Moody's
INVESTORS SERVICE

NRC Decommissioning Fund Workshop

Credit Implications Associated With Nuclear Generation for U.S. Utilities

Jim Hempstead, Senior Vice President

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Industry Rating Methodologies

- Classified by industry sector
- Prepared by each industry rating team
- Must meet minimum standards and be approved by the Credit Policy function
- Must be updated regularly
- Provides guidance as to how to form a rating recommendation
- Moody's rating methodologies balance qualitative risk factors against quantitative factors
- Generally, a rating gap of more than two notches is considered an outlier; flag for discussion, not rating action
- The rating methodology is an important tool in the ratings process, but does not dictate ratings

Scope of Rating Methodologies

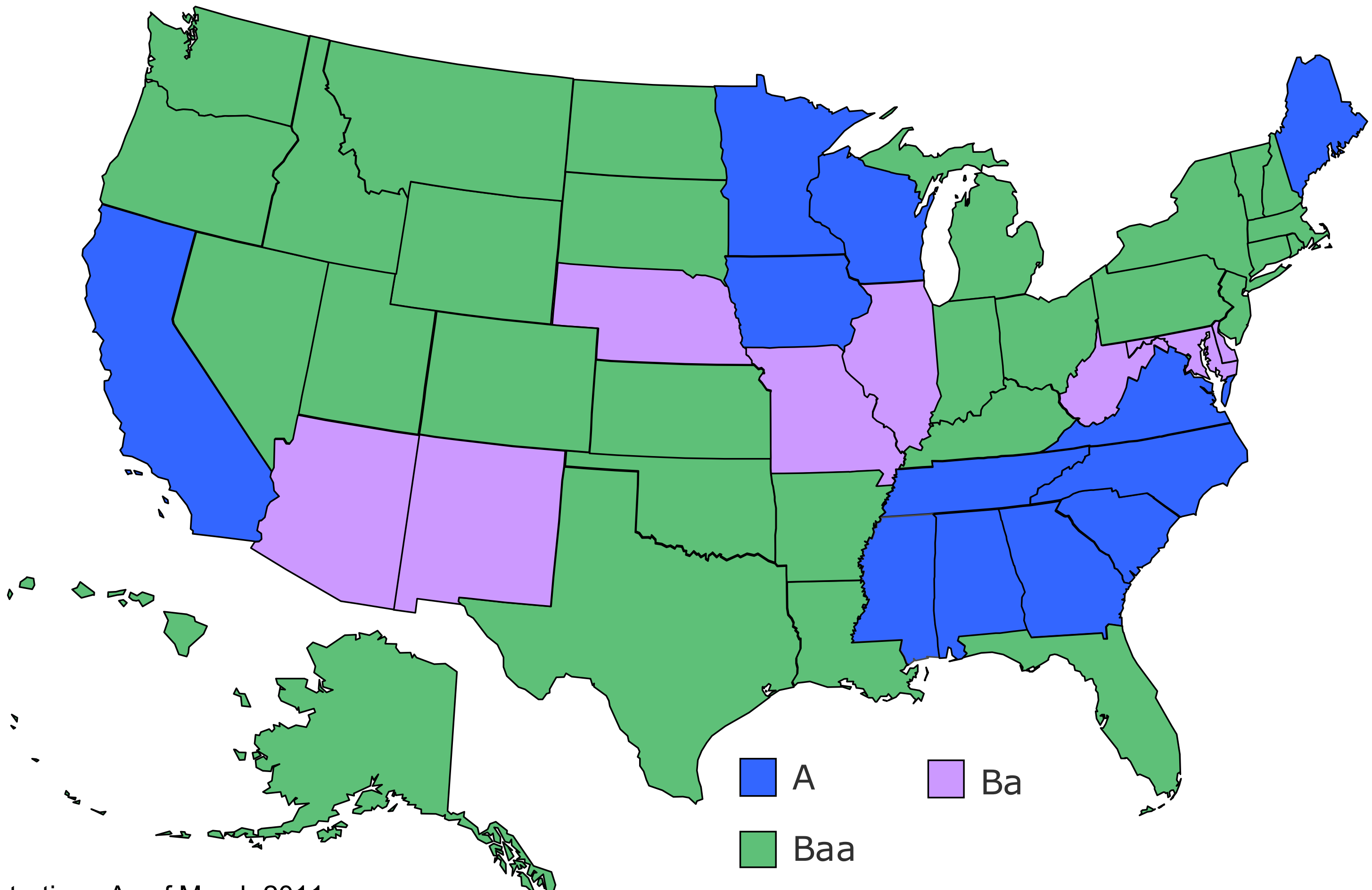
- Industry overview and industry risk analysis
- Industry credit risk factors
  - Major risk factors
  - The role of external support
  - Regional differences
- Company credit risk factors
  - Qualitative factors
    - Standards by broad rating category
  - Quantitative metrics
    - Key ratios used by Moody's for companies in the industry (typically 3 year averages)
    - General mapping to rating scale
    - Industry-related accounting adjustments for credit analysis

