing the detailed rules and procedures for the NYISO's administered market. Since the NYISO commenced operating, I have been an active participant in the NYISO workgroups addressing market design issues and methods to address market design flaws and to otherwise improve the market design.
3. I have been asked by the Independent Power Producers of New York to comment on the Business Issues Committee's recent failure to pass the Installed Capacity Demand Curve ("Demand Curve") proposal.
4. I believe that the Demand Curve is a critical change that is necessary to ensure that the Installed Capacity Market provides a sufficiently stable price signal to allow generation providers to rely upon it for building new generation.
5. The current Installed Capacity market design is based upon a vertical Installed Capacity demand curve set at the minimum New York ISO Statewide and Locality capacity requirements.
6. Over time, this market structure has revealed the flaw inherent in its design; specifically, it has shown a tendency to clear at near zero price levels when the amount of capacity exceeds the minimum required level by relatively small amounts and fails to account for the significant benefits that additional capacity provides to competitive energy markets.
7. The market clearing price for Installed Capacity for the February 2002 through January 2003 period was approximately \$14.89/kW-year for the Rest of State Market and \$93.85/kW-year for New York City. The upstate clearing prices translate to approximately \$2.9/MWh for an upstate customer with a 70% load factor $((14.89/\text{kW-year} * 118\% \text{ requirement} * 1000 \text{ MW/kW}) / (.7 * 8760 \text{ hours/year}) = \$2.87/\text{MWh})$. The New York

City clearing price translates to approximately \$12.2/MWh for a customer with a 70% load factor ($(93.85/\text{kW-Month} * 80\% \text{ requirement} * 1000 \text{ MW/kW}) / (.7 * 8760 \text{ hours/year}) = \$12.24/\text{MWh}$).

8. The clearing prices in both markets have been trending downward even though there has been limited load growth and no significant additions to capacity over this period. Last winter the Rest of State UCAP market cleared at more than \$1.50/kW-month while this winter the clearing prices have dropped to less than \$0.60/kW-Month. Last winter's New York City UCAP clearing price averaged more than \$9/kW-month but has now dropped to less than \$6.70/kW-month. During the current winter period in each market the monthly prices are clearing well below the strip auction price so the average clearing price for the current winter is likely to continue to decline.
9. For the existing market design to provide a signal for new generation, the low clearing prices in periods where capacity exceeds the requirement will need to be offset by periods where the Installed Capacity market clears at the deficiency rate.
10. Under the NYISO tariff the deficiency rate starting next year will be three times the levelized cost of a Gas Turbine. The NYISO has estimated the levelized cost of a GT at \$85/kW-year, \$139/kW-year and \$159/kW-year in the Rest of State, Long Island and New York City markets respectively. This results in deficiency rates of \$255/kW-year, \$417/kW-year, and \$477/kW-year for these markets.
11. The deficiency rate will translate to approximately \$49.1/MWh for a consumer with a 70% load factor in the Rest of State Market. The deficiency rate in New York City translates to approximately \$62.2/MWh.
12. Under the existing Installed Capacity market, the frequency of the periods where the market clears at the deficiency rate will be determined by the frequency required to provide sufficient average Installed Capacity revenues to induce new generation entry.
13. With the Installed Capacity market tending to clear close to zero during periods of essentially any excess and with the deficiency rate being set at three times the cost of a GT, over the long run, the Installed Capacity market will need to clear at the deficiency rate once every three or four years. Even accounting for reaching the deficiency rate at these times, this design, by its very structure, fails to provide a sufficiently stable environment for planning new generation and maintenance of existing generation. As soon as

sufficient generation is added to meet the minimum reserve requirement, the existing market will crash to very low prices thereby blunting the signal about the benefit of having met the minimum capacity requirement.

14. The ICAP Demand Curve proposal currently under consideration suffers from none of the flaws outlined above. Unlike the current design, the ICAP Demand Curve provides a more stable price signal. The ICAP demand curve replaces the fluctuation between near zero prices and the deficiency rate that is the hallmark of the current market design with a more gradual and predictable relationship between the amount of capacity in the market and the clearing prices. New generation will be able to be introduced into the NYISO system without causing a collapse in the capacity price.
15. The ICAP Demand Curve also recognizes that there is both a reliability and energy market benefit to having more than the minimum required capacity level. The current market mechanism essentially assumes that the next tenth of a MW beyond the minimum requirement is valueless.
16. The ICAP demand curve replaces the boom/bust pricing of the current design with a more predictable price. This will enable developers and financial institutions to more reliably predict revenues and therefore should make the funding of new generation easier.
17. Finally, by its design, the ICAP demand curve provides the basis to allow for longer term forward contracting. By reducing the likely range of clearing prices it will make it feasible for both generators and Load Serving Entities to enter into longer term bilaterals because the cost/lost opportunity of being wrong in the forecast value will be significantly reduced.

Mark D. Younger

Sworn to before me this
day of December, 2002.

Notary Public

Attachment I

IPPNY Members

Sithe Energy Marketing, LP

PSEG Energy Resources & Trade

Mirant New York, Inc.

El Paso Merchant Energy North America

PG&E National Energy Group, Inc.

Indeck Energy Services

Entergy Nuclear Northeast