

## 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. For the past ten years, I have been an active participant in the working groups refining the New York Independent System Operator, Inc. ("NYISO") market structure and developing methods to improve the market design, including all aspects of its energy, ancillary services and capacity markets. My resume is attached as Exhibit MDY-1.
3. I write this affidavit in support of the filing of the Independent Power Producers of New York, Inc. ("IPPNY") and ConsumerPowerline, Inc. ("ConsumerPowerline") to the NYISO Board of Directors regarding the recent change in the law that eliminated the Industrial and Commercial Incentive Program real property tax exemptions in New York City for utility property, including electric generating facilities ("ICIP Exemption"). The ICIP Exemption was a significant factual input that was included in the calculation of the New York City Demand Curves ("NYC Curves") for the next three Capability Years (2008-2009, 2009-2010 and 2010-2011).
4. I have been asked by IPPNY and ConsumerPowerline to quantify the impact of including the ICIP Exemption on the net cost of new entry ("Net CONE") for the New York City market, the ability of the NYC Curves to continue to send an adequate or accurate signal on the value of capacity in New York City given the elimination of this major factual

input, and the likely impacts of failing to revise the NYC Curves to reflect the elimination of the ICIP Exemption.

5. As demonstrated herein, the existing NYC Curves no longer provide an adequate or accurate signal of the cost required to attract new investment in New York City. If they are not revised, there will be substantial adverse impacts to the NYISO capacity markets.

## **BACKGROUND**

6. The Demand Curves that determine capacity market clearing prices for New York City were filed by the NYISO with the Federal Energy Regulatory Commission (“FERC”) on November 30, 2007 in Docket No. ER08-283-000 and accepted by the FERC on January 29, 2008. The NYISO filing, and the FERC decision, established, among other things, new NYC Curves for the 2008-2009, 2009-2010 and 2010-2011 Capability Years. As of this time, only three months of the 36 month period have elapsed.
7. With two exceptions, the calculation of the Demand Curves each year relies on the same factual inputs, estimates, and assumptions. The first exception is that the Demand Curves for the latter two years are based upon escalating the Demand Curve for the 2008-2009 Capability Year to account for inflation. The second exception is that the Demand Curve for the final year includes a different factor for the amount of capacity that is assumed to be in the New York City area in the summer and winter capability periods.
8. One of the most critical factual inputs incorporated into the calculation of the Net CONE that was used for the NYC Curves was the ICIP Exemption for new generating facilities. This factual input was included as part of the calculation of the Net CONE for the NYC Curves because there was no reason to believe at that time that this exemption would not continue for the period covered by the Demand Curves. This input, and its application in

determination of the Demand Curves, is discussed in the “Independent Study to Establish Parameters of the ICAP Demand Curve for the New York Independent System Operator,” dated August 15, 2007, that was performed by NERA Economic Consulting as part of the Demand Curve reset process (“NERA Report”).

9. The NERA Report describes the exemption as follows:

Under the Industrial and Commercial Incentive Program (ICIP) in New York City, the project is granted a property tax exemption for the first 11 years, followed by a 20% decline in the exemption each year for four years, with full taxes due in the 16<sup>th</sup> year and thereafter. A New York State court has ruled that power plants in New York City qualify for the program as commercial improvement work. The continuous renewal of the ICIP in future years is assumed. NERA Report, pp 37-38.

10. The NERA Report then describes the application of the exemption in determining the Net CONE for the NYC Curves as follows:

The ICIP property tax abatement in New York City has a significant effect on the carrying charge rates. Over the 15-year amortization period, the ICIP reduces the levelized carrying charge rate by 23%. There are several reasons for a change of this magnitude:

- Under the ICIP, the normal property tax bill is not phased in until year 16, which is after the 15-year amortization period;
- Without the ICIP, the effective property tax rate for New York City is 4.53% compared to 2.00% elsewhere, as indicated in Section II.E.1.b;
- Property taxes escalate with inflation due to valuation and/or rate adjustments. This is the assumption also used in the LAI report. Without the ICIP, the relatively high property taxes in New York City are constant in real terms through the entire amortization period.

NERA Report, p. 47

11. On June 30, 2008, only two months into the three-year period covered by the recently reset NYC Curves, the ICIP program expired.
12. The program which replaced it, the Industrial and Commercial Abatement Program, expressly excludes utility property from receiving any real property tax exemptions.

