Attachment V

6.10 Schedule 10 - Rate Mechanism for the Recovery of the Reliability Facilities Charge ("RFC")

6.10.1 Applicability.

This rate mechanism establishes the Reliability Facilities Charge ("RFC") for the recovery of costs related to: (i) a regulated backstop transmission solution identified by the NYISO pursuant to Section 31.2.4.3.1 of Attachment Y of the ISO OATT and the NYISO/TO Reliability Agreement or an Operating Agreement, (ii) an alternative regulated transmission solution provided that the ISO has selected such project pursuant to Section 31.2.6.5.2 of Attachment Y of the ISO OATT as the more efficient or cost effective solution to the identified Reliability Need, or (iii) a regulated transmission Gap Solution proposed by a Responsible Transmission Owner or an alternative regulated Gap Solution proposed by an Other Developer or Transmission Owner that has been determined by the appropriate state regulatory agency(ies) as the preferred solution(s) to the identified Reliability Need. The rate mechanism shall not apply to projects undertaken by Transmission Owners pursuant to Local Transmission Owner Planning Processes pursuant to Section 31.1.3 and Section 31.2.1 of Attachment Y of the NYISO OATT. The RFC shall be comprised of the revenue requirements related to: (i) each regulated reliability transmission project filed with FERC by a Transmission Owner pursuant to the provisions of this Attachment; (ii) any costs incurred by NYPA and filed with FERC by the NYISO pursuant to the provisions of this Attachment; and (iii) any FERC approved costs incurred by an Other Developer under Section 6.10.5 and filed with FERC by the NYISO or Other Developer pursuant to the provisions of this Attachment. Any costs incurred by LIPA and allocable to other Transmission Districts will be collected under a separate LIPA RFC as set forth in Section 6.10.4.3 and filed with FERC by the NYISO pursuant to the provisions of Section 6.10.4.3. This RFC will provide for full recovery of all reasonably incurred costs related

to the preparation of proposals for, and the development, construction, operation and maintenance of any regulated reliability transmission project undertaken pursuant to Attachment Y of this tariff, including all reasonable costs related to such a project that is halted in accordance with the provisions of the NYISO's tariff and the NYISO/TO Reliability Agreement or an Operating Agreement. Subject to regulatory acceptance, the RFC shall include a reasonable return on investment and any applicable incentives. The RFC established under this Attachment shall be separate from the Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Attachment H of the NYISO OATT. With respect to the recovery of costs incurred by LIPA and NYPA, the provisions of Sections 6.10.1, and 6.10.2 through 6.10.3.4 of this Attachment shall not apply to LIPA or NYPA, except as provided for in Sections 6.10.4.3 and 6.10.4.4 of this Attachment. The recovery of costs related to development, construction, operation and maintenance of a regulated reliability transmission project undertaken by LIPA or NYPA shall be pursuant to the provisions of Sections 6.10.4.3 and 6.10.4.4 of this Attachment**.** The recovery of costs related to development, construction, operation and maintenance of an alternative regulated solution proposed by an Other Developer shall be pursuant to the provisions of Section 6.10.5 of this Attachment.

6.10.2 Recovery of Transmission Owner's Costs Related to Regulated Reliability Transmission Solutions.

Each Transmission Owner shall have on file at FERC the rate treatment that will be used to derive and determine the revenue requirement to be included in the RFC, and for the LIPA RFC as applicable, for regulated transmission projects undertaken pursuant to a determination by the NYISO that a regulated solution is needed to address Reliability Needs identified by the NYISO in its reliability planning process in accordance with Section 31.2.8 of Attachment Y of

the NYISO OATT. The filing will provide for the recovery of the full revenue requirement for a regulated reliability transmission project consistent with FERC regulations including but not limited to any incentives for the construction of transmission projects provided for in Section 219 of the Federal Power Act and the FERC regulations implementing that section. Pursuant to a determination by the NYISO that a regulated solution is needed to address Reliability Needs identified by the NYISO in its reliability planning process in accordance with Section 31.2.8 of Attachment Y of the NYISO OATT, (i) the Responsible Transmission Owner(s) proceeding with a regulated transmission backstop solution or (ii) a Transmission Owner proceeding with an alternative regulated transmission solution that the ISO has selected as the more efficient or cost effective solution, will proceed with the approval process for all necessary federal, state and local authorizations for the requested project to which this RFC applies.

6.10.2.1 Upon receipt of all necessary federal, state, and local authorizations, including FERC acceptance of the rate treatment, the Transmission Owner(s) shall commence construction of the project.

6.10.2.2 Upon completion of the project, the Transmission Owner(s) or the NYISO as applicable, will make an informational filing with FERC to provide the final project cost and resulting revenue requirement to be recovered pursuant to this Attachment. The final project cost and resulting revenue requirement will be reduced by any amounts that, pursuant to Section 25.7.12.3.3 of Attachment S to the NYISO OATT, have been previously committed by or collected from Developers for the installation of System Deliverability Upgrades required for the interconnection of generation or merchant transmission projects. The resulting revenue requirement will become effective and recovery of project costs pursuant

to this Attachment will commence upon the making of the information filing with FERC, and shall not require and shall not be dependent upon a re-opening or review of the Transmission Owner(s)' revenue requirements for the TSCs and NTAC set forth in Attachment H of the NYISO OATT. This Section 6.10.2.2 also applies to the recovery of all reasonably incurred costs related to either (i) a regulated backstop transmission project or (ii) an alternative regulated transmission project that the ISO has selected as the more efficient or cost effective solution and that is later halted, including but not limited to reasonable and necessary expenses incurred to implement an orderly termination of the project, in accordance with the provisions of the NYISO OATT and the NYISO/TO Reliability Agreement or an Operating Agreement. Following the information filing, the NYISO will bill the RFC or LIPA RFC, as applicable.

6.10.2.3 The Transmission Owners may propose a non-transmission solution subject to state jurisdiction to address a Reliability Need included in the Comprehensive Reliability Plan, provided that the appropriate state agency(ies) has established procedures to ensure full and prompt recovery of all reasonably incurred costs related to a project, comparable to those set forth in this tariff for cost recovery for regulated reliability transmission projects.

6.10.3 RFC Revenue Requirement Recovery.

The RFC is to be billed by the NYISO and paid by the LSEs located in the Load Zones and/or Subzones to which the cost of the transmission facilities have been allocated in accordance with Attachment Y of the NYISO OATT. All LSEs in the Load Zones and/or

Subzones to which costs have been allocated, including Transmission Owners, competitive LSEs and municipal systems, will be billed by the NYISO.

6.10.3.1 The revenue requirement filed pursuant to Section 6.10.2.2 will be the basis for the RFC Rate ($/MWh) for the Billing Period, and shall be applied by the NYISO to each LSE based on its Actual Energy Withdrawals as set forth in Section 6.10.3.4.

6.10.3.2 To the extent that incremental transmission rights owned by the Transmission Owner sponsoring the project are created as a result of a transmission project implemented in accordance with Attachment Y of the NYISO OATT, those incremental transmission rights that can be sold will be auctioned or otherwise sold by the NYISO. The NYISO will disburse the associated revenues to the Transmission Owner(s). The associated revenues will be used in the calculation of the RFC as set forth in Section 6.10.3.4. The incremental transmission rights will continue to be sold for the depreciable life of the project, and the revenues offset discussed above will commence upon the first payment of revenues related to a sale of incremental transmission rights on or after the RFC is implemented for a specific project. These incremental revenues shall not require and shall not be dependent upon any reopening or any review of the Transmission Owner(s) TSCs or NTAC under Attachment H of the NYISO OATT.

6.10.3.3 The NYISO will collect the appropriate RFC revenues each Billing Period and remit those revenues to the appropriate Transmission Owner(s) in accordance

with the NYISO's billing and settlement procedures pursuant to Section 2.7.2.5 of the NYISO OATT.

6.10.3.4 The Billing Units for the RFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Load Zones and/or Subzones determined to be allocated the costs of the project in accordance with Attachment Y of the NYISO OATT.

Step 1: Calculate the $ assigned to each Load Zone or Subzone (as applicable)

$$RFC_{z,B} = \sum_{p \in P} \left(\left(AnnualRR_{p,B} - IncrementalTransmissionRightsRevenue_{p,B} \right) * \left(ZonalCostAllocation\%_{P} \right) \right)$$

Step 2: Calculate a per-MWh Rate for each Load Zone or Subzone (as applicable)

$$RFCRate_{z,B} = RFC_{z,B} / MWh_{z,B}$$

Step 3: Calculate charge for each Billing Period for each LSE in each Load Zone or Subzone (as applicable)

$$Charge_{B,1,z} = RFCRate_{z,B} * MWh_{1,z,B}$$

Step 4: Calculate charge for each Billing Period for each LSE across all Load Zones or Subzones (as applicable)

$$Charge_{B,1} = \sum_{z \in Z} \left(Charge_{B,1,z} \right)$$

Where,

P = set of Projects.

Z = set of ISO Load Zones or Subzones, as applicable.

B = the relevant Billing Period.

$MWh_{z,B}$ = Actual Energy Withdrawals in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B.

$MWh\ l, z, B_{1,z,B}$ = Actual Energy Withdrawals for LSE l in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B.

$AnnualRR_{p,B}$ = the pro rata share of the annual Revenue Requirement for each Project as discussed in Section 6.10.2.2 above allocated for Billing Period B.

$IncrementalTransmissionRightsRevenue_{p,B}$ = the pro rata share of the Incremental Transmission Rights Revenue for each Project as discussed in Section 6.10.3.2 above allocated for Billing Period B.

6.10.4 Recovery of Costs by an Unregulated Transmitting Utility.

An Unregulated Transmitting Utility is a Transmission Owner that, pursuant to Section 201(f) of the FPA is not subject to the Commission's jurisdiction under Sections 205 and 206 of the FPA. The recovery of costs related to the preparation of proposals for, and the development, construction, operation and maintenance of, a regulated reliability transmission project undertaken pursuant to Attachment Y of the NYISO OATT by LIPA, as an Unregulated Transmitting Utility, shall be conducted as follows:

6.10.4.1 Upon the request of the NYISO, an Unregulated Transmitting Utility will proceed with the process of receiving any necessary authorization for the requested project.

6.10.4.2 Upon receipt of all necessary federal, state and local authorizations, the Unregulated Transmitting Utility shall commence with construction of the project.

6.10.4.3 Cost Recovery for LIPA

Transmission Owners other than LIPA that propose an alternative regulated transmission project on Long Island would recover any costs per Sections 6.10.2 through 6.10.3.4 of this Attachment. Other Developers that propose an alternative regulated transmission project on Long Island would recover any costs per Section 6.10.5 of this Attachment.

6.10.4.3.1 Any costs incurred for a regulated backstop reliability transmission project or an alternative regulated transmission project undertaken by LIPA, as an Unregulated Transmitting Utility, shall be recovered as follows:

6.10.4.3.1.1 For costs to LIPA customers: Cost will be recovered pursuant to a rate recovery mechanism approved by the Long Island Power Authority's Board of Trustees pursuant to Article 5, Title 1-A of the New York Public Authorities Law, Sections 1020-f(u) and 1020-s. Upon approval of the rate recovery mechanism, LIPA shall provide to the NYISO, for purposes of inclusion within the NYISO OATT and filing with FERC on an informational basis only, a description of the rate recovery mechanism and the rate that LIPA will charge and collect from responsible entities within the Long Island Transmission District in accordance with the NYISO cost allocation methodology pursuant to Section 31.5.3.2 of Attachment Y of the NYISO OATT.

6.10.4.3.1.2 For Costs to Other Transmission Districts: Where the NYISO determines that there are responsible entities outside of the Long Island Transmission District that should be allocated a portion of the costs of the regulated backstop reliability transmission solution or an alternative regulated transmission solution undertaken by LIPA, LIPA shall inform the NYISO of the amount of such costs. Such costs will be an allocable amount of the cost base recovered through the recovery mechanism described in Section 6.10.4.3.1.1 in accordance with the formula set forth in Section 6.10.3.4. The costs of a LIPA regulated backstop reliability transmission project or an alternative regulated transmission solution, allocable to responsible entities outside of the Long Island Transmission District shall

constitute the "revenue requirement" that the NYISO shall include and, and recover through, a separate "LIPA RFC". The NYISO shall file the LIPA RFC with the Commission as an informational filing. The NYISO will file such RFC for Commission review under the same "comparability" standard as is applied to review of changes in LIPA's TSC under Attachment H of this tariff. LIPA shall intervene in support of such filing at the Commission and shall take the responsibility to resolve all concerns about the contents of the filing that might be raised in such proceeding. The NYISO shall bill for LIPA the LIPA RFC to responsible entities in Transmission Districts other than the Long Island Transmission District consistent with Sections 6.10.3.1 through 6.10.3.4 and shall remit the revenues collected to LIPA each Billing Period.

6.10.4.4 Savings Clause. The inclusion in the NYISO OATT or in a FERC filing on an informational basis of the charges for recovery of costs incurred by LIPA or NYPA related to a regulated project undertaken pursuant to Attachment Y into the NYISO OATT, as provided for in Sections 6.10.4.3 and 6.10.4.4, or the inclusion of such charges in the NYISO RFC pursuant to Section 6.10.4.3.1.2, shall not be deemed to modify the treatment of such rates as non-jurisdictional pursuant to Section 201(f) of the FPA.

6.10.5 Recovery of Costs Incurred by an Other Developer Related to an Alternative Regulated Solution.

6.10.5.1 The RFC shall be used as the cost recovery mechanism for the recovery of the costs of an alternative regulated transmission solution that has been selected by the ISO as the more efficient or cost effective solution to the identified Reliability Need, and is authorized by FERC to recover costs under this rate

mechanism. Provided however, nothing in this cost recovery mechanism shall be deemed to create any additional rights for an Other Developer to proceed with a regulated transmission project that such Other Developer does not otherwise have at law. The provisions of Sections 6.10.3 through 6.10.3.4 of this Attachment shall be applicable to the recovery of the costs incurred by an Other Developer for proposing, developing, constructing, operating, maintaining, and financing an alternative regulated transmission project that the ISO has selected as the more efficient or cost effective solution to the identified Reliability Need .

6.10.5.2 Upon receipt of all necessary federal, state, and local authorizations, including FERC acceptance of a Section 205 filing authorizing cost recovery under the NYISO tariff, the Other Developer shall commence construction of the project . Upon completion of the project, the Other Developer and/or the NYISO, as applicable, will make a filing with FERC to provide the final project cost and resulting revenue requirement to be recovered pursuant to this Attachment. The resulting revenue requirement will become effective and recovery of project costs pursuant to this Attachment will commence upon the acceptance of the filing by FERC. This Section 6.10.5.2 also applies to the recovery of all reasonably incurred costs related to a project that the ISO has selected as the more efficient or cost effective solution, and is later halted in accordance with the provisions of the NYISO OATT, including but not limited to reasonable and necessary expenses incurred to implement an orderly termination of the project.

6.10.5.3 Other Developers may also propose a non-transmission solution subject to state jurisdiction to address a Reliability Need included in the Comprehensive Reliability Plan.

14.2 Attachment 1 to Attachment H

14.2.1 Schedules

Table of Contents

Niagara Mohawk Power Corporation **Attachment 1**

Calculation of RR Pursuant to Attachment H, Section 14.1.9.2 Year **Schedule 1**

Calculation of RR

14.1.9.2 The RR component shall equal the (a) Historical Transmission Revenue Requirement plus (b) the Forecasted Transmission Revenue Requirement plus (c) the Annual True-Up, determined in accordance with the formula below.

Historical Transmission Revenue Requirement (Historical TRR)

Line No.

Line No.					
1		**Historical Transmission Revenue Requirement (Historical TRR)**			
2					
3	14.1.9.2 (a)	Historical TRR shall equal the sum of NMPC's (A) Return and Associated Income Taxes, (B) Transmission Related Depreciation Expense, (C)			
4		Transmission Related Real Estate Tax Expense, (D) Transmission Related Amortization of Investment Tax Credits,			
5		(E) Transmission Operation and Maintenance Expense, (F) Transmission Related Administrative and General Expenses, (G) Transmission			
6		Related Payroll Tax Expense, (H) Billing Adjustments, and (I) Transmission Related Bad Debt Expense less			
7		(J) Revenue Credits, and (K) Transmission Rents, all determined for the most recently ended calendar year as of the beginning of the update year.			
8			Reference		
9			*Section:*	**0**	
10		Return and Associated Income Taxes	(A)	#DIV/0!	Schedule 8, line 64
11		Transmission-Related Depreciation Expense	(B)	#DIV/0!	Schedule 9, Line 6, column 5
12		Transmission-Related Real Estate Taxes	(C)	#DIV/0!	Schedule 9, Line 12, column 5
13		Transmission - Related Investment Tax Credit	(D)	#DIV/0!	Schedule 9, Line 16, column 5 times minus 1
14		Transmission Operation & Maintenance Expense	(E)	$0	Schedule 9, Line 23, column 5
15		Transmission Related Administrative & General Expense	(F)	#DIV/0!	Schedule 9, Line 38, column 5
16		Transmission Related Payroll Tax Expense	(G)	$0	Schedule 9, Line 44, column 5
17		Sub-Total (sum of Lines 10 - Line 16)		#DIV/0!	
18					
19		Billing Adjustments	(H)	$0	Schedule 10, Line 1
20		Bad Debt Expenses	(I)	$0	Schedule 10, Line 4
21		Revenue Credits	(J)	$0	Schedule 10, Line 7
22		Transmission Rents	(K)	$0	Schedule 10, Line 14
23					
24		Total Historical Transmission Revenue Requirement (Sum of Line 17 - Line 22)		#DIV/0!	
25					

Niagara Mohawk Power Corporation **Attachment 1**

Forecasted Transmission Revenue Requirement **Schedule 2**

Attachment H, Section 14.1.9.2

0

Shading denotes an input

Line No.						
1	14.1.9.2 (b)	**FORECASTED TRANSMISSION REVENUE REQUIREMENTS**				
2		Forecasted TRR shall equal (1) the Forecasted Transmission Plant Additions (FTPA) multiplied by the Annual FTRRF, plus (2) the Mid-Year Trend				
3		Adjustment (MYTA), plus (3) the Tax Rate Adjustment (TRA), as shown in the following formula:				
4						
5		Forecasted TRR = (FTPA * FTRRF) + MYTA + TRA				
6						
7			Period	Reference		Source
8						
9						
10	(1)	Forecasted Transmission Plant Additions (FTPA)			$0	Workpaper 8, Section I, Line 16
11		Annual Transmission Revenue Requirement Factor (FTRRF)			#DIV/0!	Line 35
12		Sub-Total (Lines 10*11)			#DIV/0!	
13		Plus Mid-Year Trend Adjustment (2) (MYTA)			$0	Workpaper 9, line 31, variance column
14		Less Impact of Transmission Support Payments on Historical Transmission Revenue Requirement			$0	Worpaper 9A
15		Forecasted Transmission Revenue Requirement (Line 12 + Line 13- Line 14)			**#DIV/0!**	
16	(2)	**MID YEAR TREND ADJUSTMENT (MYTA)**				
17		The Mid-Year Trend Adjustment shall be the difference, whether positive or negative, between				
18						
19		(i) the Historical TRR Component (E) excluding Transmission Support Payments, based on actual data for the first three months of the Forecast Period, and (ii) the Historical TRR Component (E) excluding Transmission Support Payments, based on data for the first three months of the year prior to the Forecast Period.				
20						
21	(3)	**The Tax Rate Adjustment (TRA)**				
22		The Tax Rate Adjustment shall be the amount, if any, required to adjust Historical TRR Component (A) for any change in the Federal Income Tax Rate				
23		and/or the State Income Tax Rate that takes effect during the first five months of the Forecast Period.				
24						
25	14.1.9.2(c)	**ANNUAL FORECAST TRANSMISSION REVENUE REQUIREMENT FACTOR**				
26		The Annual Forecast Transmission Revenue Requirement Factor (Annual FTRRF) shall equal the sum of Historical TRR components (A) through (C),				
27		divided by the year-end balance of Transmission Plant in Service determined in accordance with Section 14.1.9.2 (a), component (A)1(a).				
28						
29						
30		Investment Return and Income Taxes		(A)	#DIV/0!	Schedule 1, Line 10
31		Depreciation Expense		(B)	#DIV/0!	Schedule 1, Line 11
32		Property Tax Expense		(C)	#DIV/0!	Schedule 1, Line 12

33	Total Expenses (Lines 30 thru 32)		#DIV/0!	
34	Transmission Plant	(a)	#DIV/0!	Schedule 6, Page 1, Line 12
35	Annual Forecast Transmission Revenue Requirement Factor (Lines 33/ Line 34)		#DIV/0!	

Niagara Mohawk Power Corporation **Attachment 1**

Annual True-up (ATU) **Schedule 3**

Attachment H Section 14.1.9.2 (c)

Line No.			0 Year	Source:
1				
2	14.1.9.2(d)	The Annual True-Up (ATU) shall equal (1) the difference between the Actual Transmission Revenue Requirement and the Prior Year		
3		Transmission Revenue Requirement, plus (2) the difference between the Actual Scheduling, System Control and Dispatch costs		
4		and Prior Year Scheduling, System Control and Dispatch costs, plus (3) the difference between the Prior Year Billing Units and the Actual Year		
5		Billing Units multiplied by the Prior Year Unit Rate, plus (4) Interest on the net differences.		
6				
7	(1)	Revenue Requirement (RR) of rate effective July 1 of prior year	$0	Schedule 4, Line 1, Col (d)
8		Less: Annual True-up (ATU) from rate effective July 1 of prior year	$0	Schedule 4, Line 1, Col (c)
9		Prior Year Transmission Revenue Requirement	$0	Line 7 - Line 8
10				
11		Actual Transmission Revenue Requirement	#DIV/0!	Schedule 4, Line 2, Col (a)
12		Difference	#DIV/0!	Line 11 - Line 9
13				
14	(2)	Prior Year Scheduling, System Control and Dispatch costs (CCC)	$0	Schedule 4, Line 1, Col (e)
15		Actual Scheduling, System Control and Dispatch costs (CCC)	$0	Schedule 4, Line 2, Col (e)
16		Difference	$0	Line 15 - Line 14
17				
18	(3)	Prior Year Billing Units (MWH)	$0	Schedule 4, Line 1, Col (f)
19		Actual Billing Units	-	Schedule 4, Line 2, Col (f)
20		Difference	-	Line 18 - Line 19
21		Prior Year Indicative Rate	#DIV/0!	Schedule 4, Line 1, Col (g)
22		Billing Unit True-Up	#DIV/0!	Line 20 * Line 21
23				
24		Total Annual True-Up before Interest	#DIV/0!	(Line 12 + Line 16 + Line 22)
25				
26	(4)	Interest	#DIV/0!	Line 57
27				
28		Annual True-up RR Component	#DIV/0!	(Line 24 + Line 26)
29				

Interest Calculation per 18 CFR § 35.19a

30	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
31	Quarters	Annual	Accrued Prin	Monthly	Days			Accrued Prin	Accrued
32		Interest	& Int. @ Beg	(Over)/Under	in	Period		& Int. @ End	Int. @ End
33		Rate (a)	Of Period	Recovery	Period	Days	Multiplier	Of Period	Of Period
34									
35									
36	3rd QTR '07		0		92	92	1.0000	$0	$0
37	July	0.00%		#DIV/0!	31	92	1.0000	#DIV/0!	#DIV/0!
38	August	0.00%		#DIV/0!	31	61	1.0000	#DIV/0!	#DIV/0!
39	September	0.00%		#DIV/0!	30	30	1.0000	#DIV/0!	#DIV/0!
40									

41	4th QTR '07		#DIV/0!		92	92	1.0000	#DIV/0!	#DIV/0!
42	October	0.00%		#DIV/0!	31	92	1.0000	#DIV/0!	#DIV/0!
43	November	0.00%		#DIV/0!	30	61	1.0000	#DIV/0!	#DIV/0!
44	December	0.00%		#DIV/0!	31	31	1.0000	#DIV/0!	#DIV/0!
45									
46	1st QTR '08		#DIV/0!		91	91	1.0000	#DIV/0!	#DIV/0!
47	January	0.00%		#DIV/0!	31	91	1.0000	#DIV/0!	#DIV/0!
48	February	0.00%		#DIV/0!	29	60	1.0000	#DIV/0!	#DIV/0!
49	March	0.00%		#DIV/0!	31	31	1.0000	#DIV/0!	#DIV/0!
50									
51	2nd QTR '08		#DIV/0!		91	91	1.0000	#DIV/0!	#DIV/0!
52	April	0.00%		#DIV/0!	30	91	1.0000	#DIV/0!	#DIV/0!
53	May	0.00%		#DIV/0!	31	61	1.0000	#DIV/0!	#DIV/0!
54	June	0.00%		#DIV/0!	30	30	1.0000	#DIV/0!	#DIV/0!
55									
56									
57	Total (over)/under Recovery			#DIV/0!	(line 24)	#DIV/0!			#DIV/0!

(a) Interest rates shall be the interest rates as reported on the FERC Website http://www.ferc.gov/legal/acct-matts/interest-rates.asp

Attachment 1
Schedule 4

Niagara Mohawk Power Corporation Wholesale TSC Calculation Information

		(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Historical Transmission Revenue Requirement (Historical TRR)	Forecasted Transmission Revenue Requirement	Annual True Up (**)	Revenue Requirement (RR)	Scheduling System Control and Dispatch Costs (CCC)	Annual Billing Units (BU) MWh	Rate $/MWh (*)
1	Prior Year Rates Effective _____	-	-	-	-	-	-	#DIV/0!
2	Current Year Rates Effective July 1, _____	#DIV/0!	#DIV/0!		#DIV/0!	-	-	#DIV/0!
3	Increase/(Decrease)							#DIV/0!
4	Percentage Increase/(Decrease)							#DIV/0!

1.) Information directly from Niagara Mohawk Prior Year Informational Filing

2.)

(a) Schedule 1, Line 24

(b) Schedule 2, Line 14

(c) Schedule 3, Line 28

(d) Attachment H, Section 14.1.9.2 The RR Component shall equal Col (a) Historical Transmission Revenue Requirement plus Col (b) the Forecasted Transmission Revenue Requirement which shall exclude Transmission Support Payments, plus Col (c) the Annual True-Up plus Col (c) the Annual True-Up

(e) Schedule 11 - Annual Scheduling, System Control and Dispatch Costs. (i.e. the Transmission Component of control center costs) as recorded in FERC Account 561 and its associated sub-accounts from the prior calendar year excluding any NY Independent System Operating (NYISO) system control and load dispatch expenses already recovered under Schedule 1 of the NYISO Tariff.

(f) Schedule 12 - Billing Units shall be the total Niagara Mohawk load as reported to the NYISO for the calendar year prior to the Forecast Period, including the load for customers taking service under Niagara Mohawk's TSC rate. The total Niagara Mohawk load will be adjusted to exclude (i) load associated with wholesale transactions being revenue credited through the WR, CRR, SR, ECR, and Reserved components of Attachment H of the NYISO TSC rate including Niagara Mohawk's external sales, load associated with grandfathered OATT agreements, and any load related to pre-OATT grandfathered agreements; (ii) load associated with transactions being revenue credited under Historical TRR Component J; and (iii) load associated with netted station service.

(g) (Col (d) + Col (e)) / Col (f)

(*) The rate column represents the unit rate prior to adjustments; the actual rate will be determined pursuant to the applicable TSC formula rate.

(**)

Niagara Mohawk Power Corporation
Allocation Factors - As calculated pursuant to Section 14.1.9.1

Attachment 1
Schedule 5

	0

Shading denotes an input

Line No.				Source	Definition
1	14.1.9.1 1.	**Electric Wages and Salaries Factor**	**83.5000%**		Fixed per settlement
2					
3	14.1.9.1 3.	**Transmission Wages and Salaries Allocation Factor**	**13.0000%**		Fixed per settlement
4					
5					
6					
7					
8	14.1.9.1 2.	**Gross Transmission Plant Allocation Factor**			
9		Transmission Plant in Service	#DIV/0!	Schedule 6, Page 2, Line 3, Col 5	Gross Transmission Plant Allocation Factor shall equal the total investment in
10		Plus: Transmission Related General	$0	Schedule 6, Page 2, Line 5, Col 5	Transmission Plant in Service, Transmission Related Electric General Plant,
11		Plus: Transmission Related Common	$0	Schedule 6, Page 2, Line 10, Col 5	Transmission Related Common Plant and Transmission Related Intangible Plant
12		Plus: Transmission Related Intangible Plant	$0	Schedule 6, Page 2, Line 15, Col 5	divided by Gross Electric Plant.
13		Gross Transmission Investment	#DIV/0!	Sum of Lines 9 - 13	
14					
15		Total Electric Plant		FF1 207.104	
16		Plus: Electric Common	$0	Schedule 6, Page 2, Line 10, Col 3	
17		Gross Electric Plant in Service	$0	Line 15 + Line 16	
18					
19		**Percent Allocation**	**#DIV/0!**	Line 13 / Line 17	
20					
21	14.1.9.1 4.	**Gross Electric Plant Allocation Factor**			
22					
23		Total Electric Plant in Service	$0	Line 15	Gross Electric Plant Allocation Factor shall equal
24		Plus: Electric Common Plant	$0	Schedule 6, Page 2, Line 10, Col 3	Gross Electric Plant divided by the sum of Total Gas Plant,
25		Gross Electric Plant in Service	$0	Line 23 + Line 24	Total Electric Plant, and Total Common Plant
26					
27		Total Gas Plant in Service		FF1 201.8d	
28		Total Electric Plant in Service	$0	Line 15	
29		Total Common Plant in Service	$0	Schedule 6, Page 2, Line 10, Col 1	
30		Gross Plant in Service (Gas & Electric)	-	Sum of Lines 27-Lines 29	
31					
32		**Percent Allocation**	**#DIV/0!**	Line 25 / Line 30	

Niagara Mohawk Power Corporation
Annual Revenue Requirements of Transmission Facilities
Transmission Investment Base (Part 1 of 2)
Attachment H, section 14.1.9.2

Line No.

14.1.9.2 (a) Transmission Investment Base

A.1. Transmission Investment Base shall be defined as (a) Transmission Plant in Service, plus (b) Transmission Related Electric General Plant, plus (c) Transmission Related Common Plant, plus (d) Transmission Related Intangible Plant, plus (e) Transmission Related Plant Held for Future Use, less (f) Transmission Related Depreciation Reserve, less (g) Transmission Related Accumulated Deferred Taxes, plus (h) Transmission Related Regulatory Assets net of Regulatory Liabilities, plus (i) Transmission Related Prepayments, plus (j) Transmission Related Materials and Supplies, plus (k) Transmission Related Cash Working Capital.

	Reference	**2007**	Reference
	Section:		
Transmission Plant in Service	(a)	#DIV/0!	Schedule 6, page 2, line 3, column 5
General Plant	(b)	$0	Schedule 6, page 2, line 5, column 5
Common Plant	(c)	$0	Schedule 6, page 2, line 10, column 5
Intangible Plant	(d)	$0	Schedule 6, page 2, line 15, column 5
Plant Held For Future Use	(e)	$0	Schedule 6, page 2, line 19, column 5
Total Plant (Sum of Line 12 - Line 16)		#DIV/0!	
Accumulated Depreciation	(f)	#DIV/0!	Schedule 6, page 2, line 29, column 5
Accumulated Deferred Income Taxes	(g)	#DIV/0!	Schedule 7, line 6, column 5
Other Regulatory Assets	(h)	#DIV/0!	Schedule 7, line 11, column 5
Net Investment (Sum of Line 17 -Line 21)		#DIV/0!	
Prepayments	(i)	#DIV/0!	Schedule 7, line 15, column 5
Materials & Supplies	(j)	#DIV/0!	Schedule 7, line 21, column 5
Cash Working Capital	(k)	$0	Schedule 7, line 28, column 5
Total Investment Base (Sum of Line 22 - Line 26)		#DIV/0!	

Attachment H Section 14.1. 9.2 (a) A. 1.

0

Shading denotes an input

Line No.		(1) Total	(2) Allocation Factor		(3) = (1)*(2) Electric Allocated	(4) Allocation Factor		(5) = (3)*(4) Transmission Allocated	FERC Form 1/PSC Report Reference for col (1)		Definition
1	Transmission Plant								FF1 207.58g	14.1.9.2(a)A.1.(a)	Transmission Plant in Service shall equal the balance of total investment in Transmission Plant plus Wholesale Metering Investment
2	Wholesale Meter Plant							#DIV/0!	Workpaper 1		
3	Total Transmission Plant in Service (Line 1+ Line 2)							#DIV/0!			
4											
5	General Plant		100.00%		$0	13.00%	(c)	$0	FF1 207.99g	14.1.9.2(a)A.1.(b)	Transmission Related Electric General Plant shall equal the balance of investment in Electric General Plant mulitplied by the Transmission Wages and Salaries Allocation Factor
6											
7											
8											
9											
10	Common Plant		83.50%	(a)	$0	13.00%	(c)	$0	FF1 201. 8h	14.1.9.2(a)A.1.(c)	Transmission Related Common Plant shall equal Common Plant multiplied by the Electric Wages and Salaries Allocation Factor and further multiplied by the Transmission Wages and Salaries Allocation Factor.
11											
12											
13											
14											
15	Intangible Plant		100.00%		-	13.00%	(c)	$0	FF1 205.5g	14.1.9.2(a)A.1.(d)	Transmission Related Intangible Plant shall equal Intangible Electric Plant multiplied by the Transmission Wages and Salaries Allocation Factor.
16											
17											
18											
19	Transmission Plant Held for Future Use	$0						$0	Workpaper	14.1.9.2(a)A.1.(e)	Transmission Related Plant Held

										10	for Future Use shall equal the balance in Plant Held for Future Use associated with property planned to be used for transmission service within five years
20											
21											
22											
23	Transmission Accumulated Depreciation										
24	Transmission Accum. Depreciation							$0	FF1 219.25b	14.1.9.2(a)A.1.(f)	Transmission Related Depreciation Reserve shall equal the balance of: (i) Transmission Depreciation Reserve, plus (ii) the product of Electric General Plant Depreciation Reserve multiplied by the Transmission Wages and Salaries Allocation Factor, plus (iii) the product of Common Plant Depreciation Reserve multiplied by the Electric Wages and Salaries Allocation Factor and further multiplied by the Transmission Wages and Salaries Allocation Factor plus (iv) the product of Intangible Electric Plant Depreciation Reserve multiplied by the Transmission Wages and Salaries Allocation Factor plus (v) depreciation reserve associated with the Wholesale Metering Investment
25	General Plant Accum.Depreciation		100.00%		$0	13.00%	(c)	$0	FF1 219.28b		
26	Common Plant Accum Depreciation		83.50%	(a)	$0	13.00%	(c)	$0	FF1 356.1 end of year balance		
27	Amortization of Other Utility Plant		100.00%		$0	13.00%	(c)	$0	FF1 200.21c		
28	Wholesale Meters	#DIV/0!						#DIV/0!	Workpaper 1		
29	Total Depreciation (Sum of line 24 - Line 28)							#DIV/0!			
30											
31											
32											
33											
34											
35											
36											

Allocation Factor Reference
(a) Schedule 5, line 1
(b) Schedule 5, line 32 - not used on this Schedule
(c) Schedule 5, line 3
(d) Schedule 5, line 19 - not used on this Schedule

Transmission Investment Base (Part 2 of 2)

Attachment H Section 14.1.9.2 (a) A. 1.

