



# Operating Procedures

ISO New England Operating Procedure No. 9

*Scheduling and Dispatch of External Transactions*

Effective Date: December 10, 2010  
Revision No. 11

## ISO NEW ENGLAND OPERATING PROCEDURE NO. 9 SCHEDULING AND DISPATCH OF EXTERNAL TRANSACTIONS

Effective Date: December 10, 2010

### REFERENCES:

1. North American Energy Standards Board (NAESB) Wholesale Electricity Quadrant (WEQ) Coordinate Interchange Standards - WEQ-004
2. NERC Reliability Standard - INT-006 - Response to Interchange Authority
3. NERC Reliability Standard - INT-008 - Interchange Authority Distributes Status
4. ISO New England Open Access Transmission Tariff (OATT)
5. ISO New England Market Rule 1 & Appendix H Cold Weather Event Operations
6. ISO New England Manual for Market Operations, Manual M-11
7. ISO New England Manual for the Forward Capacity Market, Manual M-20
8. ISO New England Manual for Tariff Accounting, Manual M-27
9. ISO New England Manual for Market Rule 1 Accounting, Manual M-28
10. ISO New England Manual for Billing, Manual M-29
11. ISO New England Manual for Definitions and Abbreviations, Manual M-35
12. ISO New England Operating Procedure No. 4 - Action During a Capacity Deficiency (OP-4)
13. ISO New England Operating Procedure No. 7 - Action in an Emergency (OP-7)
14. ISO New England Operating Procedure No. 8 - Operating Reserve and Regulation (OP-8)
15. ISO Web Site for OASIS Registration Information - <http://www.iso-ne.com/support/index.html>
16. ISO Web Site for "E-Tagging Procedures in New England" - [http://www.iso-ne.com/trans/services/types\\_apps/index.html](http://www.iso-ne.com/trans/services/types_apps/index.html)

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## I. INTRODUCTION

This ISO New England Operating Procedure (OP) describes the actions that ISO New England (ISO) must perform, with respect to developing External Transaction<sup>1</sup> schedules for external interfaces between Reliability Coordinator Areas/Balancing Authority Areas (RCA/BAA), for physical implementation in the Real-time Energy Market. All External Transactions must conform to the requirements of the ISO New England Operating Documents and applicable transmission tariffs.

Information regarding each External Transaction must be submitted to ISO in accordance with ISO New England Manual for Market Operations Manual M-11. Any External Transaction for which incomplete information is submitted will not be considered by ISO for physical implementation.

ISO operates both a Day-Ahead Energy Market and a Real-Time Energy Market, where External Transactions can be submitted to one or both of these markets. External Transactions submitted to the Day-Ahead Energy Market are used to develop financially binding schedules for the clearing and settlement of the Day-Ahead Energy Market. While the clearing of an External Transaction in the Day-Ahead Energy Market can influence how a corresponding Real-Time Energy Market External Transaction is scheduled, the External Transaction submitted to the Day-Ahead Energy Market will not result in the physical flow of energy. As such, this procedure does not address any details associated with Day-Ahead Energy Market External Transactions.

ISO will use External Transactions submitted for the Real-Time Energy Market that are supporting a Capacity Supply Obligation (CSO) and those that have cleared the Day-Ahead Energy Market when developing an operating plan and for physical implementation of the transactions. All other External Transactions submitted for the Real-Time Energy Market will be considered for physical implementation but are subject to ISO judgment regarding actions that must be taken to ensure system reliability. ISO will verify transmission arrangements (to the extent possible), NERC Interchange Transaction tagging, and the adequacy of the transaction information submittal. ISO will be prepared to modify schedules or reduce any and all transactions in the event that available market-based options are insufficient to ensure system reliability.

