Article Title: ARCHIVE | Criteria | Corporates | Utilities: Debt Treatment Of Contingent Capital For Energy Marketing And Trading Data: (EDITOR'S NOTE: — This criteria article is no longer current.) Standard & Poor's Ratings Services adds a debt equivalent to companies that engage in energy marketing and trading to account for the contingent liabilities associated with business risks. This article explains why, and how Standard & Poor's calculates the contingent liability amount. For companies with substantial trading operations, Standard & Poor's has added between $300 million to $600 million in contingent debt per company. Few companies engage exclusively in energy trading and marketing. Many energy and marketing companies exist to optimize the value of the assets owned by other affiliated companies that engage in power generation, midstream oil and gas, natural gas pipelines, gas storage, and electricity transmission and distribution. In the credit analysis of these companies, it can be challenging to incorporate the trading and marketing business segments into Standard & Poor's consolidated rating approach. Standard & Poor's consolidated rating approach assigns a business position score to the trading and marketing segment, as well as the other segments, to derive a company's overall business profile score. Business segments are typically weighted based on a combination of a segment's contribution to operating income, funds from operations (FFO), and the level of future capital expenditures. However, this weighting is inappropriate for trading and marketing business units because the cash flows can be volatile, which would move the business profile in accordance with the cash coming from trading and marketing. There may be years in which there is tremendous cash flow from trading and marketing, followed by years of little to none. However, the capital resources must still be allocated. In addition, the weighting does not adequately address inherent business risks. The consolidated rating is based on a cash flow analysis that contradicts the capital adequacy approach used to evaluate stand-alone energy trading and marketing companies. Therefore, a business position score for a trading and marketing company does not capture the risks imposed on the consolidated entity. However, it is still important to evaluate operating margins and operating cash flow (both historical and forecast) from the trading and marketing businesses to determine contribution and volatility levels. In this regard, operating margins from speculative trading will not be considered for rating purposes, because these revenues are unsustainable. Standard & Poor's uses a capital adequacy model to analyze trading and marketing risks. The contingent liability is reflected in a company's consolidated financial risk profile by treating the capital adequacy requirement as a debt-like obligation on the consolidated balance sheet. This adjustment is made to reflect the inherent risks in trading and marketing: the lack of sufficient capital to carry on its business as it grows, the need to hold positions over time (even hedged positions), and to cover unexpected losses. Although some trading and marketing funding may come from cash on hand, the use of a debt equivalent reflects the reality that unexpected capital needs arising from market changes will be initially funded with debt, potentially from a revolving credit agreement or a letter of credit. The imputed debt will affect calculated leverage ratios (adjusted debt to total capital and FFO to total debt) and cash flow coverage ratios (mainly adjusted FFO interest coverage). The imputed debt is used in the base case financial projections because from a ratings perspective, the company should withstand reasonable changes in the marketplace without suffering a ratings downgrade. The capital adequacy component differs from the liquidity required due to ratings triggers. The ability to weather changes in the marketplace is an integral part of the company's ongoing business. The company must have sufficient capital available to withstand commodity market changes, and the expected short-term debt and the commensurate interest expense are added to the financial ratios. However, an investment-grade company is also expected to remain solvent in the event of a ratings downgrade and should have lines of credit available to meet liquidity requirements under ratings triggers. While a downgrade to subinvestment grade is expected to cause financial distress, it should not cause a downward spiral into bankruptcy. If it does, the company may not be rated investment grade in the first place. Although the potential debt associated with a ratings downgrade is not added to the base case financial ratios, the investment-grade company should have sufficient liquidity to meet ratings triggers. As the consolidated rating of company will be influenced by the capital requirements of its trading and marketing arm, the stand-alone rating of a trading and marketing company can be influenced by its parent's rating. If the trading and marketing operation is seen as fundamental to the greater business and key to selling the output of a generating arm, then Standard & Poor's can attribute some parental support to the trading

company. It is possible for the ratings to be equalized, although the trading company would have to be integral and essentially inseparable from the parent. Assessing the risk of trading and marketing operations from a contingent capital perspective entails analyzing three key risks: market risk, operational risk, and credit risk. Each category of risk is quantified and the sum is then added as contingent debt to the financial ratios. When evaluating market risk, Standard & Poor's looks at the potential loss of trading income over a specified time period. Although we currently use a company's value at risk (VaR) statistic, we attempt to make the statistic uniform across companies by defining a 10-day holding period and a 99% confidence interval. For investment-grade ratings, we have required that a company have 4 times the calculated VaR as contingent capital. For example, assume company X calculates its VaR at $50 million, assuming a 10-day holding period and a 99% confidence interval. Standard & Poor's would add $200 million (4 times $50 million) as a contingent capital debt equivalent. Operational risk is linked to market risk and includes the potential that the trading company may not record trades accurately or that errors in operating activities may cause a draw on capital resources. As an adjustment for operational risk, Standard & Poor's has used an average of 50% of the VaR, assuming a 10-day holding period and a 99% confidence interval. Therefore, for company X, we would add $100 million for operational risk (50% of the $50 million VaR, times four). The financial community should remember that Standard & Poor's continually refines the process of assessing market and operating risk and is exploring other metrics to determine whether they better quantify these risks. In addition to refining market and operating risk metrics, we are also refining our credit risk assessment for energy trading and marketing. Specifically, how to quantify the capital at risk from counterparty exposure. Standard & Poor's believes that this methodology captures a significant portion of the credit risk, but we continue to refine the process and explore other metrics to provide a better quantification of the risk. For example, correlation risk is not factored into the current methodology and the credit deterioration of one large counterparty could have a "daisy chain" effect on other industry players. Standard & Poor's methodology first involves an evaluation of a firm's counterparties, with a focus on their creditworthiness. Next, we apply a default probability to a counterparty's unsecured credit line (trading line of credit). The tenor of the default probability in Standard & Poor's methodology has been one year, reflecting the average duration of a portfolio (this metric is under review, given that a one-year default probability may understate the risk). We then multiply the default probability by the credit line amount to determine the credit risk. For example, assume that company X offers $500 million in total credit lines to 'BBB' rated companies. We would multiply $500 million by 0.91% (the one-year default probability for 'BBB' rated companies) for a total of $4.55 million. The process would then be repeated for all rating categories and the sum multiplied by four. For an investment-grade rating, we have concluded that a company should have 4 times the calculated value as a contingent capital requirement. This total would be added as a contingent capital debt equivalent for financial ratio calculations.