Shading denotes an input

				0						
Line No.		(1) Total	(2) Allocation Factor	(3) = (1)*(2) Electric Allocated	(4) Allocation Factor		(5) = (3)*(4) Transmission Allocated	FERC Form 1/PSC Report Reference for col (1)		Definition
1	Transmission Accumulated Deferred Taxes									
2	Accumulated Deferred Taxes (281-282)		100.00%	$0	#DIV/0!	(d)	#DIV/0!	FF1 275.2k	14.1.9.2(a)A.1.(g)	Transmission Related Accumulated Deferred Income Taxes
3	Accumulated Deferred Taxes (283)	$0	100.00%	$0	#DIV/0!	(d)	#DIV/0!	Workpaper 2, Line 5		shall equal the electric balance of Total Accumulated Deferred
4	Accumulated Deferred Taxes (190)		100.00%	$0	#DIV/0!	(d)	#DIV/0!	FF1 234.8c		Income Taxes (FERC Accounts 190, 55,281, 282, and 283 net of
5	Accumulated Deferred Inv. Tax Cr (255)		100.00%	$0	#DIV/0!	(d)	#DIV/0!	FF1 267.8h		stranded costs), multiplied by the Gross Transmission Plant
6	Total (Sum of line 2 - Line 5)			$0			#DIV/0!			Allocation Factor.
7										
8	Other Regulatory Assets									
9	FAS 109 (Asset Account 182.3)		100.00%	$0	#DIV/0!	(d)	#DIV/0!	FF1 232 lines 2,4,9,17	14.1.9.2(a)A.1.(h)	Transmission Related Regulatory Assets shall be Regulatory
10	FAS 109 (Liability Account 254)		100.00%	$0	#DIV/0!	(d)	#DIV/0!	FF1 278.1 lines 4&21(f)		Assets net of Regulatory Liabilities multiplied by the Gross
11	Total (line 9 + Line 10)	$0		$0			#DIV/0!			Transmission Plant Allocation Factor.
12										
13	Transmission Prepayments							FF1 111.57c	14.1.9.2(a)A.1.(i)	Transmission Related Prepayments shall be the product of
14	Less: Prepaid State and Federal Income Tax							FF1 263 lines 2 & 9 (h)		Prepayments excluding Federal and State taxes multiplied by
15	Total Prepayments	$0	#DIV/0! (b)	#DIV/0!	#DIV/0!	(d)	#DIV/0!			the Gross Electric Plant Allocation Factor and further
16										multiplied by the Gross Transmission Plant Allocation Factor.
17										
18	Transmission Material and Supplies								14.1.9.2(a)A.1.(j)	Transmission Related Materials and Supplies shall equal: (i)
19	Trans. Specific O&M Materials and Supplies						$0	FF1 227.8		the balance of Materials and Supplies assigned to
20	Construction Materials and Supplies		#DIV/0! (b)	#DIV/0!	#DIV/0!	(d)	#DIV/0!	FF1 227.5		Transmission plus (ii) the product of Material and Supplies
21	Total (Line 19 + Line 20)						#DIV/0!			assigned to Construction multiplied by the Gross Electric
22										Plant Allocation Factor and further multiplied by Gross
23										Transmission Plant Allocation Factor.

24					
25	Cash Working Capital			14.1.9.2(a)A.1.(k)	Transmission Related Cash Working Capital shall be an
26	Operation & Maintenance Expense	$0	Schedule 9, Line 23		allowance equal to the product of: (i) 12.5% (45 days/ 360 days = 12.5%)
27		0.1250	x 45 / 360		multiplied by (ii) Transmission Operation and Maintenance Expense.
28	Total (line 26 * line 27)	$0			
29					
30					

Allocation Factor Reference
(a) Schedule 5, line 1 - not used on this Schedule
(b) Schedule 5, line 32
(c) Schedule 5, line 3 - not used on this Schedule
(d) Schedule 5, line 19

Niagara Mohawk Power Corporation **Attachment 1**
Annual Revenue Requirements of Transmission Facilities **Schedule 8**
Cost of Capital Rate

Shading denotes an input **0**

The Cost of Capital Rate shall equal the proposed Weighted Costs of Capital plus Federal Income Taxes and State Income Taxes.

The Weighted Costs of Capital will be calculated for the Transmission Investment Base using NMPC's actual capital structure and will equal the sum of (i), (ii), and (iii) below:

(i) the long-term debt component, which equals the product of the actual weighted average embedded cost to maturity of NMPC's long-term debt outstanding during the year and the sum of (a) the ratio of actual long-term debt to total capital at year-end; and (b) the extent, if any, by which the ratio of NMPC's actual common equity to total capital at year-end exceeds fifty percent (50%). Long term debt shall be defined as the average of the beginning of the year and end of year balances of the following: long term debt less the unamortized Discounts on Long-Term Debt less the unamortized Loss on Reacquired Debt plus unamortized Gain on Reacquired Debt. Cost to maturity of NMPC's long-term debt shall be defined as the cost of long term debt included in the debt discount expense and any loss or gain on reacquired debt.

(ii) the preferred stock component, which equals the product of the actual weighted average embedded cost to maturity of NMPC's preferred stock then outstanding and the ratio of actual preferred stock to total capital at year-end;

(iii) the return on equity component shall be the product of the allowed return on equity of 10.3% and the ratio of NMPC's actual common equity to total capital at year-end, provided that such ratio shall not exceed fifty percent (50%).

			CAPITALIZATION	Source:	CAPITALIZATION RATIOS	COST OF CAPITAL	Source:	WEIGHTED COST OF CAPITAL	EQUITY PORTION
(i)	Long-Term Debt	$0	Workpaper. 6, Line 16b	#DIV/0!	#DIV/0!	Workpaper 6, Line 17c	#DIV/0!		
(ii)	Preferred Stock		FF1 112.3c	#DIV/0!	#DIV/0!	Workpaper 6, Line 24d	#DIV/0!	#DIV/0!	
(iii)	Common Equity		FF1 112.16c - FF1 112.3,12,15c	#DIV/0!	10.30%		#DIV/0!	#DIV/0!	
	Total Investment Return	$0		#DIV/0!			#DIV/0!	#DIV/0!	

14.1.9.2.2.(b) Federal Income Tax shall equal = (A. + [B / C] X Federal Income Tax Rate)

(1 - Federal Income Tax Rate)

where A is the sum of the preferred stock component and the return on equity component, each as determined in Sections (a)(ii) and for the ROE set forth in (a)(iii) above, B is the Equity AFUDC component of Depreciation Expense for Transmission Plant in Service as defined at Section 14.1.9.1.16 (FF1 117.38c), and C is the Transmission Investment Base as shown at Schedule 6, Page 1 of 2, Line 28.

= (#DIV/0! +($0) / #DIV/0! X (1 - 0))

= #DIV/0!

14.1.9.2.2.(c) State Income Tax shall equal = (A. + [B / C] + Federal Income Tax Rate) X State Income Tax Rate / (1 - State Income Tax Rate)

where A is the sum of the preferred stock component and the return on equity component as determined in (a)(ii) and (a)(iii) above , B is the Equity AFUDC component of Depreciation Expense for Transmission Plant in Service as defined at Section 14.1.9.1.16 above, and C is the Transmission Investment Base as shown at Schedule 6, Page 1 of 2, Line 28.

= (#DIV/0 ! +($ 0) / #DIV/ 0! + #DIV/0!) X / (1 - 0)

= #DIV/0!

(a)+(b)+(c) Cost of Capital Rate = #DIV/0!

14.1.9.2(a) A. Return and Associated Income Taxes shall equal the product of the Transmission Investment Base and the Cost of Capital Rate

	Transmission Investment		
60	Base	#DIV/0!	Schedule 6, page 1 of 2, Line 28
61			
	Cost of Capital		
62	Rate	#DIV/0!	Line 53
63			
	= Investment Return		
64	and Income Taxes	#DIV/0!	Line 60 X Line 62

Niagara Mohawk Power Corporation **Attachment 1**
Annual Revenue Requirements of Transmission Facilities **Schedule 9**
Transmission Expenses

Attachment H Section 14.1.9.2 **0**

Shading denotes an input

Line No.		(1) Total	(2) Allocation Factor	(3) = (1)*(2) Electric Allocated	(4) Allocation Factor	(5) = (3)*(4) Transmission Allocated	FERC Form 1/ PSC Report Reference for col (1)		Definition
	Depreciation Expense								
1	Transmission Depreciation					$0	FF1 336.7f	14.1.9.2.B.	Transmission Related Depreciation Expense shall equal the sum of:
2	General Depreciation		100.0000%	$0	13.0000% (c)	$0	FF1 336.10f		(i) Depreciation Expense for Transmission Plant in Service, plus (ii)
3	Common Depreciation		83.5000% (a)	$0	13.0000% (c)	$0	FF1 356.1		the product of Electric General Plant Depreciation Expense multiplied
4	Intangible Depreciation		100.0000%	$0	13.0000% (c)	$0	FF1 336.1f		by the Transmission Wages and Salaries Allocation Factor plus (iii)
5	Wholesale Meters					#DIV/0!	Workpaper 1		Common Plant Depreciation Expense multiplied by the Electric
6	Total (line 1+2+3+4+5)					#DIV/0!			Wages and Salaries Allocation Factor, further multiplied by the
7									Transmission Wages and Salaries Allocation Factor plus (iv)
8									Intangible Electric Plant Depreciation Expense multiplied by the
9									Transmission Wages and Salaries Factor plus (v) depreciation
10									expense associated with the Wholesale Metering Investment.
11									
12	Real Estate Taxes		100.0000%	$0	#DIV/0! (d)	#DIV/0!	FF1 263.25i	14.1.9.2.C.	Transmission Related Real Estate Tax Expense shall equal the
13									electric Real Estate Tax Expenses multiplied by the Gross
14									Transmission Plant Allocation Factor.
15									
16	Amortization of Investment Tax Credits		#DIV/0! (b)	#DIV/0!	#DIV/0! (d)	#DIV/0!	FF1 117.58c	14.1.9.2.D.	Transmission Related Amortization of Investment Tax Credits shall
17									equal the product of Amortization of Investment Tax Credits multiplied
18									by the Gross Electric Plant Allocation Factor and further multiplied by
19									the Gross Transmission Plant Allocation Factor.
20	Transmission Operation and Maintenance								
21	Operation and Maintenance					$0	FF1 321.112b	14.1.9.2.E.	Transmission Operation and Maintenance Expense shall equal
22	less Load Dispatching - #561					$0	FF1 321.84-92b		the sum of electric expenses as recorded in
23	O&M (Line 21 - Line 22)	$0				$0			FERC Account Nos. 560, 562-574.
24									
25	Transmission Administrative and General							14.1.9.2.F.	Transmission Related Administrative and General Expenses shall
26	Total Administrative and General						FF1 323.197b		equal the product of electric Administrative and General Expenses,
27	less Property Insurance (#924)						FF1 323.185b		excluding the sum of Electric Property Insurance, Electric Research and
28	less Pensions and Benefits (#926)						FF1 323.187b		Development Expense and Electric Environmental Remediation

									Expense,
29	less: Research and Development Expenses (#930)	$0					Workpaper 12		
30	Less: 50% of NY PSC Regulatory Expense						50% of Workpaper 15		and 50% of the NYPSC Regulatory Expense multiplied by the Transmission Wages and Salaries Allocation Factor,
31	Less: 18a Charges (Temporary Assessment						Workpaper 15		
32	less: Environmental Remediation Expense	$0					Workpaper 11		plus the sum of Electric Property Insurance multiplied by the Gross
33	Subtotal (Line 26-27-28-29-30-31-32)	$0	100.0000 %	$0	13.0000% (c)	$0			Transmission Plant Allocation Factor, plus transmission-specific Electric
34	PLUS Property Insurance alloc. using Plant Allocation	$0	100.0000 %	$0	#DIV/0! (d)	#DIV/0!	Line 27		Research and Development Expense, and transmission-specific
35	PLUS Pensions and Benefits	$88,644,000	100.0000 %	$88,644,000	13.0000% (c)	$11,523,720	Workpaper 3		Electric Environmental Remediation Expense. In addition, Administrative
36	PLUS Transmission-related research and development	$0				$0	Workpaper 12		
37	PLUS Transmission-related Environmental Expense	$0				$0	Workpaper 11		and General Expenses shall exclude the actual Post-Employment Benefits Other than Pensions ("PBOP") included in FERC Account 926,
38	Total A&G (Line 33+34+35+36+37)	$88,644,000		$88,644,000		#DIV/0!			and shall add back in the amounts shown on Workpaper 3, page 1,
39									or other amount subsequently approved by FERC under Section 205 or 206.
40	Payroll Tax Expense							14.1.9.2.G.	Transmission Related Payroll Tax Expense shall equal the product of
41	Federal Unemployment						FF1 263.4i		electric Payroll Taxes multiplied by the Transmission Wages and
42	FICA						FF1 263.3i		Salaries Allocation Factor.
43	State Unemployment						FF1 263.17i		
44	Total (Line 41+42+43)	$0	100.0000 %	$0	13.0000% (b)	$0			

Allocation Factor Reference
(a) Schedule 5, line 1
(b) Schedule 5, line 32
(c) Schedule 5, line 3
(d) Schedule 5, line 19

Niagara Mohawk Power Corporation **Attachment 1**
Annual Revenue Requirements of Transmission Facilities **Schedule 10**
Billing Adjustments, Revenue Credits, Rental Income

0

Attachment H Section
14.1.9.2 (a)

Shading denotes an input

Line No.		(1) Total	Source		Definition
1	Billing Adjustments			14.1.9.2.H.	Billing Adjustments shall be any adjustments made in accordance with Section 14.1.9.4.4 below.
2					( ) indicates a refund or a reduction to the revenue requirement on Schedule 1.
3					
4	Bad Debt Expense	$0	Workpaper 4	14.1.9.2.I.	Transmission Related Bad Debt Expense shall equal
5					Bad Debt Expense as reported in Account 904 related to NMPC's wholesale transmission billing.
6					
7	Revenue Credits	$0	Workpaper 5	14.1.9.2.J.	Revenue Credits shall equal all Transmission revenue recorded in FERC account 456
8					excluding (a) any NMPC revenues already reflected in the WR, CRR, SR, ECR and Reserved
9					components in Attachment H of the NYISO TSC rate; (b) any revenues associated
10					with expenses that have been excluded from NMPC's revenue requirement; and (c) any
11					revenues associated with transmission service provided under this TSC rate, for which the
12					load is reflected in the calculation of BU.
13					
14	Transmission Rents	$0	Workpaper 7	14.1.9.2.K.	Transmission Rents shall equal all Transmission-related rental income recorded in FERC
15					account 454.615
16					
17				14.1.9.4(d)	
18				1	Any changes to the Data Inputs for an Annual Update, including but not limited to
19					revisions resulting from any FERC proceeding to consider the Annual Update, or
20					as a result of the procedures set forth herein, shall take effect as of the beginning
21					of the Update Year and the impact of such changes shall be incorporated into the
22					charges produced by the Formula Rate (with interest determined in accordance
23					with 18 C.F.R. § 38.19(a)) in the Annual Update for the next effective Update
24					Year. This mechanism shall apply in lieu of mid-Update Year adjustments and
25					any refunds or surcharges, except that, if an error in a Data Input is discovered
26					and agreed upon within the Review Period, the impact of such change shall be
27					incorporated prospectively into the charges produced by the Formula Rate during
28					the remainder of the year preceding the next effective Update Year, in which case
29					the impact reflected in subsequent charges shall be reduced accordingly.
30				2	The impact of an error affecting a Data Input on charges collected during the
31					Formula Rate during the five (5) years prior to the Update Year in which the error
32					was first discovered shall be corrected by incorporating the impact of the error on

the charges produced by the Formula Rate during the five-year period into the charges produced by the Formula Rate (with interest determined in accordance with 18 C.F.R. § 38.19(a)) in the Annual Update for the next effective Update Year. Charges collected before the five-year period shall not be subject to correction.

(b)	List of Items excluded from the Revenue Requirement	Reason

Niagara Mohawk Power Corporation
System, Control, and Load Dispatch Expenses (CCC)
Attachment H, Section
14.1.9.5

The CCC shall equal the annual Scheduling, System Control and Dispatch Costs (i.e.,
the transmission component of control center costs) as recorded in FERC Account 561 and its associated sub-accounts
using information from the prior calendar year, excluding NYISO system control and load dispatch expense
already recovered under Schedule 1 of the NYISO Tariff.

1	**Scheduling and Dispatch Expenses**			**0**	**Source**
2					
3	Accounts	561	Load Dispatching		FF1 321.84b
4	Accounts	561.1	Reliability		FF1 321.85b
5	Accounts	561.2	Monitor and Operate Transmission System		FF1 321.86b
6	Accounts	561.3	Transmission Service and Schedule		FF1 321.87b
7	Accounts	561.4	Scheduling System Control and Dispatch		FF1 321.88b
8	Accounts	561.5	Reliability, Planning and Standards Development		FF1 321.89b
9	Accounts	561.6	Transmission Service Studies		FF1 321.90b
10	Accounts	561.7	Generation Interconnection Studies		FF1 321.91b
11	Accounts	561.8	Reliability, Planning and Standards Dev. Services		FF1 321.92b
12					
13			Total Load Dispatch Expenses (sum of Lines 3 - 11)		sum lines 3 - 11
14					
15	Less Account 561 directly recovered under Schedule 1 of the NY ISO Tariff				
16					
17	Accounts	561.4	Scheduling System Control and Dispatch		line 7
18	Accounts	561.8	Reliability, Planning and Standards Dev. Services		line 11
19		Total NYISO Schedule 1			line 17 + line 18
20					
21	Total CCC Component				line 13 - line 19

Niagara Mohawk Power Corporation
Billing Units - MWH
Attachment H, Section 14.1.9.6

BU shall be the total Niagara Mohawk load as reported to the NYISO for the calendar billing year prior to the Forecast Period, including the load for customers taking service under Niagara Mohawk's TSC Rate. The total Niagara Mohawk load will be adjusted to exclude (i) load associated with wholesale transactions being revenue credited through the WR, CRR, SR, ECR and Reserved components of Workpaper H of the NYISO TSC rate including Niagara Mohawk's external sales, load associated with grandfathered OATT agreements, and any load related to pre-OATT grandfathered agreements; (ii) load associated with transactions being revenue credited under Historical TRR Component J; and (iii) load associated with netted station service.

Line No.			SOURCE
1	Subzone 1		NIMO TOL (transmission owner load)
2	Subzone 2		NIMO TOL (transmission owner load)
3	Subzone 3		NIMO TOL (transmission owner load)
4	Subzone 4		NIMO TOL (transmission owner load)
5	Subzone 29		NIMO TOL (transmission owner load)
6	Subzone 31		NIMO TOL (transmission owner load)
7	Total NIMO Load report to NYISO	**0.000**	sum lines 1-6
8	LESS: All non-retail transactions		
9	Watertown		FF1 page 329.11.j
10	Disputed Station Service		NIMO TOL (transmission owner load)
11	Other non-retail transactions		All other non-retail transactions (Sum of 300,000 series PTID's from TOL)
12	Total Deductions	**0.000**	sum lines 9 - 11
13	PLUS: TSC Load		
14	NYMPA Muni's, Misc. Villages, Jamestown (X1)		FF1 page 329.19.j
15	NYPA Niagara Muni's (X2)		FF1 page 329.1.j
16	Total additions	**0.000**	sum lines 15 -17
17	Total Billing Units	**0.000**	line 7 - line 12 + line 16

14.2.2 NYPA Transmission Adjustment Charge ("NTAC")

14.2.2.1 Applicability of the NYPA Transmission Adjustment Charge

Each Billing Period, the ISO shall charge, and each Transmission Customer shall pay, the applicable NYPA Transmission Adjustment Charge ("NTAC") calculated in accordance with Section 14.2.2.2.2 of this Attachment for the first two (2) months of LBMP and in accordance with Section 14.2.2.2.1 of this Attachment thereafter. The NTAC shall apply to Transmission Service:

14.2.2.1.1 from one or more Interconnection Points between the NYCA and another Control Area to one or more Interconnection Points between the NYCA and another Control Area ("Wheels Through");[1] or

14.2.2.1.2 from the NYCA to one or more Interconnection Points between the NYCA and another Control Area, including transmission to deliver Energy purchased from the LBMP Market and delivered to such a Control Area Interconnection ("Exports");1 or

14.2.2.1.3 to serve Load within the NYCA.

In summary, the NTAC will be applied to all Energy Transactions, including internal New York State Loads and Wheels Through and Exports out of the NYCA at a uniform, non-discountable rate.

14.2.2.2 NTAC Calculation

14.2.2.2.1 NTAC Formula

Beginning with January 2001, NYPA shall calculate the NTAC applicable to Transmission Service to serve New York State Load, Wheels Through and Exports as follows:

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[1] The NTAC shall not apply to Wheels Through or Exports scheduled with the ISO to destinations within the New England Control Area provided that the conditions listed in Section 2.7.2.1.4 of this Tariff are satisfied.

$NTAC = \{(ATRR_{NTAC} \div 12) - (EA) - (IR \div 12) - SR - CRN - WR - ECR - NR - NT\}/(BU \div 12)$

Where:

$ATRR_{NTAC}$ = NYPA's Annual Transmission Revenue Requirement for costs not recoverable through project-specific transmission revenue requirements, which includes the Scheduling, System Control and Dispatch Costs of NYPA's control center, all as determined in accordance with the Formula Rate Template provided in Section 14.2.3.1 of this Attachment, and as reflected on SCH - Summary, line 11 of the Formula Rate Template;

EA = Monthly Net Revenues from Modified Wheeling Agreements, Facility Agreements and Third Party TWAs, and Deliveries to directly connected Transmission Customers;

SR = $SR_1 + SR_2 + SR_3$

SR_1 will equal the revenues from the Direct Sale by NYPA of Original Residual TCCs, and Grandfathered TCCs associated with ETAs, the expenses for which are included in NYPA's $ATRR_{NTAC}$ where NYPA is the Primary Owner of said TCCs.

SR_2 will equal NYPA's revenues from the Centralized TCC Auction allocated pursuant to Attachment M; this includes revenues from: (a) TCCs associated with Residual Transmission Capacity that are sold in the Centralized TCC Auction; and (b) the sale of Grandfathered TCCs associated with ETAs, if the expenses for these ETAs are included in NYPA's $ATRR_{NTAC}$.

Revenue from TCCs associated with Residual Transmission Capacity includes payments for Original Residual TCCs that the Transmission Providers sell through the Centralized TCC

Auction and the allocation of revenue for other TCCs sold through the Centralized TCC Auction (per the Facility Flow-Based Methodology described in Attachment N).

SR_1 shall be updated prior to the start of each month based on actual data for the calendar month prior to the month in which the adjustment is made (i.e., January actual data will be used in February to calculate the NTAC effective in March). SR_1 for a month in which a Direct Sale is applicable shall equal the total nominal revenue that NYPA will receive under each applicable TCC sold in a Direct Sale divided by the duration of the TCC (in months).

SR_2 shall equal the Transmission Owner's share of Net Auction Revenue for all rounds of a Centralized TCC Auction, as calculated pursuant to Attachment N, divided equally among the months covered by the Centralized TCC Auction. SR_2 shall be adjusted after each Centralized TCC Auction, and the revised SR_2 shall be effective at the start of each Capability Period;

SR_3 shall equal NYPA's share of revenues from the award and renewal of Historic Fixed Price TCCs, as determined pursuant to Section 20.4 of Attachment N. The share of revenues allocated to NYPA pursuant to Section 20.4 of Attachment N shall be adjusted after each Centralized TCC Auction and divided equally across the months for which the Historic Fixed Price TCCs that were awarded or renewed prior to the relevant Centralized TCC Auction are valid. Notwithstanding anything to the contrary herein, with respect to NYPA's share of any revenues for Historic Fixed Price TCCs that took effect on or before November 1, 2016, such revenues (or any portion thereof) shall be accounted for in SR_3 by dividing such revenues (or any portion thereof) equally across the six months of the first Capability Period following the effective date of this provision provided that the NYISO has informed NYPA of its respective share of such revenues (or any portion thereof) at least two weeks prior to the start of such

Capability Period, otherwise such revenues (or any remaining portion thereof) shall be accounted for in SR_3 by dividing such revenues (or any remaining portion thereof) equally across the six months of the Capability Period that follows the first Capability Period following the effective date of this provision.

ECR = NYPA's share of Net Congestion Rents in a month, calculated pursuant to Attachment N. The computation of ECR is exclusive of any Congestion payments or Rents included in the CRN term;

CRN = Monthly Day-Ahead Congestion Rents in excess of those required to offset Congestion paid by NYPA's SENY governmental customers associated with the NYPA OATT Niagara/St. Lawrence Service reservations, net of the Initial Cost.

IR = A. The amount that NYPA will credit to its $ATRR_{NTAC}$ assessed to the SENY Load on account of the foregoing NYPA Niagara/St. Lawrence OATT reservations for SENY governmental customers. Such annual revenues will be computed as the product ("Initial Cost") of NYPA's current OATT system rate of $2.23 per kilowatt per month and the 600 MW of TCCs (or the amount of TCCs reduced by Paragraph C below). In the event NYPA sells these TCCs (or any part thereof), all revenues from these sales will offset the NTAC and the Initial Cost will be concomitantly reduced to reflect the net amount of Niagara/St. Lawrence OATT Reservations, if any, retained by NYPA for the SENY Load. The parties hereby agree that the revenue offset to NTAC will be the greater of the

actual sale price obtained by NYPA for the TCCs sold or that computed at the applicable system rate in accordance with Paragraph B below;

B. The system rate of $2.23 per kilowatt per month will be benchmarked to the $ATRR_{NTAC}$ for NYPA transmission initially accepted by FERC ("Base Period $ATRR_{NTAC}$") for the purposes of computing the Initial Cost. Whenever an amendment to the $ATRR_{NTAC}$ is accepted by FERC or the $ATRR_{NTAC}$ is updated pursuant to the procedures set forth in Section 14.2.3.2 of this Attachment ("Amended $ATRR_{NTAC}$"), the system rate for the purpose of computing the Initial Cost will be increased (or decreased) by the ratio of the Amended $ATRR_{NTAC}$ to the Base Period $ATRR_{NTAC}$ and the effect of Paragraph A on NTAC will be amended accordingly.

C. If prior to the Centralized TCC Auction all Grandfathered Transmission Service including NYPA's 600 MW Niagara/St. Lawrence OATT reservations held on behalf of its SENY governmental customers are found not to be feasible, then such OATT reservations will be reduced until feasibility is assured. A reduction, subject to a 200 MW cap on the total reduction as described in Attachment M, will be applied to the NYPA Niagara/St. Lawrence OATT reservations held on behalf of its SENY governmental customers.

WR = NYPA's revenues from external sales (Wheels Through and Exports) not associated with Existing Transmission Agreements in Attachment L,

Tables 1 and 2 and Wheeling revenues from OATT reservations extending beyond the start-up of the ISO;

NR = NYPA Reserved1 + NYPA Reserved2

NYPA Reserved1 will equal NYPA's Congestion payments for a month received pursuant to Section 20.2.3 of Attachment N of this Tariff for NYPA's RCRR TCCs.

NYPA Reserved2 will equal the value that NYPA receives for the sale of RCRR TCCs in a month, with the value for each RCRR TCC sold divided equally over the months remaining until the expiration of that RCRR TCC.

NT = The amount of actual NYPA transmission revenues minus NYPA's monthly revenue requirement.

BU = Annual Billing Units are New York State Loads and Loads associated with Wheels Through and Exports in megawatt-hours ("MWh").

The $ATRR_{NTAC}$ and SR will not include expenses for NYPA's purchase of TCCs or revenues from the sale of such purchased TCCs or from the collection of Congestion Rents for such TCCs.

The ECR, EA, CRN, WR, NR, and NT shall be updated prior to the start of each month based on actual data for the calendar month prior to the month in which the adjustment is made (i.e., January actual data will be used in February to calculate the NTAC effective in March).

The NTAC shall be calculated as a $/MWh charge and shall be applied to Actual Energy Withdrawals, except for Wheels Through and Exports in which case the NTAC shall be applied to scheduled Energy quantities. The NTAC shall not apply to scheduled quantities that are Curtailed by the ISO.

14.2.2.2.2 Implementation of NTAC

At the start of LBMP implementation certain variables of the NTAC equation will not be available. For the first and second months of LBMP implementation, the only terms in the NTAC equation that will be known by NYPA are its historical Annual Transmission Revenue Requirement ($ATRR_{NTAC}$) and the historical Billing Units (BU), which have been approved by or filed with FERC. For these two months NYPA shall calculate the NTAC using the following equation:

$$NTAC = \{(ATRR_{NTAC} \div 12) - (EA) - (IR \div 12)\}/(BU \div 12)$$

SR_2 shall not be available until after the first Centralized TCC Auction. For the third month of LBMP implementation until the second month of the Capability Period corresponding to the first Centralized TCC Auction, NYPA shall recalculate the NTAC using the following equation:

$$NTAC = \{(ATRR_{NTAC} \div 12) - (EA) - (IR \div 12) - WR - CRN - SR_1 - ECR\}/(BU \div 12)$$

Prior to and during implementation of LBMP those current NYPA transmission customers wishing to terminate their Third Party TWAs shall notify the ISO. The ISO shall duly inform NYPA of such conversion so that NYPA can calculate revenues (EA) to be derived from Existing Transmission Wheeling Agreements.

14.2.2.2.3

NYPA's recovery pursuant to NTAC initially is limited to expenses and return associated with its transmission system as that system exists at the time of FERC approval of the NTAC ("base period revenue requirement"). Additions to its system may be included in the computation of NTAC only if: a) upgrades or expansions do not exceed $5 million on an annual basis; or b) such upgrades or expansions have been unanimously approved by the Member

Systems. Notwithstanding the above, NYPA may invest in transmission facilities in excess of $5 million annually without unanimous Member Systems' authorization outside the NTAC recovery mechanism. In that case, NYPA cannot recover any expenses or return associated with such additions under NTAC and any TCC or other revenues associated with such additions will not be considered NYPA transmission revenue for purposes of developing the NTAC nor be used as a credit in the allocation of NTAC to transmission system users.

14.2.2.3 Filing and Posting of NTAC

NYPA shall coordinate with the ISO to update certain components of the NTAC formula on a monthly or Capability Period basis. NYPA may update the NTAC calculation to change the $ATRR_{NTAC}$, initially approved by FERC, and such updates shall be submitted to FERC each year as part of NYPA's informational filing pursuant to Section 14.2.3.2.6 of this Attachment. An integral part of the agreement between the other Member Systems and NYPA is NYPA's consent to the submission of its $ATRR_{NTAC}$ for FERC review and approval on the same basis and subject to the same standards as the Revenue Requirements of the Investor-Owned Transmission Owners. Each January, beginning with January 2001, the ISO shall inform NYPA of the prior year's actual New York internal Load requirements and the actual Wheels Through and Exports and shall post this information on the OASIS. NYPA shall change the BU component of the NTAC formula to reflect the prior calendar year's information, with such change to take effect beginning with the March NTAC of the current year. NYPA will calculate the monthly NTAC and provide this information to the ISO by no later than the fourteenth day of each month, for posting on the OASIS to become effective on the first day of the next calendar month. Beginning with LBMP implementation, the monthly NTAC shall be posted on the OASIS by the ISO no later than the fifteenth day of each month or as soon thereafter as is reasonably possible

but in no event later than the 20th of the month to become effective on the first day of the next calendar month.

14.2.2.4 NTAC Calculation Information

NYPA's $ATRR_{NTAC}$ for facilities owned as of January 31, 1997, and Annual Billing Units (BU) of the NTAC are:

$ATRR_{NTAC}$ = $165,449,297

BU = 133,386,541MWh

NYPA's $ATRR_{NTAC}$ is subject to FERC review because it is collected through the ISO's jurisdictional rates, and will be filed, together with any project-specific revenue requirements, with the Commission each year for informational purposes pursuant to Section 14.2.3.2.6 of this Attachment.

14.2.2.5 Billing

The New York State Loads, Wheels Through, and Exports will be billed based on the product of: (i) the NTAC; and (ii) the Customer's billing units for the Billing Period. The billing units will be based on the metered energy for all Transactions to supply Load in the NYCA during the Billing Period, and hourly Energy schedules for the Billing Period for all Wheels Through and Exports.

20.1 Overview and Definitions

20.1.1 Overview

This Attachment N describes the Congestion settlements related to the Day-Ahead Market and the settlements related to Centralized TCC Auctions and Reconfiguration Auctions. Congestion Rent settlements for Real-Time Market Energy Transactions or Bilateral Transactions scheduled in the Real-Time Market are not addressed in this Attachment N.

Section 20.2 addresses the Congestion settlements related to each hour of the Day-Ahead Market. These settlements include, as applicable pursuant to this Attachment N, charges or payments for Congestion Rents for Energy Transactions in the Day-Ahead Market and for Bilateral Transactions scheduled in the Day-Ahead Market, and settlements with Primary Holders of TCCs. In addition, these settlements include, as applicable pursuant to this Attachment N, O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments. The ISO shall allocate to Transmission Owners the net of all of these settlements as Net Congestion Rents as described in this Attachment N.

Section 20.3 addresses the settlements in each round of each Centralized TCC Auction and in each Reconfiguration Auction. These settlements include, as applicable pursuant to this Attachment N, charges or payments to purchasers of TCCs, charges or payments to Primary

Holders selling TCCs, payments to Transmission Owners in a Centralized TCC Auction for ETCNL released into the Centralized TCC Auction, and payments to Transmission Owners for Original Residual TCCs that are released into the Centralized TCC Auction. In addition, these settlements include, as applicable pursuant to this Attachment N, O/R-t-S Auction Revenue Shortfall Charges, U/D Auction Revenue Shortfall Charges, O/R-t-S Auction Revenue Surplus

Payments, and U/D Auction Revenue Surplus Payments. The ISO shall allocate to Transmission Owners the net of all of these settlements as Net Auction Revenue as described in this Attachment N.

Section 20.4 addresses the allocation of revenue from the initial award and annual renewals of Historic Fixed Price TCCs. The ISO shall allocate such revenues to Transmission Owners as described in this Attachment N.

Provisions of this Attachment N applicable to a transmission facility outage or return-to-service shall not apply to a transmission facility derating or uprating. Charges and payments under this Attachment N shall be made to a Transmission Owner for a transmission facility derating or uprating only as specified in Sections 20.2.4.3 and 20.3.6.3.

This Attachment N shall not apply to the obligation to pay an outage charge which obligation attaches to persons or entities not otherwise subject to Section 20.2.5 of this Attachment N that own an Expansion (or a portion of an Expansion) associated with a temporary or final award of Incremental TCCs or which has been assigned Incremental TCCs related to an Expansion which Expansion is modeled as wholly or partially out of service for any hour in the Day-Ahead Market which obligation to pay to the ISO an outage charge shall be determined pursuant to Attachment M to the OATT.

Unless expressly provided for otherwise in the ISO Tariffs, such as in a rate schedule, this Attachment N shall apply to the Member Systems. This Attachment N shall only apply to Transmission Owners other than the Member Systems to the extent that the ISO Tariffs, such as in a rate schedule, do not provide otherwise.

