

139 FERC ¶ 61,048
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
and Cheryl A. LaFleur.

New York Independent System Operator, Inc.

Docket Nos. ER12-701-000
ER12-701-001

ORDER ACCEPTING TARIFF REVISIONS

(Issued April 19, 2012)

1. On December 28, 2011, as amended on January 13, 2011, the New York Independent System Operator, Inc. (NYISO) filed proposed tariff amendments to its Open Access Transmission Tariff (OATT) and its Market Administration and Control Area Services Tariff (Services Tariff) to add new real-time External Transaction bidding and scheduling rules. These new real-time market rules, together known as “Coordinated Transaction Scheduling” (CTS) are proposed for use at specifically designated Proxy Generator Buses (CTS Enabled Proxy Generator Buses) between NYISO and ISO New England (ISO-NE). For the reasons discussed below, the Commission accepts the proposed tariff revisions to be effective on the date that CTS becomes operational, subject to a compliance filing as discussed herein.

I. Background

2. NYISO states that Potomac Economics, its external market monitoring unit (MMU) has determined that price disparities between the New York and New England regions, when the interface between them is unconstrained, imply that low-cost generation is used too little and high-cost generation is used too much in the two regions.¹ NYISO further states that a joint evaluation, prepared by ISO-NE and NYISO (White Paper), revealed three central reasons the current trading system does not produce all of the potential benefits that regional trading could provide to both regions.²

¹ NYISO December 28, 2011 Filing at 3, Appendix A.

² NYISO submitted the White Paper as Attachment V to its December 28, 2011 Filing.

3. First, NYISO states, existing trading rules leave unused, ample transmission capacity to move additional power from the lower-cost ISO to the higher-cost ISO in most hours of the year. NYISO adds that, for example, the New York North interface (NYN)³ operated at half or less of its capacity approximately 75 percent of the time in 2009.⁴

4. Second, NYISO states that for a number of reasons energy trading does not always result in moving power from the low-cost to the high-cost region. One reason is because existing trading processes lock hourly schedules so that they cannot be revised even if the region with the lower-cost energy and the region with higher costs switches, resulting in inefficient allocation of resources. NYISO adds that another reason is the current 60 to 120 minute gap between the time the energy schedule for the hour is established and the time the power actually flows and the real-time settlement prices or real-time locational based marginal prices (LBMP) are established. NYISO states that this is known as latency delay. NYISO explains that when power system conditions change dramatically between the scheduling interval and the interval in which the power actually flows, what was scheduled as an economic trade can become uneconomic.

5. Third, NYISO asserts that non-economic clearing occurs because NYISO and ISO-NE make separate scheduling decisions based on a determination by the evaluating ISO, not whether the transaction makes economic sense across the interface. What was economic for one region may not be for the other and, if the transaction does not flow in real-time because it was not scheduled in both regions, the customer may be exposed to balancing obligations and/or penalties for failed transactions. This can decrease opportunities for price convergence.

6. NYISO explains that the current inter-regional trading system involves four steps: (1) market participants submit requests to buy or sell power at the border separately to each ISO (e.g., a request to buy on the New England side and to sell on the New York side); (2) each ISO independently clears the requests on its side, based primarily on economic comparisons to other requests and to the ISO's generation supply stack; (3) during the delivery period, each ISO dispatches internal generation so the total physical flow of power between regions matches (as closely as possible) the aggregate quantity of offers accepted by both ISOs;⁵ and (4) market participants with accepted requests incur a

³ NYISO states that the NYN interface comprises the majority of the transmission capacity between New York and New England. NYISO December 28, 2011 Filing, White Paper at I-2.

⁴ NYISO December 28, 2011 Filing at 3 (citing White Paper at II-2).

⁵ NYISO adds that, from a physical perspective, the physical delivery obligation applies only to the two ISOs, that is, a participant submitting an external transaction (with
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financial obligation.⁶ These binding financial obligations are also called external transactions or accepted offers to buy or sell across the interface between ISOs.

