LONG-TERM TCC ALLOCATION EXAMPLES November 21, 2006

Suppose that the ETCNL assigned to load in Zone X was as shown in Table 1. Most of the ETCNL is defined to sink at the load zone, however, some is defined to load buses within the load zone. The ETCNL is defined to particular buses within the load zone because this ETCNL would not be feasible if defined to the load zone as a whole due to load pocket constraints within the load zone.

Table 1 ETCNL

	A to Zone X
1000	B to Zone X
	B to Bus C
150	B to Bus D

A simultaneous feasibility testing using summer ratings would be applied to this ETCNL to determine the quantity that would be defined as auction allocation rights (AARs). For the example, we assume that 1,100 A to Zone X and 800 B to Zone X AARs satisfy the simultaneous feasibility test. Since no AARs would be defined for ETCNL sinking at load buses, the AARs would be as shown in Table 2.¹

Table 2AARs Eligible for Allocation

1100	A to Zone X
900	B to Zone X

The example assumes that in the spring 2008 auction, 75% of the available transmission system will be used to support the sale of six-month TCCs and the remaining 25% will be used to support the sale of annual TCCs. Thus, 275 A to Zone X AARs TCCs and 225 B to Zone AARs would be eligible for conversion into long-term. In the example, LSEs Blue and Red each serve 10% of the load within Zone X. LSE Blue chooses to exercise its right to convert its AARs into long-term TCCs. Since only whole MW AARs can be converted into TCCs, each LSE would be eligible to convert 27 A to Zone X and 22 B to Zone X AARs into TCCs. In the example, we assume that Blue LSE chooses to convert its AARs into TCCs while Red LSE does not.

Since LSE Blue opted to convert its AARs into TCCs, these converted AARs would be modeled as fixed injections and withdrawals in the spring 2008 auction, leaving the remaining capacity to support the sale of additional TCCs.

¹ The example assumes that 50% of the load in Zone X is within load pocket E, 12.5% within load pocket C, and 37.5% within load pocket D.

Table 3 portrays the assumed source/sink prices in the spring 2008 six-month TCC auction. C1, D1 and E1 are generation buses within pockets C, D and E.

		Price
А	West	0
F	Central	250
В	East	1750
C1	C Pocket	5500
D1	D Pocket	4750
E1	E Pocket	9750
Х	Zone	7343.75

Table 3Auction Source/Sink PricesSix-Month Rounds

Table 4 portrays the number of TCCs sold between each source and sink in the six-month rounds of the auction, TCC prices and the total auction revenues. The price of each TCC is the difference between the sink price and the source price.

Table 4Auction RevenuesSix-Month Rounds

	MW	Sink Price	Source Price	Price	Revenues
A-F	150	250	0	250	37500
A-X	825	7343.75	0	7343.75	6058594
B-X	600	7343.75	1750	5593.75	3356250
B-C	46.875	5500	1750	3750	175781.3
B-D	103.125	4750	1750	3000	309375
					9937500

Table 5 portrays the assumed source/sink prices in the spring 2008 annual TCC rounds.

Table 5Auction Source/Sink PricesAnnual Rounds

		Price
A F	West	0
	Central	250
В	East	2750
C1	C Pocket	7525
D1	D Pocket	6750
E1 X	E Pocket	12250
Х	Zone	9596.875

Table 6 portrays the number of TCCs sold between each source and sink in the annual rounds of the spring auction, TCC prices and the total auction revenues.

	MW	Sink Price	Source Price	Price	Revenues
A-F	50	250	0	250	12500
A-X	248	9596.875	0	9596.875	2380025
B-X	178	9596.875	2750	6846.875	1218744
B-C	15.625	7525	2750	4775	74609.38
B-D	34.375	6750	2750	4000	137500
					3823378

Table 6Annual Auction Revenues

In addition to the payments for TCCs purchased in the auction, the NYISO would collect payments for the allocated long-term TCCs based on the prices in the annual TCC round as shown in Table $7.^2$

Table 7Charges for Allocated TCCs

	MW	Sink Price	Source Price	TCC Price	Revenues
A-X	27	9596.875	0	9596.875	259115.6
B-X	22	9596.875	2750	6846.875	150631.3
Total					409746.9

ETCNL would be valued in the six-month rounds as in any other auction as illustrated in Table 8.

ETCNL	Payment	Quantity	Value
A to Zone X	7343.75	825	6058594
B to Zone X	5593.75	600	3356250
B to Bus C	3750	37.5	140625
B to Bus D	337500		
ETCNL Payments	9892969		
Six-month auction r	9937500		
Residual-six month	44531.25		

 Table 8

 Six-Month Auction Revenue and ETCNL Values

² Allocated TCCs would be priced in the first one year round the auction, the same round in which ETCNL would be valued, maintaining revenue adequacy for the auction.

ETCNL would also be valued in the annual round, but payments to ETCNL holders would be funded both by auction revenues and payments for allocated TCCs as shown in Table 9.

ETCNL	Payment	Quantity	Value
A to Zone X	9596.875	275	2639141
B to Zone X	6846.875	200	1369375
B to Bus C	4775	12.5	59687.5
B to Bus D	4000	37.5	150000
ETCNL Payments	4218203		
Annual auction reve	3823378		
Payments for alloca	409746.9		
Residual annual auction			14921.88

 Table 9

 Annual Auction Revenues and ETCNL Values