20.1.2 Defined Terms Used in Attachment N

Capitalized terms used in this Attachment N shall have the meaning specified below in

this Section 20.1.2, and capitalized terms used in this Attachment N but not defined below shall have the meaning given to them in Section 1 of the OATT:

Actual Qualifying Auction Derating: As defined in Section 20.3.6.3.1.

Actual Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Actual Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Actual Qualifying Auction Uprating: As defined in Section 20.3.6.3.1.

Actual Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Actual Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Actual Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Actual Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

Auction Status Change: Any of the following: Qualifying Auction Outage, Qualifying Auction Derating, Qualifying Auction Return-to-Service, or Qualifying Auction Uprating.

Centralized TCC Auction Interface Uprate/Derate Table: The interface derate table posted on the ISO website prior to a given Centralized TCC Auction specifying the impact on transfer limits of Qualifying DAM Outages and Qualifying DAM Returns-to-Service for a Sub-Auction of a Centralized TCC Auction.

DAM Constraint Residual: The dollar value associated with a Constraint that is binding for an hour of the Day-Ahead Market, which is calculated pursuant to Section 20.2.4.1.

DAM Status Change: Any of the following: Qualifying DAM Outage, Qualifying DAM Derating, Qualifying DAM Return-to-Service, or Qualifying DAM Uprating.

DCR Allocation Threshold: Five thousand dollars ($5,000), except that this amount shall be reduced for any given month to the extent necessary so that the sum of all DAM Constraint Residuals for the month (for all binding constraints and for all hours of the month) that are less than the DCR Allocation Threshold is not greater than either two hundred and fifty thousand dollars ($250,000) or five percent (5%) of the sum of all DAM Constraint Residuals for the month (for all binding constraints and for all hours of the month) that would have been calculated if the DCR Allocation Threshold were set equal to zero.

Deemed Qualifying Auction Derating: As defined in Section 20.3.6.3.1.

Deemed Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Deemed Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Deemed Qualifying Auction Uprating: As defined in Section 20..3.6.3.1.

Deemed ISO-Directed Auction Status Change: Any of the following: (1) an Actual Qualifying Auction Return-to-Service for a Reconfiguration Auction that occurs for a transmission facility that, in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to the relevant Reconfiguration Auction, was a Qualifying Auction Outage that qualified as an ISO-Directed Auction Status Change; (2) an Actual Qualifying Auction Uprating for a Reconfiguration Auction that occurs as a result of an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service of a transmission facility that, in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to the relevant Reconfiguration Auction, qualified as a Qualifying Auction Outage or Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change; or (3) an Actual Qualifying Auction Derating for a Reconfiguration Auction that occurs as a result of an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service of a transmission facility that, in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to the relevant Reconfiguration Auction, qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change.

Deemed ISO-Directed DAM Status Change: Any of the following: (1) an Actual Qualifying DAM Return-to-Service for an hour of the Day-Ahead Market that occurs for a transmission facility that, in the last Reconfiguration Auction held for TCCs valid for the relevant hour or the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour, was an Actual Qualifying Auction Outage that qualified as an ISO-Directed Auction Status Change; (2) an Actual Qualifying DAM Uprating for an hour of the Day-Ahead Market that occurs for a transmission facility that, in the last Reconfiguration Auction held for TCCs valid for the relevant hour or the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour, qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change; or (3) an Actual Qualifying DAM Derating for an hour of the Day-Ahead Market that occurs for a transmission facility that, in the last Reconfiguration Auction held for TCCs valid for the relevant hour or the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour, qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change. (The terms "Actual Qualifying Auction Outage" and "ISO-Directed Auction Status Change" shall, if not defined in this Section 20.1.2, have the meaning given in the ISO's March 17, 2006, filing.)

Deemed Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Deemed Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Deemed Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Deemed Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

ISO-Directed Auction Status Change: Either of the following: (1) an Actual Qualifying Auction Outage for a Reconfiguration Auction or a round of a Centralized TCC Auction that is directed by the ISO or results from an Actual Qualifying Auction Outage or an Actual

Qualifying Auction Return-to-Service directed by the ISO; or (2) an Actual Qualifying Auction Derating or an Actual Qualifying Auction Uprating for a Reconfiguration Auction or a round of a Centralized TCC Auction that results from an Actual Qualifying Auction Outage directed by the ISO.

ISO-Directed DAM Status Change: Either of the following: (1) an Actual Qualifying DAM Outage for an hour of the Day-Ahead Market that is directed by the ISO or results from an Actual Qualifying DAM Outage or an Actual Qualifying DAM Return-to-Service directed by the ISO; or (2) an Actual Qualifying DAM Derating or an Actual Qualifying DAM Uprating for an hour of the Day-Ahead Market that results from an Actual Qualifying DAM Outage directed by the ISO.

Normally Out-of-Service Equipment: Transmission facilities that are normally operated as out-of-service by mutual agreement of the transmission facility owner and the ISO and that appear on the list of such equipment posted on the ISO website.

Outage/Return-to-Service Auction Constraint Residual ("O/R-t-S Auction Constraint Residual"): The portion of an Auction Constraint Residual that is deemed to be attributable to Qualifying Auction Outages or Qualifying Auction Returns-to-Service, which O/R-t-S Auction Constraint Residual shall be calculated pursuant to Section 20.3.6.1.

Outage/Return-to-Service Auction Revenue Shortfall Charge ("O/R-t-S Auction Revenue Shortfall Charge"): A charge to a Transmission Owner that is created as a result of the allocation of an O/R-t-S Auction Constraint Residual pursuant to Section 20.3.6.2.

Outage/Return-to-Service Auction Revenue Surplus Payment ("O/R-t-S Auction Revenue Surplus Payment"): A payment to a Transmission Owner that is created as a result of the allocation of an O/R-t-S Auction Constraint Residual pursuant to Section 20.3.6.2.

Outage/Return-to-Service Congestion Rent Shortfall Charge ("O/R-t-S Congestion Rent Shortfall Charge"): A charge to a Transmission Owner that is created as a result of the allocation of an O/R-t-S DAM Constraint Residual pursuant to Section 20.2.4.2.

Outage/Return-to-Service Congestion Rent Surplus Payment ("O/R-t-S Congestion Rent Surplus Payment"): A payment to a Transmission Owner that is created as a result of the allocation of an O/R-t-S DAM Constraint Residual pursuant to Section 20.2.4.2.

Outage/Return-to-Service DAM Constraint Residual ("O/R-t-S DAM Constraint Residual"): The portion of a DAM Constraint Residual that is deemed to be attributable to Qualifying DAM Outages or Qualifying DAM Returns-to-Service, which O/R-t-S DAM Constraint Residual shall be calculated pursuant to Section 20.2.4.1.

Qualifying Auction Derating: As defined in Section 20.3.6.3.1.

Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Qualifying Auction Uprating: As defined in Section 20.3.6.3.1.

Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

Reconfiguration Auction Interface Uprate/Derate Table: The interface derate table posted on the ISO website prior to a Reconfiguration Auction specifying the impact on transfer limits of Qualifying DAM Outages and Qualifying DAM Returns-to-Service for the Reconfiguration Auction.

Uprate/Derate Auction Constraint Residual ("U/D Auction Constraint Residual"): The portion of an Auction Constraint Residual that is deemed to be attributable to Qualifying Auction Deratings or Qualifying Auction Upratings, which U/D Auction Constraint Residual shall be calculated pursuant to Section 20.3.6.1.

Uprate/Derate Auction Revenue Shortfall Charge ("U/D Auction Revenue Shortfall Charge"): A charge to a Transmission Owner that is created as a result of the allocation of a U/D Auction Constraint Residual pursuant to Section 20.3.6.3.

Uprate/Derate Auction Revenue Surplus Payment ("U/D Auction Revenue Surplus Payment"): A payment to a Transmission Owner that is created as a result of the allocation of a U/D Auction Constraint Residual pursuant to Section 20.3.6.3.

Uprate/Derate Congestion Rent Shortfall Charge ("U/D Congestion Rent Shortfall Charge"): A charge to a Transmission Owner that is created as a result of the allocation of a U/D DAM Constraint Residual pursuant to Section 20.2.4.3.

Uprate/Derate Congestion Rent Surplus Payment ("U/D Congestion Rent Surplus Payment"): A payment to a Transmission Owner that is created as a result of the allocation of a U/D DAM Constraint Residual pursuant to Section 20.2.4.3.

Uprate/Derate DAM Constraint Residual ("U/D DAM Constraint Residual"): The portion of a DAM Constraint Residual that is deemed to be attributable to a Qualifying DAM Derating or a Qualifying DAM Uprating, which U/D DAM Constraint Residual shall be calculated pursuant to Section 20.2.4.1.

For purposes of this Attachment N, the term "transmission facility" shall mean any transmission line, phase angle regulator, transformer, series reactor, circuit breaker, or other type of transmission equipment.

For the purposes of this Attachment N, a "constraint" shall refer to a monitored

transmission facility and a transmission facility that is out of service in the contingency being evaluated (including the base case).

All references in this Attachment N to Sections shall be construed to be references to a section of this Attachment N.

20.2 Congestion Settlements Related to the Day-Ahead Market

20.2.1 Overview of Congestion Settlements Related to the Day-Ahead Market; Calculation of Net Congestion Rents

Overview of DAM Related Congestion Settlements. For each hour *h* of the Day-Ahead Market, the ISO shall settle all Congestion settlements related to the Day-Ahead Market. These Congestion settlements include, as applicable pursuant to the provisions of this Attachment N: (i) Congestion Rent charges or payments for Energy Transactions in the Day-Ahead Market and Bilateral Transactions scheduled in the Day-Ahead Market; (ii) Congestion payments or charges to Primary Holders of TCCs; (iii) O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges; and (iv) O/R-t-S Congestion Rent Surplus Payments and U/D Congestion Rent Surplus Payments. Each of these settlements is represented by a variable in Formula N-1.

Calculation of Net Congestion Rents for an Hour. In each hour *h* of the Day-Ahead Market, the ISO shall calculate Net Congestion Rents pursuant to Formula N-1.

Formula N-1

$$NetCongestionRents_h = (Congestion\ Rents_h - TCC\ Payments_h - O/R\text{-}t\text{-}S\&U/D\ CRSC\&CRSP_h)$$

Where,

$NetCongestionRents_h$	=	The total Net Congestion Rents for hour *h* of the Day-Ahead Market
h	=	An hour of the Day-Ahead Market
$Congestion\ Rents_h$	=	The sum of Congestion Rents for (i) Energy Transactions scheduled in hour *h* of the Day-Ahead Market, and (ii) Bilateral Transactions scheduled in hour *h* of the Day-Ahead Market, each as calculated pursuant to Section 20.2.2
$TCC\ Payments_h$	=	The sum for all TCCs of all payments and charges made pursuant to Section 20.2.3 to Primary Holders of TCCs in hour *h*

O/R-t-S&U/D CRSC&CRSP$_h$	=	The sum of all O/R-t-S Congestion Rent Shortfall Charges (O/R-t-S CRSC$_{a,t,h}$), U/D Congestion Rent Shortfall Charges (U/D CRSC$_{a,t,h}$), O/R-t-S Congestion Rent Surplus Payments (O/R-t-S CRSP$_{a,t,h}$), and U/D Congestion Rent Surplus Payments (U/D CRSP$_{a,t,h}$) for all Transmission Owners *t* (which sum is calculated for each Transmission Owner as NetDAMAllocations$_{t,h}$ pursuant to Formula N-14), reduced by any zeroing out of such charges or payments pursuant to Section 20.2.4.5

The ISO shall allocate the Net Congestion Rents calculated in each hour to Transmission Owners pursuant to Section 20.2.5.

20.2.2 Congestion Rents Charged in the Day-Ahead Market

In each hour of the Day-Ahead Market, the ISO shall collect or pay Congestion Rents through Energy Transactions in the Day-Ahead Market and through Bilateral Transactions scheduled in the Day-Ahead Market.

Day-Ahead Market Energy Transactions. The ISO shall charge or pay Congestion Rents as part of the Congestion Component of the LBMP applicable to Energy injections and withdrawals scheduled in the Day-Ahead Market, as described in Attachment J of this Tariff. The total Congestion Rents for all Energy Transactions scheduled in the Day-Ahead Market in hour *h* are calculated pursuant to Formula N-2.

Formula N-2

$$\sum_{W} MWh_{W,h} * CCPOW_{W,h} - \sum_{I} MWh_{I,h} * CCPOI_{I,h}$$

Where,

MWh$_{W,h}$	=	Energy, in MWh, scheduled to be withdrawn in hour *h* pursuant to Day-Ahead Market schedule *W*
CCPOW$_{W,h}$	=	Congestion Component, in $/MWh, at the Point of Withdrawal for Energy withdrawn in hour *h* pursuant to schedule *W*
MWh$_{I,h}$	=	Energy, in MWh, scheduled to be injected in hour *h* pursuant

to Day-Ahead Market schedule *I*

$CCPOI_{I,h}$ = Congestion Component, in $/MWh, at the Point of Injection for Energy injected in hour *h* pursuant to schedule *I*.

Bilateral Transactions. The ISO shall charge or pay Congestion Rents as part of the Transmission Usage Charge applied to Bilateral Transaction *B* scheduled in the Day-Ahead Market, as described in Section 2.7.2.2 of this Tariff. Total Congestion Rents for all Bilateral Transactions scheduled in the Day-Ahead Market in hour *h* are calculated pursuant to Formula N-3.

Formula N-3

$$\sum_{B} MWh_{B,h} * CCTUC_{B,h}$$

Where,

$MWh_{B,h}$ = Energy, in MWh, of Bilateral Transaction *B* scheduled in the Day-Ahead Market in hour *h*

$CCTUC_{B,h}$ = Congestion Component of the TUC, in $/MWh, for scheduled Bilateral Transaction *B*, in hour *h*, which is equal to $CCPOW_{B,h}$ - $CCPOI_{B,h.}$

$CCPOW_{B,h}$ = Congestion Component, in $/MWh, at the Point of Withdrawal for Energy withdrawn in hour *h* pursuant to Bilateral Transaction *B*

$CCPOI_{B,h}$ = Congestion Component, in $/MWh, at the Point of Injection for Energy injected in hour *h* pursuant to Bilateral Transaction *B*.

20.2.3 Congestion Payments Made To Primary Holders

For each hour *h* of the Day-Ahead Market, the ISO shall charge or pay Congestion payments to the Primary Holders, as follows:

Formula N-4

$$Congestion\ Payment\ (\$/\text{hr}) = (CCPOW - CCPOI) * TCCMW$$

Where,

CCPOW = Congestion Component ($/MWh) at the Point of Withdrawal (POW)

CCPOI = Congestion Component ($/MWh) at the Point of Injection (POI)

TCCMW = The number of TCCs in MW from POI to POW.

(See Attachment J for the calculation of the Congestion Component of the LBMP price at either the POI or the POW.)

The ISO shall pay Primary Holders for the Congestion payments from revenues collected from: (i) Congestion Rents, (ii) O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges, and (iii) Net Congestion Rents in accordance with Section 20.2.5.

The ISO shall assess a "Shortfall Reimbursement Surcharge" each month on monthly net positive Congestion payments to Primary Holders of TCCs sold in or after the Autumn 2004 Centralized TCC Auction. The Shortfall Reimbursement Surcharge shall be 0.5% of Congestion payments associated with TCCs that have a Point of Withdrawal outside of Load Zone J and 2.5% of Congestion payments associated with TCCs that have a Point of Withdrawal at, or inside of, Load Zone J.

The Shortfall Reimbursement Surcharge shall not be assessed on Congestion payments to Primary Holders of TCCs that produce net negative Congestion payments, *i.e.,* that oblige the Primary Holder to make payments, in a given month, on Congestion payments to Primary Holders of Grandfathered TCCs, or on Congestion payments to Primary Holders of ETCNL TCCs or RCRR TCCs. The Shortfall Reimbursement Surcharge also shall not be assessed on Congestion payments to Primary Holders of TCCs sold before the Autumn 2004 Centralized TCC Auction, except to the extent that such TCCs are unbundled or reconfigured at the request of a Primary Holder, and sold, in or after that auction, in which case the Congestion payments associated with them shall be subject to the Shortfall Reimbursement Surcharge.

The ISO shall cease to impose the Shortfall Reimbursement Surcharge when it has

collected sufficient funds to: (i) pay refunds for all of the "Historic Shortfall" plus interest pursuant to Article III of the July 13, 2004 Settlement Agreement that was approved by the Commission in Docket Nos. EL04-110, EL04-113, EL04-115, and ER04-983; and (ii) replenished the ISO Working Capital Fund pursuant to Article IV of that Settlement Agreement.

20.2.4 Charges and Payments to Transmission Owners for DAM Outages and Returns-to-Service

The ISO shall charge O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges and pay O/R-t-S Congestion Rent Surplus Payments and U/D Congestion Rent Surplus Payments pursuant to this Section 20.2.4. To do so, the ISO shall calculate the DAM Constraint Residual for each binding constraint for each hour of the Day-Ahead Market and then determine the amount of each DAM Constraint Residual that is O/R-t-S DAM Constraint Residual and the amount that is U/D DAM Constraint Residual, as specified in Section 20.2.4.1. The ISO shall use the O/R-t-S DAM Constraint Residual to allocate O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments to Transmission Owners pursuant to Sections 20.2.4.2 and 20.2.4.4, each of which shall be subject to being reduced to zero pursuant to Section 20.2.4.5. The ISO shall use the U/D DAM Constraint Residual to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments to Transmission Owners pursuant to Sections 20.2.4.3 and 20.2.4.4, each of which shall be subject to being reduced to zero pursuant to Section 20.2.4.5.

20.2.4.1 Measuring the Impact of DAM Outages and Returns-to-Service: Calculation of DAM Constraint Residuals and Division of DAM Constraint Residuals into O/R-t-S DAM Constraint Residuals and U/D DAM Constraint Residuals

For each hour *h* of the Day-Ahead Market, the ISO shall identify all constraints that are

binding in the Power Flow solution for the final schedules for hour *h* of the Day-Ahead Market. For each binding constraint *a* identified for each hour *h,* the ISO shall calculate the DAM Constraint Residual, $DCR_{a,h}$, using Formula N-5; *provided, however*, where $DCR_{a,h}$ calculated using Formula N-5 is not greater than the DCR Allocation Threshold or less than the negative of the DCR Allocation Threshold, then $DCR_{a,h}$ shall be set equal to zero.

Formula N-5

$$DCR_{a,h} = ShadowPrice_{a,h} * \begin{bmatrix} (FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) \\ +(UprateDerate_{a,h} * SCUCSignChange_{a,h}) \\ +(UnsoldCapacity_{a,h,RA} * SCUCSignChange_{a,h}) \end{bmatrix}$$

Where,

$DCR_{a,h}$ = The DAM Constraint Residual, in dollars, for binding constraint *a* in hour *h* of the Day-Ahead Market

$ShadowPrice_{a,h}$ = The Shadow Price, in dollars/MWh, of binding constraint *a* in hour *h* of the Day-Ahead Market, which Shadow Price is calculated in a manner so that if relaxation of constraint *a* would permit a reduction in the associated Bid Production Cost, $ShadowPrice_{a,h}$ is negative

$FLOW_{a,h,DAM}$ = The Energy flow, in MWh, on binding constraint *a* for hour *h* for a set of injections and withdrawals that corresponds[1] to the set of TCCs and Grandfathered Rights represented in the solution to the most recent auction in which TCCs valid in hour *h* were sold (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction), which Energy flow will be determined using Shift Factors produced in scheduling hour *h* of the Day-Ahead Market applied to these injections and withdrawals and the phase angle regulator schedules fixed in the last auction held for TCCs valid for hour *h*

$FLOW_{a,h,TCC\ Auction}$ = The Energy flow, in MWh, on binding constraint *a* for hour *h* determined as described in the definition of $FLOW_{a,h,DAM}$ above, except that the Shift Factors applied will be those produced in a simulated run of SCUC (run using the Transmission System model used in the most recent auction in which TCCs valid in hour *h* were sold);

provided, however, special rules (1) through (3) below shall instead be used to calculate $FLOW_{a,h,TCC\ Auction}$ if they apply, and rule (4) below shall

[1] A set of injections and withdrawals corresponds to a set of TCCs and Grandfathered Rights if the quantity of Energy injected at each location matches the number of TCCs and Grandfathered Rights specifying that location as a POI, and the quantity of Energy withdrawn at each location matches the number of TCCs and Grandfathered Rights specifying that location as a POW.

be used to calculate $FLOW_{a,h,TCC\ Auction}$ if $FLOW_{a,h,TCC\ Auction}$ cannot be calculated using any other rule set forth in this definition of $FLOW_{a,h,TCC\ Auction}$ because a simulated run of SCUC does not produce Shift Factors to calculate $FLOW_{a,h,TCC\ Auction}$:

(1) in the event that a maintenance contingency is binding in the Day-Ahead Market but was not applied in the most recent auction in which TCCs valid in hour *h* were sold, $FLOW_{a,h,TCC\ Auction}$ shall be equal to the Energy flow in MWh on the monitored transmission facility of binding constraint *a* for the contingency resulting in the highest flows on constraint *a* in the most recent auction in which TCCs valid in hour *h* were sold, which Energy flow shall be calculated using the set of injections and withdrawals that corresponds to the set of TCCs and Grandfathered Rights represented in the solution to that auction (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction) and using Shift Factors from a simulated run of SCUC as first set forth in this definition of $FLOW_{a,h,TCC\ Auction}$

(2) in the event that the monitored transmission facility for constraint *a* was modeled as out-of-service in the most recent auction in which TCCs valid in hour *h* were sold and that transmission facility returns to service for hour *h* of the Day-Ahead Market, $FLOW_{a,h,TCC\ Auction}$ shall be equal to:

(i) the rating limit, in MWh, for the monitored transmission facility of binding constraint *a* applicable in hour *h* of the Day-Ahead Market, <u>multiplied</u> by

(ii) negative $SCUCSignChange_{a,h}$

(3) in the event that the transmission facility that is the contingency element for constraint *a* was modeled as out-of-service in the most recent auction in which TCCs valid in hour *h* were sold and that transmission facility returns to service for

hour *h* of the Day-Ahead Market, $FLOW_{a,h,TCC\ Auction}$ shall be equal to the Energy flow, in MWh, on the monitored transmission facility of binding constraint *a* for the contingency resulting in the highest flows on the monitored transmission facility of constraint *a* in the most recent auction in which TCCs valid in hour *h* were sold, which Energy flow shall be calculated using the set of injections and withdrawals that corresponds to the set of TCCs and Grandfathered Rights represented in the solution to that auction (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction) and using Shift Factors from a simulated run of SCUC as first set forth in this definition of $FLOW_{a,h,TCC\ Auction}$

(4) in the event that a simulated run of SCUC does not produce Shift Factors to calculate $FLOW_{a,h,TCC\ Auction}$, $FLOW_{a,h,TCC\ Auction}$ shall be equal to:

(i) the Energy flow on constraint *a* as determined in the most recent auction in which TCCs valid in hour *h* were sold, multiplied by

(ii) $OPF/SCUCAdjust_a$

$UprateDerate_{a,h}$ = Zero, except that in the event of a Qualifying DAM Uprating or Qualifying DAM Derating for constraint *a* in hour *h* that is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction), $UprateDerate_{a,h}$ shall equal the interface uprating or derating impact reflected in such table. Notwithstanding the definition above, $UprateDerate_{a,h}$ shall always equal zero in the event that the monitored transmission facility for binding constraint *a* in the Day-Ahead Market was modeled as out-of-service in the most recent auction in which TCCs valid in hour *h* were sold and that transmission facility returns to service for hour *h*.

$UnsoldCapacity_{a,h,RA}$ = Zero, except that if $ShadowPrice_{a,h} * (FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) + (UprateDerate_{a,h} * SCUCSignChange_{a,h})$ is less than zero, then

UnsoldCapacity$_{a,h,RA}$ shall be equal to the lesser of (1) the amount of transmission Capacity for constraint *a* that was available for sale in the most recent auction in which TCCs valid in hour *h* were sold but which transmission Capacity was not sold; or (2) the absolute value of (FLOW$_{a,h,DAM}$ − FLOW$_{a,h,TCCAuction}$) + (UprateDerate$_{a,h}$ * SCUCSignChange$_{a,h}$).

SCUCSignChange$_{a,h}$ = 1 if ShadowPrice$_{a,h}$ is greater than zero; otherwise, -1.

OPF/SCUCAdjust$_a$ = 1 if the directional orientation of constraint *a* used by the ISO in SCUC is the same as that used by the ISO in the Optimal Power Flow program used to select winning Bids in TCC auctions; otherwise, -1.

Following calculation of the DAM Constraint Residual for each constraint *a* for each hour *h*, the ISO shall calculate the amount of each O/R-t-S DAM Constraint Residual and the amount of each U/D DAM Constraint Residual for each constraint *a* for each hour *h*. The amount of each O/R-t-S DAM Constraint Residual for hour *h* and for constraint *a* shall be determined by applying Formula N-6. The amount of each U/D DAM Constraint Residual for hour *h* and for constraint *a* shall be determined by applying Formula N-7.

Formula N-6

$$O/R\text{-}t\text{-}S\ DCR_{a,h} = DCR_{a,h} * \left[\frac{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction})}{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) + (UprateDerate_{a,h} * SCUCSignChange_{a,h})} \right]$$

Where,

O/R-t-S DCR$_{a,h}$ = The amount of the O/R-t-S DAM Constraint Residual, in dollars, for hour *h* and for constraint *a*

and each of the other variables are as defined in Formula N-5.

Formula N-7

$$U/D\ DCR_{a,h} = DCR_{a,h} * \left[\frac{(UprateDerate_{a,h} * SCUCSignChange_{a,h})}{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) + (UprateDerate_{a,h} * SCUCSignChange_{a,h})} \right]$$

Where,

U/D DCR$_{a,h}$ = The amount of the U/D DAM Constraint Residual for hour *h* for constraint *a*

and each of the other variables are as defined in Formula N-5.

20.2.4.2 Charges and Payments for the Direct Impact of DAM Outages and Returns-to-Service

The ISO shall use O/R-t-S DAM Constraint Residuals to allocate O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments, as the case may be, among Transmission Owners pursuant to this Section 20.2.4.2. Each O/R-t-S Congestion Rent Shortfall Charge and each O/R-t-S Congestion Rent Surplus Payment allocated to a Transmission Owner pursuant to this Section 20.2.4.2 is subject to being set equal to zero pursuant to Section 20.2.4.5.

20.2.4.2.1 Identification of Outages and Returns-to-Service Qualifying for Charges and Payments

For each hour of the Day-Ahead Market, the ISO shall identify each Qualifying DAM Outage and each Qualifying DAM Return-to-Service, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for a Qualifying DAM Outage or Qualifying DAM Return-to-Service shall be allocated an O/R-t-S Congestion Rent Shortfall Charge or an O/R-t-S Congestion Rent Surplus Payment pursuant to Sections 20.2.4.2.2 or 20.2.4.2.3.

20.2.4.2.1.1 Definition of Qualifying DAM Outage

A "**Qualifying DAM Outage**" shall be defined to mean either an Actual Qualifying DAM Outage or a Deemed Qualifying DAM Outage. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying DAM Outage.

An "**Actual Qualifying DAM Outage**" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the facility exists but is not modeled as in-service for the Day-Ahead Market for hour *h*;

(ii) the facility existed and was modeled as in-service in the last auction held for TCCs valid for hour *h*; and

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last auction held for TCCs valid for hour *h*.

A "**Deemed Qualifying DAM Outage**" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service for the last auction held for TCCs valid for hour *h*;

(ii) the facility existed but was not modeled as in-service in hour *h* as a result of a DAM Status Change or external event described in Section 20.2.4.4.3 for which responsibility was assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner assigned responsibility for the facility not being modeled as in-service for the last auction held for TCCs valid for hour *h*;

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last auction held for TCCs valid for hour *h*.

A transmission facility shall not qualify as an Actual Qualifying DAM Outage if the facility is modeled as in-service for hour *h* of the Day-Ahead Market as a result of a Transmission Owner's use of spare or alternative transmission equipment to bring the facility back in-service so long as the Transmission Owner has notified the ISO in advance of or contemporaneously with the use of such spare or alternative equipment and the estimated duration of its use.

20.2.4.2.1.2 Definition of Qualifying DAM Return-to-Service

A "**Qualifying DAM Return-to-Service**" shall be defined to mean either an Actual Qualifying DAM Return-to-Service or a Deemed Qualifying DAM Return-to-Service. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying DAM Return-to-Service.

An "**Actual Qualifying DAM Return-to-Service**" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the facility exists and is modeled as in-service in the Day-Ahead Market for hour *h*;

(ii) the facility existed but was not modeled as in-service for the last auction held for TCCs valid for hour *h*; and

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last auction held for TCCs valid for hour *h*.

A "**Deemed Qualifying DAM Return-to-Service**" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service for the last auction held for TCCs valid for hour *h*;

(ii) the facility existed but was not modeled as in-service in the Day-Ahead Market for hour *h* as a result of a DAM Status Change or external event described in Section 20.2.4.4.3 for which responsibility is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner assigned responsibility for the facility not being modeled as in-service for

the last auction held for TCCs valid for hour *h*; and

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last auction held for TCCs valid for hour *h*.

20.2.4.2.2 Allocation of an O/R-t-S DAM Constraint Residual When Only One Transmission Owner is Responsible for All of the Relevant Outages and Returns-to-Service

This Section 20.2.4.2.2 describes the allocation of an O/R-t-S DAM Constraint Residual for a given hour and a given constraint when only one Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for all of the Qualifying DAM Outages and all of the Qualifying DAM Returns-to-Service for that hour that contribute to that constraint.

If the same Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for all of the Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* for hour *h* that contribute to constraint *a*, then the ISO shall allocate the O/R-t-S DAM Constraint Residual for that hour and that constraint, O/R-t-S $DCR_{a,h}$, to that Transmission Owner in the form of either: (i) an O/R-t-S Congestion Rent Shortfall Charge in the amount of O/R-t-S $DCR_{a,h}$ if O/R-t-S $DCR_{a,h}$ is negative, or (ii) an O/R-t-S Congestion Rent Surplus Payment in the amount of O/R-t-S $DCR_{a,h}$ if O/R-t-S $DCR_{a,h}$ is positive.

20.2.4.2.3 Allocation of an O/R-t-S DAM Constraint Residual When More Than One Transmission Owner is Responsible for the Relevant Outages and Returns-to-Service

This Section 20.2.4.2.3 describes the allocation of an O/R-t-S DAM Constraint Residual for a given hour and a given constraint when more than one Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Outages and the Qualifying DAM Returns-to-Service for that hour that contribute to that constraint.

If more than one Transmission Owner is responsible, as determined pursuant to Section

20.2.4.4, for the Qualifying DAM Outages and the Qualifying DAM Returns-to-Service for hour *h* that contribute to constraint *a*, the ISO shall allocate the O/R-t-S DAM Constraint Residual for constraint *a* for hour *h*, O/R-t-S $DCR_{a,h}$, in the form of an O/R-t-S Congestion Rent Shortfall Charge or O/R-t-S Congestion Rent Surplus Payment to the Transmission Owners responsible for the Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* for hour *h* by first determining the net total impact on the constraint for hour *h* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* with an impact on the Energy flow across that constraint of 1 MWh or more by applying Formula N-8, and then applying either Formula N-9 or Formula N-10, as specified herein, to assess O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments.

Formula N-8

$$O/R\text{-}t\text{-}S\ NetDAMImpact_{a,h} = \left(\sum_{for\ all\ o \in O_h} FlowImpact_{a,h,o} * ShadowPrice_{a,h} \right) * OPF/SCUCAdjust_a$$

Where,

$O/R\text{-}t\text{-}S\ NetDAMImpact_{a,h}$ = The net impact, in dollars, on constraint *a* in hour *h* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* having an impact of more than 1 MWh on Energy flow across constraint *a*; *provided, however*, O/R-t-S $NetDAMImpact_{a,h}$ shall be subject to recalculation as specified in the paragraph immediately following this Formula N-8

$FlowImpact_{a,h,o}$ = The Energy flow impact of a Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o*, in MWh, on binding constraint *a* determined for hour *h*, which shall either:

(a) if Qualifying DAM Outage *o* is a Deemed Qualifying DAM Outage, be equal to the negative of $FlowImpact_{a,h,o}$ calculated for the corresponding Deemed Qualifying DAM Return-to-Service as described in part (b) of this definition of $FlowImpact_{a,h,o}$; or

(b) if Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* is an Actual Qualifying DAM Outage, an Actual Qualifying DAM Return-to-Service, or a Deemed Qualifying DAM Return-to-Service, be calculated pursuant to the following formula:

$$FlowImpact_{a,h,o} = One\text{-}OffFlow_{a,h,o} - BaseCaseFlow_{a,h}$$

Where,

$BaseCaseFlow_{a,h}$ = The Energy flow on binding constraint *a* resulting from a Power Flow or similar analysis using (1) the set of injections and withdrawals corresponding to the TCCs and Grandfathered Rights represented in the solution to the most recent auction in which TCCs valid in hour *h* were sold (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction); (2) the phase angle regulator schedule determined in the Optimal Power Flow solution for the final round of the last auction held for TCCs valid in hour *h*; and (3) the Transmission System model for the last auction held for TCCs valid in hour *h*;

$One\text{-}OffFlow_{a,h,o}$ = Either

(1) if Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* is an Actual Qualifying DAM Outage or an Actual Qualifying DAM Return-to-Service, the Energy flow on binding constraint *a* resulting from a Power Flow or similar analysis using each element of the base case data set used in the calculation of $BaseCaseFlow_{a,h}$ above (*provided, however*, if a transmission facility was modeled as free-flowing in hour *h* of the Day-Ahead Market because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedule and related variables to model the transmission facility as free flowing), but in each case with the Transmission System model modified so as to, as the case may be, either (i) model as out-of-service Actual Qualifying DAM Outage *o*, or (ii) model as in-service Actual Qualifying DAM Return-to-Service *o*; or

(2) if Qualifying DAM Return-to-Service *o* is a Deemed Qualifying DAM Return-to-Service, the Energy flow on binding constraint *a* resulting from a Power Flow or similar analysis using each element of the base case data set used in the calculation of $BaseCaseFlow_{a,h}$ above (*provided, however,* if a transmission facility was modeled as free-flowing in hour *h* of the Day-Ahead Market because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedule and related variables to model the transmission facility as free flowing), but with the Transmission System model modified so as to model as in-service the transmission facility that is Deemed Qualifying DAM Return-to-Service *o*

provided, however, where the absolute value of $FlowImpact_{a,h,o}$ calculated using the procedures set forth above is less than 1 MWh, then $FlowImpact_{a,h,o}$ shall be set equal to zero;

provided further, $FlowImpact_{a,h,o}$ shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-8

O_h = The set of all Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* in hour *h*

and the variables $ShadowPrice_{a,h}$ and $OPF/SCUCAdjust_a$ are defined as set forth in Formula N-5.

After calculating O/R-t-S $NetDAMImpact_{a,h}$ pursuant to Formula N-8, the ISO shall determine whether O/R-t-S $NetDAMImpact_{a,h}$ for constraint *a* in hour *h* has a different sign than O/R-t-S $DCR_{a,h}$ for constraint *a* in hour *h*. If the sign is different, the ISO shall (i) recalculate O/R-t-S $NetDAMImpact_{a,h}$ pursuant to Formula N-8 after setting equal to zero each $FlowImpact_{a,h,o}$ for which $FlowImpact_{a,h,o} * ShadowPrice_{a,h} * OPF/SCUCAdjust_a$ has a different sign than O/R-t-S $DCR_{a,h}$, and then (ii) use this recalculated O/R-t-S $NetDAMImpact_{a,h}$ and reset value of $FlowImpact_{a,h,o}$ to allocate O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S

Congestion Rent Surplus Payments pursuant to Formula N-9 or Formula N-10, as specified below.

