

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.)	Docket No. ER20-1718-000
)	

AFFIDAVIT OF DAVID B. PATTON, Ph.D.

JULY 8, 2020

I. Qualifications and Purpose

- 1. My name is David B. Patton. I am an economist and the President of Potomac Economics Ltd. 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 independent Market Monitoring Unit ("MMU") for the New York Independent System Operator, Inc. ("NYISO"). Potomac Economics serves in a substantially similar role for ISO New England ("ISONE"), 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 Installed Capacity¹ ("ICAP") 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 29 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.

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").

- 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 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 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. 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.
- 6. The purpose of this affidavit is to support the NYISO's response to the deficiency letter issued in the above-referenced docket on June 19, 2020. Potomac Economics previously filed comments supporting the NYISO's proposed "Part A Enhancements" in its April 30 Filing in this proceeding. I am submitting this affidavit now to reiterate this support and to provide our response as the MMU for NYISO to Question 4.d. Specifically, it is my opinion that the proposed reordering of evaluated resources for the Part A exemption test would result in "efficient, competitive, economic outcomes" that would benefit both consumers and existing suppliers, that would be superior to the results achieved under the current version of the Part A exemption test.

II. Support for the NYISO's Response to Question 4.d

7. Buyer side mitigation is intended to protect the credibility of market outcomes by preventing supply surpluses caused by out-of-market actions from artificially suppressing prices below competitive (*i.e.*, just and reasonable) levels. The existing Part A Exemption Test is designed to allow exemptions only when the entry of additional resources would not cause prices to fall below competitive levels. Ultimately, this better allows market participants to rely on the NYISO's market prices to facilitate efficient long-term decisions.

- 8. Unfortunately, the current rules are not optimal because they are not fully effective at minimizing artificial surpluses. This issue arises because the current Part A test can provide inefficient incentives for investment in new resources that are not needed. The Part A Exemption Test is intended to exempt resources from mitigation when the market is sufficiently tight that new resources will soon be needed to satisfy NYISO's resource adequacy needs. The current procedure calls for NYISO to test units in the order of their costs, starting with the lowest Net CONE and proceeding up to the Part A threshold, then testing all remaining projects together.
- 9. The concern that arises is that the current Part A test may grant low-Net CONE resources exemptions based solely on the perceived need for new resources. However, this perceived need will be inaccurate in retrospect after PPRs enter that have satisfied the need. In this case, allowing PPRs that will be entering regardless of the mitigation outcome to be recognized first for satisfying the system needs minimizes inefficient investment in other resources that would lead to larger capacity surpluses. For example, assume that capacity margins are tightening and 500 MW of exemptions are possible under the Part A test. Further assume that 500 MW of PPRs subject to mitigation are in the process of entering regardless of the mitigation. If the NYISO exempts 500 MW of conventional resources in this case, 1000 MW of capacity resources will have been built and entered. This contributes to an artificial increase in the total supply surplus. If the 500 MW of exemptions are instead granted to the PPRs, only 500 MW will enter into service and the total supply surplus will be 500 MW lower.
- 10. Inefficient entry of conventional resources and the associated larger capacity surpluses associated with the inefficient entry of conventional resources as described above are harmful to all market participants. These surpluses lead to:
 - Higher costs that are ultimately borne by consumers;
 - Market distortions, including lower energy and ancillary service prices that are harmful to the markets' suppliers; and
 - Higher PPR costs resulting from not having the ability to sell capacity.

III. Conclusion

- 11. The proposed re-ordering of the Part A evaluation is designed to continue to protect the integrity of the NYISO's Installed Capacity market prices while more effectively avoiding inefficient capacity surpluses by testing PPRs first under the Part A Exemption Test. The test will continue to only provide exemptions when the entry of the exempted resources will not suppress capacity prices below competitive levels. The proposed Part A Enhancements would therefore achieve more efficient, lower-cost long run outcomes that benefit consumers. These outcomes would also benefit existing suppliers in the market by minimizing inefficient capacity surpluses. Such surpluses would likely be larger and more sustained under the current version of the Part A Exemption Test since it can result in inefficient investment in new non-PPRs when mitigated PPRs will be in service to meet the system's resource adequacy needs.
- 12. Therefore, we support the NYISO's proposed re-ordering of the Part A exemption tests and respectfully encourage the Commission to approve it.
- 13. This concludes my affidavit.

ATTESTATION

	the foregoing affidavit. I have read the affidavit and am set forth therein are true to the best of my knowledge,
	David B. Patton
	July 8, 2020
Subscribed and sworn to before me this 8th day of July, 2020	
Notary Public	
roday rubile	
My commission expires:	