

## Attachment VI

## **26.4 Operating Requirement and Bidding Requirement**

### **26.4.1 Purpose and Function**

The Operating Requirement is a measure of a Customer's expected financial obligations to the ISO based on the nature and extent of that Customer's participation in ISO-Administered Markets. A Customer shall be required to allocate Unsecured Credit, where allowed, and/or provide collateral in an amount equal to or greater than its Operating Requirement. Upon a Customer's written request, the ISO will provide a written explanation for any changes in the Customer's Operating Requirement.

The Bidding Requirement is a measure of a Customer's potential financial obligation to the ISO based upon the bids that Customer seeks to submit in an ISO-administered TCC or ICAP auction. A Customer shall be required to allocate Unsecured Credit, where allowed, and/or provide collateral in an amount equal to or greater than its Bidding Requirement prior to submitting bids in an ISO-administered TCC or ICAP auction.

### **26.4.2 Calculation of Operating Requirement**

The Operating Requirement shall be equal to the sum of (i) the Energy and Ancillary Services Component; (ii) the UCAP Component; (iii) the TCC Component; (iv) the WTSC Component; (v) the Virtual Transaction Component; (vi) the DADRP Component; and (vii) the DSASP Component where:

#### **26.4.2.1 Energy and Ancillary Services Component**

The Energy and Ancillary Services Component shall be equal to:

- (a) For Customers without a prepayment agreement, the greater of either:

$$\frac{\text{Basis Amount for Energy and Ancillary Services}}{\text{Days in Basis Month}} \times 5016$$

- or -

$$\frac{\text{Total Charges Incurred for Energy and Ancillary Services for Previous Ten (10) Days}}{10} \times 5016$$

- (b) For Customers that qualify for a prepayment agreement, subject to the ISO's credit analysis and approval, and execute a prepayment agreement in the form provided in Appendix K-1, the greater of either:

$$\frac{\text{Basis Amount for Energy and Ancillary Services}}{\text{Days in Basis Month}} \times 3$$

or-

$$\frac{\text{Total Charges Incurred for Energy and Ancillary Services for Previous Ten (10) Days}}{10} \times 3$$

- (c) For new Customers, the ISO shall determine a substitute for the Basis Amount for Energy and Ancillary Services for use in the appropriate formula above equal to:

$$\text{EPL} \times 720 \times \text{AEP}$$

where:

EPL = estimated peak Load for the Capability Period; and

AEP = average Energy and Ancillary Services price during the Prior Equivalent Capability Period after applying the Price Adjustment.

#### **26.4.2.2 UCAP Component**

The UCAP Component shall be equal to the total of all amounts then-owed (billed and unbilled) for UCAP purchased in the ISO-administered markets.

#### **26.4.2.3 TCC Component**

The TCC Component shall be equal to the greater of either 26.4.2.3(a) or 26.4.2.3(b) where:

- (a) The sum of the amounts calculated in accordance with the appropriate per TCC term-based formula listed below for TCC purchases less the amounts calculated in accordance with the appropriate per TCC term-based formula listed below for TCC sales:

**for two-year TCCs:**

- (1) upon initial award of a two-year TCC until completion of the final round of the current one-year Sub-Auction:

$$2 \quad \times \quad \text{the amount calculated in accordance with the one-year TCC formula listed below}$$

where:

Pijt = auction price of a one-year TCC in the final round of the one-year Sub-Auction in the prior Capability Period Centralized TCC Auction with the same POI and POW combination as the two-year TCC; *provided, however*, in the event there is no price for a one-year TCC with the same POI and POW combination as the two-year TCC, then “Pijt” shall equal a proxy price, assigned by the NYISO, for a one-year TCC with like characteristics. For Centralized TCC Auctions conducted before May 1, 2010, the “auction price of a one-year TCC in the final round of the one-year Sub-Auction” means the auction price of a one-year TCC in the final Stage 1 round of the one-year TCC auction.

- (2) upon completion of the final round of the current one-year Sub-Auction until commencement of year two of a two-year TCC:

$$2 \quad \times \quad \text{the amount calculated in accordance with the one-year TCC formula listed below}$$

where:

Pijt = auction price of a one-year TCC in the final round of the current one-year Sub-Auction with the same POI and POW combination as the two-year TCC

- (3) upon commencement of year two of a two-year TCC until commencement of the final six months of the two-year TCC:

$$1 \quad \times \quad \text{the amount calculated in accordance with the one-year TCC formula listed below}$$

where:

$P_{ijt}$  = auction price of a one-year TCC in the final round of the most recently completed one-year Sub-Auction with the same POI and POW combination as the two-year TCC

- (4) upon commencement of the final six months of a two-year TCC until commencement of the final month of the two-year TCC:

the amount calculated in accordance with the six-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a six-month TCC in the final round of the most recently completed six-month Sub-Auction with the same POI and POW combination as the two-year TCC

- (5) upon commencement of the final month of a two-year TCC:

the amount calculated in accordance with the one-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a one-month TCC in the most recently completed monthly reconfiguration auction with the same POI and POW combination as the two-year TCC