Moreover, upon information and belief, there is no other similar exemption now available as of right to either new generating facilities, or for new capital investments at existing generating facilities, located within New York City.

13. The elimination of this substantial factual input directly and significantly increases the Net CONE applicable to the New York City market. With this change in law, the NYC Curves no longer provide adequate or accurate price signals to encourage efficient investment in generation capacity in the City.

#### **SUBSTANTIAL IMPACT ON THE NYC CURVES FROM THE STATUTORY ELIMINATION OF THE ICIP EXEMPTION**

14. The NYC Curves were developed using a model designed by NERA that estimated the Net CONE for a proxy unit in New York City by considering the cost of building and operating the proxy unit (an LMS-100 gas turbine), the expected net energy and ancillary service revenues of the proxy unit, the shape and zero crossing point of the Demand Curve, and the likely level of excess capacity that the proxy unit could experience over its life.
15. The Net CONE in the NERA model was set at a level that would allow the proxy unit to receive sufficient revenues to induce appropriate entry into New York City to maintain reliability. The Net CONE value was placed at the minimum capacity requirement point on the Demand Curve (*i.e.*, at the Demand Curve point consistent with 100% of the minimum requirement value).
16. As noted above, this value was calculated by including the ICIP Exemption because of the common understanding among the NYISO, its consultants, and market participants that it would be continuously renewed, and, thus, that generating facilities would not incur real property taxes for an extended period.

17. The NERA model calculated a Net CONE of \$123.18/kW-year for the NYC Curve for the 2008-2009 Capability Year.
18. Because the ICIP Exemption had such a significant impact on the new entry cost, NERA included a binomial variable in the model to enable the calculation of the Net CONE with or without its inclusion. Consequently, the impact of the elimination of the ICIP Exemption on the Net CONE (“Post ICIP Net CONE”) is known and quantifiable.
19. Equally as important, the impact can be determined without revising any of the other factual inputs, estimates, or assumptions in the NERA model.
20. Changing the binomial variable to exclude the ICIP Exemption, with all other factual inputs, as well as all estimates and assumptions, remaining exactly the same, results in a Post ICIP Net CONE of \$170.92 kW-year for the 2008-2009 Capability Year. In other words, this single change to accurately incorporate the elimination of the ICIP Exemption translates to an increase of 38.76% over the Net CONE upon which the 2008-2009 NYC Curve is based.
21. As a result of this absolute change to such a major factual input included in the calculation, the Post ICIP Net CONE is no longer consistent with the 80% minimum capacity requirement for New York City. Instead, the Post ICIP Net CONE is located at a point on the current Demand Curve that is consistent with carrying a minimum capacity level of 74.4% in New York City. This is less than the minimum capacity requirement level for New York City that has been recommended by the NYISO and approved by the Operating Committee as being required to maintain reliability.

## **THE NEED FOR EFFICIENT PRICE SIGNALS**

22. The NYISO's November 30, 2007 letter accompanying its filing to reset the Demand Curves stated: "The NYISO and its Board are fully committed to continuing this process and ensuring that the ICAP Demand Curves are calculated to promote the appropriate price signals to existing and potential new entrants to encourage efficient investment in generating capacity." Docket No. ER08-283-000, NYISO Filing Letter, p. 1.
23. The NYISO operates a short-term market for capacity. That is, by the time a generator is being paid for capacity, it has already made its investment and operating decisions. In such a market, the assurance that the NYISO will set the Demand Curves at levels that promote appropriate price signals to encourage efficient investment in generating capacity is critical to developers, as well as existing generators, being willing to continue to make investments in New York. It may also be critical to decisions of demand response providers about the extent of their participation in the New York City capacity market.
24. The impact of the elimination of the ICIP Exemption on the Net CONE is not speculative or subjective. As discussed above, it is readily discernible and, because of the construct of NERA's model, not subject to debate or dispute.
25. Because of the magnitude of the impact, I believe it constitutes an exigent circumstance for which immediate corrective action is needed. Indeed, given the substantial and indisputable impact that the elimination of this major factual input will have on the cost of new generation in NYC, and given that the NYC Curves with artificially depressed Net CONE levels will otherwise remain in place for nearly three years, it is hard to conceive of a circumstance that would merit an exigent circumstance filing if this situation were deemed to fall short.