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<sup>1</sup> Unless otherwise noted, any use to the term External Transaction in this OP-9 shall refer to a Real-Time Energy Market External Transaction

## II. EXTERNAL TRANSMISSION CUSTOMER IDENTITY AND ELIGIBILITY

- A. An entity wishing to transact business on the external interfaces must register their information in the NERC database in conformance with FERC requirements. Each entity shall maintain current information in the NERC database and notify ISO of any changes. Additionally, entities wishing to transact business on the external interfaces shall submit contact information to the ISO, using the External Transmission Customer Contact Form posted on ISO's Web site, and shall complete requirements for access to the Open Access Same-Time Information System (OASIS). Steps for completing the requirements referred to in this section are outlined in the document, "ISO-NE OASIS Registration Information," posted on ISO's Web site, at <http://www.iso-ne.com/support/index.html>.
- B. ISO shall verify the accuracy of the external transmission customer information and confirm receipt of the External Transmission Customer Contact Form prior to allowing that company access to the software for submitting External Transactions to the markets.

## III. TRANSMISSION CONSIDERATIONS

### A. INTERNAL AND EXTERNAL TRANSMISSION ARRANGEMENTS

1. Any transmission service that is required from a transmission provider internal or external to the New England RCA/BAA must be obtained by a party to the External Transaction from the appropriate transmission provider(s). Examples of how advance transmission reservations are mapped to the External Transaction are outlined in Appendix A, "Mapping of External Transactions to Transmission Reservations."
2. Prior to implementing any External Transaction, ISO will verify, to the extent possible, that appropriate and adequate transmission service arrangements have been obtained from transmission providers within the New England RCA/BAA. Where possible, verification will be made through the OASIS. It is recognized that transmission service not posted on OASIS nodes may need to be verified. In such instances, ISO may use other means at its disposal to attempt to verify the existence of proper transmission arrangements.
3. ISO may ask the entity submitting the External Transaction to state in writing that proper transmission service arrangements are in place or to provide a copy of the transmission service agreement with the transmission provider.
4. If an External Transaction is implemented by ISO and a neighboring Reliability Coordinator/Balancing Authority (RC/BA), but the transmission service arrangements are not adequate with any transmission provider in the contract path the transmission customer may be subject to unauthorized use charges under the transmission provider's tariff from which adequate service was not procured.

**B. TRANSMISSION RESTRICTIONS**

1. Transmission restrictions imposed by a transmission provider or RC/BA external to the New England RCA/BAA will be accepted and applied by ISO. Such restrictions must be communicated to ISO Operations by the appropriate dispatch organization. ISO Operations will record the resulting External Transaction schedule amounts, availability of each transaction after the restrictions are applied, as well as the causing condition, in the transaction scheduling software. The restrictions will be reflected in the schedule and availability data that will be sent electronically to ISO Settlements for processing according to the ISO's accounting and billing manuals and the Open Access Transmission Tariff (OATT).
2. Transmission restrictions imposed by ISO that require a modification of requested schedules during the scheduling process will be addressed in accordance with Section V of this OP, "Scheduling and Dispatch of External Energy Transactions." The restrictions will be reflected in the schedule and availability data that will be sent electronically to ISO Settlements for processing according to the accounting and billing manuals and the OATT.
3. Transmission restrictions imposed by ISO that require partial or complete reduction of implemented External Transactions will be treated in accordance with the provisions outlined in Section VI of this OP, "Reductions of External Transactions Within the Scheduling Interval." Operations will record the resulting transaction schedule amounts, the availability of each transaction after applying the restriction, and the causing condition in the transaction scheduling software. The restrictions will be reflected in the schedule and availability data that will be sent electronically to ISO Settlements for processing according to the accounting and billing manuals and the OATT.

**IV. NERC INTERCHANGE TRANSACTION TAGGING REQUIREMENT**

- A. All External Transactions submitted to ISO for physical implementation in the Real-Time Market must have an associated NERC Interchange Transaction E-Tag that complies with the requirements of North American Energy Standards Board (NAESB) Wholesale Electricity Quadrant (WEQ) Coordinate Interchange Standards - WEQ-004. E-Tags shall be required for all External Transactions to be implemented for which the ISO is on the Scheduling Path as the Sink, Source or Intermediate RC/BA.
- B. ISO will review NERC E-Tags submitted by electronic means (via a NERC E-Tag compliant system) or in the case of a failure of this system, by FAX copies sent to the ISO Scheduling Office. ISO will actively approve or deny NERC E-Tags based solely on the information provide in the NERC E-Tag within the review time specified by NERC Reliability Standards INT-006 - Response to Interchange Authority and INT-008 - Interchange Authority Distributes Status.
- C. Before implementing any External Transaction in Real-Time, whether for an import, export or wheel-through, ISO will verify that a complete, approved NERC E-Tag exists for that External Transaction and that the energy profile on the NERC E-Tag and the External Transaction are consistent.
- D. Prior to the start time indicated in the NERC E-Tag, each NERC E-Tag must be associated with an existing External Transaction market submittal or the NERC E-Tag will be terminated by ISO.