Moody's Rating Methodology for Regulated Electric and Gas Utilities

Focuses on the following 4 key rating factors:

Rating factor	Considerations
1. Regulatory Framework [25%]	▪ Consistency, Predictability, Supportiveness
2. Ability to Recover Costs & Earn Returns [25%]	▪ Rate/Tariff Reviews, Outcomes, Timeliness
3. Diversification [10%]	▪ Market Position ▪ Generation and Fuel Diversity
4. Key Credit Metrics [40%]	▪ Liquidity ▪ CFO pre-WC + Interest / Interest ▪ CFO pre-WC / Debt ▪ CFO pre-WC - Dividends / Debt ▪ Debt / Capitalization or Debt / Regulated Asset Value

Factor 1 – Regulatory Framework



Illustrative - As of March 2011

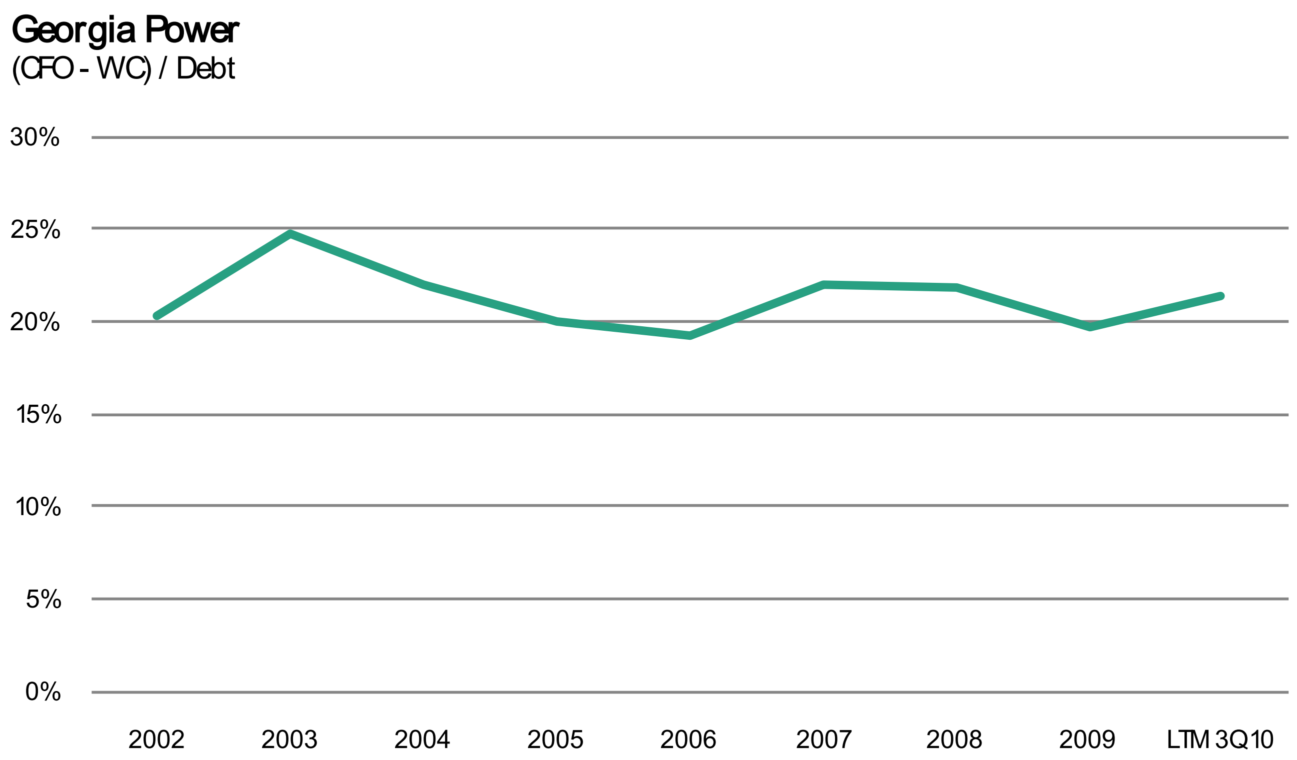
Note: T&Ds in Texas without POLR obligations are rated A for Factor 1.

