NEW YORK INDEPENDENT SYSTEM OPERATOR
10 Krey Boulevard ♦ Rensselaer, NY 12144

November 30, 2016

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

Re: New York Independent System Operator, Inc., Docket No. ER17-___-000
Proposed Tariff Revisions Regarding Capacity Exports from Certain Localities in New York

Dear Secretary Bose:

In accordance with Section 205 of the Federal Power Act ("FPA") and Part 35 of the Commission's regulations,[1] the New York Independent System Operator, Inc. ("NYISO") respectfully submits amendments to its Market Administration and Control Area Services Tariff ("Services Tariff") to correct a pricing inefficiency in its Installed Capacity ("ICAP") market design related to capacity exports from certain Localities[2] in the New York Control Area ("NYCA"). The NYISO proposes to revise certain provisions in Section 5 and Section 23.4.5 of its Services Tariff (and associated definitions) to allow capacity market prices to appropriately reflect the impact of capacity exports from Localities. The proposed revisions also provide clear rules regarding the obligations of generators that export capacity. For the reasons set forth below, the proposed tariff revisions are just and reasonable and should be accepted by the Commission.

The proposed revisions were developed through the NYISO's shared governance process with extensive input from stakeholders. The revisions were approved by a vote of 63.62% at the October 26, 2016 stakeholder Management Committee meeting and by the NYISO's Board of Directors on November 21, 2016. Potential alternative market designs and features were identified, but the NYISO and its stakeholders determined that there was not sufficient time to fully evaluate or develop them in order to timely incorporate them into the Services Tariff and implement them. Nor was there time to modify the software to implement some of the alternatives. A factor in selecting the solution proposed in this filing was that it required only limited modifications to the software, which could be timely deployed.[3]

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[1] 16 U.S.C. § 824d

[2] Capitalized terms not otherwise defined herein shall have the meaning specified in the Services Tariff.

[3] The NYISO has already begun developing the limited software modifications necessary to implement the tariff provisions proposed in this filing.

The Management Committee's approval included a NYISO commitment to continue to explore, with stakeholders, potential additional future enhancements, as described in Section IV of this letter. The revisions reflect the input of the independent Market Monitoring Unit ("MMU").

The NYISO requests issuance of an order by the Commission accepting all of the tariff revisions proposed in this filing to become effective at the end of the standard sixty-day notice period under FPA Section 205, *i.e.*, January 29, 2017. This effective date will allow the NYISO to meet the first implementation step required by the tariff revisions – which would have to be completed by January 31.[4] This timing is important for the NYISO and Market Participants to be able to take actions related to the upcoming Summer Capability Period. To the extent necessary, the NYISO requests a waiver of the cost-of-service filing requirements set forth in Section 35.13 of the Commission's regulations because they are not relevant to this filing.[5]

I. DOCUMENTS

The NYISO respectfully submits the following documents in support of this filing:

1. This filing letter;
2. A clean version of the proposed revisions to the Services Tariff ("Attachment I");
3. A blacklined version of the proposed revisions to the Services Tariff ("Attachment II")
4. Confirming Affidavit of Joshua Boles (Attachment III);
5. Confirming Affidavit of Lorenzo P. Seirup (Attachment IV); and
6. The NYISO Board of Directors *Decision on Appeal of the Management Committee's Action Accepting a Proposal to Amend Tariff Provisions Regarding Import Constrained Locality Capacity (November 21, 2016)* (Attachment V).

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[4] Proposed Section 5.11.4.1 of the Services Tariff requires the NYISO to determine and post on its web site Locality Exchange Factors. This provision is discussed in Section III.D of this filing letter.

[5] Under 18 C.F.R. § 35.13 (2016), a public utility is required to "file the information required by this section, as applicable, at the time it files with the Commission under §35.1 all or part of a rate schedule, tariff or service agreement to supersede or otherwise change the provisions of a rate schedule, tariff or service agreement filed with the Commission under §35.1." Much of the information required by Section 35.13 is related to costs incurred by traditional vertically integrated utilities and is designed to allow the Commission to review changes in cost-of-service rates charged by investor-owned public utilities. However, the NYISO is not such a utility, and, more importantly, this filing does not modify a cost-of-service rate. Accordingly, the NYISO respectfully submits that § 35.13's cost-of-service related filing requirements are inapplicable and requests, to the extent necessary, that the Commission waive them with respect to this filing.

II. BACKGROUND

A. Capacity Price Impacts of Exports from Certain NYCA Localities

Each Locality has a Locational Minimum Installed Capacity Requirement ("LCR"), which is the amount of capacity Load Serving Entities must obtain from capacity Resources electrically located within the Locality. Certain Localities are "import constrained," meaning that transmission constraints limit the amount of power that can be delivered into them.[6] Under the NYISO's current capacity market rules, a Generator that exports capacity from a Locality would be treated in the ICAP Spot Market Auction as though it is no longer in service. The full amount of the exported capacity would therefore have to be replaced with other capacity located within the Locality, and capacity prices would increase accordingly.

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 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 that 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.

B. New England's "FCM Enhancements Filing" and the Need to Address the NYISO's Capacity Market Pricing Issue

In its State of the Market Report ("SOM Report") issued in May 2016, the MMU recommended that the NYISO "[m]odify the capacity market and planning process to better account for capacity that is exported to neighboring control areas from import-constrained capacity zones."[7] The SOM Report specifically referenced capacity exports ISO New England Inc. ("ISO-NE") awarded to capacity located in the G-J Locality in ISO-NE's FC9 (2018/2019) and FCA 10 (2019/2020).[8]

The SOM Report emphasized that the NYISO should act promptly because the MMU anticipated that "capacity clearing prices in the Lower Hudson Valley could rise far above competitive levels . . . at least during the two years for which capacity has already been sold into

[6] The NYISO's proposed tariff revisions define "Import Constrained Localities" as New York City (*i.e.,* Load Zone J) and the G-J Locality.

