

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.)

Docket No. ER01-2076-000

AFFIDAVIT OF
DAVID B. PATTON

David B. Patton, having been duly sworn under oath deposes and says:

1. My name is David B. Patton. I am the President of Potomac Economics, located in Fairfax, VA. I have a Ph.D. in economics and have worked as an energy economist for twelve years, focusing primarily on the electric utility and natural gas industries.

2. In May 1999, I was appointed as the independent Market Advisor for the New York Independent System Operator, Inc. (“NYISO”). As the independent Market Advisor, I am responsible for assisting the NYISO in monitoring for market design flaws and market power abuses, as well as assessing the overall efficiency of the wholesale electric power markets in New York. I was recently appointed to a comparable position for ISO New England.

3. I have worked with the market participants and the NYISO in the development of the Automated Mitigation Procedure (“AMP”). The NYISO has requested that I review and comment on the concerns and protests raised by the participants. In general, the protests claim that the AMP is more than simply an automation of the current market mitigation measures (“MMM”) and that it will result in inefficient intervention in the market and distortion of competitive electricity prices. These criticisms are misplaced and generally based on a misunderstanding of how the AMP would operate.

4. Perhaps the most troubling assertion is that the AMP constitutes a price cap or other form of unjustified price control. This is clearly not true as the AMP will in no way prevent pricing from rising legitimately. Dr. Ruff and others claim that the AMP procedure would prevent prices from rising appropriately during periods of scarcity. These comments presume that reference prices will not exceed variable fuel costs. In reality however, the determination of reference prices under the MMM and AMP is substantially more sophisticated. For example, the reference prices for emergency output ranges that can only be achieved at very high marginal costs (reflecting incremental increases in O&M, reduction in the unit's efficiency, and increases in the forced outage probability) will reflect those high marginal costs. Consequently, there are substantial quantities of resources in the New York markets that have reference prices close to or at the \$1000 bid cap. These output blocks with legitimately high marginal costs and resulting high reference prices will cause prices to rise to the cap level when supplies become scarce. Therefore, it is not necessary for suppliers to engage in economic withholding to cause prices to rise to scarcity levels.

5. Hence, the AMP will not serve as a cap on prices or otherwise constrain prices from increasing to reflect market conditions when supply is scarce. However, it will effectively prevent relatively large suppliers from causing prices to rise to scarcity levels by economically withholding when transmission constraints or other conditions temporarily limit competition.

6. The second criticism of the AMP made by some of the protests is that the price impact test that would be performed within SCUC under the proposed AMP would be substantially different than under the current procedures for implementing the MMM. The basis for this criticism is that the AMP would test the impact of withholding by multiple bidding organizations together. The protests claim that the MMM require that each instance of economic withholding be analyzed independently, but this is not the case. The MMM specifically contemplates mitigating conduct that "contributes to" a material price increase. In fact, given the time it requires to run one SCUC scenario, the current MMM process generally requires that conduct be analyzed jointly. In addition, the AMP provides a number of exemptions that are designed to minimize the potential that bidding conduct is not inappropriately grouped from purposes of the market impact test.

7. In fact, in a repeated market with the same suppliers, economic theory suggests that when a market is highly concentrated or otherwise subject to market power abuse, bids of oligopoly suppliers will account for the reactions of other suppliers. Although this does not constitute explicit collusion, it does justify the joint assessment of market impacts that are currently performed currently under the MMM and which are contemplated in the proposed AMP.

8. The AMP will significantly improve the assessment of price impacts. The time required to run SCUC scenarios currently results in a one-day lag in the implementation of mitigation, the elimination of which is the objective of the AMP. Hence, the NYISO currently relies on SCUC results showing that certain economic withholding had a material effect on today's prices to justify imposing mitigation tomorrow if the conduct continues. In other words, the price effect established today is a proxy for the likely effect tomorrow. While this may generally be appropriate assuming that market conditions are similar, the price effects computed under the proposed AMP process would clearly be more accurate in that they would be estimated using the current day's supply bids, loads, system conditions, and external transactions.

9. The third criticism of the proposed AMP relates to the alleged inadequacy of the proposed consultation process. Some of the protests argue that the NYISO will be excessively involved in reviewing suppliers bids and will not be capable of accounting for opportunity costs, risk premiums and other factors. These protests do not account for some key facts. First, suppliers are granted a relatively wide band within which they may adjust their bids without any concern regarding mitigation (300 percent increase or \$100 per MWh over the resource's reference price), which limits the conduct that could be eligible to be mitigated to only the most extreme bid changes. Second, practical experience has not shown that the bids that tend to exceed the conduct thresholds arise for extremely short periods. Hence, there is generally sufficient time to consult with the market participant in advance of potential mitigation. Such is the case today under the current MMM procedures and would likely be the case under the AMP.

10. The fourth criticism relates to the appropriateness of the reference prices. The vast majority of the reference prices currently used for market monitoring are based on accepted bids from the units. The NYISO's MMM does not constrain reference prices to reflect only variable fuel costs as some would claim. Using reference prices based on past accepted bids allows the supplier to control its reference price since it controls its bid prices, while relying on competitive forces to provide the appropriate incentive for suppliers to bid close to marginal costs during most hours when the market is workably competitive. Further, these reference prices are indexed to account for fuel price changes, which is likely the most common need for a supplier to change its bid. Using this methodology, together with the current threshold levels that allow suppliers to raise their bids to reflect changes in real factors, the probability that the reference prices will unjustifiably constrain changes in supply bids is very small.

11. Nonetheless, the NYISO has structured a process to allow for suppliers to justify adjustments to their reference prices as an additional safeguard that suppliers bidding competitively will not be subject to mitigation under the AMP.

12. The fifth point I will address from the protests is the contention that my Assessment of the New York Markets supports the conclusion that the AMP is unnecessary. The report does conclude that the markets have generally been workably competitive, but notes that there were isolated incidents in which some suppliers engaged in conduct that substantially increased prices. With continued load growth and warmer weather this summer, and with limited new capacity having been installed, such incidents may increase in frequency and severity. This does not mean that market-based pricing is unwarranted in general or that the markets are not performing well, but having a procedure to effectively address these situations in a timely manner is important to maintain the integrity of the market while minimizing ISO intervention.

13. Lastly, some have claimed that the AMP will provide incentives for internal suppliers to increase exports to other markets, reducing market efficiency and reliability. While this can be result of hard or soft price caps as I noted in comments to the New York Department of Public Service last year, this is not the case with the AMP. The AMP imposes no artificial price control on the market and

does not limit imports or exports. Therefore, if a unit is dispatched and chooses to export its power to a neighboring market, resulting in higher New York prices and lower prices in the adjacent market – arbitrage back into New York from the suppliers in the neighboring market could be expected to allow the prices in the two markets to equilibrate.

14. In summary, price controls do generally raise significant concerns in the context of competitive electric markets by muting efficient price signals, reducing incentives to enter the market or provide power from high priced resources, and creating inefficient signals for suppliers to import and export power. Therefore, it is critical to understand that the AMP proposal and the MMM itself are not price controls. The AMP in no way limits prices from rising to the level needed to clear the market, it simply limits the ability of larger suppliers to artificially raise prices when network or market conditions may create a temporary ability to do so.

15. This concludes my affidavit.

David B. Patton, Ph.D.
President
Potomac Economics, Ltd.

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Subscribed and sworn to before me
this ____ day of June, 2001.

Notary Public