



**The Finance & Audit (F&A) Committee is
expected to consider
F&A Committee Agenda Item 8:
*Recommendation regarding
Letter of Credit Concentration Limits*
at its meeting on November 18, 2013.**

**The Board of Directors is expected to hear the
F&A Committee's recommendation on this matter
as part of the F&A Committee Report at
the Board meeting on November 19, 2013.**

**Attached are the Committee and Board materials
in relation to these agenda items.**



Item 8: Letter of Credit Concentration Limits

Mark Ruane

Vice President, Credit and Enterprise Risk Management

Finance & Audit Committee

ERCOT Public

November 18, 2013

Letter of Credit Concentration Limits

- At its March 18, 2013 meeting, the F&A Committee requested that ERCOT staff submit a Letter of Credit (LC) issuer concentration limit proposal. This was submitted to the F&A Committee at its May 13, 2013 meeting.
- ERCOT proposed that the proposed limit structure would be tested throughout the summer months before seeking approval of the proposal from the F&A Committee.
- The F&A Committee agreed to this approach. At that time, the F&A Committee also requested that an alternative limit structure be tested that utilized issuing bank regulatory capital.

Proposed Limit Structure

- Letter of Credit issuer limit calculated as the maximum of
 - \$750M per Letter of Credit issuer
 - Tangible Net Worth or regulatory Tier 1 capital adjusted for credit rating

Issuer Rating		Maximum Letter of Credit Issuer Limit as a % of TNW / Tier 1 Capital
Moody's	Fitch/S&P	
Aaa	AAA	1.00%
Aa1	AA+	.95%
Aa2	AA	.90%
Aa3	AA-	.85%
A1	A+	.70%
A2	A	.75%
A3	A-	.70%
Below A3	Below A-	Not accepted

- Issuer limits will be reviewed by CWG and approved by the F&A Committee at least annually.

Proposed Limit Structure

Processes for Limit Breaches

- If an issuer limit is breached, Counter-Parties utilizing that issuer will be notified. New LCs from the issuer would not be accepted.
- This would start a timer that after four months ERCOT would no longer accept new LCs or amendments to existing LCs from that issuer.
- LCs currently held as collateral would not be rejected.
- ERCOT would continue to report outstanding LCs and unused limit by issuer.
- Note that if an issuer were to be downgraded below investment grade or otherwise fail to meet issuer requirements per ERCOT Creditworthiness Standards, outstanding LCs would be immediately ineligible as collateral.

