Appendix: Standard and Poor's PPA Debt Equivalence and Credit Statistics Calculations

PPA Debt Equivalence Methodology

S&P initially addressed the "pros and cons" of utilities' purchasing power rather than building their own plants in a "Credit Comment" published in November, 1991. In that report S&P noted the benefits associated with purchased power while pointing out S&P's belief that utilities absorb significant market, operating, regulatory, and financial risks when they enter into purchased power contracts with non-utility generators. S&P went on to present its method of adjusting a utility's financial statements to capture the off-balance sheet obligations associated with purchased power. Since that report was published, S&P has periodically adjusted its approach, and its most recent refinements were adopted in November, 2006. The debt equivalence and credit statistic algorithms used in the analysis presented in this paper are consistent with S&P's current approach, which is described below and in Table 1.

In November 2006 S&P proposed that contract fixed (capacity) payments be treated as perpetuities, or "evergreened," to reflect the long-term load serving obligations borne by utilities. However, S&P's analyst for PG&E has indicated that, with the level and quality of forecast detail PG&E provides, S&P does not deem it necessary to apply evergreening to PG&E's forecast of PPA contract capacity payments. S&P also reported that it plans to refine its traditional approach for estimating the capacity payments for renewables and other PPAs where the contract price is stated as a single, all-in energy price. Instead of assuming one half of the all-in energy payment is for capacity, S&P plans to estimate capacity payments by employing an as yet unpublished proxy capacity charge, stated in dollars per kilowatt-year, and multiply that figure by the number of kilowatts under contract. S&P's analyst noted that they have not moved forward on this proposal and she continues to assume half of PG&E's renewables payments are for capacity.

S&P determines debt equivalence as the present value of PPA capacity payments, discounted at the utility's average cost of debt, and multiplied by a risk factor. The risk factor reflects the credit analysts' assessment of the probability that PPA costs will be recovered in rates and it varies depending on state legislative and regulatory policies. Greater certainty of recovery manifests itself in a lower risk factor, which in turn reduces the equivalent debt ascribed to the utility. Risk factors range from zero to 100 percent, and S&P applies a 25 percent risk factor to California utility PPAs.

The risk-adjusted PPA debt equivalence is added to the balance sheet debt to help determine the credit strength of a company. This can also be used to calculate the amount of additional equity that would be required to rebalance the capital structure. Other factors associated with PPAs that affect credit strength estimates include imputed interest, which is debt equivalence multiplied by the average cost of debt, and implied depreciation, which is added to Funds from Operations and is the difference between risk-adjusted fixed contract payments and imputed interest.

The cost of PPA debt equivalence stems from its weakening effect on credit strength and the consequent higher cost of capital. The CPUC has held that consideration for recovery of this cost is within the scope of the Cost of Capital Proceedings. While the CPUC has not adopted a formal debt equivalence policy, it does recognize that PPA debt equivalence can affect utility credit ratings and it considers the impact of such risk in authorizing the Utility's capital structure and rate of return.

Table 1. Credit Statistics Calculations

FFO Interest Coverage = (FFO + Total Interest Expense)/Total Interest Expense FFO = Net Income – AFUDC - Pfd Div + Depreciation (Excluding Securitization Principal Payments) + Change in Deferred Tax + Other Net Cash from Operations + Imputed Depreciation Expense. Total Interest Expense = Interest + Imputed Interest + 50% of Preferred Dividend.
Total Debt to Total Capital = Total Debt/Total Capitalization Total Debt = Long-Term Debt + Short-Term Debt + 50% of Preferred Stock + Imputed QF & Purchased Power Debt. Total Capitalization = Common Equity + 50% of Preferred Stock + Total Debt.
FFO to Average Total Debt = FFO/Average Total Debt FFO = Net Income – AFUDC - Pfd Div + Depreciation (Excluding Securitization Principal Payments) + Change in Deferred Tax + Other Net Cash from Operations + Imputed Depreciation Expense. Average Total Debt = Average of Beginning of Year and End of Year Total Debt.

Notes: Highlighted items indicate adjustments that are related to PPA debt equivalence.
All calculations exclude securitized debt and non-recurring items.