161 FERC ¶ 61,151 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman; Cheryl A. LaFleur, and Robert F. Powelson.

New York Independent System Operator, Inc.

Docket No. ER17-1561-000

ORDER ON COMPLIANCE

(Issued November 9, 2017)

1. On May 8, 2017, the New York Independent System Operator, Inc. (NYISO) submitted, pursuant to section 206 of the Federal Power Act (FPA),¹ revisions to its Market Administration and Control Area Services Tariff (Tariff)² to comply with the requirements of Order No. 831.³ In this order, we accept in part, and reject in part, NYISO's compliance filing, and direct further compliance. This further compliance filing will be effective on a date to be specified by NYISO in a subsequent filing.⁴

I. <u>Background</u>

2. In Order No. 831, the Commission addressed the incremental energy offer component of a resource's supply offer,⁵ requiring regional transmission organizations and independent system operators (RTOs/ISOs) to amend their existing caps on incremental energy offers and implement additional measures, as discussed below.

¹ 16 U.S.C. 824e (2012).

² New York Independent System Operator, Inc., NYISO Tariffs, NYISO Markets and Services Tariff.

³ Offer Caps in Markets Operated by Regional Transmission Organizations and Independent System Operators, Order No. 831, 81 Fed. Reg. 87,770 (Dec. 5, 2016), FERC Stats. & Regs. ¶ 31,387 (2016), order on reh'g and clarification, Order No. 831-A, 161 FERC ¶ 61,156 (2017).

⁴ See infra P 12.

⁵ An incremental energy offer is a financial cost component consisting of costs that vary with a resource's output or level of demand reduction. It is one of the components used to calculate locational marginal prices (LMPs).

A. <u>Offer Cap Structure</u>

3. Each RTO/ISO must: (1) cap each resource's incremental energy offer at the higher of \$1,000/MWh or that resource's verified cost-based incremental energy offer; and (2) cap verified cost-based incremental energy offers at \$2,000/MWh (hard cap) when calculating LMPs.⁶ The Commission stated that it expects RTOs/ISOs to use cost-based incremental energy offers above \$2,000/MWh to determine merit-order dispatch.⁷ In Order No. 831-A, the Commission clarified that Order No. 831's expectation was not a requirement for RTOs/ISOs to use cost-based incremental energy offers above \$2,000/MWh to determine dispatch.⁸ that RTOs/ISOs must select from several offers above \$2,000/MWh, RTOs/ISOs are encouraged to make those selections on a least-cost basis when possible.⁸

B. <u>Cost Verification</u>

4. Incremental energy offers above \$1,000/MWh must be cost-based and must be verified by the RTO/ISO or the Market Monitoring Unit before the RTO/ISO uses the offer to calculate LMPs. The verification process must ensure that a resource's cost-based incremental energy offer above \$1,000/MWh "reasonably reflects that resource's actual or expected cost."⁹ Although the Commission did not prescribe how RTOs/ISOs or Market Monitoring Units should conduct the verification process, the Commission stated that it expected RTOs/ISOs to build upon their existing mitigation processes for calculating or updating cost-based incremental energy offers. The Commission required that RTO/ISO compliance filings explain what factors the cost verification process would consider and whether such factors are currently considered in the market power mitigation process, or whether new provisions would be necessary.¹⁰

5. If an incremental energy offer above \$1,000/MWh cannot be verified prior to the start of the market clearing process, it may not be used to calculate LMPs, but the resource may be eligible to receive an uplift payment after-the-fact, subject to verification. Resources with verified incremental energy offers above \$2,000/MWh are also eligible for after-the-fact uplift payments because the energy component of LMP is capped at \$2,000/MWh.¹¹ Any such after-the-fact uplift payment must be based on a resource's actual short-run marginal costs.¹²

⁶ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 77.

⁷ *Id.* P 90.

⁸ Order No. 831-A, 161 FERC ¶ 61,156 at P 16.

⁹ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 140.