**for one-year TCCs:**

- (1) upon initial award of a one-year TCC until completion of the final round of the current one-year Sub-Auction:

the amount calculated in accordance with the one-year TCC formula listed below

- (2) upon completion of the final round of the current one-year Sub-Auction until commencement of the final six months of the one-year TCC:

the amount calculated in accordance with the one-year TCC formula listed below

where:

$P_{ijt}$  = auction price of a one-year TCC in the final round of the current one-year Sub-Auction with the same POI and POW combination as the one-year TCC

- (3) upon commencement of the final six months of a one-year TCC until commencement of the final month of the one-year TCC:

the amount calculated in accordance with the six-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a six-month TCC in the final round of the most recently completed six-month Sub-Auction with the same POI and POW combination as the one-year TCC

- (4) upon commencement of the final month of a one-year TCC:

the amount calculated in accordance with the one-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a one-month TCC in the most recently completed monthly reconfiguration auction with the same POI and POW combination as the one-year TCC

**for six-month TCCs:**

- (1) upon initial award of a six-month TCC until completion of the final round of the current six-month Sub-Auction:

the amount calculated in accordance with the six-month TCC formula listed below

- (2) upon completion of the final round of the current six-month Sub-Auction until commencement of the final month of a six-month TCC:

the amount calculated in accordance with the six-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a six-month TCC in the final round of the current six-month Sub-Auction with the same POI and POW combination as the one-year TCC

- (3) upon commencement of the final month of a six-month TCC:

the amount calculated in accordance with the one-month TCC formula listed below

where:

$P_{ijt}$  = auction price of a one-month TCC in the most recently completed monthly reconfiguration auction with the same POI and POW combination as the six-month TCC

**for one-month TCCs:**

the amount calculated in accordance with the one-month TCC formula listed below

**TCC formulas:**

**for one-year TCCs, representing a 5% probability curve:**

$$+1.909 \sqrt{e^{10.9729 + .6514 (\ln(|P_{ijt}| + e)) + .6633 * Zone J}} - .9696 P_{ijt}$$

**for six-month TCCs, representing a 3% probability curve:**

$$+2.565 \sqrt{e^{11.6866 + .4749 (\ln(|p_{ijt}| + e)) + .4856 * Zone J - .0373 Summer}} - .8166 P_{ijt}$$

**for one-month TCCs, representing a 3% probability curve:**

$$+2.221 \sqrt{e^{11.2682 + 0.3221 (\ln(|p_{ijt}| + e)) + 1.3734 * Zone J + 2.00 * Zone K + Month}} - .8152 P_{ijt}$$

where:

$P_{ijt}$  = auction price of i to j TCC in round t of the auction in which the TCC was purchased;

Zone J = 1 if TCC sources or sinks but not both in Zone J, zero otherwise;

Zone K = 1 if TCC sources or sinks but not both in Zone K and does not source or sink in Zone J, 0 otherwise;

Summer = 1 for six-month TCCs sold in the spring auction, 0 otherwise; and

Month = the following values:

January	=	0
February	=	-0.0201
March	=	0.1065
April	=	-0.3747
May	=	0.8181
June	=	0.2835
July	=	0.5201
August	=	0.7221
September	=	0.242
October	=	0.32
November	=	-0.7681
December	=	-0.3836

Provided, however, for purposes of determining the credit holding requirement for a Fixed Price TCC, the auction price shall be replaced by the fixed price associated with that Fixed Price TCC, as determined in Section 19.2.1 of Attachment M of the OATT.

- or -



- (b) The projected amount of the Primary Holder's payment obligation to the NYISO, if any, considering the net mark-to-market value of all TCCs in the Primary Holder's portfolio, as defined for these purposes, according to the formula below:

$$\sum_{n \in N} \left\{ \frac{NAP_n}{90} \times RD_n \right\}$$

where:

NAP = the net amount of Congestion Rents (positive or negative) between the POI and POW composing each TCC<sub>n</sub> during the previous ninety days

RD = the remaining number of days in the life of TCC<sub>n</sub>; *provided, however*, that in the case of Grandfathered TCCs, RD shall equal the remaining number of days in the life of the longest duration TCC sold in an ISO-administered auction then outstanding; and

N = the set of TCCs held by the Primary Holder.

#### **26.4.2.4 WTSC Component**

The WTSC Component shall be equal to the greater of either:

$$\frac{\text{Greatest Amount Owed for WTSC During Any Single Month in the Prior Equivalent Capability Period}}{\text{Days in Month}} \times 50$$

- or -

$$\frac{\text{Total Charges Incurred for WTSC Based Upon the Most Recent Monthly Data Provided by the Transmission Owner}}{\text{Days in Month}} \times 50$$

#### **26.4.2.5 Virtual Transaction Component**

The Virtual Transaction Component shall be equal to the sum of the Customer's

- (i) Virtual Supply credit requirement ("VSCR") for all outstanding Virtual Supply Bids, plus (ii) Virtual Load credit requirement ("VLCR") for all outstanding Virtual Load Bids, plus (iii) net amount owed to the ISO for settled Virtual Transactions.

