

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

Uplift Cost Allocation and Transparency)	
in Markets Operated by Regional Transmission)	Docket No. RM17-2-000
Organizations and Independent System)	
Operators)	

COMMENTS OF THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Pursuant to the Notice of Proposed Rulemaking issued by the Federal Energy Regulatory Commission (“Commission”) on January 19, 2017 in the above-referenced docket (“Uplift NOPR”),¹ the New York Independent System Operator, Inc. (“NYISO”) hereby submits its comments in response to the Uplift NOPR.² The NYISO generally supports the reforms proposed by the Commission. The NYISO also: (i) provides comments in response to certain of the questions posed by the Commission in the Uplift NOPR; (ii) seeks clarification regarding certain aspects of the proposed reforms related to the monthly total uplift payments report and the reporting of operator-initiated commitments; and (iii) respectfully requests that the Commission provide additional flexibility with respect to the proposed schedule for implementing any reforms that may be established by a final rule in this proceeding.

¹ *Uplift Cost Allocation and Transparency in Markets Operated by Regional Transmission Organizations and Independent System Operators*, 158 FERC ¶ 61,047 (2017).

² Capitalized terms not otherwise defined herein shall have the meaning specified in Section 1 of the NYISO Open Access Transmission Tariff (“OATT”) and Section 2 of the NYISO Market Administration and Control Area Services Tariff (“Services Tariff”).

I. COMMUNICATIONS AND CORRESPONDENCE

All communications and correspondence concerning these comments should be directed to:

Robert E. Fernandez, General Counsel
Raymond Stalter, Director, Regulatory Affairs
*Garrett E. Bissell, Senior Attorney
New York Independent System Operator, Inc.
10 Krey Boulevard
Rensselaer, New York 12144
Phone: 518-356-6107
Fax: 518-356-8825
Email: gbissell@nyiso.com

*Person designated for receipt of service.

II. COMMENTS

A. Allocation of Real-Time Uplift to Deviations

The Commission proposes certain reforms to the allocation of “real-time uplift” to deviations.³ The Commission defines real-time uplift to mean “uplift payments to resources committed after the close of the day-ahead market, including any uplift associated with reliability commitments, whether or not the RTO/ISO considers such commitments outside of the day-ahead market”⁴ The Uplift NOPR clearly states that the proposed reforms apply only to real-time uplift, as defined by the Commission, and only if such real-time uplift costs are allocated to deviations.⁵ The Commission expressly provides that “[t]his NOPR does not apply to other methods used by RTOs/ISOs to allocate uplift costs. If an RTO/ISO does not currently allocate

³ Uplift NOPR at P 35-55.

⁴ *Id.* at P 4, fn. 2.

⁵ *Id.* at P 4.

real-time uplift costs to deviations, this NOPR does not impose a requirement on those RTOs/ISOs to allocate real-time uplift costs to deviations.”⁶

The NYISO strongly supports the Commission’s proposal to not require RTOs/ISOs to implement deviations-based allocation methods if real-time uplift costs are currently allocated using a different methodology. The NYISO does not currently allocate real-time uplift costs to deviations. Instead, as acknowledged by the Uplift NOPR, the NYISO allocates such uplift costs to load using a “beneficiary pays” approach.⁷ As aptly noted by the Commission, the beneficiaries pay approach: (i) recognizes that load is the ultimate beneficiary of the actions taken by operators in real-time to maintain reliability; and (ii) is least likely to distort market participant behavior.⁸

The NYISO’s use of the beneficiaries pay methodology for allocating real-time uplift costs to physical load correctly recognizes that load ultimately benefits from the actions taken in real-time that may cause uplift. Real-time uplift is generally the result of either the lumpiness of committed resources or different system conditions being anticipated by the Real-Time Commitment (“RTC”) and Real-Time Dispatch (“RTD”) programs that together constitute the