26. Some may argue that there is no need to revise the Demand Curves now because the reset process that will set the Curves that determine prices three years from now will be the major determinant of the prices that will be paid to any actual new entry in New York City. This argument is incorrect in many respects. Developers are making decisions, now, as to their potential future investments, and the only information they have regarding the potential value of capacity in New York City, and the willingness of the NYISO to set Demand Curves that correctly represent the cost of entry into the market, is premised on erroneous, understated Demand Curves.
27. Developers will also look to the stability of the markets and the actions of the NYISO and its Board of Directors to ensure that their administrative decisions, such as the level of the Demand Curves, are reasonably reflective of real-world conditions and circumstances. Additionally, developer confidence in the markets will be fostered by expeditious action to eliminate deviations between the NYISO's administrative decisions and costs of entering the market, especially where the deviations are due to material changes in factual inputs that clearly and indisputably affect the economics of new projects and investments.
28. In contrast, the NYISO's failure to revise the NYC Curves to reflect the change in the law and the associated change in the Net CONE for the New York City market diminishes confidence in the markets and raises the specter that the NYISO will also fail to set future Demand Curves at reasonable and appropriate levels.
29. Because the revenues received by generators and other capacity suppliers are directly dependent upon the NYISO setting Demand Curves that are based on accurate Net CONE levels and send appropriate price signals, an unwillingness by the NYISO to revise the Curves, now, to reconcile them with the change in the law and send the correct

price signals increases the investment risk faced by developers. That is, if the NYISO fails to correct the Demand Curves at this point because it believes it does not need capacity in the near term, developers will have a reasonable basis to question whether the NYISO will make similar decisions in the future.

30. For example, a failure to act now could cause developers to conclude that, in the future, if there is entry of new capacity to satisfy then-existing needs, the NYISO will not feel constrained to ensure that the subsequent Demand Curves are set at appropriate levels. In other words, if there is no need at the time that the NYISO is undergoing its next reset process, the NYISO may not be as concerned about ensuring the reasonableness and validity of the price signals they convey.
31. In addition to increasing risk, the uncertainty and lack of confidence created by inaction here may adversely affect the ability of market participants to proceed with market based solutions to identified reliability needs.

#### **SHORT TERM NYISO CAPACITY NEEDS**

32. The table below shows the forecast capacity needed to satisfy the 80% minimum Locational Capacity Requirement (“LCR”) for New York City. The data for this table are taken from the NYISO’s 2008 Gold Book.



2008 Gold Book Projection of New York City Summer  
Installed Capacity And Minimum Capacity Requirement

	Summer Generating Capacity (MW)	Summer SCR Capacity (MW)	Total Resource Capacity (MW)	Forecast Peak Load (MW)	Minimum Capacity Requirement (MW)	Projected Capacity Shortfall (MW)
2008	10,052	421	10,473	11,955	9,564	0
2009	10,052	421	10,473	12,135	9,708	0
2010	9,161	421	9,582	12,215	9,772	190
2011	9,161	421	9,582	12,320	9,856	274
2012	9,161	421	9,582	12,455	9,964	382
2013	9,161	421	9,582	12,590	10,072	490
2014	9,161	421	9,582	12,660	10,128	546
2015	9,161	421	9,582	12,755	10,204	622

33. This information demonstrates that there is a need for additional capacity in the summer of 2010, which need arises as a result of the retirement of the Charles A. Poletti Generating Station (“Poletti”) in January 2010. This shortfall will need to be met by new entry into the market.
34. While the amount of capacity from Special Case Resources (“SCR”) available this summer is greater than the Gold Book forecast, SCR capacity could exit the market as quickly as it has entered. Consequently, appropriate market price signals are critical for assuring that existing and potential suppliers of SCR receive appropriate signals to stay in the market and fill the forecast shortfall.
35. Additionally, the Linden VFT project, which will allow more energy to flow between New Jersey and New York, is expected to commence commercial operation before Poletti retires and has been granted 300 MW of unforced capacity deliverability rights. While this project provides a potential source of capacity to meet the shortfall, it is

important to send appropriate price signals to assure that a sufficient amount of capacity is actually imported into New York City by the project.<sup>1</sup>

