

Enron: An In-Depth Analysis Of The Hedging Schemes

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1.0 Introduction

In the late 1990's Enron held substantial investments in several high-tech companies. Many of these stocks soared in price after their initial public offering, which allowed Enron to report very large gains on its income statement.¹ However, the stocks could not be sold and the gains realized in cash because the investments were subject to lock-up agreements.² Enron's Chief Financial Officer (CFO) and others realized it was likely these investments would experience significant drops in value before they could be sold, but the investments could not be hedged commercially. Therefore, the CFO designed transactions that would, from an accounting point of view, keep the anticipated losses out of Enron's income statement.

This paper explains Enron's hedging transactions with special purpose entities (SPEs) that allowed the company to overstate its true economic profit.³ The paper first provides an overview of risk management and explains how particular derivatives used by Enron and other companies help manage risk. The paper then analyzes Enron's unique hedging schemes and provides insights with respect to their structure as well as the motivation for their creation. In addition, this section of the paper describes how the SPEs were used to keep losses out of Enron's financial statements, how investors in the SPEs were provided with massive financial returns on modest investments, and why Enron's declining stock price ultimately exposed the questionable activities of the CFO and others. The third section of the paper addresses specific, improper accounting employed by Enron, including consolidation rules. Finally, the paper discusses the Financial Accounting Standards Board Exposure Draft on the Proposed Interpretation that would change the consolidation rules and also considers whether the proposed standards would have made a difference in the Enron setting. A qualification is that the paper presents a simplified overview of some very complex transactions. Nonetheless, insight is provided regarding what Enron was trying to accomplish and, in concept, the strategy used to achieve the desired results.

2.0 Risk Management and Derivatives Used by Enron

A complex global economy subjects multinational businesses to financial risks. Among these risks are changes in interest rates, foreign currency exchange rates, stock prices, and commodity prices. Derivatives are financial instruments designed to achieve certain economic results and are often used to help manage risk. A derivative's value is derived from something else, which is referred to as the "underlying." The underlying could be the price of a security or commodity, a rate, an index, or the price of another financial instrument. A derivative changes in value as the value of the underlying changes. The most common types of derivatives are futures, forwards, swaps, and options. Enron's hedging transaction relied primarily on equity swaps, put options on equity investments, and collars, which are option-like instruments.

2.1 Futures and Forwards

A futures contract is an exchange-traded legal contract to buy or sell a standard quantity of a commodity, financial instrument, or index at a specified future date or price. Futures, which allow companies to lock-in a future purchase or sales price, are generally used to help protect against changing commodity prices. They trade in standard quantities and for standard time periods. A forward contract is similar to a futures contract except that the

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contract is tailored more specifically to the needs of the two parties. A forward is traded over-the-counter, and therefore, is less liquid and more risky than an exchange-traded futures contract involving the same underlying.

2.2 Swaps

A swap is an agreement between two parties to exchange cash flows calculated according to different formulas. Although interest rate swaps are the most common type of swap, currency, commodity, and equity swaps also frequently occur.⁴ In an equity swap, at least one party's payments are calculated according to the performance of a stock price or index. A total return equity swap sets a strike price such that if the market price of the stock increases above that price, the first party receives the difference from the second party. If the stock price decreases below the strike price, the payment is reversed. To illustrate, assume Company X enters into a total return equity swap with Company Y on 100,000 shares of Company A stock at a strike price of \$50 per share whereby on the settlement date Company X pays Company Y if A's price is above \$50 and receives payment if A's price is below \$50. If on the settlement date A's stock price has decreased to \$40 per share, Company Y pays Company X \$1,000,000.

2.3 Options

An option is a contract giving the owner the right, but not the obligation, to buy (call) or sell (put) a specified item at a fixed price (strike price) during a specified period of time. The option buyer pays a nonrefundable fee (premium) to the seller (writer) for the option. Investors often purchase options to protect against adverse changes in prices or rates. A purchased put option is like an insurance policy in that it protects against losses but allows the buyer to benefit from favorable movements by not exercising the option. Options are one-sided because the buyer has the right, but not the obligation, to perform. In contrast, futures, forwards, and swaps are two-sided because performance by both parties to the contract is required. The two-sided contracts require no initial investment, whereas the option's protection against losses must be purchased.