[7] *See 2015 State of the Market for the New York ISO Markets* at xii, 117 (May 2016), available at: <http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2015/NYISO%202015%20SOM%20Report_5-23-2016-CORRECTED.pdf>.

[8] SOM Report at n. 103.

ISO-NE."[9] At the time the SOM Report was published, it was understood that those detrimental effects would not occur until June 2018.[10]

The NYISO promptly began an evaluation of the MMU's recommendation, including a review of the MMU's proposed solution and potential alternatives. However, the filing by ISO-NE and the New England Power Pool Participants Committee of proposed "FCM Enhancements" accelerated the need for action to address this issue.[11] The FCM Enhancements Filing included revisions that would, among other things, permit resources that have qualified to sell capacity in a future ISO-NE Capacity Commitment Period to offer capacity in reconfiguration auctions and enter into capacity supply obligation bilaterals for earlier periods (the "Reconfiguration Auction Import Proposal"). Because that rule change exposed New York customers to serious pricing inefficiencies under the current NYISO rules a year sooner than expected, the NYISO requested that the Commission defer this one element of the FCM Enhancements for one capability year as it applied to imports from NYISO Localities.[12]

The one-year delay would have preserved the status quo under which exports from NYCA Localities to ISO-NE would first be permitted beginning June 1, 2018.[13] It therefore would have prevented harmful, inefficient economic outcomes in New York during ISO-NE's 2017/2018 capacity year. The one-year delay also would have allowed the NYISO to work with its stakeholders to analyze the complex issues involved, consider various market design solutions, and develop and implement related software revisions.

The Commission accepted the New England FCM Enhancements Filing including the Reconfiguration Auction Import Proposal and its requested effective date.[14] In denying the NYISO's request for a limited deferral of the implementation of the Reconfiguration Auction Import Proposal, the Commission "acknowledge[d] NYISO's concerns about a potential flaw in its market rules."[15] It also encouraged timely completion of NYISO stakeholder discussions and

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[9] SOM Report at 117.

[10] *Id*.

[11] *ISO New England Inc. and New England Power Pool Participants Committee,* Forward Capacity Market Enhancements, Docket No. ER16-2451-000 (August 19, 2016) ("FCM Enhancements Filing").

[12] Docket No. ER16-2451-000, *ISO New England Inc. and New England Power Pool Participants Committee*, Motion to Intervene and Limited Protest of the New York Independent System Operator, Inc. (Sept. 9, 2016).

[13] The NYISO did not contend that any other aspect of the FCM Enhancements proposal should have been delayed, which would have allowed capacity resources located in the NYCA but outside of NYCA Localities to gain early access to Reconfiguration Auctions and to capacity supply obligation bilateral.

[14] *ISO New England Inc. and New England Power Pool Participants Committee*, 157 FERC ¶ 61,025 (2016) ("Order").

[15] Order at P 32. A group of New York Transmission Owners have sought rehearing of the

urged the "NYISO to make the anticipated tariff filing with the Commission to address these concerns before the relevant market and implementation deadlines."[16] The Order also stated that "in order to provide the Commission with timely, actionable information we direct NYISO to file an informational report addressing its progress in preparing any tariff filing with the Commission."[17] The NYISO submitted that filing on November 4, 2016 in Docket No. AD16-26-000.

C. Development of a Measure to Address the Capacity Market Pricing Issue

The NYISO began discussions regarding the market design issue and potential solutions with its stakeholders at the August 2, 2016 meeting of its Installed Capacity Working Group ("ICAP Working Group"). Those discussions continued at the August 23, 2016 ICAP Working Group meeting at which the NYISO presented the framework of a proposed solution. On September 19, 2016, the NYISO presented a detailed proposal and draft tariff revisions to stakeholders at an ICAP Working Group meeting. The NYISO also presented a customer impact analysis.[18] At the October 7, 2016 ICAP Working Group meeting, the NYISO presented further analysis and incremental tariff revisions based on stakeholder input. The proposed tariff revisions presented in this filing (the "NYISO Proposal") are the revisions that were advanced by the NYISO during the stakeholder process with one exception, which is described in Section III.D.2.[19]

The NYISO also made presentations concerning the evolving NYISO Proposal to the New York State Reliability Council's ("NYSRC") Installed Capacity Subcommittee on August 30, October 5 and November 2, 2016, and the NYSRC's Executive Committee on October 14, 2016.

III. PROPOSED TARIFF REVISIONS

A. Overview

Order. *Request for Rehearing of the Indicated New York Transmission Owners*, Docket No. ER16-2451-001 (November 17, 2016).

[16] Order at P 32.

[17] *Id.*

[18] *Consumer Impact Analysis: Exports Capacity Exports from Localities* (Sept. 19, 2016), available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-09-19/CIA%20-%20Capacity%20Exports%20from%20Localities.pdf>.

[19] *See Locational Export Capacity Proposal* (Oct. 26, 2016), available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-10-26/Agenda%2006_Locational%20Export%20Capacity%20Proposal.pdf>, and *Locational Capacity Exports – Mitigation* (Oct. 26, 2016), available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-10-26/Agenda%2006_Locational%20Capacity%20Exports_Mitigation.pdf>.