Where:

$$VSCR = \sum (VSG_{MWh} \times VSG_{CS})$$

$$VLCR = \sum (VLG_{MWh} \times VLG_{CS})$$

Where:

$VSG_{MWh}$  = the total quantity of MWhs of Virtual Supply that a Customer Bids for all Virtual Supply positions in the Virtual Supply group

$VSG_{CS}$  = the amount of credit support required in \$/MWh for the Virtual Supply group

$VLG_{MWh}$  = the total quantity of MWhs of Virtual Load that a Customer Bids for all Virtual Load positions in the Virtual Load group

$VLG_{CS}$  = the amount of credit support required in \$/MWh for the Virtual Load group

The ISO will categorize each Virtual Supply Bid into one of the 72 Virtual Supply groups set forth in the Virtual Supply chart below, as appropriate, based upon the season, Load Zone, and time-of-day of the Virtual Supply Bid. The amount of credit support required in \$/MWh for a Virtual Transaction in a particular Virtual Supply group shall equal the price differential between the Energy price in the Day-Ahead Market and the Energy price in the Real-Time Market, at the 97<sup>th</sup> percentile, based upon all possible Virtual Supply positions in the Virtual Supply group for the period of time from April 1, 2005, through the end of the preceding calendar month.

The ISO will categorize each Virtual Load Bid into one of the 30 Virtual Load groups set forth in the Virtual Load chart below, as appropriate, based upon the season, Load Zone, and time-of-day of the Virtual Load Bid. The amount of credit support required in \$/MWh for a Virtual Transaction in a particular Virtual Load group shall equal the price differential between the Energy price in the Day-Ahead Market and the Energy price in the Real-Time Market, at the

97<sup>th</sup> percentile, based upon all possible Virtual Load positions in the Virtual Load group for the period of time from April 1, 2005, through the end of the preceding calendar month.

If a Customer submits Bids for both Virtual Load and Virtual Supply for the same day, hour, and Load Zone, then for those Bids, until such time as those Bids have been evaluated by SCUC, only the greater of the Customer's (i) VLCR for the total MWhs Bid for Virtual Load, or (ii) VSCR for the total MWhs Bid for Virtual Supply will be included when calculating the Customer's Virtual Transaction Component. After evaluation of those Bids by SCUC, then only the credit requirement for the net position of the accepted Bids (in MWhs of Virtual Load or Virtual Supply) will be included when calculating the Customer's Virtual Transaction Component.

#### Virtual Supply Groups

<b>Summer</b>	<b>Load Zones A–F</b>	<b>Load Zones G–I</b>	<b>Load Zone J</b>	<b>Load Zone K</b>
HB07–10	VSG-1	VSG-7	VSG-13	VSG-19
HB11–14	VSG-2	VSG-8	VSG-14	VSG-20
HB15–18	VSG-3	VSG-9	VSG-15	VSG-21
HB19–22	VSG-4	VSG-10	VSG-16	VSG-22
Weekend/ Holiday (HB07–22)	VSG-5	VSG-11	VSG-17	VSG-23
Night (HB23–06)	VSG-6	VSG-12	VSG-18	VSG-24
<b>Winter</b>				
HB07–10	VSG-25	VSG-31	VSG-37	VSG-43
HB11–14	VSG-26	VSG-32	VSG-38	VSG-44
HB15–18	VSG-27	VSG-33	VSG-39	VSG-45
HB19–22	VSG-28	VSG-34	VSG-40	VSG-46
Weekend/ Holiday (HB07–22)	VSG-29	VSG-35	VSG-41	VSG-47
Night (HB23–06)	VSG-30	VSG-36	VSG-42	VSG-48
<b>Rest-of-Year</b>				
HB07–10	VSG-49	VSG-55	VSG-61	VSG-67
HB11–14	VSG-50	VSG-56	VSG-62	VSG-68
HB15–18	VSG-51	VSG-57	VSG-63	VSG-69
HB19–22	VSG-52	VSG-58	VSG-64	VSG-70
Weekend/ Holiday (HB07–22)	VSG-53	VSG-59	VSG-65	VSG-71

Night (HB23–06)	VSG-54	VSG-60	VSG-66	VSG-72
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Where:

Summer	=	May, June, July, and August
Winter	=	December, January, and February
Rest-of-Year	=	March, April, September, October, and November
HB07–10	=	weekday hours beginning 07:00–10:00
HB11–14	=	weekday hours beginning 11:00–14:00
HB15–18	=	weekday hours beginning 15:00–18:00
HB19–22	=	weekday hours beginning 19:00– 22:00
Weekend/Holiday	=	weekend and holiday hours beginning 07:00–22:00
Night	=	all hours beginning 23:00– 06:00