If the absolute value of the net impact (O/R-t-S $NetDAMImpact_{a,h}$) on constraint *a* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* as calculated using Formula N-8 (or recalculated pursuant to Formula N-8 using a reset value of $FlowImpact_{a,h,o}$ as described in the prior paragraph) is greater than the absolute value of the O/R-t-S DAM Constraint Residual (O/R-t-S $DCR_{a,h}$), in dollars, for constraint *a* in hour *h*, then the ISO shall allocate the O/R-t-S DAM Constraint Residual in the form of an O/R-t-S Congestion Rent Shortfall Charge, O/R-t-S $CRSC_{a,t,h}$, or O/R-t-S Congestion Rent Surplus Payment, O/R-t-S $CRSP_{a,t,h}$, by using Formula N-9. If the absolute value of the net impact (O/R-t-S $NetDAMImpact_{a,h}$) on constraint *a* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* as calculated using Formula N-8 (or recalculated pursuant to Formula N-8 using a reset value of $FlowImpact_{a,h,o}$ as described in the prior paragraph) is less than or equal to the absolute value of the O/R-t-S DAM Constraint Residual (O/R-t-S $DCR_{a,h}$), in dollars, for constraint *a* in hour *h*, then the ISO shall allocate the O/R-t-S DAM Constraint Residual in the form of an O/R-t-S Congestion Rent Shortfall Charge or O/R-t-S Congestion Rent Surplus Payment by using Formula N-10.

Formula N-9

$$O/R\text{-}t\text{-}S\ Allocation_{a,t,h} = \left(\frac{\sum_{o \in O_h \text{ and } q=t} \left(FlowImpact_{a,h,o} * Responsibility_{h,q,o} \right)}{\sum_{for\ all\ o \in O_h} FlowImpact_{a,h,o}} \right) * O/R\text{-}t\text{-}S\ DCR_{a,h}$$

Where,

O/R-t-S $Allocation_{a,t,h}$ = Either an O/R-t-S Congestion Rent Shortfall Charge or an O/R-t-S Congestion Rent Surplus Payment, as specified in (a) and (b) below:

(a) If O/R-t-S Allocation$_{a,t,h}$ is negative, then O/R-t-S Allocation$_{a,t,h}$ shall be an O/R-t-S Congestion Rent Shortfall Charge, O/R-t-S CRSC$_{a,t,h}$, charged to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market; or

(b) If O/R-t-S Allocation$_{a,t,h}$ is positive, then O/R-t-S Allocation$_{a,t,h}$ shall be an O/R-t-S Congestion Rent Surplus Payment, O/R-t-S CRSP$_{a,t,h}$, paid to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market

Responsibility$_{h,q,o}$ = The amount, as a percentage, of responsibility borne by Transmission Owner *q* (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4) for Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* in hour *h*, as determined pursuant to Section 20.2.4.4

and the variable O/R-t-S DCR$_{a,h}$ is defined as set forth in Formula N-6 and the variables FlowImpact$_{a,h,o}$ and O$_h$ are defined as set forth in Formula N-8.

Formula N-10

$$O/R\text{-}t\text{-}S\ Allocation_{a,t,h} = \left(\sum_{\substack{o \in O_h \\ and\ q=t}} FlowImpact_{a,h,o} * ShadowPrice_{a,h} * Responsibility_{h,q,o} \right) * OPF/SCUCAdjust_a$$

Where,

the variables ShadowPrice$_{a,h}$ and OPF/SCUCAdjust$_a$ are defined as set forth in Formula N-5, the variables O/R-t-S Allocation$_{a,t,h}$ and Responsibility$_{h,q,o}$ are defined as set forth in Formula N-9, and the variables FlowImpact$_{a,h,o}$ and O$_h$ are defined as set forth in Formula N-8.

20.2.4.3 Charges and Payments for the Secondary Impact of DAM Outages and Returns-to-Service

The ISO shall use U/D DAM Constraint Residuals to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments, as the case may be, among Transmission Owners pursuant to this Section 20.2.4.3. Each U/D Congestion Rent Shortfall Charge and each U/D Congestion Rent Surplus Payment allocated to a Transmission Owner

pursuant to this Section 20.2.4.3 is subject to being set equal to zero pursuant to Section 20.2.4.5.

20.2.4.3.1 Identification of Upratings and Deratings Qualifying for Charges and Payments

For each hour of the Day-Ahead Market and for each constraint, the ISO shall identify each Qualifying DAM Derating and each Qualifying DAM Uprating, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Derating shall be allocated a U/D Congestion Rent Shortfall Charge and the Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Uprating shall be allocated a U/D Congestion Rent Surplus Payment pursuant to Section 20.2.4.3.2.

20.2.4.3.1.1 Definition of Qualifying DAM Derating

A "**Qualifying DAM Derating**" shall be defined to mean either an Actual Qualifying DAM Derating or a Deemed Qualifying DAM Derating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying DAM Derating.

An "**Actual Qualifying DAM Derating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the constraint has a lower rating in hour *h* than it would have if all transmission facilities were modeled as in-service in hour *h*;

(ii) this lower rating is in whole or in part the result of an Actual Qualifying DAM Outage *o* or an Actual Qualifying DAM Return-to-Service *o* for hour *h*;

(iii) this lower rating resulting from Actual Qualifying DAM Outage *o* or Actual Qualifying DAM Return-to-Service *o* for hour *h* was not modeled in the last

auction held for TCCs valid for hour *h*;

(iv) this lower rating is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and

(v) the constraint is binding in the Day-Ahead Market for hour *h*.

A "**Deemed Qualifying DAM Derating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the constraint has a lower rating in hour *h* than it would have if all transmission facilities were modeled as in-service in hour *h*;

(ii) this lower rating is in whole or in part the result of a Deemed Qualifying DAM Outage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h*;

(iii) the lower rating resulting from Deemed Qualifying DAM Outage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h* was modeled in the last auction held for TCCs valid for hour *h*, but responsibility for Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* resulting in the lower rating for hour *h* is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner responsible for the lower rating in the last auction held for TCCs valid for hour *h*;

(iv) this lower rating is included in the Reconfiguration Auction Interface

Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and

(v) the constraint is binding in the Day-Ahead Market for hour *h*.

20.2.4.3.1.2 Definition of Qualifying DAM Uprating

A "**Qualifying DAM Uprating**" shall be defined to mean either an Actual Qualifying DAM Uprating or a Deemed Qualifying DAM Uprating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying DAM Uprating.

An "**Actual Qualifying DAM Uprating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* in hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the constraint has a higher rating for hour *h* than it would have absent an Actual Qualifying DAM Outage *o* or Actual Qualifying DAM Return-to-Service *o* for hour *h*;

(ii) this higher rating resulting from Actual Qualifying DAM Outage *o* or Actual Qualifying Return-to-Service *o* for hour *h* was not modeled in the last auction held for TCCs valid for hour *h*;

(iii) this higher rating is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and

(iv) the constraint is binding in the Day-Ahead Market for hour *h*.

A "**Deemed Qualifying DAM Uprating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and hour *h* of the Day-Ahead Market, meets each of the following requirements:

(i) the constraint has a lower rating in hour *h* than it would have if all transmission facilities were modeled as in-service in hour *h*;

(ii) this lower rating is in whole or in part the result of a Deemed Qualifying DAM Outage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h*;

(iii) this lower rating resulting from Deemed Qualifying DAM Outage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h* was modeled in the last auction held for TCCs valid for hour *h*, but responsibility for Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* resulting in the lower rating for hour *h* is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner for the purpose of applying Section 20.2.4.4) other than the Transmission Owner responsible for the lower rating in the last auction held for TCCs valid for hour *h*;

(iv) this lower rating for hour *h* is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and

(v) the constraint is binding in the Day-Ahead Market for hour *h*.

20.2.4.3.2 Allocation of U/D DAM Constraint Residuals

This Section 20.2.4.3.2 describes the allocation of U/D DAM Constraint Residuals to Qualifying DAM Deratings and Qualifying DAM Upratings.

When there are Qualifying DAM Deratings or Qualifying DAM Upratings for constraint *a* in hour *h*, the ISO shall allocate a U/D DAM Constraint Residual in the form of a U/D Congestion Rent Shortfall Charge, U/D $CRSC_{a,t,h}$, or U/D Congestion Rent Surplus Payment, U/D $CRSP_{a,t,h}$, by first determining the net total impact on the constraint for hour *h* of all Qualifying DAM Upratings r and Qualifying DAM Deratings *r* for constraint *a* in hour *h* pursuant to Formula N-11 and then applying either Formula N-12 or Formula N-13, as specified herein, to assess U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments.

Formula N-11

$$U/D\ NetDAMImpact_{a,h} = \left(\sum_{for\ all\ r \in R_{a,h}} RatingChange_{a,h,r} * ShadowPrice_{a,h} \right) * SCUCSignChange_{a,h}$$

Where,

U/D $NetDAMImpact_{a,h}$ = The net impact, in dollars, on constraint *a* of all Qualifying DAM Upratings and Qualifying DAM Deratings for constraint *a* in hour *h*; *provided, however,* U/D $NetDAMImpact_{a,h}$ shall be subject to recalculation as specified in the paragraph immediately following this Formula N-11

$RatingChange_{a,h,r}$ = Either

(a) If Qualifying DAM Derating *r* or Qualifying DAM Uprating *r* is a Deemed Qualifying DAM Derating or a Deemed Qualifying DAM Uprating, $RatingChange_{a,h,r}$ shall be equal to the amount, in MWh, of the decrease or increase in the rating of binding constraint *a* in hour *h* resulting from a Deemed Qualifying DAM Return-to-Service or Deemed Qualifying DAM Outage for

constraint *a* in hour *h*, as shown in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); or

(b) If Qualifying DAM Derating *r* or Qualifying DAM Uprating *r* is an Actual Qualifying DAM Derating or an Actual Qualifying DAM Uprating, $RatingChange_{a,h,r}$ shall be equal to the amount, in MWh, of the decrease or increase in the rating of binding constraint *a* in hour *h* resulting from an Actual Qualifying DAM Return-to-Service or an Actual Qualifying DAM Outage for constraint *a* in hour *h*, as shown in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); *provided, however*, $RatingChange_{a,h,r}$ shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-11

$R_{a,h}$ = The set of all Qualifying DAM Deratings *r* or Qualifying DAM Upratings *r* for binding constraint *a* in hour *h*

and the variables $SCUCSignChange_{a,h}$ and $ShadowPrice_{a,h}$ are defined as set forth in Formula N-5.

After calculating U/D $NetDAMImpact_{a,h}$ pursuant to Formula N-11, the ISO shall determine whether U/D $NetDAMImpact_{a,h}$ for constraint *a* in hour *h* has a different sign than U/D $DCR_{a,h}$ for constraint *a* in hour *h*. If the sign is different, the ISO shall (i) recalculate U/D

$NetDAMImpact_{a,h}$ pursuant to Formula N-11 after setting equal to zero each $RatingChange_{a,h,r}$ for which $RatingChange_{a,h,r}$ * $ShadowPrice_{a,h}$ * $SCUCSignChange_{a,h}$ has a different sign than U/D $DCR_{a,h}$, and then (ii) use this recalculated U/D $NetDAMImpact_{a,h}$ and reset value of $RatingChange_{a,h,r}$ to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments pursuant to Formula N-12 or Formula N-13, as specified below.

If the absolute value of the net impact (U/D $NetDAMImpact_{a,h}$) on constraint *a* of all Qualifying DAM Deratings and Qualifying DAM Upratings for constraint *a* in hour *h* as calculated using Formula N-11 (or recalculated pursuant to Formula N-11 using a reset value of $RatingChange_{a,h,r}$ as described in the prior paragraph) is greater than the absolute value of the U/D DAM Constraint Residual (U/D $DCR_{a,h}$) for constraint *a* in hour *h*, then the ISO shall allocate the U/D DAM Constraint Residual in the form of a U/D Congestion Rent Shortfall Charge, U/D $CRSC_{a,t,h}$, or U/D Congestion Rent Surplus Payment, U/D $CRSP_{a,t,h}$, by using Formula N-12. If the absolute value of the net impact (U/D $NetDAMImpact_{a,h}$) on constraint *a* of all Qualifying DAM Deratings and Qualifying DAM Upratings for constraint *a* in hour *h* as calculated using Formula N-11 (or recalculated pursuant to Formula N-11 using a reset value of $RatingChange_{a,h,r}$ as described in the prior paragraph) is less than or equal to the absolute value of the U/D DAM Constraint Residual (U/D $DCR_{a,h}$) for constraint *a* in hour *h*, then the ISO shall allocate the U/D DAM Constraint Residual in the form of a U/D Congestion Rent Shortfall Charge, U/D $CRSC_{a,t,h}$, or U/D Congestion Rent Surplus Payment, U/D $CRSP_{a,t,h}$, by using Formula N-13.

Formula N-12

$$U/D\ Allocation_{a,t,h} = \left(\frac{\sum_{\substack{r \in R_{a,h} \\ and\ q=t}} \left(RatingChange_{a,h,r} * Responsibility_{h,q,r} \right)}{\sum_{for\ all\ r \in R_{a,h}} RatingChange_{a,h,r}} \right) * U/D\ DCR_{a,h}$$

Where,

U/D Allocation$_{a,t,h}$ = Either a U/D Congestion Rent Shortfall Charge or a U/D Congestion Rent Surplus Payment, as specified in (a) and (b) below:

(a) If U/D Allocation$_{a,t,h}$ is negative, then U/D Allocation$_{a,t,h}$ shall be a U/D Congestion Rent Shortfall Charge, U/D CRSC$_{a,t,h}$, charged to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market; or

(b) If U/D Allocation$_{a,t,h}$ is positive, then U/D Allocation$_{a,t,h}$ shall be a U/D Congestion Rent Surplus Payment, U/D CRSP$_{a,t,h}$, paid to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market

Responsibility$_{h,q,r}$ = The amount, as a percentage, of responsibility borne by Transmission Owner *q* (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4) for Qualifying DAM Derating *r* or Qualifying DAM Uprating *r* in hour *h*, as determined pursuant to Section 20.2.4.4

and the variable U/D DCR$_{a,h}$ is defined as set forth in Formula N-7 and the variables RatingChange$_{a,h,r}$ and R$_{a,h}$ are defined as set forth in Formula N-11.

Formula N-13

$$U/D\ Allocation_{a,t,h} = \left(\sum_{\substack{r \in R_{a,h} \\ and\ q=t}} RatingChange_{a,h,r} * ShadowPrice_{a,h} * Responsibility_{h,q,r} \right) * SCUCSignChange_{a,h}$$

Where,

the variables ShadowPrice$_{a,h}$ and SCUCSignChange$_{a,h}$ are defined as set forth in Formula N-5, the variables U/D Allocation$_{a,t,h}$ and Responsibility$_{h,q,r}$ are defined as set forth in Formula N-12, and the variables RatingChange$_{a,h,r}$ and R$_{a,h}$ are defined as set forth in Formula N-11.

20.2.4.4 Assigning Responsibility for Outages, Returns-to-Service, Deratings, and Upratings

20.2.4.4.1 General Rule for Assigning Responsibility; Presumption of Causation

Unless the special rules set forth in Sections 20.2.4.4.2 through 20.2.4.4.4 apply, a Transmission Owner shall for purposes of this Section 20.2.4 be deemed responsible for a DAM Status Change to the extent that the Transmission Owner has caused the DAM Status Change by changing the in-service or out-of-service status of its transmission facility; *provided, however,* that where a DAM Status Change results from a change to the in-service or out-of-service status of a transmission facility owned by more than one Transmission Owner, responsibility for such DAM Status Change shall be assigned to each owning Transmission Owner based on the percentage of the transmission facility that is owned by the Transmission Owner (as determined in accordance with Section 20.2.4.6.1) during the hour for which the DAM Status Change occurred. For the sake of clarity, a Transmission Owner may, by changing the in-service or out-of-service status of its transmission facility, cause a DAM Status Change of another transmission facility if the Transmission Owner's change in the in-service or out-of-service status of its transmission facility causes (directly or as a result of Good Utility Practice) a change in the in-service or out-of-service status of the other transmission facility.

The Transmission Owner that owns a transmission facility that qualifies as a DAM Status Change shall be deemed to have caused the DAM Status Change of that transmission facility unless (i) the Transmission Owner that owns the facility informs the ISO that another Transmission Owner caused the DAM Status Change or that responsibility is to be shared among Transmission Owners in accordance with Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4, and no party disputes such claim; (ii) in case of a dispute over the assignment of responsibility, the ISO determines a Transmission Owner other than the owner of the transmission facility caused the

DAM Status Change or that responsibility is to be shared among Transmission Owners in accordance with Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4; or (iii) FERC orders otherwise.

20.2.4.4.2 Shared Responsibility For Outages, Returns-to-Service, and Ratings Changes Directed by the ISO or Caused by Facility Status Changes Directed by the ISO

A Transmission Owner shall not be responsible for any DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change. Instead, the ISO shall allocate any revenue impacts resulting from a DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change as part of Net Congestion Rents for hour *h*. To do so, the ISO shall be treated as a Transmission Owner when allocating DAM Constraint Residuals pursuant to Section 20.2.4.2 and Section 20.2.4.3, and any DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change shall be attributed to the ISO when performing the calculations described in Section 20.2.4.2 and Section 20.2.4.3; *provided, however*, any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocable to the ISO pursuant to this Section 20.2.4.4.2 shall ultimately be allocated to the Transmission Owners as Net Congestion Rents pursuant to Section 20.2.5.

Responsibility for a Qualifying DAM Return-to-Service or Qualifying DAM Uprating that is directed by the ISO but does not qualify as a Deemed ISO-Directed DAM Status Change shall be assigned to the Transmission Owner that was responsible for the Qualifying Auction Outage or Qualifying Auction Derating in the last Reconfiguration Auction held for TCCs valid for the relevant hour or the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour.

20.2.4.4.3 Shared Responsibility for External Events

A Transmission Owner shall not be responsible for a DAM Status Change occurring inside the NYCA that is caused by a change in the in-service or out-of-service status or rating of a transmission facility located outside the NYCA. Instead, the ISO shall allocate any revenue impacts resulting from a DAM Status Change caused by such an event outside the NYCA as part of Net Congestion Rents for hour *h*. To do so, the ISO shall be treated as a Transmission Owner when allocating DAM Constraint Residuals pursuant to Section 20.2.4.2 and Section 20.2.4.3 and any DAM Status Change caused by such an event outside the NYCA shall be attributed to the ISO when performing the calculations described in Section 20.2.4.2 and Section 20.2.4.3; *provided, however*, any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocable to the ISO pursuant to this Section 20.2.4.4.3 shall ultimately be allocated to the Transmission Owners as Net Congestion Rents pursuant to Section 20.2.5.

20.2.4.4.4 Shared Responsibility For Returns-to-Service and Upratings During a Transitional Period

Notwithstanding any other provision of this Attachment N, a Transmission Owner shall be deemed to be not responsible for a Qualifying DAM Return-to-Service, Qualifying DAM Derating, or Qualifying DAM Uprating for an hour of the Day-Ahead Market if this Attachment N was not in effect at the time of the last Reconfiguration Auction held for TCCs valid for the hour. Instead, the ISO shall allocate any revenue impacts resulting from such a Qualifying DAM Return-to-Service, Qualifying DAM Derating, or Qualifying DAM Uprating as part of Net Congestion Rents for hour *h*. To do so, the ISO shall be treated as a Transmission Owner when allocating DAM Constraint Residuals pursuant to Section 20.2.4.2 and Section 20.2.4.3, and any such Qualifying DAM Return-to-Service, Qualifying DAM Derating, or

Qualifying DAM Uprating during this transitional period shall be attributed to the ISO when performing the calculations described in Section 20.2.4.2 and Section 20.2.4.3; *provided, however*, any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocable to the ISO pursuant to this Section 20.2.4.4.4 shall ultimately be allocated to the Transmission Owners as Net Congestion Rents pursuant to Section 20.2.5.

20.2.4.5 Exceptions: Setting Charges and Payments to Zero

20.2.4.5.1 Zeroing Out of Charges and Payments When Outages and Deratings Lead to Net Payments or Returns-to-Service and Upratings Lead to Net Charges

The ISO shall use Formula N-14 to calculate the total O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments, $\text{NetDAMAllocations}_{t,h}$, for Transmission Owner *t* in hour *h*. Based on this calculation, the ISO shall set equal to zero all O/R-t-S $\text{CRSC}_{a,t,h}$, U/D $\text{CRSC}_{a,t,h}$, O/R-t-S $\text{CRSP}_{a,t,h}$, and U/D $\text{CRSP}_{a,t,h}$ (each as defined in Formula N-14) for Transmission Owner *t* for all constraints for hour *h* if (i) $\text{NetDAMAllocations}_{t,h}$ is positive and Transmission Owner *t* is not responsible (as determined pursuant to Section 20.2.4.4) for any Qualifying DAM Returns-to-Service or Qualifying DAM Upratings during hour *h*, or (ii) $\text{NetDAMAllocations}_{t,h}$ is negative and Transmission Owner *t* is not responsible (as determined pursuant to Section 20.2.4.4) for any Qualifying DAM Outages or Qualifying DAM Deratings during hour *h*; *provided, however*, the ISO shall not set equal to zero pursuant to this Section 20.2.4.5.1 any O/R-t-S $\text{CRSC}_{a,t,h}$, U/D $\text{CRSC}_{a,t,h}$, O/R-t-S $\text{CRSP}_{a,t,h}$, or U/D $\text{CRSP}_{a,t,h}$ arising from an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change described in Section 20.2.4.4.2, an external event described in Section 20.2.4.4.3, or an event

occurring during a transitional period as described in Section 20.2.4.4.4.

Formula N-14

$$NetDAMAllocations_{t,h} = \sum_{for\ all\ a} \left(O/R\text{-}t\text{-}S\ CRSC_{a,t,h} + U/D\ \mathrm{CRSC}_{a,t,h} + O/R\text{-}t\text{-}S\ CRSP_{\mathrm{a,t,h}} + U/D\ CRSP_{\mathrm{a,t,h}} \right)$$

Where,

NetDAMAllocations$_{t,h}$ = The total of the O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments allocated to Transmission Owner *t* in hour *h*

O/R-t-S CRSC$_{a,t,h}$ = An O/R-t-S Congestion Rent Shortfall Charge allocated to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market, calculated pursuant to Section 20.2.4.2

U/D CRSC$_{a,t,h}$ = A U/D Congestion Rent Shortfall Charge allocated to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market, calculated pursuant to Section 20.2.4.3

O/R-t-S CRSP$_{a,t,h}$ = An O/R-t-S Congestion Rent Surplus Payment allocated to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market, calculated pursuant to Section 20.2.4.2

U/D CRSP$_{a,t,h}$ = A U/D Congestion Rent Surplus Payment allocated to Transmission Owner *t* for binding constraint *a* in hour *h* of the Day-Ahead Market, calculated pursuant to Section 20.2.4.3.

20.2.4.5.2 Zeroing Out of Charges and Payments Resulting from Formula Failure

Notwithstanding any other provision of this Attachment N, the ISO shall set equal to zero any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocated to a Transmission Owner for an hour of the Day-Ahead Market if either:

(i) data necessary to compute such a charge or payment, as specified in the formulas set forth in Section 20.2.4, is not known by the ISO and cannot be computed by the ISO (in interpreting this clause, equipment failure shall not preclude computation by the ISO unless necessary data is irretrievably lost); or

(ii) both (a) the charge or payment is clearly and materially inconsistent with cost

causation principles; and (b) this inconsistency is the result of factors not taken into account in the formulas used to calculate the charge or payment;

provided, however, if the amount of charges or payments set equal to zero as a result of the unknown data or inaccurate formula is greater than twenty five thousand dollars ($25,000) in any given month or greater than one hundred thousand dollars ($100,000) over multiple months, the ISO will inform the Transmission Owners of the identified problem and will work with the Transmission Owners to determine if an alternative allocation method is needed and whether it will apply to all months for which the intended formula does not work. Alternate methods would be subject to market participant review and subsequent filing with FERC, as appropriate.

For the sake of clarity, the ISO shall not pursuant to this Section 20.2.4.5.2 set equal to zero any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment that fails to meet these conditions, even if another O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment is set equal to zero pursuant to this Section 20.2.4.5.2 in the same hour of the Day-Ahead Market.

20.2.4.6 Information Requirements

20.2.4.6.1 Information Regarding Facility Ownership

A Transmission Owner shall be responsible for informing the ISO of any change in the ownership of a transmission facility. The ISO shall allocate responsibility for DAM Status Changes based on the transmission facility ownership information available to it at the time of initial settlement.

20.2.4.6.2 Calculation of Settlements Without DCR Allocation Threshold

One month each year, the ISO shall, for informational purposes only, calculate the DAM Constraint Residuals for each constraint for each hour without applying the DCR Allocation Threshold and shall calculate all O/R-t-S Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, U/D Congestion Rent Shortfall Charges, and U/D Congestion Rent Surplus Payments. Before choosing the month for which it will perform these calculations, the ISO will consult with the Transmission Owners.

20.2.5 Allocation of Net Congestion Rents to Transmission Owners

The Net Congestion Rents for each hour of month *m* shall be summed over the month, so that positive and negative values net to a monthly total, NCR_m. The ISO shall allocate NCR_m each month to the Transmission Owners by allocating to each Transmission Owner *t* an amount equal to the product of (i) NCR_m, and (ii) the allocation factor for Transmission Owner *t* for month *m*, as calculated pursuant to Formula N-15.

Formula N-15

$$AllocationFactor_{t,m} = \frac{\left(OriginalResidual_{t,m} + ETCNL_{t,m} + NARs_{t,m} + GFR\&GFTCC_{t,m} + HFPTCC_{t,m}\right)}{\sum_{q \in T}\left(OriginalResidual_{q,m} + ETCNL_{q,m} + NARs_{q,m} + GFR\&GFTCC_{q,m} + HFPTCC_{q,m}\right)}$$

Where,

Allocation Factor$_{t,m}$ = The allocation factor used by the ISO to allocate a share of the Net Congestion Rents to Transmission Owner *t* for month *m*

Original Residual$_{q,m}$ = The one-month portion of the revenue imputed to the Direct Sale or the sale in any Centralized TCC Auction Sub-Auction of Original Residual TCCs that are valid in month *m*. The one-month portion of the revenue imputed to the Direct Sale of these Original Residual TCCs shall be the market clearing price of the TCCs in the Reconfiguration Auction held for month *m* (or one-sixth of the average market clearing price in the rounds of the 6-month Sub-

Auction of the last Centralized TCC Auction if no Reconfiguration Auction was held for month *m.* For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate only Stage 1 six month rounds.). The one-month portion of the revenue imputed to the sale in any Centralized TCC Auction Sub-Auction of these Original Residual TCCs shall be calculated by dividing the revenue received from the sale of these Original Residual TCCs in the Centralized TCC Auction Sub-Auction by the duration in months of the TCCs sold in that Centralized TCC Auction Sub-Auction.

$ETCNL_{q,m}$ = The sum of the one-month portion of the revenue the Transmission Owner has received as payment for the Direct Sale of ETCNL or for its ETCNL released in the Centralized TCC Auction Sub-Auction held for TCCs valid for month *m*. Each one-month portion of the revenue for ETCNL released in such Centralized TCC Auction shall be calculated by dividing the revenue received in a Centralized TCC Auction Sub-Auction from the sale of the ETCNL by the duration in months of the TCCs corresponding to the ETCNL sold in the Centralized TCC Auction Sub-Auction.[2] The one-month portion of the revenue imputed to the Direct Sale of ETCNL shall be the value of the TCCs corresponding to that ETCNL in the Reconfiguration Auction held for month *m* (or one-sixth of the average market clearing price of such TCCs in the rounds of the 6-month Sub-Auction of the last Centralized TCC Auction if no Reconfiguration Auction was held for month *m*). For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate only Stage 1 six month rounds.

$NARs_{q,m}$ = The one-month portion of the Net Auction Revenues the Transmission Owner has received in Centralized TCC Auction Sub-Auction and Reconfiguration Auctions held for TCCs valid for month *m* (which shall not include any revenue from the sale of Original Residual TCCs). The one-month portion of the revenues shall be calculated by summing (i) the revenue Transmission Owner *q* received in each Centralized TCC Auction Sub-Auction or Reconfiguration Auction from the allocation of Net Auction Revenue pursuant to Section 20.3.7, divided by the duration in months of the TCCs sold in the Centralized TCC Auction Sub-Auction or Reconfiguration Auction (or, to the extent TCC auction revenues were allocated pursuant to a different methodology, the amount of such revenues allocated to Transmission Owner *q*), minus (ii) the sum of $NetAuctionAllocations_{t,n}$ as calculated

2 A TCC corresponds to ETCNL if it has the same POI and POW as the ETCNL.

pursuant to Formula N-27 (as adjusted for any charges or payments that are zeroed out) for Transmission Owner *q* for all 6-month Sub-Auction rounds *n* of all Centralized TCC Auctions held for TCCs valid in month *m*, divided in each case by the duration in months of the TCCs sold in each Centralized TCC Auction Sub-Auction (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner *q*), minus (iii) $NetAuctionAllocations_{t,n}$ as calculated pursuant to Formula N-27 and as adjusted for any charges or payments that are zeroed out for Transmission Owner *q* for the Reconfiguration Auction *n* held for month *m* (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner *q*). For Centralized TCC Auctions conducted before May 1, 2010, the calculation of (ii) shall incorporate only Stage 1 six month rounds.

$GFR\&GFTCC_{q,m}$ = The one-month portion of the imputed value of Grandfathered TCCs and Grandfathered Rights, valued at their market clearing prices in the Reconfiguration Auction for month *m* (or one-sixth of the average market clearing price for rounds in the 6-month Sub-Auction of the last Centralized TCC Auction if no Reconfiguration Auction was held for month *m*), provided that the Transmission Owner is the selling party and the Existing Transmission Agreement related to each Grandfathered TCC and Grandfathered Right remains valid in month *m*. For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate only Stage 1 six month rounds.

$HFPTCC_{q,m}$ = The one-month portion of the Historic Fixed Price TCC revenues that Transmission Owner *q* has received for Historic Fixed Price TCCs valid for month *m*, valued at the sum of the share of revenues received by Transmission Owner *q* pursuant to Section 20.4 of this Attachment N for all Historic Fixed Price TCCs valid for month *m*, divided by twelve; provided, however that the value shall be zero for all Historic Fixed Price TCCs that took effect on or before November 1, 2016.

t = Transmission Owner *t*

T = The set of all Transmission Owners *q*.

Each Transmission Owner's share of Net Congestion Rents allocated pursuant to this Section 20.2.5 shall be incorporated into, or otherwise accounted for as part of, its TSC, NTAC,

or other applicable rate mechanism under the ISO Tariffs used to assess charges for Transmission Service provided by the Transmission Owner pursuant to this Tariff, as the case may be.

20.3 Settlement of TCC Auctions

20.3.1 Overview of TCC Auction Settlements; Calculation of Net Auction Revenue

Overview of TCC Auction Settlements. For each round *n* of a Centralized TCC Auction and for each Reconfiguration Auction *n*, the ISO shall settle all settlements for round *n* or for Reconfiguration Auction *n*. These settlements include, as applicable pursuant to the provisions of this Attachment N: (i) the market clearing price charged or paid to purchasers of TCCs; (ii) payments to Transmission Owners that released ETCNL; (iii) payments or charges to Primary Holders selling TCCs; (iv) payments to Transmission Owners that released Original Residual TCCs; (v) O/R-t-S Auction Revenue Shortfall Charges and U/D Auction Revenue Shortfall Charges; and (vi) O/R-t-S Auction Revenue Surplus Payments and U/D Auction Revenue Surplus Payments. Each of these settlements is represented by a variable in Formula N-16.

Calculation of Net Auction Revenues for a Round or a Reconfiguration Auction. In each Centralized TCC Auction round *n* and in each Reconfiguration Auction *n*, the ISO shall calculate Net Auction Revenue pursuant to Formula N-16.

Formula N-16

$$Net\ Auction\ Revenue_n = \begin{bmatrix} TCC\ Auction\ Revenue_n \\ -ETCNL_n \\ -Primary\ Holder\ TCCs\ Sold_n \\ -Original\ Residual\ TCCs_n \\ -O/R\text{-}t\text{-}S\&U/D\ ARSC\&ARSP_n \end{bmatrix}$$

Where,

n = A round of a Centralized TCC Auction (which may be either a round of a 6-month Sub-Auction , a round of a Sub-Auction in which TCCs with a duration greater than 6 months are sold,) or a Reconfiguration Auction, as the case may be

Net Auction Revenue$_n$ = Net Auction Revenue for the round *n* of a Centralized TCC Auction or for Reconfiguration Auction *n*, as the case may be

TCC Auction Revenue$_n$	=	The gross amount of revenue that the ISO collects from the award of TCCs to purchasers in round *n* or in Reconfiguration Auction *n*, which results from the charges and payments allocated pursuant to Section 20.3.2
ETCNL$_n$	=	Either (i) if round *n* is a round of a Centralized TCC Auction, the total of all payments that the ISO makes to Transmission Owners releasing ETCNL into the round pursuant to Section 20.3.3; or (ii) for Reconfiguration Auction *n*, 0
Primary Holder TCCs Sold$_n$	=	The net of the total payments and charges the ISO allocates to Primary Holders selling TCCs in round *n* or in Reconfiguration Auction *n* pursuant to Section 20.3.4
Original Residual TCCs$_n$	=	Either (i) if round *n* is a round of a Centralized TCC Auction, the total payments the ISO makes in round *n* pursuant to Section 20.3.5 to Transmission Owners that release into round *n* Original Residual TCCs; or (ii) for Reconfiguration Auction *n*, 0
O/R-t-S&U/D ARSC&ARSP$_n$	=	Either (i) if round *n* is a round of a Centralized TCC Auction in which 6-month TCCs are sold, the sum of the total O/R-t-S Auction Revenue Shortfall Charges, U/D Auction Revenue Shortfall Charges, O/R-t-S Auction Revenue Surplus Payments, and U/D Auction Revenue Surplus Payments (calculated as NetAuctionAllocations$_{t,n}$ pursuant to Formula N-27) for all Transmission Owners *t*, reduced by any zeroing out of such charges or payments pursuant to Section 20.3.6.5; (ii) if round *n* is a round of a Centralized TCC Auction Sub-Auction in which TCCs with durations longer than 6 months are sold, 0; or (iii) for Reconfiguration Auction *n*, the sum of the total O/R-t-S Auction Revenue Shortfall Charges(O/R-t-S ARSC$_{a,t,n}$), U/D Auction Revenue Shortfall Charges (U/D ARSC$_{a,t,n}$), O/R-t-S Auction Revenue Surplus Payments (O/R-t-S ARSP$_{a,t,n}$), and U/D Auction Revenue Surplus Payments (U/D ARSP$_{a,t,n}$) for all Transmission Owners *t* (which sum is calculated for each Transmission Owner as NetAuctionAllocations$_{t,n}$ pursuant to Formula N-27), reduced by any zeroing out of such charges or payments pursuant to Section 20.3.6.5

The ISO shall allocate the Net Auction Revenue calculated in each round of a Centralized TCC Auction Sub-Auction and in each Reconfiguration Auction to Transmission Owners pursuant to Section 20.3.7.