The value of an option is comprised of two elements, intrinsic value and time value. Intrinsic value is based on the degree to which the option is "in-the-money." Time value represents the market's estimation of how likely it is that the option will be valuable, i.e., in-the-money, before it expires.

To illustrate a put option on an equity investment, assume on January 1, when the market price of Company A's stock is \$20, Company X purchases for \$500 put options on 1,000 shares of Company A stock. The strike price is \$20, and the expiration date is March 31. Company X can sell the stock to the option writer for \$20 per share anytime up to March 31. The initial payment of \$500 represents all time value because the market and strike price are the same. Assume Company A's stock price is \$18 on January 31, and the market price of the options is \$2,300. Two thousand dollars of the value represents intrinsic value; the remaining \$300 is automatically time value.

Many companies have investment portfolios that include equity securities, and put options on these securities protect against adverse price movements. In the previous example, Company X's investment managers might want to hold the stock to meet certain dividend requirements of the portfolio even though they believe the stock price is likely to decline during the option period. Company X's purchase of the put option on the Company A stock effectively hedges the risk of a decline in A's stock price.

2.4 Collars

A company that purchases put options on equity securities could offset some or all of the cost by selling call options on the same securities. Doing so would create an *equity collar*. To illustrate this type of hedge, assume on January 1 Company X is holding 100,000 shares of Stock A with a current value of \$35 per share. Concerned that the stock price might decline, Company X buys 100,000 put options with a strike price of \$30 for a premium of \$.50 each. To help offset this cost, on the same date Company X sells 100,000 call options on Stock A with a strike price of \$40 for a premium of \$.40 each. The amount that Company X will receive from this stock is now collared between \$30 and \$40 per share. If Stock A's price drops below \$30, Company X could exercise the put option, and

therefore, sell the stock for \$30 per share. If the stock price increases above \$40, the purchaser of the call option could exercise the option, and Company X would have to sell the stock for \$40.

3.0 Enron’s Questionable Hedging Activities

Enron grew rapidly in the late 1990’s buying and developing assets and businesses. These purchases required large initial capital investments that were not expected to generate significant cash flows in the short term. Therefore, Enron used SPEs to achieve off-balance sheet financing, which is a common business practice. Enron also used futures and options to hedge energy positions, which is also a common and acceptable business practice. However, in 1999 Enron began creating SPEs that engaged in some very unusual hedging schemes.⁵ These schemes enabled Enron managers to keep losses out of the financial statements and provided significant investment returns to the CFO and others who participated in the arrangements. This section of the paper discusses an SPE for the Rhythms investment and then discusses a second set of transactions for SPEs called the Raptors. The relative impact of these transactions on the financial statements of Enron was very substantial. Earnings from the Raptors accounted for more than 80 percent of Enron’s total earnings for the last two quarters of 2000.

3.1 The Rhythms Transaction

In March 1998, Enron invested \$10 million in stock (5,400,000 shares @ \$1.85 per share) of Rhythms Net Connections, Inc. (Rhythms), a privately-held internet service provider. On April 7, 1999, Rhythms went public at \$21 per share, and by the close of the trading day the stock had increased to \$69 per share. By May 1999, the investment was worth more than \$300 million, but a lock-up agreement prevented Enron from selling the stock until the end of 1999.

Enron managers wanted to hedge the Rhythms stock to protect the appreciation in value, especially since they believed the stock value had likely peaked. As discussed earlier, purchasing put options on equity securities protects against price declines. However, it was virtually impossible to hedge the Rhythms investment commercially because of the number of shares, the relative illiquidity of the Rhythms stock, and the lack of comparable securities in the market. Enron’s CFO decided to create an SPE that would provide Enron with put options to hedge the Rhythms investment.

