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# Innovation Corrupted: The Rise and Fall of Enron (A)

## Introduction

Until its collapse in the fourth quarter of 2001, Enron Corporation was the world's dominant energy trader, accounting for about one-quarter of all energy trading in the United States. By pioneering the development of large-scale energy trading, Enron was able to transform itself from an "old economy" gas pipeline operator to a "new economy" financial intermediary and market maker. In the process, Enron's revenues grew from \$13.5 billion in 1991 to a reported \$100.8 billion 10 years later. During the last five years of the millennium, Enron delivered a 507% total return for its shareholders, and for many years it was a regular and prominent member of published lists of America's most admired and innovative companies.

At the beginning of 2001, Enron's market capitalization was \$62.5 billion. One year later Enron's stock was worth only pennies to its unfortunate shareholders, and the company held (at the time) the dubious distinction of being the largest bankruptcy in American economic history. A corporate icon of the 1990s had not only collapsed swiftly but also ignominiously—revealing a trail of frantic efforts to hide losses. In the process, Enron's bankruptcy left thousands of committed employees without jobs and, for those with large holdings of Enron's stock in their 401K plans, no hope of restoring their post-retirement nest eggs. (See **Exhibits 1** and **2** for selected financial data.)

This case reviews Enron's history and *modus operandi* that shed light on perplexing and, ultimately, complicated questions. Was Enron's strategy flawed or was the failure the result of poor execution and flawed management? While much is now known about Enron's strategy, organization, and core management processes, much remains to be discovered in the many legal proceedings under way. Thus, what appear as "baseline facts" in the following pages must be considered only tentative until the full light of enquiry—based on legal depositions, plaintiff accusations, and defenses offered by Enron management and directors—reveals the full texture of the Enron story.

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## Historical Overview

### *Origins and Subsequent Growth Path*

Before Congress deregulated the sale and transportation of natural gas and wholesale electricity, U.S. utilities were given monopoly charters for designated geographic areas. Their rates were approved and overseen by state regulators. This straightforward industry model was wiped off the books by a series of legislative reforms enacted between 1978 and 1992.<sup>1</sup> Utilities were liberated to merge and diversify, unbundle services, and buy and resell gas and electricity at whatever prices they saw fit. Barriers to entry also fell. Traditional industry players were soon joined by many new, virtually unsupervised power generators and traders—including the newly formed Enron Corporation.

Enron was created in 1985 through the merger of two existing gas pipeline companies. The CEO and “founder” of the new company was Kenneth L. Lay. Lay had served as a naval officer in the Pentagon and earned a Ph.D. in economics at the University of Houston before joining the Federal Power Commission in Washington. He subsequently switched to the private sector and worked his way up through various positions in the energy industry to become CEO of Houston Natural Gas—one of Enron’s predecessor companies. Lay was widely known as a free-market advocate and an outspoken lobbyist for deregulation.<sup>2</sup>

Lay’s successor as CEO in 2001 was Jeffrey Skilling, who began working with Enron in 1986 as a consultant with McKinsey & Co. and eventually joined the company in 1990 when Lay made him president of Enron’s new trading operations. A graduate of Southern Methodist University and the Harvard Business School, Skilling quickly won the confidence of Lay with his innovative ideas about trading natural gas. Skilling was known within McKinsey as a talented and charismatic consultant with a brash in-your-face persona. According to Tom Peters, a best-selling management writer who had worked with him at McKinsey, Skilling “could out-argue God.”<sup>3</sup>

Enron’s first years were marked by several “near death” experiences. In 1985, the government of Peru expropriated Enron’s offshore Peruvian production operations, resulting in a \$200 million write-off.<sup>4</sup> A year later, Enron had to fight off a hostile takeover bid from Irwin Jacobs by repurchasing 16.5% of its common stock at a premium.<sup>5</sup> In 1988, Enron was faced with an oil-trading scandal that cost the company \$85 million. On the heels of these losses and other turbulence in the industry, Lay assembled what future CEO Skilling subsequently referred to as a “Come-to-Jesus” meeting. At this meeting, Lay presented Enron’s senior executives with two choices: (1) to continue with the current business model as a staid pipeline company, fight deregulation, and probably go bankrupt; or (2) to create a new way of doing business.

Not surprisingly, the second path was followed. More interestingly, the new way of doing business capitalized on deregulation by creating a gas-trading business alongside the traditional pipeline business. Enron’s new trading business was the brainchild of Skilling. Over time both Skilling and Lay came to see energy trading as a once-in-a-lifetime opportunity to establish a business that Enron could lead and count upon for decades to come.

In 1989, Enron locked in its first fixed price contract to supply natural gas, to a Louisiana aluminum producer. During the early 1990s Enron pioneered fixed price contracts to supply natural gas to a wide variety of industrial firms. Its financial engineering capabilities grew as many forward contracts were hedged by an increasingly diverse array of transactions. By 1994, Enron’s scope of trading had expanded to include wholesale electricity after Congress deregulated the electric power industry. Enron had jumped into this market after its analysts estimated the electricity market to be 10 times larger than the natural gas market. Once the company found its legs trading electricity

contracts, it then turned its attention in 1998 to financing innovative “peaking plants” in the United States to cover the shortfall in supply during peak periods of electricity demand.

At the same time that Enron was diversifying at home, it was also building new power plants and pipelines abroad as part of an aggressive international growth strategy. This strategy reflected the strong belief that those who moved quickly to exploit the worldwide deregulation and privatization of the energy industry would be the market leaders. As early as 1994, Enron was operating power and pipeline projects in 15 countries and was developing similar projects in 15 others.

While many new business initiatives were being pursued both domestically and internationally during the 1990s, one of the more innovative and impactful was EnronOnline, launched in 1999. EnronOnline was an Internet-based trading platform that handled a wide array of commodity trades and contributed to a large increase in trading volumes. Within two years of its launch, EnronOnline offered over 1,500 different products, from spot electricity and gas to complex derivative instruments and even hedges against the weather. Enron had also invested billions of dollars in a new broadband-trading operation and various telecommunications ventures while, at the same time, continuing to invest in international power-generation projects. By the end of 2000, Enron’s reported revenues had soared through the \$100 billion mark.

### *The Use of Off-Balance Sheet Partnerships*

In the course of building its trading and merchant investment businesses, Enron created over 3,000 off-balance sheet subsidiaries and off-balance sheet partnerships.<sup>6</sup> Some partnerships invested in energy and telecommunications businesses that were originally owned by Enron but would not generate earnings or cash flow within a one- to three-year period. These businesses would of course dilute Enron’s current earnings per share. They would also adversely affect Enron’s balance sheet and credit rating due to their heavy debt financing. Thus, one apparent purpose of the partnerships was to deconsolidate Enron’s assets, thereby accelerating the growth in Enron’s reported earnings and protecting its prime credit rating by moving some portion of corporate debt off its public financial statements. Another, more widely proclaimed purpose was to invest in hedges related to Enron’s investments in various operating and financial assets.<sup>7</sup>

Enron’s strategy of moving debt off its balance sheet was perfectly legal so long as the company complied with the (few) applicable accounting rules. As will be explained below, these rules were not followed in all instances. In addition, according to a special board committee report prepared after Enron’s bankruptcy, some partnerships were apparently designed to simply conceal very large losses from Enron’s merchant banking investments by creating the false impression that these investments were properly hedged. In fact, the equity capital of several important partnerships was Enron stock provided by Enron itself—thereby eliminating any plausible basis for claiming that these partnerships were true economic hedges.<sup>8</sup> If the market price of Enron stock were to fall below a predetermined trigger price (\$47 in one instance), the liquidity of the partnership would be threatened, and Enron would either have to contribute more stock to the partnerships or unravel the partnerships and their underlying hedges. Either way, as Enron’s stock price declined steadily from the high \$80s throughout the first six months of 2001—reflecting a collapse in energy prices, fears of a glut in electricity and bandwidth, adverse publicity affecting all energy traders during California’s energy crisis, and lingering problems stemming from its Indian power-generation plant—these affected partnerships were doomed.

In fact, unbeknownst to Enron’s shareholders, many inadequately hedged investments located in Enron partnerships had to be unwound during August and September. When third-quarter earnings were reported on October 16, 2001, Enron announced that it was taking a \$544 million charge against third-quarter earnings related to losses on closing down four partnerships. Enron also announced a

\$1.2 billion reduction in shareholders' equity due to an accounting error discovered in a partnership that had been created and led by Enron's chief financial officer (CFO), Andrew Fastow.<sup>9</sup> (Fastow's role in off-balance sheet partnerships created a major conflict of interest since he was, in effect, negotiating both sides of transactions between Enron and several large partnerships. The board recognized this conflict and explicitly made an exception to the company's Code of Ethics, arguing that Fastow's detailed knowledge of the relevant transaction would shorten the due-diligence process and accelerate the closing of deals to the benefit of Enron shareholders.)<sup>10</sup>

### *The Fall of Enron and Its Aftermath*

The announcements of unexpected write-offs and startling conflicts of interest shocked Wall Street into a detailed questioning of Enron's books. Enron's complex, and often indecipherable, financial statements made such questioning a difficult task. Not even Enron's chairman appeared able to shed light on many of Enron's accounting practices. During an earlier interview with financial analysts in August 2001, long before anyone thought that Enron might collapse, Lay was stumped when pressed to explain the financial structures and related accounting for business partnerships that were set up and run by Enron's CFO. He responded to intense questioning by admitting, "I just can't help you on that. . . . You're getting way over my head."<sup>11</sup>

One month after the October 16 announcement, during which time the company was under intense scrutiny by both the business press and the U.S. Securities and Exchange Commission (SEC), Enron announced that it was restating its financial statements for the years 1997–2000 because of various accounting errors with other Fastow-led partnerships. This restatement revealed that Enron had overstated its reported net income by \$586 million and understated its debt by as much as \$711 million over the period, in addition to overstating its shareholders' equity by \$1 billion as of December 31, 2000. *The Wall Street Journal* also discovered and reported that Fastow had personally received over \$30 million from two partnerships and that other Enron executives reporting to Fastow had profited handsomely from investments in Enron-sponsored partnerships.

These restatements and revelations destroyed market confidence and investor trust in Enron. From its earliest days, Enron's trading operation relied heavily on trust. It was widely recognized that trust in Enron's financial soundness was critical to keep credit flowing to its trading operations from banks and trading partners.<sup>12</sup> Once this trust was broken there was no way of restoring it fast enough to keep its lines of credit open.

The most tangible expression of this trust was Enron's credit rating. An investment-grade credit rating was indispensable in providing Enron access to the commercial paper market where it borrowed billions of dollars to maintain its liquidity and protect its backup credit lines from lead banks (J.P. Morgan Chase and CitiCorp). Enron's investment-grade credit rating also enabled the company to raise long-term capital on attractive terms by selling debt securities to the public. Finally, under the terms of many Enron partnerships, maintaining an investment-grade credit rating was critical in preventing nonrecourse debt securities sold by the partnerships from becoming recourse to Enron if and when Enron's debt was downgraded. By the end of October, Enron's credit rating and access to credit had collapsed, and the company was staggering under the increased burden of nonrecourse debt converting to recourse.

On November 9, in a last-ditch effort to save itself from a complete financial breakdown, Enron agreed to be acquired by its crosstown rival, Dynegy Inc., for about \$9 billion in stock and the assumption of \$13 billion in debt. In less than three weeks, however, Dynegy called off the deal, citing inadequate disclosure of Enron's true financial picture. In the wake of this failed merger, Enron filed for bankruptcy on December 2, 2001.

Fueling widespread dismay and debate surrounding Enron's collapse was the feeling that the public had been duped by the company's extensive public relations program, which won Enron substantial coverage in the business press and academic community. Enron senior management, and Skilling in particular, vigorously argued in public for a higher valuation of Enron's stock. For example, before a group of analysts and investors in San Francisco and Houston in early 2001, Skilling claimed that Enron's stock was worth at least \$126 a share, or almost 50% higher than the then-current value, as a result of its attractive broadband, energy services, and new-business prospects.