7. NYISO further explains that, although settlements are performed separately by each ISO, the market participant's net gain or loss on a transaction is the difference between locational based marginal price (LBMP) between each region, plus various fees. NYISO states that these transaction requests are submitted and accepted prior to when the power actually flows which means that, if accepted, there is uncertainty about the LBMPs at which they will settle. NYISO states that the economic purpose of transacting between ISOs is to converge the LBMPs in the two regions enabling the ISOs to meet demand at the lowest total production cost, a central ISO objective; and yet, the current system does not produce optimal results because of shortcomings in the current trading system's design resulting in limited price convergence.⁷

8. NYISO states that two solutions were proposed to address the inefficiencies with the current transaction scheduling process: CTS and Tie Optimization. As discussed further below, CTS uses market-based offers to set real-time external interface schedules. The MMU estimates that, if CTS had been in place from 2008 to 2010, it would have reduced total production costs by \$26 to \$34 million, and total energy expenditures by load by \$387 to \$417 million, for the two regions combined.⁸ In contrast, Tie Optimization treats external transaction clearing in a manner that is similar to the clearing of offers and bids at internal interfaces.

II. Notice of Filing and Responsive Pleadings

9. Notice of NYISO's December 28, 2011 filing was published in the *Federal Register*, 76 Fed. Reg. 34,692 (2011), with interventions and protests due on or before January 18, 2012. On January 13, 2012, NYISO filed an amendment to the December 28, 2011 filing. Notice of the amendment was published in the *Federal Register*, 77 Fed. Reg. 3468 (2011), with comments due on or before February 3, 2012.

the exception of those transacting capacity market products) need not supply generation to match its buy or sell request or have any physical assets at all. NYISO December 28, 2011 Filing, White Paper at I-4.

⁶ *Id.* at I-3.

⁷ *Id.* at I-4, 5.

⁸ NYISO December 28, 2011 Filing at 4-5.

10. The Electric Power Supply Association and Consolidated Edison Solutions, Inc. filed motions to intervene. The New York State Public Service Commission filed a notice of intervention.

11. The PSEG Companies (PSEG)⁹ filed a motion to intervene and protest. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Power Authority, New York Power Authority, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation (collectively NY Transmission Owners) filed a motion to intervene and comments. Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc. (Constellation) filed a motion to intervene and comments in support of PSEG's protest.

12. On March 13, 2012, Hydro-Québec Energy Services (U.S.) Inc. (HQUS) filed an out-of-time motion to intervene without comments.

III. Discussion

A. Procedural Matters

13. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2011), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2011), the Commission will grant HQUS's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2011), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We will accept all of the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

⁹ The PSEG Companies consist of PSEG Energy Resources & Trade LLC, Public Service Electric and Gas Company, PSEG Power Connecticut LLC, PSEG Power New York LLC.

B. Coordinated Transaction Scheduling**1. Proposal****a. Interface Pricing**

15. NYISO states that under its proposal, once a proxy generator bus is CTS enabled, all real-time external transactions at the bus, other than wheel-through transactions, would use CTS bidding and scheduling rules.¹⁰ NYISO explains that importing and exporting customers would submit a single bid to indicate their desire to, simultaneously, buy in one control area and sell into the other. Every 15 minutes, NYISO states that it would use its real-time commitment optimization, incorporating the ISO-NE supply curve and the submitted CTS interface bids, to determine cross border transaction schedules.¹¹ NYISO explains that CTS coordinated optimization for both regions improves scheduling efficiency in two ways. First, NYISO states that the optimization better ensures that scheduling decisions take into account relative price differences between the regions. Second, NYISO states that CTS provides the scheduling decisions on a more frequent, 15-minute basis which significantly reduces the transacting customer's latency delay.

b. Intra-hour Scheduling

16. NYISO states that when economic transactions are proposed to move power from the low-cost to the high-cost region, the CTS-enabled interfaces will also more fully utilize the available capacity. NYISO maintains that this higher frequency trading increases the opportunities to use external load and generation at the NYISO/ISO-NE interface to help balance the New York control area's demand and intermittent resource generation on a real-time basis.¹² NYISO asserts that CTS scheduling will also avoid the

¹⁰ NYISO explains this includes both transactions to buy and sell energy from the ISOs' LBMP markets and bilateral transactions to schedule transmission service for a private energy sale. Wheel-through transactions at CTS Enabled Proxy Generator Buses would use decremental bids, as they do currently. NYISO December 28, 2011 Filing at n.19.