⁶ *Id.*

⁷ *Id.* at P 17. Although the NYISO primarily allocates all uplift costs to load using a beneficiaries pay approach, there is a very small subset of day-ahead uplift allocated to both virtual supply transactions and real-time load that cause the need for certain day-ahead commitments giving rise to such uplift and, thus, arguably could be interpreted as being allocated on a deviations basis. This day-ahead uplift relates to certain unit commitments within the Day-Ahead Market that are necessary to ensure that sufficient resources are committed to meet the NYISO’s forecasted load if the amount of load bid into the Day-Ahead Market is less than the forecasted requirements. Because this category of uplift costs relates solely to unit commitments within the Day-Ahead Market, it does not constitute real-time uplift, as defined by the Commission. Notably, these commitments to meet forecasted load are distinct from the NYISO’s day-ahead reliability commitment process that consists of two components - one conducted as part of the Day-Ahead Market solution (*i.e.*, the Day-Ahead Reliability Unit or “DARU” commitment process), and another conducted after the close of the Day-Ahead Market (*i.e.*, the Supplemental Resource Evaluation or “SRE” commitment process). Uplift costs related to DARU and SRE committed units are allocated using the NYISO’s beneficiaries pay methodology.

⁸ *Id.* at P 13.

NYISO's Real-Time Market.⁹ These factors are unaffected by deviations from day-ahead schedules that are addressed by the Uplift NOPR. Therefore, deviations-based uplift allocations would not serve to incent behavior to mitigate uplift resulting therefrom.

Under its beneficiaries pay approach, the NYISO allocates real-time uplift costs on the basis of the underlying reliability need giving rise to such uplift. If real-time uplift is the result of a statewide (New York Control Area or "NYCA" wide) reliability need, such costs are allocated proportionately to all load. If, however, real-time uplift is the result of a local reliability need, such costs are allocated only to load within the subzone where the generator is located.

B. Uplift Reporting

The Commission proposes to require the posting, in a machine readable format, of two uplift reports within 20 days after the end of each month: (i) a total uplift payments report providing total uplift dollars paid to resources within each transmission zone for each day of the month, broken down by uplift cost categories; and (ii) a unit-specific uplift report providing the total aggregate uplift dollars for the month paid to each resource receiving uplift payments during the month.¹⁰ The Commission also proposes to allow transmission zones to be aggregated for purposes of the monthly total uplift payments report if a transmission zone consists of fewer than four resources.¹¹

⁹ RTC schedules/commits resources every 15 minutes. Each RTC run requires 15 minutes to execute. RTD optimizes the NYISO's resource dispatch every five minutes. As a result, the two programs may consider slightly different real-time operating conditions, including generator operating status and output levels. This may result in circumstances where RTC may not perfectly anticipate RealTime LBMPs produced by RTD.

¹⁰ Uplift NOPR at P 83-89.

¹¹ *Id.* at P 89.

The NYISO generally supports the uplift cost reporting reforms proposed by the Commission. The NYISO strives to provide a high degree of transparency regarding its market outcomes, including uplift costs, while balancing the need to protect confidential information and avoid the potential for indirectly facilitating anti-competitive behavior. The NYISO makes publicly available a significant amount of information to assist market participants and the public in understanding the amount and underlying causes/categorization of uplift costs in New York’s wholesale energy markets.¹²

As acknowledged by the Commission, the NYISO already provides reports of uplift costs on a monthly basis, broken down by uplift cost category as part of its “Operations Performance Metrics Monthly Reports.”¹³ These reports are posted to the NYISO’s website each month and presented to market participants at the NYISO Management Committee and Operating Committee meetings.¹⁴ A number of uplift payments to resources are detailed in these reports, including Day-Ahead Bid Production Cost Guarantee (“BPCG”) payments, real-time BPCG payments, Day-Ahead Margin Assurance Payments, and payments to resources required to operate on alternative fuels pursuant to certain local reliability rules adopted by the New York State Reliability Council, L.L.C. (commonly referred to as the “minimum oil burn” requirements).¹⁵ To comply with the proposed requirements of the Uplift NOPR, the NYISO

¹² See, e.g., Docket No. AD14-14-000, *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators*, Post-Technical Workshop Comments of the New York Independent System Operator, Inc. at 5-7 (March 6, 2015); and Docket No. AD14-14-000, *supra*, Report of the New York Independent System Operator, Inc. at 56-57 and 59-60 (March 4, 2016).

