

March 10, 2023

By Electronic Delivery

Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: *New York Independent System Operator, Inc.*, Docket No. ER23-\_\_\_\_-000;  
Proposed Changes to Credit Requirement Calculations for Virtual  
Transactions and External Transactions**

Dear Secretary Bose:

In accordance with Section 205 of the Federal Power Act (“FPA”)<sup>1</sup> and Part 35 of the regulations of the Federal Energy Regulatory Commission (“Commission”), the New York Independent System Operator, Inc. (“NYISO”) respectfully submits proposed amendments to its Market Administration and Services Tariff (“Services Tariff”).<sup>2</sup> The proposed enhancements seek to better align the credit requirements for Virtual and External Transactions with the risk associated with the transactions, thereby improving protection of the NYISO-administered markets in the event of a default.

The NYISO respectfully requests: (i) an order accepting the proposed tariff revisions on or before May 9, 2023 (*i.e.*, sixty days from the date of this filing letter); and (ii) a flexible effective date for the proposed tariff revisions to be established upon at least two weeks’ prior notice.<sup>3</sup>

**I. Documents Submitted**

The NYISO respectfully submits the following documents with this filing letter:

1. A clean version of the proposed revisions to the Services Tariff (“Attachment I”);  
and

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<sup>1</sup> 16 U.S.C. § 824d.

<sup>2</sup> Capitalized terms not otherwise defined herein shall have the meaning specified in the Services Tariff.

<sup>3</sup> As further described in Section IV below, the NYISO proposes to submit a subsequent filing to establish the effective date for the proposed tariff revisions. The effective date will align with deployment of the software to implement the proposed enhancements, which the NYISO currently anticipates will occur in June 2023.

2. A blacklined version of the proposed revisions to the Services Tariff (“Attachment II”).

## **II. Background**

### **A. Operation of Virtual and External Transaction Credit Requirements**

In the NYISO-administered markets, credit is collectively extended by all Market Participants to each individual Market Participant, so that if one Market Participant defaults on its obligations to the NYISO, the remaining participants must make up the shortfall.<sup>4</sup> As a FERC-approved independent system operator, the Commission views the NYISO as “gatekeeper for the integrity of the markets they administer.”<sup>5</sup> In this role, the NYISO is expected to “implement [its] credit policies in a manner created to limit, as much as possible, the risk of credit defaults.”<sup>6</sup>

Market Participants submit Bids in the Day-Ahead Market for Virtual and External transactions, and those Bids are settled in the Real-Time Market. Thus, the credit requirements for Virtual Transactions and External Transactions use differences between the Day-Ahead and Real-Time prices (known as price differentials) to calculate the financial risk exposure the transaction presents to the market. To establish appropriate credit requirements, Bids are grouped based on the location, season, day, and time-of-day (hereinafter referred to as “Price Differential Groups”).<sup>7</sup> The Price Differential Groups were developed to group Bids with similar risk characteristics together to generate credit requirements that appropriately reflect the risk associated with those Bids.<sup>8</sup> The price differential methodology uses historical data to calculate credit requirements designed to reflect the potential payment that may be incurred as a result of a loss accruing for a given transaction.<sup>9</sup>

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<sup>4</sup> Policy Statement on Electric Creditworthiness, 109 FERC ¶ 61,186 P. 5 (2004).

<sup>5</sup> *Id.* P. 17.

<sup>6</sup> *Id.*

<sup>7</sup> See Services Tariff Sections 26.4.2.2.1, 26.4.2.2.2, and 26.4.2.6. For Virtual Transactions, these groups are referred to in Section 26.4.2.6 as “Virtual Supply Groups” and “Virtual Load Groups,” and for External Transactions the groups are referred to in Sections 26.4.2.2.1 and 26.4.2.2.2 as “Import Price Differential groups” and “Export Price Differential groups.” For ease of reference, these groups are referred to collectively as “Price Differential Groups” in this filing letter.

<sup>8</sup> See *New York Independent System Operator, Inc.’s Proposed Tariff Revisions to the Credit Requirements for Virtual Transactions*, Docket ER09-1010, Filing Letter at 4 (April 17, 2009); *New York Independent System Operator, Inc.’s Proposed Tariff Revisions to Establish a Distinct Credit Requirement for External Transactions*, Docket ER13-1199, Filing Letter at 3 (March 29, 2013).