¹¹ Every 15 minutes, NYISO runs a multi-period optimization covering the next three hours in 15-minute intervals. The coordination with ISO-NE for the CTS Enabled Proxy Bus Transactions involves ISO-NE providing its interface supply curve every 15 minutes as an input into NYISO's optimization. *Id.* n.20.

¹² NYISO explains that as renewable resources increase their output and lower LBMPs in one region relative to another, additional export transactions can become economic thus increasing the magnitude of those transactions. Likewise, NYISO

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financial risk of a single-ISO schedule by ensuring that, if scheduled at all, the proposed transaction will be scheduled in both ISOs.

17. NYISO explains that CTS accommodates both purchases and sales of energy and the scheduling of transmission service in real-time at CTS-enabled interfaces. NYISO states that no changes to the scheduling of external transactions in the day-ahead market are necessary. NYISO contends that market participants will flow their day-ahead scheduled transactions into the real-time market by using a CTS interface bid much like a real-time transaction bid is used currently.

c. Other Modifications

18. NYISO maintains that several modifications to other market rules will further increase the efficiency of external interface scheduling at CTS-enabled interfaces. First, NYISO is proposing to ease the hurdle rate for external transactions at the CTS-enabled interface by eliminating import and export fees that would otherwise attach to injections and withdrawals resulting from CTS interface bids. NYISO asserts that together these revisions reduce the incidental fees that encumber efficient trading across the interface.

19. Second, NYISO proposes to remove two transactional revenue guarantees that would otherwise be available to importers of energy on the CTS-enabled interface: the real-time bid production cost guarantee (real-time bid guarantee) and the import curtailment guarantee.

20. NYISO states that real-time bid guarantee is currently paid to importers when the revenues they receive for selling their energy import in the real-time market do not recover the costs of the transaction as reflected in their bid. NYISO explains that this risk is brought about by the latency between the time the transaction was scheduled and the time the power flowed and the settlement price or real time LBMP was established. NYISO asserts that statewide load currently absorbs the cost of protecting importers from this latency delay. NYISO contends that CTS should significantly reduce the financial risks of energy trading, thereby reducing the need for real-time bid guarantee in the first place. NYISO explains that stakeholders chose to move the cost of protecting against latency delay to cross-border transaction customers where it would be captured in the importers' bids rather than recover the cost of this risk from statewide load by selecting CTS over other alternative market designs. Eliminating the real-time bid guarantee payments for imports at CTS-enabled interfaces, according to NYISO, will leave to each

contends the reverse is also true; as renewable resources decrease their output and LBMPs increase in one region relative to another, additional import transactions can become economic thus increasing the magnitude of those transactions. *Id.* n.21.

transacting customer the decision on how recovering the cost of latency delay fits within its bidding strategy.¹³

21. Likewise, NYISO proposes to eliminate, at CTS-enabled interfaces, the import curtailment guarantee which it makes to keep the importer whole to its day-ahead margin if NYISO curtails the real-time scheduled import for reliability reasons and the importer's balancing market obligation erodes the day-ahead margin it would otherwise have earned. NYISO explains that the risk of such a curtailment should also be incorporated in the importer's bid rather than be fully passed through as a guarantee payment to statewide load. NYISO notes that neither the real-time bid guarantee, nor the curtailment guarantee, have ever been available to exporters. NYISO adds that although exporters face similar latency and curtailment risks, they are required to structure their bids in response to their exposure to these costs.

d. Attachment P of NYISO's Services Tariff

22. NYISO explains that market participants in both NYISO and ISO-NE voted to support CTS after extended discussions and compromise.¹⁴ NYISO states that the ISOs developed the review procedure memorialized in Attachment P to bring the market participants from both ISOs together on a going-forward strategy.

23. NYISO explains that Attachment P contains a two-step review procedure for CTS. First, after CTS market rules have been in effect for two years, NYISO states that Attachment P requires a review by the MMU of production cost savings thresholds. NYISO states that the MMU will compute a ratio which compares the actual benefits of CTS, the estimated foregone benefits of Tie Optimization, and the assumed benefits of an

¹³ NYISO asserts that the Commission has accepted similar proposals to impose this risk on transacting customers rather than statewide load relating to: hourly transactions at Interfaces where customers can elect to have their external transactions scheduled on a 15-minute basis; import transactions at non-competitive proxy generator buses, and at all designated scheduled lines, when such facilities are export constrained NYISO December 28, 2011 Filing at 6-7 (citing *New York Independent System Operator, Inc.*, 134 FERC ¶ 61,186, at P 6 (2011)).