The NYISO Proposal is designed to address the pricing inefficiency that can arise under current market rules when a Generator exports capacity to an External Control Area over an AC interface from an import constrained Locality.[20] The NYISO Proposal would recognize that an exporting Generator continues to operate within its Locality, which would be reflected in the ICAP Spot Market Auction clearing prices. It would do so by accounting for the portion of exported capacity that can be replaced by capacity located in Rest of State, and sending a market price signal that reflects the capacity that truly must be located within the Locality.[21]

The MW amount of capacity from Rest of State that can replace MW of capacity exported from an import constrained Locality would be determined according to the methodology included with the proposed tariff revisions presented here. This amount would be expressed as a percentage called the "Locality Exchange Factor."[22] It would account for the continued operation of the exporting Generator in an import constrained Locality by using a power flow analysis to determine the amount of capacity that can be replaced from Rest of State and the amount that must be replaced within the Locality. The NYISO would apply that percentage to the MW amount of exported capacity and would set each the Locality's Locational Minimum Unforced Capacity Requirement accordingly. It would then set each Load Serving Entity's Locational Minimum Unforced Capacity Requirements using that adjusted amount and run the ICAP Spot Market Auction. Thus, the ICAP Spot Market clearing price for the Locality would reflect the amount of capacity that is actually needed within that Locality and the amount that could be located in Rest of State in light of the capacity export from the Locality. The overall capacity requirement for the state would not change under this proposal.

The NYISO Proposal, including the Locality Exchange Factor methodology and the determination of Load Serving Entities' requirements, described in this Section III are supported by the affidavit of Joshua A. Boles, Manager of ICAP Market Operations for the NYISO.

B. New Defined Terms

The new defined term "Import Constrained Localities," which comprises New York City (Load Zone J) and the G-J Locality, would be added to Section 2.9 of the Services Tariff.

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[20] Only AC circuits, and not Controllable Transmission and Unforced Capacity Deliverability Right facilities (commonly referred to as UDRs) are part of this proposal because unlike AC lines, they can specifically commit an amount of capacity and control the amount of energy that is extracted from that Locality

[21] Based on the NYISO's analysis described herein and presented to stakeholders, the pricing outcomes of an export from New York City to an External Control Area would look very similar to an export from the G-J Locality because there is 100% counterflow from the G-J Locality to New York City.

[22] The main software modification required to implement the proposed tariff revisions is to add the capability to apply the Locality Exchange Factor percentage to establish the Locational Minimum Unforced Capacity Requirement for each Locality prior to determining each Load Serving Entity's obligations.

The new defined term "Locational Export Capacity" would be added to Section 2.12, with the following definition:

> **The MW of a Generator electrically located in an Import Constrained Locality that (a) has Capacity Resource Interconnection Service, pursuant to the applicable provisions of Attachment X, Attachment S and Attachment Z to the ISO OATT, and (b) that meets the eligibility requirements set forth in Section 5.9.2.2 of the Services Tariff.**

The new defined term "Locality Exchange MW" meaning the portion of Locational Export Capacity that can be replaced from Rest of State would be defined in Section 2.12 of the Services Tariff as:

> **The MW of Locational Export Capacity excluding the MW to be transmitted using UDRs, that the ISO determines in accordance with Section 5.11.4 of the Services Tariff.**

Proposed Section 5.11.4 provides that the NYISO would determine the Locality Exchange MW by applying the "Locality Exchange Factor," a percentage defined and described below, to:

> **the MW of Locational Export Capacity that are the lesser of (i) the lesser of the Generator's CRIS and its most recent DMNC, and (ii) the MW pursuant to the notice provided pursuant to Section 5.9.2.2.1 of this Services Tariff.**

The notice provision referenced in subsection (ii) above is described in Section III.E.1 of this letter. This clause would ensure that even if the MW the Generator's notice indicated it planned to export were greater than its MW that could qualify as Installed Capacity in the NYISO's market, the proposed market mechanism could satisfy the LCR.

"Locality Exchange Factor" is another proposed new definition that would be added to Section 2.12 of the Services Tariff. It would be "**[t]he percentage of Locational Export Capacity that the ISO determines annually in accordance with Section 5.11.4.1 of the Services Tariff,**" subject to a limited exception discussed below. Section 5.11.4.1 referenced in the definition describes the inputs and the methodology the NYISO would use to perform a power flow based analysis to determine Locality Exchange Factors.

C. Determination of ICAP Requirements and Auction Rules

The NYISO determines each Load Serving Entity's individual Locational Minimum Unforced Capacity Requirement, which is the amount of capacity that a Load Serving Entity must procure from resources within the Locality for a given month. To ensure that the appropriate amount of capacity is purchased in the Import Constrained Locality, the NYISO proposes to reduce the relevant LCR by the Locality Exchange MW – *i.e.,* the MW that can be replaced by capacity outside of the Locality. The overall NYCA Minimum Installed Capacity

Requirement, and the Unforced Capacity needed to satisfy it, would not change. This adjustment is provided for in the following proposed revision to Section 5.11.4 of the Services Tariff:

> The Locational Minimum Unforced Capacity Requirement for each Locality shall equal the product of the Locational Minimum Installed Capacity Requirement for a given Locality (**(A)** with or without the UDRs if there is a capability year adjustment election by a rights holder and **(B) without the Locality Exchange MW)**…."

When the NYISO runs the ICAP Spot Market Auction, the Import Constrained Locality's Unforced Capacity requirements would be satisfied with Load Serving Entities' purchases of the appropriate amount of Unforced Capacity located in the Locality. The remaining portion of the requirement could be satisfied with capacity available outside the Locality. Thus, in the event of an export from an Import Constrained Locality, the total amount of MW exported from the Import Constrained Locality would be reflected as leaving the NYCA and the NYCA Market-Clearing Price would increase accordingly. The Import Constrained Locality's Unforced Capacity price would also increase, but only to the extent that the exported capacity cannot be replaced with capacity from Rest of State, taking counterflow into consideration. Thus, the resulting price signals would appropriately reflect the impact of the export on the resulting capacity needs in Rest of State and in the Import Constrained Locality.