<sup>9</sup> The NYISO currently uses the price differential at the 97<sup>th</sup> percentile to determine the credit requirements for Virtual and External Transactions. This means that the price differential value used to determine the applicable credit requirements is greater than or equal to 97 percent of the price differentials observed during the relevant period (*i.e.*, season, day, and hour) for the location at issue.

## **B. Evaluation of Virtual and External Transaction Credit Requirements**

The NYISO regularly evaluates its credit requirements to identify areas of potential risk and opportunities for improvement. In 2022, the NYISO analyzed the statistical validity of the Price Differential Groups, date parameters of the historical dataset (referred to as the “look-back period”) used to calculate price differentials, as well as the 97<sup>th</sup> percentile probability threshold used to calculate credit requirements for Virtual and External Transactions. The NYISO evaluated the outcome of this analysis to determine whether the current calculations result in credit requirements that appropriately reflect the risk associated with the relevant transactions. The NYISO has determined that certain enhancements to the credit requirements for Virtual and External Transactions would improve the credit protection afforded by such requirements and more closely align them with the risk of default associated with those transactions.<sup>10</sup>

Based on its detailed review and analysis, the NYISO proposes to revise the currently-effective Virtual Transaction and External Transaction credit requirement calculations as follows:

1. Change the hourly groupings that are used to determine the applicable Price Differential Groups;
2. Eliminate zonal groupings for Virtual Transactions in favor of calculating price differentials for each Load Zone;
3. Use a weighted look-back period to calculate price differentials, applying 1/3 of the weight on historical data from the most recent year preceding the Bid and 2/3 of the weight on historical data from the previous five years; and
4. Increase the probability threshold to the 98<sup>th</sup> percentile for Virtual Supply transactions and Imports, while maintaining the 97<sup>th</sup> percentile threshold for Virtual Demand transactions and Exports.

## **III. Description of Proposed Tariff Revisions**

The NYISO proposes to revise Sections 26.4.2.2 and 26.4.2.6 of the Services Tariff to better align the credit requirements associated with Virtual Transactions and External Transactions with the risk they present to the NYISO markets.

### **A. Changes to the Hourly Groupings Used to Determine the Price Differential Group to Be Applied to a Bid.**

The current Price Differential Groups are based on six hourly groupings, which are the same for Virtual Load, Virtual Supply, Imports, and Exports, and are the same for all seasons

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<sup>10</sup> Details of the NYISO’s analysis of the credit requirement enhancements proposed in this filing letter can be found at: [https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes\\_11-30-2022%20MC.pdf](https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes_11-30-2022%20MC.pdf).

(summer, winter, and rest-of-year).<sup>11</sup> The NYISO analyzed several alternative hourly groupings to determine whether those alternatives would generate credit requirements that covered a larger proportion of the financial risk presented by the transactions. Based on that analysis, the NYISO recommends changing the hourly groupings as set forth in the proposed changes to Services Tariff Sections 26.4.2.2.4 and 26.4.2.6. Virtual Load and Export Bids would be classified into 28 hourly groupings—10 summer hourly groupings, 10 winter hourly groupings, and 8 rest-of-year hourly groupings. Virtual Supply and Import Bids would be classified into 33 hourly groupings—14 summer hourly groupings, 11 winter hourly groupings, and 8 rest-of-year hourly groupings.<sup>12</sup> The NYISO determined that the updated groupings would result in credit requirements that more accurately reflect the risk of the transactions in each group, particularly in volatile hours in the summer and winter periods.

## **B. Change to Calculate Separate Credit Requirements for Each Load Zone for Proxy Generator Bus**

### **1. Virtual Transactions**

The NYISO currently groups Virtual Transaction Bids into four load zone groups: Load Zones A-F, Load Zones G-I, Load Zone J, and Load Zone K.<sup>13</sup> Prior to 2009, the NYISO did not utilize load zone groupings in determining the credit requirements for Virtual Transactions.<sup>14</sup> The NYISO evaluated whether continued use of these zone groups remained appropriate, or if calculating separate Virtual Transaction credit requirements for each zone would result in credit requirements that better reflect the risk of the transactions.