¹⁰ Id. P 141.

¹¹ *Id.* PP 145-146.

6. RTOs/ISOs are not required to include adders above cost in cost-based incremental energy offers to account for cost uncertainty or risk. However, if an RTO/ISO chooses to retain an adder above cost or proposes to include a new adder above cost in cost-based incremental energy offers above \$1,000/MWh, such adders may not exceed \$100/MWh. If a resource receives uplift after-the-fact because that resource's cost-based incremental energy offer above \$1,000/MWh could not be verified prior to the market clearing process or because its cost-based incremental energy offer exceeded \$2,000/MWh, such uplift payments should not include any adders above costs.¹³

7. In Order No. 831-A, the Commission also stated that verifiable opportunity costs should not be subject to the \$100/MWh limit on adders above cost because opportunity costs are legitimate short-run marginal costs and not adders above cost.¹⁴ The Commission also clarified that resources are only eligible to receive uplift payments to make them whole to, at most, their submitted cost-based incremental energy offers if the associated offer and cost information is submitted in a manner consistent with RTO/ISO offer submission guidelines prior to the market clearing process. Such after-the-fact uplift payments that a resource would be eligible to receive if its cost-based incremental energy offer above \$1,000/MWh is not verified prior to market clearing shall include only actual verifiable costs. The Commission further clarified that resources that submit incremental energy offers that include opportunity costs prior to the applicable RTO/ISO submission deadlines must be eligible to receive uplift after-the-fact for those opportunity costs, subject to verification, because opportunity costs are a legitimate component of incremental energy offers.¹⁵

C. <u>Resource Neutrality and Demand Response Resources</u>

8. Any energy resource with short-run marginal costs above \$1,000/MWh may submit a cost-based incremental energy offer above \$1,000/MWh, regardless of resource type. As such, demand response resources that submit incremental energy offers to the energy market may also submit incremental energy offers above \$1,000/MWh, which must be verified before being used to set LMP. The Commission noted that the verification process for demand response resources would differ from the verification process for generation resources and that the short-run marginal costs of a demand response resource may equal its opportunity costs. The offer cap reforms, however, do not apply to capacity-only demand response resources that do not submit incremental energy offers into energy markets.¹⁶

¹² *Id.* n.331, P 207.

¹³ Id. P 207.

¹⁴ Order No. 831-A, 161 FERC ¶ 61,156 at P 38.

¹⁵ *Id.* PP 38-39.

¹⁶ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at PP 156-159.

D. <u>External Transactions</u>

9. RTOs/ISOs must permit import and export transactions¹⁷ to offer up to the \$2,000/MWh hard cap, but such transactions are not required to be subject to the verification requirement. The Commission stated, however, that, if RTOs/ISOs wish to verify or otherwise review the costs of imports or exports and/or develop additional mitigation provisions for import and export transactions above \$1,000/MWh, RTOs/ISOs may propose such verification or mitigation provisions in a separate filing under section 205 of the FPA.¹⁸

E. <u>Virtual Transactions</u>

10. RTOs/ISOs must permit market participants to submit virtual transactions up to the \$2,000/MWh hard cap, but such transactions are not required to be subject to the verification requirement. The Commission stated, however, that if RTOs/ISOs determine that additional measures are necessary to address any concerns that arise from permitting virtual transactions up to \$2,000/MWh, RTOs/ISOs may propose such additional measures in a separate filing under section 205 of the FPA.¹⁹

II. <u>Request for Clarification/Rehearing</u>

11. On December 19, 2016, NYISO sought clarification, and alternatively rehearing, that Order No. 831 does not require that incremental energy bids above \$2,000/MWh be used to determine merit-order dispatch in all RTOs/ISOs.²⁰ In addition, NYISO sought clarification, and alternatively rehearing, that RTOs/ISOs are permitted to apply the

¹⁹ *Id.* PP 172, 176.

