

Attachment III

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

New York Independent System Operator, Inc.)))	Docket No. ER17-____-000
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AFFIDAVIT OF JOSHUA A. BOLES

Mr. Joshua A. Boles declares:

1. I have personal knowledge of the facts and opinions herein and if called to testify could and would testify competently hereto.

I. Qualifications

2. I am the Manager of Installed Capacity Market Operations for the New York Independent System Operator, Inc. (“NYISO”). In this position, I am directly responsible for overseeing the administration of Installed Capacity¹ (“ICAP”) auctions conducted by the NYISO including administering the rules for capacity imports and exports. I am also responsible for overseeing the administration and execution of the annual update process for the ICAP Demand Curves. Prior to my current position, I served as the Manager of Monitoring, Analysis, and Reporting for the NYISO Market Mitigation and Analysis department. In this role, I was responsible for assisting in overseeing the administration of both the NYISO’s capacity and energy market mitigation measures. I have worked for the NYISO in the administration of its capacity markets, including mitigation measures relating thereto, for over 10 years. I received an M.A. in Applied Economics and a B.A. in Economics from the State University of New York at Buffalo.

¹ Capitalized terms that are not specifically defined in this affidavit shall have the meaning set forth in NYISO’s Market Administration and Control Area Services Tariff (“Services Tariff”) and if not defined therein, then the meaning in the filing in which this affidavit is incorporated (“NYISO Filing”).

II. Purpose of this Affidavit

3. I submit this affidavit in support of the NYISO Filing that proposes amendments to the Services Tariff to correct pricing inefficiencies in its ICAP market, which can be triggered by capacity exports from certain Localities in the New York Control Area. I have been working on the issues related to this filing since they were first identified by the NYISO's independent Market Monitoring Unit ("MMU"). I have been an integral part of the NYISO's efforts to adjust its ICAP market rules to avoid the inefficient market outcomes that otherwise are likely to result under the current treatment of capacity exports in New York. I helped oversee the stakeholder process that led to the development of the NYISO Filing and worked on the tariff adjustments reflected in that proposal. I also oversaw the work by the NYISO staff that involved calculations of the Locality Exchange Factors and Locality Exchange MW discussed in the NYISO Filing.
4. I made nine presentations to stakeholders and obtained their input regarding the design of the revisions and the draft tariff revisions to the capacity market rules proposed in the NYISO Filing. I also discussed the proposal with and obtained input from the MMU and ISO-NE during its development.
5. The purpose of this affidavit is to describe the NYISO proposal and explain the basis for the proposed changes to the Services Tariff. I discuss the flaws in the existing rules that, if left unchanged, are likely to lead to dramatically inefficient pricing in the NYISO's ICAP market. I also explain the NYISO's proposal for addressing such inefficiencies by accurately reflecting, in the ICAP market, the continued operation of a resource that exports capacity from an import-constrained Locality. In my opinion, as a subject matter expert in the administration of the NYISO's ICAP Market and its outcomes, the NYISO's proposal is a reasonable solution to the potential ICAP market inefficiencies triggered by capacity exports from the NYCA.

III. NYISO Proposal

6. Under the NYISO's current ICAP market rules, when capacity is exported from a Locality, it is treated in the ICAP Spot Market Auction as though it is no longer in service. The full

amount of the exported capacity must therefore be replaced with other capacity located within the Locality and capacity prices would increase accordingly.

7. The current market design does not recognize that an exporting Generator continues to operate in the Locality. Similarly, it does not recognize that exports from certain Localities create increased counterflow with the Rest of State. The counterflow makes it possible to replace a portion of exported capacity with capacity located in Rest of State. An efficient capacity market design should reflect this reality. It should not produce a price signal that indicates the entire amount of an export from a Locality must be replaced by Resources located there when that is not the case. Rather, the price signal should reflect only the portion of the export that must be replaced by Resources located within the Locality.
8. Given that an exporting Generator in a Locality continues to operate in that Locality, the market signals should reflect the fact that the Generator, by continuing to operate, should be recognized in the capacity requirements in that Locality. The key to sending appropriate market signals is to reflect in the NYISO's ICAP Spot Market Auction the continued operation of the exporting Generator, and the impact the exporting Generator has on the amount of capacity that can be imported into the Locality.
9. Under the proposal advanced by the NYISO Filing, this would be accomplished by identifying "Locational Export Capacity," which is capacity in an "Import Constrained Locality"² that will be exported, and then identifying the portion of that Locational Export Capacity that can be replaced by capacity located in Rest of State and the amount that must be replaced from within the Locality. The portion of the Locational Export Capacity that can be replaced by capacity located outside of the Locality is the "Locality Exchange MW", an amount determined by calculating and applying the Locality Exchange Factor. The NYISO would then reduce the relevant Locational Minimum Installed Capacity Requirement by the Locality Exchange MW, and use the resulting figure to determine Load Serving Entities' Locational Minimum Unforced Capacity Requirements.

² The NYISO proposal defines Import Constrained Locality to mean the New York City Locality and the G-J Locality.

10. These adjustments would be made by applying the “Locality Exchange Factor” which, with one limited exception described below, would be a percentage of the Locational Export Capacity determined by the NYISO after a power flow based analysis. Specifically, the NYISO would determine the Locality Exchange Factor by conducting a power flow analysis using applicable transmission system planning practices, and incorporating base case data from the most recent reliability planning process, to determine the amount of Rest-of-State generation that can be brought into the Locality given the constraint relief provided by the export. The NYISO would calculate a Locality Exchange Factor for each Import Constrained Locality relative to each neighboring Control Area once each year, and would post those Locality Exchange Factors prior to the opening of the Summer Capability Period Auction.
11. As part of the stakeholder process, the NYISO performed, under my direction, a preliminary analysis of what the Locality Exchange Factor would be for exports from the G-J Locality to ISO-New England. I would emphasize that this calculation was intended primarily as an example to stakeholders of how the Locality Exchange Factor would be calculated. This preliminary analysis resulted in a Locality Exchange Factor of 47.8%, meaning that 52.2 % of the capacity exported from the G-J Locality would have to be replaced by capacity within the G-J Locality, while 47.8% could be sourced from outside of the G-J Locality.
12. Stakeholders approved a modification to the NYISO proposal under which the Locality Exchange Factor would be set for June 2017 through May 2018 at 80% for exports from the G-J Locality to ISO-NE. The Locality Exchange Factor for all other interfaces and the Import Constrained Localities would be based on the new Locality Exchange Factor mechanism.
13. The NYISO’s proposed Locality Exchange Factor mechanism is a reasonable solution to the looming market distortions that otherwise could occur beginning in June 2017. I, and many other NYISO staff members, have worked diligently to develop a solution to the problem regarding capacity exports in the NYISO’s ICAP market design. We had to re-double our efforts after we learned that ISO-NE was proposing changes to its market rules

that would allow exports from NYCA Localities to participate in its capacity market as soon as June 2017. The NYISO has a shared governance process, and the NYISO has had to work within the parameters of that process to develop an effective solution. I believe that the approach proposed by the NYISO is a reasonable one. These proposed tariff revisions will result in a reasonable price signal for investment in new and existing capacity resources.

14. This concludes my affidavit.

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.



Joshua A. Boles
November 30, 2016

Subscribed and sworn to before me
this 30th day of November, 2016


Notary Public

LINDA SLOAN
Notary Public - State of New York
No. 01SL6198599
Qualified in Schenectady County
My Commission Expires December 29, 2016

My commission expires: December 29, 2016