20.3.2 Charges for TCCs Purchased

All bidders awarded TCCs in round *n* of a Centralized TCC Auction or in

Reconfiguration Auction *n* shall pay or be paid the market clearing price in round *n* or in Reconfiguration Auction *n*, as determined pursuant to Attachment M of this Tariff, for the TCCs purchased.

20.3.3 Payments for ETCNL

The ISO shall, in each round of a Centralized TCC Auction in which ETCNL is released, pay the market clearing price determined in that round for TCCs that correspond to that ETCNL to the Transmission Owner that releases the ETCNL.

If a Transmission Owner releases ETCNL for sale in a round of the Centralized TCC Auction, and the market-clearing price for those TCCs corresponding to that ETCNL in that round is negative, the value of those TCCs will not be included in the determination of payments to the Transmission Owners for ETCNL released into the Centralized TCC Auction. If the market-clearing price is negative for TCCs corresponding to any ETCNL, the value will be set to zero for purposes of allocating auction revenues from the sale of ETCNL. If the total value of the auction revenues available for payment to the Transmission Owners for ETCNL released into the Centralized TCC Auction is insufficient to fund payments at market-clearing prices, the total payments to each Transmission Owner for ETCNL will be reduced proportionately. Notwithstanding any other provision in this Tariff, ETCNL that is offered in any Centralized TCC Auction and that is assigned a negative market clearing price or value shall not give rise to a payment obligation by the Transmission Owner that released it.

20.3.4 Payments to Primary Holders Selling TCCs; Distribution of Revenues from Sale of Certain Grandfathered TCCs (excluding ETCNL) in a Centralized TCC Auction

The ISO shall distribute to or collect from each Primary Holder of a TCC selling that TCC in the Centralized TCC Auction or Reconfiguration Auction the market clearing price of

that TCC in the round of the Centralized TCC Auction or in the Reconfiguration Auction in which that TCC was sold.

In the event a Grandfathered TCC[1] is terminated by mutual agreement of the parties to the grandfathered ETA prior to the conditions specified within Attachments K and L, then the ISO shall distribute the revenues from the sale of the TCCs that correspond to the terminated Grandfathered TCCs in a round of a Centralized TCC Auction directly back to the Transmission Owner identified in Attachment L, until such time as the conditions specified within Attachments K and L are met. Upon such time that the conditions within Attachments K and L are met, the ISO shall allocate the revenues from the sale of the TCCs that correspond to terminated Grandfathered TCCs in the Centralized TCC Auction as Net Auction Revenues in accordance with Section 20.3.7 of this Attachment.

20.3.5 Allocation of Revenues from the Sale of Original Residual TCCs

Revenues associated with Original Residual TCCs shall be distributed directly to each Primary Holder for the duration of the LBMP Transition Period. The Primary Holder of such an Original Residual TCC shall be paid the market clearing price of the Original Residual TCC in the round of the Sub-Auction in which that Original Residual TCC was sold.

If a Transmission Owner releases an Original Residual TCC for sale in a round of the Centralized TCC Auction, and the market-clearing price for those TCCs in that round is negative, the value of those TCCs will not be included in the determination of payments to the Transmission Owners for Original Residual TCCs released into the Centralized TCC Auction. If the market-clearing price is negative for any Original Residual TCC, the value will be set to zero for purposes of allocating auction revenues from the sale of Residual TCCs. If the total value of

[1] These TCCs include TCCs, if any, associated with those rate schedules to which footnote 9 of Attachment L pertains, whether by mutual agreement or otherwise.

the auction revenues available for payment to the Transmission Owners for Original Residual TCCs released into the Centralized TCC Auction is insufficient to fund payments at market-clearing prices, the total payments to each Transmission Owner for Original Residual TCCs will be reduced proportionately. This proportionate reduction would include a reduction in payments reflecting a proportionate reduction in the auction value of Original Residual TCCs sold in a Direct Sale. Notwithstanding any other provision in this Tariff, Original Residual TCCs that are offered in any Centralized TCC Auction and that are assigned a negative market clearing price or value shall not give rise to a payment obligation by the Transmission Owner that released them.

20.3.6 Charges and Payments to Transmission Owners for Auction Outages and Returns-to-Service

The ISO shall charge O/R-t-S Auction Revenue Shortfall Charges and U/D Auction Revenue Shortfall Charges and pay O/R-t-S Auction Revenue Surplus Payments and U/D Auction Revenue Surplus Payments pursuant to this Section 20.3.6. To do so, the ISO shall calculate the Auction Constraint Residual for each constraint for each round *n* of a Centralized TCC Auction 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, pursuant to Section 20.3.6.1 and then determine the amount of each Auction Constraint Residual that is O/R-t-S Auction Constraint Residual and the amount that is U/D Auction Constraint Residual, as specified in Section 20.3.6.1. The ISO shall use the O/R-t-S Auction Constraint Residual to allocate O/R-t-S Auction Revenue Shortfall Charges and O/R-t-S Auction Revenue Surplus Payments to Transmission Owners pursuant to Sections 20.3.6.2 and 20.3.6.4, each of which shall be subject to being reduced to zero pursuant to Section 20.3.6.5. The ISO shall use the U/D Auction Constraint Residual to allocate U/D Auction Revenue Shortfall Charges and U/D Auction Revenue Surplus Payments to Transmission Owners pursuant to Sections 20.3.6.3 and 20.3.6.4, each of which shall be subject to being reduced to zero pursuant to Section 20.3.6.5.

The ISO shall not calculate an Auction Constraint Residual, O/R-t-S Auction Constraint Residual, or U/D Auction Constraint Residual for any rounds of a Centralized TCC Auction except for rounds of the 6-month Sub-Auction.

20.3.6.1 Measuring the Impact of Auction Outages and Returns-to-Service: Calculation of Auction Constraint Residuals and Division of Auction Constraint Residuals into O/R-t-S Auction Constraint Residuals and U/D Auction Constraint Residuals

The ISO shall identify all constraints that are binding in the final Optimal Power Flow solution for round *n* of a 6-month Sub-Auction of a Centralized TCC Auction or for Reconfiguration Auction *n*, as the case may be. For each binding constraint *a* and for each round *n* of a 6-month Sub-Auction of a Centralized TCC Auction or Reconfiguration Auction *n*, the ISO shall calculate the Auction Constraint Residual, $ACR_{a,n}$, using Formula N-17; *provided, however*, the ISO shall recalculate $ACR_{a,n}$ using Formula N-18 if (i) $ACR_{a,n}$ is positive based on the calculation using Formula N-17, and (ii) constraint *a* was not binding in the Power Flow used to determine the Energy flow on constraint *a* in calculating the variable $FLOW_{a,n,basecase}$ in Formula N-17.

Formula N-17

$$ACR_{a,n} = ShadowPrice_{a,n} * \begin{bmatrix} (FLOW_{a,n,actual} - FLOW_{a,n,basecase}) \\ +(ISORatingChange_{a,n} * OPFSignChange_{a,n}) \end{bmatrix} * \%Sold_n$$

Where,

$ACR_{a,n}$ = The Auction Constraint Residual, in dollars, for binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*

$ShadowPrice_{a,n}$ = The Shadow Price, in dollars/MW-*p*, of binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, where *p* is a one-month period for Reconfiguration Auction *n* and *p* is a six-month period for round *n* of a 6-month Sub-Auction, which Shadow Price is calculated in a manner so that if relaxation of constraint *a* would permit an increase in the objective function used for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* as described in Attachment M of this tariff, then

$ShadowPrice_{a,n}$ is positive

$FLOW_{a,n,actual}$ = The Energy flow, in MW-*p*, on binding constraint *a* resulting from a Power Flow using, as the case may be:

(a) For Reconfiguration Auction *n*, (i) the Transmission System model for Reconfiguration Auction *n*, (ii) the set of TCCs and Grandfathered Rights represented in the solution to Reconfiguration Auction *n* (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction), and (iii) the phase angle regulator schedules determined in the Optimal Power Flow solution for Reconfiguration Auction *n*; or

(b) For round *n* of a 6-month Sub-Auction, (i) the Transmission System model for round *n*, (ii) the set of TCCs (scaled appropriately) and Grandfathered Rights represented in the solution to round *n* (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction), and (iii) the phase angle regulator schedule produced in the Optimal Power Flow solution for round *n*

$FLOW_{a,n,basecase}$ = The Energy flow, in MW-*p*, on binding constraint *a* produced in, as the case may be:

(a) For Reconfiguration Auction *n*, a Power Flow using the following base case data set: (i) the Transmission System model for Reconfiguration Auction *n*, (ii) the set of TCCs and Grandfathered Rights represented in the solution to the final round of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n* (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction), and (iii) the phase angle regulator schedules determined in the Optimal Power Flow solution for the final round of the last 6-month Sub-Auction held for

TCCs valid during the month corresponding to Reconfiguration Auction *n*; or (b) For round *n* of a 6-month Sub-Auction, a Power Flow run using the following base case data set: (i) the Transmission System model for the actual 6-month Sub-Auction, and (ii) the base case set of TCCs (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in the simulated auction) and the phase angle regulator schedule produced in a single simulated TCC auction administered for all rounds of the 6-month Sub-Auction using the Transmission System model for the actual 6-month Sub-Auction modified so as to model as in-service all transmission facilities that were out-of-service in the Transmission System model used for the Sub-Auction and model as fully rated all transmission facilities that were derated in the Transmission System model used for the Sub-Auction, the pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in the Sub-Auction, and all bids to purchase and offers to sell made into all rounds of the Sub-Auction that includes round *n*

$ISORatingChange_{a,n}$ =The total change in the rating of constraint *a* for round *n* or Reconfiguration Auction *n* resulting from ISO-Directed Auction Status Changes or Deemed ISO-Directed Auction Status Changes described in Section 20.3.6.4.2, external events described in Section 20.3.6.4.3, or reasons determined by the ISO to be unrelated to Qualifying Auction Outages or Qualifying Auction Returns-to-Service for round *n* or Reconfiguration Auction *n*, which shall be calculated as follows:

(a) For Reconfiguration Auction *n*, zero, except that in the event of a change in the rating of constraint *a* resulting from ISO-Directed Auction Status Changes or Deemed ISO-Directed Auction Status Changes described in Section 20.3.6.4.2, external events described in Section 20.3.6.4.3, or reasons determined by the ISO to be unrelated to Qualifying Auction Outages or Qualifying Auction Returns-to-

Service for round *n* or Reconfiguration Auction *n*, $ISORatingChange_{a,n}$ shall be equal to the amount, in MW-*p*, of the change in the rating limit of constraint *a* as shown in the Reconfiguration Auction Interface Uprate/Derate Table applicable for Reconfiguration Auction *n*

(b) For round *n* of a 6-month Sub-Auction, zero, except that in the event of a change in the rating of a transmission facility resulting from ISO-Directed Auction Status Changes or Deemed ISO-Directed Auction Status Changes described in Section 20.3.6.4.2, external events described in Section 20.3.6.4.3, or reasons determined by the ISO to be unrelated to Qualifying Auction Outages or Qualifying Auction Returns-to-Service for round *n* or Reconfiguration Auction *n*, $ISORatingChange_{a,n}$ shall be equal to the amount, in MW-*p*, of the change in the rating limit of constraint *a* as shown in the Centralized TCC Auction Interface Uprate/Derate Table applicable for round *n*

$OPFSignChange_{a,n}$=1 if $ShadowPrice_{a,n}$ is greater than zero; otherwise, -1

$\%Sold_n$ = Either (i) for round *n* of a 6-month Sub-Auction, the percentage of transmission Capacity sold in round *n*, divided by the percentage of transmission Capacity sold in all rounds of the Sub-Auction of which round *n* is a part; or (ii) for Reconfiguration Auction *n*, 1.

Formula N-18

$$ACR_{a,n} = ShadowPrice_{a,n} * \begin{bmatrix} (FLOW_{a,n,actual} - FLOW_{a,n,basecase}) \\ +(ISORatingChange_{a,n} * OPFSignChange_{a,n}) \\ -(UnsoldCapacity_{a,n,PriorAuction} * OPFSignChange_{a,n}) \end{bmatrix} * \%Sold_n$$

Where,

$UnsoldCapacity_{a,n,PriorAuction}$ = Either:

(a) For Reconfiguration Auction *n*, the rating limit for binding constraint *a* applied in the model used in the last Centralized TCC Auction held for TCCs valid during

the month corresponding to Reconfiguration Auction *n*, minus the Energy flow, in MW-*p*, on binding constraint *a* produced in the Optimal Power Flow in the last round of that Centralized TCC Auction; or

(b) For round *n* of a 6-month Sub-Auction, the rating limit for binding constraint *a* applied in the model used in the simulated auction run to determine $FLOW_{a,n,basecase}$ in Formula N-17, minus the Energy flow, in MW-*p*, on binding constraint *a* produced in the Optimal Power Flow in the simulated auction run to determine $FLOW_{a,n,basecase}$ in Formula N-17

and each of the other variables is as set forth in Formula N-17; *provided, however,* if $ACR_{a,n}$ is less than zero when calculated using this Formula N-18, $ACR_{a,n}$ shall be set equal to zero.

Following calculation of the Auction Constraint Residual for each constraint *a* for each round *n* of a 6-month Sub-Auction or each Reconfiguration Auction *n*, the ISO shall calculate the amount of each O/R-t-S Auction Constraint Residual and the amount of each U/D Auction Constraint Residual for each constraint *a* for each ound *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be. The amount of each O/R-t-S Auction Constraint Residual for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, for constraint *a* shall be determined by applying Formula N-19. The amount of each U/D Auction Constraint Residual for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, for constraint *a* shall be determined by applying Formula N-20.

Formula N-19

$$O/R\text{-}t\text{-}S\ ACR_{a,n} = ACR_{a,n} * \left[\frac{\left(FLOW_{a,n,actual} - FLOW_{a,n,basecase}\right) + \left(TotalRatingChange_{a,n} * OPFSignChange_{a,n}\right)}{\left(FLOW_{a,n,actual} - FLOW_{a,n,basecase}\right) + \left(ISORatingChange_{a,n} * OPFSignChange_{a,n}\right)}\right]$$

Where:

$O/R\text{-}t\text{-}S\ ACR_{a,n}$ = The amount of the O/R-t-S Auction Constraint Residual for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, for

constraint *a*

TotalRatingChange$_{a,n}$ = The total change in the rating of constraint *a*, which shall be calculated as follows:

(a) For Reconfiguration Auction *n*, TotalRatingChange$_{a,n}$ shall be equal to (1) the rating limit, in MW-*p*, of constraint *a* in the last Centralized TCC Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*, minus (2) the rating limit, in MW-*p*, of constraint *a* applicable in Reconfiguration Auction *n*

(b) For round *n* of a 6-month Sub-Auction, TotalRatingChange$_{a,n}$ shall be equal to (1) the rating limit, in MW-*p*, of constraint *a* in a case where all transmission facilities are in-service and fully rated, minus (2) the rating limit, in MW-*p*, of constraint *a* in round *n*

and the variable ACR$_{a,n}$ is as calculated pursuant to Formula N-17 or, if required, pursuant to Formula N-18, and each of the other variables are as defined in Formula N-17.

Formula N-20

$$U/D\,ACR_{a,n} = ACR_{a,n} * \left[\frac{-\left(TotalRatingChange_{a,n} - ISORatingChange_{a,n}\right) * \ OPFSignChange_{a,n}}{\left(FLOW_{a,n,actual} - FLOW_{a,n,basecase}\right) + \left(ISORatingChange_{a,n} * OPFSignChange_{a,n}\right)}\right]$$

Where,

U/D ACR$_{a,n}$ = The amount of the U/D Auction Constraint Residual for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, for constraint *a*

and the variable ACR$_{a,n}$ is as calculated pursuant to Formula N-17 or, if required, pursuant to Formula N-18, the variable TotalRatingChange$_{a,n}$ is defined as set forth in Formula N-19 and each of the other variables are defined as set forth in Formula N-17.

20.3.6.2 Charges and Payments for the Direct Impact of Auction Outages and Returns-to-Service

The ISO shall use O/R-t-S Auction Constraint Residuals to allocate O/R-t-S Auction

Revenue Shortfall Charges and O/R-t-S Auction Revenue Surplus Payments, as the case may be, among Transmission Owners pursuant to this Section 3.6.2. Each O/R-t-S Auction Revenue Shortfall Charge and each O/R-t-S Auction Revenue Surplus Payment allocated to a Transmission Owner pursuant to this Section 20.3.6.2 is subject to being set equal to zero pursuant to Section 20.3.6.5.

20.3.6.2.1 Identification of Outages and Returns-to-Service Qualifying for Charges and Payments

For each round of a 6-month Sub-Auction or Reconfiguration Auction, as the case may be, the ISO shall identify each Qualifying Auction Outage and each Qualifying Auction Return-to-Service, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.3.6.4, for the Qualifying Auction Outage or Qualifying Auction Return-to-Service shall be allocated an O/R-t-S Auction Revenue Shortfall Charge or an O/R-t-S Auction Revenue Surplus Payment pursuant to Sections 20.3.6.2.2 or 20.3.6.2.3.

20.3.6.2.1.1 Definition of Qualifying Auction Outage

A "**Qualifying Auction Outage**" (which term shall apply to round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be) shall be defined to mean either an Actual Qualifying Auction Outage or a Deemed Qualifying Auction Outage. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying Auction Outage.

An "**Actual Qualifying Auction Outage**" (which term shall apply to round *n* of a 6-month ub-Auction or Reconfiguration Auction *n*, as the case may be) shall be defined as a transmission facility that, for a given round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be:

(a) For Reconfiguration Auction *n*, meets each of the following requirements:

(i) the facility existed and was modeled as in-service in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; and

(ii) the facility exists but is not modeled as in-service for Reconfiguration Auction *n*;

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; or

(b) For round *n* of a 6-month Sub-Auction, meets each of the following requirements:

(i) the facility exists but is not modeled as in-service for round *n* of a 6-month Sub-Auction; and

(ii) the facility was not Normally Out-of-Service Equipment at the time of stage 1 round *n* of that 6-month Sub-Auction.

A "**Deemed Qualifying Auction Outage**" (which term shall apply only to a Reconfiguration Auction *n*) shall be defined as a transmission facility that, for Reconfiguration Auction *n*, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(ii) the facility existed but was not modeled as in-service in Reconfiguration Auction *n* as a result of an Auction Status Change or external event described in Section 20.3.6.4.3 in Reconfiguration Auction *n* for which responsibility was assigned pursuant to Section 20.3.6.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.3.6.4) other than the

Transmission Owner assigned responsibility for the facility not being modeled as in-service in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*.

20.3.6.2.1.2 Definition of Qualifying Auction Return-to-Service

A "**Qualifying Auction Return-to-Service**" shall be defined to mean either an Actual Qualifying Auction Return-to-Service or a Deemed Qualifying Auction Return-to-Service. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying Auction Return-to-Service.

An "**Actual Qualifying Auction Return-to-Service**" shall be defined as a transmission facility that, for a given Reconfiguration Auction *n*, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service for the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; and

(ii) the facility exists and is modeled as in-service in Reconfiguration Auction *n*;

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*.

Notwithstanding any other provision of this Attachment N, a transmission facility returning to service for round *n* of a 6-month Sub-Auction shall not be an Actual Qualifying Auction Return-to-Service for that round *n* and shall not qualify a Transmission Owner for an O/R-t-S Auction Revenue Shortfall Charge or O/R-t-S Auction Revenue Surplus Payment for

that round *n*.

A "**Deemed Qualifying Auction Return-to-Service**" shall be defined as a transmission facility that, for a given Reconfiguration Auction *n*, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(ii) the facility existed but was not modeled as in-service in Reconfiguration Auction *n* as a result of an Auction Status Change or external event described in Section 20.3.6.4.3 in Reconfiguration Auction *n* for which responsibility was assigned pursuant to Section 20.3.6.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.3.6.4) other than the Transmission Owner assigned responsibility for the facility not being modeled as in-service for the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; and

(iii) the facility was not Normally Out-of-Service Equipment at the time of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*.

20.3.6.2.2 Allocation of an O/R-t-S Auction Constraint Residual When Only One Transmission Owner is Responsible for All of the Relevant Outages and Returns-to-Service

This Section 20.3.6.2.2 describes the allocation of an O/R-t-S Auction Constraint Residual for a given round of a 6-month Sub-Auction or Reconfiguration Auction, as the case may be, and a given constraint when only one Transmission Owner is responsible, as determined pursuant to Section 20.3.6.4, for all of the Qualifying Auction Outages and all of the Qualifying

Auction Returns-to-Service for that round of a 6-month Sub-Auction or Reconfiguration Auction that contribute to that constraint.

If the same Transmission Owner is responsible, as determined pursuant to Section 20.3.6.4, for all of the Qualifying Auction Outages *o* and Qualifying Auction Returns-to-Service *o* for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* that contribute to constraint *a*, then the ISO shall allocate the O/R-t-S Auction Constraint Residual for that round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* and that constraint, O/R-t-S $ACR_{a,n}$, to that Transmission Owner in the form of either (i) an O/R-t-S Auction Revenue Shortfall Charge in the amount of O/R-t-S $ACR_{a,n}$ if O/R-t-S $ACR_{a,n}$ is negative, or (ii) an O/R-t-S Auction Revenue Surplus Payment in the amount of O/R-t-S $ACR_{a,n}$ if O/R-t-S $ACR_{a,n}$ is positive.

20.3.6.2.3 Allocation of an O/R-t-S Auction Constraint Residual When More Than One Transmission Owner is Responsible for the Relevant Outages and Returns-to-Service

This Section 20.3.6.2.3 describes the allocation of an O/R-t-S Auction Constraint Residual for a given round of a 6-month Sub-Auction or Reconfiguration Auction, as the case may be, and a given constraint when more than one Transmission Owner is responsible, as determined pursuant to Section 20.3.6.4, for the Qualifying Auction Outages and the Qualifying Auction Returns-to-Service for the round of a 6-month Sub-Auction or Reconfiguration Auction that contribute to the constraint.

If more than one Transmission Owner is responsible, as determined pursuant to Section 20.3.6.4, for the Qualifying Auction Outages and the Qualifying Auction Returns-to-Service for round n of a 6-month Sub-Auction or Reconfiguration Auction n that contribute to constraint a, the ISO shall allocate the O/R-t-S Auction Constraint Residual for constraint a for round n of a 6-month Sub-Auction or for Reconfiguration Auction n, O/R-t-S $ACR_{a,n}$, in the form of an O/R-

t-S Auction Revenue Shortfall Charge or O/R-t-S Auction Revenue Surplus Payment to the Transmission Owners responsible for the Qualifying Auction Outages o and Qualifying Auction Returns-to-Service o for round n of a 6-month Sub-Auction or Reconfiguration Auction n by first determining the net total impact on the constraint of all Qualifying Auction Outages and Qualifying Auction Returns-to Service for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* with an impact on the Energy flow across that constraint of 1 MW-*p* or more by applying Formula N-21, and then applying either Formula N-22 or Formula N-23, as specified herein, to assess O/R-t-S Auction Revenue Shortfall Charges and O/R-t-S Auction Revenue Surplus Payments.

Formula N-21

$$O/R\text{-}t\text{-}SNetAuctionImpact_{a,n} = \sum_{for\ all\ o \in O_n} FlowImpact_{a,n,o} * ShadowPrice_{a,n}$$

Where,

$O/R\text{-}t\text{-}SNetAuctionImpact_{a,n}$ = The net impact, in dollars, for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, on constraint *a* of all Qualifying Auction Outages and Qualifying Auction Returns-to-Service for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* having an impact of more than 1 MW-*p* on Energy flow across constraint *a; provided, however*, $O/R\text{-}t\text{-}SNetAuctionImpact_{a,n}$ shall be subject to recalculation as specified in the paragraph immediately following this Formula N-21

$FlowImpact_{a,n,o}$ = The Energy flow impact, in MW-*p*, of a Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* on binding constraint *a* determined for Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, which shall either:

(a) if Qualifying Auction Outage *o* is a Deemed Qualifying Auction Outage, be equal to the negative of $FlowImpact_{a,n,o}$ calculated for the corresponding Deemed Qualifying Auction Return-to-Service as described in part (b) of this definition of $FlowImpact_{a,n,o}$, or

(b) if Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* is an Actual Qualifying Auction Outage, an Actual Qualifying Auction Return-to-Service, or a Deemed Qualifying Auction Return-to-Service, be calculated pursuant to the following formula:

$$FlowImpact_{a,n,o} = BaseCaseFlow_{a,n} - One\text{-}OffFlow_{a,n,o}$$

Where,

$BaseCaseFlow_{a,n}$ = Either, as the case may be:

(i) for a Reconfiguration Auction, the Energy flow on constraint *a* resulting from a Power Flow using (1) the set of injections and withdrawals corresponding to the actual TCCs and Grandfathered Rights represented in the solution to the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n* (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction); (2) the phase angle regulator schedule determined in the Optimal Power Flow solution for the final round of the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; and (3) the Transmission System model for the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*; or

(ii) for any round of a 6-month Sub-Auction, the Energy flow on constraint *a* resulting from a Power Flow run using the following base case data set: (1) the Transmission System model for the actual 6-month Sub-Auction, modified so as to model as in-service all transmission facilities that were out-of-service for the actual 6-month Sub-Auction, and (2) the set of injections and withdrawals corresponding to the base case set of TCCs (including those pre-existing TCCs

and Grandfathered Rights that are represented as fixed injections and withdrawals in the 6-month Sub-Auction) and the phase angle regulator schedule produced in the Optimal Power Flow used to calculate the Energy flow on constraint *a* for round *n* of a 6-month Sub-Auction, as described in the definition of $FLOW_{a,n,basecase}$ in Formula N-17

$One\text{-}OffFlow_{a,n,o}$ = Either

(i) if Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* is an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service, the Energy flow on constraint *a* resulting from a Power Flow using each element of the base case data set used in the calculation of $BaseCaseFlow_{a,n}$ above (*provided, however*, if a transmission facility was modeled as free-flowing in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, as the case may be, because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedule and related variables to model the transmission facility as free flowing), but in each case with the Transmission System model modified so as to, as the case may be, either (i) model as out-of-service Actual Qualifying Auction Outage *o*, or (ii) model as in-service Actual Qualifying Auction Return-to-Service *o*; or

(ii) if Qualifying Auction Return-to-Service *o* is a Deemed Qualifying Auction Return-to-Service, the Energy flow on constraint *a* resulting from a Power Flow using each element of the base case data set used in the calculation of $BaseCaseFlow_{a,n}$ above (*provided,* however, if a transmission facility was modeled as free-flowing in round *n* of a 6-month Sub-Auction or in

Reconfiguration Auction *n*, as the case may be, because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedule and related variables to model the transmission facility as free flowing), but with the Transmission System model modified so as to model as in-service the facility that is Deemed Qualifying Auction Return-to-Service *o*; *provided, however*, where the absolute value of $\text{FlowImpact}_{a,n,o}$ calculated using the procedures set forth above is less than 1 MW-*p*, then $\text{FlowImpact}_{a,n,o}$ shall be set equal to zero *provided further*, $\text{FlowImpact}_{a,n,o}$ shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-21

O_n = The set of all Qualifying Auction Outages *o* and Qualifying Auction Returns-to-Service *o* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*

p = A one-month period for Reconfiguration Auction *n*, or a six-month period for round *n* of a 6-month Sub-Auction

and the variable $\text{ShadowPrice}_{a,n}$ is defined as set forth in Formula N-17.

After calculating O/R-t-S $\text{NetAuctionImpact}_{a,n}$ pursuant to Formula N-21, the ISO shall determine whether O/R-t-S $\text{NetAuctionImpact}_{a,n}$ for constraint *a* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* has a different sign than O/R-t-S $\text{ACR}_{a,n}$ for constraint *a* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*. If the sign is different, the ISO shall (i) recalculate O/R-t-S $\text{NetAuctionImpact}_{a,n}$ pursuant to Formula N-21 after setting equal to zero each $\text{FlowImpact}_{a,n,o}$ for which $\text{FlowImpact}_{a,n,o} * \text{ShadowPrice}_{a,n}$ has a different sign than O/R-t-S $\text{ACR}_{a,n}$, and then (ii) use this recalculated O/R-t-S $\text{NetAuctionImpact}_{a,n}$ and reset value of $\text{FlowImpact}_{a,n,o}$ to allocate O/R-t-S Auction Revenue Shortfall Charges and O/R-t-S Auction Revenue Surplus Payments pursuant to Formula N-22 or Formula N-23, as specified below.

If the absolute value of the net impact (O/R-t-S $\text{NetAuctionImpact}_{a,n}$) on constraint *a* of

all Qualifying Auction Outages and Qualifying Auction Returns-to-Service for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* as calculated using Formula N-21 (or recalculated pursuant to Formula N-21 using a reset value of $\text{FlowImpact}_{a,n,o}$ as described in the prior paragraph) is greater than the absolute value of the O/R-t-S Auction Constraint Residual (O/R-t-S $\text{ACR}_{a,n}$) for constraint *a* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, then the ISO shall allocate the O/R-t-S Auction Constraint Residual in the form of an O/R-t-S Auction Revenue Shortfall Charge, O/R-t-S $\text{ARSC}_{a,t,n}$, or O/R-t-S Auction Revenue Surplus Payment, O/R-t-S $\text{ARSP}_{a,t,n}$, by using Formula N-22. If the absolute value of the net impact (O/R-t-S $\text{NetAuctionImpact}_{a,n}$) on constraint *a* of all Qualifying Auction Outages and Qualifying Auction Returns-to-Service for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* as calculated using Formula N-21 (or recalculated pursuant to Formula N-21 using a reset value of $\text{FlowImpact}_{a,n,o}$ as described in the prior paragraph) is less than or equal to the absolute value of the O/R-t-S Auction Constraint Residual (O/R-t-S $\text{ACR}_{a,n}$) for constraint *a* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, then the ISO shall allocate the O/R-t-S Auction Constraint Residual in the form of an O/R-t-S Auction Revenue Shortfall Charge, O/R-t-S $\text{ARSC}_{a,t,n}$, or O/R-t-S Auction Revenue Surplus Payment, O/R-t-S $\text{ARSP}_{a,t,n}$, by using Formula N-23.

Formula N-22

$$O/R\text{-}t\text{-}S\ Allocation_{a,t,n} = \left(\frac{\sum_{\substack{o \in O_n \\ and\ q=t}} \left(FlowImpact_{a,n,o} * Responsibility_{n,q,o} \right)}{\sum_{for\ all\ o \in O_n} FlowImpact_{a,n,o}} \right) * O/R\text{-}t\text{-}S\ ACR_{a,n}$$

Where,

O/R-t-S $\text{Allocation}_{a,t,n}$ = Either an O/R-t-S Auction Revenue Shortfall Charge or an O/R-t-S Auction Revenue Surplus Payment, as specified in (a) and (b) below:

(a) If O/R-t-S Allocation$_{a,t,n}$ is negative, then O/R-t-S Allocation$_{a,t,n}$ shall be an O/R-t-S Auction Revenue Shortfall Charge, O/R-t-S ARSC$_{a,t,n}$, charged to Transmission Owner *t* for binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction; or

(b) If O/R-t-S Allocation$_{a,t,n}$ is positive, then O/R-t-S Allocation$_{a,t,n}$ shall be an O/R-t-S Auction Revenue Surplus Payment, O/R-t-S ARSP$_{a,t,n}$, paid to Transmission Owner *t* for binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction

Responsibility$_{n,q,o}$ = The amount, as a percentage, of responsibility borne by Transmission Owner *q* (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.3.6.4.2 or 20.3.6.4.3) for Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, as determined pursuant to Section 20.3.6.4

and the variable O/R-t-S ACR$_{a,n}$ is defined as set forth in Formula N-19 and the variables FlowImpact$_{a,n,o}$ and O$_n$ are defined as set forth in Formula N-21.

Formula N-23

$$O/R\text{-}t\text{-}S\ Allocation_{a,t,n} = \sum_{\substack{o \in O_n \\ and\ q=t}} FlowImpact_{a,n,o} * ShadowPrice_{a,n} * Responsibility_{n,q,o}$$

Where,

the variable ShadowPrice$_{a,n}$ is defined as set forth in Formula N-17, the variables O/R-t-S Allocation$_{a,t,n}$ and Responsibility$_{n,q,o}$ are defined as set forth in Formula N-22, and the variables FlowImpact$_{a,n,o}$ and O$_n$ are defined as set forth in Formula N-21.

20.3.6.3 Charges and Payments for the Secondary Impact of Auction Outages and Returns-to-Service

The ISO shall use U/D Auction Constraint Residuals to allocate U/D Auction Revenue Shortfall Charges and U/D Auction Revenue Surplus Payments, as the case may be, among Transmission Owners pursuant to this Section 20.3.6.3. Each U/D Auction Revenue Shortfall Charge and each U/D Auction Revenue Surplus Payment allocated to a Transmission Owner

pursuant to this Section 20.3.6.3 is subject to being set equal to zero pursuant to Section 20.3.6.5.

20.3.6.3.1 Identification of Upratings and Deratings Qualifying for Charges and Payments

For each constraint for each round of a 6-month Sub-Auction or Reconfiguration Auction, the ISO shall identify each Qualifying Auction Derating and each Qualifying Auction Uprating, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.3.6.4, for a Qualifying Auction Derating or Qualifying Auction Uprating shall be allocated a U/D Auction Revenue Shortfall Charge or a U/D Auction Revenue Surplus Payment, as the case may be, pursuant to Section 20.3.6.3.2.

20.3.6.3.1.1 Definition of Qualifying Auction Derating

A "**Qualifying Auction Derating**" (which term shall apply to round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be) shall be defined to mean an Actual Qualifying Auction Derating or a Deemed Qualifying Auction Derating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying Auction Derating.

An "**Actual Qualifying Auction Derating**" (which term shall apply to round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be) shall be defined as a change in the rating of a constraint that, for a given constraint *a* and a given round *n* or Reconfiguration Auction *n* meets each of the following requirements:

For Reconfiguration Auction *n*:

(i) the constraint has a lower rating in Reconfiguration Auction *n* than it would have if all transmission facilities were modeled as in-service in Reconfiguration Auction *n*;

(ii) this lower rating is in whole or in part the result of an Actual Qualifying Auction

Outage *o* or an Actual Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n*;

(iii) the lower rating resulting from Actual Qualifying Auction Outage *o* or Actual Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n* was not modeled in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(iv) this lower rating is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*; and

(v) the constraint was binding in Reconfiguration Auction *n*.

For round *n* of a 6-month Sub-Auction:

(i) the constraint has a lower rating in round *n* of the 6-month Sub-Auction than that constraint would have in a case where all transmission facilities are in-service and fully rated;

(ii) this lower rating is the result of an Actual Qualifying Auction Outage *o* or Actual Qualifying Auction Return-to-Service *o* for round *n* of the 6-month Sub-Auction;

(iii) this lower rating is included in the Centralized TCC Auction Interface Uprate/Derate Table in effect for round *n* of the 6-month Sub-Auction; and

(iv) the constraint is binding in round *n* of the 6-month Sub-Auction.