36. It is also important to send the right price signals to assure that we do not have needed and otherwise economic capacity retire. For example, with the expected imminent implementation of the Regional Greenhouse Gas Initiative in New York, as well as New York State proposals to reduce other air emissions, owners of existing generating facilities in New York City are facing the prospect of significant capital investments for new or upgraded pollution control equipment. Additionally, due to the advancing age of the some of the New York City units, generator owners are also contemplating repowering, major overhauls and/or equipment upgrades to existing units.
37. As the generator owners consider their options and decide whether to make these investments or mothball or retire the units, they will look to the riskiness of, and their ability to recover, such investments. In doing so, and as discussed above, they will look at the stability of the marketplace, the NYISO's dedication to assuring that the NYC Curves are based on the actual Net CONE, and the actions of the NYISO in ensuring that the clearing prices are representative of actual costs.
38. In particular, because any capital investments other than for qualifying pollution control equipment will be subject to real property taxes, the generators will evaluate whether the clearing prices capture those property taxes, in addition to other fixed and variable operations & maintenance costs.

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<sup>1</sup> Even if capacity is not imported across the Linden facilities, the project could provide emergency assistance benefits that will have some impact on lowering the LCR for New York City. The amount that the LCR would be reduced as a result of emergency supplies is not known at this point. A decision by the NYISO to refrain from correcting the Demand Curves to continue to send appropriate price signals because the Linden VFT can provide emergency assistance benefits is precisely the type of investment risk that I described above.

39. The failure by the NYISO to correct the Demand Curves to include property taxes now that the ICIP Exemption has been statutorily eliminated, could result in a generator making the decision to mothball or retire a unit when the investment would instead appear economic if compared to prices that result from corrected NYC Curves.

**FAILURE TO CORRECT THE DEMAND CURVES MAY RESULT IN LONG TERM HARM TO THE MARKET AS A RESULT OF THE INTERRACTION OF THE INAPPROPRIATELY LOW EXISTING DEMAND CURVES WITH THE RECENTLY APPROVED UNECONOMIC ENTRY MITIGATION PROVISIONS**

40. On March 8, 2008, the FERC accepted, with modifications, the NYISO's proposal to comprehensively revise the mitigation measures for the New York City capacity market. Importantly, to ensure the stability and viability of the New York City capacity market, the new mitigation measures include both supplier-side and buyer-side mitigation measures. Pertinent hereto, the NYISO proposed, and the FERC accepted, protections against uneconomic entry.
41. In March and May of 2008, the NYISO made tariff compliance filings to implement the new mitigation measures. The May tariff compliance filing defined the rules for testing for, and applying mitigation to, uneconomic new entry. Because the FERC has not yet ruled on the tariff compliance filings, the following description is based on the rules as proposed by the NYISO.
42. The NYISO proposed adding Section 4.5(g) to Attachment H of the Market Administration and Control Area Services Tariff ("Market Services Tariff") to implement the uneconomic entry mitigation. The new tariff language outlines the manner in which the NYISO will make an ex ante determination of whether a new entrant will be subject to an Offer Floor in the capacity market.

43. The language provides that the NYISO will exempt a new entrant from having to bid an Offer Floor and be subject to mitigation if:

(a) any ICAP Spot Market Auction price for the two Capability Periods beginning with the first Capability Period for any part of which the Installed Capacity Supplier is reasonably anticipated to offer to supply UCAP (the "Starting Capability Period") is projected by the ISO to be higher with the inclusion of the Installed Capacity Supplier, than the highest Offer Floor based on Net CONE that would be applicable to such supplier in such Capability Periods, or (b) the average of the ICAP Spot Market Auction prices in the six Capability Periods beginning with the Starting Capability Period is projected by the ISO to be higher, with the inclusion of the Installed Capacity Supplier, than the reasonably anticipated Unit Net Cone of the Installed Capacity Supplier. Proposed Market Service Tariff Attachment H, Section 4.5(g)(ii).

44. The intent of the ex ante analysis is to provide a conclusive determination of whether mitigation will apply to a new unit before the new unit is built. Because the ex-ante determination is made before the decision to proceed, the period that is analyzed is likely to extend beyond the last capability period covered by the then-approved Demand Curves. If that occurs, proposed Section 4.5(g)(iv) provides that the then-existing Demand Curves will be escalated to the requisite future date.


45. If the Demand Curves are not corrected to eliminate the ICIP Exemption, any ex ante determination performed during the next two and three quarters years will be flawed because it will not accurately reflect new entry costs. Specifically, given that the determinations will almost certainly be lower than the Unit Net CONE, they will likely result in an artificially suppressed Offer Floor price thereby adversely impacting NYC suppliers.