### Virtual Load Groups

<b>Summer</b>	<b>Load Zones A–F</b>	<b>Load Zones G–I</b>	<b>Load Zone J</b>	<b>Load Zone K</b>
HB07–10	VLG-1	VLG-4	VLG-8	VLG-12
HB11–14	VLG-2	VLG-5	VLG-9	VLG-13
HB15–18	VLG-2	VLG-6	VLG-10	VLG-14
HB19–22	VLG-1	VLG-4	VLG-8	VLG-15
Weekend/ Holiday (HB07–22)	VLG-3	VLG-4	VLG-8	VLG-16
Night (HB23–06)	VLG-1	VLG-7	VLG-11	VLG-12
<b>Winter</b>				
HB07–10	VLG-17	VLG-19	VLG-21	VLG-23
HB11–14	VLG-17	VLG-20	VLG-21	VLG-23
HB15–18	VLG-18	VLG-19	VLG-22	VLG-24
HB19–22	VLG-17	VLG-20	VLG-21	VLG-24
Weekend/ Holiday (HB07–22)	VLG-17	VLG-20	VLG-21	VLG-23
Night (HB23–06)	VLG-17	VLG-20	VLG-21	VLG-23
<b>Rest-of-Year</b>				
HB07–10	VLG-25	VLG-26	VLG-27	VLG-29
HB11–14	VLG-25	VLG-26	VLG-28	VLG-29

HB15–18	VLG-25	VLG-26	VLG-28	VLG-30
HB19–22	VLG-25	VLG-26	VLG-27	VLG-30
Weekend/ Holiday (HB07–22)	VLG-25	VLG-26	VLG-27	VLG-30
Night (HB23–06)	VLG-25	VLG-26	VLG-27	VLG-29

Where:

Summer	=	May, June, July, and August
Winter	=	December, January, and February
Rest-of-Year	=	March, April, September, October, and November
HB07–10	=	weekday hours beginning 07:00–10:00
HB11–14	=	weekday hours beginning 11:00–14:00
HB15–18	=	weekday hours beginning 15:00–18:00
HB19–22	=	weekday hours beginning 19:00– 22:00
Weekend/Holiday	=	weekend and holiday hours beginning 07:00–22:00
Night	=	all hours beginning 23:00– 06:00

#### **26.4.2.6 DADRP Component**

The DADRP Component shall be equal to the product of: (i) the Demand Reduction Provider’s monthly average of MWh of accepted Demand Reduction Bids during the prior summer Capability Period or, where the Demand Reduction Provider does not have a history of accepted Demand Reduction bids, a projected monthly average of the Demand Reduction Provider’s accepted Demand Reduction bids; (ii) the average Day-Ahead LBMP at the NYISO Reference Bus during the prior summer Capability Period; (iii) twenty percent (20%); and (iv) a factor of four (4). The ISO shall adjust the amount of Unsecured Credit and/or collateral that a Demand Reduction Provider is required to provide whenever the DADRP Component increases or decreases by ten percent (10%) or more.

#### 26.4.2.7 DSASP Component

The DSASP Component is calculated every two months based on the Demand Side Resource's Operating Capacity available for the scheduling of such services, the delta between the Day-Ahead and hourly market clearing prices for such products in the like two-month period of the previous year, and the location of the Demand Side Resource. Resources located East of Central-East shall pay the Eastern reserves credit support requirement and Resources located West of Central-East shall pay the Western reserves credit support requirement. The DSASP Component shall be equal to:

- (a) For Demand Side Resources eligible to offer only Operating Reserves, the product of (i) the maximum hourly Operating Capacity (MW) for which the Demand Side Resource may be scheduled to provide Operating Reserves, (ii) the amount of Eastern or Western reserves credit support, as appropriate, in \$/MW per day, and (iii) three (3) days.

Where:

The amount of Eastern reserves credit support (\$/MW/day) for each two-month period	=	Eastern Price Differential for the same two-month period in the previous year * the higher of two (2) or the maximum number of daily Reserve Activations for the same two-month period in the previous year
The amount of Western reserves credit support (\$/MW/day) for each two-month period	=	Western Price Differential for the same two-month period in the previous year * the higher of two (2) or the maximum number of daily Reserve Activations for the same two-month period in the previous year
Two-month periods:	=	January and February March and April May and June July and August September and October November and December

$MCP_{SRh}$	=	Hourly, time-weighted Market Clearing Price for Spinning Reserves
Eastern Price Differential	=	The hourly differential at the 97 <sup>th</sup> percentile of all hourly differentials between the Day-Ahead and Real-Time $MCP_{SRh}$ for Eastern Spinning Reserves for hours in the two-month period of the previous year when the Real-Time $MCP_{SRh}$ for Eastern Spinning Reserves exceeded the Day-Ahead $MCP_{SRh}$ for Eastern Spinning Reserves
Western Price Differential	=	The hourly differential at the 97 <sup>th</sup> percentile of all hourly differentials between the Day-Ahead and Real-Time $MCP_{SRh}$ for Western Spinning Reserves for hours in the two-month period of the previous year when the Real-Time $MCP_{SRh}$ for Western Spinning Reserves exceeded the Day-Ahead $MCP_{SRh}$ for Western Spinning Reserves
Reserve Activations	=	The number of reserve activations at the 97 <sup>th</sup> percentile of daily reserve activations for days in each two month period of the previous year that had reserve activations.

