Supplemental Congestion Reduction Proposal

A Motion Before the **NYISO Management Committee** Presented by Jerry Ancona New York City February 20, 2003

rev: 18-Feb-2003

Objectives

- Meet intent of previous decisions:
 - MC approved Congestion Reduction proposal (02/07/2002)
 - NYISO Board's decision (04/17/2002)
- Simply and fairly accurately allocate congestion rent shortfall and surpluses to the TOs responsible
- Help assure that TCCs are not unrealistically subscribed thereby generating excessive shortfalls and/or surpluses.

This supplemental proposal was reviewed/revised by the Congestion Reduction Task Force and the Market Structures Working Group – and subsequently revised and approved by the Business Issues Committee on February 11, 2003.



Reallocation of Shortfall/Surpluses

- First Allocate Shortfalls & Surpluses proportionately to Inter-Zonal Interfaces based on the \$-impact of derates and uprates
- Second Allocate Interface amounts proportionately to individual transmission facilities based on their individual impacts



Summary of Proposal

- I. Re-allocate shortfalls and surpluses simply and fairly accurately to TOs responsible
- II. Similarly change Monthly Reconfiguration Auction Revenue/Cost Allocations to TOs
- III. Develop method to Fully-Fund a Realistic Set of TCCs
- IV. Investigate potential for developing a Transmission Facility Dynamic Rating Program



Motion Before the MC

- *Resolved,* that the Management Committee approve the Supplemental Congestion Reduction Proposal as approved at the BIC February 11, 2003 meeting, and as presented at the February 20, 2003 MC meeting.
- Further, the MC requests that the NYISO staff estimate the approximate time and other resources needed to implement this proposal.
- Prior to filing, tariff language to be reviewed and approved by the Chairs and Vice Chairs of the Management Committee and Business Issues Committee.



Appendix



First: Assign Surplus (Shortfall) to Interfaces



Table 1: Cost Allocation of Surpluses (Shortfalls) by Transmission Interfaces											
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)		
Interface	TCCs et al Subject to Full- Funding (MW)	Avg TCC Price x TCCs et al Subject to Full- Funding (\$-MW)	Day- Ahead Interface Capability (MW)	Day- Ahead Capability in Excess of TCCs (MW)	Congestion Price = Sink LMP minus Source LMP (\$/MWh)	Computed "Nominal" Surplus (Shortfall) Allocation (\$)	Allocated Share of Surplus (Shortfall) Mismatch (%)	Allocated Share of Surplus (Shortfall) Mismatch (\$)	Total Surplus (Shortfall) Allocation (\$)		
W to X	2,000	\$8,000	2,100	100	\$5	\$500	12.5%	(\$63)	\$438		
X to Y	2,000	\$22,000	2,000	0	\$10	\$0	34.4%	(\$172)	(\$172)		
Y to Z	2,000	\$34,000	1,700	(300)	\$20	(\$6,000)	53.1%	(\$266)	(\$6,266)		
				(\$5,500)	100.0%	(\$500)	(\$6,000)				



Then: Assign Costs by Transmission Facility & TO Based Upon Impact



Line 107 and Cap Bnk #1 out-of-service Line 103 derated 5%



Continued – Assign Costs by Impact

Table 2: Cost Allocation of Surpluses (Shortfalls) by Transmission Facility and TO										
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
Trans- mission Facility	то	Capability Impact (if out) on Interface in Auction (MW)	Portion in Service in SCUC (%)	Uprate (Derate) Capability Impact on Interface in SCUC (MW)	Allocated Share of "Nominal" Interface Surplus (Shortfall) (%)	Allocated Share of "Nominal" Interface Surplus (Shortfall) (\$)	Allocated Share of Interface's Surplus (Shortfall) Mismatch (%)	Allocated Share of Interface's Surplus (Shortfall) Mismatch (\$)	Allocated Surplus (Shortfall) Allocation (\$)	
Line 101	А	300	100%	0	0.0%	\$0	10.0%	(\$27)	(\$27)	
Line 102	В	900	100%	0	0.0%	\$0	30.0%	(\$80)	(\$80)	
Line 103	В	900	95%	(45)	9.1%	(\$545)	30.0%	(\$80)	(\$625)	
Line 107	С	400	100%	0	0.0%	\$0	13.3%	(\$35)	(\$35)	
Line 108	С	400	0%	(400)	80.8%	(\$4,848)	13.3%	(\$35)	(\$4,884)	
Cap Bnk 1	С	50	0%	(50)	10.1%	(\$606)	1.7%	(\$4)	(\$610)	
Cap Bnk 2	С	50	100%	0	0.0%	\$0	1.7%	(\$4)	(\$4)	
Total of Above		3,000		(495)	100.0%	(\$6,000)	100.0%	(\$266)	(\$6,266)	
Total Interface Y-Z		2,000		(300)		(\$6,000)		(\$266)	(\$6,266)	
Total Allocated to TO "A"						\$0		(\$27)	(\$27)	
Total Allocated to TO "B"						(\$545)		(\$159)	(\$705)	
Total Allocated to TO "C"						(\$5,455)		(\$80)	(\$5,534)	



Other Details

- Allocations are cleared each Day-Ahead hour
- Allocation of Surpluses/Shortfalls to be effective May 1, 2003 and/or retroactive to that date
- For jointly owned facilities, TO(s) associated with "root cause" will be charged/credited
- Surplus can be credited to upgraded facilities on interfaces that have a net shortfall; and shortfall can be charged to facility outages on interfaces that have a net surplus provided the NYISO can verify these impacts through a protocol
- Congestion Rent Reserve Funds not needed
- Tariff will be generic enough to allow other methods
- NYISO will implement this proposal and then compare LECG proposal with this for a possible longer term solution



Advantages of Proposal

- Fair
- Helps Reduce Shortfall
- Simple
- Intuitive
- Accommodates...
 - simultaneous shortfalls and surpluses
 - partial as well as full outages
- Transparent
- Versatile



Changes to Monthly Reconfiguration Auction Allocations to TOs

- Cost allocation for monthly TCC reconfiguration auction needs to be done similarly to shortfall/surplus allocation to assure shortfalls/ surpluses receive consistent treatment
- Otherwise, TO could evade shortfalls and/or not be fairly credited with surpluses
- This change to take effect May 1, 2003 and/or made retroactive to that date



Fully-Funding a Realistic Set of TCCs

- The NYISO with MPs will develop a method to apply an availability adjustment to TCCs that can be fully-funded in an effort to balance TCCs with the anticipated average transmission capability.
- This method to be brought back to BIC for approval to be implemented in time for the Fall 2003 auctions.
- Such adjustments will not be conducted with the objective of withholding capability that otherwise could have been used to support TCCs in one part of the system in order to generate a surplus, which then would be used to offset shortfalls that occur in other parts of the system that are over-subscribed beyond their anticipated capability.
 - This offset would neither be equitable nor efficient.
 - Issue of grandfathered TCCs, and potential infeasibilities or nearinfeasibilities that may result from grandfathered TCCs, will continue to be explored.



Developing a Transmission Facility Dynamic Rating Program

- CRTF will meet to discuss the feasibility and desirability of developing a Transmission Facility Dynamic Rating Program
 - Allow a TO to temporarily change transmission facility limits to take advantage of ambient conditions that are more favorable than those assumed in the TCC Auction