A "**Deemed Qualifying Auction Derating**" (which term shall apply to Reconfiguration Auction *n*) shall be defined as a change in the rating of a constraint that, for a given constraint *a* and a given Reconfiguration Auction *n* meets each of the following requirements:

(i) the constraint has a lower rating in Reconfiguration Auction *n* than it would have if all transmission facilities were modeled as in-service in Reconfiguration

Auction *n*;

(ii) this lower rating is in whole or in part the result of a Deemed Qualifying Auction Outage *o* or Deemed Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n*;

(iii) this lower rating resulting from Deemed Qualifying Auction Outage *o* or Deemed Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n* was modeled in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*, but responsibility for Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* resulting in the lower rating for Reconfiguration Auction *n* is assigned pursuant to Section 20.3.6.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.3.6.4) other than the Transmission Owner responsible for the lower rating in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(iv) this lower rating is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*; and

(v) the constraint is binding in Reconfiguration Auction *n*.

20.3.6.3.1.2 Definition of Qualifying Auction Uprating

A "**Qualifying Auction Uprating**" shall be defined to mean either an Actual Qualifying Auction Uprating or a Deemed Qualifying Auction Uprating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying Auction Uprating.

An "**Actual Qualifying Auction Uprating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and Reconfiguration Auction *n*, as the case may be,

meets each of the following requirements:

(i) the constraint has a higher rating for Reconfiguration Auction *n* than it would have absent an Actual Qualifying Auction Outage *o* or Actual Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n*;

(ii) this higher rating resulting from Actual Qualifying Auction Outage *o* or Actual Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n* was not modeled in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*;

(iii) this higher rating is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*; and

(iv) the constraint is binding in Reconfiguration Auction *n*.

Notwithstanding any other provision of this Attachment N, a transmission facility uprating for a round of a 6-month Sub-Auction shall not be a Qualifying Auction Uprating and shall not qualify a Transmission Owner for a U/D Auction Revenue Shortfall Charge or U/D Auction Revenue Surplus Payment.

A "**Deemed Qualifying Auction Uprating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and Reconfiguration Auction *n*, as the case may be, meets each of the following requirements:

(i) the constraint has a lower rating in Reconfiguration Auction *n* than it would have if all transmission facilities were modeled as in-service in Reconfiguration Auction *n*;

(ii) this lower rating is in whole or in part the result of a Deemed Qualifying Auction Outage *o* or Deemed Qualifying Auction Return-to-Service *o* for Reconfiguration

Auction *n*;

(iii) this lower rating resulting from Deemed Qualifying Auction Outage *o* or Deemed Qualifying Auction Return-to-Service *o* for Reconfiguration Auction *n* was modeled in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*, but responsibility for Qualifying Auction Outage *o* or Qualifying Auction Return-to-Service *o* resulting in the lower rating for Reconfiguration Auction *n* is assigned pursuant to Section 20.3.6.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.3.6.4) other than the Transmission Owner responsible for the lower rating in the last auction held for TCCs valid for hour *h*;

(iv) this lower rating in Reconfiguration Auction *n* is included in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*; and

(v) the constraint is binding in Reconfiguration Auction *n*.

20.3.6.3.2 Allocation of U/D Auction Constraint Residuals

This Section 20.3.6.3.2 describes the allocation of U/D Auction Constraint Residuals to Qualifying Auction Deratings and Qualifying Auction Upratings.

When there are Qualifying Auction Deratings or Qualifying Auction Upratings in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction for constraint *a,* the ISO shall allocate a U/D Auction Constraint Residual in the form of a U/D Auction Revenue Shortfall Charge, U/D $ARSC_{a,t,n}$, or U/D Auction Revenue Surplus Payment, U/D $ARSP_{a,t,n}$, by first determining the net total impact on the constraint for the round *n* of a 6-month Sub-Auction or

Reconfiguration Auction *n* of all Qualifying Auction Deratings *r* and Qualifying Auction Upratings *r* for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction pursuant to Formula N-24 and then applying either Formula N-25 or Formula N-26, as specified herein, to assess U/D Auction Revenue Shortfall Charges and U/D Auction Revenue Surplus Payments.

Formula N-24

$$U/D\ NetAuctionImpact_{a,n} = \left(\sum_{r \in R_{a,n}} RatingChange_{a,n,r} * ShadowPrice_{a,n} \right) * OPFSignChange_{a,n}$$

Where,

U/D NetAuctionImpact$_{a,n}$ = The net impact, in dollars, on constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction of all Qualifying Auction Deratings or Qualifying Auction Upratings for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction; *provided, however*, U/D NetAuctionImpact$_{a,n}$ shall be subject to recalculation as specified in the paragraph immediately following this Formula N-24

RatingChange$_{a,n,r}$= Either:

(a) If Qualifying Auction Derating *r* or Qualifying Auction Uprating *r* is a Deemed Qualifying Auction Derating or a Deemed Qualifying Auction Uprating, RatingChange$_{a,n,r}$ shall be equal to the amount, in MW-*p*, of the decrease or increase in the rating of binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction resulting from a Deemed Qualifying Auction Outage or Deemed Qualifying Auction Return-to-Service for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, which in the case of Reconfiguration Auction *n* shall be as shown in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*,

and which in the case of round *n* of a 6-month Sub-Auction shall be as shown in the Centralized TCC Auction Interface Uprate/Derate Table in effect for round *n* of a 6-month Sub-Auction; or

(b) If Qualifying Auction Derating *r* or Qualifying Auction Uprating *r* is an Actual Qualifying Auction Derating or an Actual Qualifying Auction Uprating, $RatingChange_{a,n,r}$ shall be equal to the amount, in MW-*p*, of the decrease or increase in the rating of binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction resulting from an Actual Qualifying Auction Outage or Actual Qualifying Auction Return-to-Service for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, which in the case of Reconfiguration Auction *n* shall be as shown in the Reconfiguration Auction Interface Uprate/Derate Table in effect for Reconfiguration Auction *n*, and which in the case of round *n* of a 6-month Sub-Auction shall be as shown in the Centralized TCC Auction Interface Uprate/Derate Table in effect for round *n* of a 6-month Sub-Auction;

provided, however, $RatingChange_{a,n,r}$ shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-24

$R_{a,n}$ = The set of all Qualifying Auction Deratings *r* or Qualifying Auction Upratings *r* for binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction

and the variables $ShadowPrice_{a,n}$ and $OPFSignChange_{a,n}$ are defined as set forth in Formula N-17.

After calculating U/D $NetAuctionImpact_{a,n}$ pursuant to Formula N-24, the ISO shall determine whether U/D $NetAuctionImpact_{a,n}$ for constraint *a* in round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n* has a different sign than U/D $ACR_{a,n}$ for constraint *a* in

round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*. If the sign is different, the ISO shall (i) recalculate U/D $\text{NetAuctionImpact}_{a,n}$ pursuant to Formula N-24 after setting equal to zero each $\text{RatingChange}_{a,n,r}$ for which $\text{RatingChange}_{a,n,r} * \text{ShadowPrice}_{a,n} * \text{OPFSignChange}_{a,n}$ has a different sign than U/D $\text{ACR}_{a,n}$, and then (ii) use this recalculated U/D $\text{NetAuctionImpact}_{a,n}$ and reset value of $\text{RatingChange}_{a,n,r}$ to allocate U/D Auction Revenue Shortfall Charges and U/D Auction Revenue Surplus Payments pursuant to Formula N-25 or Formula N-26, as specified below.

If the absolute value of the net impact (U/D $\text{NetAuctionImpact}_{a,n}$) on constraint *a* for Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction of all Qualifying Auction Deratings or Qualifying Auction Upratings for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction as calculated using Formula N-24 (or recalculated pursuant to Formula N-24 using a reset value of $\text{RatingChange}_{a,n,r}$ as described in the prior paragraph) is greater than the absolute value of the U/D Auction Constraint Residual (U/D $\text{ACR}_{a,n}$) for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, as the case may be, then the ISO shall allocate the U/D Auction Constraint Residual in the form of a U/D Auction Revenue Shortfall Charge, U/D $\text{ARSC}_{a,t,n}$, or U/D Auction Revenue Surplus Payment, U/D $\text{ARSP}_{a,t,n}$, by using Formula N-25. If the absolute value of the net impact (U/D $\text{NetAuctionImpact}_{a,n}$) on constraint *a* for Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction of all Qualifying Auction Deratings or Qualifying Auction Upratings for constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction as calculated using Formula N-24 (or recalculated pursuant to Formula N-24 using a reset value of $\text{RatingChange}_{a,n,r}$ as described in the prior paragraph) is less than or equal to the absolute value of the U/D Auction Constraint Residual (U/D $\text{ACR}_{a,n}$) for constraint *a* in Reconfiguration Auction *n* or round *n* of a

6-month Sub-Auction, as the case may be, then the ISO shall allocate the U/D Auction Constraint Residual in the form of a U/D Auction Revenue Shortfall Charge, U/D $ARSC_{a,t,n}$, or U/D Auction Revenue Surplus Payment, U/D $ARSP_{a,t,n}$, by using Formula N-26.

Formula N-25

$$U/D\ Allocation_{a,t,n} = \left(\frac{\sum_{\substack{r \in R_{a,n} \\ and\ q=t}} \left(RatingChange_{a,n,r} * Responsibility_{n,q,r} \right)}{\sum_{for\ all\ r \in R_{a,n}} RatingChange_{a,n,r}} \right) * U/D\ ACR_{a,n}$$

Where,

$U/D\ Allocation_{a,t,n}$ = Either a U/D Auction Revenue Shortfall Charge or a U/D Auction Revenue Surplus Payment, as specified in (a) and (b) below:

(a) If $U/D\ Allocation_{a,t,n}$ is negative, then $U/D\ Allocation_{a,t,n}$ shall be a U/D Auction Revenue Shortfall Charge, U/D $ARSC_{a,t,n}$, charged to Transmission Owner *t* for binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction; or

(b) If $U/D\ Allocation_{a,t,n}$ is positive, then $U/D\ Allocation_{a,t,n}$ shall be a U/D Auction Revenue Surplus Payment, U/D $ARSP_{a,t,n}$, paid to Transmission Owner *t* for binding constraint *a* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction

$Responsibility_{n,q,r}$ = The amount, as a percentage, of responsibility borne by Transmission Owner *q* (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.3.6.4.2 or 20.3.6.4.3) for Qualifying Auction Derating *r* or Qualifying Auction Uprating *r* in Reconfiguration Auction *n* or round *n* of a 6-month Sub-Auction, as determined pursuant to Section 20.3.6.4

and the variable U/D $ACR_{a,n}$ is defined as set forth in Formula N-20 and the variables $RatingChange_{a,n,r}$ and $R_{a,n}$ are defined as set forth in Formula N-24.

Formula N-26

$$U/D\ Allocation_{a,t,n} = \sum_{\substack{r \in R_{a,n} \\ and\ q=t}} RatingChange_{a,n,r} * ShadowPrice_{a,n} * Responsibility_{n,q,r}$$

Where,

the variables U/D Allocation$_{a,t,n}$ and Responsibility$_{n,q,r}$ are defined as set forth in Formula N-25, the variable ShadowPrice$_{a,n}$ is defined as set forth in Formula N-17, and the variables RatingChange$_{a,n,r}$ and R$_{a,n}$ are defined as set forth in Formula N-24.

20.3.6.4 Assigning Responsibility for Outages, Returns-to-Service, Deratings, and Upratings

20.3.6.4.1 General Rule for Assigning Responsibility; Presumption of Causation

Unless the special rules set forth in Sections 20.3.6.4.2 or 20.3.6.4.3 apply, a Transmission Owner shall for purposes of this Section 20.3.6 be deemed responsible for an Auction Status Change to the extent that the Transmission Owner has caused the Auction Status Change by changing the in-service or out-of-service status of its transmission facility; *provided, however*, that where an Auction Status Change results from a change to the in-service or out-of-service status of a transmission facility owned by more than one Transmission Owner, responsibility for such Auction Status Change shall be assigned to each owning Transmission Owner based on the percentage of the transmission facility that is owned by the Transmission Owner (as determined in accordance with Section 20.3.6.6.3) during the hour for which the DAM Status Change occurred. For the sake of clarity, a Transmission Owner may, by changing the in-service or out-of-service status of its transmission facility, cause an Auction Status Change of another transmission facility if the Transmission Owner's change in the in-service or out-of-service status of its transmission facility causes (directly or as a result of Good Utility Practice) a change in the in-service or out-of-service status of the other transmission facility.

The Transmission Owner that owns a transmission facility that qualifies as an Auction Status Change shall be deemed to have caused the Auction Status Change of that transmission facility unless (i) the Transmission Owner that owns the facility informs the ISO that another

Transmission Owner caused the Auction Status Change or that responsibility is to be shared among Transmission Owners in accordance with Sections 20.3.6.4.2 or 20.3.6.4.3, and no party disputes such claim; (ii) in case of a dispute over the assignment of responsibility, the ISO determines a Transmission Owner other than the owner of the transmission facility caused the Auction Status Change or that responsibility is to be shared among Transmission Owners in accordance with Section 20.3.6.4.2 or Section 20.3.6.4.3; or (iii) FERC orders otherwise.

20.3.6.4.2 Shared Responsibility For Outages, Returns-to-Service, and Ratings Changes Directed by the ISO or Caused by Facility Status Changes Directed by the ISO

A Transmission Owner shall not be responsible for any Auction Status Change that qualifies as an ISO-Directed Auction Status Change or Deemed ISO-Directed Auction Status Change. Instead, the ISO shall allocate any revenue impacts resulting from an Auction Status Change that qualifies as an ISO-Directed Auction Status Change or Deemed ISO-Directed Auction Status Change as part of Net Auction Revenues for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*. To do so, the ISO shall be treated as a Transmission Owner when allocating Auction Constraint Residuals pursuant to Section 20.3.6.2 and Section 20.3.6.3, and any Auction Status Change that qualifies as an ISO-Directed Auction Status Change or Deemed ISO-Directed Auction Status Change shall be attributed to the ISO when performing the calculations described in Section 20.3.6.2 and Section 20.3.6.3; *provided, however,* any O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment allocable to the ISO pursuant to this Section 20.3.6.4.2 shall ultimately be allocated to the Transmission Owners as Net Auction Revenues pursuant to Section 20.3.7.

Responsibility for a Qualifying Auction Return-to-Service or Qualifying Auction

Uprating that is directed by the ISO but does not qualify as a Deemed ISO-Directed Auction Status Change shall be assigned to the Transmission Owner that was responsible for the Qualifying Auction Outage or Qualifying Auction Derating in the last 6-month Sub-Auction held for TCCs valid during the month corresponding to the relevant Reconfiguration Auction.

The ISO shall not direct that a transmission facility be modeled as in-service or out-of-service for purposes of a Reconfiguration Auction without the unanimous consent of the Transmission Owner(s), if any, that will be allocated a resulting O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment in accordance with this Section 20.3.6.4.2.

20.3.6.4.3 Shared Responsibility for External Events

A Transmission Owner shall not be responsible for an Auction Status Change occurring inside the NYCA that is caused by a change in the in-service or out-of-service status or rating of a transmission facility located outside the NYCA. Instead, the ISO shall allocate any revenue impacts resulting from an Auction Status Change caused by such an event outside the NYCA as part of Net Auction Revenues for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*. To do so, the ISO shall be treated as a Transmission Owner when allocating Auction Constraint Residuals pursuant to Section 20.3.6.2 and Section 20.3.6.3 and any Auction Status Change caused by such an event outside the NYCA shall be attributed to the ISO; *provided, however*, any O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment allocable to the ISO pursuant to this Section 20.3.6.4.3 shall ultimately be allocated to the Transmission Owners as Net Auction Revenues pursuant to Section 20.3.7.

20.3.6.5 Exceptions: Setting Charges and Payments to Zero

20.3.6.5.1 Zeroing Out of Charges and Payments When Outages and Deratings Lead to Net Payments or Returns-to-Service and Upratings Lead to Net Charges

The ISO shall use Formula N-27 to calculate the total O/R-t-S Auction Revenue Shortfall Charges, U/D Auction Revenue Shortfall Charges, O/R-t-S Auction Revenue Surplus Payments, and U/D Auction Revenue Surplus Payments, $\text{NetAuctionAllocations}_{t,n}$, for Transmission Owner *t* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, as the case may be. Based on this calculation, the ISO shall set equal to zero all O/R-t-S $\text{ARSC}_{a,t,n}$, U/D $\text{ARSC}_{a,t,n}$, O/R-t-S $\text{ARSP}_{a,t,n}$, and U/D $\text{ARSP}_{a,t,n}$ (each as defined in Formula N-27) for Transmission Owner *t* for all constraints for round *n* of a 6-month Sub-Auction or Reconfiguration Auction *n*, as the case may be, if (i) $\text{NetAuctionAllocations}_{t,n}$ is positive and Transmission Owner *t* is not responsible (as determined pursuant to Section 20.3.6.4) for any Qualifying Auction Returns-to-Service or Qualifying Auction Upratings in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, as the case may be, or (ii) $\text{NetAuctionAllocations}_{t,n}$ is negative and Transmission Owner *t* is not responsible (as determined pursuant to Section 20.3.6.4) for any Qualifying Auction Outages or Qualifying Auction Deratings in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, as the case may be; *provided, however*, the ISO shall not set equal to zero pursuant to this Section 20.3.6.5.1 any O/R-t-S $\text{ARSC}_{a,t,n}$, U/D $\text{ARSC}_{a,t,n}$, O/R-t-S $\text{ARSP}_{a,t,n}$, or U/D $\text{ARSP}_{a,t,n}$ arising from an ISO-Directed Auction Status Change or Deemed ISO-Directed Auction Status Change described in Section 20.3.6.4.2 or external events described in Section 20.3.6.4.3.

Formula N-27

$$NetAuctionAllocations_{t,n} = \sum_{for\ all\ a} \left(O/R\text{-}t\text{-}S\ ARSC_{a,t,n} + U/D\ ARSC_{a,t,n} + O/R\text{-}t\text{-}S\ ARSP_{a,t,n} + U/D\ ARSP_{a,t,n} \right)$$

Where,

$NetAuctionAllocations_{t,n}$ = The total of the O/R-t-S Auction Revenue Shortfall Charges, U/D Auction Revenue Shortfall Charges, O/R-t-S Auction Revenue Surplus Payments, and U/D Auction Revenue Surplus Payments allocated to Transmission Owner *t* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*

$O/R\text{-}t\text{-}S\ ARSC_{a,t,n}$ = An O/R-t-S Auction Revenue Shortfall Charge allocated to Transmission Owner *t* for binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, calculated pursuant to Section 20.3.6.2

$U/D\ ARSC_{a,t,n}$ = A U/D Auction Revenue Shortfall Charge allocated to Transmission Owner *t* for binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, calculated pursuant to Section 20.3.6.3

$O/R\text{-}t\text{-}S\ ARSP_{a,t,n}$ = An O/R-t-S Auction Revenue Surplus Payment allocated to Transmission Owner *t* for binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, calculated pursuant to Section 20.3.6.2

$U/D\ ARSP_{a,t,n}$ = A U/D Auction Revenue Surplus Payment allocated to Transmission Owner *t* for binding constraint *a* in round *n* of a 6-month Sub-Auction or in Reconfiguration Auction *n*, calculated pursuant to Section 20.3.6.3.

20.3.6.5.2 Zeroing Out of Charges and Payments Resulting from Formula Failure

Notwithstanding any other provision of this Attachment N, the ISO shall set equal to zero any O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment allocated to a Transmission Owner for a Reconfiguration Auction or a round of a Centralized TCC Auction if either:

(i) data necessary to compute such a charge or payment, as specified in the formulas set forth in Section 20.3.6, is not known by the ISO and cannot be computed by the ISO (in interpreting this clause, equipment failure shall not preclude computation by the ISO unless necessary data is irretrievably lost); or

(ii) both (a) the charge or payment is clearly and materially inconsistent with cost causation principles; and (b) this inconsistency is the result of factors not taken into account in the formulas used to calculate the charge or payment;

provided, however, if the amount of charges or payments set equal to zero as a result of the unknown data or inaccurate formula is greater than twenty five thousand dollars ($25,000) in any given month or greater than one hundred thousand dollars ($100,000) over multiple months, the ISO will inform the Transmission Owners of the identified problem and will work with the Transmission Owners to determine if an alternative allocation method is needed and whether it will apply to all months for which the intended formula does not work. Alternate methods would be subject to market participant review and subsequent filing with FERC, as appropriate.

For the sake of clarity, the ISO shall not pursuant to this Section 20.3.6.5.2 set equal to zero any O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment that fails to meet these conditions, even if another O/R-t-S Auction Revenue Shortfall Charge, U/D Auction Revenue Shortfall Charge, O/R-t-S Auction Revenue Surplus Payment, or U/D Auction Revenue Surplus Payment is set equal to zero pursuant to this Section 20.3.6.5.2 in the same round of a Centralized TCC Auction or the same Reconfiguration Auction, as the case may be.

20.3.6.6 Information Requirements

20.3.6.6.1 Posting of Uprate/Derate Tables

Prior to each Reconfiguration Auction, the ISO shall post on its website the Reconfiguration Auction Interface Uprate/Derate Table, which table shall specify the expected impact (at the time of the Reconfiguration Auction based on all information available to the ISO) of all transmission facility outages and returns-to-service on interface transfer limits for the period for which TCCs are to be sold in the Reconfiguration Auction.

Prior to each Centralized TCC Auction, the ISO shall post on its website the Centralized TCC Auction Interface Uprate/Derate Table, which table shall specify the expected impact (at

the time of the Centralized TCC Auction based on all information available to the ISO) of all transmission facility outages and returns-to-service on interface transfer limits for the period for which TCCs are to be sold in each Sub-Auction of the Centralized TCC Auction.

20.3.6.6.2 Posting of List of Normally Out-of-Service Equipment

The ISO shall maintain on its website a list of Normally Out-of-Service Equipment and update such list prior to each Reconfiguration Auction and each Centralized TCC Auction.

20.3.6.6.3 Information Regarding Facility Ownership

A Transmission Owner shall be responsible for informing the ISO of any change in the ownership of a transmission facility. The ISO shall allocate responsibility for Auction Status Changes based on the transmission facility ownership information available to it at the time of initial settlement.

20.3.7 Allocation of Net Auction Revenue to Transmission Owners

In Centralized TCC Auction round *n* or in Reconfiguration Auction *n*, as the case may be, the ISO shall use the Facility Flow-Based Methodology to allocate Net Auction Revenue to each Transmission Owner *t* in an amount equal to the product of (i) the Facility Flow-Based Methodology coefficient, $FFB_{t,n}$, and (ii) the Net Auction Revenue for the round or for the Reconfiguration Auction; *provided, however,* where the Net Auction Revenue is negative for a Reconfiguration Auction, the ISO shall allocate Net Auction Revenue to each Transmission Owner *t* in an amount equal to the product of (i) the negative Net Auction Revenue coefficient, $NNAR_{t,n}$, and (ii) the negative Net Auction Revenue for the Reconfiguration Auction.

Calculation of Facility Flow-Based Methodology Coefficient. The Facility Flow-Based Methodology coefficient for Transmission Owner *t* for Centralized TCC Auction round *n* or

Reconfiguration Auction *n* is calculated pursuant to Formula N-28.

Formula N-28

$$FFB_{t,n} = \frac{\sum_{l \in L_{t,n}} \left| \left(FLOW_{l,n} - FLOW_{l,IC}\right) * \left(Price_{y,l} - Price_{x,l}\right) * Share_{n,t,l} \right|}{\sum_{l \in L_n} \left| \left(FLOW_{l,n} - FLOW_{l,IC}\right) * \left(Price_{y,l} - Price_{x,l}\right) \right|}$$

Where,

$FFB_{t,n}$ = The Facility Flow-Based Methodology coefficient for Transmission Owner for Centralized TCC Auction round *n* or Reconfiguration Auction *n*, as the case may be

L_n = The set of all transmission facilities modeled in the Transmission System model for round *n* or for Reconfiguration Auction *n*, as the case may be

$L_{t,n}$ = The set of all transmission facilities owned by Transmission Owner *t* that are modeled in the Transmission System model applied in round *n* or in Reconfiguration Auction *n*, as the case may be

l = A transmission facility from bus *x* to bus *y*

$FLOW_{l,n}$ = The Energy flow, in MW-*p*, on transmission facility *l* from the set of TCCs and Grandfathered Rights represented in the solution to round *n* or to Reconfiguration Auction *n*, as the case may be (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction).

$FLOW_{l,IC}$ = The Energy flow, in MW-*p*, on transmission facility *l* from (i) the set of pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in administering the TCC auction held for round *n* or Reconfiguration Auction *n*, as the case may be, (ii) ETCNL not sold in prior Centralized TCC Auctions or through a Direct Sale, and (iii) Original Residual TCCs not sold in prior Centralized TCC Auctions or through a Direct Sale

$Price_{y,l}$ = The market clearing price at bus *y* on transmission facility *l* in the Optimal Power Flow solution to round *n* or Reconfiguration Auction *n*, as the case may be

$Price_{x,l}$ = The market clearing price at bus *x* on transmission facility *l* in the Optimal Power Flow solution to round *n* or Reconfiguration Auction *n*, as the case may be

$Share_{n,t,l}$ = The percentage of transmission facility *l* owned by Transmission Owner *t* on the effective date of the TCCs sold in round *n* or in Reconfiguration Auction *n*

p = A one-month period for Reconfiguration Auction *n*, or the effective period of

TCCs sold in round *n* for round *n*.

Calculation of Negative Net Auction Revenue Coefficient. The negative Net Auction Revenue coefficient for Transmission Owner *t* for Reconfiguration Auction *n* is calculated pursuant to Formula N-29.

Formula N-29

$$NNAR_{t,n} = \frac{\left(OriginalResidual_{t,n} + ETCNL_{t,n} + NARs_{t,n} + GFR\&GFTCC_{t,n} + HFPTCC_{t,n}\right)}{\sum_{q \in T}\left(OriginalResidual_{q,n} + ETCNL_{q,n} + NARs_{q,n} + GFR\&GFTCC_{q,n} + HFPTCC_{q,n}\right)}$$

Where,

$NNAR_{t,n}$ = The negative Net Auction Revenue coefficient for Transmission Owner *t* for Reconfiguration Auction *n*

$Original\ Residual_{q,n}$ = The one-month portion of the revenue imputed to the Direct Sale or the sale in any Centralized TCC Auction Sub-Auction of Original Residual TCCs that are valid during the month corresponding to Reconfiguration Auction *n*. The one-month portion of the revenue imputed to the Direct Sale of these Original Residual TCCs shall be one-sixth of the average market clearing price in the rounds of the 6-month Sub-Auction of the last Centralized TCC Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*. For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate only Stage 1 six month rounds. The one-month portion of the revenue imputed to the sale in any Centralized TCC Auction Sub-Auction of these Original Residual TCCs shall be calculated by dividing the revenue received from the sale of these Original Residual TCCs in the Centralized TCC Auction Sub-Auction by the duration in months of the TCCs sold in that Centralized TCC Auction Sub-Auction

$ETCNL_{q,n}$ = The sum of the one-month portion of the revenues the Transmission Owner has received as payment for the Direct Sale of ETCNL or for its ETCNL released in the Centralized TCC Auction Sub-Auction held for TCCs valid for the month corresponding to Reconfiguration Auction *n*. Each one-month portion of the revenue for ETCNL released in such Centralized TCC Auction shall be calculated by dividing the revenue received in a Centralized TCC Auction Sub-Auction from the sale of the ETCNL by the duration in months of the TCCs corresponding to the ETCNL sold in the Centralized TCC Auction Sub-Auction.[2]

[4] **A TCC corresponds to ETCNL if it has the same POI and POW as the ETCNL.**

The one-month portion of the revenue imputed to the Direct Sale of ETCNL shall be one-sixth of the average market clearing price of the TCCs corresponding to that ETCNL in the rounds of the 6-month Sub-Auction of the last Centralized TCC Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n.* For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate only Stage 1 six month rounds.

$NARs_{q,n}$ = The one-month portion of the Net Auction Revenues the Transmission Owner has received in Centralized TCC Auction Sub-Auction and Reconfiguration Auctions held for TCCs valid for the month corresponding to Reconfiguration Auction *n* (which shall not include any revenue from the sale of Original Residual TCCs). The one-month portion of the revenues shall be calculated by summing (i) the revenue Transmission Owner *q* received in each Centralized TCC Auction Sub-Auction from the allocation of Net Auction Revenue pursuant to Section 20.3.7, divided by the duration in months of the TCCs sold in the Centralized TCC Auction Sub-Auction (or, to the extent TCC auction revenues were allocated pursuant to a different methodology, the amount of such revenues allocated to Transmission Owner *q*), minus (ii) the sum of $NetAuctionAllocations_{t,n}$ as calculated pursuant to Formula N-27 (as adjusted for any charges or payments that are zeroed out) for Transmission Owner *q* for all rounds *n* of a 6-month Sub-Auction for all Centralized TCC Auctions held for TCCs valid in the month corresponding to Reconfiguration Auction *n*, divided in each case by the duration in months of the TCCs sold in each Centralized TCC Auction Sub-Auction (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner *q*), minus (iii) $NetAuctionAllocations_{t,n}$ as calculated pursuant to Formula N-27 and as adjusted for any charges or payments that are zeroed out for Transmission Owner *q* for Reconfiguration Auction *n*. For Centralized TCC Auctions conducted before May 1, 2010, the calculation of (ii) shall incorporate only Stage 1 six month rounds.

GFR& $GFTCC_{q,n}$ = The one-month portion of the imputed value of Grandfathered TCCs and Grandfathered Rights, valued at one-sixth of the market clearing price in the last Centralized TCC Auction held for TCCs valid during the month corresponding to Reconfiguration Auction *n*, provided that the Transmission Owner is the selling party and the Existing Transmission Agreement related to each Grandfathered TCC and Grandfathered Right remains valid in the month corresponding to Reconfiguration Auction *n.* For Centralized TCC Auctions conducted before May 1, 2010, the calculation of the average market clearing price in rounds of the 6-month Sub-Auction shall incorporate Stage 1 six month rounds.

HFPTCCq,n = The one-month portion of the Historic Fixed Price TCC revenues that Transmission Owner *q* has received for Historic Fixed Price TCCs valid during a given month covered by Reconfiguration Auction *n*, valued at the sum of the share of revenues received by Transmission Owner *q* pursuant to Section 20.4 of

this Attachment N for all Historic Fixed Price TCCs valid in the relevant month covered by Reconfiguration Auction *n*, divided by twelve; provided, however that the value shall be zero for all Historic Fixed Price TCCs that took effect on or before November 1, 2016.

t = Transmission Owner *t*

T = The set of all Transmission Owners *q*.

Each Transmission Owner's share of Net Auction Revenues allocated pursuant to this Section 20.3.7 shall be incorporated into, or otherwise accounted for as part of, its TSC, NTAC, or other applicable rate mechanism under the ISO Tariffs used to assess charges for Transmission Service provided by the Transmission Owner pursuant to this Tariff, as the case may be.

31.5 Cost Allocation and Cost Recovery

31.5.1 The Scope of Attachment Y Cost Allocation

31.5.1.1 Regulated Responses

The cost allocation principles and methodologies in this Attachment Y cover only regulated transmission solutions to Reliability Needs, regulated transmission responses to congestion identified in the CARIS, and regulated Public Policy Transmission Projects whether proposed by a Responsible Transmission Owner or a Transmission Owner or Other Developer. The cost allocation principles and methodology for: (i) regulated transmission solutions to Reliability Needs are contained in Sections 31.5.3.1 and 31.5.3.2 of this Attachment Y, (ii) regulated transmission responses to congestion identified in the CARIS are contained in Sections 31.5.4.1 and 31.5.4.2 of this Attachment Y, and (iii) regulated Public Policy Transmission Projects are contained in Sections 31.5.5 and 31.5.6 of this Attachment Y.

31.5.1.2 Market-Based Responses

The cost allocation principles and methodologies in this Attachment Y do not apply to market-based solutions to Reliability Needs, to market-based responses to congestion identified in the CARIS, or to Other Public Policy Projects. The cost of a market-based project shall be the responsibility of the developer of that project.

31.5.1.3 Interconnection Cost Allocation

The cost allocation principles and methodologies in this Attachment Y do not apply to the interconnection costs of generation and merchant transmission projects. Interconnection costs are determined and allocated in accordance with Attachment P, Attachment S, Attachment X and Attachment Z of the ISO OATT. Cost related to the deliverability of a resource will be addressed under the ISO's deliverability procedures in Attachment S of the ISO OATT.

31.5.1.4 Individual Transmission Service Requests

The cost allocation principles and methodologies in this Attachment Y do not apply to the cost of transmission expansion projects undertaken in connection with an individual request for Transmission Service. The cost of such a project is determined and allocated in accordance with Section 3.7 or Section 4.5 of the ISO OATT.

31.5.1.5 LTP Facilities

The cost allocation principles and methodologies in this Attachment Y do not apply to the cost of transmission projects included in LTPs or LTP updates. Each Transmission Owner will recover the cost of such transmission projects in accordance with its then existing rate recovery mechanisms.

31.5.1.6 Regulated Non-Transmission Projects

Costs related to regulated non-transmission projects will be recovered by Responsible Transmission Owners, Transmission Owners and Other Developers in accordance with the provisions of New York Public Service Law, New York Public Authorities Law, or other applicable state law. Nothing in this section shall affect the Commission's jurisdiction over the sale and transmission of electric energy subject to the jurisdiction of the Commission.

31.5.1.7 Eligibility for Cost Allocation and Cost Recovery

Any entity, whether a Responsible Transmission Owner, Other Developer, or Transmission Owner, shall be eligible for cost allocation and cost recovery as set forth in Section 31.5 of this Attachment Y and associated rate schedules, as applicable, for any transmission project proposed to satisfy an identified Reliability Need, regulated economic transmission project, or Public Policy Transmission Project that is determined by the ISO to be eligible under

Sections 31.2, 31.3, or 31.4, as applicable. Interregional Transmission Projects identified in accordance with the Interregional Planning Protocol, and that have been accepted in each region's planning process, shall be eligible for interregional cost allocation and cost recovery, as set forth in Section 31.5 of this Attachment Y and associated rate schedules. The ISO's share of the cost of an Interregional Transmission Project selected pursuant to this Attachment Y to meet a Reliability Need, congestion identified in the CARIS, or a Public Policy Transmission Need shall be eligible for cost allocation consistent with the cost allocation methodology applicable to the type of regional transmission project that would be replaced through the construction of such Interregional Transmission Project.

31.5.2 Cost Allocation Principles Required Under Order No. 1000

31.5.2.1 In compliance with Commission Order No. 1000, the ISO shall implement the specific cost allocation methodology in Section 31.5.3.2, 31.5.4.4, and 31.5.5.4 in accordance with the following Regional Cost Allocation Principles ("Order No. 1000 Regional Cost Allocation Principles"):

Regional Cost Allocation Principle 1: The ISO shall allocate the cost of transmission facilities to those within the transmission planning region that benefit from those facilities in a manner that is at least roughly commensurate with estimated benefits. In determining the beneficiaries of transmission facilities, the ISO's CSPP will consider benefits including, but not limited to, the extent to which transmission facilities, individually or in the aggregate provide for maintaining reliability and sharing reserves, production cost savings and congestion relief, and/or meeting Public Policy Requirements.

