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## Enron Corporation: May 6, 2001 Sell Recommendation

New Rec: Enron Corp. (ENE \$59.48)

Position: Sell

Target: \$30

Timing: 2 (1=aggressive; 5=cautious)

—Off Wall Street Consulting Group, Inc., May 6, 2001

On May 6, 2001, the Off Wall Street Consulting Group, Inc. issued a report recommending Enron common shares be sold short with a target price of \$30 per share (see **Exhibit 1**). At the time Enron's common stock was selling for \$59.48 per share, after selling for as high as \$75 per share a year earlier. The Off Wall Street recommendation was in contrast to most Wall Street recommendations. They ranged from "hold" to "strong buy."

On December 2, 2001, Enron filed for bankruptcy protection under Chapter 11, the largest bankruptcy filing in U.S. history.

### Brief History<sup>1</sup>

July 1985:	Enron formed.
November 1985:	Kenneth Lay becomes CEO.
June 1990:	Jeffrey Skilling joins Enron as chief executive of finance unit.
December 13, 2000:	Skilling promoted to CEO; Lay stays on as chairman.
August 14, 2001:	Skilling announces resignation from Enron, citing personal reasons. Lay returns as CEO.
August 15:	Sherron Watkins, an Enron accountant, sends letter to Lay warning that company could "implode" in an accounting scandal.

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<sup>1</sup> "Enron: the countdown to court," *The Financial Times*, February 20, 2004.

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Professor David F. Hawkins and Jacob Cohen, Affiliate Professor of Accounting & Control at INSEAD, prepared this case. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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- September 21:** Vinson & Elkins, Enron's lawyers, conduct internal investigation of Watkins's concerns and assure Lay no cause for alarm.
- October 16:** Enron announces \$1 billion charge in conference call with analysts.
- October 22:** Company reveals that Securities and Exchange Commission has begun inquiry into company's related-party transactions.
- October 24:** Andrew Fastow, CFO and architect of the company's off-balance sheet partnerships, is fired.
- December 2:** Enron files for bankruptcy, the largest bankruptcy filing in U.S. history.
- January 23, 2002:** Lay resigns as chairman and CEO.
- March 14:** Justice Department unseals criminal indictment of Arthur Andersen accountancy for obstruction of justice in Enron case, signaling the firm's demise.
- August 21:** Michael Kopper, former executive, pleads guilty for his involvement in off-balance sheet partnership. First criminal charges against a former employee.
- October 31:** Fastow indicted on 78 fraud counts.
- January 14, 2004:** Fastow pleads guilty to two counts of fraud, pays \$23 million in civil and criminal penalties, and agrees to cooperate with Justice Department. Fastow's wife Lea pleads guilty to tax charge.
- February 19:** Skilling charged in 42-count indictment. Vows to fight in court.

### *Close Position Recommendation*

After May 6, 2001, Off Wall Street continued to issue Enron reports recommending "sell." On September 19, 2001, Off Wall Street closed its Enron position for a 56% gain from its initial recommendation on May 6, 2001. Enron's stock price had now declined to \$26.41.

### **Questions**

1. What is the basis for the Off Wall Street "sell" recommendation?
2. Do you find the basis for the Off Wall Street conclusion persuasive?
3. As a potential financial analyst, what lessons can you learn from the Off Wall Street report?

## Exhibit 1 Enron Corporation

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<b>New Rec: Enron Corp.</b>	<b>(ENE \$59.48)</b>	<b>May 6, 2001</b>
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**Position: Sell      Target: \$30      Timing: 2 (1=aggressive; 5=cautious)**

\$M	Q1 01a	Q2 01e	Q3 01e	Q4 01e	FY 01e	FY 02e
Revs	49,361	34,161	55,551	40,414	179,488	185,850
EP\$	0.47	0.42	0.45	0.39	1.73	1.99
Y/Y %	17%	24%	32%	-5%	18%	15%
PE					34.4	29.9
PSR					0.29	0.28
Consens	0.47	0.42	0.45	0.46	1.80	2.15

**Shares Out: 871M**

**Market Cap: \$51.8B**

**FYE: Dec.**

Summary: Enron's business model has been evolving toward trading and risk management services mainly for the energy market. Enron has been abandoning its energy producing physical assets in favor of trading assets.

Recently, Enron has had the best of both worlds. Booming energy markets have maximized the value of its remaining physical assets, while high prices and increased volatility have created trading opportunities that have allowed the company to increase revenue very substantially. After growing revenue by about

## Exhibit 1 (continued)

\$10B year over year in both 1998 and 1999, revenue growth exploded in 2000, as revenue rose to \$100B from \$40B in 1999.

When revenue increased by \$11B in 1998 versus 1997, gross profit increased by \$2B. When revenue increased by \$9B in 1999 versus 1998, gross profit increased by \$0.5B. However, when revenue increased by \$60B in 2000 versus 1999, gross profit rose by only another \$0.5B.

Gross margin as a % of sales dropped from 13.3% in 1999 to 6.2% in 2000. However, the incremental gross margin dollars generated by the incremental sales year over year was just 1.52% of the incremental sales. Gross margins have not been released for Q1 01, but operating profit rose by just \$429M, only 1% of the year over year sales increase of \$37B.

Enron's Wholesale segment accounted for 95% of Enron's \$100B of revenue and 71% of its IBITDA in 2000, versus 90% of revenue and 55% of IBITDA in 1999. In Q1 01, Wholesale was 97% of revenue and 95% of total IBIT. ENE total IBIT was just 1.6% of total revenue in Q1 01 versus 4.7% in Q1 00.

Wholesale, and trading in particular, has clearly become the Enron story. The Wholesale division combines the results of Enron's trading and risk management business with results of various physical assets that the company own or controls. Enron does not break out gross margin or operating profit by these two types of Wholesale operations. EnronOnline, the company's on line trading division, was clearly a principal driver of revenue growth in 2000.

"Street" analysts expect ENE to generate about \$54M of incremental net income for the balance of the year 2001 versus the last nine months of 2000. However, the "street" also estimates only \$20B of incremental revenue for the balance of 2001 versus 2000. In our opinion, "street" analysts may not have grasped ENE's business model. By our estimate, ENE would have to increase revenue by \$45B over the comparable period in 2000 to make consensus estimates. This would be \$7B higher our current estimated increase of \$38B.

For 2002, "street" analysts expect ENE to generate incremental net income of about \$475M versus 2001. This is based on total revenue estimates of just \$126B, which is only a \$12B increase over current 2001 estimates of \$112B. The "street's" 2002 projection is \$60B under our revenue projections for 2002, but consensus EPS estimates are much higher than ours. We estimate that ENE would have to increase revenue by about \$90B (based on 2001 analyst expectations for revenue of \$112B) to meet their EPS estimates. We expect Enron will miss this \$215B of needed revenue by approximately \$30B in 2002.

Actually, there are few "street" revenue estimates for Enron. "Street" analysts prefer to estimate operating profit, although it is not clear how they obtain their results. The revenue estimates that do exist appear to be far too low, as we have shown. Analysts have not understood to what extent trading would become the main driver of Enron's business. This may also lead them to miss evaluate the company.

**Exhibit 1 (continued)**

If analysts understood that increased volume of trading was driving much of the bottom line increase, they would need to think about the huge revenue increases needed to meet their earnings targets. They would begin to realize, as we have shown, that increased trading appears to result in lower margins. It has diminishing returns. Investors would then also see how slim margins have become and they would understand that if trading increases still more, which it will have to do to increase profit, profit margins should become slimmer still. Such low margins have important implications for the company's balance sheet, its return on assets and invested capital and, importantly, on its risk profile. We think an understanding of Enron's business model would lead investors to award a much lower multiple to Enron's forecasted EPS.

Industry sources say that Enron traders make large directional bets, and that they think that Enron is especially long gas and power. Enron's portfolio of long and short positions is "globally" balanced, that is to say that individual positions may not be specifically offset with an opposite position. These sources say that this is the main source of the risk, and that counterparty risk is not a major issue in general (though the PG&E receivable may be a problem, as we discuss). We note that a \$21B long position and a \$20B short position in the Wholesale division sits on top of total company equity of just \$11B. Total assets are \$65B. Hedge fund managers know that it is possible to lose money on both long and short positions at the same time. Enron's Wholesale portfolio is about 200% long and 200% short and leverage is increasing. According to energy traders, some of these positions could experience swings of 25% of their value. Notional single position sizes can be in the hundreds of million of dollars.