The NYISO's analysis demonstrated that changing to zone-specific credit requirement calculations resulted in an increase in the amount of financial risk covered by the credit requirements, especially as it relates to Virtual Supply Bids in certain Load Zones.<sup>15</sup> Based on the results of this analysis, the NYISO proposes calculating credit requirements for Virtual Transactions separately for each Load Zone based on the location of the Bid. Notably, the use of

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<sup>11</sup> See Services Tariff Sections 26.4.2.2.4 and 26.4.2.6.

<sup>12</sup> See Slides 6-11 at: [https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes\\_11-30-2022%20MC.pdf](https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes_11-30-2022%20MC.pdf).

<sup>13</sup> See Services Tariff Section 26.4.2.6.

<sup>14</sup> The Load Zone groupings are intended to aggregate Bids with similar risk characteristics. See *New York Independent System Operator, Inc.'s Proposed Tariff Revisions to the Credit Requirements for Virtual Transactions*, Docket ER09-1010, Filing Letter at 4 (April 17, 2009).

<sup>15</sup> The NYISO's analysis identified improvements when using zone-specific calculations for other zones and Virtual Load Bids, but less significant than the improvements observed for Virtual Supply Bids in Load Zones A and F. See Slides 19-20 and 44-49 at [https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes\\_11-30-2022%20MC.pdf](https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes_11-30-2022%20MC.pdf).

a zone-specific credit requirement calculation helps to ensure that zonal price variability that can arise due to changes in system conditions is appropriately reflected in its credit requirements.

## **2. External Transactions**

The NYISO does not utilize load zone groupings in determining the applicable credit requirements for External Transactions. Instead, the NYISO calculates credit requirements for External Transactions based on the applicable Proxy Generator Bus associated with each Bid.<sup>16</sup> No changes are proposed to this methodology as part of this filing.

### **C. Change to the Look-Back Period Used to Calculate the Price Differential Used to Calculate the Credit Requirement.**

The NYISO currently calculates credit requirements for Virtual Transactions and External Transactions using data from April 1, 2005 through the end of the month preceding the month of the Bid.<sup>17</sup> While longer look-back periods use more historical data and therefore minimize short-term and possibly aberrant changes in credit requirements, such longer periods may result in credit requirements that do not appropriately reflect changes in system conditions or increased price volatility. The NYISO evaluated a variety of alternative look-back period durations<sup>18</sup> to determine which period would result in credit requirements that are intended to most appropriately reflect the risk of the relevant transactions.

The NYISO determined that utilizing a weighted look-back period provided improved risk coverage compared to the current look-back period.<sup>19</sup> The NYISO's analysis determined that use of a five-year look-back period that applies 1/3 of the weight on data over the previous year and 2/3 of the weight on data over the previous five years, resulted in credit requirements that covered a higher percentage of financial exposure than the current look-back period and the other alternatives evaluated by the NYISO. The NYISO therefore recommends implementing this weighted look-back period for Virtual Transactions and External Transactions.

### **D. Change the Probability Threshold from the 97<sup>th</sup> Percentile to the 98<sup>th</sup> Percentile for Virtual Supply Transactions and Imports.**

The NYISO's credit calculations currently apply a 97<sup>th</sup> percentile threshold to all Virtual and External Transactions.<sup>20</sup> At this threshold, the amount of credit support required for a

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<sup>16</sup> See Services Tariff Sections 26.4.2.2.4.

<sup>17</sup> See Services Tariff Sections 26.4.2.2.1, 26.4.2.2.2, and 26.4.2.6.

<sup>18</sup> The NYISO evaluated one-year, two-year, five-year periods, as well as various weighting options for time periods within each historical dataset.

<sup>19</sup> See Slides 12-18 and 29-43 at [https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes\\_11-30-2022%20MC.pdf](https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes_11-30-2022%20MC.pdf).

<sup>20</sup> See Services Tariff Sections 26.4.2.2.1, 26.4.2.2.2, and 26.4.2.6.

transaction will be equal to or higher than 97 percent of the applicable historical price differentials observed during the relevant time period and location for each Bid. Setting a probability threshold too high could result in credit requirements that are disproportionately high compared to the risk they present. Alternatively, setting a probability threshold too low could result in credit requirements that do not adequately protect the market from the risk of default associated with the transactions.

