Original Sheet No. 251

### **SCHEDULE 3**

### <u>CHARGES FOR</u> REGULATION AND FREQUENCY RESPONSE SERVICE

Regulation and Frequency Response-Service is necessary to provide for the continuous balance of resources (generation and interchange) with Load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Regulation and Frequency Response Service is accomplished by committing on-line generationGenerators whose output is raised or lowered (predominantly through the use of automatic generating control equipment) as necessary to follow the moment-by-moment changes in Load. The obligation to maintain this balance between resourcesResources and Load lies with the ISO. The ISO must offer this service when the Transmission Service is used to serve Load within the NYCA. The Transmission Customer must either purchase this service from the ISO or make alternative comparable arrangements-pursuant to the provisions set forth in the ISO Services Tariff to satisfy its Regulation and Frequency Response-Service obligation. The charges for Regulation and Frequency Response Service are set forth below.

### **1.0** Customer Obligations and Responsibilities

Transmission Customers and LSEs shall either purchase this service from the ISO,

Self-Supply, or purchase this service from alternate Suppliers. <u>Alternate Suppliers and sources</u> for Self-Supply shall comply with those conditions specified in Rate Schedule 3 of the ISO Services Tariff.

## 2.0 Charges to Transmission <u>CustomerCustomers</u>

(a) For all Actual Energy Withdrawals for Load located in the NYCA, the LSE is considered the Transmission Customer taking service under Parts II, III and IV of this Tariff for purposes of this Rate Schedule and shall pay a charge for this service on all Transmission Service in accordance with this Tariff and purchases in the LBMP Markets in accordance with the ISO Services Tariff, when such service serves Load located in the NYCA.

(b) The ISO shall calculate the charge, for each hour, as follows: LSE Charge = (Supplier Payment - Supplier Charge - Generator Charge) x LRS<sub>LSE</sub>

where:

Supplier Payment is the aggregate of the availability payments<u>all Day-Ahead Market and</u> <u>Real-Time Market payments (including Regulation Revenue Adjustment Payments)</u> made by the ISO to all Suppliers of this<u>Regulation serviceService</u> as described in Section 4.0(b)Sections 4.0, <u>5.0, 6.0 and 7.0</u> of Rate Schedule 3 of the ISO Services Tariff; <u>.</u>

Supplier Charge is the aggregate of: (i) charges paid by all Suppliers for poor Regulation <u>Service performance, as described in Section 4.15.4 and, if its provisions are re-instituted,</u> <u>Section 8.0 of Rate Schedule 3.</u> Rate Schedule 3: (ii) all real-time imbalance charges paid by <u>Suppliers under Section 5.2(a) of the ISO Services Tariff; that Rate Schedule; and all (iii)</u> <u>Regulation Revenue Adjustment Charges assessed pursuant to Section 6.0 of that Rate Schedule.</u>

# Generator Charge is the aggregate of charges paid by all Generators that do not provide

Original Sheet No. 253

Regulation Service and do not follow their SCDRTD Base Points sufficiently accurately, as

described in Section 4.2 of Rate Schedule 3-A of the ISO Services Tariff; and

LRS<sub>LSE</sub> is each Transmission Customer's share of the Load in the NYCA.

(c) In any hour where the charges paid by Generators and Suppliers, as described in

the ISO Services Agreement Tariff, exceed the payments made to Suppliers of this service (i) the

ISO shall not assess a charge against any LSE, and (ii) the surplus will be applied to the

following hour as an offset to subsequent payments.

(d) Charges to be paid by Transmission Customers for this service shall be aggregated to render a monthly charge.

Schedule 5

Original Sheet Nos. 254 through 255

Sheet Nos. 254 through 255 are reserved for future use.

 Issued by:
 William J. Museler, President
 Effective:
 September 1, 2000

 Issued on:
 November 10, 2000
 Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. RM99-12-000, issued March 31, 2000, 90 FERC ¶ 61,352 (2000). New York Independent System Operator, Inc.

 FERC Electric Tariff
 Original Sheet No. 263

 Original Volume No. 1
 1

### **SCHEDULE 5**

### <u>CHARGES FOR</u> OPERATING RESERVE SERVICE

The ISO must offer this service when the Transmission Service is used to serve Load within the NYCA or to support Export Transactions from the NYCA. The Transmission Customer must either purchase this service from the ISO or make alternative comparable arrangements to satisfy its Operating Reserve Service-obligation. The amount of, and charges for, Operating Reserve Service are set forth below. The ISO shall establish the following Operating Reserves in accordance with the ISO Procedures and the Reliability Rules: (1) Spinning Reserve (10 Minute Synchronized Reserve); (ii) 10 Minute Non Synchronized Reserve; and (iii) 30 Minute Reserve. The ISO shall maintain Operating Reserves requirements are established using the Operating Reserve Demand Curves described in Rate Schedule 4 of this ISO Services Tariff, in accordance with the ISO Procedures and the Reliability Rules the Reliability Rules and other applicable reliability standards. The ISO shall monitor the level of Operating Reserves utilizing the security monitoring program. Transmission Customers, Transmission Owners and Suppliers shall supply all data required for the proper operation of the security monitoring program.

