

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

New York Independent System Operator, Inc.)

Docket No. ER17-446-000

**REQUEST FOR LEAVE TO ANSWER AND ANSWER OF
THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.**

Pursuant to Rule 213 of the Commission’s Rules of Practice and Procedure,¹ the New York Independent System Operator, Inc. (“NYISO”) respectfully submits this request for leave to answer and answer (“Answer”) to the *Protest of the NRG Companies and Motion for Leave to File One Day Out of Time* (“NRG Protest”). The NRG Protest addresses the NYISO’s *Proposed Tariff Revisions Regarding Capacity Exports from Certain Localities in New York* (“Capacity Export Filing”). The Capacity Export Filing was submitted in accordance with Section 205 of the Federal Power Act (“FPA”) and Part 35 of the Commission’s regulations. It proposed revisions to the NYISO’s Market Administration and Control Area Services Tariff (“Services Tariff”) to correct a pricing inefficiency in the Installed Capacity² (“ICAP”) market design related to capacity exports from certain Localities in the New York Control Area (“NYCA”).

As discussed in detail below, the NRG Protest fundamentally mischaracterizes the purpose and impact of the Capacity Export Filing as well as related aspects of the capacity and energy markets. NRG’s arguments lack merit. The Commission should therefore deny NRG’s request that the Capacity Export Filing be rejected and instead accept the filing without modification or condition.

¹ 18 C.F.R. § 385.213 (2016).

² Capitalized terms not defined in this Answer shall have the meaning set forth in the NYISO Open Access Transmission Tariff (“OATT”) and Market Administration and Control Area Services Tariff (“Services Tariff”), including the proposed revisions to those tariffs in the NYISO’s compliance filing.

The NYISO has limited the scope of this answer to correcting the NRG Protest's most significant errors and mischaracterizations out of deference to the Commission's procedural rules. The NYISO's silence with respect to other assertions in the NRG Protest and in other pleadings should not be construed as agreement with, or acquiescence to, them.

I. COMMUNICATIONS

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II. REQUEST FOR LEAVE TO ANSWER

Under Commission Rule 213(a)(3), the Commission has discretion to accept answers to protests when they are helpful to its decision-making process.⁴ The NRG Protest is replete with errors and misstatements that fundamentally mischaracterize the Capacity Export Filing and related aspects of the markets. This Answer is confined to correcting NRG's errors and

³ The NYISO respectfully requests waiver of the requirements of Rule 18 C.F.R. § 385.203(b)(3) (2015) to permit service on more than two persons.

⁴ See e.g., *New York Independent System Operator, Inc.*, 108 FERC ¶ 61,188 at P 7 (2004) (accepting the NYISO's answer to protests because it provided information that aided the Commission in better understanding the matters at issue in the proceeding); *Morgan Stanley Capital Group, Inc. v. New York Independent System Operator, Inc.*, 93 FERC ¶ 61,017 at 61,036 (2000) (accepting an answer that was "helpful in the development of the record").

misstatements. The NYISO therefore respectfully submits that this Answer will clarify the record in this proceeding and should be accepted by the Commission.⁵

III. ANSWER

A. The NYISO's Proposal Does Not "Double Count" Capacity, Alter the Nature of the Capacity Product, or Contravene the Northeast MOU

The NRG protest incorrectly claims that the Capacity Export Filing is an impermissible attempt to "double count" generating capacity so that it can simultaneously provide resource adequacy benefits to two markets. NRG alleges that the NYISO would do this by re-defining capacity from a "unit contingent" product into a "slice of system" product. It asserts that the alleged "double counting" is barred by the Northeast Memorandum of Understanding ("Northeast MOU") among the NYISO, ISO-NE, and PJM Interconnection, LLC. NRG further contends that the NYISO proposal is a "retreat" from competitive markets that "threatens to undermine capacity market structures across the organized markets."⁶

NRG's arguments demonstrate a fundamental misunderstanding of the NYISO's proposal. Nothing about the Capacity Export Filing would result in "double counting" of capacity or alter the nature of capacity exports from New York to external regions. Accordingly, NRG's suggestion that the Capacity Export Filing is contrary to the Northeast MOU, or serves to undermine capacity market structures across organized markets, is baseless.

Under the Capacity Export Filing, an exporting resource would continue to be a capacity supplier to a single jurisdiction: namely, the importing region. In the case of exports from New

⁵ To the extent that the Commission determines that the 15 day period for submitting answers under Rule 213(d)(1) is applicable to this filing, the NYISO respectfully requests that this answer be accepted out of time. The NYISO worked diligently to complete this answer within the 15-day period, but it was not practicable to do so, given that the answer period encompassed both the Christmas and New Year's holidays.

