

# **Supplemental Congestion Reduction Proposal**

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**A Motion Before the  
NYISO Business Issues Committee  
Presented by Jerry Ancona  
Albany, NY  
February 11, 2003**

# Objectives

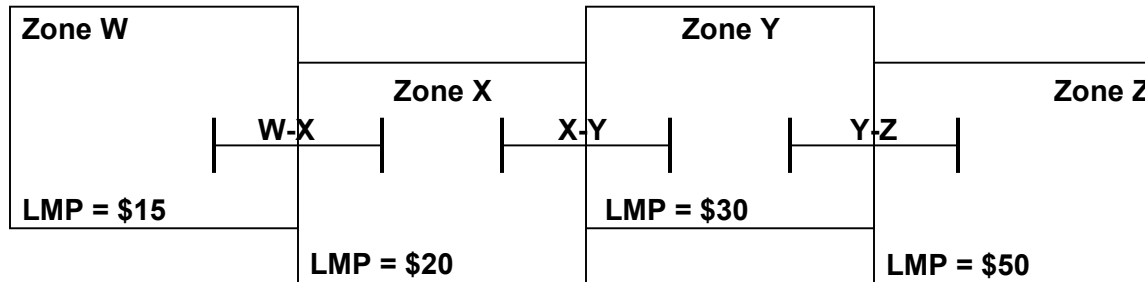
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- ◆ **Meet intent of:**
  - ❖ MC approved Congestion Reduction proposal (02/07/2002)
  - ❖ NYISO Board's decision (04/17/2002)
- ◆ **Go one step further from “what” to “how”**
- ◆ **Offer simple transparent procedure**
  - ❖ “Implementable” with hopefully no significant new software.
  - ❖ Fairly accurately allocate congestion rent shortfall and surpluses to the TOs responsible
  - ❖ 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 possibly the Market Structures Working Group).*



# First: Assign Surplus (Shortfall) to Interfaces

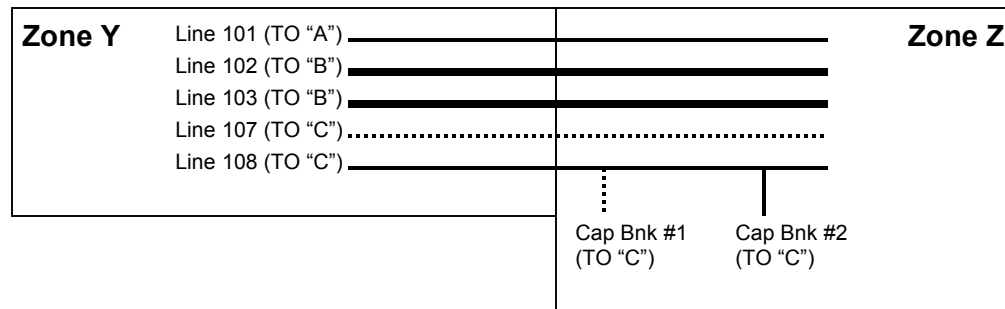


**Table 1: Cost Allocation of Surpluses (Shortfalls) by Transmission Interfaces**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
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 Mismatch (%)	Trued-Up Surplus (Shortfall) Allocation (\$)
W to X	2,000	\$8,000	2,100	100	\$5	\$500	12.5%	\$437
X to Y	2,000	\$22,000	2,000	(0)	\$10	(\$0)	34.4%	(\$172)
Y to Z	2,000	\$34,000	1,700	(300)	\$20	(\$6,000)	53.1%	(\$6,266)
Total						(\$5,500)	100.0%	(\$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)
Transmission Facility	TO	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 Total Interface Surplus (Shortfall) (%)	Allocated Surplus (Shortfall) Allocation (\$)
Line 101	A	300	100%	0	0.0%	\$0
Line 102	B	900	100%	0	0.0%	\$0
Line 103	B	900	95%	(45)	9.1%	(\$570)
Line 107	C	400	100%	0	0.0%	\$0
Line 108	C	400	0%	(400)	80.8%	(\$5,063)
Cap Bnk 1	C	50	0%	(50)	10.1%	(\$633)
Cap Bnk 2	C	50	100%	0	0.0%	\$0
<b>Total of Above</b>		3,000	--	(495)	100.0%	(\$6,266)
<b>Total Interface Y-Z</b>		2,000	--	(300)	--	(\$6,266)
<b>Total Allocated to TO "A"</b>						\$0
<b>Total Allocated to TO "B"</b>						(\$570)
<b>Total Allocated to TO "C"</b>						(\$5,696)



# Other Details

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- ◆ **Allocations are cleared each Day-Ahead hour**
- ◆ **For multiplied owned facilities, TO associated with “root cause” will be charged/credited**
- ◆ **Surplus credited to upgraded facilities only on interfaces that have a surplus**
- ◆ **Shortfall charged to facility outages only on interfaces that have shortfall**
- ◆ **Congestion Rent Reserve Funds not needed**
- ◆ **Cost allocation for monthly reconfigure auction needs to be done similarly to assure shortfalls/surpluses receive consistent treatment**



# Advantages of Proposal

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



# Fully-Funding a Realistic Set of TCCs

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- ◆ **NYISO – based on analysis and judgement – can apply availability adjustment to TCCs that can be fully-funded to balance TCCs with anticipated average transmission capability**
- ◆ **A derate (uprate) adjustment made on interface-by-interface basis**
  - ❖ **Not equitable nor efficient to derate one interface below its anticipated capability so that it could provide an offsetting surplus for shortfalls caused by another inter-face that is over-subscribed beyond its anticipated capability.**



# Developing a Transmission Facility Dynamic Rating Program

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- ◆ **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**



# Motion Before BIC

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- ◆ Resolved, that the Business Issues Committee approve the Supplemental Congestion Reduction Proposal as presented herein (and as previously presented and discussed at the Congestion Reduction Task Force – and subsequently revised). Further, BIC requests that the NYISO staff estimate the approximate time and other resources needed to implement this proposal. In addition:
  - ◆
  - ◆ 1. The NYISO will make a determination before the 6-month auction on the capacity that needs to be held back from the auction to reflect planned and expected forced outages.
  - ◆ 2. At each monthly auction, the NYISO will make some of the withheld capacity available to the market, but would still withhold any planned or known outages plus a small provision (the risk is smaller) for forced outages.
  - ◆ 3. The NYISO will work with real facilities to address the concern that one interface is not unduly reduced in order to generate surpluses for another over-subscribed interface; i.e.; all interfaces need to be treated independently
  - ◆ 4. The NYISO will implement this allocation method such that it is ready by May 1, 2003.
  - ◆ 5. Without impacting the implementation of this method, the NYISO will conduct a comparative analysis of the LECG proposal made to the Congestion Reduction Task Force on January 29, 2003 with this proposal, and will evaluate the accuracy of the proposed method to the LECG proposal. The NYISO will present the analysis at a CRTF meeting and determine which proposal will serve as a long-term solution.
  - ◆ 6. Tariff language shall be written in sufficient terms so as to allow for the above proposal without the need for additional voting at the stakeholder committees.

