124 FERC ¶ 61,218
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

ISO New England Inc. Docket Nos. ER08-61-001
ER08-61-002
ER08-1222-000

ORDER ON TECHNICAL CONFERENCE AND ACCEPTING TARIFF SHEETS FOR FILING

(Issued September 3, 2008)

1. In Docket Nos. ER08-61-000 and ER08-61-001, ISO New England Inc. (ISO-NE) proposed an emergency revision to Market Rule 1 of its Transmission, Markets and Services Tariff (Tariff) to eliminate a potential opportunity for market manipulation at the interties with neighboring control areas. In the January Order, the Commission accepted and suspended the emergency revision, effective October 17, 2007, subject to refund, and to the outcome of a technical conference examining whether congestion pricing requirements currently contained in ISO-NE's Tariff would render the emergency revision unnecessary.[1] Following the technical conference, ISO-NE submitted for filing in Docket Nos. ER08-61-002 and ER08-1222-000 further revisions to Market Rule 1 (July 2008 Revisions) that would clarify how prices are determined for external nodes in the Day-Ahead Energy Market. For the reasons discussed below, we accept the July 2008 Revisions for filing, effective September 4, 2008, as requested. Additionally, the emergency revision accepted and suspended in the January Order is accepted, effective October 17, 2007, without further conditions.

I. Emergency Revision

2. ISO-NE states in its ER08-61 filing that it does not currently include the cost of congestion in the locational marginal price (LMP) of an external transaction. Rather,

[1] *ISO New England Inc.*, 122 FERC ¶ 61,057 (2008) (January Order).

when market participants submit fixed transactions that exceed the Total Transfer Capability (TTC) of the interties between ISO-NE and a neighboring control area,[2] the Day-Ahead Energy Market economically clears enough counter-flow to honor the TTC. For example, if fixed exports from ISO-NE to the New York Independent System Operator, Inc. (NYISO) exceed the TTC, ISO-NE will schedule an off-setting number of imports from NYISO to avoid violating the TTC, even if it means scheduling imports that are offered at a higher price than the energy price at the external node. If ISO-NE must schedule such imports, then the importer is paid not only the energy price, but also a Net Commitment Period Compensation (NCPC) payment to cover the difference between the energy price and the offer price.[3]

3. On three days in October 2007, the TTC for the ties between ISO-NE and NYISO declined significantly in certain hours, forcing ISO-NE to clear a material amount of imports from NYISO to avoid violating the TTC.[4] As a result, approximately $230,000 in NCPC was paid to the imports. Although it observed no inappropriate bidding during these three days, this anomaly led ISO-NE to recognize that its market rules create an incentive to manipulate the scheduling of imports and exports in the Day-Ahead Market. Specifically, ISO-NE recognized that its rules allow market participants to simultaneously schedule offsetting imports and exports at the same external node, deliberately resulting in no net sales or purchases, for the sole purpose of receiving an NCPC payment.[5]

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[2] A fixed transaction is one that is not sensitive to price. That is, the entity requesting the schedule wishes the transaction to go forward regardless of the price.

[3] NCPC is allocated as an uplift charge to market participants in proportion to the daily sum of their Day-Ahead Load Obligations.

[4] These three days were October 3, 4, and 9, 2007. The TTC of the interties between ISO-NE and NYISO is approximately 1,000 MW.

[5] For example, a market participant could schedule a large fixed export to congest the external interface and then offer, at a price higher than the energy price, a price sensitive import to alleviate the congestion. The entity would pay the energy price for the export and receive the energy price for the import. However, the entity would also receive an NCPC payment for the import to cover the difference between the energy price and the offer price. Physically, the export and the import would largely cancel each other out (the entity's net schedule would be close to 0 MWh), but financially the entity would receive a net payment equal to the NCPC payment.

4. In October 2007, ISO-NE filed an emergency revision to its Tariff to eliminate this loophole.[6] In its filing, ISO-NE proposed to prohibit market participants (and/or their affiliates) from receiving NCPC payments on any offsetting external transactions that clear the Day-Ahead Energy Market when the external interface is binding. Thus, if a market participant submits a 100 MW fixed export transaction and a 120 MW price sensitive import transaction, and the interface is binding, 100 MW of the price sensitive import transaction will be ineligible to receive NCPC credits.

