Attachment III

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.

)) Docket Nos. ER04-449-____) ER12-360-___

AFFIDAVIT OF

DAVID B. PATTON, PH.D.

JUNE 29, 2012

I. Qualifications and Purpose

- My name is David B. Patton. I am an economist and the President of Potomac Economics. Our offices are located at 9990 Fairfax Boulevard, Fairfax, Virginia 22030. Potomac Economics is a firm specializing in expert economic analysis and monitoring of wholesale electricity markets. Potomac Economics serves as the Market Monitoring Unit ("MMU") for the New York Independent System Operator ("NYISO"). Potomac Economics serves in a substantially similar role for ISO New England, the Midwest Independent Transmission System Operator, Inc., and the Electric Reliability Council of Texas.
- 2. As the MMU for the NYISO, Potomac Economics is responsible for assessing the competitive performance of the markets that the NYISO administers, including the ICAP¹ market, and for assisting in the implementation of a monitoring plan to identify and remedy potential market design flaws and abuses of market power. This work has included preparing a number of reports that assess the performance of these markets and providing advice on numerous issues related to market design and economic efficiency. Prior to Potomac Economics becoming the MMU, I served as the independent Market Advisor to the NYISO.
- 3. I have worked as an energy economist for twenty years, focusing primarily on the electric utility and natural gas industries. I have provided strategic advice, analysis, and expert testimony in the areas of electric power industry restructuring, pricing, mergers, and market power. I have also advised Regional Transmission Organizations on transmission pricing, market design, and congestion management issues. With regard to competitive analysis, I have provided expert testimony and analysis regarding market power issues in a number of mergers and market-based pricing cases before the Federal Energy Regulatory Commission ("Commission"), state regulatory commissions, and the U.S. Department of Justice.
- 4. Prior to my experience as a consultant, I served as a Senior Economist in the Office of Economic Policy at the Commission, advocating on a variety of policy issues including

¹ Terms with initial capitalization not defined herein have the meaning set forth in the NYISO's Market Administration and Control Area Services Tariff ("Services Tariff"), and if not defined therein, then as defined in the NYISO's Open Access Transmission Tariff ("OATT").

transmission pricing and open-access policies, market design issues, and electric utility mergers. As a member of the Commission's advisory staff I worked on policies reflected in Order No. 888, particularly on issues related to power pool restructuring, independent system operators ("ISOs"), and functional unbundling. I also analyzed the competitive characteristics of alternative transmission pricing and electricity auctions proposed by ISOs.

- 5. Before joining the Commission, I worked as an economist for the U.S. Department of Energy. During this time, I helped to develop and analyze policies related to investment in oil and gas exploration, electric utility demand side management, residential and commercial energy efficiency, and the deployment of new energy technologies.
- 6. I have a Ph.D. in Economics and a M.A. in Economics from George Mason University, and a B.A. in Economics with a minor in Mathematics from New Mexico State University.

II. Purpose of this Affidavit

7. The purpose of this affidavit is to provide support for two aspects of the NYISO's proposed New Capacity Zone ("NCZ") ICAP Market Mitigation Measures tariff revisions. Specifically this affidavit explains that it is appropriate to: (1) apply the proposed ICAP Market Mitigation Measures to all NCZs; and (2) grandfather facilities from the proposed Buyer-Side Market Mitigation Measures using the specified criteria.

III. The Market Mitigation Measures Should Apply to All NCZs

- 8. I recommend that the Commission accept the NYISO's proposal to apply the market power mitigation measures to all NCZs. As the NYCA market is subdivided, the effective market area becomes narrower and potential market power increases.
- 9. Market power is much more likely to exist in a local area in the capacity market than in the energy and ancillary services markets. This is because capacity requirements are designed to exceed the peak requirements of the system. Hence, the demand for capacity is generally much higher than the demand for energy and ancillary services in a particular hour. For this reason, the excess supply is generally much lower in the capacity market than in NYISO's other wholesale electricity markets. Excess supply plays an important