¹³ Uplift NOPR at P 59.

¹⁴ For example, the February 2017 report is available at: http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2017-03-29/02_Operations_Report.pdf.

¹⁵ Further information regarding payments to generators related to minimum oil burn obligations is provided in Section 6.1.7 of Rate Schedule 1 of the OATT.

would need to revise its processes for developing and posting its current monthly uplift cost reporting, including the format of the report.¹⁶ The NYISO would also need to implement the necessary processes to generate the monthly unit-specific uplift report proposed by the Uplift NOPR.

The Commission proposes to require that total uplift payments be reported by “transmission zone.” The Commission proposes to define a transmission zone to mean “a geographic area that is used for the local allocation of charges.”¹⁷ The NYISO generally allocates uplift by Transmission District “subzones.” Subzones are uniquely identified by Investor-Owned Transmission Owner service territories within each Load Zone.¹⁸ In some cases, however, a subzone used for allocating certain uplift costs may encompass portions of an Investor-Owned Transmission Owner’s service territory located in more than one Load Zone.¹⁹

The NYISO also strongly supports the Commission’s recognition of the need to provide for the ability to aggregate data for purposes of the monthly total uplift payments report to avoid potential confidentiality and anti-competitive behavior concerns.²⁰ The NYISO, however, seeks clarification of the Commission’s proposal regarding data aggregation.

As recognized by the Commission, the provision of daily total uplift payments by transmission zone has the potential to disclose commercially sensitive information that is deemed confidential information under the NYISO’s tariffs. Release of this information could raise anti-

¹⁶ Although the Operations Performance Metrics Monthly Reports are posted to the NYISO’s website on a monthly basis, these reports are currently not posted in a machine readable format.

¹⁷ Uplift NOPR at P 85.

¹⁸ For example, within Load Zone A, unique subzones exist for the portion of each Investor-Owned Transmission Owner’s service territory that is located within the load zone.

¹⁹ For example, costs associated with certain local reliability rules are allocated to all load within the Consolidated Edison Company of New York, Inc. Transmission District. This geographic area includes portions of Load Zones H, I and J.

²⁰ Uplift NOPR at P 89.

competitive behavior concerns.²¹ If such information is not adequately aggregated, it could, under certain circumstances, facilitate the ability to deduce an individual resource's operating costs. Access to a competitor's cost information can give rise to competitive advantages and incent a resource to be offered in a manner that does not reflect its true cost of operation. To address such concerns, the Commission proposes to allow transmission zones with fewer than four resources to be aggregated with neighboring transmission zones for purposes of the proposed monthly total uplift payments report.²²

The NYISO also seeks clarification regarding the determination of whether a transmission zone contains "fewer than four resources." If a particular transmission zone contains more than four resources in total, but less than four resources within that transmission zone are receiving uplift payments on a given day, such a transmission zone should be aggregated with other neighboring transmission zones until the geographic area being reported contains at least four resources receiving uplift payments on that day. Measuring the number of applicable resources on the basis of those receiving uplift payments within a given transmission zone would help to ensure that the Commission's proposed data aggregation procedures serve to protect confidentiality and mitigate the potential for anti-competitive behavior concerns.²³

C. Operator-Initiated Commitments Reporting

The Commission proposes to require the posting of all "operator-initiated commitments"

²¹ *Id.* at P 87-88.

²² *Id.* at P 89.