## **V. SCHEDULING AND DISPATCH OF EXTERNAL ENERGY TRANSACTIONS**

### **A. GENERAL INFORMATION FOR THE REAL-TIME ENERGY MARKET**

1. Transmission Customers requesting physical implementation of External Transactions shall submit External Transaction details to ISO through the External Transaction scheduling software system for consideration in the Real-Time Energy Market. The ISO Scheduling Office will validate each External Transaction submittal in order of submission through a combination of automated software checks and manual review.
2. ISO will promptly notify the transaction submitter via the External Transaction scheduling software if an External Transaction has been rejected and the reason that it was rejected.
3. Market Participants may submit External Transactions for importing, exporting or wheeling energy through the New England RCA/BAA for the Real-Time Energy Market. Non-Participants may only submit wheel-through energy transactions to the Real-Time Energy Market.
4. Submitted External Transaction quantities must be expressed in whole megawatts (MW).
  - Losses are reflected in the loss component of the Locational Marginal Price (LMP) that is applied to the External Transaction and are settled as outlined in ISO New England Manual for Market Rule 1 Accounting, Manual M-28.
  - For all import and export transactions, the submittal must be stated in terms of the MW quantity to be received at or delivered to the RCA/BAA boundary.
  - For wheel-through transactions, the submittal must be stated in terms of the MW quantity to be received at the importing RCA/BAA boundary.
5. ISO will schedule External Transactions (imports, exports and wheel-through transactions) in whole MW at the New England RCA/BAA boundary.

6. External Transactions submitted to the Real-Time Energy Market shall have a minimum duration that is consistent with the scheduling practice established between ISO and each neighboring RC/BA. External Transactions shall be submitted with a minimum duration of one hour<sup>2</sup> and a maximum duration of one month. (For example, a month-long transaction might be from February 21 and to March 20, or from March 21 to April 20.)
7. External Transactions may be submitted to the Real-Time Energy Market as early as ten days prior to the Operating Day in which the transaction begins.
8. The deadline for submission of External Transactions depends on whether the transaction is priced or Self-Scheduled.
  - a.) Priced transactions (“real-time with price”) may be submitted up to the scheduling deadline, noon (or 0900 for a Cold Weather Event day in accordance with ISO New England Market Rule 1 Appendix H Cold Weather Event Operations) of the day prior to the Operating Day in which the transaction is requested to begin.
  - b.) Self-Scheduled transactions (“real-time without price”) may be submitted sixty minutes or more prior to the top of the hour<sup>3</sup> in which the transaction is requested to begin. When the necessary scheduling, dispatch and settlement software and business practices are in place, shorter submittal times will be allowed.
9. Following the initial submission, the External Transaction data pertaining to any given Operating Day may be modified. All modifications will be validated by the External Transaction scheduling software and the ISO Scheduler. The transaction timestamp will be updated to reflect the time when the modification was submitted. ISO will promptly notify the transaction submitter via the External Transaction scheduling software if a modification has been rejected and the reason that it was rejected.
  - a.) Priced External Transactions (“real-time with price”) may be modified up to the scheduling deadline of the day prior to the Operating Day in which the modification is to be effective.
    - i. After the scheduling deadline of the day prior to the Operating Day in which the transaction is requested to begin and sixty minutes or more prior to the top of the hour in which the energy is requested to be scheduled, megawatt quantities may be redeclared to a lower MW amount, including zero (0) MW.