Key Indicators Defined by the Methodology

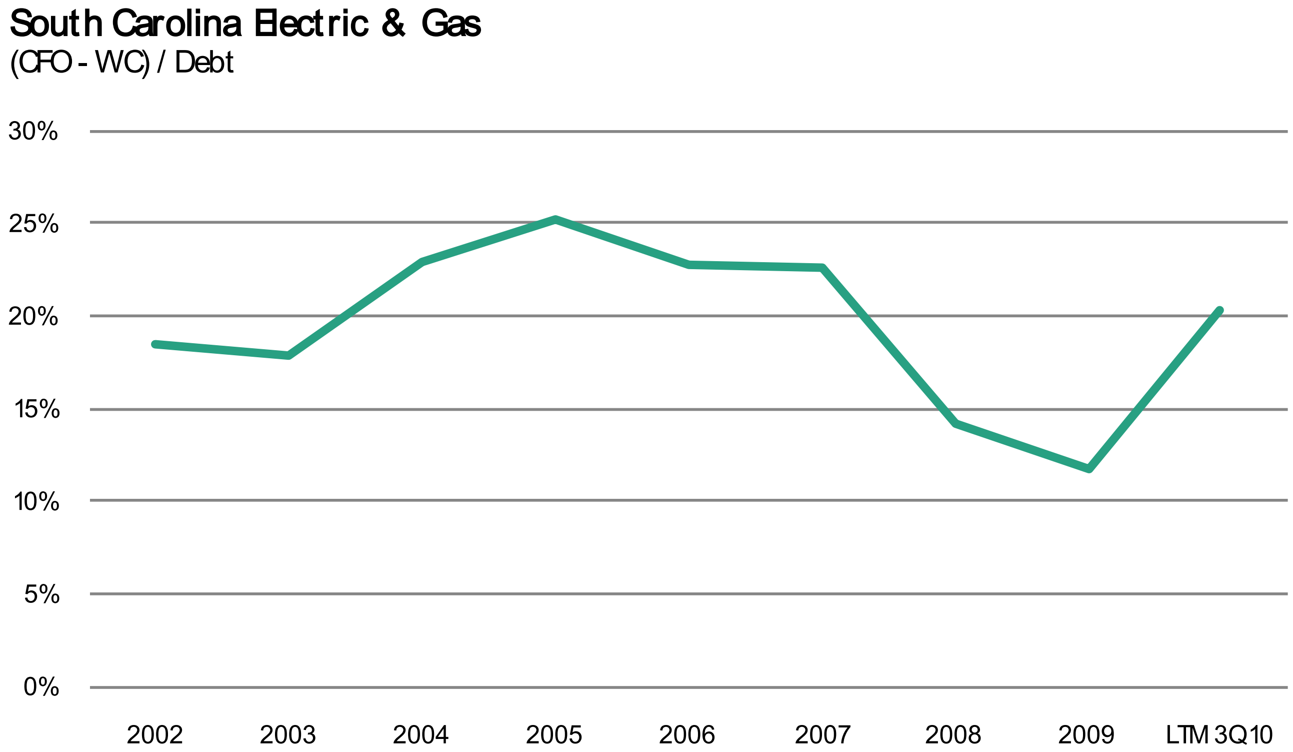
Key Indicators

	Aaa	Aa	A	Baa	Ba	B
CFO pre-WC + Interest/Interest (7.5%)	> 8.0x	6.0x - 8.0x	4.5x - 6.0x	2.7x - 4.5x	1.5x - 2.7x	< 1.5x
CFO pre-WC/Debt (7.5%)	> 40%	30% - 40%	22% - 30%	13% - 22%	5% - 13%	< 5%
CFO pre-WC - Dividends/Debt (7.5%)	> 35%	25% - 35%	17% - 25%	9% - 17%	0% - 9%	< 0%
Debt/Capitalization (7.5%)	<25%	25% - 35%	35% - 45%	45% - 55%	55% - 65%	> 65%