²³ The interaction of the data aggregation procedures and the reporting of total uplift paid to all resources for each day could result in circumstances where the geographic regions being reported in a single monthly report change from day-to-day, as the resources receiving uplift payments each day vary. Therefore, the Commission should provide flexibility for RTOs/ISOs to consider whether the understandability and usefulness of the data may be improved by applying the data aggregation procedures in a manner that would identify a more consistent set of geographic regions to be reported for each day of the month.

within four hours after they occur.²⁴ For purposes of this reporting obligation, the Commission proposes to define an operator-initiated commitment to mean “a commitment that is not associated with a resource clearing the day-ahead or real-time market on the basis of economics and that is not self-scheduled.”²⁵ The Commission further clarifies that this definition is intended to:

include any commitment, whether manual or automated, made after the execution of the day-ahead market that is made outside the real-time market. Such commitments include commitments made through residual unit commitment processes after the execution of the day-ahead market, commitments made through look-ahead commitment processes, and manual commitments made in real-time.²⁶

The Commission further proposes that operator-initiated commitment reports be posted in a machine readable format and include the following information regarding each committed resource: (i) the resource’s upper economic operating limit; (ii) the transmission zone in which the resource is located; and (iii) the category of the commitment reason.²⁷

The NYISO generally supports the Commission’s proposed reforms, but seeks clarification regarding the intended scope of the term “operator-initiated commitments.”²⁸ The NYISO already posts information regarding many operator-initiated commitments in a machine readable format as part of its “Operational Announcements” postings.²⁹ To comply with the

²⁴ Uplift NOPR at P 90-91.

²⁵ *Id.* at P 90.

²⁶ *Id.*

²⁷ *Id.* at P 90-91 and 95.

²⁸ It is important to note, however, that depending on the requirements of any final rule in this proceeding, it may be necessary to modify existing mitigation rules or potentially create new rules to address any market power or other anti-competitive behavior concerns that may arise as a result of the required reforms.

²⁹ These reports are updated in real-time to include various information including operator-initiated commitments. For example, the Operational Announcements document from the March 28,

proposed reforms, however, the NYISO would need to revise its current processes for the development and posting of this information to: (i) include additional commitments that fall within the proposed definition of “operator-initiated commitments” but are currently not reported; and (ii) broaden the information provided regarding resource commitments to include both the location and upper operating limit of each committed resource.

To comply with the reforms proposed by the Uplift NOPR, the NYISO would report all SRE commitments and Out-of-Merit (“OOM”) actions resulting in unit commitments as operator-initiated commitments. The NYISO seeks clarification regarding the intended scope of the term operator-initiated commitments, as defined in the Uplift NOPR. Specifically, the NYISO seeks to confirm that commitments made on the basis of economics as part of the real-time market are not intended to be classified as operator-initiated commitments simply because an RTO’s/ISO’s real-time market software includes look-ahead functionality.

The NYISO’s Real-Time Market, which is comprised of RTC and RTD, performs a unique *ex ante*, co-optimized, multi-period commitment, scheduling and dispatch process that evaluates bids and offers submitted by External Transactions and internal resources to simultaneously solve for all Load, Operating Reserves and Regulation Service requirements and to minimize the total as-bid production costs. Both RTC and RTD include look-ahead functionality.³⁰ This look-ahead functionality is intended to ensure that the most efficient set of resources are scheduled, recognizing both the current system conditions and expected future conditions.

2017 operating day is available at:

<http://mis.nyiso.com/public/pdf/OperMessages/20170328OperMessages.pdf>.

³⁰ The RTC optimization horizon is nominally 2.5 hours and the RTD optimization horizon is 55 to 60 minutes, depending on the interval.

RTC makes binding unit commitment and de-commitment decisions for the periods beginning 15 minutes (in the case of resources that can respond within 10 minutes) and 30 minutes (in the case of resources that can respond within 30 minutes) after the scheduled posting time of each RTC run.³¹ Resource commitments made by RTC are based on an evaluation of the economics of resource Bids and Bid parameters. Accordingly, the NYISO does not believe that RTC commitments are intended to fall within the scope of operator-initiated commitments, as defined in the Uplift NOPR. Otherwise, the Uplift NOPR would essentially require the NYISO to post all economic commitments that are made as part of its Real-Time Market.