Enron's aggressive self-promotion seemed to work. Questions from investor analysts often went unasked or, if asked, unanswered. Failure to provide answers got lost in Enron's public relations campaign and the stock's performance. Analysts and journalists appeared to be afraid to ask key questions for risk of appearing to be stupid or of losing access to Enron executives. Skilling often intimidated analysts with statements such as, "People who raise questions are people who have not gone through [our business] in detail and who want to throw rocks at us."<sup>13</sup> Those who did ask questions were aggressively shot down. For example, when Richard Grubman of Boston-based hedge fund Highfields Capital Management criticized Enron's schedules for releasing balance sheet information during an analysts and investors' meeting in April 2001, Skilling reportedly responded by calling him a profanity.<sup>14</sup> As long as Enron's stock kept rising, however, Wall Street appeared to have bought Skilling's assertions that "We're on the side of angels. . . . We're taking on the entrenched monopolies. In every business we've been in, we're the good guys."<sup>15</sup>

Once the crisis of confidence in Enron set in, the business press drummed up considerable interest and anger over the fact that a series of public statements by senior executives during 2000–2001 about the health of the company were at odds with both their personal investment behavior and the economic realities facing the company. For example, while Chairman Lay and CEO Skilling were publicly and internally touting the prospects of Enron throughout 2000 and 2001, other officials were becoming increasingly worried over its mounting debt and looming cash shortage. In late 2000 Skilling was reportedly leading an effort to unload a collection of troubled foreign assets to raise \$6 billion to \$8 billion in cash.<sup>16</sup> At the same time, Lay and Skilling were privately selling large amounts of their holdings throughout 2000 and 2001. In fact, Lay gained over \$178 million through various trading activities during 2000 and 2001 (up to October 26, when trading in Enron's shares was suspended). Skilling gained more than \$78 million over the same period, although most of this was booked in 2000.<sup>17</sup> In contrast to Lay, Skilling was actually a *net* buyer of Enron stock in 2001 once he became CEO. Fastow, Enron's CFO, was reportedly also a net buyer of stock during the spring and summer of 2001. In addition, he reaped enormous financial benefits from two off-balance sheet partnerships (discussed below).

Similarly, when Enron's chief executive Skilling quit in mid-August 2001 for "personal reasons," after only six months on the job, Lay, who resumed the CEO title, told his organization that he "never felt better about the company."<sup>18</sup> Yet, on the same day, a suspicious Wall Street knocked down Enron's stock price to a 52-week low of \$40.25, way below the \$47 trigger price that would require Enron to refinance or fold one of its off-balance sheet partnerships.

Once again, on September 26, 2001, Lay called the Enron stock "an incredible bargain" and told employees, "The third quarter is looking great."<sup>19</sup> In fact, he added that he had bought the stock within the last two months.<sup>20</sup> Only three weeks later, however, Enron was forced to report the third-quarter loss and massive write-off in equity value related to trades and investments that Enron had entered into with the partnerships set up and led by Fastow, beginning in the summer of 1999.

These insider stock sales and the increasingly apparent counterfactual public statements by Enron's senior executives—coupled with the blatant conflicts of interest involving Enron's CFO and

the revelation of serious accounting errors involving the nearly unfathomable web of off-balance sheet partnerships—created a public backlash against Enron. Within days of Enron’s collapse, the Department of Justice created a special task force to investigate whether Enron defrauded investors by deliberately concealing certain information.<sup>21</sup> Various pension funds holding Enron stock also immediately filed dozens of lawsuits against the company, accompanying many class-action lawsuits aimed at Lay, Skilling, and Fastow, among others. By mid-February 2002 at least 10 House and Senate committees had initiated investigations aimed at revealing suspected abuses of the public trust by Enron’s top management and board of directors. In addition, at least 70 lawsuits were filed in state and federal courts on behalf of former employees, shareholders, and investors.<sup>22</sup> Given the number of Enron executives subpoenaed by Congress who subsequently requested protection against self-incrimination under the Fifth Amendment of the Constitution, it was clear that Enron was soon to become one of the most complex and litigious bankruptcies in American history.

Understanding the full dimensions and causes of the Enron debacle requires several important elaborations of this brief historical overview.

## **Enron’s Business Model**

Enron’s growth in revenues was built on a series of business initiatives and practices that continued to evolve rapidly right up to Enron’s collapse in December 2001.

### *Oil and Gas Exploration, Production, and Transportation*

When Enron Corporation was created through the merger of Houston Natural Gas and Omaha-based InterNorth, its principal line of business was oil and gas exploration, production, and transportation. Enron sold or transported oil and gas to regulated utilities through long-term, point-to-point, fixed price contracts. The merger enabled Enron to become the first interstate natural gas pipeline system in the United States. By virtue of its geographic distribution capabilities and operational efficiencies, the company was able to build market share while steadily growing profits. Even as this “hard-asset” side of Enron’s business declined over time as a percent of total sales, its profit stream continued to account for a major proportion of total corporate profits. From 1990 to 2000, for example, Enron’s “hard-asset” revenues declined from 80% to only 3% of reported revenues in 2000, but this business sector nevertheless provided one-third of Enron’s reported cash flow in 2000. Industry experts estimated that profits from Enron’s traditional gas pipeline business were growing at an annual rate of 18%–20% during this period.<sup>23</sup> Even after Enron’s bankruptcy, these on-going operations were known to be generating good returns and cash flows.<sup>24</sup>

### *Trading Energy Products and Services*

Prior to industry deregulation, more than 75% of gas sales were conducted through the spot market, with significant volatility in prices.<sup>25</sup> As the deregulation enacted by Congress took hold, Enron’s business model expanded to include the trading of physical and financial contracts in energy. Enron became the first to create a futures market for natural gas with a “Gas Bank” that allowed users to buy and sell gas for future delivery.<sup>26</sup> In addition to straightforward buy-sell contracts, Enron soon started trading such “derivative” contracts as puts, calls, swaps, and collars.<sup>27</sup>

In the natural gas-trading business, Enron could capitalize on its pipeline network and geographic reach to provide customers with more flexible contracts for physical delivery. Enron could also provide risk management tools to hedge prices and volatility in supply and demand. In order to be able to offer a rich menu of options and choices to buyers and sellers, Enron built a portfolio of longer-term contracts that, in turn, could be broken down into tailor-made, shorter-term instruments.

These instruments were designed to help customers manage uncertainties in prices and supply. For example, Enron could enter into a long-term supply contract with an oil or gas producer and then sell part of that guaranteed supply to one customer who needed a two- to three-year contract at a certain price and part to another customer who was more interested in a 10-year deal.

In the markets that it chose to enter, Enron usually owned or purchased sufficient quantities of the product so that it could guarantee delivery. Enron was thus a “party at risk,” which meant it was a buyer or a seller, not just a bulletin board, exchange, or broker. Because it had its own inventory, Enron could make up the difference between what a buyer wanted and what was available and could guarantee delivery. In addition, with guaranteed sources of supply, Enron could operate as a logistics company that tied together supply and demand for a given commodity and figured out the most cost-effective way to transport that commodity to its destination.<sup>28</sup> Here is an example of how Enron filled that “logistics” role:

In 1999, Peoples Gas, Light & Coke Co. of Chicago, a local distribution company, signed a five-year gas procurement deal with Enron. Enron took over Peoples’ scheduling of gas pipelines and storage assets that Enron then could use to meet commitments for a broad array of other customers. In the meantime, it procured gas daily as Peoples needed it, provided working capital, handled accounts receivable and payable, managed storage, and financed the gas in storage.<sup>29</sup>

Enron’s successful entry into natural gas trading and related services was followed by a similar strategy designed to exploit opportunities in electricity. By 1995, Enron had captured 30% of the non-regulated market in electricity.<sup>30</sup>

As Enron’s supply base, inventory, and transaction volume expanded, the company became increasingly adept at swiftly structuring natural gas and electricity deals. In the late 1980s and early 1990s, it took Enron up to nine months to prepare and negotiate long-term gas contracts, and only 400–500 such deals could be closed in any calendar year. (This time was well spent, however, since the profit margins on long-term contracts ran from 20% to 75%, versus 5% to 7% for a simple energy futures contract.)<sup>31</sup> By the late 1990s, Enron traders—working with standardized contracts (developed by Enron) and assisted by sophisticated systems and research support—could assemble long-term deals in only two weeks, with each trader completing two to three deals a week. With more suppliers and inventory also came an increased ability to pluck kilowatts from inventory and configure them in ways that precisely fit customers’ needs and to charge attractive prices for doing so.<sup>32</sup>

Once EnronOnline was up and running, its portfolio of contracts expanded exponentially. In less than a year after its launch, 60% of Enron’s gas trades took place on EnronOnline. Enron’s rapid growth in trading volume enabled its traders to accelerate their deal making, completing as many as five deals per day.<sup>33</sup> Additionally, as the size of Enron’s natural gas distribution network grew, its expanded market knowledge and information flow enabled traders to exploit geographic price differentials more efficiently than its competitors and to better predict fluctuations in supply and demand. Increased size not only made Enron one of the savviest traders in the business but also one of the fastest in identifying and capturing profits from big moves in prices.<sup>34</sup> According to one account:

Enron has its hands on one-quarter to one-third of the U.S. total. . . . So it’s able to jump on arbitrage opportunities that arise from regional price differences. If Enron sees prices skyrocket in Louisiana, where it owns a major pipeline, it can send gas originally bound for Chicago there instead. Then it can buy gas to fulfill its Chicago contract in Chicago at a cheaper price, pocketing the difference.<sup>35</sup>

The derivatives side of Enron's natural gas- and electricity-trading business expanded even more rapidly than the base forward-contracting business. Indeed, the volume of Enron's total financial contracts exceeded the volume of contracts to deliver gas or electricity by 15 to 20 times.<sup>36</sup> Many of these derivative products were highly complex, avant-garde instruments that challenged the understanding of accountants, auditors, and investment analysts. The absence of accounting rules and regulations governing their use and disclosure only made the challenge of understanding their underlying value and risks more severe.

Most trades—including long-term contracts that accounted for 25% of Enron's trading volume<sup>37</sup>—were valued using mark-to-market (MTM) accounting principles. Under MTM accounting rules, Enron would calculate the total estimated revenue and profits stream over the life of the contract. That stream would then be discounted to allow for default risk and potential interruptions in the flow of the payments over the life of the contract. The present value of the contract was booked in the year the contract was signed, an accounting treatment that financial trading firms such as Wall Street banks were not permitted to use.<sup>38</sup>

MTM rules gave Enron "huge latitude for deciding when to include as current earnings profits they expect to realize in future periods from energy-related contracts and other 'derivative' instruments."<sup>39</sup> In addition to the wide discretion it gave operating executives, the actual valuation process invited highly subjective judgments. While market values were easily assigned in liquid markets using a single forward price curve for each commodity, in less-liquid markets where a commodity and its delivery date were not frequently traded, developing a forward price curve was at best a very rough estimation.<sup>40</sup> Similarly, for long contracts stretching out for 20 years or more, the estimation of present values required assumptions on the prices of natural gas and electricity that were virtually unknowable (and therefore difficult to hedge).<sup>41</sup> To offset inevitable concerns over the valuation of contracts and other origination deals, Enron's chief risk officer was responsible for challenging and validating the trader's forward curves. Whenever possible, such validation involved seeking an external verification of forward price estimates.<sup>42</sup>

Enron, like most of its competitors, booked revenue from its contracts and other deals at their gross value, not their net value. This method of booking revenue was legal but not necessarily understood by outside analysts. Most Wall Street firms involved in trading tended to book only the spread between the bid and ask price as revenue. Enron's method of booking revenues clearly overstated its reported size, enabling Enron to claim that it was the "seventh-largest company in America."<sup>43</sup> Using these inflated top-line figures, Enron could report that 95% of its 2000 revenues came from its energy-trading business.