An SPE called Swap Sub was created in June 1999 by Enron’s transfer of its own restricted stock in exchange for a note and put options. The restriction was that most of the stock could not be sold or transferred for four years. Its unrestricted value was \$276 million, and the restricted value was \$168 million. The put options were valued at \$104 million, and the note was for \$64 million.⁶ The transaction from Enron’s side is as follows:

Note Receivable	64,000,000	
Put Options	104,000,000	
Equity		168,000,000

The SPE accounting for the transaction is as follows:

Investment in Enron Stock	168,000,000	
Revenue		104,000,000
Note Payable		64,000,000

The Enron stock significantly increased in value from June to December 1999 increasing the value of assets held by the SPE. On December 17, 1999, the SPE paid the \$64 million note and accrued interest, perhaps with a loan collateralized with the restricted Enron stock because the stock could not be sold to generate the funds.⁷

The put options acquired by Enron from the SPE had a strike price of \$56. So if the Rhythms stock price dropped below \$56, the options would be in-the-money and increase in value. Thus, Enron’s loss on the investment

would be offset by an equal amount, the increase in the intrinsic value of the options. On Enron’s books the following entries occurred:

Loss Investment	XX	XX
Options Gain	XX	XX

The SPE had the following entry as the Rhythms stock price declined:

Loss Options (liability)	XX	XX
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Enron had a receivable from the SPE equal to the intrinsic value of the option, but because Enron’s stock was increasing in value during this time period, the SPE had enough asset value to cover this liability (i.e., credit capacity). SPE credit capacity was important to Enron because Enron would have to record an impairment loss if adequate credit capacity was not maintained by the SPE. Credit capacity did not become an issue with Swap Sub but was a critical issue with the Raptors.

The hedge appeared to be effective because the loss on the Rhythms investment was offset on the books by the gain on the options, but in substance it was only an accounting hedge. The transaction was not a true economic hedge in which an independent, creditworthy counterparty accepts the economic risk of loss. Enron was in substance its own counterparty. So the loss was still incurred economically, but for financial reporting it had been transferred from Enron to the SPE.

In the first quarter of 2000, Enron management liquidated the Rhythms position because it continued to decline in value and because the expiration of the lock-up agreement allowed the sale. The SPE needed to return the shares of Enron stock to Enron, and Enron would return the put options to the SPE to “unwind” the transaction. At the time of the unwind the Enron shares had an unrestricted value of \$234 million, but the restricted value was \$162 million. The in-the-money option value was \$207. The settlement was based on the unrestricted value and resulted in cash paid by Enron to the SPE of \$27 million (\$234 minus \$207).

This unwind was not fair to Enron. The shares had been transferred to the SPE based on restricted value and should have been returned to Enron at restricted value. The settlement should have been cash paid to Enron of \$45 million (\$207 minus \$162). Andersen reviewed the unwind but raised no questions about Enron’s bringing back the stock at its unrestricted value. This settlement provided a windfall to the SPE investors at the expense of Enron and ultimately its shareholders. The fact that the Enron stock remained strong throughout the Rhythms transaction provided enough value to cover the losses on that investment and to provide investors with massive returns on modest investments.

3.2 The Raptors

The Rhythms hedge was so successful in keeping losses off Enron’s income statement that the CFO decided to create four more SPEs (referred to as Raptors I, II, III and IV). These SPEs hedged select investments whose values had increased dramatically but were likely to decline and that could not be hedged with independent, creditworthy counterparties. The Rhythms approach was adopted. That is, restricted stock was transferred to the SPEs, and the forecasted future growth of Enron’s stock value was used to shield Enron’s income statement from future losses on the investments. The fair value of stock transferred to Raptor I was \$537 million, but the discounted value due to the restrictions was \$350 million.

