

Attachment III

Affidavit of Mr. Rana Mukerji
Senior Vice President of Market Structures
New York Independent System Operator, Inc.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.) Docket No. ER15- -000

1. Qualifications and Purpose

1. My name is Rana Mukerji . I am the Senior Vice President of Market Structures for the New York Independent System Operator, Inc. (“NYISO”). My business address is 10 Krey Boulevard, Rensselaer, New York 12144. I joined the NYISO in 2006. I am a Professional Engineer, registered in the State of New York.
2. As the NYISO’s Senior Vice President of Market Structures, I am responsible for overseeing Market Design, Product and Project Management, System Resource Planning, Research and Development, and Market Training at the NYISO.
3. The Market Structures Department is responsible for designing and developing new market rules, including the proposal developed in response to Order No. 755.
4. I am submitting this affidavit in support of the Regulation Movement Multiplier (RMM) revision being proposed by the NYISO in this proceeding.

II. The Regulation Movement Multiplier

4. The NYISO utilizes the uniform Regulation Movement Multiplier in scheduling resources for Regulation Service. Each Regulation Service provider submits a two-part Bid, a Regulation Capacity Bid (with a MW offer and a Bid price/MW) and a Regulation Movement Bid (a Bid Price/MW). NYISO software schedules resources using the MW of Regulation Capacity offered and a composite Bid Price calculated by summing, for each Supplier, the bid cost for Regulation Capacity and the product of the bid cost for Regulation Movement and the Regulation Movement Multiplier. The use of a Regulation Movement Multiplier in this fashion equips the scheduling and dispatch software with a better representation of the likely cost of each Supplier in providing both the Capacity and Movement components of Regulation Service, allowing a least cost comparison among individual offers.
5. The NYISO originally implemented Regulation Service market changes including a payment for Regulation Movement with a Regulation Movement Multiplier of ten (10) on June 26, 2013. This number was derived by NYISO staff under my direction and control. The NYISO filed an informational report on August 26, 2014 to update the

Commission on the status of the Regulation Service market. As part of this informational report, the NYISO committed to review the current Regulation Movement Multiplier with stakeholders, and to propose a revised Regulation Movement Multiplier if necessary. The NYISO has determined that it is necessary to revise the uniform Regulation Movement Multiplier upward to a value of thirteen (13).

6. To derive the Regulation Movement Multiplier, NYISO staff, under my direction, analyzed historic data for the time period from October 25, 2012 to October 20, 2014. For each Regulation provider scheduled for Regulation Service during a given hour of this historic period, the NYISO calculated a Movement MW value for each 6-second interval during the hour, where Movement MW is defined as the absolute change in Energy or Demand Reduction¹ over a 6-second interval that a Regulation Service provider is instructed to deliver for the purpose of providing Regulation Service. Directions to a resource to provide Energy were not counted as Movement MWs. The Movement MWs were then summed across all Regulation Service providers for the given hour, and divided by the NYISO Regulation (Capacity) Requirement (in MWs) for that hour. The average of the Movement MWs-to-NYISO Regulation Requirement ratio for each hour of the historic period is 15.3. Considering the time period from the date Regulation Movement was introduced to the market, June 26, 2013, to the end of the data set, October 20, 2014, the average ratio is 16.1. The average ratio for the two month period of August 21, 2014 to October 20, 2014 is 13.3.
7. The NYISO is proposing to set the Regulation Movement Multiplier to thirteen (13). The NYISO expects that this value will provide a better estimate of resource cost in providing Regulation Movement compared to a Regulation Movement Multiplier based on an older, though larger, historical data set. Data based on the last two months of the data set is appropriate given that tuning of the NYISO's Automatic Generation Control system in late August 2014 has allowed the NYISO to procure Regulation Movement more efficiently, thus lowering the average ratio of Regulation Movement to Regulation Capacity.
8. As measured, the RMM either did not vary significantly, or did not have a predictable pattern of variation by: season, day of week, weekday versus weekend, on-peak versus off-peak, or hour of day. As a result, the NYISO is proposing to continue use of a single RMM for all hours and will continue to monitor and evaluate this value for potential adjustments.
9. This concludes my affidavit.

¹ The Tariff offers Demand Side resources the opportunity to participate in the Regulation market. However, during this period, we had no Demand Side Resources providing Regulation Service.

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.

Rana Mukerji
Rana Mukerji

February 5, 2015

Subscribed and sworn to before me

this 5th day of February, 2015

Pamela J Mead

Notary Public

My commission expires: 6/24/2018