- (b) For Demand Side Resources eligible to offer only Regulation Service, or Operating Reserves and Regulation Service, the product of (i) the maximum hourly Operating Capacity (MW) for which the Demand Side Resource may be scheduled to provide Regulation Service and Operating Reserves, (ii) the amount of regulation credit support, as appropriate, in \$/MW per day, and (iii) three (3) days.

Where:

The amount of regulation credit support (\$/MW/day) for each two-month period	=	Price Differential for the same two-month period in the previous year * 24 hours
Two-month periods:	=	January and February March and April May and June

July and August  
September and October  
November and December

$MCP_{RegH}$	=	Hourly, time-weighted Market Clearing Price for Regulation Services
Price Differential	=	The hourly differential at the 97 <sup>th</sup> percentile of all hourly differentials between the Day-Ahead and Hour-Ahead $MCP_{RegH}$ for hours in the two-month period of the previous year when the Real-Time MCP exceeded the Day-Ahead MCP

### 26.4.3 Calculation of Bidding Requirement

The Bidding Requirement shall be an amount equal to the sum of:

- (i) the amount of bidding authorization that the Customer has requested for use in an upcoming ISO-administered TCC auction, which shall account for all positive bids to purchase TCCs and the absolute value of all negative offers to sell TCCs; *provided, however*, that the amount of credit required for each TCC that the Customer bids to purchase, whether positive, negative, or zero shall not be less than (a) (2 x \$/MW for one-year TCCs) per MW for two-year TCCs, (b) \$1,500 per MW for one-year TCCs, (c) \$2,000 per MW for six-month TCCs, and (d) \$600 per MW for one-month TCCs;
- (ii) the approximate amount that the Customer may owe following an upcoming TCC auction as a result of converting expired ETAs into TCCs pursuant to Section 19.2.1 of Attachment M to the OATT, which shall be calculated in accordance with the provisions of Section 19.2.1 regarding the purchase of TCCs with a duration of ten years;



- (iii) the amount of bidding authorization that the Customer has requested for use in an upcoming ISO-administered ICAP auction; and
- (iv) five (5) days prior to any ICAP Spot Market Auction, the maximum amount that the Customer may be required to pay for UCAP in the auction.

## **26.5 Unsecured Credit**

A Customer may use Unsecured Credit to satisfy any part of its Operating Requirement or Bidding Requirement other than any credit requirement for bidding on or holding TCCs.

Affiliate guarantees are considered a form of Unsecured Credit.

Upon written request of a Customer, the ISO shall determine the amount of Unsecured Credit to be granted to the Customer, if any, in accordance with the ISO's creditworthiness requirements. Upon a Customer's written request, the ISO will provide a written explanation for any changes in the amount of the Customer's Unsecured Credit.

### **26.5.1 Eligibility**

A Customer may be eligible to receive Unsecured Credit if the Customer meets the following criteria:

- (i) Creditworthiness
  - (a) is an Investment Grade Customer,
  - (b) is an Unrated Customer that is deemed an Investment Grade Customer pursuant to an Equivalency Rating, or
  - (c) provides an Affiliate guarantee in compliance with Section 26.5.4 of this Attachment K;

AND

- (ii) Payment History
  - (a) has actively participated in the ISO-Administered markets and paid when due all of its invoices during the immediately preceding six months, or
  - (b) has actively participated in the markets of another independent system operator or regional transmission organization and has paid when due all of its invoices

during the immediately preceding six months. Any Customer relying on its payment history in another market to fulfill the requirement of this Section 26.5.1(ii) must provide evidence satisfactory to the ISO of such payment history.

Notwithstanding the foregoing, a Customer otherwise eligible for Unsecured Credit that fails to respond to the ISO's request to update the Customer's list of Affiliates, within the time frame provided by Section 9.2 of the ISO Services Tariff, shall not be eligible for Unsecured Credit.

### **26.5.2 Market Concentration Cap**

A Customer's Unsecured Credit shall not exceed ~~one hundred and~~ fifty million dollars (\$~~150M~~) (the "Market Concentration Cap"). Moreover, the maximum amount of Unsecured Credit extended to a group of Customers that are Affiliates shall not exceed, in the aggregate, the Market Concentration Cap, unless the Customer: ~~(i) is an Investment Grade Customer, (ii) provides evidence to the ISO, in a form satisfactory to the ISO in its sole discretion, that the Customer has a legal right to recover its costs for supplying Energy, Ancillary Services, and Capacity to end-users, and (iii) uses its Unsecured Credit to meet its Native Load Credit Requirements only. For NYPA, Native Load Customers include all wholesale and retail power customers for which NYPA is under contract to provide electric service. A Customer that satisfies all of the conditions in clauses (i), (ii) and (iii) of this Section 26.5.2 may receive Unsecured Credit in excess of one hundred and fifty million dollars (\$150M) but the Customer's Unsecured Credit shall not exceed two hundred and fifty million dollars (\$250M). Once Market Participants approve the indexing methodology for adjusting these dollar limits, then the indexing methodology will be set forth in ISO Procedures and these dollar limits will be adjusted annually in accordance with that methodology.~~

### **26.5.3 Determination of Unsecured Credit**

#### **26.5.3.1 Starting Point**

The starting point for determining the amount of Unsecured Credit to be granted to an Investment Grade Customer, except as provided otherwise in Section 26.5.3.6 of this Attachment K, shall be a percentage of its Tangible Net Worth, as indicated on the matrix contained in Table K-1, subject to the Market Concentration Cap.