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<sup>2</sup> ISO will implement schedules for less than full-hour intervals when all RCs/BAs and dispatching authorities on the scheduling path have agreed to such intervals, provided ISO’s staff has scheduling, dispatch and settlement software and business practices in place to allow schedules of fifteen minutes duration (or a multiple of fifteen minutes) to be developed, implemented and settled. Any such scheduling interval based on fifteen minutes or multiples of fifteen minutes will begin at the top of the hour, or at fifteen, or thirty or forty-five minutes after the top of the hour

<sup>3</sup> This submittal deadline may be different than those required by Neighboring RCs/BAs

- ii. During the Re-Offer Period of the day prior to the Operating Day in which the transaction is requested to begin, the price of the transaction may be modified to be higher or lower than the originally submitted value. If the price of a Real-Time External Transaction is changed by the Participant during the Re-Offer Period, those hours where the price is modified will be considered at that revised price in the scheduling of Real-Time Energy Market.
- b.) Self-scheduled External Transactions (“real-time without price”) may be modified sixty minutes or more prior to the top of the hour in which the modification is to be effective. Megawatt quantities may be redeclared for External Transactions sixty minutes or more prior to the top of the hour in which the energy is to be scheduled.

**NOTE:**

When the necessary scheduling, dispatch and settlement software and business practices are in place, shorter modification and/or redeclaration times will be allowed

10. In developing schedules for physical implementation, ISO will consider the requested External Transaction for each scheduling interval within each Operating Day. ISO will not consider any External Transaction request that is submitted to ISO outside of the stated submission and modification timeframe, nor will ISO consider any External Transaction that does not meet the transaction duration requirements.
11. Each scheduling interval for External Transactions shall be one hour, beginning at the start of the clock hour and ending at the end of the clock hour, except where shorter intervals are allowed under the operating protocols of ISO and the applicable external RC/BA<sup>4</sup>.
12. ISO will verify that required transmission arrangements under Section II of the ISO Tariff are in place, that the transaction information submittal is complete, and that all applicable external RCs/BAs involved have a record of the transaction. Only such verified transactions will be eligible for physical implementation in the Real-Time Energy Market.
  - a) If a Market Participant submits multiple External Transactions that reference a single OASIS reservation, the transactions will be mapped to the reservation in order of transaction submission as illustrated in Appendix A, “Mapping of External Transactions to Transmission Reservations.”
  - b) When a transaction references multiple OASIS reservations for Merchant Transmission Facility (MTF) or Other Transmission Facility (OTF) paths, the transaction will be mapped to the reservations as illustrated in Appendix A of this OP for stacking of reservations, and the lowest transmission priority of the reservations being used will be applied to the transaction.

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<sup>4</sup> See footnote for Section V.A.6.

- c) ISO will verify that NERC E-Tag requirements have been met. The document, “E-tagging Procedures in New England,” provides details of requirements for NERC tagging of transactions on the external ties for the New England RCA/BAA and is posted on the ISO external Web site at [http://www.iso-ne.com/trans/services/types\\_apps/index.html](http://www.iso-ne.com/trans/services/types_apps/index.html) .
13. ISO shall schedule transactions and physically implement flow across each external interface for each scheduling interval of the Operating Day. Imports, exports and wheel-through transactions will be considered for each scheduling interval, based on the applicable Locational Marginal Price (LMP), on a net basis up to the applicable transfer limit determined for each interface by ISO.
- The scheduling process for all interfaces is provided in ISO New England OATT Section II.44 and the details are set forth in Appendix B of this OP.
14. ISO will, to the best of its ability, reflect the impact of the economic loading of the external interface for the next scheduling interval upon the projected External Node LMP. If ISO expects that the scheduling of priced transactions may modify the projected LMP to the extent that those transactions are no longer economic, those transactions may be scheduled in part or may not be scheduled.
15. Any External Transaction, or portion thereof, submitted to the Real-Time Energy Market that did not clear in the Day-Ahead Energy Market will not be scheduled in Real-Time if the ISO anticipates that the External Transaction would create or worsen a minimum generation or capacity deficient condition.
16. Any External Transaction, or portion thereof, submitted to the Real-Time Energy Market that has cleared a corresponding Day-Ahead Energy Market transaction will continue to be scheduled in Real-Time prior to and during minimum generation or capacity deficient conditions, until the applicable procedures governing the condition, as set forth in Manual 11, require a change in schedule. When a reduction in the next scheduling interval is required for these conditions, the reductions shall be applied as defined in Appendix B of this OP.
17. ISO will normally only allow the scheduling of Participant EETs and out-of-merit imports in order to maintain Ten-Minute Operating Reserve Requirements, unless unusual or unexpected reliability needs or system conditions dictate a more conservative approach. An example of such a condition is if Thirty-Minute Operating Reserve would be depleted for more than four hours.