Very high revenue increases are largely generated by increased opportunities that result from high prices and by very high volatility in energy markets. Although the risk of less volatility, with the result that ENE would experience a significant decrease in its earnings, may now seem remote, the peak in volatility may occur this summer. We doubt that volatility can increase after this summer, even in the West. Industry observers predict high volatility to remain for a couple of years in the West, until more supply comes on line. However, they expect volatility in other parts of the country to decrease. Even this summer's widely anticipated New York energy crisis may not live up to expectations. It depends on the weather. But even if New York's energy market is volatile this summer, it should be temporary. Over all, except in the West, volatility will probably decline, though New York may remain tight. Declining volatility is a major risk for Enron, as it reduces the opportunity for trading profits. We will discuss volatility and prices in detail.

There is also risk in doing longer duration deals to make up for lower trading profit. Longer deals are more profitable because the total value of the discounted cash flows is higher. However, as the duration gets longer the risk also increases. The future cash flows become less predictable. As money managers know, a 30 year bond is more volatile than a two year bond. The changes in the value of the securities held by Enron pose a risk to future earnings.

Because margins on Enron's incremental business are so thin, and because it

## Exhibit 1 (continued)

now takes about \$2.1B in additional revenues just to generate an additional penny of after tax earnings, it probably should come as no surprise that Enron management appears to have resorted to a variety of transactions that are of questionable quality and sustainability to manage and to boost its earnings. These transactions appear to be purposely obscured in Enron's public reporting. They include related party transactions whose total earnings impact is difficult to gauge, and they include gain on sale items that are of questionable quality and where the buyer appears to have recourse. In the past, when Enron management has been questioned about some of these transactions, it has not been forthcoming.

By our estimate, about \$0.41, or 28%, of EPS in 2000 came from gains on sale of securitized assets, some or all of which may have recourse to Enron, and related party transactions. Gains on sale of securitized assets accounted for about \$0.33, or 22% of 2000 EPS, by our estimate. About \$0.08 of the \$0.33 appears to be due to an unusual related party, called Whitewing, which we discuss below. Other related party transactions accounted for another \$0.08 of the \$0.41, or 5% of EPS in 2000. The fact that many of the gains on sales transactions also appear to have recourse to Enron casts their quality into doubt. Enron's balance sheet reflects swaps that insure the buyer of these securitizations against some amount of loss. We go into detail on these transactions below.

Finally, we come to the issue of ENE's valuation. Some estimates of Enron's value seem simply arbitrary, while some others attempt to use a "market driven" price to earnings multiple based on future earnings by segment. First, we can not agree with "street" analyst EPS growth projections because we expect lower prices and lower volatility. However, even if Enron were to generate the massive revenue increases required to hit EPS expectations, given the added risk from the balance sheet and from decreased volatility, the very high so-called "market multiples" that are being awarded to the business are inappropriate.

For example, one analyst estimates that the Wholesale group will produce about 82% of total year 2001 IBIT. He then extrapolates that Wholesale will earn \$1.48 of his \$1.80 2001 estimate. The analyst applies an arbitrary 35x multiple to those earnings, though even by his aggressive estimate they will grow at 20% per year in 2002. He thus values Wholesale at \$52 per share in 2001, which is still only 58% of his total valuation of \$90. He then adds Broadband, which is even more arbitrarily valued at \$30 in 2001 and \$34 in 2002, even though it loses money. This so-called analysis is typical of current "street" thinking.

Goldman Sachs, by contrast, sells for just 16x 2001 estimated EPS, 16x 2002 EPS, and 7.65x EBITDA. Few would argue that Enron has a business franchise equal to Goldman. However, using Goldman as a yard stick, as we explain below, we estimate that ENE might be worth between 7.65x TTM EBITDA, or about 15x EPS. That would put Enron's total value between \$23 and \$30 per share. We also do a separate segment analysis below. By this method, we estimate that the Wholesale division might be worth \$19.50 per share. Retail, pipeline, and Portland General may be worth \$9. We value Broadband at about \$1.75. We deduct \$3 for the cost to operate these businesses at the corporate level. We arrive at a value of \$27 per share by this method.

**Exhibit 1 (continued)****Background:**

Enron's business is divided into five operating segments: Wholesale, Retail, Broadband, Transportation & Distribution, and Corporate & Other.

Wholesale is divided into two units, Commodity Sales & Services and Assets & Investments. Commodity Sales & Services focuses on buying, selling, and trading natural gas, electricity, paper, pulp, metals, and numerous derivative financial instruments. Assets & Investments manages, buys, and sells assets for investment opportunity and for creating market liquidity. However, both of these segments include results of operations from physical assets such as power plants and pipelines. Merchant investments are also included in Wholesale.

Enron does not provide the breakdown of revenue or gross margin for these two groups, but together they generated \$95B of the \$101B 2000 revenue and \$2.4B of \$3.4B consolidated recurring 2000 EBITDA. This income and revenue is produced through EnronOnline, live traders, asset sales, equity investee earnings, unrealized gains/losses on merchant assets/investments, and delivery of commodities. Wholesale also owns (or controls through equity investees) certain assets relevant to corporate goals. These include power plants, paper factories, and other miscellaneous assets in the US and in various parts of the world. When Enron determines that liquidity has become available around its physical assets, the company disposes of them. In 2000 and Q1 2001, Enron ramped up its EnronOnline revenues, which have fueled the majority of the company's recent growth. 60% of transactions are now done online.

Retail accounted for \$4.6B of revenue and \$142M of the \$3.4B EBITDA in 2000. Retail specializes in selling power, gas, and energy related contracts to large end use customers such as Eli-Lilly, Saks, and JC Penney.

Broadband generated \$400M in revenue in 2000 and \$17M of the total EBITDA. As with its fixed assets in Wholesale, Enron intends to trade bandwidth around its network infrastructure until bandwidth trading becomes a liquid market, at which time Enron would dispose of its network.

Transportation & Distribution consists of Portland General Electric (PGE) and Transportation Services. All of Enron's Transportation & Distribution units are subject to regulatory restriction. PGE is engaged in the generation, purchase, transmission, distribution and sale of electricity in the State of Oregon. PGE generated \$2.3B of revenue and \$549M of the consolidated \$3.4B EBITDA in 2000. Transportation Services operates several domestic interstate natural gas pipelines extending from Texas to the Canadian border and across the southern United States from Florida to California. This unit produced \$699M of revenue and \$455M of the \$3.4B consolidated EBITDA in 2000.

Corporate & Other consists of the corporate cost center and generated an unallocated EBITDA loss of (\$197M) in 2000.

**Exhibit 1 (continued)**

We think Enron is currently overvalued. We will take two approaches to our analysis of Enron's business and our estimate of the company's value:

**A. Enterprise Analysis:** indications of overvaluation include:

1. Declining IBIT margins;
2. Poor returns on Capital, Equity, and Assets;
3. Lack of Discount for Risk in Business Model;
4. Enron's position exposure is increasing rapidly on Risk Management Instruments;
5. Questionable earnings quality;
  - a. Related Party Transactions;
  - b. Mark to market accounting for Price Risk Management activities;
  - c. Mark to Market Accounting for Merchant Investments;
  - d. Accounting for Merchant Investments as Recurring Revenue;
  - e. Securitizations of Financial Assets;
  - f. "One Time Charges" and potential Acquisition Accounting issues;
  - g. Adjustment to earnings for quality issues.
6. Weak Cash Flow;
7. High Level of Insider Sales;
8. Enron may be under-reserved for PG&E accounts receivables;
9. The importance and impact of energy market volatility on Enron. Why volatility should decrease.
10. ENE Enterprise Model and Valuation Assessment

**B. Valuation by Segments:** Enron's business segments enjoy high valuations relative to other companies with similar business models.

Wholesale.

