

Board of Directors

August 15, 2006

Credit Update

Some goals for credit policy in the ERCOT market

- **Provide a financially stable and viable market**
 - Amount of any residual credit risk should not endanger the overall financial stability of the market
- **Ensure all market participants understand the financial risks associated with any residual credit exposure accepted in the market**
 - If credit risk is not mitigated, there will be losses whenever there is a Mass Transition. Losses may be of the order of magnitude described in this presentation.
- **Address credit risks as they are identified**

In 2005, the market experienced several Mass Transition events

- The market experienced losses of approximately \$5,800,000 related to these events
- The market began a review of processes and procedures around Mass Transition as a result of these losses

Many market groups and ERCOT staff have worked hard toward improving the ERCOT credit profile:

TAC, PRS, WMS, RMS, COPS, Texas SET task force, and Credit Working Group have all played important roles in the review process

Credit improvements to date

- Current solution reduces Mass Transition timeline from about 22 days to approximately 15 days
 - By June 2007 an additional 5 days will be cut
- PRR 625 increased notice period for QSE dropping an LSE from 5 business days to 12 business days (effectively collateral)
- PRR 568 reduces settlement date from 17 to 10 days after operating day
- PRR 638 changes the settlement invoice due date from 16 calendar days to 5 business days
- PRR 643 reduces the number of days allowed to cure a breach from 3 days to 2 days

Further improvements being considered

Credit WG, as directed by the F&A committee, has initiated a Protocol Revision Request to:

- Reduce time to post collateral from 2 bus days to 1 bus day
 - munis and coops may continue to have 2 bus days
- Reduce time to cure a breach from 2 bus days to 1 bus day
 - This requires all QSEs, LSEs, etc. to sign new or amended contracts, which may not be fully complete until April 2007.
- Create a working credit limit which allows an entity to utilize up to 85% of posted collateral + unsecured credit limit (rather than 100%)

This PRR will be vetted by the full market through the Protocol Revision process.

Credit WG also proposes to leave collateral calculation at 40 days (allowing the 7 days of reduced credit exposure achieved with PRR 568 to be used to compensate for the increased credit exposure related to Mass Transition)

Credit WG and ERCOT staff will continue to evaluate the use of credit insurance separately.

Further improvements being considered

- If the above changes are made, Credit WG would propose to make no additional changes to the EAL calculation for a year unless significant new risk factors are identified.

Impact of changes to date (and proposed changes)

Revised timelines (in business days)

	<u>Orig</u>	<u>Curr</u>	<u>Long</u>	<u>Further</u>
Identify problem / make collateral call	0	0	0	0
<u>Notice periods</u>				
• Collateral due	2	2	2	1
• Notice of default given	3	2	2	1
• 2 BDays to cure default	6	4	4	2
<u>Mass transition</u>				
• Conference call to begin process	7	5	5	3
• POLRs / ERCOT initiate switches	10-12	8	6	4
• Switch complete by TDSP	16-18	11	8	6
Calendar days (approx)	<u>22-26</u>	<u>15-17</u>	<u>10-12</u>	<u>8-10</u>

Impact of changes to date (and proposed changes)

Revised potential loss in exit scenario

Potential loss (simplified – w / 3 weeks of collateral) (in 000's)

	Orig	Curr	Long	Further
Collateral held ⁽¹⁾				
1,000 MWh/day x \$100/MWh =	\$140	\$ 210	\$ 210	\$ 210
x 10% x 21 days				
At default				
1,000 MWh/day x \$100/MWh =	<u>\$ 2,200</u>	<u>\$ 1,500</u>	<u>\$ 1,000</u>	<u>\$ 800</u>
x 100% x ? days				
Potential market loss	\$ 2,060	\$ 1,290	\$ 790	\$ 590
 For 100 MWh/day	 \$ 206	 \$ 129	 \$ 79	 \$ 59
For 10,000 MWh/day	\$20,600	\$12,900	\$ 7,900	\$ 5,900
 Reduction in exposure		37%	62%	71%

(1) Collateral held for Mass Transition events increased with the implementation of PRR 568 given that collateral is maintained at 40 days and credit exposure for historical activity was reduced by 7 days with PRR 568.