D. Determination of the Locality Exchange Factors

Section 5.11.4.1 of the Services Tariff describes the inputs and the methodology the NYISO would use to perform a power flow based analysis to determine Locality Exchange Factors. The NYISO would perform this analysis for each Import Constrained Locality relative to each neighboring Control Area prior to the start of each Capability Year, except as described in Section III.D.2. Specifically, the proposed rules provide that:

> **[t]he ISO shall make each such determination by performing a power flow based analysis according to applicable transmission system planning practices for the determination of interface transfer limits used for the resource adequacy topology. Base case data from the most recent reliability planning process will be incorporated. The Locality Exchange Factor is the ratio of the shift factor on the applicable NYCA interface of a transfer from the Import Constrained Locality to the respective neighboring Control Area, to the shift factor of a transfer from Rest of State to the Import Constrained Locality, calculated in accordance with ISO Procedures. Only the AC circuits comprising the respective neighboring Control Area's interface with the NYCA will participate in the shift.**

The NYISO already develops a "resource adequacy topology" for its Reliability Needs Assessment and Comprehensive Reliability Plan[23] and for the NYSRC as part of the analysis for

[23] *See* Section 31.2 of the Open Access Transmission Tariff; *see, e.g.*, 2016 Reliability Needs

the Installed Reserve Margin ("IRM"). Thus, the topology used to develop the Locality Exchange Factor will have been vetted with stakeholders. Key base case data inputs will be as transparent as practicable given data confidentiality data restrictions.

The power flow analysis would be used to determine the ratio of the shift factors on the interfaces between an Import Constrained Locality and the applicable neighboring External Control Area. Because exports from the Locality result in counterflow back into Rest of State, the analysis will enable the NYISO to determine the amount of capacity from Rest of State that could be used to satisfy requirements in the Import Constrained Locality.

The proposed tariff language also specifies when the NYISO will be required to calculate the Locality Exchange Factors. The proposed tariff provides that "**[n]o later than January 31 each year, the ISO shall determine the Locality Exchange Factor for each Import Constrained Locality relative to each neighboring Control Area.**"[24] For transparency, the proposed tariff provides that "**[t]he ISO shall post its Locality Exchange Factors on its website prior to the opening of the Capability Period Auction, and notify the New York State Reliability Council.**"[25]

As described below, the MW of Locational Export Capacity for a given month will not be known until a few weeks prior to the ICAP Spot Market Auction for that month. But setting the Locality Exchange Factor in the proposed time frame will still be important to Market Participants because neighboring External Control Areas generally make certain information available before the start of the capability period. Thus Market Participants might create their own forecast of expected exports from Import Constrained Localities, which would enable them to make forecasts and take positions based on their expectations.[26]

1. Example of Methodology and Initial Calculation of the G-J Locality to ISO-NE Locality Exchange Factor

The NYISO presented to stakeholders its preliminary analysis of how the Locality Exchange Factor for exports from the G-J Locality to ISO-NE would be determined under the NYISO Proposal.[27] That presentation described the inputs and the power flow analysis used to

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Assessment, available at: <http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Assessment_Documents/2016RNA_Final_Oct18_2016.pdf>.

[24] *See* proposed Section 5.11.4.1 of the Services Tariff.

[25] *Id.*

[26] As described in the second paragraph of this letter, the Commission's acceptance of the proposed tariff revisions and an effective date of January 29, 2017, will enable the NYISO to implement the proposal in advance of the steps that must take place prior to the Summer Capability Period auction, and to timely provide information to Market Participants.

[27] *See* Locational Export Capacity Proposal (Oct. 26, 2016), available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-10-

determine the shift factors on the applicable interfaces. It also showed the calculation of the Locality Exchange Factor, which was determined by dividing the ratio of the shift factor on the SENY interface of an export from Load Zones G, H, or I (within the G-J Locality) to ISO-NE, by the shift factor on that same interface for a transfer from Rest of State to Load Zones G, H, or I. This preliminary analysis resulted in a Locality Exchange Factor of 47.8%, which indicates that a price signal to replace 52.2% of the MW exported from the G-J Locality to ISO-NE within the G-J Locality would be efficient.

Thus, under such a Locality Exchange Factor the NYISO would decrease the LCR by 47.8% of the MW to be exported from the G-J Locality to ISO-NE. The remaining 52.2% of the ICAP export would directly impact the G-J Locality ICAP Spot Market Auction clearing price. The portion of the Locality export that is replaceable from outside the Locality (47.8% of the MW) does not create any additional need in the Locality and therefore a price signal to replace that portion in the Locality would be inefficient. The G-J Locality ICAP Spot Market Auction clearing price would rise in order to send a price signal that 52.2% of the ICAP export should be replaced in the Locality. Because the NYCA encompasses all Localities, the NYCA clearing price would rise by the full amount of the export to reflect that the entire system has less capacity.

2. One Year Transition Rule for Certain Exports

Stakeholders approved the NYISO Proposal at the October 26 Management Committee meeting, but with one limited modification. The modification establishes a one-year transition period, from June 2017 through May 2018, during which the Locality Exchange Factor for exports from the G-J Locality to ISO-NE would be fixed at 80%.[28] For all other exports, including G-J Locality exports into ISO-NE after May 2018, the methodology proposed in Section 5.11.4.1 would be used to determine the Locality Exchange Factor. The language shown below in bold and double underline was incorporated into the proposed definition of Locality Exchange Factor to address the stakeholder-approved modification:

> Locality Exchange Factor: **Except the G-J Locality to ISO-NE for June 2017 through May 2018,** the percentage of Locational Export Capacity that the ISO determines annually in accordance with Section 5.11.4.1 of the Services Tariff. **For the G-J Locality to ISO-NE for June 2017 through May 2018, eighty percent (80%).**

The stakeholder motion modifying the tariff proposal stated that "due to a very large and sudden impact of ISO-NE rule changes on New York consumers that gave rise to the NYISO proposal, … for ISO-NE's 2017/2018 Capability Year, the NYISO will set the Locality Exchange Factor for exports from the G-J Locality to ISO-NE to 80% to offset the impact of

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26/Agenda%2006_Locational%20Export%20Capacity%20Proposal.pdf> at pp. 14 – 22.