Enron's entry into the energy-trading business was part of what came to be called its "asset-light" strategy. This strategy reflected Skilling's view that the company did not need a lot of physical assets to thrive and, in fact, should minimize its reliance on these assets. Such assets were not, according to Skilling, generating the returns that Enron needed. Indeed, they were holding Enron back from its growth strategy.

In Skilling's opinion, information, along with a modest physical presence in the form of power plants, pipelines, and supplies of "feedstock," was the key to dominating energy markets in their early stages of development. Skilling believed that the firm's "hard assets" were most useful in generating information or providing a badge of credibility or emergency source of supply. For Enron, it was more important to develop the intellectual capability to diversify risks through a network or portfolio of suppliers than to own redundant hard assets requiring significant investments. In the words of one observer:



Enron sees its future in carrying out e-commerce transactions rather than in owning the infrastructure and commodities themselves. In the natural gas sector, for instance, the company now sells about 20 times its pipeline capacity (and it owns 5,000 fewer miles of pipeline than it did in 1985, when the merger of Houston Natural Gas and InterNorth created Enron). For each industry it serves, Enron figures it needs about 2% of the physical product in the right locations.<sup>44</sup>

According to Enron's own accounting, profits from its energy-trading operations in the fiscal year prior to its collapse were \$2.3 billion—leading *The Economist* to observe that such returns would make the Enron Wholesale Services division (the pillar of Skilling's "asset-light" strategy) one of the 50 most profitable companies in the United States. At its peak, Enron's trading business reportedly had 300 main clients.<sup>45</sup>

### *Replicating the Energy-Trading Business in Nonenergy Markets*

Enron's successes in natural gas and then in electric power encouraged managers to try to replicate its business model in other industries, such as coal, steel, paper and pulp, and broadband. According to Enron's way of thinking, each of these markets shared some common characteristics. They tended to be fragmented and undergoing significant change, such as deregulation. Companies' distribution channels were highly complex, capital intensive, and dedicated to a single commodity. Sales cycles were lengthy. Supply and service contracts tended to contain loosely defined quality-of-service standards and performance guarantees. Prices were not transparent; most deals were struck in the strictest confidence without public disclosure. Finally, buyers of supply contracts, who needed some flexibility to manage their supply and price risks over differing time frames, were typically saddled with long-term, fixed price contracts with little ability to vary the terms of these contracts. The result was a high degree of market inefficiency, coupled with the potential for substantial profit margins.

Since each of these markets appeared to share important characteristics, Skilling argued that Enron could use the same risk systems, the same position-monitoring and analysis systems, the same back-office and accounting systems, and similar logistics systems in building its expanded trading business: "If you have the same general [market] characteristics, all you have to do is change the units. Enron has a huge investment in capabilities that can be deployed instantly into new markets at no cost."<sup>46</sup> This was Skilling's principal rationale for expanding the scope of Enron's trading business.

The first major step in Enron's strategy of putting gas and electricity under one roof in the North American market was its 1996 acquisition of an Oregon-based electric utility, Portland General Electric, Inc., for \$2.1 billion and the assumption of \$1.1 billion in debt. The idea was to combine Enron's gas, trading and risk management, and logistics expertise with Portland General's expertise in power generation, transmission, and distribution.<sup>47</sup> By just about any measure—strategic or financial—this purchase turned out to be a failure.

When Enron tried to split up Portland General by selling off all its power plants (while retaining the trading, transmission, and distribution functions), the Oregon Public Utility Commission flatly rejected the idea on the grounds that it was too risky to separate the retail electricity market from "firm" or secured sources of supply and that selling the company's hydroelectric plants to a third party would threaten Oregon's advantage as a low-cost power producer.<sup>48</sup> To make matters worse, neither Oregon's nor California's markets turned out to be as lucrative and promising as originally thought. So in the summer of 2001, five years after making a major commitment to domestic power generation, Enron put the company up for sale. Northwest Natural Gas agreed to acquire Portland General for \$1.9 billion and the assumption of \$1.1 billion of the utility's debt, which would have left Enron with a capital loss on the venture of approximately over \$200 million (\$2.1 billion less \$1.9

billion).<sup>49</sup> This capital loss was soon to expand. After Enron declared bankruptcy in December 2001, the purchase agreement was dissolved by mutual consent. A year and a half later, a bankrupt Enron announced the final sale of Portland General for an amount that would leave Enron with close to a \$1 billion capital loss on the venture.

Enron's foray into broadband also turned out to be more complicated and costly than planned. Initially, Enron's senior managers believed they could convert the 15,000-mile-plus, leading-edge fiber-optic network that was part of the 1997 acquisition of Portland General Electric into a major bandwidth-trading operation. With the increased competition promised by the Telecommunications Act of 1996, Enron planned to offer physical and financial bandwidth products to customers who wanted to optimize their network investments without having to use the public Internet or build their own networks. Enron's offerings were to include a variety of high-quality video-streaming and file-transfer applications.

Despite significant resistance from the large telecommunications players, the inevitable challenges of an unproven technology, problems extending a national network over the "last mile" into local buildings, and difficulties stemming from the lack of standardization and interconnectivity of telecommunications equipment and software, Enron announced the formation of Enron Broadband Services (EBS) in January 2000. By the end of the year, a total of 321 trades had been made. Allegedly, several of these trades were made with Enron off-balance sheet partnerships.<sup>50</sup> While EBS's headcount grew to over 1,000 employees by the end of the first year of operations, the new venture's economics were not working out as hoped. As a result of a decline in demand for broadband, excess industry capacity, falling prices, Enron's relatively high cost structure, and the failure of a highly touted deal with Blockbuster, losses began piling up in 2001. By the end of the third quarter, 2001, year-to-date losses totaled \$494 million, on revenues of \$335 million.<sup>51</sup> Enron had reportedly invested over \$1 billion in equipment, software development and licensing, real estate, and other related "costs" such as merchant investments in several start-up telecommunications companies.

### *International Expansion*

While Enron was building its North American trading business, it was also pursuing a strategy of transferring its skills developed in the deregulated U.S. natural gas market to other markets around the world experiencing the deregulation and privatization of energy production and distribution. In South America, Enron acquired gas pipelines and distribution companies, including one that delivered two-thirds of Argentina's natural gas through a 4,000-mile pipeline. Enron also had large utility holdings in Brazil and throughout the Caribbean. In the United Kingdom, it built the \$1.4 billion Teesside gas-fueled power plant, which provided Enron with a large gas-supply contract and facilitated Enron's entry into energy trading in Europe. Enron's international portfolio also included power plants in India, Turkey, Japan, China, and even Gaza; an interest in a multibillion-dollar effort to ship natural gas from Qatar to markets in the Middle East; a host of oil and gas reserves; and ships and various terminal rights to liquefied natural gas.<sup>52</sup> One particularly troublesome international asset was Enron's 1993 investment, along with GE and Bechtel, in the \$2.9 billion Dabhol power plant in Maharashtra, India, which quickly became bogged down in continuing negotiations with the Indian government over payment disputes and alleged misrepresentations. By 1999, Enron had invested nearly \$3 billion in assets in developing markets, with Brazil and Argentina accounting for about 50% of the total and India for about 15%.<sup>53</sup> By mid-2001, the net asset value of Enron's international physical assets was \$10 billion to \$15 billion spread throughout 15 countries around the world.<sup>54</sup>

The Dabhol project was meant to be a cornerstone of Enron's international energy strategy. The power plant was designed to be the largest gas-fired plant in the world. Beyond serving the Indian

market, Enron intended to link what would be the largest power plant on the subcontinent with a liquid natural gas operation in the Middle East. In its planned scope, Dabhol represented a grand vision.

Immediately after the contract was signed the project was criticized and contested on the grounds that (1) the local state government had awarded the contract to Enron in a closed, uncompetitive process, (2) the state electricity board was required to purchase gas even if it did not need it, (3) the guaranteed sales price of electrical power was too high, (4) standard environmental approvals had been ignored by the local state government, and (5) the Indian government was liable for payments to Enron if the state electricity board defaulted. In short, the public thought the deal was too sweet for Enron. After a political party opposing the Dabhol power plant won a critical state election, construction was suspended while various suits and countersuits worked their way through the local courts. Meanwhile, interest payments and project delays were costing the Dabhol Power Co. \$250,000 a day.

While a new plan was worked out in 1995 involving a much lower electricity price and the granting of a maximum 30% ownership stake to the state electricity board,<sup>55</sup> the board eventually stopped honoring its guarantees to take its required Dabhol output. To complicate matters further, the board fell \$240 million behind in payments for electricity drawn from the plant. The state electricity board had trouble making its payments because Dabhol's electricity had become so costly due to higher oil and naphtha costs, lower power demand, and most importantly the emergence of locally owned power plants that produced cheaper electricity under Enron's price umbrella.<sup>56</sup> For all these reasons, Enron shut down the operation in June 2001 just before the second construction phase was completed. By then, \$2.9 billion had been invested in Dabhol, with Enron facing as much as \$900 million in equity write-offs.<sup>57</sup> By early 2001, Enron was actively seeking to sell its 65% share in the Dabhol project to the Indian government.<sup>58</sup>

Enron also chose to enter the international water business with its July 1998 purchase of Wessex Water in the United Kingdom. The price tag was \$2.4 billion. This business, which came to be known as Azurix as it expanded globally, was expected "to buy and operate water and waste-water businesses, and to manage water resources on behalf of governments."<sup>59</sup> Although Enron successfully spun off Azurix as a U.S.-based entity in June 1999 at \$19 a share, things started going downhill very quickly after the initial public offering (IPO).

First of all, Azurix was cash starved from the very beginning because part of the IPO receipts went to retiring outstanding debt. Enron also took its *pro-rata* share of capital proceeds from the IPO back to Houston, along with cash raised from the sales of certain Wessex assets. Without Enron's continuing financial support, Azurix was left with just over \$464 million to retire its debt and spend on its aforementioned acquisitions.

Then, throughout 1999 and early 2000 profits declined at Azurix. Much of this loss was attributable to a write-down of "impaired assets" in Argentina.<sup>60</sup> During the spring and summer of 2000, Azurix's stock price fell precipitously when privatization of water supplies failed to materialize in the targeted states of Florida, Texas, and California and unexpected changes, such as capped water prices, significantly reduced profit opportunities in other parts of the world. By August 25, 2000, the day that the CEO of Azurix (Rebecca Mark) resigned, the stock price closed at \$4.94. Subsequently, Azurix was forced to take itself private at under \$8.25 a share, leaving it with close to 100% leverage. Two years later, in June 2002, a bankrupt Enron sold Wessex Water, the jewel in Mark's Azurix, for \$1.7 billion—netting Enron \$794 million after allowing for debt liabilities.<sup>61</sup>

As the scope and scale of international operations expanded, coexistence with the domestic oil and gas exploration, production, and transportation business and the domestic energy-trading business

was not always amicable. For one thing, all three businesses competed for corporate funding. For another, different leadership styles and ambitions, different corporate cultures, even different compensation systems served to keep the international and domestic businesses divided, even after Skilling took over as chief operating officer (COO) in 1996. Finally, the reportedly intense personal rivalry that developed between Skilling and Mark, head of Enron's international operations, made corporate-wide coordination and collaboration more difficult than would be normally expected (and tolerated).

### *Promotion of Innovation and Other New Businesses*

Enron's repeated message to both external and internal audiences was that its remarkable growth record resulted from its special ability to foster innovation and the development of new businesses throughout the organization. This claim was not difficult to substantiate. Early in its history Enron had earned the reputation of being an innovative company by being among the first to take advantage of Order 436 issued by the Federal Energy Regulation Commission, which set in motion natural gas deregulation.<sup>62</sup> In doing so, Enron was able to take the lead in redefining the nature of competition in energy markets. Enron was also one of the first energy companies to set up separate businesses to produce, buy, sell, transport and, most importantly, market gas. "Enron, unlike many more-cautious pipeline companies, viewed the new rules as an opportunity to sell itself to new customers as fast, flexible, and easy to work with. It was willing to carry any gas a utility purchased" by offering open access to its pipelines.<sup>63</sup> Because of its marketing and related financial expertise, it quickly became the dominant force in the industry.<sup>64</sup>

Once Enron had defined itself as a different kind of supplier to traditional natural gas customers, it did not take long to develop an increasingly innovative array of products and services. For example, with the objective of providing customers an expanded range of purchase and sale options, Enron was among the first to file flexible purchased gas-adjustment tariffs.<sup>65</sup> Enron was also the first to create a futures market for natural gas (and subsequently electric power), providing both physical and financial products that ensured energy sellers and users against changes in prices or demand. In doing so, Enron changed the way natural gas and electricity were bought and sold.<sup>66</sup> EnronOnline, the online trading arm, extended Enron's trading capabilities and also changed the way business was conducted at Enron and throughout the industry as a whole.