Regional Cost Allocation Principle 2: The ISO shall not involuntarily allocate any of the costs of transmission facilities to those that receive no benefit from transmission facilities.

Regional Cost Allocation Principle 3: In the event that the ISO adopts a benefit to cost threshold in its CSPP to determine which transmission facilities have sufficient net benefits to be selected in a regional transmission plan for the purpose of cost allocation, such benefit to cost threshold will not be so high that transmission facilities with significant positive net benefits are excluded from cost allocation. If the ISO chooses to adopt such a threshold in its CSPP it will not include a ratio of benefits to costs that exceeds 1.25 unless the ISO justifies and the Commission approves a higher ratio.

Regional Cost Allocation Principle 4: The ISO's allocation method for the cost of a transmission facility selected pursuant to the process in the CSPP shall allocate costs solely within the ISO's transmission planning region unless another entity outside the region or another transmission planning region voluntarily agrees to assume a portion of those costs. Costs for an Interregional Transmission Project must be assigned only to regions in which the facility is physically located. Costs cannot be assigned involuntarily to another region. The ISO shall not bear the costs of required upgrades in another region.

Regional Cost Allocation Principle 5: The ISO's cost allocation method and data requirements for determining benefits and identifying beneficiaries for a transmission facility shall be transparent with adequate documentation to allow a stakeholder to determine how they were applied to a proposed transmission

facility, as consistent with confidentiality requirements set forth in this Attachment Y and the ISO Code of Conduct in Attachment F of the OATT.

Regional Cost Allocation Principle 6: The ISO's CSPP provides a different cost allocation method for different types of transmission facilities in the regional transmission plan and each cost allocation method is set out clearly and explained in detail in this Section 31.5.

31.5.2.2 In compliance with Commission Order No. 1000, the ISO shall implement the specific cost allocation methodology in Section 31.5.7 of this Attachment Y in accordance with the following Interregional Cost Allocation Principles:

Interregional Cost Allocation Principle 1: The ISO shall allocate the cost of new Interregional Transmission Projects to each region in which an Interregional Transmission Project is located in a manner that is at least roughly commensurate with estimated benefits of the Interregional Transmission Project in each of the regions. In determining the beneficiaries of Interregional Transmission Projects, the ISO will consider benefits including, but not limited to, those associated with maintaining reliability and sharing reserves, production cost savings and congestion relief, and meeting Public Policy Requirements.

Interregional Cost Allocation Principle 2: The ISO shall not involuntarily allocate any of the costs of an Interregional Transmission Project to a region that receives no benefit from an Interregional Transmission Project that is located in that region, either at present or in a likely future scenario.

Interregional Cost Allocation Principle 3: In the event that the ISO adopts a benefit-cost threshold ratio to determine whether an Interregional Transmission

Project has sufficient net benefits to qualify for interregional cost allocation, this ratio shall not be so large as to exclude an Interregional Transmission Project with significant positive net benefits from cost allocation. If the ISO chooses to adopt such a threshold, they will not include a ratio of benefits to costs that exceeds 1.25 unless the Parties justify and the Commission approves a higher ratio.

Interregional Cost Allocation Principle 4: The ISO's allocation of costs for an Interregional Transmission Project shall be assigned only to regions in which the Interregional Transmission Project is located. The ISO shall not assign costs involuntarily to a region in which that Interregional Transmission Project is not located. The ISO shall, however, identify consequences for other regions, such as upgrades that may be required in a third region. The ISO's interregional cost allocation methodology includes provisions for allocating the costs of upgrades among the beneficiaries in the region in which the Interregional Transmission Project is located to the transmission providers in such region that agree to bear the costs associated with such upgrades.

Interregional Cost Allocation Principle 5: The ISO's cost allocation methodology and data requirements for determining benefits and identifying beneficiaries for an Interregional Transmission Project shall be transparent with adequate documentation to allow a stakeholder to determine how they were applied to a proposed Interregional Transmission Project, as consistent with the confidentiality requirements set forth in this Attachment Y and the ISO Code of Conduct in Attachment F of the OATT.

Interregional Cost Allocation Principle 6: Though Order No. 1000 allows the ISO to provide a different cost allocation methodology for different types of interregional transmission facilities, such as facilities needed for reliability, congestion relief, or to achieve Public Policy Requirements, the ISO has chosen to adopt one interregional cost allocation methodology for all Interregional Transmission Planning Projects. The interregional cost allocation methodology is set out clearly and explained in detail in Section 31.5.7 of this Attachment Y. The share of the cost related to any Interregional Transmission Project assigned to the ISO shall be allocated as described in Section 31.5.7.1.

31.5.3 Regulated Responses to Reliability Needs

31.5.3.1 Cost Allocation Principles

The ISO shall implement the specific cost allocation methodology in Section 31.5.3.2 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1. This methodology shall apply to cost allocation for a regulated transmission solution to an identified Reliability Need, including the ISO's share of the costs of an Interregional Transmission Project proposed as a regulated transmission solution to an identified Reliability Need allocated in accordance with Section 31.5.7 of this Attachment Y.

The specific cost allocation methodology in Section 31.5.3.2 incorporates the following elements:

31.5.3.1.1 The focus of the cost allocation methodology shall be on solutions to Reliability Needs.

31.5.3.1.2 Potential impacts unrelated to addressing the Reliability Needs shall not be considered for the purpose of cost allocation for regulated solutions.

31.5.3.1.3 Primary beneficiaries shall initially be those Load Zones or Subzones identified as contributing to the reliability violation.

31.5.3.1.4 The cost allocation among primary beneficiaries shall be based upon their relative contribution to the need for the regulated solution.

31.5.3.1.5 The ISO will examine the development of specific cost allocation rules based on the nature of the reliability violation (*e.g.*, thermal overload, voltage, stability, resource adequacy and short circuit).

31.5.3.1.6 Cost allocation shall recognize the terms of prior agreements among the Transmission Owners, if applicable.

31.5.3.1.7 Consideration should be given to the use of a materiality threshold for cost allocation purposes.

31.5.3.1.8 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.

31.5.3.1.9 Consideration should be given to the "free rider" issue as appropriate. The methodology shall be fair and equitable.

31.5.3.1.10 The methodology shall provide cost recovery certainty to investors to the extent possible.

31.5.3.1.11 The methodology shall apply, to the extent possible, to Gap Solutions.

31.5.3.1.12 Cost allocation is independent of the actual triggered project(s), except when allocating cost responsibilities associated with meeting a Locational Minimum Installed Capacity Requirement ("LCR"), and is based on a separate process that results in NYCA meeting its LOLE requirement.

31.5.3.1.13 Cost allocation for a solution that meets the needs of a Target Year assumes that backstop solutions of prior years have been implemented.

31.5.3.1.14 Cost allocation will consider the most recent values for LCRs. LCRs must be met for the Target Year.

31.5.3.2 Cost Allocation Methodology

The cost allocation mechanism under this Section 31.5.3.2 sets forth the basis for allocating costs associated with a Responsible Transmission Owner's regulated backstop solution or an Other Developer's or Transmission Owner's alternative regulated transmission solution selected by the ISO as the more efficient or cost-effective transmission solution to an identified Reliability Need.

The formula is not applicable to that portion of a project beyond the size of the solution needed to provide the more efficient or cost effective solution appropriate to the Reliability Need identified in the RNA. Nor is the formula applicable to that portion of the cost of a regulated transmission reliability project that is, pursuant to Section 25.7.12 of Attachment S to the ISO OATT, paid for with funds previously committed by or collected from Developers for the installation of System Deliverability Upgrades required for the interconnection of generation or merchant transmission projects.

This Section 31.5.3.2 establishes the allocation of the costs related to resolving Reliability Needs resulting from resource adequacy, BPTF thermal transmission security, BPTF voltage security, dynamic stability, and short circuit issues. Costs will be allocated in accordance with the following hierarchy: (i) resource adequacy pursuant to Section 31.5.3.2.1, (ii) BPTF thermal transmission security pursuant to Section 31.5.3.2.2, (iii) BPTF voltage

security pursuant to Section 31.5.3.2.3, (iv) dynamic stability pursuant to Section 31.5.3.2.4, and (v) short circuit pursuant to Section 31.5.3.2.5.

31.5.3.2.1 Resource Adequacy Reliability Solution Cost Allocation Formula

For purposes of solutions eligible for cost allocation under this Section 31.5.3.2, this section sets forth the cost allocation methodology applicable to that portion of the costs of the solution attributable to resolving resource adequacy. The same cost allocation formula is applied regardless of the project or sets of projects being triggered; however, the nature of the solution set may lead to some terms equaling zero, thereby dropping out of the equation. To ensure that appropriate allocation to the LCR and non-LCR zones occurs, the zonal allocation percentages are developed through a series of steps that first identify responsibility for LCR deficiencies, followed by responsibility for remaining need. The following formula shall apply to the allocation of the costs of the solution attributable to resource adequacy:

$$\text{Resource Adequacy Cost Allocation}_i = \left[\frac{\text{LCRdef}_i}{\text{Soln Size}} + \left(\frac{\text{Concident Peak}_i * (1 + \text{IRM} - \text{LCR}_i)}{\sum_{k=1}^{n} \text{Coincident Peak}_k * (1 + \text{IRM} - \text{LCR}_k)} * \frac{\text{Soln STWdef}}{\text{Soln Size}} \right) + \left(\frac{\text{Concident Peak}_i * (1 + \text{IRM} - \text{LCR}_i)}{\sum_{l=1}^{m} \text{Coincident Peak}_l * (1 + \text{IRM} - \text{LCR}_l)} * \frac{\text{Soln Cldef}}{\text{Soln Size}} \right) \right] * 100\%$$

Where *i* is for each applicable zone, *n* represent the total zones in NYCA, *m* represents the zones isolated by the binding interfaces, IRM is the statewide reserve margin, and where LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, LCRdef_i is the applicable zonal LCR deficiency, SolnSTWdef is the STWdef for each applicable project, SolnCIdef is the CIdef for each

applicable project, and Soln_Size represents the total compensatory MW addressed by each applicable project for all reliability cost allocation steps in this Section 31.5.3.2.

Three step cost allocation methodology for regulated reliability solutions:

31.5.3.2.1.1 Step 1 - LCR Deficiency

31.5.3.2.1.1.1 Any deficiencies in meeting the LCRs for the Target Year will be referred to as the LCRdef. If the reliability criterion is met once the LCR deficiencies have been addressed, that is LOLE ≤ 0.1 for the Target Year is achieved, then the only costs allocated will be those related to the LCRdef MW. Cost responsibility for the LCRdef MW will be borne by each deficient locational zone(s), to the extent each is individually deficient.

For a single solution that addresses only an LCR deficiency in the applicable LCR zone, the equation would reduce to:

$$\text{Allocation}_i = \frac{\text{LCRdef}_i}{\text{Soln\_Size}} * 100\%$$

Where *i* is for each applicable LCR zone, LCRdef_i represents the applicable zonal LCR deficiency, and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.1.1.2 Prior to the LOLE calculation, voltage constrained interfaces will be recalculated to determine the resulting transfer limits when the LCRdef MW are added.

31.5.3.2.1.2 Step 2 - Statewide Resource Deficiency. If the reliability criterion is not met after the LCRdef has been addressed, that is an LOLE > 0.1, then a NYCA Free Flow Test will be conducted to determine if NYCA has sufficient resources to meet an LOLE of 0.1.

31.5.3.2.1.2.1 If NYCA is found to be resource limited, the ISO, using the transfer limits and resources determined in Step 1, will determine the optimal distribution of additional resources to achieve a reduction in the NYCA LOLE to 0.1.

31.5.3.2.1.2.2 Cost allocation for compensatory MW added for cost allocation purposes to achieve an LOLE of 0.1, defined as a Statewide MW deficiency (STWdef), will be prorated to all NYCA zones, based on the NYCA coincident peak load. The allocation to locational zones will take into account their locational requirements. For a single solution that addresses only a statewide deficiency, the equation would reduce to:

$$\text{Allocation}_i = \left[\frac{\text{Concident Peak}_i * (1 + \text{IRM} - \text{LCR}_\text{i})}{\sum_{k=1}^{n} \text{Coincident Peak}_k * (1 + \text{IRM} - \text{LCR}_\text{k})} * \frac{\text{Soln STWdef}}{\text{Soln Size}} \right] *100\%$$

Where *i* is for each applicable zone, *n* is for the total zones in NYCA, IRM is the statewide reserve margin, and LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, Soln STWdef is the STWdef for the applicable project, and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.1.3 Step 3 - Constrained Interface Deficiency. If the NYCA is not resource limited as determined by the NYCA Free Flow Test, then the ISO will examine constrained transmission interfaces, using the Binding Interface Test.

31.5.3.2.1.3.1 The ISO will provide output results of the reliability simulation program utilized for the RNA that indicate the hours that each interface is at limit in each flow direction, as well as the hours that coincide with a loss of load event. These

values will be used as an initial indicator to determine the binding interfaces that are impacting LOLE within the NYCA.

31.5.3.2.1.3.2 The ISO will review the output of the reliability simulation program utilized for the RNA along with other applicable information that may be available to make the determination of the binding interfaces.

31.5.3.2.1.3.3 Bounded Regions are assigned cost responsibility for the compensatory MW, defined as CIdef, needed to reach an LOLE of 0.1.

31.5.3.2.1.3.4 If one or more Bounded Regions are isolated as a result of binding interfaces identified through the Binding Interface Test, the ISO will determine the optimal distribution of compensatory MW to achieve a NYCA LOLE of 0.1. Compensatory MW will be added until the required NYCA LOLE is achieved.

31.5.3.2.1.3.5 The Bounded Regions will be identified by the ISO's Binding Interface Test, which identifies the bounded interface limits that can be relieved and have the greatest impact on NYCA LOLE. The Bounded Region that will have the greatest benefit to NYCA LOLE will be the area to be first allocated costs in this step. The ISO will determine if after the first addition of compensating MWs the Bounded Region with the greatest impact on LOLE has changed. During this iterative process, the Binding Interface Test will look across the state to identify the appropriate Bounded Region. Specifically, the Binding Interface Test will be applied starting from the interface that has the greatest benefit to LOLE (the greatest LOLE reduction per interface compensatory MW addition), and then extended to subsequent interfaces until a NYCA LOLE of 0.1 is achieved.

31.5.3.2.1.3.6 The CIdef MW are allocated to the applicable Bounded Region isolated as a result of the constrained interface limits, based on their NYCA coincident peaks. Allocation to locational zones will take into account their locational requirements. For a single solution that addresses only a binding interface deficiency, the equation would reduce to:

$$\text{Allocation}_i = \left[\frac{\text{Concident Peak}_i * (1 + \text{IRM} - \text{LCR}_\text{i})}{\sum_{l=1}^{m} \text{Coincident Peak}_l * (1 + \text{IRM} - \text{LCR}_\text{l})} * \frac{\text{SolnCIdef}}{\text{Soln Size}} \right] *100\%$$

Where *i* is for each applicable zone, *m* is for the zones isolated by the binding interfaces, IRM is the statewide reserve margin, and where LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, SolnCIdef is the CIdef for the applicable project and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.2 BPTF Thermal Transmission Security Cost Allocation Formula

For purposes of solutions eligible for cost allocation under this Section 31.5.3.2, this section sets forth the cost allocation methodology applicable to that portion of the costs of the solution attributable to resolving BPTF thermal transmission security issues. If, after consideration of the compensatory MW identified in the resource adequacy reliability solution cost allocation in accordance with Section 31.5.3.2.1, there remains a BPTF thermal transmission security issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the BPTF thermal transmission security issue(s) to the Subzones that contribute to the BPTF thermal transmission security issue(s) in the following manner.

31.5.3.2.2.1 Calculation of Nodal Distribution Factors. The ISO will calculate the nodal distribution factor for each load bus modeled in the power flow case utilizing the output of the reliability simulation program that identified the Reliability Need, including the NYCA generation dispatch and NYCA coincident peak Load. The nodal distribution factor represents the percentage of the Load that flows across the facility subject to the Reliability Need. The sign (positive or negative) of the nodal distribution factor represents the direction of flow.

31.5.3.2.2.2 Calculation of Nodal Flow. The ISO will calculate the nodal megawatt flow, defined as Nodal Flow, for each load bus modeled in the power flow case by multiplying the amount of Load in megawatts for the bus, defined as Nodal Load, by the nodal distribution factor for the bus. Nodal Flow represents the number of megawatts that flow across the facility subject to the Reliability Need due to the Load.

31.5.3.2.2.3 Calculation of Contributing Load and Contributing Flow. The Nodal Load for a load bus with a positive nodal distribution factor is a contributing Load, defined as CLoad, and the Nodal Flow for that Load is contributing flow, defined as CFlow. To identify contributing Loads that have a material impact on the Reliability Need, the ISO will calculate a contributing materiality threshold, defined as CMT, as follows:

$$CMT = \frac{\sum_{k=1}^{m} \sum_{Lk=1}^{n} CFlow_{Lk}}{\sum_{k=1}^{m} \sum_{Lk=1}^{n} CLoad_{Lk}}$$

Where *m* is for the total number of Subzones and *n* is for the total number of load buses in a given Subzone.

31.5.3.2.2.4 Calculation of Helping Load and Helping Flow. The Nodal Load for a load bus with a negative or zero nodal distribution factor is a helping Load, defined as HLoad, and the Nodal Flow for that Load is helping flow, defined as HFlow. To identify helping Loads that have a material impact on the Reliability Need, the ISO will calculate a helping materiality threshold, defined as HMT, as follows:

$$HMT = \frac{\sum_{k=1}^{m}\sum_{Lk=1}^{n} HFlow_{Lk}}{\sum_{k=1}^{m}\sum_{Lk=1}^{n} HLoad_{Lk}}$$

Where *m* is for the total number of Subzones and *n* is for the total number of load buses in a given Subzone.

31.5.3.2.2.5 Calculation of Net Material Flow for Each Subzone. The ISO will identify material Nodal Flow for each Subzone and calculate the net material flow for each Subzone. For each load bus, the Nodal Flow will be identified as material flow, defined as MFlow, if the nodal distribution factor is (i) greater than or equal to CMT, or (ii) less than or equal to HMT. The net material flow for each Subzone, defined as SZ_NetFlow, is calculated as follows:

$$SZ\_NetFlow_j = \sum_{Lj=1}^{n} MFlow_{Lj}$$

Where *j* is for each Subzone and *n* is for the total number of load buses in a given Subzone.

31.5.3.2.2.6 Identification of Allocated Flow for Each Subzone. The ISO will identify the allocated flow for each Subzone and verify that sufficient contributing flow is being allocated costs. For each Subzone, if the SZ_NetFlow is greater than zero, that Subzone has a net material contribution to the Reliability Need and the

SZ_NetFlow is identified as allocated flow, defined as SZ_AllocFlow. If the SZ_NetFlow is less than or equal to zero, that Subzone does not have a net material contribution to the Reliability Need and the SZ_AllocFlow is zero for that Subzone. If the total SZ_AllocFlow for all Subzones is less than 60% of the total CFlow for all Subzones, then the CMT will be reduced and SZ_NetFlow recalculated until the total SZ_AllocFlow for all Subzones is at least 60% of the total CFlow for all Subzones.

31.5.3.2.2.7 Cost Allocation for a Single BPTF Thermal Transmission Security Issue. For a single solution that addresses only a BPTF thermal transmission security issue, the equation for cost allocation would reduce to:

$$BPTF\ Thermal\ Cost\ Alloction_j = \frac{SZ\_AllocFlow_j}{\sum_{k=1}^{m} SZ\_AllocFlow_k} \times \frac{SolnBTSdef}{Soln\_Size}$$

Where *j* is for each Subzone; *m* is for the total number of Subzones; SZ_AllocFlow is the allocated flow for each Subzone; SolnBTSdef is the number of compensatory MW for the BPTF thermal transmission security issue for the applicable project; and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.2.8 Cost Allocation for Multiple BPTF Thermal Transmission Security Issues. If a single solution addresses multiple BPTF thermal transmission security issues, the ISO will calculate weighting factors based on the ratio of the present value of the estimated costs for individual solutions to each BPTF thermal transmission security issue. The present values of the estimated costs for the individual solutions shall be based on a common base date that will be the beginning of the calendar month in which the cost allocation analysis is performed (the "Base

Date"). The ISO will apply the weighting factors to the cost allocation calculated for each Subzone for each individual BPTF thermal transmission security issue. The following example illustrates the cost allocation for such a solution:

- A cost allocation analysis for the selected solution is to be performed during a given month establishing the beginning of that month as the Base Date.
- The ISO has identified two BPTF thermal transmission security issues, Overload X and Overload Y, and the ISO has selected a single solution (Project Z) to address both BPTF thermal transmission security issues.
- The cost of a solution to address only Overload X (Project X) is Cost(X), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project (X) is N(X).
- The cost of a solution to address only Overload Y (Project Y) is Cost(Y), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project Y is N(Y).
- The discount rate, D, to be used for the present value analysis shall be the current after-tax weighted average cost of capital for the Transmission Owners.
- Based on the foregoing assumptions, the following formulas will be used:
    - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D)^{N(X)}$
    - Present Value of Cost (Y) = PV Cost (Y) = Cost (Y) / $(1+D)^{N(Y)}$
    - Overload X weighting factor = PV Cost (X)/[PV Cost (X) + PV Cost (Y)]
    - Overload Y weighting factor = PV Cost (Y)/[PV Cost (X) + PV Cost (Y)]
- Applying those formulas, if:

  Cost (X) = $100 Million and N(X) = 6.25 years

Cost (Y) = $25 Million and N(Y) = 4.75 years

D = 7.5% per year

Then:

PV Cost (X) = $100/(1+0.075)^{6.25}$ = 63.635 Million

PV Cost (Y) = $25/(1+0.075)^{4.75}$ = 17.732 Million

Overload X weighting factor = 63.635 / (63.635 + 17.732) = 78.21%

Overload Y weighting factor = 17.732 / (63.635 + 17.732) = 21.79%

- Applying those weighing factors, if:

  Subzone A cost allocation for Overload X is 15%

  Subzone A cost allocation for Overload Y is 70%

  Then:

  Subzone A cost allocation % for Project Z =

  (15% * 78.21%) + (70% * 21.79%) = 26.99%

31.5.3.2.2.9 Exclusion of Subzone(s) Based on De Minimis Impact. If a Subzone is assigned a BPTF thermal transmission security cost allocation less than a *de minimis* dollar threshold of the total project costs, that Subzone will not be allocated costs; *provided however,* that the total *de minimis* Subzones may not exceed 10% of the total BPTF thermal transmission security cost allocation. The *de minimis* threshold is initially $10,000. If the total allocation percentage of all *de minimis* Subzones is greater than 10%, then the *de minimis* threshold will be reduced until the total allocation percentage of all *de minimis* Subzones is less than or equal to 10%.

31.5.3.2.3 BPTF Voltage Security Cost Allocation

If, after consideration of the compensatory MW identified in the resource adequacy cost allocation in accordance with Section 31.5.3.2.1 and BPTF thermal transmission security cost allocation in accordance with Section 31.5.3.2.2, there remains a BPTF voltage security issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the BPTF voltage security issue(s) to the Subzones that contribute to the BPTF voltage security issue(s). The cost responsibility for the portion (MW or MVAr) of the solution attributable to resolving the BPTF voltage security issue(s), defined as SolnBVSdef, will be allocated on a Load-ratio share to each Subzone to which each bus with a voltage issue is connected, as follows:

$$BPTF\ Voltage\ Cost\ Alloction_j = \frac{Coincident\ Peak_j}{\sum_{k=1}^{m} Coincident\ Peak_k} \times \frac{SolnBVSdef}{Soln\_Size}$$

Where *j* is for each Subzone; *m* is for the total number of Subzones that are subject to BPTF voltage cost allocation; Coincident Peak is for the total peak Load for each Subzone; SolnBVSdef is for the portion of the solution necessary to resolve the BPTF voltage security issue(s); and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.4 Dynamic Stability Cost Allocation

If, after consideration of the compensatory MW identified in the resource adequacy cost allocation in accordance with Section 31.5.3.2.1, BPTF thermal transmission security cost allocation in accordance with Section 31.5.3.2.2, and BPTF voltage security cost allocation in accordance with Section 31.5.3.2.3, there remains a dynamic stability issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the dynamic stability issue(s) to all Subzones in the NYCA on a Load-ratio share basis, as follows:

$$Dynamic\ Stability\ Cost\ Alloction_j = \frac{Coincident\ Peak_j}{\sum_{k=1}^{m} Coincident\ Peak_k} \times \frac{DynamicMW}{Soln\_Size}$$

Where *j* is for each Subzone; *m* is for the total number of Subzones; Coincident Peak is for the total peak Load for each Subzone; DynamicMW is for the megawatt portion of the solution necessary to resolve the dynamic stability issue(s) for the applicable project; and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.5 Short Circuit Issues

If, after the completion of the prior reliability cost allocation steps, there remains a short circuit issue, the short circuit issue will be deemed a local issue and related costs will not be allocated under this process.

31.5.4 Regulated Economic Projects

31.5.4.1 The Scope of Section 31.5.4

As discussed in Section 31.5.1 of this Attachment Y, the cost allocation principles and methodologies of this Section 31.5.4 apply only to regulated economic transmission projects ("RETPs") proposed in response to congestion identified in the CARIS.

This Section 31.5.4 does not apply to generation or demand side management projects, nor does it apply to any market-based projects. This Section 31.5.4 does not apply to regulated backstop solutions triggered by the ISO pursuant to the CSPP, provided, however, the cost allocation principles and methodologies in this Section 31.5.4 will apply to regulated backstop solutions when the implementation of the regulated backstop solution is accelerated solely to reduce congestion in earlier years of the Study Period. The ISO will work with the ESPWG to develop procedures to deal with the acceleration of regulated backstop solutions for economic reasons.

Nothing in this Attachment Y mandates the implementation of any project in response to the congestion identified in the CARIS.

31.5.4.2 Cost Allocation Principles

The ISO shall implement the specific cost allocation methodology in Section 31.5.4.4 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1. The specific cost allocation methodology in Section 31.5.4.4 incorporates the following elements:

31.5.4.2.1 The focus of the cost allocation methodology shall be on responses to specific conditions identified in the CARIS.

31.5.4.2.2 Potential impacts unrelated to addressing the identified congestion shall not be considered for the purpose of cost allocation for RETPs.

31.5.4.2.3 Projects analyzed hereunder as proposed RETPs may proceed on a market basis with willing buyers and sellers at any time.

31.5.4.2.4 Cost allocation shall be based upon a beneficiaries pay approach. Cost allocation under the ISO tariff for a RETP shall be applicable only when a super majority of the beneficiaries of the project, as defined in Section 31.5.4.6 of this Attachment Y, vote to support the project.

31.5.4.2.5 Beneficiaries of a RETP shall be those entities economically benefiting from the proposed project. The cost allocation among beneficiaries shall be based upon their relative economic benefit.

31.5.4.2.6 Consideration shall be given to the proposed project's payback period.

31.5.4.2.7 The cost allocation methodology shall address the possibility of cost overruns.

31.5.4.2.8 Consideration shall be given to the use of a materiality threshold for cost allocation purposes.

31.5.4.2.9 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.

31.5.4.2.10 Consideration should be given to the "free rider" issue as appropriate. The methodology shall be fair and equitable.

31.5.4.2.11 The methodology shall provide cost recovery certainty to investors to the extent possible.

31.5.4.2.12 Benefits determination shall consider various perspectives, based upon the agreed-upon metrics for analyzing congestion.

31.5.4.2.13 Benefits determination shall account for future uncertainties as appropriate (e.g., load forecasts, fuel prices, environmental regulations).

31.5.4.2.14 Benefits determination shall consider non-quantifiable benefits as appropriate (*e.g.,* system operation, environmental effects, renewable integration).

31.5.4.3 Project Eligibility for Cost Allocation

The methodologies in this Section 31.5.4.3 will be used to determine the eligibility of a proposed RETP to have its cost allocated and recovered pursuant to the provisions of this Attachment Y.

31.5.4.3.1 The ISO will evaluate the benefits against the costs (as provided by the Developer) of each proposed RETP over a ten-year period commencing with the proposed commercial operation date for the project. The Developer of each project will pay the cost incurred by the ISO to conduct the ten-year benefit/cost analysis of its project. The ISO, in conjunction with the ESPWG, will develop

methodologies for extending the most recently completed CARIS database as necessary to evaluate the benefits and costs of each proposed RETP.

31.5.4.3.2 The benefit metric for eligibility under the ISO's benefit/cost analysis will be expressed as the present value of the annual NYCA-wide production cost savings that would result from the implementation of the proposed project, measured for the first ten years from the proposed commercial operation date for the project.

31.5.4.3.3 The cost for the ISO's benefit/cost analysis will be supplied by the Developer of the project, and the cost metric for eligibility will be expressed as the present value of the first ten years of annual total revenue requirements for the project, reasonably allocated over the first ten years from the proposed commercial operation date for the project.

31.5.4.3.4 For informational purposes only, the ISO will also calculate the present value of the annual total revenue requirement for the project over a 30 year period commencing with the proposed commercial operation date of the project.

31.5.4.3.5 To be eligible for cost allocation and recovery under this Attachment Y, the benefit of the proposed project must exceed its cost measured over the first ten years from the proposed commercial operation date for the project, and the requirements of section 31.5.4.2 must be met. The total capital cost of the project must exceed $25 million. In addition, a super-majority of the beneficiaries must vote in favor of the project, as specified in Section 31.5.4.6 of this Attachment Y.

31.5.4.3.6 In addition to calculating the benefit metric as defined in Section 31.5.4.3.2, the ISO will calculate additional metrics to estimate the potential

benefits of the proposed project, for information purposes only, in accordance with Section 31.3.1.3.5, for the applicable metric. These additional metrics shall include those that measure reductions in LBMP load costs, changes to generator payments, ICAP costs, Ancillary Service costs, emissions costs, and losses. TCC revenues will be determined in accordance with Section 31.5.4.4.2.3. The ISO will provide information on these additional metrics to the maximum extent practicable considering its overall resource commitments.

31.5.4.3.7 In addition to the benefit/cost analysis performed by the ISO under this Section 31.5.4.3, the ISO will work with the ESPWG to consider the development and implementation of scenario analyses, for information only, that shed additional light on the benefit/cost analysis of a proposed project. These additional scenario analyses may cover fuel and load forecast uncertainty, emissions data and the cost of allowances, pending environmental or other regulations, and alternate resource and energy efficiency scenarios. Consideration of these additional scenarios will take into account the resource commitments of the ISO.

31.5.4.4 Cost Allocation for Eligible Projects

As noted in Section 31.5.4.2 of this Attachment Y, the cost of a RETP will be allocated to those entities that would economically benefit from implementation of the proposed project. This methodology shall apply to cost allocation for a RETP, including the ISO's share of the costs of an Interregional Transmission Project proposed as a RETP allocated in accordance with Section 31.5.7 of this Attachment Y.

31.5.4.4.1 The ISO will identify the beneficiaries of the proposed project over a ten-year time period commencing with the proposed commercial operation date for the project. The ISO, in conjunction with the ESPWG, will develop methodologies for extending the most recently completed CARIS database as necessary for this purpose.

31.5.4.4.2 The ISO will identify beneficiaries of a proposed project as follows:

31.5.4.4.2.1 The ISO will measure the present value of the annual zonal LBMP load savings for all Load Zones which would have a load savings, net of reductions in TCC revenues, and net of reductions from bilateral contracts (based on available information provided by Load Serving Entities to the ISO as set forth in subsection 31.5.4.4.2.5 below) as a result of the implementation of the proposed project. For purposes of this calculation, the present value of the load savings will be equal to the sum of the present value of the Load Zone's load savings for each year over the ten-year period commencing with the project's commercial operation date. The load savings for a Load Zone will be equal to the difference between the zonal LBMP load cost without the project and the LBMP load cost with the project, net of reductions in TCC revenues and net of reductions from bilateral contracts.

31.5.4.4.2.2 The beneficiaries will be those Load Zones that experience net benefits measured over the first ten years from the proposed commercial operation date for the project. If the sum of the zonal benefits for those Load Zones with load savings is greater than the revenue requirements for the project (both load savings and revenue requirements measured in present value over the first ten years from

the commercial operation date of the project), the ISO will proceed with the development of the zonal cost allocation information to inform the beneficiary voting process.

31.5.4.4.2.3 Reductions in TCC revenues will reflect the forecasted impact of the project on TCC auction revenues and day-ahead residual congestion rents allocated to load in each zone, not including the congestion rents that accrue to any Incremental TCCs that may be made feasible as a result of this project. This impact will include forecasts of: (1) the total impact of that project on the Transmission Service Charge offset applicable to loads in each zone (which may vary for loads in a given zone that are in different Transmission Districts); (2) the total impact of that project on the NYPA Transmission Adjustment Charge offset applicable to loads in that zone; and (3) the total impact of that project on payments made to LSEs serving load in that zone that hold Grandfathered Rights or Grandfathered TCCs, to the extent that these have not been taken into account in the calculation of item (1) above. These forecasts shall be performed using the procedure described in Appendix B to this Attachment Y.

31.5.4.4.2.4 Estimated TCC revenues from any Incremental TCCs created by a proposed RETP over the ten-year period commencing with the project's commercial operation date will be added to the Net Load Savings used for the cost allocation and beneficiary determination.

31.5.4.4.2.5 The ISO will solicit bilateral contract information from all Load Serving Entities, which will provide the ISO with bilateral energy contract data for modeling contracts that do not receive benefits, in whole or in part, from LBMP

reductions, and for which the time period covered by the contract is within the ten-year period beginning with the commercial operation date of the project. Bilateral contract payment information that is not provided to the ISO will not be included in the calculation of the present value of the annual zonal LBMP savings in section 31.5.4.4.2.1 above.

31.5.4.4.2.5.1 All bilateral contract information submitted to the ISO must identify the source of the contract information, including citations to any public documents including but not limited to annual reports or regulatory filings

31.5.4.4.2.5.2 All non-public bilateral contract information will be protected in accordance with the ISO's Code of Conduct, as set forth in Section 12.4 of Attachment F of the ISO OATT, and Section 6 of the ISO Services Tariff.

31.5.4.4.2.5.3 All bilateral contract information and information on LSE-owned generation submitted to the ISO must include the following information:

(1) Contract quantities on an annual basis:

(a) For non-generator specific contracts, the Energy (in MWh) contracted to serve each Zone for each year.

(b) For generator specific contracts or LSE-owned generation, the name of the generator(s) and the MW or percentage output contracted or self-owned for use by Load in each Zone for each year.

(2) For all Load Serving Entities serving Load in more than one Load Zone, the quantity (in MWh or percentage) of bilateral contract Energy to be applied to each Zone, by year over the term of the contract.

(3) Start and end dates of the contract.

(4) Terms in sufficient detail to determine that either pricing is not indexed to LBMP, or, if pricing is indexed to LBMP, the manner in which prices are connected to LBMP.

(5) Identify any changes in the pricing methodology on an annual basis over the term of the contract.