#### **26.5.3.2 Adjustment to Starting Point**

The ISO shall conduct a Credit Assessment of the Customer and shall determine the amount of Unsecured Credit that it shall grant to the Customer by adjusting the Customer's starting point in accordance with the following table:

**Starting Point Adjustment**

<b>Score Bucket</b>	<b>Public Score Range</b>	<b>Private Score Range</b>	<b>Starting Point Adjustment</b>
1	0.00 – 0.33	0.00 – 0.31	0%
2	0.34 – 0.40	0.32 – 0.39	-20%
3	0.41 – 0.45	0.40 – 0.43	-50%
4	0.46 – 0.50	0.44 – 0.48	-80%
5	0.51+	0.49+	-100%

#### **26.5.3.3 Adjustment to Unsecured Credit**

- (a) In the event of a change in a Customer's (1) Tangible Net Worth, and/or (2) agency rating, the ISO shall recalculate the Customer's starting point and Unsecured Credit amount in accordance with Sections 26.5.3.1 and 26.5.3.2 of this Attachment K.

- (b) The ISO may conduct a Credit Assessment of a Customer at any time and adjust the amount of Unsecured Credit granted to the Customer in accordance with the following table:

#### **Unsecured Credit Adjustment**

		<b>Current Credit Assessment Score Bucket</b>				
<b>Prior Credit Assessment Score Bucket</b>	<b>Score Bucket</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>1</b>	0%	-20%	-50%	-80%	-100%
	<b>2</b>	25%	0%	-38%	-75%	-100%
	<b>3</b>	100%	60%	0%	-60%	-100%
	<b>4</b>	400%	300%	150%	0%	-100%
	<b>5</b>	N/A	N/A	N/A	N/A	N/A

#### **26.5.3.4 Restoration of Unsecured Credit**

A Customer that is subject to a 100% reduction of Unsecured Credit shall not be eligible for Unsecured Credit again until the Customer demonstrates two consecutive quarters of financial performance that would otherwise have qualified the Customer for Unsecured Credit in accordance with Sections 26.5.3.1 and 26.5.3.2 of this Attachment K.

#### **26.5.3.5 Credit Assessment**

- (a) In performing a Credit Assessment, the ISO shall evaluate specified indicators of credit risk pertaining to a Customer, which indicators will vary depending on whether the Customer is categorized by the ISO as a private entity or a public entity. The ISO shall categorize a Customer as private or public, for Credit Assessment purposes, in accordance with the following criteria:

<b>Primary Criteria</b>	<b>Secondary Criteria</b>	<b>Credit Assessment Category</b>
Standalone public trading company	None	Public

Subsidiary of a public company with its parent company as guarantor	None	Public
Subsidiary of a public company	With assets greater than US\$10B	Public
Subsidiary of a public company	Contributes 50% or more of its parent company's revenues or accounts for 50% or more of its assets	Public
Subsidiary of a public company	Contributes less than 50% of its parent company's revenues or represents less than 50% of its assets	Private
Does not satisfy the criteria listed above	None	Private

- (b) The ISO shall determine the Credit Assessment score for a Customer based upon the market and financial indicators and weightings, as appropriate, set forth below.

**Public Entity Indicators** **Weight**

- Market Indicators
  - Absolute CDS Spread 21.3%
  - Relative Stock Decline from 3 month high 4.3%
  - Stock Return Volatility (3 month std. deviation) 12.7%
- Performance
  - Revenue/Market Cap 12.7%
  - Retained Earnings/Assets 8.5%
- Debt Coverage
  - Total Debt/EBITDA 12.7%
- Leverage
  - Debt/(Total Debt + Equity) 8.5%
- Liquidity
  - Cash/Assets 4.3%
- Qualitative Assessment 15.0%

**Private Entity Indicators** **Weight**

- Performance
  - Return on Assets 17.5%
  - Profit Margin 10.5%
- Debt Coverage
  - Total Debt/EBITDA 17.5%
- Leverage

- Total Debt/Total Assets 17.5%
  - Liquidity
    - Cash/Assets 7.0%
  - Qualitative Assessment 30.0%
- (c) If one or more of the indicators listed above does not exist for a Customer, then the ISO shall, in its sole discretion, reallocate the weight attributed to that indicator either (1) to the remaining indicators proportionately, or (2) entirely to the qualitative assessment indicator.
- (d) The qualitative areas evaluated shall include, but shall not be limited to, the following (as applicable): (1) Affiliate financial and market indicators, (2) ratemaking ability and legal right to fully recover end-user costs, (3) industry characteristics, (4) risk policies and procedures, (5) management quality, (6) ability to access funding in difficult market conditions, and (7) historical relationship and payment history with the ISO. A Transmission Owner that can recover end-user costs pursuant to authority granted by the PSC will receive a qualitative assessment score of no worse than five.