1. Wholesale
2. Retail
3. Broadband
4. Transmission & Distribution
5. Corporate & Other
6. Enterprise Valuation based on Segment Valuations

Discussion:

**A. Enterprise Analysis****1. Declining IBIT Margins**

	1999				2000				2001
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
Total Revenue	7,632	9,672	11,835	10,973	13,145	16,886	30,007	40,751	50,129
Total IBIT	533	469	507	473	624	609	666	847	724
IBIT Margin	6.98%	4.85%	4.28%	4.31%	4.75%	3.61%	2.22%	2.08%	1.44%
Incr Seq. Rev	NA	2,040	2,163	(862)	2,172	3,741	13,121	10,744	9,378
Incr Seq. IBIT	NA	(64)	38	(34)	151	(15)	57	181	(123)
IBIT margin on s/s increase	NA	-3.14%	1.76%	3.94%	6.95%	-0.40%	0.43%	1.68%	-1.31%



## Exhibit 1 (continued)

	1Q 99	2Q 99	3Q 99	4Q 99	1Q 00	2Q 00	3Q 00	4Q 00	1Q 01
Incr Y/Y Rev	NA	NA	NA	NA	5,513	7,214	18,172	29,778	36,984
Incr Y/Y IBIT	NA	NA	NA	NA	91	140	159	374	100
IBIT Margin on y/y sls increas	NA	NA	NA	NA	1.65%	1.94%	0.87%	1.26%	0.27%
12 mos end	1999	2000	Incr.		3/31/00	3/31/01	Incr		
Incr Y/Y Rev	40,112	100,789	60,677		45,625	137,773	92,148		
Incr Y/Y IBIT	1,982	2,746	764		2,073	2,846	773		
IBIT margin on y/y sls increas	4.94%	2.72%	1.26%				0.84%		

Enron's IBIT margins have steadily decreased from nearly 7% in Q1 1999 to 1.4% in Q1 2001, with sequential decreases in all but 2 quarters. IBIT grew only \$764M on an additional \$61B in revenues from 1999 to 2000, representing an IBIT margin on incremental sales of only 1.3%. IBIT margin on the 33% sequential increase in total quarterly revenue in Q4 was only 1.68%. IBIT margin on the 25% sequential increase in sales from Q4 to Q101 was actually a negative 1.31%.

Year over year data also shows the addition of low margin business, with the additional \$37B of revenue in Q1 2001 yielding only 0.27% of IBIT margin. As Enron adds significant revenues, it appears that overall margins will continue to decrease due to an increasingly competitive environment and due to the low margins of the additional trading transactions.

Based on our estimate of the margins that Enron can generate going forward, Enron will have to generate approximately \$2.1B additional revenue for each penny it adds to EPS in 2001. This would mean that in the last nine months of 2001 Enron must generate \$50B additional revenue over the \$88B generated in the last nine months of 2000 in order to reach analysts' expectations of \$1.79.

We think that Enron has a core group of physical assets that provide a significant portion of its high gross margin business. However, this business is shrinking as a percent of the total business, which is becoming more trading oriented and less asset based. As a result, the company's risk management activities are becoming less profitable relative to revenue and are becoming riskier. (see detailed discussion of Wholesale margins within the Valuation by Segment portion of this report).

2. Return on Capital, Equity, and Assets (analysis based on 2000 operating results as balance sheet data is not yet available for Q1 2001)

Enron claims that its asset-light mentality will allow it to utilize its capital more efficiently. However, investors may be surprised to find that Enron returned only 4.5% on total capital in 2000, and just 7.81% on equity. This is only 40% of Goldman Sach's return on capital and 70% of its return on equity. (Analysts like to compare ENE with GS.)

## Exhibit 1 (continued)

	Enron 2000	Enron 1999	Williams 2000	Duke 2000	Dynegy 2000	Goldman 2000
Equity	11,470	9,570	5,892	10,056	3,598	16,530
Long term debt	8,550	7,151	10,342	11,019	2,828	31,395
Capital	20,020	16,721	16,234	21,075	6,426	47,925
Net income	896	827	873	1,757	466	3,067
ROE	8.5%	10.0%	15.2%	18.4%	19.0%	23.0%
ROC	6.6%	6.9%	6.9%	11.8%	12.1%	8.9%

Enron's 2000 ROC was only 6.6%, down from 6.9% in 1999, and was the worst among the company's three primary peers, with Williams returning 6.9%, Dynegy 12.1%, and Duke 11.8%. Return on equity also leaves much to be desired, with Enron returning 8.5% less than half of the 18% average of Dynegy, Duke, and Williams.

## Return on Average Assets

	2000 1Q	2000 2Q	2000 3Q	2000 4Q	2001 1Q (est)	1999 Annual	2000 Annual
Average Assets	35,433	41,525	49,281	59,250	70,252	31,366	49,442
Net income	318	268	271	326	386	891	1,183
Quarterly ROA	0.897%	0.645%	0.550%	0.550%	0.549%	2.84%	2.39%

Enron returned a dismal 2.4% on assets in 2000, down from 2.8% in 1999. Return on incremental assets also decreased sequentially throughout the year from 0.9% for the quarter ended March 31, 2000 to 0.5% for the quarter ended December 31, 2000.

## 3. Inadequate Discount for Risky Business Model

Enron wants investors to believe that its business is relatively risk free. Management points to a balanced portfolio, its dealings with only credit rated entities, and its risk free investments. However, Enron's equity investment portfolio and its price risk management portfolio actually appear to have substantial risk.

A recent example of Enron's equity investment exposure is Dahbol Power. Dahbol is a \$693M (at December 31, 2000) equity investment in an Indian power plant. Dahbol is currently owed \$48M by the Maharashtra State government and the venture appears to be in jeopardy. Dealings with the Indian authorities do not appear to be going well and if Enron is forced to record an impairment on its investment, it will probably call it a non-recurring item. Should it really qualify as a non-recurring item? After all, Enron is the "market maker" and a failed venture would appear to be a risk in making a market.

Enron also recorded a one-time impairment charge for the recently failed Azurix venture. Azurix was a water utility venture Enron spun off in 1999. However, a declining stock price and investor pressure led Enron to reacquire the

**Exhibit 1 (continued)**

entity and to record a \$326M impairment charge. To ensure that Azurix' continuing operations don't reflect poorly on the company, Enron elected to include this unit within the corporate segment and will probably not disclose its financial impact. These are just two examples from Enron's "risk free" investment portfolio

As Enron exits from the power generation business, it will rely more on power producers to supply nearly all of its power inventory. Enron's willingness to make major commitments and to take on risk make it an attractive customer for producers. Enron's risk management function has become the primary element of its business model. The company has become a market maker, similar to many Wall Street firms, but catering to energy and some other commodity markets instead of to debt and equity customers. While this strategy has enabled Enron to grow revenues immensely, it is resulting in decreasing margins and increasing risk and leverage.

Aquila, a recent IPO whose business model is similar to Enron, disclosed in its S-1 many of the risks that Enron investors seem to dismiss. Among these risks are that "quarterly operating results are subject to significant fluctuation and you should not rely on them as an indication of our future results". Aquila identifies market price volatility, weather patterns, and numerous other factors that could affect quarterly and continuing results.

Enron's "balanced portfolio" of long and short positions may be misunderstood. Enron's portfolio is balanced only in a general sense, "globally", and each specific position is not hedged with a matching position. Energy traders who are familiar with Enron say that Enron takes very large single positions, in the hundreds of millions of dollars, and could lose as much as 25% in notional value on any one position. There is probably a tendency as well to want to write longer contracts, since profits are greater. To the extent that duration of contracts is lengthened, risk also increases.

As hedge fund managers know, this means that there is significant risk in both the long and the short positions, and money can be lost on both sides at the same time. Being balanced both long and short does not always result in market neutrality.

**4. Enron's leverage is increasing:**

As Enron increases its price risk management business it becomes increasingly leveraged. The company is actually more levered than is shown on its balance sheet. This is because Enron has agreements with many of its significant customers that include rights to offset long positions against short positions. As a result, in these cases, only the net positions are reflected on the balance sheet. This means that the calculations we show below are understated. It may be asserted that Enron is not risking more than the net position. However, what happens if Enron is showing a net \$0 balance from one marketer today, but in reality has \$5B in asset positions that close in year 2 and \$5B in liability positions close in year 3? At the end of year two, Enron is suddenly burdened

## Exhibit 1 (continued)

with an additional \$5B in liabilities that is not offset by an asset, thereby increasing the reported exposure.