Georgia Power



South Carolina Electric & Gas



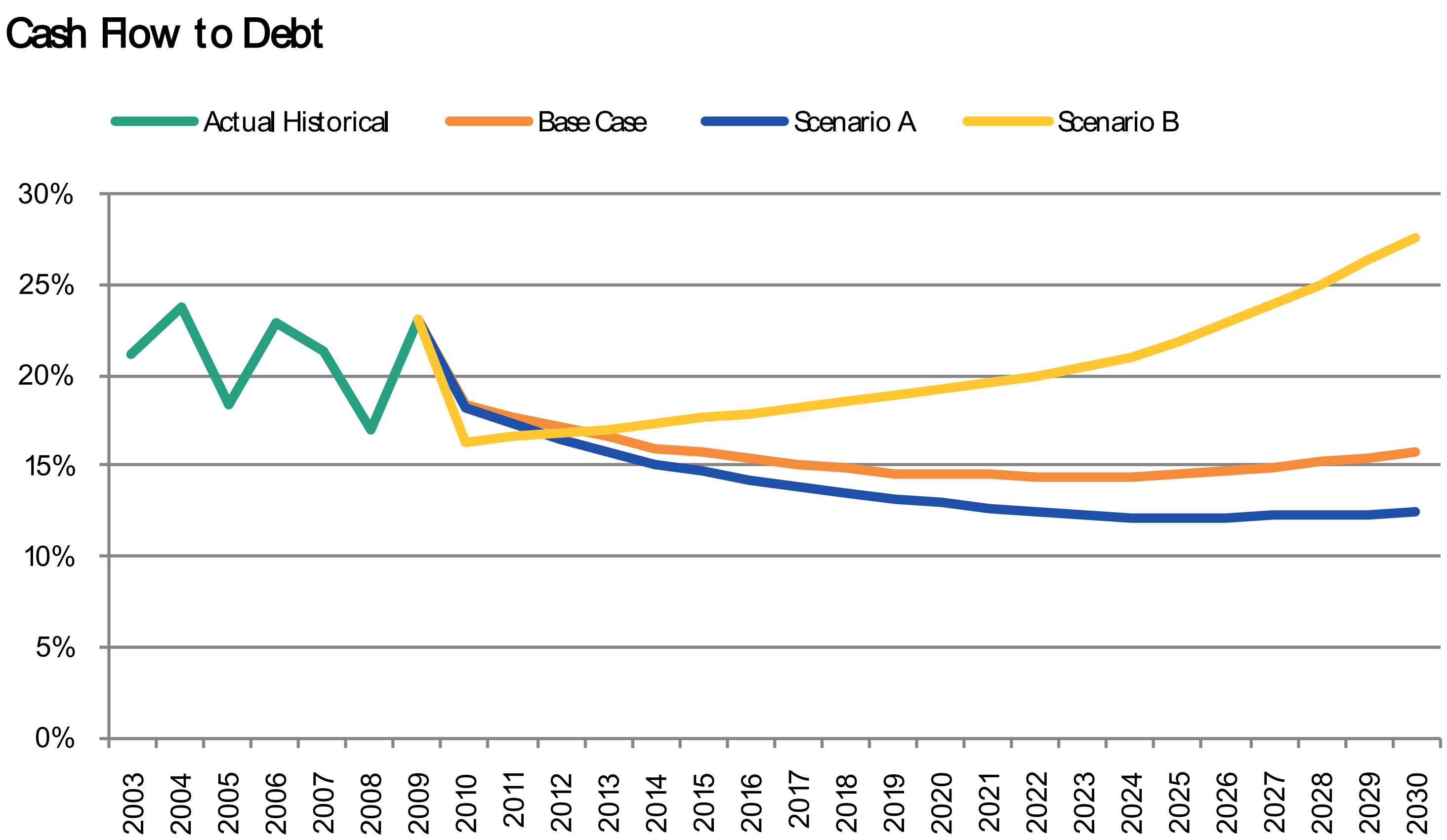
Financial Metric Averages (3 year)

	Parent	Vertically	T&D	G&T	Muni*	Merchant
Rating	Baa1 / Baa2	A3 / Baa1	A2 / A3	A2 / A3	Aa3 / A1	Ba / B
CFO / debt	16%	21%	16%	6%	12%	16%
CFO / rev	19%	20%	16%	11%	20%	18%
Div / CFO	24%	22%	34%	5%	10%	223%
D / (D&E)	63%	53%	56%	83%	90%	67%
PPE/Assets	62%	72%	58%	72%	70%	54%
Debt / PPE	67%	48%	65%	100%	40%	84%
Rev / Debt	87%	104%	105%	54%	50%	85%