The NYISO evaluated whether, considering the proposed enhancements described above, the 97<sup>th</sup> percentile threshold would continue to generate credit requirements that adequately protect against the risk of default without resulting in unnecessarily high credit requirements. The NYISO determined that while the 97<sup>th</sup> percentile threshold remained appropriate for Virtual Demand transactions and Exports, that threshold resulted in inadequate coverage for Virtual Supply transactions and Imports.<sup>21</sup> The NYISO therefore proposes to increase the probability threshold used for Virtual Supply transactions and Imports. The NYISO's analysis determined that the use of a 98<sup>th</sup> percentile threshold for Virtual Supply transactions and Imports resulted in credit requirements that more appropriately reflect the risk of the transactions. The NYISO proposes to continue use of the 97<sup>th</sup> percentile threshold for Virtual Demand transactions and Exports.

#### **IV. Effective Date**

The NYISO respectfully requests Commission acceptance of the proposed tariff revisions within sixty days from the date of this filing (*i.e.*, May 9, 2023). Such timely action by the Commission will: (i) allow the NYISO to confidently proceed with developing and deploying the software changes necessary to implement the proposed enhancements to the credit requirements; and (ii) enable the NYISO to achieve the desired effective date for these proposed changes.

The NYISO respectfully requests approval of a flexible effective date for the proposed tariff revisions. The NYISO proposes to submit a subsequent compliance filing specifying the date on which the revisions will take effect. This subsequent filing will be submitted at least two weeks prior to the proposed effective date. The NYISO, however, is unable to propose precise effective dates until the software changes necessary to implement the proposed changes are ready for deployment and testing thereof is completed. The NYISO currently anticipates that the proposed revisions will become effective in June 2023 following the software deployment that month. Consistent with Commission precedent, the subsequent compliance filing obligation will provide adequate notice to the Commission and Market Participants of the implementation dates for the tariff revisions.<sup>22</sup>

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<sup>21</sup> See Slides 22-23 and 50-51 at [https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes\\_11-30-2022%20MC.pdf](https://www.nyiso.com/documents/20142/34647738/9%20Presentation%20-%20Virtual%20and%20External%20Transactions%20-%20Proposed%20Changes_11-30-2022%20MC.pdf).

<sup>22</sup> See, *e.g.*, *New York Independent System Operator, Inc.*, 106 FERC ¶ 61,111 at P 10 (2004); Docket No. ER11-2544-000, *New York Independent System Operator, Inc.*, Letter Order at 1 (February

The NYISO requests a waiver of the Commission's regulations to allow the NYISO to make this filing more than 120 days prior to the date on which the proposed service is to become operational.<sup>23</sup> No Market Participant will be prejudiced by this request because the proposed implementation time frame was discussed with Market Participants. Furthermore, as noted above, the NYISO will provide at least two weeks prior notice before implementation of these proposed tariff revisions.

## **V. Stakeholder Process**

The NYISO Management Committee unanimously approved the proposed enhancements on November 30, 2022. The NYISO's Board of Directors approved the proposed revisions on February 14, 2023.

## **VI. Communications and Correspondence**

All communications and service in this proceeding should be directed to:

Robert E. Fernandez, Executive Vice President, General Counsel & Chief Compliance Officer

Karen G. Gach, Deputy General Counsel

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## **VII. Service**

A complete copy of this filing will be posted on the NYISO's website at [www.nyiso.com](http://www.nyiso.com). The NYISO will send an electronic link to this filing to the official representative of each of its customers, and each participant on its stakeholder committees. The NYISO will also send an electronic copy of this filing to the New York State Public Service Commission, and the New Jersey Board of Public Utilities.

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10, 2011); Docket No. ER15-485-000, *New York Independent System Operator, Inc.*, Letter Order at 2 (January 15, 2015); *New York Independent System Operator, Inc.*, 151 FERC ¶ 61,057 at P 20 (2015); and *New York Independent System Operator, Inc.*, 154 FERC ¶ 61,152 at P 19 and 25 (2016).

<sup>23</sup> See 18 C.F.R. § 35.3(a)(1).

**VIII. Conclusion**

For the foregoing reasons, the NYISO respectfully requests that the Commission: (i) issue an order accepting the proposed revisions to the Services Tariff that are filed herewith within sixty days of the date of this filing (*i.e.*, by May 9, 2023); and (ii) permit the NYISO to subsequently establish the effective date for the proposed tariff revisions upon at least two weeks' prior notice, as described in Section IV above.

Respectfully submitted,

/s/ Amie Jamieson

Amie Jamieson, Senior Attorney/Registered In-  
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