Assets and Liabilities from Price Risk Management Activities:  
Price Risk Management  
Instruments. \$MM

	1999 4Q	2000 1Q	2000 2Q	2000 3Q	2000 4Q	2001 1Q (est)
Assets ST	2,205	3,139	5,696	7,294	12,018	14,096
Assets LT	2,929	3,428	5,228	7,367	8,988	10,958
Total Assets	5,134	6,567	10,924	14,661	21,006	25,053
Liabilities ST	1,836	2,697	4,292	6,187	10,495	12,240
Liabilities LT	2,990	3,510	5,525	7,314	9,423	11,325
Total Liabilities	4,826	6,207	9,817	13,501	19,918	23,565
Net Exposure	308	360	1,107	1,160	1,088	1,488
Total Exposure	9,960	12,774	20,741	28,162	40,924	48,618
Income Generated	259	318	268	271	326	386
Incremental Seq. Total Exposure	NA	2,814	7,967	7,421	12,762	7,694
Incremental Seq. Quarterly Inc.	NA	59	(50)	3	55	60
Incremental Income as a % of Incremental Exposure (yield)	NA	2.9%	-0.6%	0.0%	0.4%	0.8%

\*- income adjusted to reflect only recurring income.

As Enron grows its revenues, the amount of exposure necessary to generate incremental income is increasing. For the four quarters ended March 31, 2001 versus the same period ending March 31, 2000, Enron produced an incremental \$68M of net income. To generate this \$68M, the Company added \$36B in reported position exposure, from \$12.7B at 3/31/00 to \$48.6B at 3/31/01, yielding an incremental return of only 0.19% on incremental exposure!

Enron's total risk management position exposure was nearly four times its equity at December 31, 2000. If revenues meet our projections in 2001, the company's reported total risk management exposure to equity could be as high as 6/1 by the end of 2001.

### 5. Quality of earnings

Since investors are enjoying Enron's EPS growth and its stock price, they don't mind overlooking the fact that the company's reported results have been confusing. Despite Enron's denial of being a "black box", investors know little about many of the company's actual financial practices and results. Enron does not offer detail on the impact of certain revenue streams and/or transactions. The company has consistently beaten earnings by a minimum of \$0.02 per quarter. However, there are indications that Enron may be utilizing certain types of transactions and accounting techniques to manage and to boost earnings.

Exhibit 1 (continued)

a. Related Party Transactions: Enron entered into transactions with three related parties during 2000. The company asserts that "the terms of the transactions were reasonable as compared to those which could have been negotiated with unrelated third parties".

Sale of Dark Fiber in Q2. Are the related party transactions truly arm's length? Enron was able to recognize \$67M in gross margin on a transaction generating revenue of approximately just \$73M (revenue consists of \$30M cash and a 7 year \$70M note with a market rate of interest whose present value is about \$43M).

Interestingly, the company originally recognized \$53M of margin from the transaction in Q2 00. It then adjusted its gross margin upward by \$14M in Q3 00 for a total gross margin of \$67mm from the one transaction. This allowed Enron to beat Q2 estimates by \$0.02 instead of missing them by \$0.02. This same transaction then gave the company an extra penny used to beat earnings by a total \$0.02 in Q3. It is unclear how much dark fiber inventory was sold during 2000. The company did announce that there were no dark fiber sales during Q1 2001.

The above details the only related party transaction that is disclosed in even a minimally understandable way. The remainder of the related party disclosures are mind numbingly complex and don't give the results on the bottom line. Some elements of these transactions included derivative sales, interest income and expense, sale of merchant investments, and issuance of put options. After a careful review of the footnotes, it also appears that there are some transactions between these related parties and the unconsolidated equity affiliates. We asked numerous industry experts and analysts about these items and none were able to divine the results of these transactions.

"Enron entered into transactions with limited partnerships (the Related Party) whose general partner's managing partner is a senior officer of Enron. The limited partners of the Related Party are unrelated to Enron" (excerpt from Enron's 2000 10-K). This transaction reminds us of the days when drug companies were able to form off balance sheet R&D partnerships which bore the expense of drug development for the company while keeping the R&D expense off the income statement. At least those transactions were transparent. Enron offers no disclosure as to how these partnerships function. Yet, their results appear to be material. We wonder why Enron does not disclose more about these entities and transactions.

b. Mark to Market Accounting for Price Risk Management Activities: Enron marks its price risk management assets and liabilities to market. In a growing business, losses recorded on certain transactions on the balance sheet can be offset by gains recorded on higher new business balances in the same periods to show earnings growth. This growing book of business that looks profitable early on could offset poor quality results from earlier transactions.

In some cases, Enron marks its books to market based on internal analyses.

**Exhibit 1 (continued)**

There are no reliable markets or industry pricing standards for certain futures. Some futures are only priced on an index going out three years, 18 months, etc. However, some of Enron's contracts may go out as much as 10 years. This allows Enron to mark its books for these instruments based on its own judgment. In addition, because Enron is the market maker and the largest player in the industry, it has the ability to influence markets and prices related to energy related commodities. This may enable Enron to manage a major earnings stream. Hedge fund managers understand that it is easy to mark up a position in a relatively illiquid investment by making a small additional investment.

c. Mark to market accounting for Merchant Investments: Enron's merchant investment portfolio includes assets purchased as investments that are not core to the company's operations. These appear to be energy and technology related ventures. As the P&L impact of gains/losses from these investments is not disclosed in the financial statements, the effect of Enron's merchant investment activities is unclear. However, Enron marks these investments to market based on its own estimates. While management utilizes valuation techniques such as comparable company analyses and independent appraisals, other more ambiguous techniques are utilized such as discounted cash flow analyses. This would allow Enron to change the values of the investments by changing the forecasts and underlying assumptions of the calculations. Some observers have opined that Enron utilizes these merchant investments as a plug to meet earnings expectations.

d. Recurring Revenue from Merchant Asset Sales: Enron operates Merchant Assets it considers non-core to its business strategy. These consist of power plants and other revenue generating assets. When the company needs additional revenue and gross margin, it may sell off the assets. Of course, this decreases its ability to generate revenue from these assets in future periods.

e. Securitizations of Financial Assets: During 2000, Enron sold certain financial assets and concurrently entered into swaps associated with the underlying assets, limiting the risks assumed by the purchasers. These swaps were adjusted to fair value using quoted market prices, if available, or to estimated fair value based on management's best estimate of the present value of cash flow. These swaps are included in Price Risk Management activities as equity investments. The proceeds and gains from securitizations were \$2.4B and \$381M respectively in 2000.

Enron recognizes a gain on these sales, and then may enter into an agreement under which Enron assumes all or part of the risk associated with the asset that it has just sold. As a result, Enron is able to realize a gain, but has ongoing risk, the effect of which may be to reduce or increase the gain at some point the future. This type of transaction has the potential to effectively defer gains and losses, and has the potential to make the buyer more indifferent to the price it pays if its risk is assumed by Enron. These are, in effect, sales with recourse to Enron. It is unclear to what degree Enron is actually exposed to these recourse arrangements.

## Exhibit 1 (continued)

We estimate that Enron's EPS was boosted by as much as \$0.33 by these transactions in 2000 (tax effect assumed at 30%).

In addition to the questionable nature of the transactions in general, \$545M of the proceeds from securitizations were from Whitewing. Enron has gone to great lengths to create the impression that Whitewing is not a related party. However, the facts are that Whitewing was consolidated in Enron until 1999, and that Enron currently holds a 50% net voting interest in Whitewing. Whitewing contributed \$7.1M to a partnership formed by Enron and a third party, and a related party of Enron contributed \$33M and \$15M of equity to Whitewing in 2000 and 1999 respectively. If the gains from the proceeds from Whitewing generated a margin of 16%, which is consistent with the overall margin generated by these sales, this would result in gross margin of \$87M, which would probably receive favorable tax treatment from the IRS. Even at a tax rate of 30%, this would result in an additional EPS of \$0.08!

Enron also purchased \$1,184M of securitized merchant financial assets as part of its activity in this area. We know little about these transactions.

f. One Time Charges and potential acquisition accounting problems: Since 1996, Enron has recorded six one-time charges for impairments of contracts and assets. As Enron prides itself on being a "risk manager", shouldn't these flow through the operating P&L as recurring items?