Raptor I would only hedge those investments that would likely result in significant losses. In order to attract investors to provide the 3 percent equity (\$30 million) necessary for the SPE to qualify for nonconsolidation with Enron,⁸ there was an agreement that Raptor I could not enter into any hedging transactions with Enron until it

had distributed \$41 million to the investors. The agreement eliminated the risk to investors, which meant they would have little incentive to question subsequent transactions between the SPE and Enron.

Raptor I sold put options to Enron on 7.2 million shares of Enron stock at a strike price of \$57.50 when the market price was \$68. The options were for six months, and Enron paid \$41 million to Raptor I for the options.⁹ It was not likely that Enron’s market price would drop that low during the six months, so it was expected the options would expire worthless and Raptor I would have the \$41 million to distribute to investors. Enron stock actually increased in value, and the options were settled early for \$4 million. Raptor I paid the \$41 million to the outside investors and began entering into hedging activities with Enron.

The following entries show Enron’s accounting for these transactions:

Note Receivable Equity	350,000,000	350,000,000
Put Options Cash	41,000,000	41,000,000
Cash Loss Put Options	4,000,000 37,000,000	41,000,000

The SPE accounting was done as follows:¹⁰

Investment in Enron Stock Note Payable Equity	537,000,000	350,000,000 187,000,000
Cash Equity	30,000,000	30,000,000
Cash Revenue	41,000,000	41,000,000
Loss/Expense Cash	4,000,000	4,000,000
Equity Cash	41,000,000	41,000,000

This time the hedging activities took the form of total return equity swaps. The SPE would be paid by Enron for future gains on the investments but would pay Enron in the event of future losses. Recall that losses were anticipated. The derivative transaction was agreed upon in mid-September 2000 but was back-dated to August 3, 2000, the date on which the stock of Aviei Systems traded at its all-time high. Enron locked in the maximum possible gain and offset third quarter losses of nearly \$75 million.¹¹ Outside investors had little economic incentive to resist the transaction structure or the back dating because they had already received their \$30 million original investment plus the substantial \$11 million return.

The original credit capacity of Raptor I was \$217 million (\$537 million investment recorded on the Enron stock transfer value - \$350 million liability recorded + \$30 million outside equity). If the fair value of Enron stock increased, the credit capacity would also increase. Similarly, decreases in the Enron stock value would decrease credit capacity. With respect to the hedged investments, declines in those values would result in losses and increases in the SPE liability to Enron, and thus, decreases in credit capacity. Enron managers were concerned about credit capacity because of the possibility of recording an impairment loss based on any SPE credit deficiency.

To address the possibility of a credit capacity problem due to a decline in Enron’s stock, on October 30, 2000, Enron entered into a “costless collar” with the SPE on 7.6 million Enron shares; Enron purchased a call option and sold a put option with the premiums offsetting each other. The call had a strike price of \$116, and the put had a strike price of \$81. If the stock price increased above \$116 the SPE would owe Enron, and if the price dropped below \$81, Enron would owe the SPE. The put protected the SPE’s credit capacity against Enron price declines by transferring the risk of such declines back to Enron. However, because Enron was permitted to settle its obligation

under the put with Enron shares, any loss associated with settling the put in the event of a decline below the put price of the collar would be charged directly to equity.

By November, 2000, the hedged investments were rapidly declining in value, and despite the collar transaction, Raptor I was running out of credit capacity to cover the losses. Because Raptor I was almost completely utilized and could not absorb additional losses, the CFO created Raptors II and IV, which were not materially different from Raptor I. Enron transferred contingent forward contracts to receive shares of its restricted stock in exchange for notes, and the two SPEs sold put options to Enron on Enron stock to generate the earnings necessary to pay the investors their agreed-upon return. Costless collars were also used for Raptors II and IV to protect credit capacity against declines in the price of Enron stock.

Raptor II hedged investments that were likely overvalued, and as with Raptor I, the substantial decline in the value of the investments soon led to a credit capacity issue. The value of the Enron stock was not high enough to create enough asset value in the SPE to overcome the losses on the hedge. With credit capacity of these two SPEs running out and investment losses expected to continue, the CFO decided to use the credit capacity in Raptor IV to prop up the credit capacities of Raptors I and II.