18. Implementation of large External Transactions or implementation of a number of External Transactions at the same time can cause a large change in the scheduled power flow on the ISO external ties from one hour to the next. Such power swings on the external ties can cause operating difficulties; hence, reliability concerns. Consequently, limitations may be placed on the allowed magnitude of the change (i.e., ramping limitation) in scheduled External Transactions from one scheduling interval to the next scheduling interval. This ramping limitation is established by Operations and may vary from day to day or hour to hour, depending on system circumstances. The process by which transactions are impacted by the ramp limitation is defined in Appendix B of this OP.

#### **B. SALES OF ENERGY BACKED BY INSTALLED CAPACITY TO EXTERNAL BALANCING AUTHORITY AREAS**

1. For the sale of energy from specified Generating Resource(s) with capacity above their CSO, ISO operational activities are limited to those required for administration and dispatch of the associated Energy transaction(s), as described in this OP.
2. Sellers wishing to export energy from specified Generating Resource(s) with capacity above their CSO must fulfill the requirements of the sink RC/BA and must identify such transactions to ISO at the time of submitting the export energy transaction to the Real-Time Energy Market in order to receive the priority in the Real-Time scheduling process as defined in OP-9 Appendix B.

#### **C. PURCHASES OF EXTERNAL INSTALLED CAPACITY**

1. Purchases of external installed capacity into New England are reflected as Import Capacity Resources associated with a CSO as defined in Section III.13 of the ISO Tariff. The Market Participant obligations associated with Import Capacity Resources associated with a CSO are defined in Section III.13.6 of the ISO Tariff.
  - a) ISO's operational activities are limited to those required for administration and dispatch of the associated Energy transaction(s), as described in this OP.
2. In addition to the changes allowed to transactions as defined in Section V.A.9(a) of this OP and in conjunction with the process in Section V.A.12 of this OP, Market Participants submitting priced External Transactions in support of Import Capacity Resource with a CSO over external interfaces, such as MTF or OTF, where advance OASIS reservations are required may link the OASIS reservation and corresponding E-Tag to the External Transaction 60 minutes or more before the start of the transaction.
  - a) Any Market Participant submitting an External Transaction in support of an Import Capacity Resource with a CSO that would have been otherwise scheduled in the Real-Time Energy Market based on

economics and availability on the external interface, but is not scheduled because the OASIS reservation and corresponding eTag are not linked to the External Transaction, will be subject to capacity penalties, as applicable, in accordance with Section III.13 of the ISO Tariff.

#### **D. CHECK OUT WITH NEIGHBORING RCs/BAs**

1. The ISO Scheduling Office will perform a day prior check out of External Transactions with each neighboring RC/BA to develop a preliminary interchange. The check out will compare NERC E-Tags and requested MW values of the transactions. Only External Transactions submitted to the Real-Time Energy Market by noon of the day prior to the Operating Day in which the transaction is requested to be scheduled will be included in the day prior check out, unless a Cold Weather Event is declared. Then only priced External Transactions submitted prior to 0900 and self-scheduled External Transactions submitted prior to noon of the day prior to the Operating Day in which the transaction is requested to be scheduled will be included in the day prior check out. The timing of such check out by ISO shall be in accordance with the timetable specified in Manual 11.
2. The day prior checkout process with each neighboring RC/BA is described in subsections (a) and (b) below. No External Transactions will be rejected because they do not checkout on the day prior with the neighboring RC/BA.
  - a) Real-Time Energy Market transactions involving New York, that are submitted by noon of the day prior to the Operating Day in which the transaction is requested to begin, will be compared to transactions that cleared the New York Day-Ahead Market, unless a Cold Weather Event is declared. Then only priced External Transactions involving New York, that are submitted prior to 0900 and self-scheduled External Transactions involving New York, that are submitted prior to noon of the day prior to the Operating Day in which the transaction is requested to be scheduled will be compared to transactions that cleared the New York Day-Ahead Market.
  - b) Real-Time Energy Market transactions involving ties to an RCA/BAA other than New York, that are submitted by noon of the day prior to the Operating Day in which the transaction is requested to begin, will be compared to transactions that exist in the neighboring RC/BA system, unless a Cold Weather Event is declared. Then only priced External Transactions involving ties to an RCA/BAA other than New York, that are submitted prior to 0900 and self-scheduled External Transactions involving ties to an RCA/BAA other than New York, submitted prior to noon of the day prior to the Operating Day in which the transaction is requested to be scheduled will compared to transactions that exist in the neighboring RC/BA system.