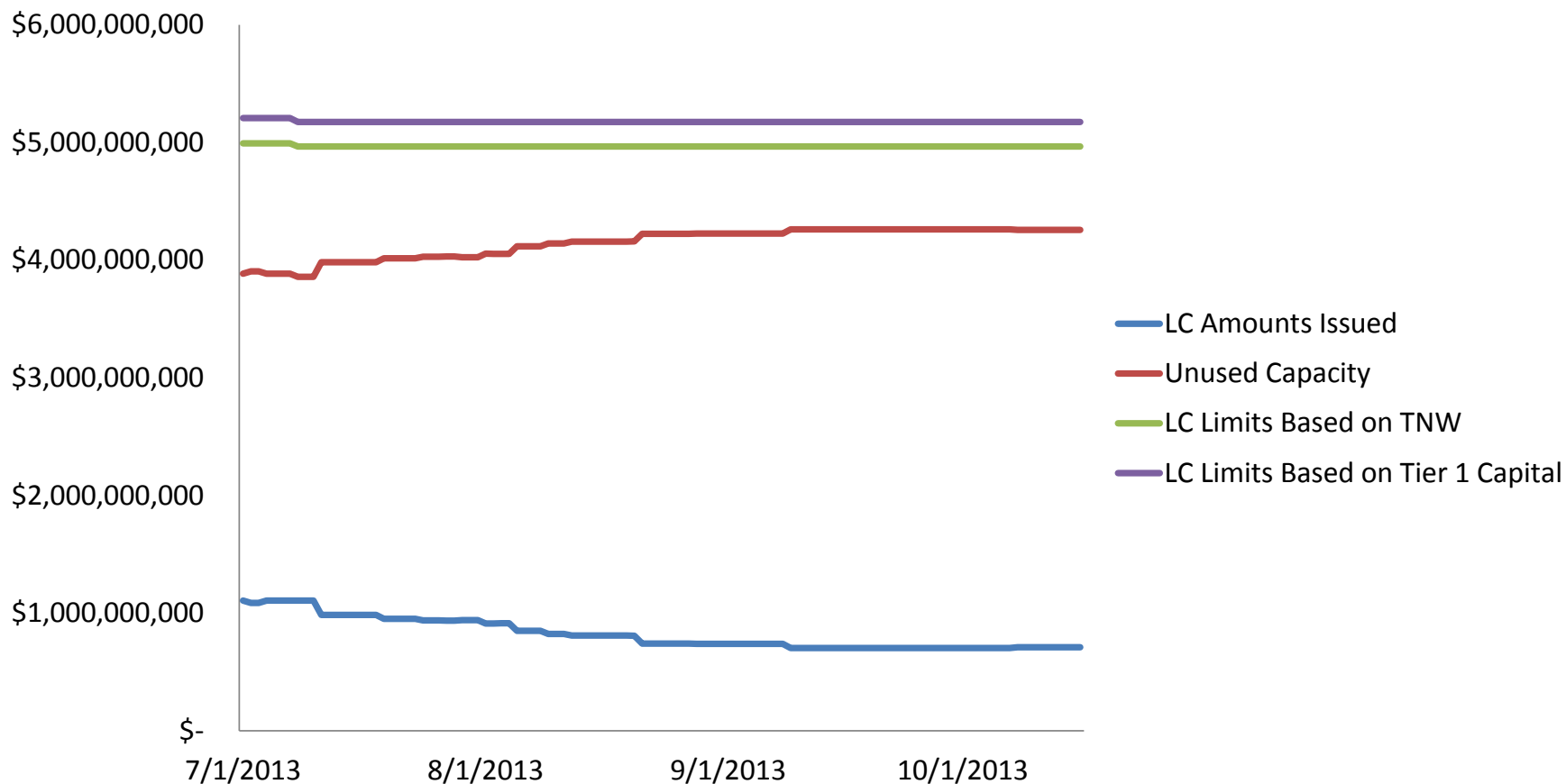
Proposed Limit Structure

Sample report:

Issuer Name	Total LC Amounts Per Issuer (US\$)	Tangible Net Worth (US\$)	Issuer Limits based on Tangible Net Worth (US\$)	Unused Capacity based on Tangible Net Worth	Tier 1 Capital (US\$)	Issuer Limits based on Tier 1 Capital (US\$)	Unused Capacity based on Tier 1 Capital (US\$)
Barclays Bank PLC	163,505,002	84,861,780,000	636,463,350	472,958,348	83,743,750,000	628,078,125	464,573,123
Citibank NA	143,035,000	129,239,000,000	750,000,000	606,965,000	117,400,000,000	750,000,000	606,965,000
Bank of America NA	81,000,000	113,716,030,000	750,000,000	669,000,000	118,431,000,000	750,000,000	669,000,000
BNP Paribas	75,085,400	95,955,380,000	750,000,000	674,914,600	99,255,960,000	750,000,000	674,914,600
US Bank	61,780,000	25,590,810,000	217,521,885	155,741,885	33,075,180,000	281,139,030	219,359,030
Wells Fargo	51,800,000	92,248,000,000	750,000,000	698,200,000	93,762,000,000	750,000,000	698,200,000
DNB Bank ASA	50,000,000	18,474,340,000	147,794,720	97,794,720	18,608,150,000	148,865,200	98,865,200
Standard Chartered	46,100,000	38,050,000,000	304,400,000	258,300,000	40,600,000,000	324,800,000	278,700,000
Bank of Nova Scotia	34,554,712	30,977,560,000	263,309,260	228,754,548	34,446,330,000	292,793,805	258,239,093
Deutsche Bank	17,400,001	52,817,420,000	396,130,650	378,730,649	66,622,420,000	499,668,150	482,268,149

Results

- During the test period no issuer met or exceeded the overall limit nor had constrained capacity.
- The top 10 issuers comprise 90% of the value issued.



Recommendation Regarding LC Concentration Limits

- The results of the Letter of Credit concentration limits test were reviewed by CWG on October 30, 2013. ERCOT staff recommended using the Tangible Net Worth basis of calculation as this is transparent and consistent with other Creditworthiness Standard calculations.
- The proposed Letter of Credit concentration limits would be effected by revisions to the ERCOT Creditworthiness Standards. A redlined version has been provided for reference as Exhibit A to the Board decision template on this matter. On November 5, 2013, the CWG voted to endorse the proposed revisions.
- ERCOT staff requests that the F&A Committee vote to recommend to the Board that:
 - The draft revisions to the ERCOT Creditworthiness Standards to incorporate limits on Letter of Credit issuer concentration be approved.