Enron's innovative tendencies led it to diversify into natural gas processing and the production of liquefied natural gas and other by-products. It took advantage of regulatory changes and became one of the first to build power plants as an independent power producer.<sup>67</sup> Its new peaking plants were uniquely positioned to take advantage of spikes in demand for electricity. In addition, Enron was an early mover in building cogeneration plants that used natural gas, instead of oil, to generate electricity.

Enron's innovations were not limited to its domestic market. In Europe, "Enron was considered the battering ram that helped break open Europe's tightly regulated energy markets, and in the process pioneered the complex trading of electricity and natural gas contracts meant to mitigate price risks."<sup>68</sup>

Accompanying Enron's ever-expanding market reach were innovations in financing structures, financial management, and information systems—some of which became the source of Enron's demise throughout 2000–2001. On the financing side, Enron used a broad menu of financing tools ranging from traditional finance techniques, such as preferred stock, to nonrecourse project financing and exotic derivatives-linked instruments. It also used tax-friendly private placement markets to obtain debt and equity financing.<sup>69</sup> As we will discuss below, the company developed several highly

sophisticated risk management tools. It is ironic that Enron's risk management systems and related research, IT, and internal reporting capabilities were considered the best in class.<sup>70</sup>

Enron's reputation as an innovative company throughout the 1990s was enhanced by Lay's public statements about the company's commitment to growth through new-business creation. In 1996, Lay remarked:

[O]ver 40% of Enron's earnings in 1995 came from businesses that did not exist ten years ago. . . . We expect that five years from now, over 40% of our earnings will come from businesses that did not exist five years ago. It's a matter of re-creating the company and the businesses we're in. That's not unusual for a company like Rubbermaid. They create a new business about every other year. But it's unique in a capital-intensive, long-lead time industry like the energy industry.<sup>71</sup>

More privately, Enron's leaders worked hard to foster entrepreneurship. As described by Skilling, creating an entrepreneurial culture at Enron was "like planting seeds. There are a lot of seeds you know are not going to grow up into anything. Our objective is to have a lot of seeds planted."<sup>72</sup> Employees were encouraged to try out new business ideas and to be prepared to build the business if the idea passed muster. According to several employees, Enron executives, and Skilling in particular, provided great encouragement and freedom to start new businesses. David Cox, who started the paper and pulp trading business, noted that Skilling "was constantly challenging employees to find ways to take advantage of the turmoil that impending deregulation had unleashed in the gas industry. . . . He made us feel that there was nothing that we could not do."<sup>73</sup> Lay was also quoted as saying:

All CEOs need to be very reluctant to tell somebody they should not do something. Quite often, someone at Enron will come up with an out-of-the-box idea or approach, and I have to keep myself from saying, "We just don't want to go that direction. . . ." Over the years, I've found that by holding off on that statement, I've learned that a lot of things that initially looked to me to be unreachable, undoable, or maybe even unwise turned out to be brilliant. The point is that if you start shutting down some of those ideas early on, well, then, your employees won't come to you at all.<sup>74</sup>

Enron's business-unit managers were often allowed to move forward on new ideas "without waiting for approval from the top."<sup>75</sup> Tom Gros, who started up the bandwidth-trading unit, "was able to spend freely on travel to sell the concept; when he needed larger sums—\$50,000 in start-up expenses, for example—his boss was able to authorize the outlay. 'There wasn't any budget per se.'"<sup>76</sup> Lynda Clemmons, who started the weather-derivatives business at age 27, stated, "I didn't have somebody holding my hand saying, 'OK, this is how it's done.'" Instead, she had to go out and find people to work for her.<sup>77</sup> Louise Kitchen's efforts to create EnronOnline were "an amazing story about not getting corporate approval and going through all the bureaucracy." According to Mike McConnell, CIO, "No one went to the board and said, 'We want to change the way we trade.' You just do it."<sup>78</sup> When senior management approval was pursued, it was typically at a high level. There was little apparent agonizing over formal business plans. Reportedly, employees who went to Skilling with the idea of creating a market in advertising contracts walked him through six slides. "In just 20 minutes, a whole new operation, Enron Media Services, was born."<sup>79</sup>

In rapid-fire succession Enron moved from trading natural gas and electric power into other markets and industries. By 1994 Enron had begun to trade currencies and was investing in research and development efforts in solar power.<sup>80</sup> By 1997 it had started trading gas and power in the United Kingdom and Scandinavia; was trading financials (interest rate, equity), emissions, and plastics; and had experimented with marketing electricity to retail customers and, when that effort failed, moved

into outsourcing energy services for commercial and industrial customers. By 1998, Enron had moved into trading coal, water, weather, pulp, and paper and had acquired the aforementioned Portland General, an Oregon power supplier, and electricity distributors in Brazil and Argentina. Over the next two years, Enron launched EnronOnline, expanded gas and power trading into Australia, and founded Enron Investment Partners, Enron Media Services, and NewPower Holding (a collection of newly constructed power plants targeted at the retail electricity market).<sup>81</sup> With breathtaking speed and in a continuing contradiction to Skilling's espoused "asset-light" strategy, Enron also invested \$2 billion in Azurix (the U.K.-based water company) and committed over \$1 billion to the creation of Enron Broadband Services. It also expanded its R&D efforts into fuel-cell technologies and other alternative energy sources such as wind. By 2001 Enron was trading freight services, DRAMs, steel, and other metals—as well as planning to sell or license its proprietary software packages such as Dealbench, which automated the contract-negotiation process, and Commodity Logic, which automated a trading organization's back-room operations.<sup>82</sup> It even had plans to start licensing versions of EnronOnline.

Most of these new-business ideas sprang from employee ideas originating in the business units (with the exception of the Azurix "water" venture, which was conceived and heavily promoted by top management). Employees wishing to pursue these ideas did have to obtain corporate approval—by, for example, completing a deal-approval sheet, obtaining sign-off from the legal department, and securing a value-at-risk position limit for trading ventures. (A discussion of "value at risk" appears below.) However, "once they [got] the go-ahead, new businesses [were able to] spin their own organizational webs, including independent IS departments and administrative staffs, so that the new unit [was] not competing for attention with Enron's existing businesses."<sup>83</sup>

### *Lobbying as a Cornerstone of Enron's Business Model*

Key to achieving Enron's strategic objectives was a large-scale lobbying organization that Enron developed and deployed aggressively in communicating the benefits of free, unregulated energy markets and actually making deregulation happen.

From his earliest days as a member of what was to become the Federal Energy Regulatory Commission (FERC), Lay had argued for deregulation in the form of the removal of fixed retail energy prices.<sup>84</sup> After FERC began to overhaul its regulations, Enron continued to press for further change. It staffed a Washington, D.C. office with more than 100 lobbyists. From 1999 to 2001, Enron spent a large portion of this office's \$6.5 million budget working to block efforts by government agencies to regulate its derivatives-trading business and to influence appointments at the SEC, FERC, and the Commodity Futures Trading Commission. This total does not include an additional \$1.6 million that Enron paid in 1999 and 2000 to outside professional lobbyists supporting Enron's in-house staff. Enron was also a steady and heavy contributor to legislators and their political parties. In the 2000 election cycle, it pumped \$2.4 million of contributions into the political system.<sup>85</sup>

Enron's objectives were not merely to change the rules in the natural gas and wholesale electricity businesses in the early 1990s but also to preserve maximum freedom in designing rules of the game for the derivatives-trading market that it was pioneering. To this end, Enron was notably successful in its 1992 petition to the Commodity Futures Trading Commission, which argued for exempting the budding market for "energy swaps" from government oversight.<sup>86</sup> As a result of this success, Enron was able to develop a trading operation that was virtually unregulated.<sup>87</sup>

Enron's lobbying operation was also successful in the 1990s in obtaining waivers from registering its Portland General Electric Co. unit in Oregon and its wholesale power-trading operations under the Public Utility Holding Act—thereby exempting Enron from reporting requirements and public oversight.<sup>88</sup> Most notably, Enron won an exemption in 1997 from the Investment Company Act of

1940 that could have prevented Enron's foreign operations from shifting debt to off-balance sheet partnerships and barred executives from investing in partnerships affiliated with the company. Enron's exemption cleared the path for the company to both expand overseas and make greater use of the special partnerships that eventually caused the company so much turmoil.<sup>89</sup> While the exemption was viewed by lawyers who approved the exception "as narrow because it applied only to the foreign operations of Enron and some of its subsidiaries," Enron pushed the limits of the ruling. In Enron's eyes, according to a former official at the SEC, the ruling "gave them carte blanche to go all over the world and set up subsidiaries and affiliated entities that would have been prohibited under the act."<sup>90</sup>

Another lobbying victory was achieved in December 2000 when the Commodity Futures Modernization Act, cosponsored in Congress by Senator Phil Gramm (Republican, Texas), included a special exemption for Enron. This exemption allowed Enron to operate an electricity auction free from federal scrutiny.<sup>91</sup> Documents disclosed in early March 2002 show that Enron also lobbied successfully for several years to be allowed to postpone paying U.S. taxes on some overseas profits, including income from its derivatives deals.<sup>92</sup>

In addition to successfully removing itself and its competitors from oversight by industry-specific regulators, Enron's lobbying efforts also managed to get Enron removed from the scrutiny of securities regulators. In the 1970s and 1980s, Congress members from oil-producing states pressured the Financial Accounting Standards Board and the SEC not to demand tougher standards for the reporting by petroleum companies of reserves, operating costs, and capitalized costs.<sup>93</sup> As a result of these and subsequent efforts, the SEC paid scant attention to the partnerships that proved Enron's undoing, mainly because Enron did not fit the definition of a traditional utility, industry experts said.<sup>94</sup> In fact, the last time the SEC did a thorough review of Enron's annual report was 1997.<sup>95</sup>

These exemptions and successful lobbying efforts were, for the most part, unnoticed by the public at large. This was not so in the case of Enron's lobbying efforts on behalf of the deregulation of electricity in California. Enron's role in lobbying for deregulation in California led to heated public criticism of Enron during the energy-shortage crisis in 2001 for its perceived role in raising prices and manipulating the power supply. In fact, there is some evidence that while Enron may have initially benefited from the crisis, its traders in the summer of 2001 may have suffered significant losses when they were "stuck with billions of dollars worth of contracts" they had assumed they could sell for any price, all purchased before FERC finally imposed price controls.<sup>96</sup>

Enron's lobbying efforts were not limited to the United States. They extended to Great Britain where both the Labour and Conservative parties received donations from Enron. The Indian government, too, received considerable attention and lobbying from Enron in connection with its large Dabhol investment. As in its domestic lobbying efforts, Enron's "sole focus was removing as much government oversight from its operations as possible."<sup>97</sup>

The success of these lobbying efforts was based, in large part, on the company's unusual access to high-ranking government officials in both major political parties. Lay's ties to the Republican Party dated back to contributions to George H.W. Bush's race for president in 1988. In 1990, Lay served as cochairman of a committee for then-President George H.W. Bush's economic summit in Houston. In 1992, Lay headed Houston's host committee for the Republican National Convention.