31.5.4.4.2.5.4 Bilateral contract and LSE-owned generation information will be used to calculate the adjusted LBMP savings for each Load Zone as follows:

$AdjLBMPS_{y,z}$, the adjusted LBMP savings for each Load Zone *z* in each year *y*, shall be calculated using the following equation:

$$AdjLBMPS_{y,z} = \max\left[0, TL_{\mathrm{y,z}} - \sum_{b \in B_{y,z}} \left(BCL_{\mathrm{b,y,z}} * \left(1 - Ind_{\mathrm{b,y,z}}\right)\right) - SG_{\mathrm{y,z}}\right] * \left(LBMP1_{\mathrm{y,z}} - LBMP2_{\mathrm{y,z}}\right)$$

Where:

$TL_{y,z}$ is the total annual amount of Energy forecasted to be consumed by Load in year *y* in Load Zone *z*;

$B_{y,z}$ is the set of blocks of Energy to serve Load in Load Zone *z* in year *y* that are sold under bilateral contracts for which information has been provided to the ISO that meets the requirements set forth elsewhere in this Section 31.5.4.4.2.5

$BCL_{b,y,z}$ is the total annual amount of Energy sold into Load Zone *z* in year *y* under bilateral contract block *b*;

$Ind_{b,y,z}$ is the ratio of (1) the increase in the amount paid by the purchaser of Energy, under bilateral contract block *b*, as a result of an increase in the LBMP in Load Zone *z* in year *y* to (2) the increase in the amount that a purchaser of that amount of Energy would pay if the purchaser paid the LBMP for that Load Zone in that year for all of that Energy (this ratio shall be

zero for any bilateral contract block of Energy that is sold at a fixed price or for which the cost of Energy purchased under that contract otherwise insensitive to the LBMP in Load Zone *z* in year *y*);

$SG_{y,z}$ is the total annual amount of Energy in Load Zone *z* that is forecasted to be served by LSE-owned generation in that Zone in year *y*;

LBMP1y,z is the forecasted *annual load-weighted average LBMP* for Load Zone *z* in year *y*, calculated under the assumption that the project is not in place; and

$LBMP2_{y,z}$ is the forecasted annual load-weighted average LBMP for Load Zone *z* in year *y*, calculated under the assumption that the project is in place.

31.5.4.4.2.6 NZS_z, the Net Zonal Savings for each Load Zone *z* resulting from a given project, shall be calculated using the following equation:

$$NZS_z = \max\left[0, \sum_{y=PS}^{PS+9}\left(\left(AdjLBMPS_{y,z} - TCCRevImpact_{y,z}\right) * DF_y\right)\right]$$

Where:

PS is the year in which the project is expected to enter commercial operation;

$AdjLBMPS_{y,z}$ is as calculated in Section 31.5.4.4.2.5;

$TCCRevImpact_{y,z}$ is the forecasted impact of TCC revenues allocated to Load Zone *z* in year *y*, calculated using the procedure described in Appendix B in Section 31.7 of this Attachment Y; and

DF_y is the discount factor applied to cash flows in year *y* to determine the present value of that cash flow in year *PS*.

31.5.4.4.3 Load Zones not benefiting from a proposed RETP will not be allocated any of the costs of the project under this Attachment Y. There will be no "make whole" payments to non-beneficiaries.

31.5.4.4.4 Costs of a project will be allocated to beneficiaries as follows:

31.5.4.4.4.1 The ISO will allocate the cost of the RETP based on the zonal share of total savings to the Load Zones determined pursuant to Section 31.5.4.4.2 to be beneficiaries of the proposed project. Total savings will be equal to the sum of load savings for each Load Zone that experiences net benefits pursuant to Section 31.5.4.4.2. A Load Zone's cost allocation will be equal to the present value of the following calculation:

$$\text{Zonal Cost Allocation} = \text{Project Cost} * \left(\frac{(\text{Zonal Benefits})}{\text{Total Zonal Benefits for zone with positive net benefits}}\right)$$

31.5.4.4.4.2 Zonal cost allocation calculations for a RETP will be performed prior to the commencement of the ten-year period that begins with the project's commercial operation date, and will not be adjusted during that ten-year period.

31.5.4.4.4.3 Within zones, costs will be allocated to LSEs based on MWhs calculated for each LSE for each zone using data from the most recent available 12 month period. Allocations to an LSE will be calculated in accordance with the following formula:

$$\text{LSE Intrazonal Cost Allocation} = \text{Zonal Cost Allocation} * \left(\frac{\text{LSE Zonal MWh}}{\text{Total Zonal MWh}}\right)$$

31.5.4.4.5 Project costs allocated under this Section 31.5.4.4 will be determined as follows:

31.5.4.4.5.1 The project cost allocated under this Section 31.5.4.4 will be based on the total project revenue requirement, as supplied by the Developer of the project, for the first ten years of project operation. The total project revenue requirement will be determined in accordance with the formula rate on file at the Commission. If there is no formula rate on file at the Commission, then the Developer shall provide to the ISO the project-specific parameters to be used to calculate the total project revenue requirement.

31.5.4.4.5.2 Once the benefit/cost analysis is completed the amortization period and the other parameters used to determine the costs that will be recovered for the project should not be changed, unless so ordered by the Commission or a court of applicable jurisdiction, for cost recovery purposes to maintain the continued validity of the benefit/cost analysis.

31.5.4.4.5.3 The ISO, in conjunction with the ESPWG, will develop procedures to allocate the risk of project cost increases that occur after the ISO completes its benefit/cost analysis under this Attachment Y. These procedures may include consideration of an additional review and vote prior to the start of construction and whether the developer should bear all or part of the cost of any overruns**.**

31.5.4.4.6 The Commission must approve the cost of a proposed RETP for that cost to be recovered through the ISO OATT. The developer's filing with the Commission must be consistent with the project proposal evaluated by the ISO under this Attachment Y in order to be cost allocated to beneficiaries.

31.5.4.5 Collaborative Governance Process and Board Action

31.5.4.5.1 The ISO shall submit the results of its project benefit/cost analysis and beneficiary determination to the ESPWG and TPAS, and to the identified beneficiaries of the proposed RETP for comment. The ISO shall make available to any interested party sufficient information to replicate the results of the benefit/cost analysis and beneficiary determination. The information made available will be electronically masked and made available pursuant to a process that the ISO reasonably determines is necessary to prevent the disclosure of any Confidential Information or Critical Energy Infrastructure Information contained in the information made available. Following completion of the review by the ESPWG and TPAS of the project benefit/cost analysis, the ISO's analysis reflecting any revisions resulting from the TPAS and ESPWG review shall be forwarded to the Business Issues Committee and Management Committee for discussion and action.

31.5.4.5.2 Following the Management Committee vote, the ISO's project benefit/cost analysis and beneficiary determination will be forwarded, with the input of the Business Issues Committee and Management Committee, to the ISO Board for review and action. In addition, the ISO's determination of the beneficiaries' voting shares will be forwarded to the ISO Board for review and action. The Board may approve the analysis and beneficiary determinations as submitted or propose modifications on its own motion. If any changes to the benefit/cost analysis or the beneficiary determinations are proposed by the Board, the revised analysis and beneficiary determinations shall be returned to the Management Committee for comment. If the Board proposes any changes to the ISO's voting

share determinations, the Board shall so inform the LSE or LSEs impacted by the proposed change and shall allow such an LSE or LSEs an opportunity to comment on the proposed change. The Board shall not make a final determination on the project benefit/cost analysis and beneficiary determination until it has reviewed the Management Committee comments. Upon final approval of the Board, project benefit/cost analysis and beneficiary determinations shall be posted by the ISO on its website and shall form the basis of the beneficiary voting described in Section 31.5.4.6 of this Attachment Y.

31.5.4.6 Voting by Project Beneficiaries

31.5.4.6.1 Only LSEs serving Load located in a beneficiary zone determined in accordance with the procedures in Section 31.5.4.4 of this Attachment Y shall be eligible to vote on a proposed project. The ISO will, in conjunction with the ESPWG, develop procedures to determine the specific list of voting entities for each proposed project. Prior to a vote being conducted, the Developer of the RETP must have a completed System Impact Study or System Reliability Impact Study, as applicable.

31.5.4.6.2 The voting share of each LSE shall be weighted in accordance with its share of the total project benefits, as allocated by Section 31.5.4.4 of this Attachment Y.

31.5.4.6.3 The costs of a RETP shall be allocated under this Attachment Y if eighty percent (80%) or more of the actual votes cast on a weighted basis are cast in favor of implementing the project.

31.5.4.6.4 If the proposed RETP meets the required vote in favor of implementing the project, and the project is implemented, all beneficiaries, including those voting "no," will pay their proportional share of the cost of the project.

31.5.4.6.5 The ISO will tally the results of the vote in accordance with procedures set forth in the ISO Procedures, and report the results to stakeholders. Beneficiaries voting against approval of a project must submit to the ISO their rationale for their vote within 30 days of the date that the vote is taken. Beneficiaries must provide a detailed explanation of the substantive reasons underlying the decision, including, where appropriate: (1) which additional benefit metrics, either identified in the tariff or otherwise, were used; (2) the actual quantification of such benefit metrics or factors; (3) a quantification and explanation of the net benefit or net cost of the project to the beneficiary; and (4) data supporting the metrics and other factors used. Such explanation may also include uncertainties, and/or alternative scenarios and other qualitative factors considered, including state public policy goals. The ISO will report this information to the Commission in an informational filing to be made within 60 days of the vote. The informational filing will include: (1) a list of the identified beneficiaries; (2) the results of the benefit/cost analysis; and (3) where a project is not approved, whether the developer has provided any formal indication to the ISO as to the future development of the project.

31.5.5 Regulated Transmission Solutions to Public Policy Transmission Needs

31.5.5.1 The Scope of Section 31.5.5

As discussed in Section 31.5.1 of this Attachment Y, the cost allocation principles and methodologies of this Section 31.5.5 apply only to regulated Public Policy Transmission Projects. This Section 31.5.5 does not apply to Other Public Policy Projects, including generation or demand side management projects, or any market-based projects. This Section 31.5.5 does not apply to regulated reliability solutions implemented pursuant to the reliability planning process, nor does it apply to RETPs proposed in response to congestion identified in the CARIS.

A regulated solution shall only utilize the cost allocation methodology set forth in Section 31.5.3 where it is: (1) a Responsible Transmission Owner's regulated backstop solution, (2) an alternative regulated transmission solution selected by the ISO as the more efficient or cost effective regulated transmission solution to satisfy a Reliability Need, or (3) seeking cost recovery where it has been halted or cancelled pursuant to the provisions of Section 31.2.8.2. A regulated economic transmission solution proposed in response to congestion identified in the CARIS, and approved pursuant to Section 31.5.4.6, shall only be eligible to utilize the cost allocation principles and methodologies set forth in Section 31.5.4.

31.5.5.2 Cost Allocation Principles

The ISO shall implement the specific cost allocation methodology in Section 31.5.5.4 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1. The specific cost allocation methodology in Section 31.5.5.4 incorporates the following elements:

31.5.5.2.1 The focus of the cost allocation methodology shall be on regulated Public Policy Transmission Projects.

31.5.5.2.2 Projects analyzed hereunder as Public Policy Transmission Projects may proceed on a market basis with willing buyers and sellers at any time.

31.5.5.2.3 Cost allocation shall be based on a beneficiaries pay approach.

31.5.5.2.4 Project benefits will be identified in accordance with Section 31.5.5.4.

31.5.5.2.5 Identification of beneficiaries for cost allocation and cost allocation among those beneficiaries shall be according to the methodology specified in Section 31.5.5.4.

31.5.5.3 Project Eligibility for Cost Allocation

The Developer of a Public Policy Transmission Project will be eligible for cost allocation in accordance with the process set forth in Section 31.5.5.4 when its project is selected by the ISO as the more efficient or cost effective regulated Public Policy Transmission Project; *provided, however*, that if the appropriate federal, state, or local agency(ies) rejects the selected project's necessary authorizations, or such authorizations are withdrawn, the costs the Developer is eligible to recover under Section 31.4.12.1 shall be allocated in accordance with Section 31.5.5.4.3, except as otherwise determined by the Commission. The Developer of the selected regulated transmission solution may recover its costs in accordance with Section 31.5.6.

31.5.5.4 Cost Allocation for Eligible Projects

As noted in Section 31.5.5.2 of this Attachment Y, the identification of beneficiaries for cost allocation and the cost allocation of a selected Public Policy Transmission Project will be conducted in accordance with the process described in this Section 31.5.5.4. This Section will also apply to the allocation within New York of the ISO's share of the costs of an Interregional Transmission Project proposed as a solution to a Public Policy Transmission Need allocated in accordance with Section 31.5.7 of this Attachment Y. The establishment of a cost allocation

methodology and rates for a proposed solution that is undertaken by LIPA or NYPA as an Unregulated Transmitting Utility to a Public Policy Transmission Need as determined in Sections 31.4.2.1 through 31.4.2.3, as applicable, or an Interregional Transmission Project shall occur pursuant to Section 31.5.5.4.4 through 31.5.5.4.6, as applicable. Nothing herein shall deprive a Transmission Owner or Other Developer of any rights it may have under Section 205 of the Federal Power Act to submit filings proposing any other cost allocation methodology to the Commission or create any Section 205 filing rights for any Transmission Owner, Other Developer, the ISO, or any other entity. The ISO shall apply the cost methodology accepted by the Commission.

31.5.5.4.1 If the Public Policy Requirement that results in the identification by the NYPSC of a Public Policy Transmission Need prescribes the use of a particular cost allocation and recovery methodology, then the ISO shall file that methodology with the Commission within 60 days of the issuance by the NYPSC of its identification of a Public Policy Transmission Need. Nothing herein shall deprive a Transmission Owner or Other Developer of any rights it may have under Section 205 of the Federal Power Act to submit filings proposing any other cost allocation methodology to the Commission or create any Section 205 filing rights for any Transmission Owner, Other Developer, the ISO, or any other entity. If the Developer files a different proposed cost allocation methodology under Section 205 of the Federal Power Act, it shall have the burden of demonstrating that its proposed methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles taking into account the methodology specified in the Public Policy Requirement.

31.5.5.4.2 Subject to the provisions of Section 31.5.5.4.1, the Developer may submit to the NYPSC for its consideration – no later than 30 days after the ISO's selection of the regulated Public Policy Transmission Project – a proposed cost allocation methodology, which may include a cost allocation based on load ratio share, adjusted to reflect, as applicable, the Public Policy Requirement or Public Policy Transmission Need, the party(ies) responsible for complying with the Public Policy Requirement, and the party(ies) who benefit from the transmission facility.

31.5.5.4.2.1 The NYPSC shall have 150 days to review the Developer's proposed cost allocation methodology and to inform the Developer regarding whether it supports the methodology.

31.5.5.4.2.2. If the NYPSC supports the proposed cost allocation methodology, the Developer shall file that cost allocation methodology with the Commission for its acceptance under Section 205 of the Federal Power Act within 30 days of the NYPSC informing the Developer of its support. The Developer shall have the burden of demonstrating that the proposed cost allocation methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles.

31.5.5.4.2.3 If the NYPSC does not support the proposed cost allocation methodology, then the Developer shall take reasonable steps to respond to the NYPSC's concerns and to develop a mutually agreeable cost allocation methodology over a period of no more than 60 days after the NYPSC informing the Developer that it does not support the methodology.

31.5.5.4.2.4 If a mutually acceptable cost allocation methodology is developed during the timeframe set forth in Section 31.5.5.4.2.3, the Developer shall file it with the Commission for acceptance under Section 205 of the Federal Power Act no later than 30 days after the conclusion of the 60 day discussion period with the NYPSC. The Developer shall have the burden of demonstrating that the proposed cost allocation methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles.

31.5.5.4.2.5 If no mutually agreeable cost allocation methodology is developed, the Developer shall file its preferred cost allocation methodology with the Commission for acceptance under Section 205 of the Federal Power Act no later than 30 days after the conclusion of the 60 day discussion period with the NYPSC. The Developer shall have the burden of demonstrating that its proposed methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles in consideration of the position of the NYPSC. The filing shall include the methodology supported by NYPSC for the Commission's consideration. If the Developer elects to use the load ratio share cost allocation methodology referenced below in Section 31.5.5.4.3, the Developer shall notify the Commission of its intent to utilize the load ratio share methodology and shall include in its notice the NYPSC supported methodology for the Commission's consideration.

31.5.5.4.3. Unless the Commission has accepted an alternative cost allocation methodology pursuant to this Section, the ISO shall allocate the costs of the Public Policy Transmission Project to all Load Serving Entities in the NYCA

using the default cost allocation methodology, based upon a load ratio share methodology.

31.5.5.4.4 The NYISO will make any Section 205 filings related to this Section on behalf of NYPA to the extent requested to do so by NYPA. NYPA shall bear the burden of demonstrating that such a filing is compliant with the Order No. 1000 Regional Cost Allocation Principles. NYPA shall also be solely responsible for making any jurisdictional reservations or arguments related to their status as non-Commission-jurisdictional utilities that are not subject to various provisions of the Federal Power Act.

31.5.5.4.5 The cost allocation methodology and any rates for cost recovery for a proposed solution to a Public Policy Transmission Need undertaken by LIPA, as an Unregulated Transmitting Utility (for purposes of this section a "LIPA project"), shall be established and recovered as follows:

31.5.5.4.5.1 *For costs solely to LIPA customers.* The cost allocation methodology and rates to be established for a LIPA project, for which cost recovery will only occur from LIPA customers, will be established pursuant to Article 5, Title 1-A of the New York Public Authorities Law, Sections 1020-f(u) and 1020-s. Prior to the adoption of any cost allocation mechanism or rates for such a LIPA project, and pursuant to Section 1020-f(u), the Long Island Power Authority's Board of Trustees shall request that the NYDPS provide a recommendation with respect to the cost allocation methodology and rate that LIPA has proposed and the Board of Trustees shall consider such recommendation in accordance with the requirements of Section 1020-f(u). Upon approval of the cost allocation mechanism and/or

rates by the Long Island Power Authority's Board of Trustees, LIPA shall provide to the ISO, for purposes of inclusion within the ISO OATT and filing with FERC on an informational basis only, a description of the cost allocation mechanism and the rate that LIPA will charge and collect within the Long Island Transmission District.

31.5.5.4.5.2 *For Costs for a LIPA Project That May be Allocated to Other Transmission Districts.* A LIPA project that meets a Public Policy Transmission Need as determined by the NYPSC pursuant to Section 31.4.2.3(iii) may be allocated to market participants outside of the Long Island Transmission District. The cost allocation methodology and rate for such a LIPA project shall be established in accordance with the following procedures. LIPA's proposed cost allocation methodology and/or rate shall be reviewed and approved by the Long Island Power Authority's Board of Trustees pursuant to Article 5, Title 1-A of the New York Public Authorities Law, Sections 1020-f(u) and 1020-s. Prior to the adoption of any cost allocation mechanism or rates for such project and pursuant to Section 1020-f(u), the Long Island Power Authority's Board of Trustees shall request that the NYDPS provide a recommendation with respect to the cost allocation methodology and rate that LIPA has proposed and the Board of Trustees shall consider such recommendation in accordance with the requirements of Section 1020-f(u). LIPA shall inform the ISO of the cost allocation methodology and rate that has been approved by the Long Island Power Authority's Board of Trustees for filing with the Commission.

Upon approval by the Long Island Power Authority's Board of Trustees, LIPA shall submit and request that the ISO file the LIPA cost allocation methodology for approval with the Commission. Any cost allocation methodology for a LIPA project that allocates costs to market participants outside of the Long Island Transmission District shall be reviewed as to whether there is comparability in the derivation of the cost allocation for market participants such that LIPA has demonstrated that the proposed cost allocation is compliant with the Order No. 1000 cost allocation principles, there are benefits provided by the project to market participants outside of the Long Island Transmission District, and that the proposed allocation is roughly commensurate to the identified benefits.

Article 5, Title 1-A of the New York Public Authorities Law, Sections 1020-f(u) and 1020-s, requires that LIPA's rates be established at the lowest level consistent with sound fiscal and operating practices of the Long Island Power Authority and which provide for safe and adequate service. Upon approval of a LIPA rate by the Long Island Power Authority's Board of Trustees pursuant to Section 1020-f(u), LIPA shall submit, and request that the ISO file, the LIPA rate with the Commission for review under the same comparability standard as applied to the review of changes in LIPA's TSC under Attachment H of this tariff.

In the event that the cost allocation methodology or rate approved by the Long Island Power Authority's Board of Trustees did not adopt the NYDPS recommendation, the NYDPS recommendation shall be included in the filing for the Commission's consideration.

31.5.5.4.5.3 *Support for Filing*. LIPA shall intervene in support of the filing(s) made pursuant to Section 31.5.5.4.5 at the Commission and shall take the responsibility to demonstrate that: (i) the cost allocation methodology and/or rate approved by the Long Island Power Authority's Board of Trustees meets the applicable standard of comparability, and (ii) the Commission should accept such methodology or rate for filing. LIPA shall also be responsible for responding to, and seeking to resolve, concerns about the contents of the filing that might be raised in such proceeding.

31.5.5.4.5.4 *Billing of LIPA Charges Outside of the Long Island Transmission District*. For Transmission Districts other than the Long Island Transmission District, the ISO shall bill for LIPA, as a separate charge, the costs incurred by LIPA for a solution to a Public Policy Transmission Need allocated using the cost allocation methodology and rates established pursuant to Section 31.5.5.4.5.2 and accepted for filing by the Commission and shall remit the revenues collected to LIPA each Billing Period in accordance with the ISO's billing and settlement procedures.

31.5.5.4.6 The inclusion in the ISO OATT or in a filing with the Commission of the cost allocation and charges for recovery of costs incurred by NYPA or LIPA related to a solution to a transmission need driven by a Public Policy Requirement or Interregional Transmission Project as provided for in Sections 31.5.5.4.4 and 31.5.5.4.5 shall not be deemed to modify the treatment of such rates as non-jurisdictional pursuant to Section 201(f) of the FPA.

31.5.6 Cost Recovery for Regulated Projects

Responsible Transmission Owners, Transmission Owners and Other Developers will be entitled, if eligible for cost recovery under Section 31.2 of this Attachment Y, to full recovery of all reasonably incurred costs, including a reasonable return on investment and any applicable incentives, related to the development, construction, operation and maintenance of regulated solutions, including Gap Solutions, proposed or undertaken pursuant to the provisions of this Attachment Y to meet a Reliability Need. Transmission Owners and Other Developers will be entitled to recovery of costs associated with the implementation of a regulated economic transmission project ("RETP") in accordance with the provisions of Section 31.5.6 of this Attachment Y. Developers will be entitled to recover the costs, to the extent permitted under Sections 31.4 and 31.5.6.5 of this Attachment Y, associated with the implementation of a regulated Public Policy Transmission Project in accordance with the requirements in Section 31.5.6.5 of this Attachment Y.

31.5.6.1 The Responsible Transmission Owner, Transmission Owner or Other Developer will receive cost recovery for a regulated solution it undertakes to meet a Reliability Need pursuant to Section 31.2 of this Attachment Y that is subsequently halted in accordance with the criteria established pursuant to Section 31.2.8.2 of this Attachment Y. Such costs will include reasonably incurred costs through the time of cancellation, including any forward commitments made.

31.5.6.2 The Responsible Transmission Owner, Transmission Owner or Other Developer will recover its costs described in this Section 31.5 incurred with respect to the implementation of a regulated transmission solution to Reliability Needs, in accordance with the provisions of Rate Schedule 10 of this ISO OATT, or as determined by the Commission. Provided further that cost recovery for

regulated transmission projects undertaken by a Transmission Owner pursuant to this Attachment Y shall be in accordance with the provisions of the NYISO/TO Reliability Agreement or an Operating Agreement.

31.5.6.3 Costs related to non-transmission regulated solutions to Reliability Needs will be recovered by Responsible Transmission Owners, Transmission Owners and Other Developers in accordance with the provisions of New York Public Service Law, New York Public Authorities Law, or other applicable state law. A Responsible Transmission Owner, a Transmission Owner, or Other Developer may propose and undertake a regulated non-transmission solution, provided that the appropriate state agency(ies) has established cost recovery procedures comparable to those provided in this tariff for regulated transmission solutions to ensure the full and prompt recovery of all reasonably-incurred costs related to such non-transmission solutions. Nothing in this section shall affect the Commission's jurisdiction over the sale and transmission of electric energy subject to the jurisdiction of the Commission.

31.5.6.4 For a regulated economic transmission project that is approved pursuant to Section 31.5.4.6 of this Attachment Y, the Transmission Owner or Other Developer shall have the right to make a filing with the Commission, under Section 205 of the Federal Power Act, for approval of its costs associated with implementation of the project. The filing of the Transmission Owner or Other Developer must be consistent with its project proposal made to and evaluated by the ISO under Section 31.5.4 of this Attachment Y. Costs will be recovered when the project is completed pursuant to a rate schedule filed with and accepted by the

Commission in accordance with the cost recovery requirements set forth in this Section, or as otherwise determined by the Commission. Upon request by NYPA, the ISO will make a filing on behalf of NYPA.

31.5.6.5 For a regulated Public Policy Transmission Project, the Developer shall have the right to make a filing with the Commission under Section 205 of the Federal Power Act, for approval of its costs eligible for recovery under Section 31.4 and this Section 31.5.6.5.

31.5.6.5.1 The Developer of a Public Policy Transmission Project selected by the ISO as the more efficient or cost-effective Public Policy Transmission Project will be entitled to full recovery of all reasonably incurred costs, including a reasonable return on investment and any applicable incentives, related to the development, construction, operation, and maintenance of the selected Public Policy Transmission Project. Such cost recovery will include reasonable costs incurred by the Developer to provide a more detailed study or cost estimate for such project at the request of the NYPSC, and to prepare the application required to comply with New York Public Service Law Article VII, or any successor statute or any other applicable permits, and to seek other necessary authorizations. The filing of the Developer must be consistent with its project proposal submitted to, evaluated by and selected by the ISO under Section 31.4 of this Attachment Y. The period for cost recovery, if any cost recovery is approved, will be determined by the Commission and will begin if and when the project is completed, or as otherwise determined by the Commission.

31.5.6.5.2 If the appropriate federal, state or local agency(ies) either rejects a necessary authorization, or approves and later withdraws authorization, for the selected Public Policy Transmission Project, the Developer may recover all of the necessary and reasonable costs incurred and commitments made up to the final federal, state or local regulatory decision, including reasonable and necessary expenses incurred to implement an orderly termination of the project, to the extent permitted by the Commission in accordance with its regulations on abandoned plant recovery. The period for cost recovery will be determined by the Commission and will begin as determined by the Commission.

31.5.6.5.3 Upon request by NYPA, the ISO will make a filing on behalf of NYPA under this Section 31.5.6.5.

31.5.6.6 To the extent that Incremental TCCs are created as a result of a regulated economic transmission project that has been approved for cost recovery under the NYISO Tariff, those Incremental TCCs that can be sold will be auctioned or otherwise sold by the ISO. The ISO shall determine the amount of Incremental TCCs that may be awarded to an expansion in accordance with the provisions of Section 19.2.2 of Attachment M of the ISO OATT. The ISO will use these revenues to offset the revenue requirements for the project. The Incremental TCCs shall continue to be sold for the depreciable life of the project, and the revenues offset will commence upon the first payment of revenues related to a sale of Incremental TCCs on or after the charge for a specific RETP is implemented.

31.5.7 Cost Allocation for Eligible Interregional Transmission Projects

31.5.7.1 Costs of Approved Interregional Transmission Projects

The cost allocation methodology reflected in this Section 31.5.7.1 shall be referred to as the "Northeastern Interregional Cost Allocation Methodology" (or "NICAM"), and shall not be modified without the mutual consent of the Section 205 rights holders in each region.

The costs of Interregional Transmission Projects, as defined in the Interregional Planning Protocol, evaluated under the Interregional Planning Protocol and selected by ISO-NE, PJM and the ISO in their regional transmission plans for purposes of cost allocation under their respective tariffs shall, when applicable, be allocated to the ISO-NE region, PJM region and the ISO region in accordance with the cost allocation principles of FERC Order No. 1000, as follows:

(a) To be eligible for interregional cost allocation, an Interregional Transmission Project must be selected in the regional transmission plan for purposes of cost allocation in each of the transmission planning regions in which the transmission project is proposed to be located, pursuant to agreements and tariffs on file at FERC for each region. With respect to Interregional Transmission Projects and other transmission projects involving the ISO and PJM, the cost allocation of such projects shall be in accordance with the Joint Operating Agreement ("JOA") among and between the ISO and PJM. With respect to Interregional Transmission Projects and other transmission projects involving the ISO and ISO-NE, the cost allocation for such projects shall be in accordance with this Section 31.5.7 of Attachment Y of the NYISO Open Access Transmission Tariff and with the respective tariffs of ISO-NE.

(b) The share of the costs of an Interregional Transmission Project allocated to a region will be determined by the ratio of the present value of the estimated costs of such region's displaced regional transmission project to the total of the present values of the estimated costs of

the displaced regional transmission projects in all regions that have selected the Interregional Transmission Project in their regional transmission plans.

(i) The present values of the estimated costs of each region's displaced regional transmission project shall be based on a common base date that will be the beginning of the calendar month of the cost allocation analysis for the subject Interregional Transmission Project (the "Base Date").

(ii) In order to perform the analysis in this Section 31.5.7.1(b), the estimated cost of the displaced regional transmission projects shall specify the year's dollars in which those estimates are provided.

(iii) The present value analysis for all displaced regional transmission projects shall use a common discount rate. The regions having displaced projects will mutually agree, in consultation with their respective transmission owners, and for purposes of the ISO, its other stakeholders, on the discount rate to be used for the present value analysis.

(iv) For the purpose of this allocation, cost estimates shall use comparable cost estimating procedures. In the Interregional Planning Stakeholder Advisory Committee review process, the regions having displaced projects will review and determine, in consultation with their respective transmission owners, and for purposes of the NYISO, its other stakeholders, that reasonably comparable estimating procedures have been used prior to applying this cost allocation.

(c) No cost shall be allocated to a region that has not selected the Interregional Transmission Project in its regional transmission plan.

(d) When a portion of an Interregional Transmission Project evaluated under the Interregional Planning Protocol is included by a region (Region 1) in its regional transmission plan but there is no regional need or displaced regional transmission project in Region 1, and the neighboring region (Region 2) has a regional need or displaced regional project for the Interregional Transmission Project and selects the Interregional Transmission Project in its regional transmission plan, all of the costs of the Interregional Transmission Project shall be allocated to Region 2 in accordance with the NICAM and none of the costs shall be allocated to Region 1. However, Region 1 may voluntarily agree, with the mutual consent of the Section 205 rights holders in the other affected region(s) (including the Long Island Power Authority and the New York Power Authority in the NYISO region) to use an alternative cost allocation method filed with and accepted by the Commission.

(e) The portion of the costs allocated to a region pursuant to the NICAM shall be further allocated to that region's transmission customers pursuant to the applicable provisions of the region's FERC-filed documents and agreements, for the ISO in accordance with Section 31.5.1.7 of Attachment Y of the ISO OATT.

(f) The following example illustrates the cost allocation for such an Interregional Transmission Project:

- A cost allocation analysis of the costs of Interregional Transmission Project Z is to be performed during a given month establishing the beginning of that month as the Base Date.
- Region A has identified a reliability need in its region and has selected a transmission project (Project X) as the preferred solution in its regional plan. The estimated cost of

Project X is: Cost (X), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project (X) is: N(X).

- Region B has identified a reliability need in its region and has selected a transmission project (Project Y) as the preferred solution in its Regional Plan. The estimated cost of Project Y is: Cost (Y), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project (Y) is: N(Y).
- Regions A and B, through the interregional planning process have determined that an Interregional Transmission Project (Project Z) will address the reliability needs in both regions more efficiently and cost-effectively than the separate regional projects. The estimated cost of Project Z is: Cost (Z). Regions A and B have each determined that Interregional Transmission Project Z is the preferred solution to their reliability needs and have adopted that Interregional Transmission Project in their respective regional plans in lieu of Projects X and Y respectively. If Regions A and B have agreed to bear the costs of upgrades in other affected transmission planning regions, these costs will be considered part of Cost (Z).
- The discount rate used for all displaced regional transmission projects is: D
- Based on the foregoing assumptions, the following formulas will be used:
    - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D)^{N(X)}$
    - Present Value of Cost (Y) = PV Cost (Y) = Cost (Y) / $(1+D)^{N(Y)}$
    - Cost Allocation to Region A = Cost (Z) x PV Cost (X)/[PV Cost (X) + PV Cost (Y)]

- Cost Allocation to Region B = Cost (Z) x PV Cost (Y)/[PV Cost (X) + PV Cost (Y)]

- Applying those formulas, if:

  Cost (X) = $60 Million and N(X) = 8.25 years

  Cost (Y) = $40 Million and N(Y) = 4.50 years

  Cost (Z) = $80 Million

  D = 7.5% per year

  Then:

  PV Cost (X) = $60/(1+0.075)^{8.25}$ = 33.039 Million

  PV Cost (Y) = $40/(1+0.075)^{4.50}$ = 28.888 Million

  Cost Allocation to Region A = $80 x 33.039/(33.039 + 28.888) = $42,681 Million

  Cost Allocation to Region B = $80 x 28.888/(33.039+28.888) = $37.319 Million

31.5.7.2 Other Cost Allocation Arrangements

(a) Except as provided in Section 31.5.7.2(b), the NICAM is the exclusive means by which any costs of an Interregional Transmission Project may be allocated between or among PJM, the ISO, and ISO-NE.

(b) Nothing in the FERC-filed documents of ISO-NE, the ISO or PJM shall preclude agreement by entities with cost allocation rights under Section 205 of the Federal Power Act for their respective regions (including the Long Island Power Authority and the New York Power Authority in the ISO region) to enter into separate agreements to allocate the cost-of Interregional Transmission Projects proposed to be located in their regions as an alternative to the NICAM, or other transmission projects identified pursuant to assessments and studies conducted pursuant to Section 6 of the Interregional Planning Protocol. Such other cost-

allocation methodologies must be approved in each region pursuant to the Commission-approved rules in each region, filed with and accepted by the Commission, and shall apply only to the region's share of the costs of an Interregional Transmission Project or other transmission projects pursuant to Section 6 of the Interregional Planning Protocol, as applicable.

31.5.7.3 Filing Rights

Nothing in this Section 31.5.7 will convey, expand, limit or otherwise alter any rights of ISO-NE, the ISO, PJM, each region's transmission owners, market participants, or other entities to submit filings under Section 205 of the Federal Power Act regarding interregional cost allocation or any other matter.

Where applicable, the regions have been authorized by entities that have cost allocation rights for their respective regions to implement the provisions of this Section 31.5.7.

31.5.7.4. Merchant Transmission and Individual Transmission Owner Projects

Nothing in this Section 31.5.7 shall preclude the development of Interregional Transmission Projects that are funded solely by merchant transmission developers or by individual transmission owners.

31.5.7.5 Consequences to Other Regions from Regional or Interregional Transmission Projects

Except as provided herein in Sections 31.5.7.1 and 31.5.7.2, or where cost responsibility is expressly assumed by ISO-NE, the ISO or PJM in other documents, agreements or tariffs on file with FERC, neither the ISO-NE region, the ISO region nor the PJM region shall be responsible for compensating another region or each other for required upgrades or for any other consequences in another planning region associated with regional or interregional transmission facilities, including but not limited to, transmission projects identified pursuant to Section 6 of

the Interregional Planning Protocol and Interregional Transmission Projects identified pursuant to Section 7 of the Interregional Planning Protocol.