3. After applying the scheduling process described in Appendix B, ISO Operations will perform a check out of External Transactions submitted to the Real-Time Energy Market that are being considered for physical implementation for the next scheduling interval with each neighboring RC/BA.
4. If an External Transaction submitted to ISO for consideration for real-time implementation does not check out with the neighboring RC/BA for a given scheduling interval, ISO will not schedule the transaction for that hour.

## **VI. REDUCTION OF EXTERNAL TRANSACTIONS WITHIN THE SCHEDULING INTERVAL**

### **A. GENERAL INFORMATION REGARDING REDUCTIONS WITHIN THE SCHEDULING INTERVAL**

ISO distinguishes between MW reductions that result from modifying requested External Transactions for the next scheduling interval and reductions that are made after the scheduling interval has begun due to events on the power system. Modifications made for the next scheduling interval are described in Section V, Scheduling and Dispatch of External Energy Transactions of this OP. Reductions made within the scheduling interval are described in this section.

1. Since External Transactions are not implemented as physical flows based on schedules developed in the Day-Ahead Energy Market, this section is applicable only to External Transactions submitted to the Real-Time Energy Market.
2. ISO will be prepared to reduce each and all of the External Transactions that have been implemented for physical flow across an external interface if necessary to maintain system reliability. There are different circumstances under which certain transactions may be reduced, depending on the effect on the power system, and on the particular external interface involved. All reductions will be determined in a non-discriminatory manner as outlined in the following sections.
3. Reductions within a scheduling interval may be due to, but not limited to:
  - a) Transmission restrictions (both internal and external),
  - b) Other system reliability concerns.

### **B. TRANSMISSION RESTRICTIONS**

1. External Transactions may produce overloading on the external interface where they are scheduled and on internal interfaces due to the nature of parallel electricity flow. The transaction priority which will be considered in order to relieve an overloaded interface will depend on the transmission service being utilized at the location of the transmission restriction.
2. For external interfaces where no advance physical reservations are required and transmission service is provided for External Transactions scheduled in the Real-Time Energy Market, reductions will occur in the reverse order of the scheduling process that occurred on that interface, pursuant to ISO New England OATT Section II.44.b. Additional detail is provided in Appendix B.

3. For interfaces where advance physical reservations are required, reductions will occur in the reverse order of the scheduling process on that interface, except that economics will not be considered during the reductions, pursuant to ISO New England OATT Section II.44.d. In instances of energy scheduled against multiple reservations from a single transmission provider, the lowest transmission priority of the associated reservations will apply. Additional detail is provided in Appendix B of this OP.
4. The transaction priority for wheel-through transactions will be based on the transmission service utilized at the restricted interface as indicated by the transmission reservation.