¹⁴ NYISO explains that its Business Issues Committee (BIC) voted in support of CTS on June 1, 2011 while ISO-NE initially supported Tie Optimization. Later, the BIC supported a revised proposal on August 31, 2011 after the going forward concepts described in Attachment P of the Services Tariff were added. ISO-NE Participants Committee voted on September 9, 2011 to support CTS with the same going forward considerations incorporated. NYISO December 28, 2011 Filing at 15-16.

optimally scheduled interchange.¹⁵ NYISO further states that it “will declare whether the threshold has triggered considering the input of the MMU and stakeholders.”¹⁶ If NYISO declares that the threshold has triggered, NYISO will develop and implement adjustments to CTS, including, to the extent necessary, any tariff revisions made as a compliance filing.¹⁷ If no adjustments to CTS are identified, NYISO states it will develop and file the revisions necessary to implement Tie Optimization as a compliance filing. If NYISO declares that the threshold has not triggered, the process further described in Attachment P becomes null and void.¹⁸

24. NYISO explains that in the event that the threshold is triggered and adjustments to CTS are identified and implemented, the second step of the review procedure is activated. According to NYISO, one year after those adjustments are implemented, the MMU will again advise, and NYISO will again declare considering the input of the MMU and stakeholders, whether the threshold has been triggered. If so, NYISO will then either make a compliance filing to implement Tie Optimization or a filing pursuant to Article 19 of the ISO Agreement to implement a “superior alternative.” NYISO asserts that the MMU supports the CTS market design as improving the efficiency of energy transactions across the borders.¹⁹ NYISO maintains the MMU expects that CTS will produce production cost savings and consumer savings for both the NYISO and ISO-NE.

2. Comments

25. PSEG, as supported by Constellation (Commenters), opposes as premature the two-step review process included in Attachment P, which implements CTS only on a trial basis with a potential “trigger” for NYISO to adopt Tie Optimization. Commenters contend it will not be until at least 2017 before Tie Optimization is potentially

¹⁵ NYISO December 28, 2011 Filing, Attachment P §31.2. As stated in the proposed tariff revisions at Attachment P, section 31.2, a ratio will be developed to compare: (a) the difference in production cost savings under optimal interchange and Tie Optimization; and (b) the difference in production cost savings under Tie Optimization and CTS. If the ratio of [b/a] is greater than 60 percent and “b” is greater than \$3 million, the MMU will advise whether in its opinion the threshold has triggered.

¹⁶ *Id.* §31.2.1.

¹⁷ *Id.* §31.2.41.

¹⁸ *Id.* §31.2.21.

¹⁹ NYISO Filing at 23, Appendix A (citing excerpt 2010 State of the Market Report).

implemented.²⁰ Commenters assert that it is unwise and unnecessary to commit today to a compliance filing that might be made so far into the future given the number of factors that can change over the course of five years. For example, Commenters suggest the composition of the NYISO Board may have a preference for a different approach or prefer to retain CTS imperfections notwithstanding. Specifically, Commenters oppose Attachment P's bias favoring the implementation of Tie Optimization because, in their view, the RTO or ISO supplants market participants as the transaction scheduling decision-maker. Further, they claim that PJM Interconnection, L.L.C. has expressed opposition to Tie Optimization during the course of stakeholder meetings because Tie Optimization would substantially increase audit and compliance complexity.²¹ Commenters assert that a better course of action is for the Commission to require market participants to investigate options following the end of the review periods described in Attachment P should the need arise, allowing market participants to reflect on lessons learned over the five year period, unencumbered by a compliance filing obligation.