At the same time Raptor IV was being used to help the credit capacities of Raptors I and II, the CFO wanted to hedge an investment in the New Power Company (TNPC) stock. Like many of the other Enron investments, the value had increased dramatically after its initial public offering but was expected to drop sharply. Because issuing additional Enron shares would cause additional dilution to earnings per share (e.p.s.), Enron transferred shares of TNPC to establish Raptor III.¹²

Raptor III entered into total return equity swaps to hedge the TNPC investment. If the TNPC stock price declined, the Raptor III would have a loss, and the SPE swap liability would increase. At the same time the SPE assets, the TNPC stock, would decrease, creating a double whammy. As expected, the TNPC stock price declined sharply after its initial public offering. With the declining price of Enron stock and TNPC stock, the credit deficiencies of Raptors I and III were too great for the other two SPEs to absorb. It was possible that more than \$500 million in charges from SPE credit capacity shortfalls would have to be reported by Enron in the first quarter of 2001. To avoid reporting this loss, the SPEs were restructured with an agreement that the SPEs would cross-collateralize, and additional Enron shares would be pumped into the SPEs. This fix was just temporary. Either Enron's stock price or the value of the investments needed to increase in order to avoid credit capacity problems.

By late summer of 2001, the continuing decline of Enron and TNPC stock prices caused credit deficiencies of millions of dollars. In addition, Enron faced the prospect of having to deliver a very large number of shares of stock to the SPEs as a result of Enron's stock price dropping below the put option strike price on the collars. Delivery of those shares would significantly dilute Enron's e.p.s.

By mid-September 2001 it was obvious that the scheme would no longer work. Enron finally terminated the SPEs. In doing so, it incurred an after-tax charge of \$544 million (pre-tax of \$710 million) that Enron disclosed on October 16, 2001, in its initial third quarter earnings release. Less than a month later, Enron and Andersen concluded that the SPE involved in the Rhythms hedge did not qualify for nonconsolidation and retroactively consolidated the SPE for 1999 and 2000. The retroactive consolidation decreased Enron's reported net income by \$95 million in 1999 and \$8 million in 2000.

4.0 The Improper Accounting that Allowed the Scheme to Work

The two main areas of improper accounting that allowed the hedging schemes to work were fair value measurement and nonconsolidation of the SPEs. Measurement issues arose with respect to Enron's restricted stock, put options on the stock, and the TNPC stock. The measurement errors combined with the appreciation in Enron stock generated SPE credit capacity needed to offset the losses on Enron's investments. Nonconsolidation kept the losses off Enron's books.

The Rhythms initial exchange of the note and put options for Enron stock was correctly based on the value of the restricted shares. Yet the SPE secured loans and transferred the shares back to Enron at the unrestricted value. The incorrect use of the unrestricted value resulted in a large cash transfer to the SPE from Enron.

In the Raptor I initial exchange of the note and put options for Enron stock, the stock's restricted value was \$350 million. However, the SPE recorded the stock investment at the unrestricted value of \$537 million. This measurement created a phantom excess credit capacity for the difference, \$187 million, which allowed the SPE immediately to begin offsetting losses from derivative transactions without creating a credit deficiency.

In addition, Raptor I sold put options to Enron on Enron stock for \$41 million. The price was determined based on the options being written by a creditworthy party. However the SPE was not creditworthy because with a strike price of \$57.50, Raptor I only had enough credit capacity to cover a \$10 reduction below the strike price.¹³ The put options were worth substantially less than \$41 million because Raptor I would not be able to pay if the stock price actually dropped significantly below the strike price, but the \$41 million was needed to return to investors their original investment plus a large return so Enron could enter into hedging transactions with the SPE. The put option valuation overstated SPE assets, which created credit capacity.