<VOTE>

Questions





Date: November 19, 2013
To: Board of Directors
From: Mark Ruane, Vice President Credit & Enterprise Risk
Subject: Letter of Credit Concentration Limits

Issue for the ERCOT Board of Directors

ERCOT Board of Directors Meeting Date: November 19, 2013

Item No.: 8.2

Issue:

Whether the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) should approve modifications regarding Letter of Credit Concentration limits in the ERCOT Creditworthiness Standards, as recommended by ERCOT staff and endorsed by the Credit Work Group. The Finance and Audit (F&A) Committee will review such proposed modifications at its November 18, 2013 meeting.

Background/History:

The ERCOT Creditworthiness Standards require that “Revisions to the Creditworthiness Standards shall be reviewed by the Credit Work Group and the F&A Committee and approved by the ERCOT Board.” The Creditworthiness Standards were last approved by the Board in March 2013.

By electronic vote, in November 2013 the Credit Work Group voted to endorse revisions to the Creditworthiness Standards to effectuate issuer limits on Letters of Credit (LCs). The proposed revisions specify an overall limit of \$750 million per LC issuer, further limited by the application of a credit-linked factor to the issuer’s Tangible Net Worth.

In addition, the proposed revisions specify the process by which breaches of limits by LC issuers would be addressed.

Key Factors Influencing Issue:

1. Reduction in the risk of concentration among the issuers of LCs that ERCOT accepts for collateral
2. Limit breach process provides sufficient time for Counter-Parties to source additional issuers

Conclusion/Recommendation:

ERCOT staff recommends approval of the modifications regarding Letter of Credit Concentration Limits in the ERCOT Creditworthiness Standards as recommended by ERCOT staff and endorsed by the CWG. The F&A Committee will be considering recommendation of approval of these modifications at its November 18, 2013 meeting.



ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, after due consideration of the alternatives, the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) deems it desirable and in the best interest of ERCOT to approve the modifications regarding Letter of Credit Concentration limits to the ERCOT Creditworthiness Standards as recommended by the Finance and Audit (F&A) Committee of the Board as attached hereto as Exhibit A;

THEREFORE, BE IT RESOLVED, that the modifications regarding Letter of Credit Concentration limits to the ERCOT Creditworthiness Standards as recommended by the F&A Committee as attached hereto as Exhibit A are hereby authorized and approved.

CORPORATE SECRETARY'S CERTIFICATE

I, Vickie G. Leady, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its November 19, 2013 meeting, the ERCOT Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of November, 2013.

Vickie G. Leady
Assistant Corporate Secretary

Electric Reliability Council of Texas, Inc.

Creditworthiness Standards

Referenced in Section 16.11 of the Nodal Protocols

Creditworthiness Standards for Cooperative and Municipal Systems

IF YOUR ENTITY HAS	<u>AND</u>	<u>AND</u>	<u>AND</u>	<u>THEN</u>
Minimum Equity (Patronage Capital)	Minimum Times Interest Earnings Ratio (TIER)	Minimum Debt Service Coverage (DSC)	Minimum Equity to Assets	Maximum unsecured line as a percentage of Unencumbered Assets*
\$25,000,000	1.05	1.00	0.15	0.00% to 5.00%

* Unsecured line not to exceed \$ 50 million.

Unencumbered Assets is defined as Total Assets minus Total Secured Debt.

Note 1: Cooperatives shall apply these standards consistent with RUS [CFR Sec. 1717.656 (3)]. Municipals shall apply these standards annually.

Note 2: A Cooperative or Municipal must use "Rated Entity" standards for qualification if that entity is publicly rated by Fitch, S&P or Moody's and has greater than \$100 million in equity.

Note 3: The amount of unsecured line established within the range above is at the discretion of ERCOT if the above criteria are met.

Electric Reliability Council of Texas, Inc.

Creditworthiness Standards

Referenced in Section 16.11 of the Nodal Protocols

Creditworthiness Standards for Rated Entities

IF YOUR ENTITY HAS		AND	THEN		
Long-Term or Issuer Rating		Tangible Net Worth greater than	Maximum unsecured line as a percentage of Tangible Net Worth*		
<u>Fitch or S&P</u>	<u>Moody's</u>				
AAA	Aaa	\$ 100,000,000	0.00%	to	3.00%
AA+	Aa1	\$ 100,000,000	0.00%	to	2.95%
AA	Aa2	\$ 100,000,000	0.00%	to	2.85%
AA-	Aa3	\$ 100,000,000	0.00%	to	2.70%
A+	A1	\$ 100,000,000	0.00%	to	2.55%
A	A2	\$ 100,000,000	0.00%	to	2.35%
A-	A3	\$ 100,000,000	0.00%	to	2.10%
BBB+	Baa1	\$ 100,000,000	0.00%	to	1.80%
BBB	Baa2	\$ 100,000,000	0.00%	to	1.40%
BBB-	Baa3	\$ 100,000,000	0.00%	to	0.70%
Below BBB-	Below Baa3	Requires Security			

* Unsecured line not to exceed \$ 50 million

Tangible Net Worth is defined as Total Shareholder's Equity less Goodwill or other intangible assets.

