“Debt By Any Other Name: Are Ratings Reality? Does the Accounting Make It So?”

Harvard Electricity Policy Group
Cambridge, MA
May 30, 2008

Richard W. Cortright, Jr., Managing Director
U.S. Utilities and Infrastructure Ratings

CONFIDENTIAL AND PROPRIETARY.
Permission to reprint or distribute any content from this presentation requires the written approval of Standard & Poor’s.
Copyright (c) 2006 Standard & Poor’s, a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.
What is A Credit Rating?

Most Fundamentally, A Credit Rating Represents Standard & Poor’s Opinion Regarding …

➢ The Likelihood That An Issuer Will Default On Its Financial Obligations

➢ The Capacity And Willingness Of An Issuer Or Obligor To Pay Principal And Interest In Accordance With The Terms Of The Obligations

*A Rating Is Derived from Art, not Science*
The Analytical Process: Deriving The Corporate Credit Rating

- **REGULATION**
- Markets
- Operations
- Competitiveness
- **MANAGEMENT**

Business Risk

- Profitability
- Cash Flow Protection
- Liability Management
- Financial Flexibility
- Financial Policy

Financial Risk

CORPORATE CREDIT RATING
Rationale for Adjusting Financial Statements

- Issuers’ Audited Financial Statements Are Not Necessarily Viewed As Representative Of Analytical “Truth”

- Adjustments Create A More Accurate Depiction Of The Economic Reality Of An Issuer’s Risks, Rights And Benefits

- Adjustments Enable More Meaningful Peer And Period-over-period Comparisons
Principal Adjustments to Financial Statements

Common Adjustments

Additions To The Balance Sheet:
- Operating And Capital Leases (PPA Exception)
- Purchased Power Agreements
- Pensions And Post-retirement Benefit Obligations
- Asset Retirement Obligations

Subtractions From The Balance Sheet:
- Stranded Cost Securitization Financings
- Hybrid Preferred Instruments

Key Ratios Affected
- Funds From Operations (FFO) To Total Debt
- FFO To Interest Coverage
- Total Debt To Total Capitalization
Components of Imputed Debt

Reconciliation of Adjusted Debt

<table>
<thead>
<tr>
<th>Debt component</th>
<th>Dollars ($ bil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported Debt</td>
<td>425.0</td>
</tr>
<tr>
<td>Operating leases</td>
<td>450.0</td>
</tr>
<tr>
<td>Power Purchases agreements</td>
<td>475.0</td>
</tr>
<tr>
<td>Postretirement benefit obligations</td>
<td>500.0</td>
</tr>
<tr>
<td>Asset retirement obligations</td>
<td>525.0</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>550.0</td>
</tr>
<tr>
<td>Other/Misc</td>
<td>575.0</td>
</tr>
<tr>
<td>Other of balance sheet</td>
<td>600.0</td>
</tr>
<tr>
<td>LDC Gas Inv (less)</td>
<td>625.0</td>
</tr>
<tr>
<td>Hybrid adjustment</td>
<td>650.0</td>
</tr>
<tr>
<td>Securitized utility cost recovery</td>
<td>675.0</td>
</tr>
<tr>
<td>Non-Recourse Debt</td>
<td>700.0</td>
</tr>
<tr>
<td>Adjusted Debt</td>
<td>725.0</td>
</tr>
</tbody>
</table>

CONFIDENTIAL AND PROPRIETARY.

Permission to reprint or distribute any content from this presentation requires the written approval of Standard & Poor's.
Purchased Power Agreements --- Credit Characteristics

PPA Debt Imputation Was Born From The Need To Make Meaningful Comparisons Between Utilities That Build And Those That Buy

- **Benefits**
  - Shifts Construction Risk And Operating Risk On To Third Party
  - Reduces Cost Variability
  - Provides Degree of Supply Diversity

- **Risks**
  - Creates A Fixed, Debt-Like Financial Obligation
  - Ultimate Recovery Remains Subject to Regulatory Approvals
Debt Imputation of PPAs

- PPAs Represent Fixed Obligations
  - The Capacity Payments Owed To The Provider
- Standard & Poor’s Imputes A Debt Equivalent That Is Based On This Fixed Obligation
  - The Goal Is To Reflect In Our Financial Metrics The Credit Exposure That A PPA Entails
- Imputation Seeks To Achieve Comparability Of Financial Commitments
  - Without Adjustments, A Company That Builds Generation To Meet Requirements Reflects 100% Of Generation Debt On The Company Balance Sheet

But...
- A Company That Exclusively Purchases Has An Obligation Which Is Not Reflected On Its Balance Sheet
Calculation of PPA Debt Equivalent

- Calculate NPV Of Capacity Payments
  - The Discount Rate Reflects Utility’s Average Cost Of Debt
  - NPV Calculation Is Applied From Contract Inception Through Termination

- A “Risk Factor” Adjustment Is Made To The Result, Typically Either 0%, 25% Or 50%

- This Resulting Amount, As Well As An Imputed Interest Expense And Depreciation Expense, Are Incorporated Into The Utility’s Financial Statements

- Financial Metrics Are Adjusted Accordingly
What is a Risk Factor and Why is it Used?