### **C. OTHER SYSTEM RELIABILITY CONCERNS**

1. When reductions to External Transactions are required that relate to capacity deficient conditions for the next scheduling interval or within a scheduling interval, those reductions will be made using the methods as detailed in Appendix B to OP-9.
  - An External Transaction that meets the requirements of Section III.1.10.7(i) of the ISO Tariff will not be reduced in response to actual or projected system wide capacity deficient conditions until such time as Regional Network Load within the New England RCA/BAA is also being reduced except as required to maintain transmission security (e.g., voltage, stability)
  - When local area capacity deficient conditions occur or are projected and External Transactions that meet the criteria defined in Section III.1.10.7(f) i, ii or iii<sup>5</sup> are present within that local area, ISO will consider OP-4 actions up to and including the activation of Real-Time Demand Response, to the extent it would resolve the local area capacity deficiency and as time permits, prior to reducing the transaction. However, curtailment of such transactions would be used when, and to the degree necessary to preserve reliable operation of the system.
2. ISO will reduce import External Transactions as they relate to minimum generation conditions occurring within a local area or on a wider scale, as defined in Appendix B, in accordance with the applicable provisions for Minimum Generation Emergency Conditions defined in ISO New England Manual for Market Operations Manual M-11.

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<sup>5</sup>The considerations described in this section do not apply to any Section 1.10.7(f)iii transaction submitted after the close of the reoffer period if the Non-CSO MWs from the generator backing the transaction were offered prior to the close of the re-offer period

**VII. EMERGENCY ENERGY TRANSACTIONS (EET) IN THE REAL-TIME ENERGY MARKET**

When the New England RCA/BAA experiences or is forecast to experience a shortage of operating capacity, ISO will operate the system according to the provisions of ISO New England Operating Procedure No. 4, Actions During a Capacity Deficiency (OP-4). This section addresses provisions for Market Participants to submit Emergency Energy Transactions (EETs) during periods when such capacity shortages are anticipated or declared. Control Area to Control Area Emergency transactions, which may only be initiated by ISO, will be scheduled in accordance with the process outlined in OP-4.

1. When actions of OP-4 are anticipated or declared that would allow the scheduling EETs, ISO will post a Special Notice to the ISO external website requesting the submittal of EETs for specified hour(s) and amount(s).
2. EETs may be submitted to ISO via the transaction scheduling software as imports with the designation, “EET Emergency,” and may be submitted as either Self-Scheduled (“Real-Time without Price”) or priced (“Real-Time with Price”). EETs may be submitted sixty minutes or more prior to the top of the hour in which the transaction is requested to begin.
3. EETs will be scheduled only for hours when ISO is arranging the purchase available of emergency capacity and energy, or energy only in accordance with OP4. EETs will be scheduled and reduced along with other External Transactions that are not designated as EETs. The same operational considerations will apply to EETs and transactions that are not EETs.

## **VIII. SECURITY ENERGY TRANSACTIONS (SET) IN THE REAL-TIME ENERGY MARKET**

This section addresses provisions for Market Participants to submit Security Energy Transactions (SETs) during periods when the New Brunswick to New England minimum tie flow requirements are violated or potentially could be violated.

The New England and New Brunswick RCAs/BAAAs share a joint Interconnection Reliability Operating Limit (IROL) related to minimum flow requirements on the New Brunswick - New England transmission interface (consisting of the 3001 line and the 390/3016 line) that defines the boundary points of the two RCAs/BAAAs. At infrequent intervals, the flow on the interface is insufficient from north to south to ensure acceptable steady-state and transient performance of the Maine system and reliable performance of the 3001 and the 390/3016 lines on a post-contingency basis. ISO takes the lead role in determining the requirements and coordinating operations between the RCAs/BAAAs to avoid or correct violations. In order to avoid or correct a violation, both parties will take corrective action(s) using no-cost methods first. However, if after exhausting such no-cost methods, a violation or potential violation still exists, ISO will take the following actions, as necessary and in the following order, in coordination with Market Participants and the New Brunswick System Operator to avoid or correct the violation of the minimum flow requirement:

1. Reduce exports from New England to New Brunswick.
2. Request Security Energy Transactions (SETs)
  - a) ISO will post a Special Notice to the ISO external website requesting the submittal of SETs for specified hour(s) and amount(s).
  - b) SETs may be submitted to the ISO via the External Transaction scheduling software as imports with the designation, "Security Energy Transactions" and may be submitted as either Self-Scheduled ("Real-Time without Price") or priced ("Real-Time with Price"). SETs may be submitted sixty minutes or more prior to the top of the hour in which the transaction is requested to begin.
3. Energy (including Security Energy Transactions) is scheduled for the next scheduling interval to the required MW level, based on economics, from all available offers in sufficient quantity to correct the potential or actual violation.
4. If steps 1 through 3 above do not fully correct the potential or actual violation, then Control-Area-to-Control-Area Security Energy will be scheduled to satisfy the minimum flow requirement.