Note 1: If a Market Participant's or guarantor's debt is rated by more than one of the rating agencies and all ratings fall within rating categories which are functional equivalents, ERCOT shall assign unsecured credit or allow a guarantee for amounts within the range for that rating.

If a Market Participant's or guarantor's debt is rated by more than one of the rating agencies and the ratings fall within different rating categories which are not functional equivalents, ERCOT shall assign unsecured credit or allow a guarantee for amounts as follows:

- If there are 3 ratings and 2 of the 3 are functional equivalents, within the range where 2 of the 3 ratings apply
- If there are 3 ratings and all 3 are different, within the range where the average of the 3 ratings apply (rounded down)
- If there are 2 ratings and the two are different, within the range of the lower of the two

Note 2: ERCOT has the discretion to reasonably request any entity to provide updated financial information and may adjust credit limits as required.

Note 3: The amount of unsecured line established within the range above is at the discretion of ERCOT if the above criteria are met.

Electric Reliability Council of Texas, Inc.

Creditworthiness Standards

Referenced in Section 16.11 of the Nodal Protocols

Creditworthiness Standards for Privately-Held Entities

IF YOUR ENTITY HAS	<u>AND</u>	<u>AND</u>	<u>AND</u>	<u>THEN</u>
Tangible Net Worth		Minimum Current Ratio	Maximum Debt to Total Capitalization Ratio	Minimum EBITDA to Interest and CMLTD
100,000,000		1.0	0.60	2.0
				Maximum unsecured line as a percentage of Tangible Net Worth*
				0.00% to 1.80%

*Unsecured line not to exceed \$ 50 million

Tangible Net Worth is defined as Total Shareholders' Equity less Goodwill or other intangible assets.

Debt to Total Capitalization Ratio is defined as Long-Term Debt (including all current borrowings) divided by Total Shareholders' Equity plus Long-Term Debt.

Note 1: An unsecured limit will be set for privately-held entities which do not have a long-term rating based on the above criteria, subject to the entity providing ERCOT with the most recent audited financial statements, and subsequent quarterly unaudited interim financial statements.

Note 2: ERCOT has the discretion to reasonably request any entity to provide updated financial information and may adjust credit limits as required.

Note 3: The amount of unsecured line established within the range above is at the discretion of ERCOT if the above criteria are met.

Electric Reliability Council of Texas, Inc.

Creditworthiness Standards

Referenced in Section 16.11 of the Nodal Protocols

Entities not meeting the requirements established by the ERCOT Protocols must provide one (or a combination) of the following forms of Financial Security for the benefit of ERCOT, as defined in the ERCOT Protocols. Acceptance of Financial Security is subject to the review and approval of ERCOT.

1. **Cash** - Deposited in an account designated by ERCOT.
2. **Letter of Credit (LC)**
 - a. Must be issued by a bank with a minimum rating of A- with Fitch or S&P or A3 with Moody's.
 - b. Must be issued on the standard form document approved by the ERCOT Board of Directors; no modifications are permitted.
 - c. Letters of Credit are subject to an overall limit per Letter of Credit issuer for all ERCOT Counter-Parties as determined below:

IF THE ISSUING ENTITY HAS	<u>THEN</u>																											
Long-Term or Issuer Rating	Maximum Letter of Credit issuer limit as a percentage of Tangible Net Worth of issuer*																											
<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; padding: 2px;"><u>Fitch or S&P</u></th> <th style="text-align: left; padding: 2px;"><u>Moody's</u></th> <th style="padding: 2px;"></th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">AAA</td> <td style="padding: 2px;">Aaa</td> <td style="text-align: right; padding: 2px;">1.00%</td> </tr> <tr> <td style="padding: 2px;">AA+</td> <td style="padding: 2px;">Aa1</td> <td style="text-align: right; padding: 2px;">0.95%</td> </tr> <tr> <td style="padding: 2px;">AA</td> <td style="padding: 2px;">Aa2</td> <td style="text-align: right; padding: 2px;">0.90%</td> </tr> <tr> <td style="padding: 2px;">AA-</td> <td style="padding: 2px;">Aa3</td> <td style="text-align: right; padding: 2px;">0.85%</td> </tr> <tr> <td style="padding: 2px;">A+</td> <td style="padding: 2px;">A1</td> <td style="text-align: right; padding: 2px;">0.80%</td> </tr> <tr> <td style="padding: 2px;">A</td> <td style="padding: 2px;">A2</td> <td style="text-align: right; padding: 2px;">0.75%</td> </tr> <tr> <td style="padding: 2px;">A-</td> <td style="padding: 2px;">A3</td> <td style="text-align: right; padding: 2px;">0.70%</td> </tr> <tr> <td style="padding: 2px;">Below A-</td> <td style="padding: 2px;">Below A3</td> <td style="text-align: right; padding: 2px;">Not accepted</td> </tr> </tbody> </table>	<u>Fitch or S&P</u>	<u>Moody's</u>		AAA	Aaa	1.00%	AA+	Aa1	0.95%	AA	Aa2	0.90%	AA-	Aa3	0.85%	A+	A1	0.80%	A	A2	0.75%	A-	A3	0.70%	Below A-	Below A3	Not accepted	
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* Subject to an overall limit of \$750 million per issuer. Tangible net worth calculation based on most recent audited financial statements.

- (i) Each Bank Business Day, ERCOT will issue a report of each Letter of Credit issuer detailing the issuer's dollar amount of the Letters of Credit currently issued to ERCOT, the issuer's computed aggregate concentration limit, and the unused capacity under that limit. Market Participants may inquire of ERCOT about intra-day changes to the amount of posted Letters of Credit.
- (ii) If a Letter of Credit issuer limit is breached, Counter-Parties utilizing that issuer will be notified and no new LCs from that issuer will be accepted while the limit remains breached.
- (iii) After four months of the limit in breach, ERCOT will no longer accept new LCs or amendments to existing LCs from that issuer.
- (iv) LCs currently held as collateral would not be rejected.
- (v) ERCOT in its sole discretion may authorize exceptions to these limits.
- (vi) Issuer limits will be reviewed by CWG and approved by F&A no less often than annually.

3. Corporate Guarantee

- a. Guarantor must meet applicable credit standards as stated in the ERCOT Protocols.

Electric Reliability Council of Texas, Inc.

Creditworthiness Standards

Referenced in Section 16.11 of the Nodal Protocols

- b. Guarantee must be on the standard form document approved by the ERCOT Board of Directors; no modifications are permitted
- c. Subject to a limit of \$50 million of guarantees per Counter-Party and an overall limit of \$50 million per guarantor for all ERCOT Counter-Parties.

4. Foreign Guarantee

- a. Guarantor must meet applicable credit standards as stated in the ERCOT Protocols, as well as the standards listed below.
- b. The country of domicile for the foreign guarantor must:
 - i. Maintain a sovereign rating greater than or equal to AA with Fitch or S&P or Aa2 with Moody's.
 - ii. If the ratings are below those in (i) above, but greater than or equal to A with Fitch or S&P or A2 with Moody's, then the sovereign rating would qualify if the country had a ceiling rating of AAA with Fitch or S&P or Aaa with Moody's.
 - iii. Must have reciprocity agreements with the U.S. regarding enforcement and collection of guarantee agreements.
- c. The foreign guarantor must:
 - i. Provide to ERCOT annual audited financial statements, prepared in accordance with U.S. generally accepted accounting principles or international accounting standards and semi-annual unaudited financial statements.
 - ii. Provide a guarantee in one of the standard form documents approved by the ERCOT Board of Directors for foreign Entities; no modifications are permitted.
Provide an opinion letter from a law firm unaffiliated with the Counter-Party or guarantor affirming that the guarantee agreement is enforceable in the U.S. and in the jurisdiction of the corporate guarantor's domicile

5. Surety Bond

- a. Must be issued by an insurance company with a minimum rating of A- with Fitch or S&P or A3 with Moody's.
- b. Surety Bond must be on the standard form document approved by the ERCOT Board of Directors; no modifications are permitted.
- c. Subject to a limit of \$10 million per Counter-Party per insurer and an overall limit of \$100 million per insurer for all ERCOT Counter-Parties.

Revisions to the Creditworthiness Standards shall be reviewed by the Credit Work Group and the Finance and Audit Committee and approved by the ERCOT Board.