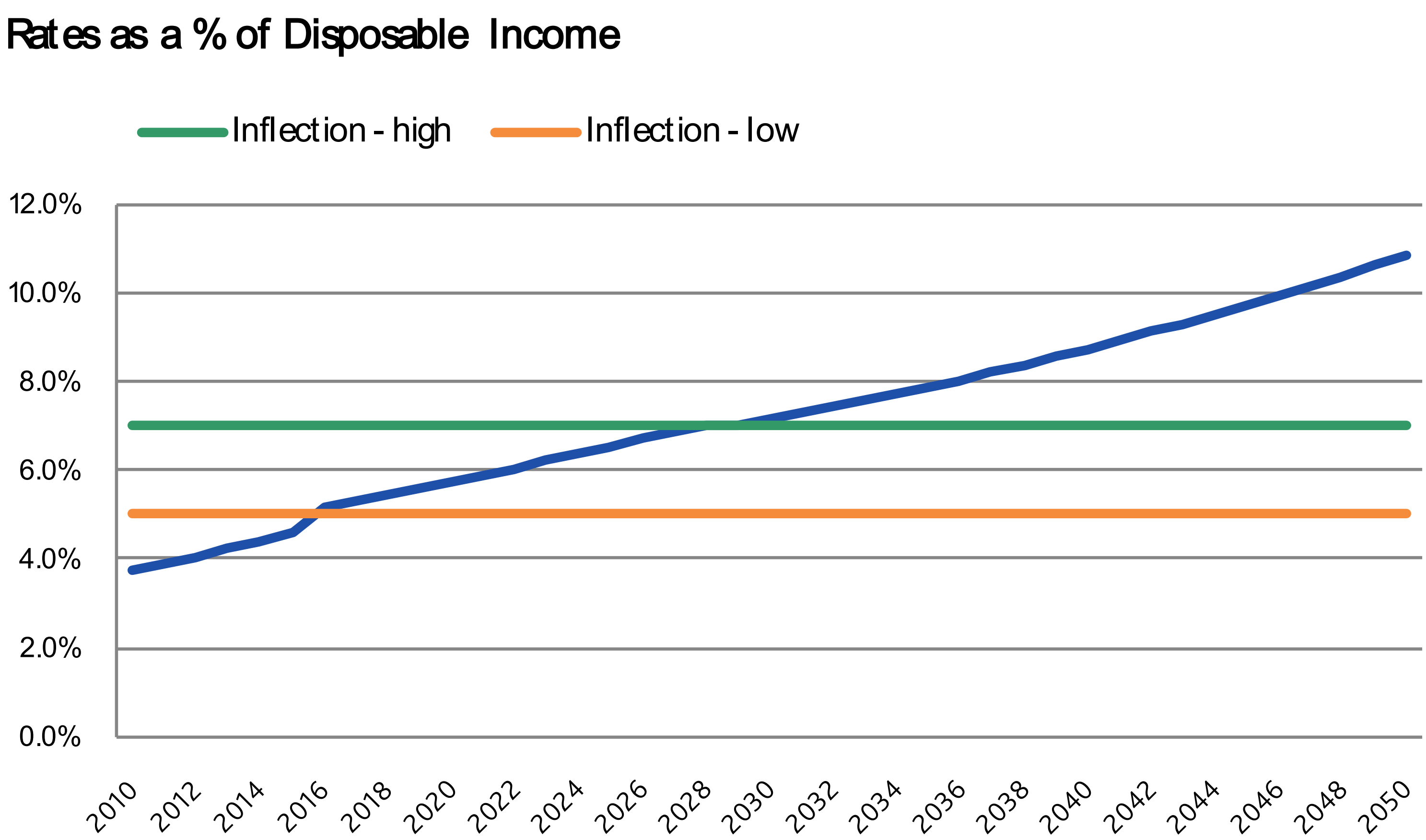
*Includes municipal electric utility systems and Joint Power Agencies.

Moody's estimates.