Lay's ties with the Bush family flowed from father to son. Between 1993 and 2001, Enron had given over \$700,000 dollars to George W. Bush—more than any other donor. Lay was one of the "Pioneers," raising more than \$100,000 for the Bush presidential bid. The company also contributed to the Florida recount fund. Lay personally contributed \$100,000 to the Bush inaugural committee.<sup>98</sup>

George W. Bush reportedly returned the favors. While he was governor of Texas, his regulators were Enron friendly. Bush even lobbied his friend, then-Pennsylvania governor Tom Ridge, on behalf of Enron's plan for deregulation in that state.<sup>99</sup>

Enron and Lay were careful to hedge their political bets by making significant contributions to legislators in both parties. Lay was a sometime golf partner of President Clinton and a frequent visitor to the Clinton White House. Enron contributed more than \$1 million to the Democratic Party during the Clinton years.<sup>100</sup>

These contributions and connections appeared to give Enron a significant presence and easy access in Washington. When President George W. Bush asked Vice President Richard Cheney to chair a task force charged with developing a new national energy policy, Lay was a prominent member of Cheney's list of industry advisors. In addition, once it became clear to Lay that an Enron bankruptcy was a possible outcome, he and other Enron executives did not hesitate calling the Treasury Department to seek government assistance in rebuilding its lines of credit with the financial community.<sup>101</sup> These requests for help, however, went unanswered.

## Key Management Processes

Throughout the 1990s, Enron earned a reputation as a "paragon of American ingenuity, a stodgy gas pipeline company that had reinvented itself as a high-tech clearinghouse in an ever-expanding roster of markets."<sup>102</sup> The company, never bashful about its achievements, was particularly proud of the way it managed its affairs. This was a company that acted on the belief that success depended upon creating an innovative environment where creativity and risk taking were fostered. (See **Exhibit 3** for the statement of Enron's core values, as presented in the 2000 annual report.)

Enron relied heavily on two management processes in managing the business: its human resources and performance management process, and its risk management process. There was no formal corporate strategic-planning process at Enron—only a single, superordinate goal that, according to Skilling, was "to create markets in commodities where there are inefficiencies."

Both Skilling and Lay claimed that Enron's strategic planners included all of its employees. Lay explained, "You must have the very best talent, and then let them develop a good strategy."<sup>103</sup> Skilling added that with an open, internal market for talent, highly mobile employees would find the new business opportunities: "You can understand your strategy by looking at personnel reports. By the time strategic planners find out about something, it's too late!" He further explained that if you look at where people are moving, senior management can then throw more financial resources behind them.<sup>104</sup>

Skilling and Lay relied heavily on Enron's performance management system to set and communicate strategic direction. As they saw it, while managers discussed individuals' performance, they would in essence be formulating strategy.

There was another reason why Enron eschewed formal strategic planning. Skilling was averse to allowing any rigidities that might constrain Enron's dynamism or impede swift decision making.<sup>105</sup> Skilling believed that in a dynamic organization "a vertical communication system doesn't work."<sup>106</sup> For this reason, he gave business-unit managers "plenty of responsibility with only the broadest of parameters."<sup>107</sup> They were encouraged "to develop their own strategies" and "set their own rules."<sup>108</sup> Each business unit had the freedom to structure its own deals and new business ventures—up to the point when the corporate office was expected to come up with cash to finance a new venture.<sup>109</sup>



One requirement for the successful implementation of this management approach was a high level of trust between Skilling and Lay, on the one hand, and their subordinates on the other—yet another reason why Enron’s human resource and performance management practices received so much attention internally.

### *Recruiting and Performance Management Processes*

At the time of its collapse in 2001, Enron was widely known to have a deep reservoir of talent, perhaps the deepest in the industry. Its traders included not only a full complement of MBAs but also dozens of Ph.D.s, nuclear scientists and meteorologists who could help Enron traders predict energy demand and the weather, construct valuable weather derivatives (for example), and generally time trades to take advantage of the greatest profit opportunities.<sup>110</sup> Lay was a longtime proponent of hiring “the best and the brightest.” He often repeated, “There is no substitute for talent. . . . If you have the best talent and a reasonably good strategy, everything else works out.”

Enron started paying special attention to building its intellectual asset base in the early 1990s. It created an analysts and associates program modeled after similar programs in the investment banking industry. Starting with three undergraduates and two MBAs in 1990, the program grew to 250 undergraduates and 250 MBAs in 2001.

Recruiters for candidates to the program were typically experienced operations or line managers. Candidates were screened for intelligence, a strong work ethic, problem-solving ability, and a sense of urgency.<sup>111</sup> Once on board, new analysts and associates rotated through different groups in the company every 6–12 months until they found a permanent position. All were required, however, to spend a short rotation understanding how to structure more complicated commercial transactions.<sup>112</sup> According to Skilling, this program was “the source of Enron’s competitive advantage.”<sup>113</sup>

The program was also designed, according to a former Enron executive, to put recruits on a pedestal “so they would develop a sense of superiority.”<sup>114</sup> Not only were many new recruits lured with \$20,000 signing bonuses and prospects of annual bonuses of up to 100% of salary, but the two-week orientation program also strove to impress Enron’s newest elite with images of Enron as “a cosmopolitan, global company with unlimited possibilities.”<sup>115</sup>

A key component of Enron’s approach to managing this talent was its performance-evaluation process, modeled after the process that Skilling had learned at McKinsey. This process was a bi-annual feedback system based on “360-degree” reviews from peers, customers, and supervisors as well as those supervised.<sup>116</sup> The intended purposes of this process were to eliminate individual bias in the review of individual employees, identify top performers for future promotion and average or poor performers for development actions, create a fair and equitable basis for allocating pay, and lay the groundwork for future recruiting needs.

Enron’s performance-evaluation process worked by first aggregating individuals of like job title across the organization. Each category of employees was then assigned its own performance review committee (PRC) consisting of approximately 20 individuals, handpicked by Skilling, who were in positions higher than the reviewed individuals. Twice a year the PRCs met for as long as three weeks at a time to force-rank the employees in their pool according to criteria that included:

- Innovation/Entrepreneurship
- Communication/Setting Direction
- Teamwork/Interpersonal Skills
- Leadership/Vision/Values
- Business Instincts
- Analytical/Technical Skills

Employees were sorted into one of six performance categories according to the value they added to the organization: “superior,” “excellent,” “strong,” “satisfactory,” “needs improvement,” and “issues.” Decisions on ranking employees in a PRC meeting had to be unanimous. Employees falling into the bottom 20% of the rankings were in danger of being let go (although as turnover increased in later years when Enron was growing rapidly, remaining employees were in less and less danger of termination).

Skilling described what the PRCs were looking for as follows: “You have to constantly show that you are adding value to the organization. That value can come in the form of new business ideas that make money or from doing the old business well and maintaining the organization while others go on to build a new business. And you get the benefit of the doubt for trying something new.”<sup>117</sup>

In addition to its role as a performance management tool, Skilling viewed the PRC process as a communication vehicle and a safeguard against office politics. According to Skilling, “It kept a disabling boss from communicating the wrong messages. An employee’s career was not in the hands of his/her boss; it’s in the hands of the committee. The PRC also allowed individuals to be isolated from such a boss or from issues of favoritism, since the whole PRC did the evaluation, not just one individual.”<sup>118</sup>

Skilling and Lay also viewed the PRC process as a way of encouraging or promoting certain skills and capabilities. “Through the PRC, we can make clear this is what we value, and this is what we compensate for. If you’re off on a tangent, that’s reviewed, [and] you get feedback.”<sup>119</sup> According to Skilling:

In most organizations, you have a vertical chain of communication. Your struggle is how to send messages to everyone when those messages sometimes have to come through managers who might not “get it.” This is a major problem in fast-moving organizations. To fix this, you have a horizontal performance-evaluation system with a committee of 20 people who “get it,” who understand performance that is consistent with organizational values. With this approach, you can cut out the noise; you have better communication, move faster, and get the right jobs done.<sup>120</sup>

The PRC process was not without its critics. While some Enron employees thrived in this environment and felt that it was a good way to cull deadwood, others both inside and outside the company felt that it was a ruthless “rank and yank” system:

### *Compensation and Incentive System*

Closely linked to the PRC process was a compensation and incentive system that was considered to be very generous by industry standards. Bonuses for the typical employee were around 20% of salary but varied widely depending on company performance, individual performance, and specific group performance.<sup>121</sup> At the managing director level and above, bonuses could be considerably larger.

The remuneration of so-called originators provides additional insight to how Enron's compensation and incentive system actually worked. In each of Enron's four business units, Enron employed anywhere from 400 to 1,000 originators or deal developers, each working on at least four credible structured deals at any time. Originators were considered the "princes" of Enron, in-house entrepreneurs who structured deals and launched businesses that could benefit the company as quickly as possible.<sup>122</sup> In order to grow profits, Enron needed to increase the number of structured finance deals it closed each year.

As previously discussed, Enron's deals were valued, and profits reported, on the basis of estimated forward earnings (called mark-to-market accounting, or MTM) or a fair-value assessment (FVA). Enron actively recruited, rapidly promoted, and richly rewarded originators possessing the ability to (1) analyze any deal with respect to forward costs, revenues, and earnings that could be marked to market and (2) close money-making deals quickly.

The salary and bonus for managing directors on the deal origination side of the business could be significantly higher if they were well regarded by their PRC. The salary for an average early-career originator at the managing director level ran in the \$150,000–\$200,000 range with bonuses as high as \$1 million in a good year, making for a five-to-one ratio of bonus to salary. For more senior originators (and traders, who will be discussed below) the ratio was closer to 10 to one. The keys to receiving large bonuses were to be highly ranked in a high-performing origination group and to consistently generate meaningful contributions to earnings.

Annual bonuses for originators at all levels were calculated on the present value (PV) of completed deals during the year, meaning that Enron recognized the whole value of a multiyear contract at its beginning and then recorded any gains or losses in value over time as the market dictated.<sup>123</sup> While the PRC examined many aspects of an employee's performance, the bonuses of originators were closely related to whatever income they originated—a fairly standard "you eat what you kill" system practiced widely within the financial community.<sup>124</sup>

Reported profits from long-term commodity transactions put together by originators were largely based on forward price curves estimated by traders. Since Enron was often dealing with commodities where there was no established public market to set prices, traders were required to estimate the future direction of prices in order to value the deal in the present. Of course, the further one went out in time, the greater the subjectivity required in estimating prices and values. Some traders reportedly took advantage of this subjectivity to set high curves and even to change these curves to establish higher values that they could report as profits immediately.<sup>125</sup>

Traders, like deal originators, were rewarded for the reported value and profits of their transactions, not their viability. In good years, many of Enron's highest-paid employees were traders. According to documents filed in bankruptcy court, it was not unusual for successful traders to take home cash bonuses in the \$3 million to \$5 million range. In 2001, John D. Arnold, a West Coast gas trader who made about \$700 million in "trading profits" for Enron, was paid an \$8 million bonus.<sup>126</sup> (Exhibit 4 shows the total compensation of 20 originators and traders for whom data were available in subpoenaed Enron documents.)

As in the case of successful deal originators and traders, senior corporate executives were also highly compensated. In addition to incentive stock option plans, more than 100 senior executives who worked for Enron between 1998 and 2000 held "phantom equity" in business units that could be converted at certain times into common stock or cash.<sup>127</sup> According to filings with the SEC, it appears that some of these payments under the phantom stock plan were huge. For example, Skilling's 5% phantom-option stake in EES (a retail energy business unit) was converted into \$100 million of Enron common stock in 1998 after he helped persuade the California Employees' Retirement System and the

Ontario Teachers Pension Plan to invest \$130 million in the unit.<sup>128</sup> Senior executives also received multimillion-dollar bonuses for hitting various target prices in Enron stock under a so-called performance unit plan.

Given the broad and varied use of stock-based compensation at Enron—as well as the large gains from insider trading that became a huge part of management’s income—it is not surprising that Enron’s stock price became a principal, if not the dominant, performance metric in the minds of top Enron executives.<sup>129</sup> In addition, given the fact (discussed below) that many of Enron’s hedges were dependent on maintaining its stock price, it is fair to say that Enron management had many reasons to become and remain highly focused on the price of the company’s stock.