role in providing competitive discipline to a market. In a market with a large quantity of excess supply, suppliers have less ability and incentive to withhold resources to raise prices because other suppliers with excess supply should increase their sales and undercut the withholding strategy. When demand is high and excess capacity is low, it may be impossible for other suppliers to undercut a large supplier if demand cannot be satisfied without the large supplier's resources. I generally refer to such a supplier as a "pivotal" supplier. While it is not always the case, it is highly likely that a pivotal supplier will have substantial local market power in wholesale electricity markets. In equilibrium, I do not expect that NCZs will have a significant amount of surplus capacity and, thus, NCZs raise substantial local market power concerns that warrant mitigation.

- 10. The existence of market power is based in large part on the ability of the market participant (or public entity) to influence capacity prices. Any entity's incentive to withhold resources or to enter the capacity market uneconomically is directly related to the magnitude of the price effect it can achieve by doing so. In the NYCA area as a whole, the addition of one 600 MW combined-cycle unit would decrease capacity prices by more than \$1.40 per kW-month during the Summer Capability Period. Likewise, withholding 600 MW of UCAP would raise capacity prices by more than \$1.40 per kW-month.² This is almost 15 percent of the net cost of building a new unit in upstate New York.³ This alone is substantial and could provide sufficient incentives to withhold or build uneconomically. However, the capacity price effects in NCZs would be higher potentially much higher. For example, the price effects in the New York City zone are more than 5 times higher than in NYCA. This is due to the lower requirement levels in the NYC zone and the higher net CONE value in NYC.
- 11. These same factors would lead most NCZs to be much more sensitive to withholding or uneconomic entry than NYCA as a whole. For even the largest NCZs that may emerge in New York, the hypothetical new combined-cycle unit would likely affect summer capacity prices by more than \$3 per kW-month, which is more than 30 percent of the net CONE in

These examples assume that the market price is initially at a level that would allow it to change by \$1.40 per kW-Month.

³ This is referred to as the "cost of new entry" or "CONE".

most areas in New York. These price effects are sufficiently large to create substantial incentives to withhold UCAP to raise prices or engage in uneconomic conduct to lower capacity prices. Therefore, I find that the application of the proposed supplier-side and buyer-side mitigation measures is necessary to ensure that prices within NCZs remain just and reasonable.

- 12. Further, applying these measures to all NCZs does not raise significant concerns regarding "over mitigation" for at least two reasons. First, neither the supplier-side nor the buyer-side mitigation measures are intended to be punitive or to create substantial risk for suppliers that do not have market power. Instead, they are both intended to preclude conduct that would not be rational for a competitive supplier. For example, the supplier-side mitigation measure is intended to prevent a supplier from withholding capacity that is economic to continue operating. This creates no risk for a competitive supplier because such a supplier would never forgo capacity revenue for an operable resource by withholding from the market. Likewise, a competitive supplier receiving no subsidies or economic support would not likely choose to build a clearly uneconomic resource, which is the target of the buyer-side mitigation measures.
- 13. Second, the supplier-side mitigation measure includes structural tests that would help assure that it is only applied to suppliers that likely have market power. It would only be applied to pivotal suppliers. In addition, it would not be applied to relatively small suppliers that do not control a minimum quantity of Unforced Capacity, which will be proposed by NYISO for the NCZ and approved by the Commission. The NYISO's filing proposing an NCZ also will propose that threshold quantity. The combination of these provisions should address any potential concerns that the supplier-side mitigation measure could adversely affect suppliers that do not have market power.
- 14. Finally, establishing that all new NCZs will be subject to the same supply-side and buyerside mitigation measures will reduce the future uncertainty of both buyers and sellers in the capacity market associated with the potential formation of NCZs. Reducing this source of price uncertainty will facilitate long-term investment and contracting decisions. This is important because facilitating these long-term decisions is the primary purpose of NYISO's capacity market.