⁶ NRG Protest at 2, 4-9.

York to New England, the exporter's capacity would not be counted as capacity sold in New York but would be counted in full in New England. New England, not New York, would have a call on the capacity of the exporting generator for resource adequacy purposes. There would be no change to how New England would call on the capacity or to the confirmation processes that the NYISO and ISO-NE use to ensure that capacity is not committed to more than one jurisdiction.⁷ There would thus be no "double counting" of capacity.

The Capacity Export Filing also would not convert capacity exports from New York into a "slice of system" sale. When a neighboring region calls on capacity located in a NYISO Import Constrained Locality, the obligation to deliver would continue to be distinctly tied to the resource that made the sale and to its performance. In other words, if the exporting resource is online and otherwise not aggravating transmission constraints, the NYISO would schedule the New York system in a manner that facilitates the delivery of this capacity.

The only change introduced by the Capacity Export Filing is an enhancement of the NYISO's ability to recognize energy market fundamentals in the capacity market and thus to produce efficient market signals. The fact that an exporting resource is still operating in a Locality means that the NYISO should account for the counterflow that an export transaction will create when delivered to an External Control Area. Accounting for this reality is an unambiguous improvement to, not a deviation from, the existing market design. It eliminates an overly simplistic assumption, *i.e.*, that the exporting facility does not exist, and is therefore not operating, that can result in inefficient pricing.

⁷ That assurance is in addition to the assurance provided by existing requirements obligating Market Participants to comply with respective regional market rules. Those rules prohibit committing capacity to more than one jurisdiction.

Accordingly, the Capacity Export Filing is wholly consistent with the NE MOU. NRG's assertions that the NYISO is proposing to double-count capacity or make "slice of system" capacity sales in a way that would contravene those principles are completely without merit.

B. The Capacity Export Filing's Proposed Methodology for Calculating Locality Exchange Factors Is Consistent With Precedent, Is Reasonable, and Does Not Inappropriately Alter the IRM or LCRs

NRG asserts that the power flow analysis that the NYISO would use to calculate Locality Exchange Factors under the Capacity Export Filing is inconsistent with the Commission's "literature."⁸ NRG also claims that NYISO's proposed deterministic methodology for calculating the Locality Exchange Factor is insufficient and inconsistent with the NYISO's use of a probabilistic methodology for other purposes.⁹ Finally, NRG asserts that the Locality Exchange Factor proposal actually constitutes a change to the process for determining the Installed Reserve Margin ("IRM") and Locational Minimum Installed Capacity Requirements ("LCRs").¹⁰ These claims all are baseless and should be rejected.

1. The Locality Exchange Factor Proposal is Fully Consistent with Commission Precedent

NRG claims that the Capacity Export Filing's proposed use of energy market shift factors to calculate Locality Exchange Factors that pertain to the capacity market is "entirely novel and without support anywhere in the Commission's literature."¹¹ It is unclear what Commission "literature" NRG is referring to since it provides no citations. In fact, the Capacity Export Filing's proposed calculation method is fully consistent with Commission precedent.

⁸ NRG Protest at pgs. 9-10.

⁹ NRG Protest at 9-10.

¹⁰ *Id.* at 14-16.

¹¹ *Id.* at 9.

Specifically, a recent order involving the Midcontinent Independent System Operator, Inc. (“MISO”) addressed similar issues.¹²

In the MISO order, the Commission addressed a proposal by the MISO to reflect in its capacity markets the impact of capacity exports on “Local Resource Zones” - *i.e.*, the MISO equivalent of NYISO Localities. The question there, as here, was what impact such exports should have on a Local Resource Zone’s “Local Clearing Requirement,” which is the amount of capacity that must come from within a Local Resource Zone because of transmission constraints. Rather than perform a power flow analysis to determine which portion of the exported capacity should be deemed to be replaceable by capacity outside of the Local Resource Zone (as the NYISO’s Capacity Export Filing proposes), MISO proposed “to reduce each Zone’s Local Clearing Requirement by the amount of capacity under MISO’s functional control that is exported outside of MISO’s footprint (*i.e.*, non-pseudo-tied exports).”¹³ The Commission found that “MISO’s proposed adjustments to the . . . Local Clearing Requirement are just and reasonable for purposes of recognizing the effect of exports on the MISO footprint.”¹⁴

The MISO order undercuts NRG’s suggestion that the NYISO’s proposed Locality Exchange Factor calculation somehow runs contrary to “the Commission’s literature.” It is undisputed, even by NRG, that an exporting generator continues to operate in an otherwise constrained zone. This continued operation establishes counterflow that allows at least a certain portion of the generator’s capacity to be replaced by capacity from outside the zone. The MISO order not only reflects this fact, but also approves an approach - subtracting non-pseudo tied

¹² See *Midcontinent Independent System Operator, Inc., et al.*, 154 FERC ¶ 61,224 (2016).