²⁰ NYISO, Request for Clarification and Alternative Requests for Rehearing, Docket No. RM16-5-001 (filed Dec.19, 2016) (Clarification Request) at 4-13.

¹⁷ The Commission stated that Order No. 831 does not apply to Coordinated Transactions Schedules or emergency purchases. *Id.* P 198.

¹⁸ *Id.* PP 192, 197.

same offer cap to both incremental energy bids and minimum generation bids.²¹ Finally, NYISO requested that the Commission clarify that, when calculating uplift payments for the recovery of verified costs, only actual, documented out-of-pocket costs should be eligible for uplift and that no risk-related adders or opportunity costs be allowed when cost information is not submitted in a sufficiently timely manner to permit review and verification.²² On November 9, 2017, the Commission issued Order No. 831-A and, among other things, granted NYISO's requests for clarification.²³

III. Compliance Filing

12. On May 8, 2017, NYISO filed its Order No. 831 compliance filing. NYISO requests an effective date of between October 1, 2018 and December 31, 2018 in order to implement significant changes to software, procedures and practices to implement the offer cap reforms. NYISO proposes to submit a filing at least two weeks in advance of its intended effective date, specifying the date on which the Tariff revisions submitted in this compliance filing will take effect.

IV. Notice of Filing and Responsive Pleadings

Notice of NYISO's compliance filing was published in the *Federal Register*,
82 Fed. Reg. 22,330 (2017), with interventions and protests due on or before May 30,
2017. Timely motions to intervene were filed by Electric Power Supply Association and NRG Companies.²⁴ A timely motion to intervene and comments in support of NYISO's compliance filing were filed by New York Transmission Owners.²⁵

²² Clarification Request at 15-16.

²³ Order No. 831-A, 161 FERC ¶ 61,156 at PP 16-17 and 39.

²⁴ NRG Companies include NRG Power Marketing LLC and GenOn Energy Management, LLC.

²⁵ New York Transmission Owners include: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York Power Authority, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., Power Supply Long Island, and Rochester Gas and Electric Corporation.

²¹ *Id.* at 13-15. In NYISO, the first block in a resource's incremental energy offer is called a "minimum generation bid" and includes the costs a resource incurs to operate at its economic minimum operating level. NYISO, *Manual 11 - Day-Ahead Scheduling Manual*, Sec. 4.3.3. (October 2016)

 $http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Operations/dayahd_schd_mnl.pdf.$

V. <u>Discussion</u>

A. <u>Procedural Matters</u>

14. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. <u>Substantive Matters</u>

15. As discussed below, we accept in part, and reject in part, NYISO's compliance filing and direct further compliance.

1. Offer Cap Structure

a. <u>Compliance Filing</u>

16. NYISO states that its proposed revisions comply with the offer cap structure requirement. NYISO explains that its proposed tariff language increases the bid restriction that applies to resources in the New York Control Area (NYCA) to equal the higher of (a) \$1,000/MWh, or (b) a resource-specific, verified, cost-based reference level. Additionally, NYISO proposes tariff language which specifies that for purposes of determining commitment, dispatch, and market clearing prices, maximum day-ahead and real-time incremental energy bids and minimum generation bids ²⁶ submitted by NYCA resources shall not exceed the \$2,000/MWh hard cap required by Order No. 831.

17. NYISO explains that, consistent with the Clarification Request,²⁷ NYISO's proposed compliance tariff revisions do not require NYISO to use verified bids that exceed \$2,000/MWh to determine merit-order dispatch.²⁸ NYISO also explains that, consistent with the Clarification Request, the offer cap requirement applies to both incremental energy bids and to minimum generation bids.²⁹

b. <u>Comments</u>

18. New York Transmission Owners state that they agree with and support the Clarification Request concerning merit-order dispatch and minimum generation bids

²⁶ NYISO refers to its incremental energy offers as incremental energy bids. NYISO also proposes to apply the offer cap structure requirement to its minimum generation bids. For the purposes of this order, we will refer to both NYISO's incremental energy bids and its minimum generation bids as "bids."