#### **26.5.3.6 Public Power Entities**

The following additional provisions shall apply to the determination of a Customer's Unsecured Credit:

- (a) A Public Power Entity shall qualify for one million dollars (\$1M) in Unsecured Credit, without regard for its Tangible Net Worth or Credit Assessment. ~~Once Market Participants approve the indexing methodology for adjusting this dollar limit, then the indexing methodology will be set forth in ISO Procedures and this dollar limit will be adjusted annually in accordance with that methodology.~~
- Municipal electric systems that operate through a joint action agency or a similar

municipal affiliation agreement may aggregate their Unsecured Credit amounts of one million dollars (\$1M) per member such that the joint action agency will have an Unsecured Credit amount, subject to the Market Concentration Cap, equal to the total of the Unsecured Credit amounts of each individual member. Each such agency will qualify for such aggregated Unsecured Credit treatment subject to the ISO's review of the particular affiliation agreement and the ISO's review of documentation submitted by the agency to demonstrate that it has been formed under the pertinent sections of the New York State Municipal Law.

- (b) In lieu of a one million dollar (\$1M) grant of Unsecured Credit, a Public Power Entity may request Unsecured Credit based on its Tangible Net Worth and Credit Assessment. In such case, the ISO will consider the Public Power Entity a private entity for Credit Assessment purposes.

~~(c) — At its request, a Public Power Entity that (1) is an Investment Grade Customer, (2) fulfills the additional reporting requirements set forth below, and (3) uses its Unsecured Credit to meet its Native Load Credit Requirement only, may qualify for Unsecured Credit, without regard to its Tangible Net Worth or Credit Assessment, equal to the lesser of (x) sixty million dollars (\$60M), or (y) its Native Load Credit Requirement. Once Market Participants approve the indexing methodology for adjusting this dollar limit, then the indexing methodology will be set forth in ISO Procedures and this dollar limit will be adjusted annually in accordance with that methodology.~~

~~To fulfill the additional reporting requirements, a Public Power Entity must submit either (1) quarterly financial statements within 60 days of quarter end that have been~~



~~certified for accuracy by a senior officer, or (2) if quarterly financial statements are not typically prepared, then (a) a copy of the current year adopted budget prior to the start of the of the Customer's fiscal year that has been certified for accuracy by a senior officer, and (b) within sixty (60) days of quarter end, a statement from a senior officer certifying that actual costs have not exceeded budgeted costs by greater than 10%.~~

#### **26.5.4 Affiliate Guarantees**

##### **26.5.4.1 Eligibility**

An Affiliate guarantor shall be subject to the ISO's financial assurance requirements as if the Affiliate guarantor were a Customer and shall be assigned a level of Unsecured Credit, if any.

##### **26.5.4.2 Use for Satisfaction of Minimum Capitalization Requirements**

A Customer with an Affiliate guarantee may use an Affiliate guarantor's financial statements to satisfy the capitalization requirement set forth in Section 26.1.1(d) of this Attachment K if (i) the Customer relies on the Affiliate guarantor to obtain Unsecured Credit, (ii) no other Customer relies on the Affiliate guarantor's financial statements to satisfy the capitalization requirement, and (iii) the Affiliate guarantee is unlimited.

##### **26.5.4.3 Form of Affiliate Guarantee**

An Affiliate guarantee must be in a form acceptable to the ISO and issued by an Investment Grade U.S. or Canadian Affiliate. A Customer's failure to provide a source of collateral in an amount sufficient to (i) secure its obligations to the ISO and (ii) as applicable, secure its capitalization requirement pursuant to Section 26.1.1(d) of this Attachment K, fifty (50) days prior to the termination of an Affiliate guarantee, which source of collateral shall be

guaranteed to remain in effect for a period of not less than one (1) year, shall be a condition of default enabling the ISO to immediately demand payment under the Affiliate guarantee in the amount required to meet Customer's ISO credit requirements plus, where applicable, the amount required to secure Customer's capitalization requirement.

#### **26.5.5 Requests for Changes, Appeals**

Requests for changes to the amount of a Customer's Unsecured Credit shall be made in writing to the ISO Credit Manager. Appeals of any decision regarding a Customer's Unsecured Credit shall be made in writing to the ISO's Chief Financial Officer and shall include all necessary supporting documentation. The Chief Financial Officer shall determine all appeals within ten (10) business days.

## **26.6 Use of Collateral**

A Customer shall be required to provide collateral, in an acceptable form in accordance with Section 26.6.1, to support its obligations to the ISO to (i) satisfy any credit requirement for bidding on or holding TCCs, and (ii) to the extent that its Operating Requirement and/or Bidding Requirement exceed(s) the total of its Unsecured Credit plus any posted collateral.

### **26.6.1 Acceptable Collateral**

#### **26.6.1.1 Cash deposit**

A cash deposit shall be held in escrow by the ISO, with actual interest earned on the deposit accrued to the Customer's account.