¹³ *Id.* at P 31.

¹⁴ *Id.* at P 67.

exports¹⁵ from the Local Clearing Requirement - to reflect in the capacity market the localized support otherwise provided by a capacity export. As the Market Monitoring Unit for the NYISO indicated in this proceeding, the NYISO's assessment of the impact of an exporting generator through the calculation of the Locality Exchange Factor compares favorably to the MISO proposal, which treats 100 percent of exported, non-pseudo tied exports as fungible with capacity from outside a Local Resource Zone.¹⁶

2. The NYISO's Proposed Locality Exchange Factor Calculation Is Reasonable

NRG contends that the NYISO failed to demonstrate that its proposed Locality Exchange Factor methodology is sufficient and consistent with meeting resource adequacy requirements. NRG suggests that additional probabilistic analysis should have been performed to confirm the reasonableness of the NYISO's methodology.¹⁷

As described in the NYISO's filing letter, the NYISO's proposed tariff language establishes a methodology to determine the amount of exported capacity that can be replaced from Rest of State instead of from the Locality:

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.

This power flow analysis, which identifies the portion of power that would flow over specific interfaces from (1) generators in the Import Constrained Locality to the load in the External

¹⁵ Like the MISO approach, the NYISO proposal applies to capacity exports that do not become part of a neighboring Balancing Authority Area ("BAA"), but rather remain as a part of the NYISO BAA.

¹⁶ See Motion to Intervene and Comments of the Market Monitoring Unit on Proposed Tariff Revisions Regarding Capacity Exports From Certain Localities, Docket No. ER17-446-000, filed December 21, 2016, at 4.

¹⁷ NRG Protest at 9-10.

Control Area, and (2) generators in the Rest of State to the load in the Import Constrained Locality, allows for the modeling of this export to understand the impacts on the electrical grid and identify how much replacement power would need to be transferred from Rest of State to cover any shortfalls in the Import Constrained Locality as a result of the export.

In addition to establishing clear base assumptions for this analysis, the NYISO also performed sensitivities with alternative assumptions to test the reasonableness of its methodology. The *Affidavit of Joshua A. Boles* that accompanied the Capacity Export Filing stated that “the Locality Exchange Factor mechanism is a reasonable solution to the looming market distortions that otherwise could occur beginning in June 2017.”¹⁸ No other stakeholder has joined NRG in arguing that the Locality Exchange Factor calculation methodology was insufficient.

To the extent that NRG is proposing that the Locality Exchange Factor should be calculated using a probabilistic, rather than a deterministic, analysis, the NYISO has begun to explore this issue with stakeholders. As described in the Capacity Export Filing, the NYISO will evaluate alternative methodologies to determine the Locality Exchange Factor, including a probabilistic method, and consider whether further tariff revisions are warranted.¹⁹ The NYISO Proposal was developed to be implemented for the 2017/2018 Capability Year. The NYISO is pursuing the evaluation of further changes - on this and other issues specified in the filing letter - in time for the May 1, 2018 start of the 2018/2019 NYISO Capability Year.

¹⁸ Capacity Export Filing, Affidavit of Joshua A. Boles at P 13.

¹⁹ See Capacity Export Filing at 17-18.

3. The Locality Exchange Factor Analysis Does Not Alter or Affect the Process for Determining the IRM and LCRs

NRG asserts that the NYISO has effectively “bypassed” the IRM and LCR-setting processes in its calculation of Locality Exchange Factors, and instead has used “a much less robust set of power flow analyses that do not address all possible real-time conditions.”²⁰ According to NRG, the “appropriate way to model the impact of an export that that provides counterflow benefits is to allow all possible Locality Exchange Factors (*i.e.*, an analysis that includes all possible variations of shift factors, including various combinations of resources and line outages, which create various shift factors) to be included in the MARS model used to determine the IRM.”²¹ These arguments, like the ones addressed above, provide no basis for rejecting the NYISO’s proposal.