The transfer of TNPC stock to Raptor III was valued at \$10.75 per share. This price had been used in a private sale several months earlier. However, Enron managers knew five days before the TNPC initial public offering that the stock would trade at approximately \$18 to \$20 per share. Indeed just days after transferring the stock at the \$10.75, the stock was trading at \$21 per share on the initial public offering. The low transfer valuation followed by the increase in the value of the TNPC stock in the hands of the SPE increased SPE assets and credit capacity.

The second area of improper accounting regards consolidation rules. Enron's derivative transactions with its SPEs resulted in accounting hedges that allowed the loss to be transferred from Enron's to the SPEs' financial statements. However, if the SPEs had been consolidated, all intercompany transactions, including the transactions involving measurement errors, would have been eliminated, and the true economic loss would have remained on Enron's financial statements. Thus, it was crucial for the SPEs to qualify for nonconsolidation for the hedging schemes to work.

SPEs must be consolidated unless **both** of the following conditions are met:

- An owner independent of the company must make a substantive equity investment of at least 3 percent of the SPE assets, and that 3 percent must remain at risk throughout the transaction, **and**
- The independent owner must exercise control of the SPE.¹⁴

The condition that the owner must exercise control is somewhat subjective. However, the *3 percent equity at risk throughout the transaction* was not satisfied. In the Raptors, the investors received their initial investments and a significant return on investment before the SPEs were allowed to engage in any hedging transactions with Enron. There was no equity at risk throughout the transactions. The SPEs should have been consolidated. As mentioned in the previous section, Andersen admitted that it erred in the initial conclusion that the SPEs qualified for nonconsolidation.¹⁵

5.0 Accounting Guidance for SPEs

The Financial Accounting Standards Board (FASB) has issued a Proposed Interpretation, "Consolidation of Certain Special-Purpose Entities," that is intended to improve guidance for determining when an enterprise should consolidate an SPE. This section of the paper discusses the need for improved guidance, provides an overview of the Proposed Interpretation, and finally, considers whether the proposed requirements would have prevented Enron's abuses.

5.1 Need for Guidance

Transactions involving SPEs have become increasingly common, but the existing guidance related to SPEs is fragmented and incomplete. Some relationships between enterprises and SPEs are similar to a parent-subsidary relationship even though the SPE is not subject to control through a majority voting interest. The existing standards are somewhat subjective regarding control, and the subjectivity appears to have provided unintended opportunities for companies to avoid consolidation when the company did not have a majority voting interest. Enron's use and reporting of SPEs alerted the FASB to the need for improved accounting principles for determining when a company should consolidate an SPE. FASB intends to issue comprehensive guidance by the end of 2002, which should eliminate many of the perceived current SPE abuses.

5.2 Overview of the Proposed Interpretation

The Proposed Interpretation distinguishes between evaluating consolidation based on voting interest or based on the degree of variable interest in the SPE. Voting interest is the owner's portion of voting rights. Variable interests are the means through which financial support is provided to an SPE and through which the providers gain or lose from activities and events that change the value of the SPE's net assets. Variable interests may arise from contractual rights and obligations.¹⁶ There are five conditions that must **all** be present for consolidation evaluation to be based on voting interests. If any **one** of these conditions is **not** met, the consolidation evaluation should be based on the degree of variable interest in the SPE.

The five conditions are as follows:

1. The nominal owner or owners have voting rights or similar rights that convey the current ability to make decisions and manage the SPE's activities to the extent they are not predetermined by the establishing documents of the SPE or by contracts or by other arrangements.
2. The amount of the equity investment is sufficient to allow the SPE to finance its activities without relying on financial support from variable interest holders.
3. The equity investment is subordinate to all other equity investments and other interests for the entire life of the SPE.
4. The assets exchanged for the equity interest are not subordinated beneficial interests in another SPE.
5. The equity investment was not provided directly or indirectly by the SPE or other parties with variable interests in the SPE and was not financed directly or indirectly by the SPE or other parties with variable interests.