Enron has acquired several small private entities, such as paper and pulp manufacturing companies, in the past few years. With over \$2B in purchase prices in 2000 alone, the company would have the opportunity to use purchase accounting and related reserves to its benefit. We are unable to estimate these potential benefits given the amount of information made available.

g. The following represents our estimate of the earnings on which Enron's valuation should be based. We have eliminated earnings of questionable quality that we can identify. These earnings mainly are due to related party transactions and securitizations with apparent recourse.

	Tax effected @ 30%				2000 Total
	1Q	2Q	3Q	4Q	
Earnings on Common Stock	318	268	271	326	1,183
Sale of Dark Fiber to Related Party (a)	-	(38)	(9)	-	(47)
Interest Inc. from Related Party (10-K & 10-Qs)	-	-	(6)	(15)	(21)
Whitewing Securitized (with potential recourse) (e)	(15)	(15)	(15)	(16)	(61)
Other Securitized (with potential recourse) (e)	(51)	(51)	(52)	(52)	(206)
Adjusted Earnings	252	164	189	243	848

We consider the above detailed impact to be conservative, as it is impossible to determine the effects of most of the transactions the company is forced to disclose. The potential impact of the problems inherent in "mark to market" accounting, the one time charges, and possible purchase accounting

## Exhibit 1 (continued)

issues are not included in the above analysis, as their effects are impossible to determine.

In sum, we estimate that at least 28% of Enron's year 2000 net income, or \$0.41 of the total \$1.47 EPS is attributable to identifiable related parties and to securitizations with potential recourse. \$0.08 of the \$0.41 is from related parties as defined by the company. Another \$0.08 is from a securitization with Whitewing, which we view as another related party, and the balance is from other securitizations, some or all of which have potential recourse to Enron.

## 6. Weak Cash Flow:

Enron generated a negative \$100 million of cash from operating activities through the first nine months of 2000. Investors must have been pleased when the company finished Q4 with cash flow from operating activities of \$4.8B, a \$4.9B swing from the end of Q3. However, further analysis reveals that Q4 cash flow was very poor. Three primary generators of Q4 cash flow were increased deposits from customers (customer deposits net of Enron deposits) of \$1.6B, a \$1.0B sell-off of inventory that was not replenished, and sales of \$1.2B in merchant assets for which gains had already been recognized. Normalized 2000 cash flow seems especially poor considering the segment least valued by analysts, Transmission & Distribution, is a cash cow and probably produced at least \$500M of quality operating cash.

We estimate that Enron has had negative free cash flow for the past three years:

	2000	1999	1998
Net income	979	893	703
Dep & Amort	855	870	827
Equity Investment Expenditures	(933)	(722)	(1,659)
Sales of Equity Investments	494	294	239
Capital expenditures	(2,381)	(2,363)	(1,905)
Preferred dividends	(83)	(66)	(17)
Free Cash Flow	(1,069)	(1,094)	(1,812)
Estimated Capital Expenditures	1,886	1,610	1,500

Enron's cash flow further demonstrates its poor quality of earnings. It also raises the issue of Enron's ability to sustain operations without seeking alternative funding and increasing debt. Enron anticipates capital expenditures to decrease from 2000 to 2001, but the company has spent an average of more than \$500M per year in excess of estimates for the past three years. This would suggest Enron could spend \$2.0B in 2001. Estimates now are for \$1.5B of Capex.

A \$2.0B increase in debt from December 31, 1999 to December 31, 2000, the issuance of \$1.25B zero coupon convertible senior notes in February of 2001, and an accounts payable balance that is nearly 3 times annual operating expenses are additional indications of poor cash flow.



## Exhibit 1 (continued)

## 7. Insider Selling

Senior officers have been major beneficiaries of Enron's increasing stock price. For example, according to Bloomberg, Enron's CEO has sold approximately 339,000 shares since the beginning of November, 2000 at prices ranging between about \$59 and \$83 per share. Assuming an average price of \$70 would yield proceeds of nearly \$24M over a six month period.

## 8. Enron may be under-reserved for its exposure to PG&amp;E

Investors were recently informed that PG&E owes Enron \$570M. Enron was not initially forthright with its exposure to PG&E, but once management determined investors would learn the amount from PG&E's court documents, Enron disclosed the amount. While Enron has asserted its overall credit risk is covered, management has made no representation as to whether the company has accrued anything specifically for PG&E. This and other statements to the effect that PG&E will not have a "material" effect on the financials going forward, indicate that Enron may not be adequately reserved at this time. It seems that this information would be important for transparency. Enron argues that revealing the reserve would put it at a competitive disadvantage. Some industry observers think that Enron has actually set up no specific reserve for PG&E.

## 9. Energy Market Volatility is key to understanding Enron's trading prospects.

Volatility across energy markets in North America plays a critical role in driving both transaction volume and margin expansion/contraction for a wholesale energy marketer. California's crisis and an increasingly short US gas market brought energy prices and volatility to new heights in 2000. The natural gas benchmark Henry Hub weekly price topped \$9.75 per MMBtu and averaged \$4.23 per MMBtu for the year, while daily wholesale power markets in California and the West surpassed \$500 per MWhr. In 1999 by contrast, gas prices averaged \$2.27 per MMBtu and electricity markets on the West Coast averaged between \$30 per MWhr and \$35 per MWhr. Relatively high levels of volatility exists in gas and power markets relative to other commodities due to the relatively inflexible infrastructure and highly price-inelastic and, therefore, rigid demand associated with both energy commodities, and the virtually total lack of storage mechanisms for electricity. Volatility begins to dampen and prices soften, of course, when supply growth begins to outpace demand gains.

This correction is already taking place in power markets in the eastern US, with the exception of New York, and in the South, which will likely see fewer price spikes associated with power capacity shortages as new gas-fired facilities are being added to the grid. Capacity reserve margins in New England and Texas, for example are approaching 20 percent, much higher than the single digit margins experienced over the past few years.

The supply reaction in California will likely take 2-3 years to work out. New York is also vulnerable to power shortages this summer, and could experience a tight market for the next couple of years.

**Exhibit 1 (continued)**

Though volatility should dampen, causing prices at the margin to drop substantially, we also do not expect power prices to return to the very low levels of past years. Gas prices are likely to remain strong and gas-fired generation is increasingly setting power prices at the margin. This is due to higher gas input prices.

North American gas markets are likely to remain strong through 2001 and the beginning of 2002, as new supplies struggle to fill storage, meet demand growth, and capture back lost dual-fuel markets from oil. Assuming normal weather next winter, rising storage inventories, growing imports, and rising supply should begin to reassure markets and soften prices and volatility.

The combination of lower prices and lower volatility means that the transaction growth will be under pressure, and transactions will be done at lower total revenue levels due to lower prices. Margins should also suffer. We have included these assumptions in our model.

**10. Enterprise Valuation**

Enron's business model has evolved into that of a financial services company, and has been compared to Goldman Sachs. It does appear that Enron has become a lot like Goldman, offering trading, hedging, and risk management services, but Enron has focused more on the energy and commodity markets. Both companies rely on risk management activities to produce a substantial amount of their income and each has a reliable source of earnings. In terms of reliable earnings, Enron has its Transmission & Distribution segment and Goldman has interest income, each of which generated a significant amount of the respective companies' 2000 earnings.

Enron is also similar to a hedge fund that is long 200% and short 200%. Other "energy industry" players such as Williams and Duke are either retaining physical assets or becoming more asset intensive to cover market risks, Enron's business is becoming increasingly financial in nature, though it operates in the energy market.

Enron seems to be getting the best of both worlds. It has a high valuation because of its energy exposure, and seems to be widely admired because its business model is increasingly financial and not asset based. One buy side analyst did note that "because Enron resembles a Wall Street firm in the energy business, one wonders whether an enterprise that is inherently a trading business should be valued at levels that are in fact what the best trading businesses command. To the extent that this type of valuation perception were to increase in the marketplace, risk in the shares could rise given their relatively high valuation status." The fact is that Enron is being valued much more highly than either its financial industry peers or its energy peers.