For at least the initial year, it is necessary to calculate the Locality Exchange Factors separately from the IRM for 2017. Issues relating to the treatment of capacity exports in the NYISO’s ICAP market were not finalized and actual exports were not confirmed at the time the 2017 IRM study was completed. It was understood that capacity exports would not commence until 2018 at the earliest, and the NYISO was just beginning to explore approaches to address them. New England’s sudden and unexpected revisions to its rules to allow capacity imports from the NYISO in 2017 substantially accelerated the need for an immediate fix, and forced the NYISO to develop and file the Locality Exchange Factor proposal in the middle of a Capability Year.

Going forward, there are technical complexities and practical timing considerations that may affect the ability to capture, in the IRM calculations, the full effect of any exports. To

²⁰ NRG Protest at 14.

²¹ *Id.* at 15.

address the effect of capacity exports in the IRM, it is likely that exports would need to be confirmed well before the start of New York's Capability Year. However, the timing of processes in the external regions may make such confirmation difficult or even impossible. The NYISO's proposal avoids these timing difficulties by reflecting exports on a monthly basis at a point when exports are known and can be confirmed.

The relationship between the Locality Exchange Factor calculations and the IRM and LCR determinations is one issue that the NYISO will continue to explore with its stakeholders after the Locality Exchange Factor methodology is in place.²²

C. The Fact that the NYISO Has Determined that a Three Year Forward Capacity Market Auction Structure is Not Needed in New York Does Not Preclude the NYISO from Acting to Address the Serious Pricing Inefficiency in its Existing Capacity Market Design

The NRG Protest contends that the Commission should not permit the NYISO to correct the serious pricing inefficiency related to capacity exports from Localities in the NYCA because the NYISO has not chosen to adopt NRG's preferred forward capacity market design.²³ The question of whether the NYISO should adopt a forward capacity market design is far beyond the scope of this Section 205 proceeding, which is properly confined to a review of the NYISO's proposed capacity export changes.²⁴ Furthermore, an attack on the NYISO's core capacity market structure has no bearing on the merits of the NYISO's efforts to address an existing inefficiency in its market. There is no basis whatsoever for NRG's assertion that the NYISO

²³ NRG Protest at 9-10.

²⁴ See, e.g., "NYISO Management's Response to Analysis Group Report: 'New York Capacity Market - Evaluation of Options'" (May 2015) available at: <http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2015-02-25/NYISO%20Management%20Response%20to%20Analysis%20Group%20Report%202015.pdf>.

may not make a Section 205 filing to correct a serious pricing inefficiency because it has not adopted NRG's preferred market design.

The Capacity Export Filing is not an attempt to eliminate price volatility (or price increases) under the NYISO's existing capacity market framework. It is an entirely appropriate attempt to prevent inefficient, unjust, and unreasonable pricing outcomes. Neither the Federal Power Act nor Commission precedent bars the NYISO from attempting to fix the pricing inefficiency. This is especially true when, as here: (i) the Commission itself ruled that it was the NYISO's responsibility to pursue a solution to the capacity export issue;²⁵ and (ii) the MMU strongly recommended that the NYISO improve its capacity export rules.²⁶

D. The Proposed One Year Transition Rule Is Just and Reasonable and Should Not Be Modified

The NRG Protest characterizes the proposal to adopt an 80% Locality Exchange Factor for one year for certain exports as lacking any "principled basis" and an attempt by other stakeholders to vote "their short-term pocketbooks" at the expense of the "integrity of the markets."²⁷ NRG's position is without merit. The NYISO's shared governance process has a long history of successfully addressing, in an open and collaborative manner, difficult issues

²⁵ The Commission rejected the NYISO's request to delay the implementation of the ISO-NE capacity market changes, holding that the issue arises in the NYISO's market, and that it is up to the NYISO to fix the issue. *See ISO New England Inc. and New England Power Pool Participants Committee*, 157 FERC ¶ 61,025 at P 32 (2016).

²⁶ *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. *See also* Affidavit of David B. Patton, Ph.D., Docket No. ER16-2451-000, filed September 9, 2016, at 6-8.

²⁷ NRG Protest at 11-12 (*citing* Protest of the Independent Power Producers of New York, Docket No. ER17-447-000, filed December 21, 2016, at 15-16).

impacting both supply and load interests. NRG has long been an active participant in the NYISO's shared governance process.