[28] That period corresponds to ISO-NE capability year, which differs from the NYISO's. The NYISO's Capability Year is May 1 through April 30.

capacity exports."[29] The motion also noted that there was a "lack of sufficient time to adequately analyze the NYISO's methodology" and that there would be "further analysis of the methodology and possible alternatives."[30]

This modification was supported by a broad spectrum of stakeholders. The proposal approved by the Management Committee received votes in support from four out of five of the voting sectors.[31] Unlike the NYISO's proposal to the Commission in the New England FCM Enhancements Filing docket, neither the proposal nor the modification would limit the opportunity for Generators to export capacity, which was a cause for concern expressed by some NYISO stakeholders.[32]

The NYISO believes that the transition mechanism established by the Management Committee is reasonable and would provide effective price signals. In addition, it would provide a measure of protection against unanticipated price increases while allowing time for further analysis and consideration of potential refinements.

First, the 80% transition mechanism avoids an inefficient price signal that could occur under current market rules that would overstate the need for new resources in the Locality in the full amount of an export. The current rules ignore the continuing benefits to the Locality of an exporting unit that is located there and would set prices at an unnecessarily and inefficiently high level, thereby imposing an unwarranted burden on consumers.

Second, the transition rule is limited in scope and duration. It would only apply to exports from the G-J Locality to ISO-NE and only for a one-year period. The proposed Locality Exchange Factor calculation methodology in proposed Section 5.11.4.1 would apply to all other exports and would apply to G-J Locality exports starting in June 2018.

Third, the one-year transition mechanism would have limited impact on new investment decisions. There are practical limits on how quickly capacity resources can respond to market conditions, and major investment decisions are unlikely to be made based on short-term price signals. The transitional mechanism would send a price signal in the first year that would be followed in subsequent years by price signals resulting from the application of the standard Locality Exchange Factor methodology– approximately 47.8% based on current conditions.

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[29] *See Management Committee Meeting, October 26, Final Motions,* Motion #2 ("Management Committee Motion #2"), available at : <http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2016-10-26/102616_MC_Final_Motionsv4.pdf>.

[30] *Id.*

[31] *Id.* at pp. 4 – 9.

[32] *See, e.g., Answer and Motion for Leave to Answer of NRG* Companies, Docket No. ER16-2451-000 at 3-4 (Sept. 23, 2016), and *Answer of Roseton Generating LLC to New York ISO Request for Relief*, Docket No. ER16-2451-000 at 3, 22-23 (Sept. 23, 2016).

Further, under the proposed transition rule, G-J Locality prices would still increase. It is unlikely that this one-year price difference would drive a long-term investment decision.

Fourth, the amount of excess capacity in the G-J Locality is expected to far exceed requirements in the coming year.[33] As a general matter, all Unforced Capacity is offered into the market. Further, the capacity market rules obligate the NYISO to purchase all capacity that is offered in the ICAP Spot Market Auction below or equal to the ICAP Demand Curve clearing price. Therefore, the incremental amount of capacity that the transitional 80% Locality Exchange Factor would allow to be purchased from Rest of State during the transition period would not impair the NYISO's ability to satisfy the NYSRC's statewide IRM, the NYCA Minimum Unforced Capacity Requirements, and the Locational Minimum Unforced Capacity Requirements. Nor would it compromise reliability.[34]

Finally, the Commission has approved transition mechanisms in similar circumstances in the past. For example, the Commission previously approved a transition mechanism where it served to mitigate price volatility or unexpected price increases, where it produced market outcomes that fell within a zone of reasonableness, and where it was the product of an inclusive stakeholder process and had wide stakeholder support.[35] Accepting the proposed one-year transition mechanism would be consistent with these precedents. The NYISO and its stakeholders had a very short time in which to develop a solution to an issue that threatened to cause substantial unwarranted price increases. The limited one-year transition mechanism provides an additional measure of assurance against such inefficient price increases while providing an appropriate price signal for capacity investment and retirement decisions in the G-J Locality. It also enjoys widespread stakeholder support.

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[33] In fact, capacity in the G-J Locality currently exceeds the LCR for it by more than the 362 MW that could potentially be exported to ISO-NE in its 2017/2018 capability year.

[34] Based on an initial calculation in accordance with the NYISO's proposed methodology set forth in Section 5.11.4.1 in the example presented to stakeholders, the Locality Exchange Factor would be 47.8% for the first year.

[35] *See, e.g., New York Independent System Operator, Inc.*, 156 FERC ¶ 61,039 at P 28 (2016) (approving a transitional reference point price collaring mechanism as part of the Services Tariff revisions that established annual updates to certain ICAP Demand Curve parameters. In approving a transition mechanism to limit the allowable annual change in the reference point values, the Commission found that the "transitional mechanism provides an acceptable mitigation to stakeholder concerns regarding the potential for price volatility"); *ISO New England Inc, et al*, 147 FERC ¶ 61,173 at P 56 (2014) (wherein while approving ISO-NE's sloped ICAP demand curve rules, the Commission found that "[t]he lock-in extension seeks to achieve a reasonable balance between incenting new entry and protecting consumers from very high prices, all in the context of recent conditions in ISO-NE's market. We find that Filing Parties have sufficiently demonstrated that, in the circumstances here, extending the lock-in period is an appropriate way to provide investor assurance, given that the sloped demand curve represents a significant change in the FCM design. Although a lock-in extension may result in lower market clearing prices, we emphasize that other demand curve parameters, such as a price at net ICR exceeding net CONE by 20 percent, help to assure that the demand curve construct overall will support adequate new and existing resources to achieve the stated reliability objective").