Goldman Sachs generated \$6.1B of EBTDA for the twelve months ended February 2001. Note that this includes net interest income of approximately \$1B

## Exhibit 1 (continued)

as Goldman relies on interest for a significant portion of its earnings. Goldman Sachs has a current market capitalization of \$44.7B.

Enron generated \$3.4B in EBITDA for the twelve months ended December 31, 2000 and an estimated \$3.6B in EBITDA for the twelve months ended March 31, 2001. Enron also enjoys a current market capitalization around \$51.8B but generates less than 60% of the income of Goldman Sachs.

	Goldman		Enron	
	Sachs		12 months ended	
	Feb-00	12/31/00	Q1 00 (est)	
EBTDA	6,119	2,534	2,668	
Market Cap	46,839			
Market Cap/EBTDA	7.65		7.65	
Value based on Goldman Sachs				20,423

As discussed above, Goldman and Enron have similar business models. Goldman's market cap divided by its TTM EBTDA renders a ratio of 7.65. Based on this ratio, Enron's value should be approximately \$20.4B, or \$23.42 per share (871M diluted shares outstanding at March 31, 2001).

#### B. Analysis and Valuation by segment

##### 1. Wholesale

As noted above, Wholesale, Enron's core business, is like an energy hedge fund that is 200% long and 200% short relative to Enron's total equity base. As Enron does not disclose its gross margin for Wholesale, we spent a considerable amount of time calculating gross margins and assessing the incremental returns from incremental revenues. We think investors should be alarmed by the deteriorating margins being experienced by Wholesale.

##### Enron Wholesale Gross Margin Analysis:

	1999				2000				F1999	F2000
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q		
Revenue	6,595	8,694	11,062	9,936	12,001	15,547	28,145	39,213	36,287	94,906
COS	5,865	7,881	10,162	9,108	11,278	14,524	27,058	38,124	33,016	90,984
Gross Margin	730	813	900	828	723	1,023	1,087	1,089	3,271	3,922
GrossMargin%	11.1%	9.4%	8.1%	8.3%	6.0%	6.6%	3.9%	2.8%	9.0%	4.1%
Increment Q/Q										
Rev increase %	NA	31.8%	27.2%	-10.2%	20.8%	29.6%	81.0%	39.32%	NA	NA
Incr GM\$ Q/Q	NA	83	87	(72)	(105)	300	64	2	NA	NA
Incr GM%Q/Q	NA	3.95%	3.67%	6.39%	-5.08%	8.46%	0.51%	0.018%	NA	NA
Increment Y/Y										
Rev increase %	NA	NA	NA	NA	82%	79%	154%	295%	NA	162%
Incr GMSY/Y	NA	NA	NA	NA	(7)	210	187	261	NA	651
Incr GM%Y/Y	NA	NA	NA	NA	-0.13%	3.06%	1.09%	0.89%	NA	1.11%

Incremental calculation Q/Q shows the sequential revenue increase, incremental gross margin dollars, and gross margin percentage on the revenue

## Exhibit 1 (continued)

increment. Incremental calculation Y/Y shows year over year revenue increases, incremental gross margin dollars, and gross margin percentages on the incremental revenue.

Overall, Wholesale generated a gross margin of \$3.922B, or 4.1% on revenues of \$94.906B in 2000. Although 2000 total gross margin dollars grew nearly 20%, the increase is far less than the 162% increase in Wholesale revenue. This means that the year over year incremental gross margin dollars generated was just 1.1% of the incremental revenue required to generate the gross margin dollars. Confirming the year over year data is sequential quarterly data that shows incremental gross margin of only 0.5% in Q3 2000 and 0.018% in Q4 2000 (data not yet available for Q1 2001). Actual dollar gross margin grew only \$2M in Q4 on an incremental revenue stream of \$11.1B of revenue! With margins like these, Enron will have to run very fast indeed in order to continue growing profits at expected growth rates.

It appears that Enron is relying on industry analysts and investors to either ignore the gross margin percentage declines, or more realistically, to not spend the time and effort to determine the true gross margins not only from trading, but from Wholesale in general. Some might argue that a large percentage of the incremental revenues are being generated by EnronOnline, which has lower operating expenses than live trading, and is therefore just as profitable despite low gross margins. We think that the trend to lower margins on higher trading volumes is in place. We note that Wholesale's decrease in gross margins was substantial, despite the best directional energy market in years. We doubt that the company can retain even the low level of its current profitability if prices decrease.

Increasing competition is another reason why trading margin pressure will increase even more. Many industry experts have told us that the many new online platforms, such as the InterContinentalExchange (ICE), are leading to tighter margins industry wide. Unlike EnronOnline, ICE is a non-principal based platform, matching buyers and sellers, and is backed not only by major energy players such as BP and Royal Dutch/Shell, but also by some premier Wall Street firms, including Morgan Stanley, Goldman Sachs, and Deutsche Bank.

There are other online platforms as well, which include Altrade, TradeSpark, DynegyDirect, Williams Online, and others. Online platforms, as well as other growing power marketers, are taking market share that Enron will need to continue bottom line growth. We expect that there will be a consolidation of these online platforms, probably ending up with a handful of large competitors, including ICE and Enron.

We expect Wholesale gross margins to continue to deteriorate. In our view, the company's only way to slow its gross margin deterioration is to assume risks its competitors will not assume. That would mean more profit potential, but higher risk.

Isolating just the Wholesale segment for valuation purposes, and using top

## Exhibit 1 (continued)

tier top tier financial houses as a valuation guide, Enron's Wholesale segment should be valued at no more than \$16.8B (\$19.30 per share). We use Goldman Sachs market value to TTM EBTDA multiple of 7.65x. 7.65x TTM estimated EBTDA for ENE at 3/31 is \$16.8B ( $\$2.2B * 7.65$ ). If we applied Goldman's 16x TTM P/E, Enron's wholesale segment would be valued at \$17.3B (\$19.86 per share).

## 2. Retail (Enron Energy Services)

The retail market is very competitive and currently not very profitable. Retail providers are competing with utilities, which have capped rates. This has made it difficult for power marketers to compete, unless they are willing to lose money. However, Enron now appears to be making retail margins through long-term energy contracts on which it recognizes an up front origination fee, facilities management revenues, and commodity delivery.

We think that the transfer of risk management activities to Wholesale improved the quality of this business. Although competition will be fierce, there is still room for 30%-40% earnings growth in the near term. As a result, we concur with analysts that this segment should be valued at approximately 35X estimated TTM earnings of \$62M, for a total value of \$2.2B, consistent with "street" analyst valuations.

## 3. Broadband

The future of the broadband segment is uncertain. Just recently some analysts were valuing Enron's broadband segment at over \$33B, which is the equivalent of all of Lucent, for example. The idea that Enron's broadband business could be worth so much has been the object of some ridicule, and justifiably so, in our opinion.

Discounted cash flow is not an appropriate way to value this company because of the poor earnings visibility. Some analysts choose to value Broadband as an asset-light business that will focus on trading capacity. In that case, we can value Broadband as we did Wholesale and attribute to it a value of 7.31 times EBITDA of \$17M for a total value of \$141M!

Can Enron effectively compete with Williams Communications (WCG) or Global Crossing (GX)? WCG not only has more industry experience than Enron Broadband, but it also has double the revenue, six times the asset base, and over twice the mileage in fiber optic cable. Yet WCG only trades at \$6 and about 2.5X book. GX, with over 100,000 miles of fiber optic cable, currently trades around \$14, with a market cap of \$12.7B, barely over its \$11.7B book value. Considering these facts, it would be tough to argue that Enron should be worth even \$1.5B. This would be more nearly 4X revenue, 120% of its asset base, and far in excess of its value as using the Wholesale valuation as a yard stick.

We think the \$1.5B is the best case valuation for Enron's Broadband, as Williams and Global Crossing both have superior asset bases and industry

## Exhibit 1 (continued)

experience that provide them with more versatility and competitive edge.

4. Transmission & Distribution- PGE and the Gas Pipeline Group are the remnants of Enron's traditional energy business model. The units of this segment produce predictable earnings and reliable cash flows.

Based on the recent press revealing Scot Power's potential \$3.0B bid for PGE and Sierra Pacific's formerly offered \$3.1B bid, PGE is worth \$3.0B.