5. Commission staff issued a deficiency letter requesting that ISO-NE explain whether congestion pricing in external transactions is required by its Tariff, particularly by section III.2.6 (a),[7] and if so, whether pricing congestion in this manner would eliminate the opportunity for market manipulation and render the emergency revision unnecessary. In its response, ISO-NE acknowledged that its Tariff contemplates that day-ahead and real-time prices at all nodes, including external nodes, may include

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[6] ISO-NE filed the revision under the exigent circumstances provision of its Participants Agreement with the New England Power Pool Participants Committee (NEPOOL) and Individual Participants.

[7] Section III.2.6 (a) states:

> **Calculation of Day-Ahead Nodal Prices.** . . . . Such prices shall be determined in accordance with the provisions of this Section applicable to the Day-Ahead Energy Market and shall be the basis for the settlement of purchases and sales of energy, costs for losses *and Congestion Costs* resulting from the Day-Ahead Energy Market. . . . In performing this calculation, the ISO shall calculate the cost of serving an increment of load *at each Node and External Node* from each Resource associated with an eligible energy offer of bid as the sum of: (1) the price at which the Market Participant has offered to supply an additional increment of energy from the Resource of reduce consumption from the Resource; (2) *the effect on transmission Congestion Costs* (*whether positive or negative*) associated with increasing the output of the Resource or reducing consumption of the Resource, based on the effect of increased generation from that Resource or reduced consumption from a Resource on transmission line loading; and (3) the effect on transmission losses caused by the increment of load and generation. The energy offer or offers and energy bid or bids that can serve an increment of load *at a Node or External Node* at the lowest cost, calculated in this manner, shall determine the Day-Ahead Price at that Node.

ISO-NE FERC Electric Tariff No. 3, original sheet Nos. 7138-7141 (emphasis added).

congestion costs. However, ISO-NE distinguished between shadow prices[8] and clearing prices, stating that while the shadow price of binding constraints at external nodes fully reflects the market cost of serving the next increment of load at the external node, it does not establish the clearing prices. Instead, ISO-NE claimed that the published clearing price at the external node is the clearing price of the adjacent internal nodes.

6. In the January Order, the Commission accepted and suspended ISO-NE's emergency revision, and made it effective subject to refund and to the outcome of a technical conference.[9] While the Commission found that the emergency revision effectively eliminated the incentive for market participants to manipulate the scheduling of external transactions, it also stated that the loophole appeared to be caused by ISO-NE's failure to price congestion at external nodes.[10] The Commission observed that ISO-NE's response to the deficiency letter failed to address whether Tariff section III.2.6 (a) requires congestion pricing, and that ISO-NE failed to reference any Tariff section that defines the term "shadow price," provides authority to distinguish between clearing prices and shadow prices, or provides authority to set the clearing prices at any level other than the level described in Tariff section III.2.6 (a).[11] Consequently, the Commission established a technical conference[12] and directed ISO-NE to discuss whether removing congestion costs from the NCPC uplift mechanism and incorporating them in LMP at the external node was required by the Tariff and would reduce or eliminate the opportunity for the manipulation that prompted the emergency revision.

II. Technical Conference and Post-Technical Conference Comments

7. Notice of the technical conference was published in the *Federal Register*.[13]

8. Commission staff convened the technical conference on March 5, 2008. At the conference, ISO-NE claimed that, while congestion may occur between external and internal nodes in the day-ahead market, it cannot occur in the real-time market. ISO-NE stated that the reason congestion cannot occur in the real-time market is that dispatch in the real-time market is readjusted every five minutes, and thus, real-time prices are

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[8] A shadow price of a product is its marginal opportunity cost.

[9] January Order, 122 FERC ¶ 61,057 at P 25.

[10] *Id*. P 26, 31.

[11] *Id*. P 31-33.

[12] The Commission noted that ISO-NE had, in its response to the deficiency letter, requested that the Commission convene a technical conference.