E. Notice Requirement and Clarification of Supplemental Resource Evaluation Obligation

1. Notice Requirement

In order to timely obtain information needed to administer the proposed new rules, the NYISO would require Generators exporting from an Import Constrained Locality to provide notice to the NYISO identifying the ICAP MW to be exported approximately one month before the ICAP Spot Market Auction certification period.[36] This obligation is captured in the following proposed new Section 5.9.2.2 in the Services Tariff:

> **5.9.2.2 Eligibility. In order to be eligible to export capacity from an Import Constrained Locality for an Obligation Procurement Period, the Market Participant for a Generator must:**
>
> > **5.9.2.2.1 Notify the ISO on or before the first business day of the month prior to the month of the export, specify the quantity of MW in ICAP, and the Control Area that will be entitled to the exported capacity, such notice in accordance with ISO Procedures; and**
> > **5.9.2.2.2 Provide all data and other information to the ISO required in accordance with Services Tariff Section 23.4.5.**

2. Clarification of Supplemental Resource Evaluation Obligation

The Services Tariff currently requires that Installed Capacity Suppliers respond to a Supplemental Resource Evaluation ("SRE") request.[37] It also already requires that "in order to prevent[,] a Major Emergency State, Customers shall comply with all ISO Procedures and Reliability Rules applicable to a Major Emergency State."[38] "Customers" includes exporting Generators in the NYCA, and the compliance requirements established by this language would include the obligation to respond to an SRE. Proposed new tariff Section 5.9.2.3 clarifies that exporting Generators, even if they are not ICAP Suppliers in the NYISO's market,[39] are required to respond to an energy market SRE:

> **5.9.2.3 During any month a Generator has Locational Export Capacity, the Market Participant for it shall Bid the Locational Export Capacity into the in-day market when the ISO issues a Supplemental Resource Evaluation**

[36] Entities that could provide notice of a Generator's export include the Generator itself, an Installed Capacity Marketer, an Installed Capacity Supplier, and a bidding organization for the Generator.

[37] *See* Section 5.12.1.10 of the Services Tariff.

[38] *See* Section 5.5 of the Services Tariff.

[39] The language in this new section is the same as that in the Services Tariff section that applies to all Installed Capacity Suppliers. *See* Services Tariff Section 5.12.1.10.

request (an SRE), unless the entity has a bid pending in the Real-Time Market when the SRE request is made or is unable to bid in response to the SRE request due to an outage as defined in the ISO Procedures, or due to other operational issues, or due to temperature related deratings.

The proposed new section parallels the language applicable to Installed Capacity Suppliers and clarifies that it applies to generators that are located in an Import Constrained Locality. As with any other resource responding to an SRE, exporting Generators would be entitled to Bid Production Costs including valid lost opportunity costs if they respond to a NYISO SRE. In addition, Generators must bid into the NYISO administered energy market in order to have energy scheduled to support a capacity transaction with an External Control Area.[40] Thus, the clarification proposed for Section 5.9.2.3 of the Services Tariff does not impose a new burden on Generators. The clarification also does not interfere with the Generator's obligation to the neighboring Control Area because the NYISO will continue to recognize that capacity obligation.

F. Proposed Revisions to the Supplier-Side Capacity Market Power Mitigation Rules

The proposed Services Tariff revisions to the supplier-side capacity market power mitigation rules described in this Section III.F are supported by the affidavit of Lorenzo P. Seirup, Supervisor of ICAP in the Market Mitigation & Analysis for the NYISO.

1. Revisions to Conform to Locational Export Capacity Proposal

Certain tariff revisions are necessary to accommodate the introduction of Locational Export Capacity rules. The NYISO proposes to add a new defined term to Section 2.13 of the Services Tariff, as follows:

MCZ Import Constrained Locality: A Mitigated Capacity Zone that is also an Import Constrained Locality.

Currently, the Mitigated Capacity Zones are New York City and the G-J Locality, and any Locality that might be added in the future. This new term would distinguish new Localities that are also identified as an Import Constrained Locality from those that are not.

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[40] *See, e.g.*, *ISO New England Inc.*, February 24, 2012 Market Rule 1 Revisions Relating to Coordinated Transaction Scheduling, Docket No. ER12-1155, at 21 ("[A] New England Import Capacity Resource associated with a supply resource (e.g., a generator) physically located in New York will be obligated to offer the resource and participate in the NYISO day-ahead and real-time energy markets, consistent with the obligations of a New York capacity resource.)." *See also*, ISO-NE FERC Electric Tariff Section III.13.6.1.2.3(b) ("Where the Import Capacity Resource is physically located in a Control Area with which the New England Control Area has implemented the enhanced scheduling procedures in Section III.1.10.7.A, the resource must comply with all offer, outage scheduling and operating requirements applicable to capacity resources in the native Control Area.").

The NYISO would also revise several provisions in the supplier-side capacity market power mitigation rules to ensure that all exporting Generators located in a Mitigated Capacity Zone are subject to the NYISO's uneconomic withholding rules. The proposed revisions would make it clear that the withholding rules apply to Generators with Capacity Resource Interconnection Service ("CRIS") that export capacity even if the entities are not Installed Capacity Suppliers. Specifically, the NYISO would expand the definition of "Affiliated Entity" in Section 23.2.1 of the Services Tariff to include entities that have control of capacity, or that can determine or submit capacity offers, from a Generator electrically located in a Mitigated Capacity Zone even if it is not an ICAP Supplier.

The proposed revisions would expand the definition of "Market Party" in Section 23.2.1 to include entities affecting any of the ISO administered markets, "**including through the submission of bids or offers into an External Control Area**." The scope of the current definition is limited to entities that are qualified to supply Installed Capacity in the NYISO-administered market and thus would potentially not encompass a Generator exporting all of its capacity. Because "Unforced Capacity" ("UCAP") is defined in Section 2.2.1 of Services Tariff as the product and quantity by which "Installed Capacity Suppliers" will be evaluated under the withholding rules and because capacity exporters may not be ICAP Suppliers, the NYISO proposes to re-name the defined term "External Sale UCAP" to be "**External Sale of Capacity**." That change would be made to Section 23.4.5.4.1 of the Services Tariff, where the term is defined, and corresponding changes would be made to Sections 23.4.5.4.2 and 23.4.5.4.3. In light of the changes to the definition of "Affiliated Entity" and "Market Party," the NYISO also proposes to revise the "Pivotal Supplier" definition to make clear that "**Unforced Capacity that are MW of an External Sale of Capacity shall not be included in the foregoing calculations**."