Historical look – QSE dropping an LSE

Estimated Savings - QSE dropping an LSE

Entity	Est MWh/day	Est ESIDs	Tot Est Exposure	After Interim Changes - Est Savings		After Final Changes - Est Savings	
LSE 1	350	3,000	410,000	355,000	87%	391,000	95%
LSE 2	3,500	12,250	5,160,000	4,941,000	96%	5,100,000	99%
LSE 3	1,500	10,000	(liab paid)	-		-	
			<u>5,570,000</u>	<u>5,296,000</u>	95%	<u>5,491,000</u>	99%
Estimated residual liability				<u>274,000</u>		<u>79,000</u>	

Note: Savings are primarily due to the **combined** impact of reducing the mass transition timeline and increasing the QSE's required notice (from 5 to 12 business days)

Historical look – QSE and LSE are the same entity

Estimated Savings - QSE and LSE the same entity

Entity	Est MWh/day	Est ESIDs	Tot Est Exposure	After Interim Changes - Est Savings		After Final Changes - Est Savings	
QSE 1	50	500	30,000	10,000	33%	24,000	80%
QSE 2	65	550	200,000	91,000	46%	121,000	61%
QSE 3	125	2,500	(liab paid)	-		-	
			230,000	101,000	44%	145,000	63%
Estimated residual liability				129,000		85,000	

Note: Savings are primarily due to reducing the mass transition timeline.

Other options being considered to further reduce risk

- **Reduce timeline for Mass Transition**
 - Most benefit has been obtained or will be obtained with combination of current, proposed and long term solution
- **Increase collateral requirements**
 - Currently considered on only a limited basis
 - See next slide for cost analysis of full collateralization
- **Purchase credit insurance**
 - Cost analysis still being completed
 - Will not cover all entities
- **Create a self-funded default reserve**
 - Potentially risk adjusted (higher risk entities pay at a higher rate)
 - Funded based on either their use of the BES, base amount of load, or a combination of both
- **Accept some level of residual credit exposure**

Estimated cost of collateral (for those that must post collateral) vs. Estimated cost of losses (as absorbed by the entire market)

	Estimated Load (000's)	# of days of add'l collateral?	Estimated \$/MWh	Estimated cost of capital	Add'l coll req'd marketwide (000's) (1)	Potential annual cost of req'd collateral (000's) (1)	In cents / MWh	
Load that meets credit standards	23% 230	6	\$ 100	none				
Load that posts Guaranty	41% 410	6	\$ 100	2%	\$ 246,000	4,920	0.033	paid by those posting collateral
Load that posts LC or cash	36% 360	6	\$ 100	12%	\$ 216,000	25,920	0.197	paid by those posting collateral
Total estimated MWhs/day in the market	100% <u>1,000</u>							
Losses in 2002	1,000					-	-	paid by entire market
Losses in 2003	1,000					15,000	0.041	paid by entire market
Losses in 2004	1,000					-	-	paid by entire market
Losses in 2005	1,000					5,800	0.016	paid by entire market
Average losses over the past four years						<u>20,800</u>	(2) <u>0.014</u>	paid by entire market
Future? (0-\$30,000 or more?)	1,000 <div></div>					<u>30,000</u>	<u>0.082</u>	
Sample cost of capital								
	Cap Struc	Cost	WAC					
Debt	65%	10%	6.50%					
Equity	35%	15%	5.25%					
Total	100%		11.75%					

Notes

- (1) Balances are based on collateralizing for 100% of load for 6 days, which is approximately what it would take to fully collateralize for potential Mass Transition events after all other planned or proposed actions are taken.
- (2) Historical losses are not a predictor of future losses

- **Risk of catastrophic losses**

- From previous slides, have some quantification of potential losses related to Mass Transition scenarios for entities up to 10,000 MWh/day
 - Other scenarios can exist
 - Other types or size of entities can be involved
- Should we seek to insure or mitigate in some way?
 - At what cost?

- **Risk of losses from smaller defaults**

- Should we seek to insure or mitigate in some way?
 - At what cost?

Questions?