

# **Shortfall Reduction Procedures**

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**Business Issues Committee**

November 5, 2003

# SHORTFALL REDUCTION PROCEDURES

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There is a potential for full funding of TCCs to lead to large swings in the TSC when there are substantial unanticipated changes in congestion costs.

- Full funding of TCCs based on all lines in transfer capability necessarily entails TSC funding of TCCs at DAM prices during transmission outages.
- If DAM prices are substantially higher than those anticipated in the forward auction, charges to the TSC account during outages may exceed total TSC auction revenue credits.
- Unexpectedly high congestion DAM congestion charges can arise during a particular capability period due to unanticipated fuel price changes, unusual generation outages, extreme weather conditions, or unusual transmission outage conditions.

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The proposed shortfall reduction procedure will cushion the impact of full funding of TCCs on the level of the TSC during periods in which DAM congestion costs differ from those expected in the forward auction.

- If there is no consistent difference between DAM congestion costs and those priced in forward auctions, the proposed procedure will not affect the level of the TSC.

More importantly, the proposed shortfall reduction procedure provides a mechanism to sell a set of TCCs that will more closely reflect the expected transmission capability available in the DAM.

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The shortfall reduction procedure has five components:

- Each transmission owner may choose to designate a proportion of its ETCNL and Residual Capacity Revenue Rights (RCRR) for valuation at DAM prices rather than at auction (capability period or monthly) prices.
- ETCNL and RCRR designated for valuation at DAM prices will not support the sale of TCCs in forward auctions.
- The amount of ETCNL and RCRR designated for valuation at DAM prices and not available to support the sale of TCCs in forward auctions will be capped at a percentage determined by the NYISO. The initial percentage will be 5 percent.

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- The cap will be based on a historical ratio of DAM congestion rent shortfall to DAM congestion rents and subject to Capability Period adjustments in the 0% to 5% range by the NYISO.
  - Historical average since NYISO start-up  
 $\$212.5\text{M}/\$1,804.0\text{M} = 11.8\%$
  - Excluding the fully subscribed CE-LI interface  
 $\$191.5\text{M}/\$1526.0\text{M} = 12.5\%$

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- ETCNL and RCRR designated for valuation in the DAM will be settled like TCCs in the DAM with the revenues credited to the appropriate transmission owner's TSC account.
  - The value of ETCNL at summer 2003 DAM prices was \$135.9M.
  - A 5% reservation of this ETCNL would have produced \$6.8M.

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Prior to each auction the NYISO verifies the simultaneous feasibility of existing ETCNL entitlements accounting for all Grandfathered Rights and TCCs, and any previously awarded long-term TCCs that are effective for the upcoming auction.

- In addition, the NYISO will define sufficient point-to-point (zone-to-zone) RCRR to exhaust the transfer capability across each key interface. The RCRR must be simultaneously feasible with all other entitlements.
- The RCRR will be assigned to the TSC accounts of the appropriate transmission owner based on predetermined allocation factors.
- The RCRR allocation factors for each interface will be determined based on the past allocation of residual auction revenues across that interface.

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Estimate of Retained Interface Transmission Capability based on Summer 2003

	MW	Dysinger East	West Central	Volney East	Moses South	Total East	UPNY SENY	UPNY ConEd	Millwood South	Dunwoodie South
Residual TCCs (A)	70	70								
Feasible ETCNL (B)	6136	896	926	1070	0	1180	0	2783	3709	2758
GF Rights & TCC & Long-Term TCCs ©	14134	680	1623	4120	229	4253	3955	2516	2831	3646
Total (D=A+B+C)	20340	1646	2549	5190	229	5433	3955	5299	6540	6404
2003 Gold Book Limit (E)		3700	2425	5060	1875	5025	4825	5850	8025	6225
Possible Remaining Capability (F=max(E-D,0))		2054	0	0	1646	0	870	551	1485	0
Potential RCRR (5%) (G=F*0.05)		103	0	0	82	0	44	28	74	0
ETCNL + Residual TCCs (5%) (H=(A+B)*0.05)		48	46	54	0	59	0	139	185	138
Total Retained (G+H)		151	46	54	82	59	44	167	260	138



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The proposed shortfall reduction procedure will preserve the incentives of the make-whole approach.

- Lower transmission owner outage costs will reduce the TSC; higher outage costs will increase it.
- There will be no cost shifting across transmission owner customers.

By reserving a percentage of the ETCNL and RCRR from the auctions, a set of TCCs will be sold which more closely reflect the expected transfer capability of the transmission system reducing the DAM congestion shortfalls to which the TOs are exposed.

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- Proposal Elements
  - The percentage of ETCNL and RCRR reserved will initially be set at a maximum of 5% and fixed for one year.
  - During the first year, the NYISO will evaluate whether differing caps on TO percentage reservations are justified with implementation for the Spring 2005 auction.
  - Based on information gathered under the congestion shortfall procedure, the NYISO will evaluate a requirement that TOs release ETCNL and RCRR in the monthly auctions with implementation for the Autumn 2004 auction.

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- Proposal Elements
  - Develop a long-term targeted solution that more accurately accounts for scheduled outages.
    - Requires implementation of the auction automation software and multi-period auctions.
    - Revisit the 50% rule for recognizing facility outages in the auction.
    - The monthly auctions could be run as a multi-week auction recognizing varying facility outages each week.

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- Proposal Elements
  - Provide transparency by posting prior to each Capability Period and monthly auction, the amount of capability reserved by each TO.
  - Report to FERC on the performance of the congestion reduction procedure at the end of the Summer 2004 Capability Period.

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## Resource Requirements

Add a full time employee to the Resource Reliability staff

- Congestion Shortfall Reduction
  - Perform required analyses
  - Maintain data and analysis results integrity for SAS audit
  - Track ETCNL, RCRR, historical congestion & congestion shortfalls thru-time
  - Ensure that reserved ETCNL & RCRR is correctly input to BAS
- Congestion Cost Allocation
  - Track DAM outages
  - Maintain data and analysis results integrity for SAS audit
  - Coordinate data exchange with LECG
  - Produce summaries to allow TOs to verify calculations
- Maintain progress on other projects
  - TCC Manual
  - Award of TCCs for transmission expansion
  - TCC market automation