46. Under the uneconomic entry mitigation, the Offer Floor for mitigated new entry will be set at the lower of 75% of Net CONE from the Demand Curve or the Unit Net CONE. However, the tariff language is unclear as to whether the Offer Floor that will be applied

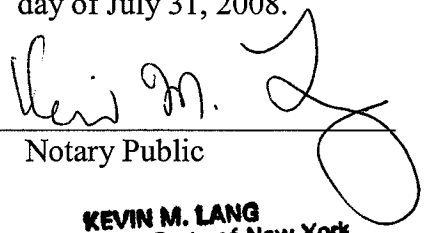
to the mitigated new entry will be set at the time of the ex ante determination and based on the Net CONE from the then-existing escalated Demand Curves or on the Net CONE from the Demand Curves that are in effect at the time the capacity is sold.

47. Using the NERA estimates of the 2008-2009 Net CONE levels with and without the property tax exemption, and applying the former interpretation of the language, the Offer Floor for a unit seeking an ex ante determination would be \$92.39/kW-year (75% of the present \$123.18/kW-year Net CONE level), whereas it should be set at \$128.19/kW-year (75% of the \$170.92/kW-year Post ICIP Net CONE level that reflects elimination of the property tax exemption).
48. Future year values would be escalated for inflation, but the relationship between the existing Curve Offer Floor and the Post ICIP based Offer Floor would remain the same. Thus, for any ex ante determination performed through April 2011, the failure to correct the Demand Curves to represent the actual cost of new entry into the New York City market will result in Offer Floors set at 54% of the Post ICIP Net CONE. This will result in setting the Offer Floor below the level that the NYISO argued was necessary to protect against uneconomic entry and will invite the harm to the market that the NYISO's proposal, and FERC's approval of that proposal, was intended to avert.
49. Consequently, NYISO inaction on this matter not only has short- and long- term ramifications on investment decisions, it will also have long-term implications on the ability of a supplier to receive proper protection from uneconomic entry.

50. This concludes my affidavit.

  
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Mark D. Younger

Sworn to before me this  
day of July 31, 2008.

  
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Notary Public

**KEVIN M. LANG**  
Notary Public, State of New York  
No. 02LA6173188  
Qualified in Albany County  
Commission Expires Aug. 20, 2011

**MDY-1**

# MARK D. YOUNGER

Mr. Younger is Vice President of Slater Consulting and has over twenty-five years of experience in energy analysis.

**EDUCATION**                   MBA, Cornell University, 1983

M.E., Operations Research  
Cornell University, 1983

B.S., Engineering, Major - Operations Research  
Cornell University 1981

## **PROFESSIONAL EXPERIENCE**

### **Vice President**

#### **Slater Consulting (1994 - Present)**

Specialist on electric deregulation, market structure issues and deregulated electric energy, ancillary service and capacity market design. Specialist in electric utility system planning and simulation modeling. Specialist in New York Independent System Operator rules and operation. Extensive modeling experience of California's utilities and the New York Independent System Operator Market. Experienced with PROMOD, ELFIN and EGEAS production cost models.

### **Senior Project Manager**

#### **Morse, Richard, Weisenmiller & Associates, Inc. (1986-1994)**

Head of MRW's New York office. Responsible for directing MRW's projects on production cost modeling. Directed MRW's analysis of East Coast utility operations. Prepared extensive analysis on avoided costs in California, New York, Pennsylvania and New Jersey. Prepared expert witness testimony on avoided costs in California and New York. Performed analyses of electric utility emissions reductions associated with cogeneration projects.

### **Energy Economist**

#### **Pacific Gas & Electric Company (1983-1986)**

Responsible for developing models and methods for integrated supply and demand-side resource analysis. Performed least-cost utility resource planning. Developed and performed an analysis of resource planning under uncertainty using Monte Carlo techniques. Performed extensive analysis for electric peak and load shape forecasting.

### **Research Specialist**

#### **Duane Chapman, Professor of Resource Economics**

#### **Cornell University (1982-1983)**

Formulated the financial simulation section of the University Research Group on Energy's (URGE) integrated model of the electric utility industry. Performed an analysis of the impact on New York Pollution levels and New York utilities of proposed acid rain abatement strategies.