26. The NY Transmission Owners maintain the MMU has repeatedly demonstrated that existing procedures for scheduling transactions between the New York and New England electricity markets fail to produce an efficient outcomes in real-time on a regular basis and eliminating this inefficiency would result in significant consumer savings in both New York and New England.²² The NY Transmission Owners support the proposal because it will minimize the adverse impacts associated with the inefficient use of the transmission system between the two regions and is the fruit of a collaborative year-long stakeholder process incorporating a reasonable balance between two competing approaches for realizing more efficient interchange schedules, each of which attracted significant support.²³ The NY Transmission Owners state that so long as interface bids are not excessively high, CTS should be able to provide almost as much economic benefit as Tie Optimization.²⁴ The NY Transmission Owners maintain that the NYISO December Filing contains protective measures within Attachment P that would take effect if it becomes apparent that expectations are not being fulfilled; the approach does not place blind faith in CTS. The NY Transmission Owners assert that in the event that

²⁰ January 20 PSEG Companies at 4.

²¹ *Id.* at 5.

²² NY Transmission Owners February 3, 2012 Comments at 2 (citing 2010 State of the Market).

²³ *Id.* at 3.

²⁴ *Id.* at 5(citing NYISO Filing Att. VI at 6-10).

high interface bids frustrate the ability of CTS to produce the anticipated improvements in efficient use of the New York/New England interface, the Attachment P procedures will ensure that alternative procedures take effect. Finally, the NY Transmission Owners contend that fee elimination measures promote more efficient interchange by eliminating charges for energy scheduled to flow into or out of the New York Control Area in transactions scheduled under CTS. This, according to the NY Transmission Owners, thereby eliminates a seam between the markets limiting efficient interchange scheduling on the interface.

3. Commission Determination

27. We find that CTS is a just and reasonable mechanism for enhancing the market efficiency of external transactions between ISO-NE and NYISO. Accordingly, we accept the proposed tariff revisions to be effective on the date that CTS will become operational, subject to its making the compliance filing as directed below. We direct NYISO to make a compliance filing no later than 14 days prior to the date on which CTS will become operational to provide the effective date of the tariff provisions and a revised section 4.4.4 to identify the proxy generator buses that are CTS enabled.

28. NYISO requests waiver of section 35.3(a)(1) of the Commission's regulations²⁵ that requires, inter alia, that rate schedules or tariffs shall be tendered for filing not more than 120 days prior to the date on which the service is to commence. NYISO states that the CTS software design is nearing completion and a Commission order will provide certainty to the software coding team and the market participants on improved transaction coordination over this interface. Thus, NYISO submitted its filing more than 120 days prior to the date that CTS is expected to become operational. NYISO states that no market participant will be prejudiced by its requested waiver because the proposed implementation timetable was developed in consultation with the New York market participants and they have known for some time that NYISO would be prepared to implement CTS software no sooner than the second half of 2013. We grant NYISO's requested waiver for good cause shown.

29. CTS will provide substantial benefits to consumers in both ISO-NE and NYISO by addressing inefficiencies present in the current external transaction scheduling process. Specifically, for the combined ISO-NE and NYISO region, Potomac Economics estimates that CTS will result in \$129 million to \$139 million in annual consumer savings, and \$9 million to \$11 million in annual production cost savings.²⁶

²⁵ 18 C.F.R. § 35.3(a)(1) (2011).

²⁶ NYISO December 28, 2011 Filing, Attachment VI at 8.

30. We note that the proposals submitted by ISO-NE and NYISO also provide for CTS to be re-evaluated at certain points after implementation. This process may lead to ISO-NE and NYISO improving the design or operation of CTS, or adopting a different methodology for scheduling external transactions (i.e., Tie Optimization or a superior alternative), if it is determined that such changes could result in greater cost savings. We commend the ISO-NE and NYISO stakeholders for their work over the past year to develop improvements to the current scheduling process, and for their willingness to continue to improve this process in the future.

31. With respect to the limited protest of PSEG and Constellation, we find that because Tie Optimization has already been vetted as a possible solution it is valid to incorporate it as a possible alternative for the NYISO Board to consider if the trigger mechanism is activated. Focusing the Board's options on a solution that has previously been considered narrows the time necessary to implement a fix if CTS is not fulfilling its goals as envisioned. Furthermore, the "and a superior alternative has not become known" language of the trigger mechanism, provides the NYISO Board the discretion necessary to reflect upon options that may not have been previously presented to stakeholders.

The Commission orders:

NYISO's December 28, 2011 filing, as amended, is hereby accepted to be effective as discussed above, subject to the filing condition discussed above.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.