[13] 73 Fed. Reg. 10,025 (2008).

recalculated every five minutes, but external transactions are fixed for the hour, and therefore no external transactions are eligible to set the price during a real-time five-minute interval. ISO-NE further claimed that because external transactions are scheduled hourly, net flows across interties with neighboring control areas are always less than or equal to the TTC of the interface, preventing the constraint from ever binding, and causing the congestion component of the LMP to always equal zero.

9. ISO-NE also stated that the day-ahead LMP at the external node may be different from the clearing price. ISO-NE acknowledged that using congestion pricing (that is, including congestion costs in the clearing price and setting the LMP equal to the clearing price) would eliminate the incentive that prompted the emergency revision, but claimed that it would also yield a day-ahead price that cannot be realized in real-time, and that the resulting difference between day-ahead and real-time prices would create a new strategic opportunity for gaming and raise concerns about expectations of price convergence.[14]

10. ISO-NE filed its PowerPoint presentation after the conference. Parties were given until March 19, 2008 to file post-technical conference comments. ISO-NE and NEPOOL submitted post-technical conference comments.

11. In its post-technical conference comments, ISO-NE stated that it was committed to working with stakeholders in 2008 and 2009 to review how external transactions are integrated into the pricing results and resource commitment schedule of the day-ahead market and to consider potential improvements to the treatment of external transactions. ISO-NE requested that the Commission allow it to go forward with this process before taking any further action. ISO-NE also stated that it was prepared to work with stakeholders in the near-term to develop and file Tariff changes that would clarify how external transactions are currently treated in the day-ahead market under its existing market rules. ISO-NE added that the existing market rules do not include details concerning the process by which external transactions are actually priced and scheduled

[14] ISO-NE offered an example to show how a market participant could engage in gaming under a system with congestion pricing. If there is congestion, a market participant could offer an import that would alleviate it at $500/MWh. This would price congestion and set the day-ahead clearing price at the external node at $500/MWh. In real-time, the market participant would elect not to flow the import. Since the real-time LMP contains no congestion component, it will be lower than the $500/MWh day-ahead clearing price (e.g., it could be $75/MWh). As a result, the participant could buy back its import at a lower price ($75/MWh) than it received in the day-ahead market ($500/MWh), resulting in a net gain even though the import necessary to alleviate the congestion in the day-ahead market never flowed.

through the day-ahead market. In addition, according to ISO-NE, the existing rules do not fully reflect the manner in which real-time operating practices associated with external tie lines are reflected in the day-ahead market and affect how any congestion costs are included in the prices at external nodes. ISO-NE included a draft Tariff change, but requested that the Commission refrain from acting on it because it had not yet been reviewed by stakeholders.

12. In its comments, NEPOOL requested that the Commission refrain from predetermining the outcome of regional efforts to conduct a comprehensive view of how external transactions are scheduled and compensated.

III. July 2008 Revisions

13. On July 3, 2008, in Docket Nos. ER08-1222-000 and ER08-62-002, ISO-NE and NEPOOL submitted for filing under section 205 of the Federal Power Act,[15] revisions to section III.2.6 of Market Rule 1 that are substantially the same as the draft revisions included in the post-technical conference comments.

14. ISO-NE and NEPOOL state that the July 2008 Revisions are intended to clarify the manner in which prices are currently determined for external nodes in the Day-Ahead Energy Market. ISO-NE and NEPOOL state that the July 2008 Revisions distinguish between the concepts of transmission constraints (i.e., limits on the flow over a line or set of lines) and nodal constraints (i.e., limits on the total net injections at a node), and that under the proposal, the prices at all nodes, including external nodes, would reflect the costs of transmission constraints. Consequently, congestion would be priced in external transactions to the extent that the congestion arises from transmission constraints. However, a binding nodal constraint would not directly affect the congestion component of an LMP at an external node. Thus, congestion would not be priced in external transactions to the extent that the congestion arises from nodal constraints. ISO-NE and NEPOOL state that because this change is clarifying in nature it would not result in any change to the software and processes that have been used by ISO-NE to determine Day-Ahead Prices at external nodes since the introduction of LMPs in March 2003.