Scenario Analysis



Inflection Point



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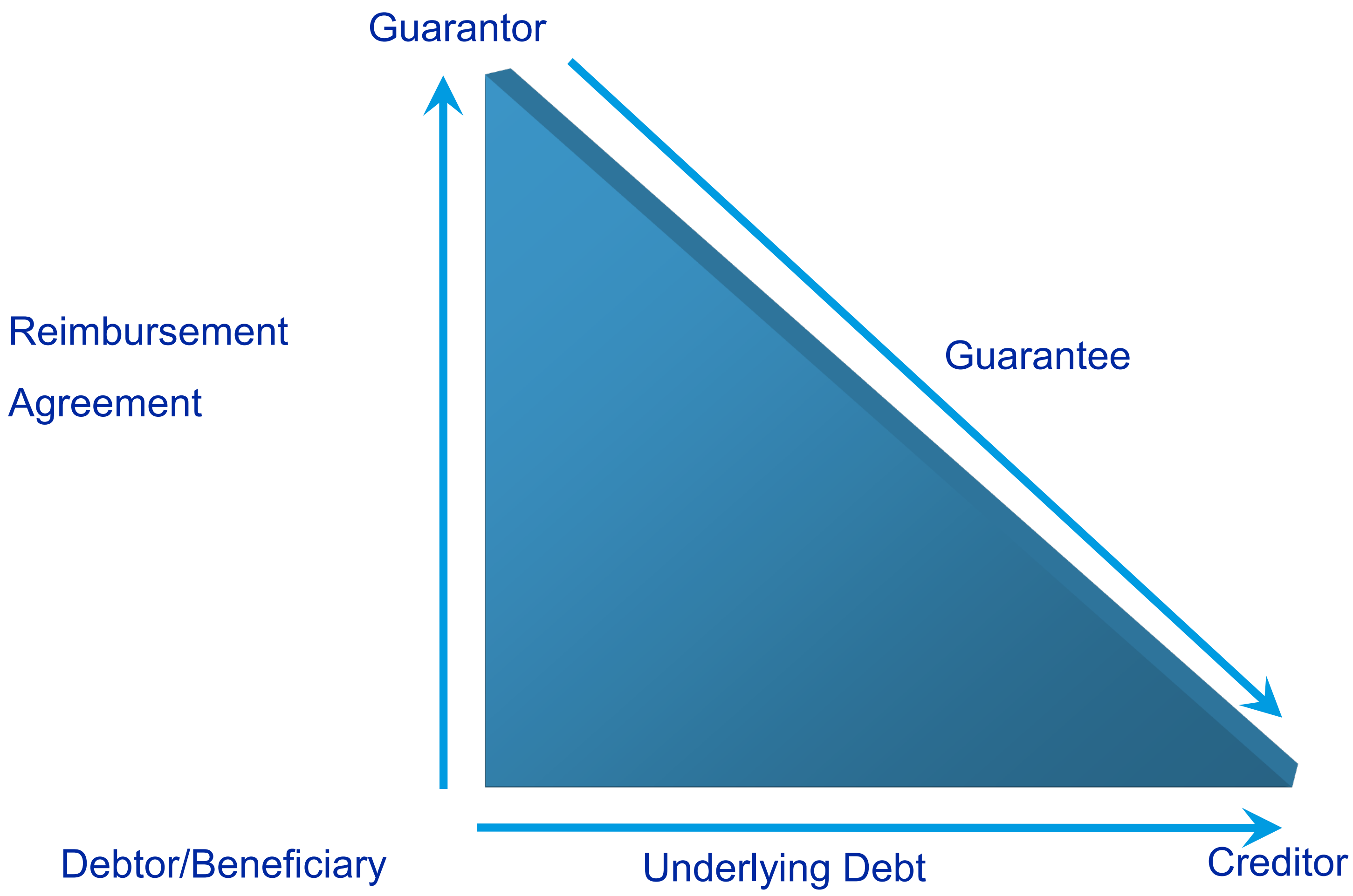
Appendix

Credit Substitution

Jim Hempstead, Senior Vice President

March 2011

Elements of Guarantee



What is a Guarantee?

» A legally enforceable promise given by one person to meet obligations of another, in our case debt

» Guarantees are variants of contracts and are different from other forms of debt-like obligations: bonds, checks, etc.

