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UBS Warburg Energy LLC

JOINT FERC/CFTC TECHNICAL CONFERENCE ON CREDIT ISSUES IN THE ENERGY MARKETS: CLEARING AND OTHER SOLUTIONS

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THE ROLE OF COLLATERAL IN THE ENERGY TRADING MARKETS

Posting Margin is the primary way trading partners can manage credit risk to acceptable levels

Margining relationships

must be considered part of the cost of doing business in the physical and financial energy trading markets

The continued deteriorating financial condition of many energy market participants has created a need to explore ways to manage credit risk effectively and at the same time increase liquidity in the energy trading markets

BASIC COLLATERAL CONCEPTS: EXPOSURE; COLLATERAL THRESHOLD AND COLLATERAL POSTING REQUIREMENT

Net Exposure: The amount that would be payable to the party that is "in the money" on a net basis taking into account all transactions under a Master Agreement

Collateral Threshold: The amount of "credit" extended to a party in a particular trading relationship under a Master Agreement

COLLATERAL POSTING REQUIREMENT:

Party A's Net Exposure - Party B's Collateral Threshold = Party B's Collateral Requirement

COLLATERAL REQUIREMENT EXAMPLE

Net Exposure to Party A:	70
Party B's Collateral Threshold	(10)
Party B's Collateral Requirement	$ 60

In this example, Party B would be required to post to Party A $60 of margin either in the form of cash, a letter of credit with a face amount of $60, etc.

COLLATERAL POSTING OPTIONS

Traditional Way: Collateral is posted by the parties under each Master Agreement between them (i.e., ISDA (Financial), EEI Master (Physical Power), NAESB (Physical Gas))

Master Netting Agreement Way: Collateral is posted by Party A to Party B based on a "net" exposure which takes into account exposures under all Master Agreements between them on a net, aggregate basis

COLLATERAL POSTING EXAMPLES

ISDA	Gas Master	EEI Master
Party A's exposure = $100	Party B's exposure = $70	Party A's exposure = $150
Party B's threshold = $50	Party A's threshold = $50	Party B's threshold = $50

Traditional Way: Party B posts $50 to Party A under the ISDA; Party A posts $20 to Party B under the Gas Master; Party B posts $100 to Party A under the EEI.

Master Netting: After aggregating all exposures, Party A has a "net" exposure to Party B of $180 and assuming a $50 threshold, Party B posts $130 to Party A. Under the "Traditional Way" above, Party B posted $150 in the aggregate to Party A and Party A posted $20 to Party B.