15. ISO-NE and NEPOOL state that NEPOOL voted unanimously to support the July 2008 Revisions at its June 23-25, 2008 meeting.

[15] 16 U.S.C. § 824d (2006).

IV. Notice of Filing and Responsive Pleadings

16. Notice of the filing of the July 2008 Revisions was published in the *Federal Register*,[16] with protests and interventions due on or before July 24, 2008. Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc. (collectively, Constellation), H.Q. Energy Services (U.S.), Inc., and Northeast Utilities Service Company[17] filed timely motions to intervene.

A. Procedural Matters

17. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,[18] the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. Substantive Matters

18. We accept the July 2008 Revisions, effective September 4, 2008, as requested, and we will allow the emergency revision to remain in effect, no longer subject to refund. We note that our acceptance of these proposals is not intended to preclude ISO-NE from undertaking a review of potential improvements to the treatment of external transactions, which ISO-NE expects to begin this year.[19]

19. Based on the evidence presented at the technical conference, we find that existing sections III.2.5 (a) and III.2.6 (a) of ISO-NE's Tariff require the inclusion of congestion costs in calculating prices at all nodes, including external nodes. In its post-technical conference comments, ISO-NE conceded that its existing Tariff rules do not reflect its actual pricing and operational practices at external nodes. This results in an inconsistency between the pricing method described in the Tariff and the actual practice of ISO-NE.

20. We further conclude that the July 2008 Revisions remedy this inconsistency. We accept the July 2008 Revisions because they appropriately distinguish between

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[16] 73 Fed. Reg. 41,057 (2008).

[17] Northeast Utilities Service Company is acting as agent for: The Connecticut Light and Power Company, Western Massachusetts Electric Company, and Public Service Company of New Hampshire.

[18] 18 C.F.R. § 385.214 (2008).

[19] ISO-NE July 3, 2008 Filing at 2.

constraints that can bind in both the day-ahead and real-time markets and those that cannot bind in the real-time market. Transmission constraints can bind in both the day-ahead and real-time markets because changes in demand and supply can occur during real-time operations and can create or change the level of congestion affecting internal and external transactions at any time during the hour. Therefore, it is appropriate for day-ahead and real-time prices at all nodes, including external nodes, to reflect these constraints.

21. By contrast, nodal constraints at external nodes – which create absolute limits on the amount of net imports or exports – do not bind within the hour in real-time. According to ISO-NE, this is because import and export schedules are fixed at the beginning of each hour and are not adjusted within the hour.[20] Since nodal constraints can never bind in real-time, real-time prices at external nodes would never reflect a congestion component associated with a nodal constraint. Nodal constraints could bind in the day-ahead market, because the day-ahead market fixes both schedules and prices over an entire hour. However, we agree with ISO-NE that allowing day-ahead prices to reflect congestion associated with a binding nodal constraint could create incentives for gaming. Therefore, we find that it is reasonable for day-ahead prices at external nodes not to include congestion arising from nodal constraints, as ISO-NE proposes.

22. In the January Order we accepted, subject to refund, ISO-NE's proposal to restrict NCPC associated with offsetting import and export transactions at the same external node. ISO-NE argued that the restriction was needed to remove an incentive to game the market rules to obtain uplift payments. In setting the issue for further proceedings, we stated that this incentive appeared to be caused by ISO-NE's practice not to price congestion at external nodes; if so, pricing such congestion could remove the need for the uplift restrictions. However, as explained above, we have now accepted ISO-NE's proposal not to price congestion associated with binding nodal constraints at external nodes. Therefore, the need for the NCPC restrictions remains, and we will accept them, no longer subject to refund.

The Commission orders:

(A) The July 2008 Revisions filed in Docket Nos. ER08-61-002 and ER08-1222-000 are hereby accepted for filing, effective September 4, 2008, as requested, as discussed in the body of this order.

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[20] On July 17, 2008, in Docket No. ER08-1277-000, ISO-NE proposed an amendment to its Tariff that would allow for intra-hour scheduling of external transactions.

(B) The emergency revision at issue in the technical conference established in Docket No. ER08-61-001 is hereby accepted without further conditions, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.