The NYSRC shall establish the criteria for determining the required levels of Operating Reserves. The NYSRC shall be responsible to evaluate for evaluating the adequacy of the criteria for

Original Sheet No. 264

determining the required level of Operating Reserves and shall modify such criteria from time to

time as required. Operating Reserves are classified as follows:

- (1) <u>Spinning Reserve</u>: Operating Reserves provided by generation facilities and Interruptible Load Resources located within the NYCA that are already synchronized to the NYS Power System and can respond to instructions to change output level within ten (10) minutes;
- (2) <u>10 Minute Non Synchronized Reserve ("10 Minute NSR")</u>: Operating Reserves provided by generation facilities that can be started, synchronized and loaded within ten (10) minutes; and
- (3) <u>30 Minute Reserve:</u> Operating Reserves provided by generation facilities and Interruptible Load Resources that can respond to instructions to change output level within thirty (30) minutes.

The ISO shall satisfy at least fifty (50) percent of the applicable 10 Minute Reserve requirements with Spinning Reserve. If the ISO satisfies all of the 10 Minute Reserve requirement through Spinning Reserve, it does not have to maintain 10 Minute NSR. The ISO shall establish additional categories of Operating Reserves if necessary to ensure reliability.

### **1.0** General Requirements

The ISO shall ensure that providers of Operating Reserves are properly located electrically so that transmission Constraints resulting from either <u>the</u> commitment or dispatch of <u>unitsSuppliers</u> do not limit the ability to deliver Energy to Loads in the case of a Contingency. The ISO will ensure that <u>Suppliers that are compensated for using</u> Capacity <del>counted towards</del> meeting<u>to provide one</u> Operating Reserve requirements<u>product</u> is<u>are</u> not also counted towards <u>meetingsimultaneously compensated for providing another Operating Reserve product, or</u> Regulation and Frequency Response-Service requirements<u>, using the same Capacity (consistent</u> with the additive nature of the market clearing price calculation formulae in Sections 5.1 and 6.1 of Rate Schedule 4 of this ISO Services Tariff).

### 2.0 **Operating Reserves Charges**

Each Transmission Customer engaging in an Export and each LSE shall pay a monthly Operating Reserves charge equal to the sum of the hourly charges for the month. The ISO shall calculate, and the LSE or Transmission Customer shall pay, the hourly<u>daily</u> charge equal to the product of (A) cost to the ISO of providing all Operating Reserves less any revenues from penalties collected during each hour; and (B) the ratio of (i) the LSE's Load or the Transmission Customer's scheduled Export to (ii) the sum of all Load in the NYCA and all scheduled Exports during that hour. The cost to the ISO of providing Operating Reserves <u>in each day will equal the</u> total amount that the ISO pays to procure Operating Reserves on behalf of the market in the Day-<u>Ahead Market and the Real-Time Market, less payments collected from entities that</u> are described scheduled to provide less Operating Reserves in the Real-Time Market than in the DayAhead Market during that day, under Rate Schedule 4 of the ISO Services Tariff.

# 3.0 Self-Supply

Transmission Customers, including LSEs, may provide for Self-Supply of Operating

First Revised Sheet No. 266 Superseding Original Sheet No. 266

Reserve by placing generation facilities supplying any one of the Operating Reserves under ISO Operational Control. The generation facilities must meet ISO rules for acceptability. The amount that any such customer will be charged for Operating Reserves Services will be reduced by the market value of the services provided by the specified generation facilities as determined in the ISO Services Tariff. In addition, Transmission Customers, including LSEs, may enter into Day-Ahead Bilateralbilateral financial transactions, *e.g.*, contracts-for-differences, in order to hedge against price volatility in the Operating Reserves markets.

Issued by:William J. Museler, PresidentIssued on:January 16, 2001

Effective:

January 2, 2001

New York Independent System Operator, Inc. FERC Electric Tariff Original Volume No. 1

Original Sheet Nos. 267 through 268

Sheet Nos. 267 through 268 are reserved for future use.

Document comparison done by DeltaView on Thursday, October 09, 2003 14:34:54

Document 1	pcdocs://washington/375468/1
Document 2	pcdocs://washington/377734/1
Rendering set	cathy

# Legend: Insertion Deletion Moved from Moved to Format change Moved deletion Inserted cell Deleted cell Moved cell Split/Merged cell Padding cell

Statistics:		
	Count	
Insertions	38	
Deletions	64	
Moved from	0	
Moved to	0	
Format changed	0	
Total changes	102	