**IX. NOTIFICATIONS**

1. ISO will develop and publish the External Transaction schedules for the Day-Ahead Energy Market for each hour of each Operating Day (available to the party submitting the transaction). The schedules will be made available concurrent with all other Day-Ahead Energy Market schedule publications.
2. Market Participants are able to monitor the status of their submitted External Transactions through the transaction scheduling software in order to determine whether they will be considered for scheduling in the Real-Time Energy Market.
3. When an External Transaction must be reduced, ISO Operations will inform the party who submitted the transaction to the Real-Time Energy Market as soon as possible after ISO becomes aware of the existence of conditions that prevent or restrict energy deliveries. ISO will indicate, to the extent of its knowledge, the reason for reduction.
4. Details with respect to the use of transmission service on the Pool Transmission Facilities (PTF), Other Transmission Facilities (OTF), and Merchant Transmission Facility (MTF) ties by each External Transaction that was implemented in the Real-Time Energy Market will be posted on the OASIS within seven days of the Operating Day, per FERC requirements.

**X. SETTLEMENT AND BILLING INFORMATION**

The Market Participant submitting the External Transaction to the Day-Ahead Energy Market or the Real-Time Energy Market will be responsible for all applicable charges, as determined by ISO under the provisions of ISO Operating Documents.

The schedule and availability data will be sent electronically to ISO Settlements for processing in accordance with the billing and settlement manuals.

**OP 9 REVISION HISTORY**

**Document History** (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

Rev. No.	Date	Reason
Rev 0	12/06/02	
Rev 1	10/03/03	
Rev 2	11/05/04	
Rev 3	02/01/05	Updated to conform to RTO terminology
Rev 4	03/03/05	Update References for NERC Version 0 Standards and deleted reference to OP 20 and added Market Rule 1 Appendix H
Rev 5	05/27/05	Revised to include recallable transactions associated with partially de-listed resources and incorporated language resulting from the NB/NE Coordination agreement.
Rev 6	04/13/07	Revised to clarify when export transactions may be curtailed/interrupted under capacity deficient system conditions
Rev 7	06/03/08	Annual Review by Procedure Owner. Revised to incorporate Market Rule changes associated with various aspects of external transaction submittal and scheduling and reductions of implemented schedules. Global change of Control Area to Balancing Authority (CA/BA) or Balancing Authority Area (CA/BAA) reflecting both ISO and NERC definitions.
Rev 8	10/01/08  *07/01/09	Change the use of the term “hourly” scheduling to “scheduling interval” to be clear that scheduling can occur more frequently than once an hour. *Added Step V.C.3., and sub-step V.C.3.a), to include the OP9 changes that were approved last year but were not to become effective until July 1; 2009. This language was stricken from of the version that was posted on 10/1/08. This version returns this language and is effective July 1, 2009.
Rev 9	06/01/10	Conforming changes for FCM
Rev 10	06/04/10	Biennial review by procedure owner; Conforming changes due to Market Rule changes
Rev 11	12/10/10	Editorial & format changes: font to Arial, added uncontrolled disclaimer to 1 <sup>st</sup> page footer, added “Hard Copy is Uncontrolled” to all page footers and changed page numbering format to Page X of Y; Globally replaced CA/BA with RC/BA and CA/BAA with RCA/BAA where applicable; In the reference section and Globally corrected reference document titles and added documents referred to in OP text; Defined acronym for Capacity Supply Obligation (CSO) and used it in all subsequent instances; Section IV.A replaced INT-001 with WEQ-004; Section IV.B deleted 1 <sup>st</sup> phrase referring to INT-001 in 1 <sup>st</sup> sentence, replaced INT-001 with INT-006 and added INT-008 in last sentence; Section VIII. Replaced “396/3001” with “3001” in both instances. (With the construction of the Keene Rd Substation it has been determined that the tie line that runs from Keswick to the new Substation will be recognized with the designation 3001 that is currently utilized by the NBSO)