RTD primarily provides for resource dispatch on a five minute basis, but also includes resource “commitment” functionality under certain circumstances. For example, when the NYISO needs to respond to real-time system conditions that were not anticipated by RTC or by the regular RTD, such as the unexpected loss of a major generator or transmission facility, operators may activate a specialized version of RTD referred to as RTD-Corrective Action Mode (“RTD-CAM”).³² Certain modes of RTD-CAM can commit resources that are able to respond within 10 minutes. Such commitments are performed based on an evaluation of the economics of resource Bids and Bid parameters. Therefore, like RTC commitments, the NYISO does not believe that the resource commitments made by RTD-CAM constitute operator-initiated commitments, as defined by the Uplift NOPR.

³¹ RTC also provides advisory commitment information for the remainder of the 2.5 hour optimization horizon.

³² RTD-CAM runs are normally five to ten minutes long and, by design, do not include lookahead functionality in order to minimize execution time.

In addition, RTD includes certain offline gas turbine (“GT”) pricing logic applicable to offline, block-loaded GTs that can respond to dispatch instructions within 10 minutes.³³ RTD can commit eligible offline GTs for pricing purposes when such a commitment represents the least cost option to meet real-time system conditions.³⁴ Although RTD can elect to commit an eligible offline resource for pricing purposes (*i.e.*, the resource’s costs are accounted for in Real-Time LBMPs produced by RTD), subsequent action must be taken by the operator to effectuate the actual dispatch of the resource. Because the offline resource commitment decision for pricing purposes is made by RTD based on economics, the NYISO likewise believes that this category of resource commitments is not intended to be classified as operator-initiated commitments, as defined by the Uplift NOPR.

D. Transmission Constraint Penalty Factors

The Commission proposes to require that the following be specified in RTO/ISO tariffs: (i) transmission constraint penalty factor values; (ii) the conditions when such penalty factors may be used to set price; and (iii) any procedures authorizing temporary changes to such penalty factors, including a requirement to notify market participants of any such temporary changes.³⁵

The NYISO recently obtained approval from its stakeholders to file for the Commission’s consideration tariff revisions that will clarify and enhance its transmission constraint pricing

³³ See, e.g., Docket No. AD14-14-000, *supra*, Post-Technical Workshop Comments of the New York Independent System Operator, Inc. at 8-10 (March 6, 2015); Docket No. AD14-14-000, *supra*, Report of the New York Independent System Operator, Inc. at 6-7 (March 4, 2016); and Docket No. RM17-3-000, *Fast Start Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Comments of the New York Independent System Operator, Inc. at 2-4 (February 28, 2017).

³⁴ In evaluating eligible offline resources, RTD considers both the start-up and incremental energy costs of such resources.

³⁵ Uplift NOPR at P 97-99.

logic.³⁶ Subject to obtaining approval from its Board of Directors, the NYISO intends to submit these tariff revisions to the Commission for approval in April 2017. The tariff revisions related to the proposal align with the proposed requirements of the Uplift NOPR in that they: (i) clearly define the transmission constraint penalty factor values utilized by the NYISO; (ii) describe the circumstances when these penalty factors are used to set price; and (iii) describe the process allowing for temporary changes to the penalty factor values under limited circumstances and include an obligation to notify market participants of any such temporary changes.

E. Transmission Outage Reporting

The Commission seeks comments on the reporting of transmission outages.³⁷ The NYISO already posts information regarding outages of 100 kV and higher transmission facilities in the NYCA. The reports are provided in a machine readable format and include separate reports for both scheduled and actual outages.³⁸

F. Market Model Availability

The Uplift NOPR solicits comments regarding the availability of RTO/ISO network models and any restrictions relating thereto.³⁹ The NYISO currently makes a network model available to entities that participate in the NYISO-administered Transmission Congestion Contract (“TCC”) market. TCC market participants seeking access to the model are required to submit a request and execute a non-disclosure agreement due to the fact that the model includes

³⁶ See NYISO, *Transmission Constraint Pricing* (presented at the March 29, 2017 Management Committee meeting), available at: http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2017-03-29/03_Transmission%20Constraint%20Pricing.pdf.