²⁷ Clarification Request at 11-12.

²⁸ Compliance Filing, Transmittal at 6.

²⁹ Id. at 3, 5.

for the reasons stated by NYISO. They assert that the Commission should accept the proposed tariff language in NYISO's compliance filing because it is consistent with the Clarification Request.³⁰

c. <u>Determination</u>

19. We find that NYISO has complied with the offer cap structure requirements in Order No. 831, because NYISO proposes to cap each resource's bid at the higher of \$1,000/MWh or that resource's verified cost-based bid; and to cap verified cost-based bids at \$2,000/MWh for the purposes of setting market clearing prices.

20. Further, we agree with NYISO and the New York Transmission Owners that NYISO is not required to use verified bids that exceed \$2,000/MWh to determine merit-order dispatch. As clarified in Order No. 831-A, RTOs/ISOs are not required to use cost-based bids above \$2,000/MWh to determine economic merit-order dispatch.³¹

21. Additionally, we agree with NYISO and the New York Transmission Owners that the offer cap requirements in Order No. 831 apply to both incremental energy bids and to minimum generation bids. As clarified in Order No. 831-A, it is appropriate to apply the offer cap and verification requirement to minimum generation bids.³²

2. <u>Cost Verification</u>

a. <u>Verification Process</u>

i. <u>Compliance Filing</u>

22. NYISO states that it intends to leverage its existing reference level development process to verify that bids that exceed \$1,000/MWh are consistent with a generator's costs. NYISO explains that this existing process considers fuel, emissions, variable operating and maintenance costs, and risk and/or opportunity costs in developing a generator's cost-based reference level. NYISO also explains that all of the cost factors except fuel costs must be submitted to, and approved by, NYISO for incorporation into a resource's reference level before a bid is submitted. NYISO notes that a fuel cost adjustment (i.e., changes to fuel type or fuel price) can be submitted with such a bid, but that if these parameters exceed a seasonally calculated tolerance level, they must be approved by NYISO before they are permitted to take effect.³³

³² *Id.* P 17.

³³ Compliance Filing, Transmittal at 9.

³⁰ New York Transmission Owners Comments at 3-4 (citing Compliance Filing, Transmittal at 3 and Clarification Request at 6, 9-11, 13-15).

³¹ Order No. 831-A, 161 FERC ¶ 61,156 at P 16.

23. NYISO also proposes to require all generators that want to submit bids exceeding \$1,000/MWh to include a fuel cost adjustment with its bid. NYISO notes that this requirement applies even for resources that do not consume fuel, such as renewable resources. To this end, NYISO states it is developing procedures—in consultation with stakeholders and to be published in NYISO's Reference Level Manual—that will explain how all generators should utilize this functionality when submitting a bid exceeding \$1,000/MWh. NYISO states that it will use this process to identify bids that exceed \$1,000/MWh and to ensure that a cost-based reference level (as opposed to alternative reference level types) is used to validate the bid.³⁴

24. NYISO notes that if a resource submits a bid that exceeds \$1,000/MWh, but does not use the required fuel cost adjustment process, then the bid will fail verification and NYISO will notify the resource to provide it an opportunity to correct its error and resubmit the bid prior to market close. NYISO clarifies that this differs from current practice, where NYISO performs this validation after the market closes.³⁵

25. NYISO also proposes to allow resources whose bids exceed \$1,000/MWh to be eligible for Bid Production Cost Guarantee (uplift) payments under two circumstances: (1) when a resource's verified, cost-based bid exceeds \$2,000/MWh, and (2) when a resource's cost-based bid exceeds \$1,000/MWh but could not be verified prior to market close, and therefore were verified after-the-fact.³⁶ NYISO's specific proposals for treatment of risk adders and opportunity costs in uplift calculations are described below.

ii. <u>Determination</u>

26. We find that NYISO complies with the general requirements in Order No. 831 regarding cost verification of bids exceeding \$1,000/MWh. Specifically, we find that NYISO meets the requirement that the RTO/ISO or the Market Monitoring Unit verify that a resource's bid above \$1,000/MWh reasonably reflects that resource's actual or expected cost.³⁷

b. <u>Adders above Cost</u>

i. <u>Compliance Filing</u>

27. NYISO proposes to make risk adders that were not verified prior to the close of the relevant market ineligible for uplift payments.³⁸ NYISO does not address whether or not there is a limit for inclusion of adders above cost.