When all five conditions are met so that evaluation for consolidation is based on voting interest, consolidation is expected if the business enterprise has a majority interest.

When evaluation for consolidation is based on the degree of variable interest in the SPE, the FASB has proposed that if a business enterprise has a controlling financial interest in an SPE, the enterprise (referred to as a primary beneficiary) should consolidate the SPE. A primary beneficiary provides either the majority of the financial support to the SPE or significantly more financial support than any other variable interest holder provides. That is, if the risks of the SPE are not effectively dispersed among the parties involved, the primary beneficiary must consolidate the SPE.

5.3 The Proposed Requirements and Enron

Whether Enron should have consolidated the SPEs discussed in this paper under the proposed requirements would have been based on variable interest because all of the conditions for basing the evaluation on voting interest

were not met. For example, the second condition regarding sufficient equity investment was not met. That condition requires that the equity investment be sufficient to enable the SPE to conduct its activities without direct or indirect assistance from variable interest holders. That is, the equity investment should be greater than or equal to the expected future losses of the SPE at all times during the SPE's existence or else assistance would be required. The Proposed Interpretation suggests that the investment be at least 10 percent of the SPE's total assets in order to meet the condition. Enron's SPEs did not have the 10 percent level of investment, and the equity investment was not sufficient to cover expected SPE losses because Enron managers were, instead, expecting the value of Enron stock to cover losses. The third condition that requires the equity investment to be subordinate was not met for Raptors I, II, and IV because the equity investment was not the first interest subject to loss if the SPE's assets were not sufficient to meet its obligations. Instead, the SPE returned the equity investment plus a substantial return on investment before entering into any derivative transactions with Enron.

If Enron would have applied the degree of variable interest standards, the SPEs should have been consolidated if Enron was considered the primary beneficiary. The primary beneficiary is one that provides significant financial support to the SPE, and in return the SPE engages in activities that serve the purposes of the primary beneficiary. Based on this definition, Enron appears to be the primary beneficiary because the SPEs served the purposes of Enron by serving as counterparty to the derivatives to help protect the value of Enron's investments. Also, Enron would have provided significant financial support by effectively absorbing SPE losses because Enron would not have been able to collect the gain on the derivatives nor the note receivable from the SPE had the SPE's assets not been sufficient to meet its obligations. In addition, an appendix to the Interpretation provides examples of SPEs and primary beneficiaries. The examples include that the primary beneficiary of an SPE acting as a counterparty to a derivative contract would probably be the entity that bears the risk of losing a variable interest in the SPE. The appendix example further supports a conclusion that Enron would have been the primary beneficiary. As such, Enron would consolidate the SPEs discussed in this paper under the Proposed Interpretation.

Recall that existing guidance also should have resulted in consolidation of the SPEs with Enron. The Proposed Interpretation would have provided a stronger and more obvious case for consolidation of the SPEs, but standards alone cannot guarantee correct accounting and reporting treatment of these type of transactions. The standards are only effective if managers follow them and auditors enforce their proper application.

6.0 Summary and Conclusion

Enron's investments in high-tech companies soared in value after initial public offerings, resulting in significant gains that were recognized in Enron's income statement. Managers reasonably anticipated these stock prices would fall and that the stock price declines would lead to large losses being reported on the income statement. Management wanted to hedge against these potential losses. When no counterparties for the hedge could be found, the CFO created SPEs to be the counterparties for the derivative transactions Enron desired. The SPEs were not consolidated with Enron, which was critical for the SPE strategy to be effective.

Enron used the increasing value of Enron stock to cover the losses on the investments from an accounting, but not an economic, standpoint by transferring Enron shares to the SPEs. As the investments declined in value and created losses for Enron, the derivatives increased in value and created an offsetting gain. Thus, Enron's financial statements were not negatively affected. The corresponding loss from the derivatives was on the books of the SPEs. As long as the Enron stock increased in value, the SPEs would have enough asset value to cover these derivative liabilities to Enron. Initially, Enron's stock price did increase, providing enough value to cover the derivative losses and also providing a substantial windfall to SPE investors. The hedging schemes were ultimately exposed because of Enron's falling stock price and the sharp decline in the value of the hedged investments.