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IV. "Grandfathering" Exemption From Buyer-Side Mitigation

- 15. The buyer-side mitigation measures are a critical component of the NCZ mitigation proposed by NYISO in its filing. A key challenge in designing the buyer-side mitigation measures is to effectively deter uneconomic investment intended to artificially depress capacity prices, while not encumbering efficient market-based investment. In this context, this objective must be considered as related to applying the buyer-side mitigation measures to projects that were begun at a location in an NCZ prior to the formation of the NCZ.
- 16. It is possible for uneconomic investment to be initiated prior to the formation of the NCZ as a means to prevent prices in the NCZ from rising once it is formed. On the other hand, exposing investors to the risk that their new resource could be denied capacity revenues when it had been initiated long before and without any regard for a potential new NCZ could create an inefficient economic barrier to new investment. Therefore, establishing a grandfathering provision that would exempt such projects and eliminate this risk is beneficial, as long as it does not unreasonably allow for strategic uneconomic investment.
- 17. I believe the NYISO proposal constitutes a reasonable balance of these two concerns. It would allow a certain new generators or UDR projects to seek grandfathered treatment to be exempt from the buyer-side mitigation.⁴ Such a generator or UDR project also would have to pass one of the two proposed tests to establish that it had advanced enough prior to the NYISO's announcement and filing of the new capacity zone to warrant an exemption from buyer-side mitigation (*i.e.*, the "Commenced Construction Tests"). The supplier must satisfy one of the two tests by showing that it has:
 - Completed site preparation work (*i.e.*, completed ingress and egress routes, clearing and grading of the project site, power service to the site, preparation of footings, and pouring of foundations consistent with purchased equipment specification and project design); or

⁴ Such projects must have acquired CRIS rights in a completed Class Year, received transferred CRIS rights at the same location pursuant to criteria in the proposed new rules, or be 2MW or less (and that therefore do not have to go through a Class Year).

- Made a financial commitment comparable to the first test, which includes costs incurred for, and costs of cancelling, discontinuing, or suspending the project, which may consist of a combination of actions or commitments (*e.g.*, major equipment has been purchased, an engineering, procurement, and construction contract for the project has been executed, or financing has been completed).
- 18. The milestones listed in the first test will likely only be satisfied if the project has been under development long before the NCZ was proposed by the NYISO. Additionally, the developer will have incurred most of the legal and permitting costs, a large share of the equipment costs, as well as some of the construction costs. In total, I expect that the developer would have incurred more than 20 percent of the total costs of the project by the time it reaches this point. Hence, I find that it is reasonable to conclude that the project was not initiated to artificially depress capacity prices in the new NCZ (which was not proposed until after the project was well underway) and, therefore, reasonable to exempt the new resource from buyer-side mitigation. This will also facilitate efficient investment by reducing the risks facing a new developer outside of an NCZ.
- 19. The second test recognizes that some projects may have a comparable level of commitment by the developer, although they do not satisfy all of the elements of the first test. The second test, therefore, allows the NYISO to exempt a project if it can demonstrate other actions or commitments that are comparable to those in the first test. Although this test is not as specific as the first test, it is beneficial because not all projects follow the same developmental milestones. To validate the NYISO's findings and determination under the second test, the tariff requires the NYISO to consult with the MMU and calls for the MMU to issue an independent report addressing the NYISO's determination. I believe this will provide a reasonable level of oversight to ensure that only those projects that truly warrant an exemption because they have commenced construction are granted such an exemption.
- 20. This concludes my affidavit.

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ATTESTATION

I am the witness identified in the foregoing affidavit. I have read the affidavit and am familiar with its contents. The facts set forth therein are true to the best of my knowledge, information, and belief.

David B. Patton

June 29, 2012

Subscribed and sworn to before me this 29th day of June, 2012

Notary Public

MATTHEW JAMES CARRIER Notary Public City/County of Faithan Commonwealth of Virginka Notary registration number - 7233763 My commission expires - Nov. 30, 2013

My commission expires: Nov. 30, 2013