- Subject to 2 level of defenses
- Bankruptcy risk of the debtor
- Payment can be delayed by legal process, according to the terms of the guarantee
- Not limited to payment of money: performance guarantees are an example of this

Uses of Guarantees

- Public Finance
  - Gas prepayment bonds
  - Tender Option Bonds
  - Parent-subsidy transactions in higher ed and health care
  - County guarantees
- Corporate and FIG
  - Acquisitions
  - Recapitalizations
  - Financing of long-term debt or commercial paper by a sub of a rated company
  - Op. Co. guarantees notes of Hold Co. (and vice versa)
- Sovereign
  - Country guarantees debt of banks
- Structured Finance
  - Servicing, custody and trust arrangements
  - Swaps
  - Indemnities

What is Credit Substitution?

» Device used to achieve credit substitution: passing through the guarantor’s applicable rating under the expectation that the guarantor will not assert any defenses to payment.

– Very important: <u>there are many situations/structures in which a guarantee is used but don’t call for credit substitution</u>

– What ultimately constitutes credit substitution will be a rating committee decision

– Some related entities may achieve credit substitution through guarantees with less than all of our ideal characteristics

Nine Core Principles of an Ideal Guarantee

» 9 ideal characteristics of a guarantee that achieve credit substitution

» Reflects a flexible approach to determining credit substitution due to the wide variations in credit factors across lines of business.
  - Credit committees determine what factors to apply
  - Related entities (parent/subsidiary) may achieve credit substitution without strict adherence to these principles

Nine Core Principles of an Ideal Guarantee

1) Guarantee is irrevocable and unconditional

  - Goal is to have the guarantee function like any third-party instrument, like a letter of credit or bond insurance, in which the provider of the credit enhancement must pay without recourse to defenses

9 Core Principles of an Ideal Guarantee

2) Full and timely payment of the underlying obligation

- Guarantor shouldn’t pay any later than when the underlying obligation is due
- Covers full principal and interest of the underlying obligation, and other payment obligations, like a redemption premium or penalty interest
- No additional costs to bondholder for relying on the guarantee
- No additional grace period should be added to the guarantee

Nine Core Principles of an Ideal Guarantee

3) Covers payment and not collection

- Guarantees of collection require exhaustion of all judicial remedies before payment
- Guarantees of payment requires the guarantor to pay on demand.
  - No need for creditor to look to the debtor for payment
  - Needs to be explicit in the document

Example of actual language

> The obligations of the County under this County Guaranty Agreement shall be full, absolute, irrevocable, and unconditional, and shall remain in full force and effect until the entire principal of (including Sinking Fund Installments, if any) and interest on the Series 2010 Bonds shall have been paid or duly provided for in accordance with the provisions of the Bond Resolution. The County Guaranty is a guaranty of payment and not of collectability.

Nine Core Principles of an Ideal Guarantee

4) Covers preference payments

- Includes payments recovered as a result of a bankruptcy or other insolvency proceeding

Example of actual language

> The County further guarantees that all payments made with respect to the Series 2010 Bonds will, when made, be final and agrees that if such payment is recovered from or repaid by or on behalf of the Authority or the holders of the Series 2010 Bonds in whole or in part in any bankruptcy, insolvency or similar proceeding instituted by or against the Authority or the Company, the County Guaranty shall continue to be fully applicable to such liabilities to the same extent as though the payment so recovered or repaid had never been originally made on such liabilities.

Nine Core Principles of an Ideal Guarantee

5) Waives all defenses

- 2 types: surety and contractual
- Surety defenses go to the obligation of the guarantor to pay. Cannot be waived in one blanket waiver; must be explicitly laid out.
  - Amendment or forbearance affecting underlying agreement or collateral
  - Lack of authorization
  - Debtor's bankruptcy or inability to pay
  - Incomplete performance
  - Delay in making claim
  - Lack of complete disclosure
  - Failure to notify the guarantor
  - Failure of debtor to satisfy a condition precedent
  - Underlying contract is void, unenforceable, illegal or other defect

Nine Core Principles of an Ideal Guarantee

Example

The obligations of the County hereunder shall not be affected, modified or impaired upon the occurrence from time to time of any event, including without limitation any of the following, whether or not with notice to, or the consent of, the County:

(a) The waiver, compromise, settlement, release or termination of any or all of the obligations, covenants or agreements of the Authority which are contained in the Bond Resolution and any other Program Document, or of the payment, performance or observance thereof;

(b) The failure to give notice to the County of the occurrence of an event of default under the provisions of this County Guaranty Agreement;