2. Revisions to the Physical Withholding Test for Exports

The NYISO proposes to remove the criteria that currently limits the application of the physical withholding test for exports to Pivotal Suppliers through the following revision to Section 23.4.5.4.1 of the Services Tariff:

> An export to an External Control Area or sale to meet an Installed Capacity requirement outside the Mitigated Capacity Zone in which the ICAP Supplier **or Generator with CRIS MW is electrically located**~~is a Pivotal Supplier is located of Mitigated UCAP~~

The NYISO also proposes to add language to that same Section to address situations where certain parameters, for example, the most recent Equivalent Demand Forced Outage Rate (EFORd) of exporting Generators, are not known:

> **"External Sale UCAP" shall mean the UCAP equivalent of the External Sale of Capacity if known, or otherwise the reasonably projected UCAP equivalent as determined by the ISO.**

In the same Section, the proposed revisions would clarify the first prong of the physical withholding test, *i.e.,* whether External Sale UCAP could have been made available or sold into the Mitigated Capacity Zone instead of being exported. The NYISO would do so by making clear that the Generator in question is deemed to have "**timely [met] the requirements to qualify as an Installed Capacity Supplier**." A third prong of the test would be added in order to evaluate whether the external sale constitutes physical withholding:

> **…the Responsible Market Party for the External Sale UCAP is a Pivotal Supplier, or would otherwise have been deemed a Pivotal Supplier if the External Sale UCAP had been available to be offered in the Mitigated Capacity Zone for the Comparison Period.**

3. Enhancement of Withholding Penalty Calculation for Exports

In addition to revisions to conform to the Locational Export Capacity proposal, the NYISO proposal enhances the existing capacity export penalty calculation provisions. With the implementation of "pay-for-performance" type initiatives in ISO-NE and PJM Interconnection, the clearing price of an external reconfiguration auction may reflect an implicit risk premium for anticipated performance penalties which, absent a revision, might influence the economics of the export. Thus, a comparison of clearing prices alone may tend to overstate the net revenues earned by a capacity export and comparatively reduce the calculated penalty amount. This difference is correctly captured in the export test methodology but would not be in the penalty calculation absent a revision. The NYISO therefore proposes to eliminate the "lesser of" language in Section 23.4.5.4.2 so that the penalty would be:

> …an amount equal to 1.5 times ~~the lesser of (A)~~ the difference between the average Market-Clearing Price for the Mitigated Capacity Zone in the ICAP Spot Market Auctions for the relevant Comparison Period with and without the ~~inclusion of the External Sale UCAP~~ **External Sale of Capacity** in those auctions, ~~or (B) the difference between such average price and the clearing price in the External Reconfiguration Market for the relevant Comparison Period,~~ times the total of (1) the amount of ~~Mitigated UCAP~~**External Sale UCAP** not offered or sold as specified above, and (2) all other megawatts of Unforced Capacity in the Mitigated Capacity Zone under common Control with such ~~Mitigated UCAP~~**External Sale UCAP**.[41]

The revisions would ensure that an entity deemed to have physically withheld through an export would be penalized an amount greater than it earned by withholding.[42]

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[41] The NYISO notes that the proposed revision to this clause presented in this filing corrects a ministerial error in the tariff revisions presented to and approved by the Management Committee. The revision is to change what had been presented in this clause as "External Capacity Sale" to correctly state "External Sale of Capacity." The term "External Capacity Sale does not exist in the current tariff and was never proposed to stakeholders. Whereas, the term "External Sale of Capacity" is defined and used in the proposal, and was clearly intended to be used in this clause.

G. Ministerial Revisions

Ministerial revisions are proposed in Section 5.13.1 and in Section 5.14.1.1. A revision to the latter section merely corrects existing language to reflect that the ICAP Spot Market Auction is transacted in Unforced Capacity to meet NYCA and locational minimum Unforced Capacity requirements, and not in terms of Installed Capacity.

IV. NYISO Commitment to Continue to Evaluate Additional Rule Changes with Stakeholders

The NYISO Proposal was developed to be implemented for the 2017/2018 Capability Year. Throughout its development, however, the NYISO committed to continue to work with stakeholders in 2017 to determine whether additional changes were warranted. The motions approved by the Business Issues Committee and the Management Committee both included this stipulation. The Management Committee motion[43] specified that:

> The ISO will conduct an evaluation with its stakeholders of additional modifications to the rules addressing Locational Export Capacity from Import Constrained Localities…. The NYISO shall report on its progress at the January and April BIC meetings in 2017, and to the NYISO Board at its January and April 2017 meetings. On or before June 1, 2017, the ISO will file with the Commission either an informational report on the evaluation or a filing proposing to amend the ISO Tariffs.

The NYISO intends to follow this schedule and will work to develop any further changes in time for the May 1, 2018 start of the 2018/2019 NYISO Capability Year.[44] In consultation with stakeholders, the NYISO will prioritize and evaluate: alternative methodologies to determine the Locality Exchange Factor, including a probabilistic method; whether Zone K (Long Island) should be an Import Constrained Locality; whether there should be additional compensation to generators the export from an Import Constrained Locality; whether a portion of imports from neighboring External Control Areas should be permitted to satisfy a Locational Minimum Unforced Capacity Requirement; the current rule for the expiration of Capacity Resource Interconnection Service; whether there should be further modifications to the capacity

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[42] The Services Tariff provides that an entity seeking to export from a Mitigated Capacity Zone may request a forecast of ICAP prices from the NYISO in advance of submitting offers into an external reconfiguration auction. Thus, the *ex ante* determination provides a safe harbor for External Sales of Capacity, provided that the capacity is offered into an auction in a manner such that, if accepted, will produce more net revenues than would have been earned through a sale in the Mitigated Capacity Zone under the NYISO's forecast. *See* Section 23.4.5.4.3 of the Services Tariff.