- A Risk Factor Incorporates A Recognition That PPAs Are Not In Fact Debt, And Adjusts Downward The Off-Balance Sheet Debt Imputation
- The Key Consideration Is The Regulatory Mechanism In Place For Full And Timely Recovery Of Fixed Commitment That A PPA Represents
- A Risk Factor Attempts To Measure, And Distinguish, The Level Of Risk Of Recovery By Jurisdiction
- Use Of A Risk Factor Acknowledges Regulators’ History Of Allowing Recovery Of PPA Costs
Guidelines for Determining Risk Factors

- 50% Risk Factor – Utility Passes Capacity Payments Through In Base Rates

- 25% Risk Factor – Utility Passes Capacity Payments Through In A Fuel Clause Adjuster

- 0%– Utility Has Legislative Authority To Pass Through Costs
Example – 12-Year PPA Recovered Through FAC

1. Review PPA Terms

2. Isolate fixed capacity per year

<table>
<thead>
<tr>
<th>Year</th>
<th>$m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>500</td>
</tr>
<tr>
<td>2</td>
<td>500</td>
</tr>
<tr>
<td>3</td>
<td>500</td>
</tr>
<tr>
<td>4</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>500</td>
</tr>
<tr>
<td>Thereafter</td>
<td>4,000</td>
</tr>
<tr>
<td>Total</td>
<td>$6,500</td>
</tr>
</tbody>
</table>

NPV@ 6.5%  
= $4,079

25% * $4,079 = $1,020

3. Calculate NPV using utility’s average cost of debt over last 3 years

4. Multiply by risk factor between 0 - 50%
# Using Results to Adjust S&P Ratios

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>...</th>
<th>Year 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds from operations</td>
<td>2,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directly issued debt</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder equity</td>
<td>9,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed capacity commit</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>...</td>
<td>500</td>
</tr>
</tbody>
</table>

NPV of fixed capacity payments $4,079 @ 6.5% discount rate
Applying 25% risk factor $1,020 = $1,020 * 0.25
Imputed interest $66 = $1,020 * 6.5%
Depreciation expense $59 = ($500 * 0.25%) - $66

**S&P Credit Metrics - Without PPA Adjustments**

- **FFO/interest x** 4.8 = \( \frac{2,500 + 650}{650} \)
- **FFO/total debt (%)** 25% = \( \frac{2,500}{10,000} \)
- **Debt/Capitalization (%)** 53% = \( \frac{10,000}{10,000 + 9,000} \)

**S&P Credit Metrics - With S&P PPA Adjustments**

- **FFO/interest x** 4.6 = \( \frac{2,500 + 650 + 66 + 59}{650} \)
- **FFO/total debt (%)** 23% = \( \frac{2,500 + 59}{10,000 + 1,020} \)
- **Debt/Capitalization (%)** 55% = \( \frac{10,000 + 1,020}{10,000 + 9,000 + 1,020} \)
Renewable Energy PPAs

- Renewable PPAs Also Constitute An Obligation That Standard & Poor’s Will Capture Under Its Debt Imputation Methodology
  - As With “Conventional” PPA, The Utility Is Making A Decision To Purchase Rather Than Build Capacity
  - Conceptually, Logic For Imputing Renewable PPAs Is No Different
- Unlike Traditional PPAs, There Is Often No Defined Capacity Payment
  - Wind Energy Is Typically “As Available,” With Developer Assuming Output Risk
  - Solar Is Similar
  - Nuclear Can Be Structured This Way --- Point Beach
- As A Practical Matter, An Extra Step Is Required To Determine “Capacity” Payment
- A Proxy Cost of Regional Capacity --- Stay Tuned
Regulatory Response To This Criteria

- State Regulatory Commissions Have Generally Been Silent On Addressing PPA-Related Debt Imputation
- Exceptions
  - Florida
  - California
## Top 10 Power Purchase Agreements