Besides distributing equity stakes, Enron had a reputation for paying large bonuses to senior executives on both a recurring and one-time basis. In 1998, for example, annual bonuses for Enron’s top five executives averaged nearly 300% of salary (with Lay and Skilling receiving the highest multiples). Two years later, the ratio was 500% (although Enron’s operating profit before taxes and net profits were nearly identical).<sup>130</sup>

With respect to one-time bonus awards, lead executives received large bonuses at the closing of major investment projects such as major power plant construction projects. In the early days of Enron, these bonuses came in the form of a participation in the project once certain minimal levels of return were achieved. Later, these payments came to look more like investment banking fees paid to insiders responsible for developing deals on behalf of the company. For example, Mark, chief executive of Enron International, and her president, Joe Sutton, received large, special bonuses for their work in securing the financing of the \$2.9 billion Dabhol power plant in India during 1993–1995. Under the then-current compensation arrangements, Mark, Sutton, and other project team members were eligible to receive 8% of the project’s estimated net present value, with 70% paid at the closing of the deal and 30% paid out over several years.<sup>131</sup>

Enron was not unique, of course, in the generous use of executive bonuses. What was notable, however, was the total amount of bonuses distributed in any given year. For 2000, the total amount of bonuses paid totaled \$750 million in cash (\$430 million in normal bonus, plus \$320 million under a performance unit plan). That year Enron’s entire net income was only \$975 million.

On top of hefty bonuses and various stock option plans, senior Enron executives had a “lavish set of pension and retirement plans.”<sup>132</sup> For example, senior executives were granted lifelong pension and company-paid insurance plans, an executive 401(k) plan that guaranteed executives in the plan minimum returns of 12%, and executive savings plans that let “participating executives contribute 25% of their salaries and 100% of their cash bonuses. In contrast to most other Enron employees, participants were guaranteed a 9% return on the first two years of the plan, and they were allowed to put their money into an array of investments, not just Enron stock.”<sup>133</sup>

Enron’s pay packages also included a heavy use of stock options. At year-end 2000, all Enron managers and employees had options that could be exercised for nearly 47 million shares (out of a total of 752.2 million shares issued and outstanding).<sup>134</sup> Enron also encouraged traders and originators to defer cash bonuses into stock or stock options. Indeed, individuals agreeing to take deferred bonuses in this way could expect to receive a higher bonus.

As a final component of executive remuneration, some top executives were provided access to low-cost loans or lines of credit from Enron to buy stock or make other investments. For example, Lay was allowed to borrow up to \$7.5 million at a time under a special loan arrangement that was part of his employment contract. “The line of credit allowed Lay to borrow up to the limit, pay it back, then borrow it again. The loans were repaid with Enron shares.”<sup>135</sup> From October 2000 to

October 2001, Lay used this line of credit to obtain \$77 million in cash from the company. By repaying the loans exclusively with company stock, Lay was able, according to SEC regulations, to cash in shareholdings without having to report stock sales publicly until year-end.<sup>136</sup>

Apart from the compensation system, another important aspect of human resource management at Enron was the pattern of job selection and rotation at the bottom of the pyramid that the performance management system encouraged. To enable employees to earn high performance awards, the organization allowed employees to move around, purportedly without a supervisor's permission, to positions where they felt they could add more value and generate as much revenue as possible. Many did so. "It wasn't unusual for a person to change jobs two to three times in two years."<sup>137</sup> People wanted to get in, make large sums of money, and then move on to something else—either inside Enron or outside.<sup>138</sup> (Coupled with Enron's rapid growth, this practice contributed to only 20% of the organization having more than five years' experience with Enron.)<sup>139</sup> This movement in personnel, according to Skilling, "strengthens Enron, with better matches of employees' talent with the job." Skilling believed that "in a hierarchical organization, if the job description doesn't fit, you're stuck. I'd prefer to let people go where they are interested, where they are supported."<sup>140</sup>

One policy that supported this free market for talent involved employee titles. Unlike in most other organizations, titles were not tied to a specific position; instead they moved with the employee.<sup>141</sup> Skilling felt this policy would encourage people "to move to new small start-ups and keep their old titles."<sup>142</sup> The relatively high velocity in job turnover was also supported by Enron's high rate of organizational change. Formal organization charts were therefore rapidly irrelevant. Not surprisingly, many Enron employees (including those in the accounting department) had a difficult time keeping up with the continual reshuffling of responsibilities.<sup>143</sup>

Complementing the fast pace of employee moves within Enron was the rapid pace of promotions. Two prominent examples are the employment histories of Greg Whalley and Louise Kitchen. Whalley (39), named COO after Skilling left in August 2001, had been COO of Enron Wholesale Services only since November 2000. Prior to that, he had held the position of chairman and CEO of Enron NetWorks (one-plus years). He had also been head of the European commodity merchant business (from 1996 to 1998), CEO of global risk management (1999), and then president and COO of Enron North America—all in a nine-year run that started with his joining Enron as an associate in 1992. Kitchen, who at 31 had led the development of EnronOnline, was named president and COO of Enron North America in August 2001, her seventh promotion in five years.

### *Risk Management Processes*

Given the high level of employee mobility and, more importantly, the highly decentralized decision-making structure within Enron, it is not surprising that Skilling worked to put centralized controls in place. In implementing these controls, Skilling tried to avoid the danger of bureaucracy's constraining creativity. According to Skilling, "You don't want to snuff out weird people, since your best businesses are often developed by weird people."<sup>144</sup> Nevertheless, the risk management processes that Skilling put in place constituted the second set of bureaucratic routines that he believed was absolutely necessary.

The impetus for developing Enron's highly sophisticated risk management system gained strength after the company took a \$675 million write-off on a contract for natural gas in the North Sea in 1997 involving the so-called J-Block contract. Following this embarrassment, Skilling assembled a collection of financial and risk-assessment analysts, business managers, and lawyers into an independent group known as Risk Assessment and Control, or "RAC." RAC was headed by a new chief risk officer, Rick Buy, who reported directly to Skilling, first as COO and, subsequently, as CEO.

The RAC group was responsible for analyzing the financial and nonfinancial risks of all Enron's significant businesses, projects, and contracts. All long-term contracts to deliver a commodity had to go through Enron's sophisticated risk management system.<sup>145</sup> According to Skilling, "You get fired if you do something that doesn't go through RAC."<sup>146</sup>

Once RAC was up and running, transactions with roughly 8,000 counterparties involving some \$20 billion in revenues were analyzed and monitored by a staff of 150. RAC's annual budget was more than \$30 million.

With the support of several management information tools (discussed below), RAC evaluated the risks and potential rewards of proposed deals—a process leading to the completion of a deal-approval sheet (referred to as DASH) for all large capital transactions. A DASH was essentially a recommendation that, depending upon the nature and size of the transaction, went to Enron's senior managers (and in certain cases, the board) with a list of five or six key risks.<sup>147</sup> Lay and Skilling then typically added their business sense to new deals that came their way, but only after they had been through the RAC process.<sup>148</sup>

Chief Risk Officer Buy characterized the impact of RAC on the organization in the following way:

A lot of our capital-intensive international deals started looking a lot less attractive after we factored in things like currency risk and default probability. Some parts of the organization didn't want to hear that. We were a speed bump they would prefer to drive around. . . . But we try to work with business-unit people to keep the risk pendulum in the middle—between the total freedom that creates a J Block situation and rigid control that kills entrepreneurship.<sup>149</sup>

When it came to new-businesses ideas, RAC-ready business plans had to be developed and a value-at-risk (VAR) analysis (described below) performed to establish initial position limits. The requirements for such a new-business plan were pretty basic: "They have to have some connection to the company's core businesses—such as sharing the hole with the gas pipeline, in the case of the fiber-optic cables in the new communications venture—and they have to survive a run through the company's computer-based risk analysis models."<sup>150</sup>

Enron's risk-assessment and control operation was supported by a variety of risk-assessment tools. A comprehensive information system known as RisktRAC was developed to help manage the various risks in a specific deal and manage the company's risk positions and limits. RisktRAC broke down all trades and contracts into 1,217 separate trading portfolios or books for different commodities, depending upon the types of exposures, such as interest rate, time horizon, location, or price risk. Traders who were specialists in particular risk products then managed these separate books. A research group supported traders by building pricing models and other tools that helped them decide whether to trade, hedge, or hold particular investments or product groups. "The trader managing each book had a picture of all the firm's exposures to a particular risk, as well as current market quotations for that risk."<sup>151</sup> The traders were given direct responsibility for managing the risk exposure of each book with the understanding that their specialized knowledge of market conditions made them the most competent to perform this task.<sup>152</sup>

RisktRAC also repriced the books each night and produced reports showing the firm's positions in the morning. This risk management tool was supported by a module that allowed the central risk group "to display its commodity groups market and credit risk in real time to traders, senior management and risk managers," according to David Port, head of market risk at Enron.<sup>153</sup>

In addition to the DASH and RisktRAC tools, Enron also used a VAR approach to managing its risk exposures. Enron's earliest VAR models were developed in 1992, long before such models attracted widespread attention and use.<sup>154</sup> By measuring the amount of money that Enron might lose

in any one day within a 95% confidence level, use of VAR models could help establish position limits reflecting Enron's historical experience and other variables "that could impact the fair value of Enron's investments, including commodity prices, interest rates, foreign exchange rates, equity prices and associated volatilities, as well as correlation within and across these variables."<sup>155</sup>

Enron also used Monte Carlo simulation, regular stress testing, and scenario analyses "to estimate the economic impact of sudden market moves on the value of its portfolios. The results of the stress testing, along with the professional judgment of experienced business and risk managers, [were] used to supplement the value at risk methodology and capture additional market-related risks, including volatility, liquidity and event, concentration and correlation risks."<sup>156</sup>

Underpinning Enron's formal control structure was its Code of Ethics, a 64-page document that outlined generally accepted behaviors. All employees were expected to certify in writing their compliance with the code. For senior managers, board approval was required to suspend the Code of Ethics. Significant in light of serious conflicts of interest involving senior managers, the code included a clause that no full-time officer or employee should "[o]wn an interest in or participate, directly or indirectly, in the profits of any other entity which does business with or is a competitor to the company, unless such ownership or participation has been previously disclosed in writing to the Chairman of the Board and Chief Executive Officer of Enron Corp. and such officer has determined that such investor participation does not adversely affect the best interests of the company."<sup>157</sup>

## Exhibit 1 Enron's Selected Financials (in millions, except per-share amounts)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Sales</b>	\$5,563	\$6,325	\$7,986	\$8,984	\$9,189	\$13,289	\$20,273	\$31,260	\$40,112	\$100,789
<b>NOPAT<sup>a</sup></b>	\$407	\$536	\$503	\$623	\$476	\$651	\$1,558	\$1,276	\$1,431	\$1,501
<b>Net Income<sup>b</sup></b>	\$242	\$306	\$333	\$453	\$520	\$584	\$105	\$703	\$893	\$979
EPS (Primary)	0.54	0.64	0.66	0.90	1.03	1.15	0.16	1.07	1.17	1.22
EPS (Fully Diluted)	0.51	0.61	0.63	0.85	0.97	1.08	0.16	1.01	1.10	1.12
Dividends Per Share	0.31	0.33	0.36	0.38	0.41	0.43	0.46	0.48	0.50	0.50
Share price (Close December 31)	8.75	11.60	7.25	15.25	19.06	21.56	20.78	28.53	44.38	83.13
<b>CAPITAL EMPLOYED</b>										
Net Working Capital <sup>c</sup>	(\$577)	(\$658)	(\$797)	(\$520)	\$180	\$15	\$87	(\$285)	(\$793)	(\$1,178)
Long-Term Assets <sup>d</sup>	7,834	8,271	9,317	10,057	10,512	12,158	16,529	21,468	23,327	31,484
Total Capital Employed <sup>e</sup>	\$7,257	\$7,613	\$8,520	\$9,537	\$10,692	\$12,173	\$16,616	\$21,183	\$22,534	\$30,306
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>										
Total Current Liabilities	\$2,649	\$2,642	\$2,676	\$2,297	\$2,432	\$3,708	\$4,412	\$6,107	\$6,759	\$28,406
Long-Term Debt <sup>f</sup>	3,109	2,459	2,661	2,805	3,065	3,349	6,254	7,357	7,151	8,550
Total Equity	1,929	2,547	2,623	2,880	3,165	3,723	5,618	7,048	9,570	11,470
Total Liabilities and Equity	\$10,424	\$10,664	\$11,504	\$11,966	\$13,239	\$16,137	\$23,422	\$29,350	\$33,381	\$65,503
<b>RATIOS</b>										
ROA (%)	2.32%	2.87%	2.89%	3.79%	3.93%	3.62%	0.45%	2.40%	2.68%	1.49%
ROCE (%) <sup>g</sup>	5.61%	7.05%	5.90%	6.53%	4.45%	5.34%	9.38% <sup>h</sup>	6.02%	6.35%	4.95%
Market Value <sup>i</sup> (\$ Mil.)	886	1,376	1,806	3,838	4,789	5,500	6,468	9,440	31,711	62,483
Book Value of Equity (\$ Mil.)	1,706	2,364	2,474	2,740	3,028	3,586	5,484	6,916	8,440	10,346
Market to Book Ratio	0.52	0.58	0.73	1.40	1.58	1.53	1.18	1.36	3.76	6.04
Equity Beta	0.693	0.273	0.356	0.443	0.548	0.766	0.454	0.784	0.821	0.565

Source: Enron annual reports and adapted from Compustat.