[43] *See* Management Committee Motion #2 at pp. 1-2.

[44] If there is not a Board meeting in January 2017, NYISO staff will provide a written update to the Board.

market power mitigation measures; the consideration of potential exports from an import constrained Locality in the NYISO's planning processes; the statewide IRM, which is overseen by the NYSRC; and the calculation of LCRs.

V. STAKEHOLDER APPROVAL, APPEAL TO THE BOARD, AND BOARD DECISION ON APPEAL

On October 20, 2016, the Business Issues Committee voted to approve the NYISO Proposal.[45] On October 26, 2016, the Management Committee approved the NYISO Proposal with an amendment establishing a transition mechanism that would fix the Locality Exchange Factor for exports from the G-J Locality to ISO-NE at 80% for one year. The NYISO Proposal, as amended to include the limited one-year transition mechanism, passed the Management Committee with a 63.62% affirmative vote, garnering support from four of five sectors.

The Independent Power Producers of New York, Inc. ("IPPNY") subsequently exercised its rights under the NYISO's shared governance system to appeal the Management Committee's action to the NYISO Board of Directors ("Board"). IPPNY did not challenge the substance of the NYISO Proposal, but objected to the Management Committee's amendment to establish a one-year transition mechanism.

IPPNY argued that the adoption of the 80% Locality Exchange Factor for exports from the G-J Locality to ISO-NE is arbitrary and inaccurate, would produce inefficient market outcomes, and would harm reliability. IPPNY also argued that the use of such a phase-in approach is inconsistent with Commission precedent, and will allow load interests to interfere with the market. IPPNY's appeal was opposed by Multiple Intervenors, the City of New York, the New York State Energy Research and Development Authority, the New York State Department of State Utility Intervention Unit, the New York Transmission Owners, the Long Island Power Authority, the New York Power Authority; the New York State Department of Public Service; and Direct Energy. NRG also filed a motion in opposition, but raised different concerns.

The Board heard oral arguments on November 14, 2016. It denied IPPNY's appeal in a written decision issued on November 21, 2016. A copy of the decision is Attachment V to this filing ("Board Decision").

The Board decision noted the Commission's rejection of the NYISO's earlier proposal to defer the effective date of the ISO-NE tariff amendments for one year as they apply to capacity sales from Import Constrained Localities in New York. The decision explained that the NYISO must now act quickly to avoid inefficient price increases and adverse consumer impacts in early 2017. The Board concluded that the proposal approved by the Management Committee is a reasonable near-term solution to the pressing concerns regarding capacity exports from New

[45] The motion approved by the Business Issues Committee is available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/bic/meeting_materials/2016-10-20/102016%20bic%20final%20motions.pdf>.

York that will allow opportunity to further examine the issue and explore potential alternative solutions. The Board affirmed the Management Committee's proposal on the grounds that it "would (i) not limit capacity exports, (ii) avoid inefficiently high prices, (iii) send a market signal to encourage investment, (iv) provide consumers with a modicum of protection against unforeseen price increases in 2017, and (v) permit further examination of alternative market designs for possible future implementation."[46]

Turning to IPPNY's specific arguments, the Board rejected the assertion that the use of an 80% Locality Exchange Factor would adversely affect reliability, noting that IPPNY had not provided any evidence that resource adequacy requirements would not be met or identified any specific transmission security or operational problems that would result. The Board concluded that sufficient resources are in place to satisfy the IRM and the Locational Minimum Installed Capacity Requirement in each Locality, and that any reliability issues are further mitigated by the fact that exporting generators are required to respond to a Supplemental Resource Evaluation.

The Board rejected the assertion that an 80% Locality Exchange Factor for one year would distort price signals, noting a price signal would still be sent in the first year, and would be followed by Locality Exchange Factors in subsequent years that would be calculated in accordance with the NYISO's proposed process. The Board also stated that it was not persuaded that the use of the 80% Locality Exchange Factor during a one-year transition period constitutes an abuse of the NYISO's shared governance model, or sets the stage for potential stakeholder abuses in the future. In support of this conclusion, the Board noted that the proposal adopted by the Management Committee was adopted by stakeholders from four out of five sectors.

The Board also found that the Management Committee's amendment to the NYISO proposal was fair and equitable. It noted that the NYISO developed the Locality Exchange Factor approach under a very compressed time frame, and used conservative parameters that assume that both the New York and New England power systems are operating under highly-stressed conditions. The Board concluded that further analysis may well produce different, and potentially higher, Locality Exchange Factors, and that in this context, the approach approved by the Management Committee is fair and equitable.

VI. EFFECTIVE DATE

In accordance with Section 205 of the FPA, the NYISO requests an effective date for these tariff amendments of January 29, 2017.

VII. COMMUNICATIONS AND CORRESPONDENCE

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

Robert E. Fernandez, General Counsel Ted J. Murphy

[46] Board Decision at 3.

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VIII. SERVICE

This filing will be posted on the NYISO's website at www.nyiso.com. In addition, the NYISO will e-mail an electronic link to this filing to each of its customers, to each participant on its stakeholder committees, to the New York Public Service Commission, and to the New Jersey Board of Public Utilities.

IX. CONCLUSION

Wherefore, for the foregoing reasons, the New York Independent System Operator, Inc. respectfully requests that the Commission accept the tariff revisions proposed in this filing and make them effective as of January 29, 2017.

Respectfully submitted,

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