The Gas Pipeline Group seems to be Enron's main core traditional asset that it intends to hold long term. Although the earnings growth is slow, this unit is a consistent generator of earnings and cash. We think that this is one of Enron's best units. As earnings quality is strong but growth is slow, we think this unit should be valued at 15X estimated TTM earnings of \$170M. This results in a value of \$2.5B.

Based on the above analyses, Enron's Transportation and Distribution segment should be valued at \$5.5B.

5. Corporate & Other generated an estimated (\$173M) net loss (excludes Azurix impairment) for the TTM ended Q1 2001. The "other" businesses consist of Azurix and other small ventures. This segment has generated increasing net losses for the past three quarters. Based on P/E of 15, this segment should be valued at approximately (\$2.6B).

6. Overall, the above analysis results in an Enron enterprise value of \$23.4B, or \$26.86 per share, well, below the current market cap of \$51.8B.

	Segment	Per Share
	Value \$B	Value
Wholesale	\$16.80	\$19.29
Retail	2.2	2.53
Broadband	1.5	1.72
T&D	5.5	6.31
Corp & Other	(2.60)	(2.99)
Enterprise	\$23.40	\$26.87

Financial projections: \$MM

Our projections use some assumptions about gas and electricity volumes and prices.

US: We estimate that Enron's realized average gas price will decrease from approximately \$5.09 in 2001 to \$3.51 in 2002. This has a significant impact on total revenue projections. Volumes traded, however, are expected to increase only slightly year over year. The market is fairly mature and competition is increasing. US Power prices are also expected to decrease from \$115 per MWhr in 2001 to \$85 per MWhr in 2002, with more power generation facilities coming online. We expect a significant increase in electricity trading volume growth as

## Exhibit 1 (continued)

the deregulated market matures. Typically, commodity volumes traded to consumed (T/C) will approach 4/1 in a mature market. However, as electricity cannot be stored like other commodities, electricity T/C will probably peak around 3/1. Industry experts estimate that the ratio is currently slightly over 2 for domestic electricity trading and that the wholesale electricity trading market will probably mature in 4-5 years. Thus, in the US we expect significantly higher trading volumes with lower prices in energy, but only slightly higher trading volumes and lower prices in gas.

Europe: Europe is a growth opportunity for Enron. European gas volumes traded are expected to increase more than 75% year over year through 2002, with prices remaining consistent at around \$3. We expect European electricity volumes traded to grow nearly 350% year over year for the next two years. However, we also expect average European power prices to decline from \$44 per MWhr in 2001 to \$32 per MWhr in 2002. While we expect some European wholesale markets to open up soon, we think that European deregulation will be slower than expected on mainland Europe due to political forces.

	Q1 00a	Q2 00a	Q3 00a	Q4 00a
Wholesale Revenue	12,162	15,632	28,445	39,201
Retail	288	409	513	452
T&D	599	545	789	809
Broadband	59	151	135	63
Corp & Other	37	149	125	226
Total Rev	13,145	16,886	30,007	40,751
COS	11,888	15,324	28,289	39,016
Gross Margin	1,257	1,562	1,718	1,735
Operating Expenses	813	951	920	780
Dep. & Amort.	172	192	256	235
Total Operating Expenses	985	1,143	1,176	1,015
Operating Income	272	419	542	720
Equity earnings in Unc.Equity Affiliates	264	55	46	48
Gains on sales of Assets & Investments	18	72	45	11
Gain on Stock Sales of TNPC	-	-	-	-
Interest Income	50	52	54	56
Other Income (net)	20	11	(21)	12
IBIT	624	609	666	847
Interest and Related Charges, net	161	196	247	234
Dividends on Company Obligated Preferred Securities of Subsidiaries	18	21	20	18
Minority Interests	35	39	35	45
Pre-tax Income	410	353	364	550
Income Taxes	72	64	72	203
Net Inc before Cum Effects of Accounting Changes	338	289	292	347
Preferred Stock Dividends	20	21	21	21
Recurring Net Income	318	268	271	326
Cum Effect of Accounting Changes	-	-	-	-
Earnings	318	268	271	326
EPS	0.40	0.34	0.34	0.41
Diluted Shares Outstanding	852	862	870	843

## Exhibit 1 (continued)

As a % of Rev	Q1 00a	Q2 00a	Q3 00a	Q4 00a
Wholesale Revenue	92.5%	92.6%	94.8%	96.2%
Retail	2.2%	2.4%	1.7%	1.1%
T&D	4.6%	3.2%	2.6%	2.0%
Broadband	0.4%	0.9%	0.4%	0.2%
Corp & Other	0.3%	0.9%	0.4%	0.6%
COS	90.4%	90.7%	94.3%	95.7%
Gross Margin	9.6%	9.3%	5.7%	4.3%
Operating Expenses	6.2%	5.6%	3.1%	1.9%
Dep. & Amort.	1.3%	1.1%	0.9%	0.6%
Total Operating Expenses	7.5%	6.8%	3.9%	2.5%
Operating Income	2.1%	2.5%	1.8%	1.8%
IBIT	4.7%	3.6%	2.2%	2.1%
Earnings	2.4%	1.6%	0.9%	0.8%
Y/Y Growth	Q1 00a	Q2 00a	Q3 00a	Q4 00a
Wholesale Revenue	81.8%	79.6%	162.4%	294.5%
Retail	53.2%	160.5%	183.4%	40.8%
T&D	25.6%	30.7%	39.2%	46.6%
Broadband	NA	NA	NA	NA
Corp & Other	-86.6%	-62.4%	-58.7%	39.5%
COS	72.2%	74.6%	153.5%	271.4%
Gross Margin	88.7%	83.6%	169.7%	305.4%
Operating Expenses	-5.6%	17.9%	27.6%	28.7%
Dep. & Amort.	11.1%	11.1%	28.5%	-16.5%
Total Operating Expenses	-20.0%	-18.6%	13.8%	21.1%
Operating Income	4.0%	4.7%	25.0%	-10.0%
IBIT	17.1%	29.9%	31.4%	79.1%
Earnings	169.5%	32.0%	0.0%	38.7%
EPS	17.6%	25.9%	25.9%	32.3%



## Exhibit 1 (continued)

	Q1 01a/e	Q2 01e	Q3 01e	Q4 01e
Wholesale Revenue	48,506	32,011	52,826	36,254
Retail	695	2,050	2,650	4,000
T&D	243	150	135	190
Broadband	83	100	110	120
Corp & Other	(166)	(150)	(170)	(150)
Total Rev	49,361	34,161	55,551	40,414
COS	47,497	32,375	53,602	38,552
Gross Margin	1,864	1,786	1,949	1,862
Operating Expenses	920	950	980	1,010
Dep. & Amort.	265	270	275	285
Total Operating Expenses	1,185	1,220	1,255	1,295
Operating Income	679	566	694	567
Equity earning in Unc.Equity Affiliates	18	75	35	59
Gains on sales of Assets & Investments	55	75	40	80
Gain on Stock Sales of TNPC	-	-	-	-
Interest Income	58	60	62	64
Other Income (net)	(15)	10	10	10
IBIT	795	786	841	780
Interest and Rel Charges, net	201	240	255	260
Dividends on Preferred Securities of Subsidiaries	18	18	18	18
Minority Interests	40	35	35	35
Pre-tax Income	536	493	533	467
Income Taxes	130	123	133	117
Net Income before Cumulative Effects of Accounting Changes	406	370	400	350
Preferred Stock Dividends	20	21	21	21
Recurring Net Income	386	349	379	329
Cumulative Effect of Accounting Changes	19	-	-	-
Earnings	405	349	379	329
EPS	0.47	0.42	0.45	0.39
Diluted Shares Outstanding*	871	880	890	900

\*- for estimates, EPS assumes all preferred stock is dilutive.