Note: In order to preserve Enron's original public disclosures, these financials do not reflect restatements reported on October 16, 2001 when the company announced a \$638 million third-quarter loss and disclosed a \$1.2 billion reduction in shareholder equity. On November 8, 2001, the company filed documents with the SEC revising its financial statements for the past five years to account for \$586 million in losses.

<sup>a</sup>NOPAT = Operating Income + equity in earnings of unconsolidated equity affiliates \* (1-tax rate).

<sup>b</sup>Net income includes extraordinary items.

<sup>c</sup>Net Working Capital is the difference between current assets, net of cash and cash equivalents, and current noninterest-bearing liabilities.

<sup>d</sup>Long-Term Assets include property, plant, and equipment; investments in and advances to unconsolidated equity affiliates; and intangible assets less amortization (e.g., goodwill).

<sup>e</sup>Total Capital Employed = Net Working Capital + Long-Term Assets.

<sup>f</sup>Long-Term Debt does not include debt transferred to off-balance sheet entities.

<sup>g</sup>ROCE = Return on Capital Employed = NOPAT / Total Capital Employed.

<sup>h</sup>In 1997, Enron took a \$675 million charge on a contract for natural gas in the North Sea. A negative tax rate of -54.88% resulted in a larger NOPAT, thus a higher ROCE.

<sup>i</sup>Market Value = number of common shares outstanding \* market price as of December 31.

<sup>j</sup>Beta values are from Datastream. Each value is based on Enron's previous five-year stock return history relative to the S&P 500.



## Exhibit 2 Enron's Selected Financials by Business Segment

(In Millions)	Transportation and Distribution <sup>a</sup>	Wholesale Services <sup>b</sup>	Retail Energy Services <sup>c</sup>	Broadband Services <sup>d</sup>	Corporate and Other <sup>e,f</sup>	Total
<b>2000</b>						
Total Revenues <sup>g</sup>	\$2,955	\$94,906	\$4,615	\$408	(\$2,095)	\$100,789
Depreciation, Depletion, and Amortization	278	343	38	77	119	855
Operating Income (loss)	565	1,668	58	(64)	(274)	1,953
Equity in earnings of unconsolidated equity affiliates	65	486	(60)	1	(405)	87
Other Income <sup>h</sup>	102	106	167	3	64	442
Income (loss) before interest, minority interests and income taxes	732	2,260	165	(60)	(615)	2,482
Capital expenditures	270	1,280	70	436	325	2,381
Identifiable assets	7,509	43,920	4,266	1,313	3,201	60,209
Investments in and advances to unconsolidated equity affiliates	774	4,014	104	24	378	5,294
Total Assets	\$8,283	\$47,934	\$4,370	\$1,337	\$3,579	\$65,503
<b>1999</b>						
Total Revenues	\$2,032	\$36,287	\$1,807	\$526	(\$540)	\$40,112
Depreciation, Depletion, and Amortization	247	294	29	213	87	870
Operating Income (loss)	551	889	(81)	66	(623)	802
Equity in earnings of unconsolidated equity affiliates	50	237	*	*	22	309
Other Income	84	191	13	(1)	597	884
Income (loss) before interest, minority interests and income taxes	685	1,317	(68)	65	(4)	1,995
Capital expenditures	316	1,216	64	226	541	2,363
Identifiable assets	7,148	18,501	956	*	1,740	28,345
Investments in and advances to unconsolidated equity affiliates	811	2,684	*	*	1,541	5,036
Total Assets	\$7,959	\$21,185	\$956	*	\$3,281	\$33,381
<b>1998</b>						
Total Revenues	\$1,849	\$27,725	\$1,072	\$750	\$385	\$31,260
Depreciation, Depletion, and Amortization	253	195	31	315	33	827
Operating Income (loss)	562	880	(124)	133	(73)	1,378
Equity in earnings of unconsolidated equity affiliates	33	42	(2)	*	24	97
Other Income	42	46	7	(5)	17	107
Income (loss) before interest, minority interests and income taxes	637	968	(119)	128	(32)	1,582
Capital expenditures	310	706	75	690	124	1,905
Identifiable assets	6,955	12,205	747	3,001	2,009	24,917
Investments in and advances to unconsolidated equity affiliates	661	2,632	*	*	1,140	4,433
Total Assets	\$7,616	\$14,837	\$747	\$3,001	\$3,149	\$29,350

Source: Enron 2000 Annual Report.

<sup>a</sup>Transportation and Distribution: Regulated industries. Interstate transmission of natural gas. Management and operation of pipelines. Electric utility operations.<sup>b</sup>Wholesale Services includes energy commodity sales and services, risk management products, and financial services to wholesale customers. Development, acquisition, and operation of power plants, natural gas pipelines, and other energy-related assets.<sup>c</sup>Retail Energy Services: Sales of natural gas and electricity directly to end-use customers, particularly in the commercial and industrial sectors, including the outsourcing of energy-related activities.<sup>d</sup>Broadband Services includes the construction and management of a nationwide fiber-optic network and the marketing and management of bandwidth including the outsourcing of energy-related activities.<sup>e</sup>Corporate and Other includes operation of water and renewable energy businesses as well as clean fuel plants.<sup>f</sup>Includes consolidating eliminations.<sup>g</sup>Total Revenues = Unaffiliated revenues and intersegment revenues. Unaffiliated revenues include sales to unconsolidated equity affiliates. Intersegment sales are made at prices comparable with those received from unaffiliated customers and in some instances are affected by regulatory considerations.<sup>h</sup>Other income includes gains on sales of assets and investments; gain on the issuance of stock by TNPC, Inc. in 2000 only; interest income; and other income, net.

**Exhibit 3** Enron's Values Statement

**Communication**

We have an obligation to communicate. Here, we take the time to talk with one another . . . and to listen. We believe that information is meant to move and that information moves people.

**Respect**

We treat others as we would like to be treated ourselves. We do not tolerate abusive or disrespectful treatment.

**Integrity**

We work with customers and prospects openly, honestly and sincerely. When we say we will do something, we will do it; when we say we cannot or will not do something, then we won't do it.

**Excellence**

We are satisfied with nothing less than the very best in everything we do. We will continue to raise the bar for everyone. The great fun here will be for all of us to discover just how good we can really be.

Source: Enron 2000 Annual Report.

**Exhibit 4 Compensation of Top-Level Originators and Traders, 2001**

Individual	Function	Salary (1)	Bonus (2)	Long-Term Incentive (3)	Deferred Income (4)	Deferral Payments (3)	Loan Advances (6)	Other (7)	Expenses (8)	Director Fees (9)	Total Payments
BELDEN, TIMOTHY N.	Trader	\$213,999	\$5,249,99	-	\$(2,334,434)	\$2,144,013	-	\$ 210,698	\$ 17,355	-	\$5,501,630
DETMERING, TIMOTHY J.	Originator	210,500	425,000	\$ 415,657	(775,241)	875,307	-	1,105	52,255	-	1,204,583
DIETRICH, JANET R.	Trader	250,100	600,000	556,416	-	-	-	473	3,475	-	1,410,464
DI MICHELE, RICHARD G.	Originator	262,788	1,000,000	694,862	-	-	-	374,689	35,812	a	2,368,151
DONAHUE JR., JEFFREY M.	Originator	278,601	800,000	-	(300,000)	-	-	891	96,268	-	875,760
FALLON, JAMES B.	Originator	304,588	2,500,000	374,347	-	-	-	401,481	95,924	-	3,676,340
GARLAND, C. KEVIN	Originator	231,946	850,000	375,304	-	-	-	60,814	48,405	-	1,566,469
HUMPHREY, GENE E.	Originator	130,724	-	-	-	2,964,506	-	-	4,994	-	3,100,224
KITCHEN, LOUISE	Trader	271,442	3,100,000	-	-	-	-	93,925	5,774	a	3,471,141
LAVORATO, JOHN J.	Trader	339,288	8,000,000	2,035,380	-	-	-	1,552	49,537	-	10,425,757
LEFF, DANIEL P.	Originator	273,746	1,000,000	1,387,399	-	-	-	3,083	-	-	2,664,228
MCCONNELL, MICHAEL S.	Originator	365,038	1,100,000	554,422	-	-	-	540	81,364	-	2,101,364
MULLER, MARK S.	Originator	251,654	1,100,000	1,725,545	(719,000)	842,924	-	947	-	-	3,202,070
SHANKMAN, JEFFREY A.	Trader	304,110	2,000,000	554,422	-	-	-	1,191	178,979	-	3,038,702
SHERRIFF, JOHN R.	Trader	428,780	1,500,000	554,422	-	-	-	1,852,186	b	-	4,335,388

Source: Adapted from Enron Corp., Payment to Insiders, Schedule of Financial Affairs, submitted to New York Bankruptcy Court, May 17, 2002. Case No. 01-16034.

Note: This sample was selected by the author with the assistance of Christopher Smith of Enron Corp. from the schedule cited below.

- (1) Reflects items such as base salary, executive cash allowances, and benefits payments.
- (2) Reflects annual cash incentives paid based upon company performance. Also may include other retention payments.
- (3) Reflects long-term incentive cash payments from various long-term incentive programs designed to tie executive compensation to long-term success as measured against key performance drivers and business objectives over a multiyear period, generally 3 to 5 years.
- (4) Reflects voluntary executive deferrals or salary, annual cash incentives, and long-term cash incentives as well as cash fees deferred by nonemployee directors under a deferred compensation arrangement. May also reflect deferrals under a stock option or phantom-stock unit in lieu of cash arrangement.
- (5) Reflects distribution from a deferred compensation arrangement due to termination of employment or due to in-service withdrawals as per plan provisions.
- (6) Reflects total amount of loan advances, excluding repayments, provided by the debtor in return for a promise of repayment. In certain instances, the terms of the promissory notes allow for the option to repay with stock of the company.
- (7) Reflects items such as payments for severance, consulting services, relocation costs, tax advances, and allowances for employees on international assignment (i.e., employment agreements), as well as imputed income amounts for such things as use of corporate aircraft.
- (8) Reflects reimbursements of business expenses. May include fees paid for consulting services.
- (9) Reflects cash payments and/or value of stock grants made in lieu of cash payments to nonemployee directors.

a. Payments include international assignment-related amounts.

b. Payments to Mr. Sherriff include international assignment-related payments imputed for both calendar years 2000 and 2001 within the 12-month period.