³⁷ Uplift NOPR at P 100.

³⁸ The transmission facility outage reports are posted in the “Outages” folder within the “Power Grid Data” subsection of the “Market & Operational Data” section on the NYISO’s website, available at: http://www.nyiso.com/public/markets_operations/market_data/power_grid_data/index.jsp.

³⁹ Uplift NOPR at P 101.

Critical Energy Infrastructure Information (“CEII”). Furthermore, because the model includes certain modifications to account for system assumptions utilized in the NYISO-administered TCC auctions, use of the model is restricted to TCC market participation.

G. Implementation Schedule

The Commission proposes to require the submission of compliance filings to address the reforms established by any final rule in this proceeding within 90 days after the effective date of any such final rule.⁴⁰ The Commission further proposes that RTOs/ISOs implement any required changes necessary to comply with such reforms within six months after the deadline for submitting compliance filings.⁴¹

The NYISO respectfully requests that the Commission provide flexibility to each RTO/ISO to develop and implement the reforms proposed by the Uplift NOPR. To achieve compliance with the reforms proposed in the Uplift NOPR, the NYISO would need to modify certain of its current data reporting processes which may require software development and testing to automate such revised reporting. Based on the reforms proposed by the Uplift NOPR, the NYISO currently estimates that it will likely require at least nine months following the deadline for submitting compliance filings to implement the changes necessary to comply with the proposed reforms.

The NYISO is in year one of a three year long effort to upgrade the hardware and software that runs its wholesale energy markets and monitors reliability of the bulk electric system. These improvements are commonly referred to as the “Energy Management System (“EMS”)/Business Management System (“BMS”) Upgrade Project.” The project will provide several important benefits. The new operating system and server hardware provide improved

⁴⁰ *Id.* at P 102.

⁴¹ *Id.*

computational performance. This will better enable the NYISO's hardware and software to support new market designs and increasing performance demands. The new system will also be more secure with enhanced cyber security protections.

Embarking on material software modifications that affect the NYISO's market software while the NYISO is transitioning to the upgraded EMS/BMS would significantly complicate the task of implementing the EMS/BMS upgrades. Based on the reforms proposed in the Uplift NOPR, the NYISO currently does not anticipate any direct impacts to its market software would occur to achieve compliance with such proposed reforms.

However, the ultimate impacts, if any, to the NYISO's market software will depend on the reforms required by any final rule issued in this proceeding. If the reforms established by any such final rule result in the need for changes to the NYISO's market software, implications to the ongoing EMS/BMS upgrades would need to be considered. The NYISO would incur significant risk and expense if the reforms established by any final rule required material changes to the NYISO's market software and were required to be implemented during the ongoing transition to the upgraded EMS/BMS. Under such circumstances, the NYISO would ideally be positioned to begin software development for a compliance solution in 2019, with the earliest possible implementation date occurring in 2020, in order to mitigate the potential risks and additional costs associated with conducting significant market software changes in tandem with the ongoing EMS/BMS upgrades.

Accordingly, the NYISO requests that the Commission provide regional flexibility with respect to the implementation timeline for compliance solutions in response to the reforms established by any final rule in this proceeding.

III. CONCLUSION

The NYISO respectfully requests that the Commission consider these comments in formulating any final rule in this proceeding.

Respectfully submitted,

/s/ Garrett E. Bissell

Garrett E. Bissell

Senior Attorney

New York Independent System Operator, Inc.

Dated: April 10, 2017

cc: Michael Bardee
Nicole Buell
Anna Cochrane
Kurt Longo
Max Minzner
Daniel Nowak
Larry Parkinson
J. Arnold Quinn
Douglas Roe
Kathleen Schnorf
Jamie Simler
Gary Will

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 10th day of April 2017.

/s/ Joy A. Zimmerlin

Joy A. Zimmerlin
New York Independent System Operator, Inc.
10 Krey Blvd.
Rensselaer, NY 12144
(518) 356-6207