As a % of Rev	Q1 01a/e	Q2 01e	Q3 01e	Q4 01e
Wholesale Revenue	98.3%	93.7%	95.1%	89.7%
Retail	1.4%	6.0%	4.8%	9.9%
T&D	0.5%	0.4%	0.2%	0.5%
Broadband	0.2%	0.3%	0.2%	0.3%
Corp & Other	-0.3%	-0.4%	-0.3%	-0.4%
COS	96.2%	94.8%	96.5%	95.4%
Gross Margin	3.8%	5.2%	3.5%	4.6%
Operating Expenses	1.9%	2.8%	1.8%	2.5%
Dep. & Amort.	0.5%	0.8%	0.5%	0.7%
Total Operating Expenses	2.4%	3.6%	2.3%	3.2%
Operating Income	1.4%	1.7%	1.2%	1.4%
IBIT	1.6%	2.3%	1.5%	1.9%
Earnings	0.8%	1.0%	0.7%	0.8%

## Exhibit 1 (continued)

	Q1 01a/e	Q2 01e	Q3 01e	Q4 01e
Y/Y Growth				
Wholesale Revenue	298.8%	104.8%	85.7%	-7.5%
Retail	141.3%	401.2%	416.6%	785.0%
T&D	-59.4%	-72.5%	-82.9%	-76.5%
Broadband	40.7%	-33.8%	-18.5%	90.5%
Corp & Other	-548.6%	-200.7%	-236.0%	-166.4%
COS	275.5%	102.3%	85.1%	-0.8%
Gross Margin	299.5%	111.3%	89.5%	-1.2%
Operating Expenses	48.3%	14.4%	13.4%	7.3%
Dep. & Amort.	13.2%	-0.1%	6.5%	29.5%
Total Operating Expenses	54.1%	40.6%	7.4%	21.3%
Operating Income	20.3%	6.7%	6.7%	27.6%
IBIT	27.4%	29.1%	26.3%	-7.9%
Earnings	27.4%	30.2%	39.8%	1.0%
EPS	16.6%	23.6%	32.1%	-5.1%
	Q1 02e	Q2 02e	Q3 02e	Q4 02e
Wholesale Revenue	43,366	35,175	56,918	37,708
Retail	3,200	2,600	3,500	2,700
T&D	253	156	140	198
Broadband	125	135	145	150
Corp & Other	(150)	(140)	(180)	(150)
Total Rev	46,794	37,926	60,524	40,606
COS	44,711	35,887	58,320	38,481
Gross Margin	2,083	2,040	2,204	2,125
Operating Expenses	1,040	1,070	1,100	1,130
Dep. & Amort.	295	305	275	285
Total Operating Expenses	1,335	1,375	1,375	1,415
Operating Income	748	665	829	710
Equity earnings in Unc.Equity Affiliates	62	65	68	71
Gains on sales of Assets & Investments	60	90	10	90
Gain on Stock Sales of TNPC	-	-	-	-
Interest Income	66	68	70	72
Other Income (net)	10	10	10	10
IBIT	946	898	987	953
Interest and Related Charges, net	265	270	280	305
Dividends on Company Obligated Preferred Securities of Subsidiaries	18	18	18	18
Minority Interests	35	35	35	35
Pre-tax Income	628	575	654	595
Income Taxes	157	144	163	149
Net Income before Cumulative Effects of Accounting Changes	471	431	490	446
Preferred Stock Dividends	22	22	22	22
Recurring Net Income	449	409	468	424
Cumulative Effect of Accounting Changes	-	-	-	-
Earnings	449	409	468	424
EPS	0.52	0.47	0.53	0.47
Diluted Shares Outstanding*	910	920	930	940

\*-EPS assumes all preferred stock is dilutive.

## Exhibit 1 (continued)

As a % of Rev	Q1 02e	Q2 02e	Q3 02e	Q4 02e
Wholesale Revenue	92.7%	92.7%	94.0%	92.9%
Retail	6.8%	6.9%	5.8%	6.6%
T&D	0.5%	0.4%	0.2%	0.5%
Broadband	0.3%	0.4%	0.2%	0.4%
Corp & Other	-0.3%	-0.4%	-0.3%	-0.4%
COS	95.5%	94.6%	96.4%	94.8%
Gross Margin	4.5%	5.4%	3.6%	5.2%
Operating Expenses	2.2%	2.8%	1.8%	2.8%
Dep. & Amort.	0.6%	0.8%	0.5%	0.7%
Total Operating Expenses	2.9%	3.6%	2.3%	3.5%
Operating Income	1.6%	1.8%	1.4%	1.7%
IBIT	2.0%	2.4%	1.6%	2.3%
Earnings	1.0%	1.1%	0.8%	1.0%
Y/Y Growth	Q1 02e	Q2 02e	Q3 02e	Q4 02e
Wholesale Revenue	-10.6%	9.9%	7.7%	4.0%
Retail	360.4%	26.8%	32.1%	-32.5%
T&D	4.0%	4.0%	4.0%	4.0%
Broadband	50.6%	35.0%	31.8%	25.0%
Corp & Other	-9.6%	-6.7%	5.9%	0.0%
COS	-5.2%	11.0%	9.0%	0.5%
Gross Margin	-5.9%	10.8%	8.8%	-0.2%
Operating Expenses	11.7%	14.2%	13.1%	14.1%
Dep. & Amort.	13.0%	12.6%	12.2%	11.9%
Total Operating Expenses	11.3%	13.0%	0.0%	0.0%
Operating Income	12.7%	12.7%	9.6%	9.3%
IBIT	18.9%	14.2%	17.3%	22.2%
Earnings	10.8%	17.2%	23.6%	28.8%
EPS	10.9%	11.5%	17.3%	22.0%

## Exhibit 1 (continued)

	FY 00a	FY 01e	FY 02e
Wholesale Revenue	95,440	169,598	173,168
Retail	1,662	9,395	12,000
T&D	2,742	718	747
Broadband	408	413	555
Corp & Other	537	(636)	(620)
Total Rev	100,789	179,488	185,850
COS	94,517	172,026	177,399
Gross Margin	6,272	7,461	8,451
Operating Expenses	3,464	3,860	4,340
Dep. & Amort.	855	1,095	1,160
Total Operating Expenses	4,319	4,955	5,500
Operating Income	1,953	2,506	2,951
Equity earnings in Unc. Equity Affiliates	413	187	266
Gains on sales of Assets & Investments	146	250	250
Gain on Stock Sales of TNPC	-	-	-
Interest Income	212	244	276
Other Income (net)	22	15	40
IBIT	2,746	3,202	3,783
Interest and Rel Charges, net	838	956	1,120
Dividends on Company Obligated Preferred Securities of Subsidiaries	77	72	72
Minority Interests	154	145	140
Pre-tax Income	1,677	2,029	2,451
Income Taxes	411	503	613
Net Income before Cumulative Effects of Accounting Changes	1,266	1,526	1,838
Preferred Stock Dividends	83	83	88
Recurring Net Income	1,183	1,443	1,750
Cum Effect of Accounting Changes	-	19	-
Earnings	1,183	1,462	1,750
EPS	1.47	1.73	1.99
Diluted Shares Outstanding*	843	882	925

\*- EPS assumes all preferred stock is dilutive.

As a % of Rev	FY 00a	FY 01e	FY 02e
Wholesale Revenue	94.7%	94.5%	93.2%
Retail	1.6%	5.2%	6.5%
T&D	2.7%	0.4%	0.4%
Broadband	0.4%	0.2%	0.3%
Corp & Other	0.5%	-0.4%	-0.3%
COS	93.8%	95.8%	95.5%
Gross Margin	6.2%	4.2%	4.5%
Operating Expenses	3.4%	2.2%	2.3%
Dep. & Amort.	0.8%	0.6%	0.6%
Total Operating Expenses	4.3%	2.8%	3.0%
Operating Income	1.9%	1.4%	1.6%
IBIT	2.7%	1.8%	2.0%
Earnings	1.2%	0.8%	0.9%

## Exhibit 1 (continued)

Y/Y Growth	FY 00a	FY 01e	FY 02e
Wholesale Revenue	163.9%	78%	2%
Retail	96.2%	465%	28%
T&D	36.2%	-74%	4%
Broadband	NA	1%	34%
Corp & Other	-52.8%	-218%	-3%
COS	151.3%	78%	4%
Gross Margin	171.9%	82%	3%
Operating Expenses	17.2%	19%	13%
Dep. & Amort.	7.0%	11%	12%
Total Operating Expenses	-1.7%	28%	6%
Operating Income	5.1%	15%	11%
IBIT	57.1%	21%	20%
Earnings	33.7%	24%	20%
EPS	25%	18%	15%

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