Contrary to NRG's characterization, the proposal strengthens, rather than undermines, "market integrity." As expressly stated in the Capacity Export Filing, the one year transition rule allows for effective price signals while protecting against "unanticipated price increases" and "allowing time for further analysis and consideration of potential refinements."²⁸ Moreover, the Commission has previously accepted similar transitional pricing mechanisms in circumstances similar to those in this proceeding.²⁹ The Commission should follow that precedent here and accept the transition period as proposed in the Capacity Export Filing.

E. The NYISO Proposal Does Not Impose Unreasonable Requirements on Exporting Generators

The NRG Protest claims that the Capacity Export Filing proposes the "unprecedented step" of requiring New York generators without capacity obligations in New York to respond to NYISO reliability dispatch directives.³⁰

However, exporting generators are already subject to certain requirements as a result of their participation in the NYISO market or neighboring markets. As the Capacity Export Filing explained, all "Customers" under the Services Tariff (including exporting Generators that are not NYISO ICAP Suppliers) are already required to comply with ISO Procedures and Reliability Rules related to preventing a Major Emergency State.³¹ Exporting generators also must already abide by the outage scheduling requirements set forth in the *Outage Scheduling Manual*.³² In

²⁸ See Capacity Export Filing at 11.

²⁹ *Id.*

³⁰ NRG Protest at 12-13.

³¹ See Section 5.5 of the Services Tariff.

³² See ISO-NE FERC Electric Tariff Section III.13.6.1.2.3(b).

addition, with respect to capacity exports to New England, ISO-NE's market rules already obligate capacity resources exporting from New York to New England "to offer the resource and participate in the NYISO's day-ahead and real-time energy markets, consistent with the obligations of a New York capacity resource."³³ ISO-NE's rules also require New York capacity resources to "comply with all offer, outage scheduling and operating requirements applicable to capacity resources" in New York.³⁴ Thus, the Capacity Export Filing is consistent with existing requirements on capacity exporters to New England.

NRG also inaccurately asserts that the Capacity Export Filing is proposing to make capacity exporters that are not NYISO ICAP Suppliers respond to NYISO directives, such as Supplemental Resource Evaluations ("SREs"), without compensation. Such concerns are inaccurate. Any resource called upon in such a manner will be compensated for providing the called upon services in a manner consistent with the NYISO's current tariff provisions.

F. NRG's Requested Clarification Regarding Capacity Resource Interconnection Service ("CRIS") is Unnecessary

NRG argues that the Capacity Export Filing is ambiguous regarding the termination of CRIS rights and that "[a]t a minimum, the Commission should require that the NYISO clarify that any capacity market discount would cease once the exporting resource loses its injection rights in New York."³⁵ Such clarification is unnecessary.

Under existing NYISO rules, CRIS rights generally terminate when a generator fails to submit offers in the NYISO ICAP market for three years. The proposed tariff language

³³ See ISO New England Inc., February 24, 2012 Market Rule 1 Revisions Relating to Coordinated Transaction Scheduling, Docket No. ER12-1155, at 21.

³⁴ See ISO-NE FERC Electric Tariff Section III.13.6.1.2.3(b).

³⁵ NRG Protest at 17.

explicitly indicates that to be Locational Export Capacity (subject to the application of the Locality Exchange Factor), the exporting generator must have CRIS.

While the filed tariff does not require further clarification, as part of its planned stakeholder process to evaluate potential additional modifications to its export rules, the NYISO is seeking feedback regarding whether these rules should be adjusted for facilities that have not participated in the NYISO's capacity market but have exported all of their capacity for three years.³⁶

G. There Is No Need for a Technical Conference

Finally, NRG contends that if the Commission accepts the Capacity Export Filing it should “convene a technical conference to examine the national implications of departing from the long-standing precedent that capacity sales are unit contingent.” There is no need for such a conference. As explained above in Section III.A, the Capacity Export Filing does not propose the kind of fundamental changes to the nature of the capacity product in New York, or to other market design elements, as NRG claims. Even if the Commission were to view the NYISO's proposal as making material changes, there would still be no need for a technical conference to address other regions. The Capacity Export Filing has no implications for the design of other capacity markets. Any other region that wished to adopt similar provisions would have to do so in a separate proceeding of its own.

³⁶ See NYISO ICAP Working Group, December 15, 2016 Meeting Presentation at http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_icapwg.

IV. CONCLUSION

WHEREFORE, for the foregoing reasons, the NYISO respectfully requests that the Commission accept its answer addressing the issues specified above and accept the pending tariff revisions that it has submitted in this proceeding without any modification.

Respectfully submitted,

/s/ Ted J. Murphy

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January 9, 2017

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 9th day of January 2017.

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