(c) The transfer, assignment or mortgaging or the purported transfer, assignment or mortgaging of all or any part of the interest or security interest of the Authority in the Projects;

(d) The extension of the time for payment of the principal of or interest on the Series 2010 Bonds or of the time for performance of any obligations, covenants or agreements under or arising out of the Program Documents;

(e) The modification or amendment (whether material or otherwise) of any obligation, covenant or agreement set forth in the Program Documents;

(f) The taking, suffering or the omission of any of the actions referred to in the Series 2010 Bond Resolution or of any actions under this County Guaranty Agreement;

(g) Any failure, omission, delay or lack on the part of the Authority to enforce, assert or exercise any right, power or remedy conferred on the Authority in this County Guaranty Agreement, the Series 2010 Bond Resolution or any other act or acts on the part of the Authority or any of the holders from time to time of the Series 2010 Bonds;

(h) The voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all of the assets, marshalling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, arrangement, composition with creditors or readjustment or other similar proceedings affecting the Authority or any party to the Program Documents or any of the assets of any of them, or any allegation or contest of the validity of the County Guaranty, or the Series 2010 Bond Resolution;

(i) To the extent permitted by law, any event or action that would, in the absence of this clause, result in the release or discharge by operation of law of the County from the performance or observance of any obligation, covenant or agreement contained in this County Guaranty Agreement; or

(j) The default or failure of the County fully to perform any of its obligations set forth in this County Guaranty Agreement.

Nine Core Principles of an Ideal Guarantee

5) Waives all defenses

- Contractual defenses go to the obligation to pay and include fraud, duress, failure of consideration, breach of representations and warranties, payment, statute of frauds (certain contracts must be written down), statute of limitations, accord and satisfaction, failure to deliver notices and usury.
- Important language: waiver of set-off, recoupment, counterclaim and any other defenses available to the guarantor or debtor

Example of actual language

> No set off, counterclaim, reduction, recoupment, or diminution of any obligation, or any defense of any kind or nature which the County or the Authority has or may have against the Authority, the County, the Trustee or against any holder of the Series 2010 Bonds, shall be available to the County or the Authority hereunder against the Authority, the County or the Trustee or anyone succeeding to the interest of the Authority, the County or the Trustee.

Nine Core Principles of an Ideal Guarantee

6) Term of guaranty is as long as the underlying obligation

- Includes bankruptcy or other regulatory preference periods
- Remains outstanding even if there is a partial settlement
- Expires upon payment of the obligation in whole
- If the guarantee terminates prior to the maturity of the obligation, guarantor will need to provide sufficient funds to cover the remaining obligation
- Guarantee should not terminate unilaterally unless the guarantor must provide an alternate guarantee consistent with credit substitution

Nine Core Principles of an Ideal Guarantee

7) The guarantee is enforceable against the guarantor

- Signed by guarantor
- We review legal opinions to help inform our view of a guarantee's enforceability

Nine Core Principles of an Ideal Guarantee

8) Transfer, assignment and amendment of the guaranty does not result in deterioration of the credit support

- Credit substitution achieved if the original guarantor retains liability for the underlying obligation
- Credit substitution may be undermined if there is a novation as a result of the transfer or if the amendment changes the terms of the guarantee.

Nine Core Principles of an Ideal Guarantee

9) Terms of the guarantee are governed by a “guarantee-friendly” jurisdiction

   – New York is an example of a jurisdiction that treats waivers more favorably than others

Guarantees in Corporate Finance

- Most guarantees in CFG are between *related entities:*
  - Acquisitions, e.g. ABC acquires XYZ and guarantees XYZ's debt
  - Financing subsidiaries
  - OpCo/HoldCo structures in leveraged finance
- Not all guarantees are structured specifically to achieve credit substitution
- Related entities may have strong economic incentives to honor the obligation
- If the terms of guarantee do not meet core principles, rating committee may consider:
  - Are the guaranteed entity's operations integral to the guarantor?
  - Are the operations interwoven?
  - Would guarantor face business/financial interruption if it didn't honor the obligation?

Conclusion

- Guarantees are very common
  - Popular because of flexibility
  - Relatively simple
  - Allows specific obligations to be backed up
- They have risks
- The risks can be avoided by careful drafting.
- Not all guarantees are used for credit substitution
- Rating committees will be the ultimate arbiters of credit substitution
- Not all elements of an ideal guarantee need to be incorporated in all situations for credit substitution

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