³⁴ *Id.* at 9.

³⁵ Id. at 9.

³⁶ Id. at 7.

³⁷ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 140.

ii. <u>Comments</u>

28. New York Transmission Owners state that they agree with and support the Clarification Request concerning risk-related adders for the reasons stated by NYISO. They assert that the Commission should accept the proposed language in NYISO's compliance filing because it is consistent with the Clarification Request.³⁹

iii. <u>Determination</u>

29. We find that NYISO complies with Order No. 831 by limiting adders eligible for uplift costs to costs that are actually incurred. While a risk adder may be appropriate in an ex ante energy offer, we agree with NYISO that such an adder should not be eligible for uplift on an ex post basis. As stated in Order No. 831, "uplift payments that the resource receives should not include any adders above costs."⁴⁰

30. However, we find that NYISO's filing does not comply with all requirements for adders above cost. NYISO currently permits a resource to include adders in its bid, but its filing does not specify that when the cost-based bid exceeds \$1,000/MWh, and includes adders above cost, that such adders are subject to a \$100/MWh cap. Specifically, Order No. 831 required that adders above cost be limited to \$100/MWh when bids exceed \$1,000/MWh.⁴¹ We find that NYISO fails to comply with this requirement of Order No. 831. Thus, we direct NYISO to submit a compliance filing, within 30 days of the date of this order, to specify in its tariff that adders above cost cannot exceed \$100/MWh for bids above \$1,000/MWh.

c. <u>Opportunity Costs</u>

i. <u>Compliance Filing</u>

31. NYISO states that under its existing process, NYISO considers opportunity costs in the development of a resource's cost-based reference level.⁴² However, NYISO also states that opportunity costs should not be allowed to be recovered through uplift payments when NYISO does not have sufficient time to verify bids that exceed \$1,000/MWh.⁴³ NYISO explains that if opportunity costs are not verified before the

³⁸ Compliance Filing, Transmittal at 7-8.

³⁹ New York Transmission Owners Comments at 4 (citing Compliance Filing, Transmittal at 3-4 and Clarification Request at 15-16).

⁴⁰ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 207.

⁴¹ *Id*. P 207.

⁴² Compliance Filing, Transmittal at 9.

⁴³ *Id.* at 3.

close of the relevant market, then they are not eligible for recovery through uplift payments because they are not actual costs.⁴⁴ NYISO states that its proposal to exclude opportunity costs that are not verified before market close is consistent with the Clarification Request.⁴⁵

ii. <u>Comments</u>

32. New York Transmission Owners state that they agree with and support the Clarification Request regarding opportunity costs for the reasons stated by NYISO. They assert that the Commission should accept the proposed language in NYISO's compliance filing because it is consistent with the Clarification Request.⁴⁶

