

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

New York Independent System Operator, Inc.	)	Docket No. ER17-1453-000
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**MOTION TO INTERVENE AND COMMENTS OF THE  
MARKET MONITORING UNIT ON THE NEW YORK ISO  
PROPOSED TARIFF REVISIONS TO CLARIFY AND ENHANCE  
TRANSMISSION CONSTRAINT PRICING**

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Potomac Economics moves to file comments concerning the filing by the New York Independent System Operator (“NYISO”) on April 21, 2017 pursuant to the above-captioned proceedings. The NYISO to modify its real-time pricing software to set more efficient real-time prices during transmission shortage conditions. Pricing under transmission shortage conditions is a key element of the overall incentives that motivate resources to perform reliably and for investment in locations where resources are needed for reliability. Potomac Economics is the Market Monitoring Unit (“MMU”) for the NYISO and is responsible for monitoring the electricity markets. As the MMU, we are expected to identify report of market performance and evaluate existing and proposed market rules.<sup>1</sup>

**I. NOTICE AND COMMUNICATIONS**

All correspondence and communications in this matter should be addressed to:

Dr. David B. Patton  
Potomac Economics, Ltd.  
9990 Fairfax, Boulevard, Suite 560  
Fairfax, VA 22030  
(703) 383-0720  
dpatton@potomaceconomics.com

Dr. Pallas LeeVanSchaick

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<sup>1</sup> See NYISO MST Section 30.4.5.1 and 30.4.5.2.

Potomac Economics, Ltd.  
9990 Fairfax, Boulevard, Suite 560  
Fairfax, VA 22030  
(703) 383-0719  
pallas@potomaceconomics.com

## **II. BACKGROUND AND PURPOSE**

The NYISO concluded last year that its real-time pricing and scheduling software had been implemented in a manner that was not consistent with Sections 17.1.1 and 17.1.4 of its MST. Furthermore, the NYISO has found that significant aspects of the pricing logic were not addressed in its tariffs and had not been adequately disclosed to stakeholders in presentations on the subject.

On January 6, the NYISO filed a request for the Commission to waive MST Sections 17.1.1 and 17.1.4. Specifically, the NYISO requested a waiver for real-time pricing outcomes going back to the activation of the GTDC project software on February 11, 2016 and until such time as it could implement new tariff provisions. The NYISO indicated its intent to develop new tariff provisions in its normal governance process and submit them in a 205 filing by April 30. On April 21, the NYISO filed its proposal in this docket.

We support the NYISO's proposed revisions as a significant improvement over the pricing logic that has been in effect since February 11, 2016.

## **III. Comments on the Proposed Modifications**

Ideally, the market software would set constraint shadow prices that rise with the severity of market conditions such that minimal violations would produce substantial but not extreme prices, while larger violations would be reflected in high prices commensurate with shortage conditions.

We have found that the current software leads to volatile transmission constraint prices that are difficult to predict and not well-correlated with the severity of real-time operating conditions. In particular, the use of constraint relaxation (i.e., resolving a transmission shortage by simply raising limit until it is feasible) leads to both situations with extreme pricing outcomes for minimal violations and situations when prices are low or even \$0/MWh during severe shortages.

The NYISO's proposal would eliminate the use of constraint relaxation for the vast majority of transmission shortages, which would be a significant improvement. This would eliminate the unnecessary price volatility that results from the current process. Only constraints with a zero Constraint Reliability Margin would continue to be relaxed, which is reasonable in the short-term since this generally applies only to the exit facilities from net exporting locations such as generation plants, where there is a rationale for alternatives to the proposed GTDC.

The NYISO's proposal would also reduce the second step of the GTDC from \$2,350 to \$1,175. We support this change because we have found that violations of 5 to 20 MW occur with significant frequency and rarely coincide with significant operating reserves constraints (so there is little reason for concern that this reduction would lead to an inappropriate prioritization between transmission security and maintaining operating reserves). From February 11 to the end of 2016, just 2.2 percent of the 2,971 transmission constraint violations of 5 to 20 MW coincided with an operating reserve shortage, so the economic dispatch model rarely faces the decision of whether to secure a transmission facility or maintain operating reserves. Even in intervals that involve such a trade-off, the short-term proposal would apply a \$4,000 shadow price cap for violations larger than 20 MW, which is the point at which the CRM would be exhausted.

#### IV. CONCLUSIONS

WHEREFORE, for the foregoing reasons, Potomac Economics, Ltd. respectfully requests the Commission grant its motion to intervene in this proceeding and accept these comments. As described in these comments, we respectfully recommend that the Commission approve NYISO's proposal to enhance the pricing of transmission constraint violations.

Respectfully submitted,

*/s/ David B. Patton*

David B. Patton  
President  
Potomac Economics, Ltd.

May 12, 2017

## CERTIFICATE OF SERVICE

I hereby certify that I have this day e-served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 27<sup>th</sup> day of January 2017 in Fairfax, VA.

*/s/ David B. Patton*

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