<table>
<thead>
<tr>
<th>Company</th>
<th>Rating</th>
<th>PPA Adj</th>
<th>Total Debt</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exelon Corp.</td>
<td>BBB+/Stable/A-2</td>
<td>2,098.6</td>
<td>16,128.4</td>
<td>13%</td>
</tr>
<tr>
<td>Edison International</td>
<td>BBB-/Stable/--</td>
<td>1,513.8</td>
<td>14,685.0</td>
<td>10%</td>
</tr>
<tr>
<td>FPL Group Inc.</td>
<td>A/Stable/--</td>
<td>1,165.8</td>
<td>11,687.7</td>
<td>10%</td>
</tr>
<tr>
<td>Xcel Energy Inc.</td>
<td>BBB+/Stable/A-2</td>
<td>1,142.5</td>
<td>9,456.8</td>
<td>12%</td>
</tr>
<tr>
<td>Progress Energy Inc.</td>
<td>BBB+/Stable/A-2</td>
<td>1,053.1</td>
<td>11,607.6</td>
<td>9%</td>
</tr>
<tr>
<td>Southern Co.</td>
<td>A/Stable/A-1</td>
<td>921.6</td>
<td>16,902.0</td>
<td>5%</td>
</tr>
<tr>
<td>Sierra Pacific Resources</td>
<td>BB/ Stable/B-2</td>
<td>659.3</td>
<td>5,090.9</td>
<td>13%</td>
</tr>
<tr>
<td>Constellation Energy Group Inc.</td>
<td>BBB+/Negative/A-2</td>
<td>496.1</td>
<td>7,837.5</td>
<td>6%</td>
</tr>
<tr>
<td>MidAmerican Energy Holdings Co.</td>
<td>BBB/Negative/--</td>
<td>494.8</td>
<td>19,946.1</td>
<td>2%</td>
</tr>
<tr>
<td>Sempra Energy</td>
<td>BBB+/Stable/A-2</td>
<td>483.1</td>
<td>7,216.9</td>
<td>7%</td>
</tr>
</tbody>
</table>
Principal Adjustments – Operating Leases

Distinction Between Operating And Capital Leases Considered Artificial From Analytical Perspective

- Capitalize Discounted Stream Of Minimum Operating Lease Payments And Add To Balance Sheet As Debt
- Operating-Lease-Related Expense Is Apportioned To Interest And Depreciation Components
  - Interest Expense Is Increased By Product Of The Discount Rate And An Average Of Lease Payments
  - Depreciation Expense Is Increased By Difference Between Lease Payment And Implicit Interest Component
- Results Can Be Significant
  - American Electric Power’s Debt And Interest Expense Both Increase By About 20%
Principal Adjustments – Asset Retirement Obligations

AROs Viewed As Debt-Like

- Capitalize Discounted Stream Of Retirement Obligations, Net Of Any Dedicated Retirement Fund Assets, Salvage Value, Tax Savings, And Add As Debt
  - Reallocate To Interest Expense An Imputed Interest Cost
- Standard & Poor’s Recognizes Limitations on This Analysis Given Nature of Utility Assets, And Accordingly Discounts Adjustments Analytically
- Nuclear Decommissioning Trusts Require No Debt Imputation
  - Funded Through Customer Rates, And Probable Nature Of Recovery Result Is A Substantive Liability Defeasance
  - Safeguards Ensure Funding Sufficiency And Collection Of Decommissioning Costs In Rates
Principal Adjustments – Pensions and OPEB Obligations

Pension, Retiree Health Care And Life Insurance, And Other Deferred Compensation Viewed As Debt-like

- Objective Is To Reflect Level Of Underfunding Of Defined-Benefit Pension Obligations And Health Care Obligations (Usually Not Funded), Retiree Lump Sum Payments, Etc.
- Debt Grossed Up By Tax-Effectened Unfunded PRB Obligation
- Equity Adjusted By Difference Between Amount Accrued On Balance Sheet And Amount Of Net Over-/Under-funded Obligation, Net Of Tax
- Various Other Adjustments Related To Income And Cash Flow Statements

- NOTE: Standard & Poor’s Analytically Recognizes History Of Regulatory Support For These Expenses
Principal Adjustments – Stranded Costs

From Standard & Poor’s Encyclopedia Of Analytical Adjustments:

➢ For Rate-Regulated Utilities, We Remove The Effects Of Debt Related To Securitization Of Stranded Costs To The Extent That Debt Is Serviced Separately By The Utilities' Customers Through Direct Inclusion In Rates.

➢ Because Customers, Not The Utility, Are Responsible, By Statute, For Principal And Interest Payments, We Remove Debt From The Balance Sheet For Analytical Purposes.

➢ We Also Remove Related Amounts From Revenue, Depreciation, And Interest.
Analytic services and products provided by Standard & Poor’s are the result of separate activities designed to preserve the independence and objectivity of each analytic process. Standard & Poor’s has established policies and procedures to maintain the confidentiality of non-public information received during each analytic process.