Enron's accounting for the SPEs discussed in this paper did not meet existing standards for nonconsolidation. Nonetheless, the situation at Enron alerted the FASB to the need for improved accounting principles for determining when a company should consolidate an SPE. The FASB's Proposed Interpretation provides comprehensive guidance that, if finalized in its proposed form, should result in increases in the number of consolidations of SPEs. 

References

- Hartgraves, A. and G. Benston. 2002. The Evolving Standards for Special Purpose Entities and Consolidations. *Accounting Horizons* 16 (3): 245-258.
- Powers, W., R. Troubh and H. Winokur. February 1, 2002. *Report of Investigation by the Special Investigative Committee of the Board of Directors of Enron Corporation*. Houston, TX: Enron Corp.

Endnotes

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1. Enron reported gains on the increases in value because the investments were accounted for using mark to market-type accounting rules.
 2. Lock-up agreements are very common in initial public offerings (IPO). The agreements prevent insiders and other significant investors from selling their stock for a certain number of days following the IPO.
 3. Many other types of accounting abuses occurred at Enron, but this paper focuses strictly on the SPEs. An SPE is an entity created by an asset transferor to carry out a specific activity or series of transactions directly related to a specific purpose. An example is a leasing arrangement, whereby assets and liabilities are transferred to the SPE, and the transferor then leases assets from the SPE.
 4. Interest rate swaps effectively change interest-bearing debt or investment from a fixed to a variable rate or vice versa in order to help manage interest rate risk.
 5. While the discussion simplifies what is an extremely complicated set of transactions, it still provides enough detail to allow for meaningful insights into Enron's hedging activities and the resulting financial statement effects. The paper is subject to the limitation that not all information about the transactions is known. Nonetheless, much information has been reported publicly, and many individuals who worked at Enron agreed to be interviewed and/or provided documents to investigators. The main source of information in this paper that is specifically related to Enron is from what is referred to as the "Powers Report" (Powers et al. 2002).
 6. Enron obtained a fairness opinion from Pricewaterhouse Coopers that concluded the exchange was fair from a financial point of view.
 7. The Powers Report speculates about a collateralized loan.
 8. The next section of the paper explains that the nonconsolidation rules were applied improperly. If the rules had been applied properly, consolidation would have been required, and the SPE transaction would have been ineffective.
 9. A company buying puts on its own stock is a highly unusual transaction.
 10. The SPE's use of the unrestricted value of the stock to measure the investment is noteworthy and is one example of measurement issues that are discussed in the next section of the paper.
 11. The losses were incurred from August 3 to mid-September.
 12. Enron actually transferred warrants to purchase 24 million shares for a nominal price, but the warrants were economically equivalent to stock.
 13. The \$10 is calculated by dividing the cash received by the SPE by the number of shares covered by the put option, \$71 million/7.2 million shares.
 14. Hartgraves and Benston (2002) provide a thorough discussion of the current accounting guidance for SPEs. They explain that the guidance for most SPEs has developed in a piecemeal fashion by the Emerging Issues Task Force (EITF) and by certain Securities and Exchange Commission interpretation and responses to EITF Issues statements.
 15. In his December 12, 2001, Congressional testimony, Arthur Andersen's Chief Executive Officer, Joe Berardino, said, "In evaluating the 3 percent residual equity level required to qualify for non-consolidation, there were some complex issues concerning the valuation of various assets and liabilities. When we reviewed the transaction again in October 2001, we determined that our team's initial judgment that the 3 percent test was met was in error. We promptly told Enron to correct it" (Powers et al., 84).
 16. Contractual rights and obligations could result from loans or debt securities, guarantees, residual interests in transferred assets, management contracts, service contracts, leases, and similar arrangements or from nonvoting ownership interests such as preferred stock or limited partnership interests.