#### **26.6.1.2 Letter of credit**

A letter of credit shall be in a form acceptable to the ISO and issued or guaranteed by an approved U.S. or Canadian commercial bank, or an approved U.S. or Canadian branch of a foreign bank, with a minimum "A" rating from Standard & Poor's, Fitch, Moody's, or Dominion. A Customer's failure to provide acceptable collateral in an amount sufficient to secure its obligations to the ISO fifty (50) days prior to the termination of a letter of credit, which collateral shall be guaranteed to remain in effect for a period of not less than one (1) year, shall be a condition of default enabling the ISO to immediately draw upon the full value of the letter of credit.

#### **26.6.1.3 Surety Bonds**

A surety bond shall be in a form acceptable to the ISO, payable immediately upon demand without prior demonstration of the validity of the demand, and issued by a U.S. Treasury-listed surety with a minimum "A" rating from A.M. Best. A Customer's failure to

provide acceptable collateral in an amount sufficient to secure its obligations to the ISO fifty (50) days prior to the termination of a surety bond, which collateral shall be guaranteed to remain in effect for a period of not less than one (1) year, shall be a condition of default enabling the ISO to immediately demand payment of the full value of the surety bond.

#### **26.6.1.4 Netting of Amounts Receivable**

A Customer may elect to treat as cash collateral the amount that the ISO determines will be owed to the Customer as of the day after the next regular weekly payment to the Customer and that will be payable to the Customer in the following regular weekly payment; *provided, however*, that (i) any such payment to the Customer may be adjusted by the ISO as necessary to correct for any error in this determination, and (ii) the Customer first enter into a security agreement with the ISO in a form acceptable to the ISO. At a minimum, the security agreement must grant to the ISO a continuing, first priority security interest in the Customer's ISO receivables and authorize the ISO to file financing statements, as necessary, at Customer's expense, to protect the ISO's interest.

### **26.6.2 Cash Collateral Investment Alternatives**

#### **26.6.2.1 Investment Alternatives**

A Customer may elect to deposit some or all of its cash collateral it has posted with the ISO to satisfy its Operating Requirement into one or both of two bond funds: a short-term bond fund ("Short-Term Bond Fund") and an intermediate-term bond fund ("Intermediate-Term Bond Fund") (each a "Bond Fund"). A Customer's election shall be in writing and shall not be changed more than twice each year.

#### **26.6.2.2 Additional Premium**

A Customer electing to deposit cash collateral into a Bond Fund shall be required to also deposit a premium above the base amount of cash collateral to protect against fluctuations in the value of the Bond Fund. A 5% premium shall be required for investments in the Short-Term Bond Fund. A 10% premium shall be required for investments in the Intermediate-Term Bond Fund.

#### **26.6.2.3 ISO Monitoring**

The ISO shall monitor the value of the Bond Funds at least once each week. If at any time the value of the Customer's account in a Bond Fund reduces by an amount equal to fifty percent (50%) of the premium required for participation in that Bond Fund, or more, the ISO shall provide the Customer with a notice requesting additional cash collateral to restore the required balance in the Bond Fund. If a Customer fails to provide the additional collateral by 4:00 p.m. on the business day following the NYISO's notice requesting additional cash collateral, the ISO may immediately liquidate the Customer's Bond Fund deposit and transfer the balance to a standard cash collateral deposit account.

#### **26.6.2.4 Example**

Assume a Customer has an Operating Requirement of \$300 and elects to place \$100 in the standard cash collateral deposit account; \$100 in the Short-Term Bond Fund; and \$100 in the Intermediate-Term Bond Fund. As such, the Customer would be required to place \$100 in the standard cash collateral deposit account. The Customer would be required to place \$100 plus \$5 (the 5% required premium) for a total of \$105 to participate in the Short-Term Bond Fund. The Customer would be required to place \$100 plus \$10 (the 10% required premium) for a total of \$110 to participate in the Intermediate-Term Bond Fund. Assume further that upon the ISO

monitoring, it discovers that the value of the Customer's Short-Term Bond Fund decreased to \$102.50 while the value of the Intermediate-Term Bond Fund remained unchanged. The ISO would then notify the Customer to provide an additional \$2.50 of collateral such that the 5% premium would be met for the Short-Term Bond Fund. If the Customer failed to timely provide the additional collateral, the ISO may then liquidate the \$102.50 balance in the Short-Term Bond Fund and place it in a standard cash collateral deposit account. The Intermediate-Term Bond Fund would remain unaffected.

### **26.6.3 Pay-down Agreement**

~~In lieu of providing any collateral or additional collateral otherwise required by the ISO's creditworthiness requirements, a Customer may execute a pay-down agreement with the ISO pursuant to which the Customer shall, upon written demand by the ISO, pay down the amount by which its Operating Requirement, as calculated pursuant to Article 26.3 of this Attachment K, exceeds the amount of its Unsecured Credit and any existing collateral. The ISO shall accept payment from a Customer at any time, but such payment shall eliminate the Customer's collateral requirements only if the payment is made pursuant to a pay-down agreement.~~

### **~~26.6.4~~ Alternative Security Arrangements**

Alternative security arrangements substantially similar to the credit requirements set forth in this Attachment K may be made in exigent circumstances to protect the financial position of the ISO if proposed by the Customer and approved by the ISO.