# **August 21 Draft**

New York Independent System Operator, Inc. FERC Electric Tariff Original Volume No. 2 Attachment J

Substitute Original Sheet No. 486 Superseding Original Sheet No. 486

#### ATTACHMENT J

## FORMULA FOR DETERMINING DAY-AHEAD MARGIN ASSURANCE PAYMENT

#### I. DAY-AHEAD MARGIN ASSURANCE PAYMENTS

#### 1.0 Payments

Except as noted in Section 1.3 of this Attachment J, Day-Ahead Margin aAssurance

Payments for generating units shall be determined using the following equations:

$$DMAP_{hu} = \max \left(0, \sum_{i \in h} CDMAP_{iu}\right)$$
 and

$$CDMAP_{iu} = \left\{ \left[ DAS_{hu} - \max(RTBP_{iu}, AEI_{iu}) \right] RTP_{iu} - \int_{LL_{iu}}^{DAS_{hu}} DAB_{hu} \right\} * \frac{Seconds_i}{3600},$$

where:

 $DMAP_{hu}$  = the Day-Ahead Margin Assurance Payment attributable in any hour h to any generating unit u;

 $CDMAP_{iu}$  = the contribution of <u>SCRT</u>D interval *i* to the Day-Ahead Margin Assurance Payment for unit *u*;

 $DAS_{hu} = dD$ ay-aAhead eEnergy schedule for unit *u* in hour *h*;

 $RTBP_{iu}$  = average 6-second ramped  $\frac{SCRT}{D}$  basepoint for unit *u* in interval *i*;

 $AEI_{iu}$  = average <u>aA</u>ctual <u>eE</u>nergy <u>iI</u>njection by unit *u* in interval *i*;

RTPiu = real-time price at the location of unit u in interval i;

 $LL_{iu} = \max(RTBP_{iu}, AEI_{iu});$ 

 $DAB_{hu}$  = Bid curve for unit u submitted in the Day-Ahead Market for hour h; and  $Seconds_i$  = number of seconds in interval i.

The value of  $RTBP_{i\iota\iota}$  in the equation above shall be determined using an arithmetic average of

the AGC Base Point Signals sent to a unit over the course of a given SCRTD interval, i.e., the

Issued by: William J. Museler, President Effective: January 31, 2003

Issued on: March 31, 2003

Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. ER03-238-000, issued January 30, 2003, 102 FERC ¶ 61,096 (2003).

period between the NYISO's issuance of two successive SCRTD Base Point Signals. The AGC

Base Point Signal for a unit that is not providing Regulation Service during a given SCRTD

interval shall be initialized by either: (i) the unit's last AGC Base Point Signal from the prior

SCRTD interval; or (ii) the unit's actual metered generation at the time new SCRTD Base Point

Signals are received by the ISO's AGC software, whichever is closer to the unit's new SCRTD

Base Point Signal. AGC Base Point Signals for a unit that is not providing Regulation Service

will ramp evenly over the course of the SCRTD interval starting at the initialized AGC Base

Point Signal and ending at the level of its new SCRTD Base Point Signal. AGC Base Point

Signals for units providing Regulation Service during a given SCRTD interval are determined

based on the ISO's need to minimize the NYCA area control error.

Issued by: William J. Museler, President

Issued on: March 31, 2003

Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. ER03-238-000, issued

Effective:

January 31, 2003

January 30, 2003, 102 FERC  $\P$  61,096 (2003).

New York Independent System Operator, Inc.

#### II. EXCEPTIONS TO DAY-AHEAD MARGIN ASSURANCE PAYMENTS

#### 1.0 Generators Lagging Behind SCRTD Base Point Signals

Generators that do not respond to or that lag behind the ISO's Security

Constrained DispatchRTD Base Point Signals in a given SCD-interval, as determined below, shall not be eligible for Day-Ahead Margin assurance payments for that interval.

If a Generator's average aActual Energy iInjection in an SCRTD interval (i.e., its aActual eEnergy iInjections averaged over the SCRTD interval) is less than or equal to its penalty limit for under-generation value for that interval it shall not be eligible for Day-Ahead Margin assurance payments for that SCRTD interval.

### 1.0.1 The Penalty Limit for Under-Generation Value

The Ppenalty limit for under-generation value is the tolerance described in Section 1.04.0a of Rate Schedule 3-A of this Tariff, which is set pursuant to ISO Procedures, and used in the calculation of the persistent under-generation charge applicable to Suppliers that are not providing Regulation Service.

# 1.1 <u>Exclusion of Self-Committed Fixed and Self-Committed Flexible</u>

# **Generators** Class B Units

Self-Committed Fixed and Self-Committed Flexible Generators Class B Units are not eligible for Day-Ahead Margin aAssurance pPayments unless they are scheduled by the NYISO out of economic merit order in response to an ISO or Transmission Owner system security need or to permit the ISO to procure additional Operating Reserves.

Effective:

January 31, 2003

Issued by: William J. Museler, President

Issued on: December 2, 2002

Attachment J

#### **Generators Scheduled to Supply Ten-Minute Spinning Reserves**

If a Class A Generator is scheduled to supply Spinning Reserves in real time and is scheduled by the NYISO out of economic merit order in response to an ISO or TO system security need, or to permit the ISO to procure additional Operating Reserves, it shall be eligible for either a real-time Lost Opportunity Cost payments or a Day-Ahead Margin assurance payments. Such a Generator will be eligible for a Day-Ahead margin assurance payment between (i) the higher of its average six second ramped SCD Base Point Signal or its average actual Energy injection and (ii) its Day Ahead Energy schedule. Such a Generator shall also be eligible for real-time Lost Opportunity Cost Payments to the extent that it supplied Spinning Reserves. No Generator, however, shall receive both Day Ahead Margin assurance payments and real-time Lost Opportunity Cost payments for the same portion of its Day Ahead bid curve. In the event that a Generator is eligible to receive both payments for a given portion of its bid curve, it will receive only the real time Lost Opportunity Cost payment.

(NOTE: ISO Staff is considering whether something like the existing Section 1.2 is still needed.)

#### **1.32 Generator Requested Derates**

Generator that request and are granted a derate of their real-time Operating Capacity, but otherwise meet all other eligibility requirements pursuant to this Attachment J may receive Day-Ahead Margin aAssurance Peayments. If a Generator's

Effective:

January 31, 2003

Issued by: William J. Museler, President

Issued on: March 31, 2003

Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. ER03-238-000, issued January 30, 2003, 102 FERC ¶ 61,096 (2003).

New York Independent System Operator, Inc. FERC Electric Tariff Original Volume No. 2

Attachment J

Substitute Original Sheet No. 489 Superseding Original Sheet No. 489

derated real-time Operating Capacity less its real-time 10-Minute-Spinning Reserve or real-time Regulation Service schedule, if any, is less than its Day-Ahead Energy schedule, then the Generator's derated real-time Operating Capacity less its real-time 10-Minute-Spinning Reserve or real-time Regulation Service schedule, shall be used in place of the Day-Ahead Energy schedule in the equations set forth in Section I of this Attachment J.

Issued by: William J. Museler, President Effective: January 31, 2003

Issued on: March 31, 2003

Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. ER03-238-000, issued January 30, 2003, 102 FERC ¶ 61,096 (2003).