iii. <u>Determination</u>

33. We find that NYISO does not comply with the requirements in Order Nos. 831 and 831-A related to after-the-fact cost recovery through uplift payments. Order No. 831-A clarifies that, if a resource avails itself of an RTO's/ISO's current rules to allow a resource to include opportunity costs in its bid, then that RTO/ISO must give that resource an opportunity to recover those opportunity costs through an uplift payment, subject to verification.⁴⁷ NYISO's proposal prevents resources from recovering opportunity costs through uplift when NYISO is unable to verify these costs before the close of the relevant market. Accordingly, we direct NYISO to ensure that opportunity costs for bids exceeding \$1,000/MWh are eligible for uplift, even if they are not verified before the close of the relevant market, if such costs are submitted as part of the resources' bid, those costs were timely submitted and supported with documentation, and that those costs were verified by NYISO after-the-fact. Further, Order No. 831-A explained that opportunity costs are legitimate short-run marginal costs and not adders above cost. Because NYISO currently permits opportunity costs to be included in a costbased bid, whether or not the bid exceeds \$1,000/MWh, it cannot subject verifiable opportunity costs to the \$100/MWh limit on adders above cost.⁴⁸ Therefore, we direct NYISO to submit a compliance filing, within 30 days of the date of this order, to modify its tariff to allow for the recovery of opportunity costs through uplift, as described above.

⁴⁵ Id. at 8.

⁴⁶ New York Transmission Owners Comments at 4 (citing Compliance Filing, Transmittal at 3-4 and Clarification Request at 15-16).

⁴⁷ Order No. 831-A, 161 FERC ¶ 61,156 at P 39.

⁴⁸ Order No. 831-A, 161 FERC ¶ 61,156 at P 38; see supra PP 3-6.

⁴⁴ *Id*. at 7.

3. <u>Resource Neutrality and Demand Response Resources</u>

a. <u>Compliance Filing</u>

34. NYISO's proposed implementation of the offer cap structure, as described above, permits resources with costs above \$1,000/MWh to submit bids, regardless of the type of resource. NYISO's proposal establishes new rules that it states will enable it to develop reference levels for the Day-Ahead Demand Response Program and the Demand Side Ancillary Service Program in order to verify demand response bids that exceed \$1,000/MWh. In addition, NYISO states that its proposal establishes eligibility for uplift payments for demand-side resources participating in the Day-Ahead Demand Side Response Program whose costs were timely submitted but could not be verified prior to market close.⁴⁹

b. <u>Determination</u>

35. We find that NYISO's proposal complies with the resource neutrality requirement in Order No. 831 as it permits all resources to submit cost-based bids above \$1,000/MWh. Further, NYISO establishes new rules for the Day-Ahead Demand Response Program and Demand Side Ancillary Service Program that enable those demand response resources to both submit bids above \$1,000/MWh and a process to verify those bids.

4. <u>External Transactions</u>

a. <u>Compliance Filing</u>

36. NYISO states that its proposal complies with Order No. 831 by implementing a \$2,000/MWh maximum bid restriction on imports and exports.⁵⁰ NYISO states that it will enforce this bid restriction by implementing real-time validation functionality that will automatically reject bids above \$2,000/MWh and notify the resource and provide it an opportunity to submit a compliant bid.⁵¹

b. <u>Determination</u>

37. We find that NYISO complies with the offer cap requirement in Order No. 831 for external transactions, because it limits the bids for external transactions to \$2,000/MWh.

⁵¹ *Id.* at 12.

⁴⁹ Compliance Filing, Transmittal at 5, 8.

⁵⁰ Id. at 11.

5. <u>Virtual Transactions</u>

a. <u>Compliance Filing</u>

38. NYISO states that its proposal complies with Order No. 831 by implementing a \$2,000/MWh maximum restriction on virtual load bids and virtual supply bids.⁵²

b. <u>Determination</u>

39. We find that NYISO complies with the offer cap requirement in Order No. 831 for virtual transactions because it limits the bids for virtual transactions to \$2,000/MWh.⁵³

The Commission orders:

(A) NYISO's compliance filing is hereby accepted in part, and rejected in part, effective as requested.

(B) NYISO is hereby directed to submit a further compliance filing, within 30 days of the date of this order, as discussed in the body of this order.

(C) NYISO is hereby directed to submit a filing with no less than two weeks' notice of the proposed effective date, as discussed in the body of this order.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

⁵² *Id*. at 11.

⁵³ Order No. 831, FERC Stats. & Regs. ¶ 31,387 at P 172.