## Endnotes

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<sup>1</sup> For an excellent summary of the history of the natural gas and electricity industries in the United States, see Pankaj Ghemawat and David Lane, "Enron: Entrepreneurial Energy," HBS Case No. 700-079.

<sup>2</sup> Jamie Dettmer and John Berlau, "Requiem for Enron," *Insight Magazine*, January 7, 2002.

<sup>3</sup> April Witt and Peter Behr, "Dream Job Turns into a Nightmare: Skilling's Success Came at High Price," *The Washington Post*, July 29, 2002. James W. Crouner, who hired Skilling at McKinsey's Houston office, remembered him as "outstanding in every respect" and "one of the most talented people we ever had."

<sup>4</sup> Christopher A. Bartlett and Meg Glinska, "Enron's Transformation: From Gas Pipelines to New Economy Powerhouse," HBS Case No. 301-064, p. 2.

<sup>5</sup> The merger that created Enron Corp. was, in fact, a union initiated by InterNorth Corp., which was the target of a hostile takeover by Irwin Jacobs.

<sup>6</sup> Enron's "merchant investments" refer to start-ups of, and participations in, new operating entities in the energy and communications sectors.

<sup>7</sup> Another, more carefully nuanced reading of Enron's history is that the off-balance sheet partnerships started as hedging vehicles and subsequently degenerated into vehicles for managing earnings and the balance sheet as many of Enron's investments soured.

<sup>8</sup> These hedges are described in detail in the Powers Committee Report.

<sup>9</sup> A detailed explanation of the \$1.2 billion reduction in equity appears in Enron's November 8, 2001 8-K filing with the SEC, p. 6.

<sup>10</sup> This action taken by the Enron board is discussed in detail on p. 16 ff of the B Case and footnote 81 for a review of various terms used to describe the board's application of its Code of Ethics.

<sup>11</sup> John Schwartz and Richard A. Opper, Jr., "Enron's Collapse: The Chief Executive," *The New York Times*, November 29, 2001.

<sup>12</sup> Staff reporters, "Enron Lessons," *The Wall Street Journal*, January 15, 2002.

<sup>13</sup> Bethany McLean, "Is Enron Overpriced?" *Fortune*, March 5, 2001.

<sup>14</sup> Rebecca Smith and John Emshwiller, "Enron Attempts to Show Investors a Softer Side," *The Wall Street Journal*, August 28, 2001.

<sup>15</sup> Wendy Zellner, "Power Play," *BusinessWeek*, February 12, 2001.

<sup>16</sup> David Barboza, "Enron Sought To Raise Cash Two Years Ago," *The New York Times*, March 9, 2002, p. 3.

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<sup>17</sup> See Malcolm S. Salter, Lynne C. Levesque, and Maria Ciampa, "Innovation Corrupted: The Rise and Fall of Enron," HBS Working Paper #02-102, Appendix for a detailed analysis of security transactions (insider trading) by senior Enron officials.

<sup>18</sup> Daniel Kadlec, "Who's Accountable?" *Time*, January 21, 2002.

<sup>19</sup> Floyd Norris and David Barboza, "Enron's Many Strands: Ex-chairman's Finances," *The New York Times*, February 16, 2002.

<sup>20</sup> Ibid.

<sup>21</sup> "Enron: A Primer," *The Columbus Dispatch, Home Final*, January 26, 2002.

<sup>22</sup> John D. McKinnon, "Questioning the Books: Enron Hasn't Fulfilled Promise to Disclose Tax Records to Congress," *The Wall Street Journal*, February 26, 2002.

<sup>23</sup> "Strength of Enron's Cash Position May be Moot, Given its Spiraling Stock Slide," *Global Power Report*, November 9, 2002.

<sup>24</sup> Kristen Hays, AP, "Pipelines, Power Plants Keeping Enron Afloat," *The Commercial Appeal*, Memphis, TN, February 23, 2002. Interviews with former executives reveal that cash flow from the "hard-asset" side of the business included cash flows from Enron's international assets.

<sup>25</sup> Sanjay Bhatnagar and Peter Tufano, "Enron Gas Services," HBS Case No. 294-076, p. 3.

<sup>26</sup> Michael Davis, "The New Power," *Houston Chronicle*, April 15, 2001.

<sup>27</sup> Derivatives are contracts that promise payment from one investor to another, contingent on the occurrence of a future event such as a price increase or change in interest rates or weather. A *put* is an option that entitles the option holder to sell to the counterparty a commodity, financial instrument, or other asset at an exercise or strike price throughout the option term or at a fixed date in the future (the expiration date). A *call* option has all the characteristics of a put option except it entitles the option holder to buy the commodity or financial instrument rather than sell it. A *swap* is a simple trading of assets or option contracts for a specified price. A total return swap is an arrangement whereby one party agrees to pay the other party the appreciation from an asset and receive repayments from the other party for the depreciation of an asset. A *collar* is a derivative transaction combining a put and a call that effectively sets a limit on the gain and the loss that the holder of the contract will realize.

<sup>28</sup> This was Skilling's vision of Enron's trading business, quoted in McLean.

<sup>29</sup> Zellner.

<sup>30</sup> According to the *Foster Electric Report*, dated August 5, 1998, citing the Edison Electric Institute, Enron achieved a 30% market share in 1995 but saw its market share drop dramatically from 26% in 1996 to 16% in 1997.

<sup>31</sup> Erick Schonfeld, "The Power Brokers," *Business 2.0*, January 2001.

<sup>32</sup> Brian O'Reilly, "The Power Merchant," *Fortune*, April 17, 2000.

<sup>33</sup> Schonfeld.

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<sup>34</sup> Christopher Locke and Michael V. Copeland, "Exchange Overload," *Red Herring*, September 1, 2001. Although Enron was capturing market share, its margins were beginning to decline as competitors entered its trading markets and as arbitrage opportunities were beginning to diminish.

<sup>35</sup> Peter Fritsch, "Size of Enron's Big Trading Operation Worries Some Analysts," *The Wall Street Journal*, December 29, 1995.

<sup>36</sup> Steven Pearlstein and Peter Beer, "At Enron, the Fall Came Quickly," *The Washington Post*, December 2, 2001.

<sup>37</sup> Peter Coy, Stephanie Anderson Forest, and others, "Enron: How Good An Energy Trader?" *BusinessWeek*, February 11, 2002.

<sup>38</sup> As a result of Enron's lobbying efforts, Enron became in 1991 the first and only nonfinancial public company to adopt mark-to-market accounting principles. (See Toni Mack, "Hidden Risks," *Forbes*, May 24, 1993.) Although MTM rules spread to other energy traders, Enron's chief accounting officer, Richard Causey, liked to claim that Enron had developed these rules. (See Jonathan Weil, "After Enron, 'Mark-to-Market' Accounting Gets Scrutiny," *The Wall Street Journal*, December 4, 2001.)

<sup>39</sup> *Wall Street Journal* staff reporters, "Enron Lessons."

<sup>40</sup> For example, "Many of the contracts covered companies in states that had not yet deregulated their power markets. In those cases, Enron forecasted when the states would deregulate those markets and then projected what prices would be under the currently nonexistent deregulated market. Then, based on its projections, Enron would calculate its total profit over the life of the contract. After discounting that figure for the risk that its customers would default and the fact that it would not receive most payments for years, Enron would book the profit immediately." Floyd Norris and Kurt Eichenwald, "Fuzzy Rules of Accounting and Enron," *The New York Times*, January 30, 2002.

<sup>41</sup> For a good discussion of estimating forward commodity prices, see Jonathan R. Laing, "The Bear that Roared," *Barron's*, January 28, 2002.

<sup>42</sup> Vince Kaminski and John Martin, "Transforming Enron: The Value of Active Management," *Journal of Applied Corporate Finance*, Vol. 13(4), Winter 2001, p. 45. Skilling led the charge within Enron to convince regulators to permit the company to use mark-to-market accounting methods. It had previously been an accepted technique for brokerages and trading companies, which used it to record the value of their securities at the end of a trading day. Skilling was successful in convincing the regulators to allow energy companies to adopt this accounting method as well. Certain press reports have noted that Skilling stood to benefit personally from this change in accounting since his employment contract apparently guaranteed him as much as 3% of the value of his division's business, and that value would expand greatly under mark-to-market accounting. See Witt and Behr.

<sup>43</sup> Dan Ackman, "Enron The Incredible," *Forbes.com*, January 15, 2002.

<sup>44</sup> Robert Preston and Mike Koller, "Enron Feels the Power," *InternetWeek*, October 30, 2000.

<sup>45</sup> "Enron's Ghost: Recharging," *The Economist*, April 20, 2002, p. 72. Once again, interviews with former executives reveal that reported earnings and cash flow from the wholesale business included earnings and cash flows from Enron International and other domestic "hard-asset" investments.

<sup>46</sup> Jeff Skilling interview, Darden School of Business videotape, May 25, 2001.

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<sup>47</sup> Ibid., p. 71.

<sup>48</sup> Ibid., p. 172.

<sup>49</sup> Enron Corp. 10-Q filing to SEC, September 30, 2001, pp. 31 and 52. Also, Swartz, p. 173.

<sup>50</sup> The alleged partnerships were LJM1, LJM2, and Chewco. See Michael Rieke, "Bandwidth Beat: Enron Puts Spotlight Back on Broadband," *Dow Jones Energy Services*, October 29, 2001.

<sup>51</sup> Enron Corp. 10-Q, filed November 19, 2001.

<sup>52</sup> Barboza; Bartlett and Glinska, "Enron's Transformation," p. 7.

<sup>53</sup> Ghemawat and Lane, "Enron: Entrepreneurial Energy," p. 7.

<sup>54</sup> Enron Corp. 10-Q filing, May 15, 2001, EDGAR online.

<sup>55</sup> In the end, the local state energy board was only able to afford a 15% stake.

<sup>56</sup> The locally owned power plants were government plants.

<sup>57</sup> This \$900 million figure is the amount that Enron eventually wrote off for the Dabhol project after a full review of all of Enron's impaired assets following the company's declaration of bankruptcy. Previous estimates of Enron's equity stake in Dabhol were in the \$550 million range, reflecting the following logic: Assuming that 67%–75% debt is common in an electric power project such as Dabhol, then the debt portion probably ran between \$1.9 billion and \$2.2 billion, with the equity portion running between \$1 billion and \$700 million. At a 65% share of the equity, Enron's equity portion was probably close to \$550 million. See Josey Puliyeenthuruthrl, "Enron Inches Toward India Plant Sale," *The Daily Mail*, November 14, 2002, for an early, external estimate of Enron's equity stakes. These estimates proved to be substantially short of the mark.

<sup>58</sup> Zachary Coile, "Accounting Firm Obeyed Law, CEO Says," *San Francisco Chronicle*, January 21, 2002.

<sup>59</sup> Mike Pollick and Chris Davis, "A primer on Enron's connections to Florida," *Sarasota Herald-Tribune*, February 2, 2002.

<sup>60</sup> These impaired assets reflected, among other things, problems of a fully owned utility in Buenos Aires province where (a) internal sabotage destroyed all customer billing records and (b) algae contamination of water in a reservoir not controlled by the company forced the company to cease billing for odiferous but otherwise unarmful water.

<sup>61</sup> Enron Corp., 8-K filing with SEC, April 1, 2002.

<sup>62</sup> William H. Miller, "Vision Vanquisher," *Industry Week*, May 18, 1998.

<sup>63</sup> O'Reilly.

<sup>64</sup> Carol Freedenthal, "Leadership a critical element in restructuring," *Pipeline & Gas Journal*, August 1998.

<sup>65</sup> Utilities were allowed to pass on to consumers the costs of purchased gas, with tariffs approved by regulators, with purchased gas adjustments (PGAs). Enron's innovation was to introduce PGAs

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that were indexed rather than fixed, thus freeing utilities from having to seek regulatory approval with gas price changes.

<sup>66</sup> Julian E. Barnes, Megan Barnett, Christopher H. Schmitt, and Marianne Lavelle, "Investigative Report: How a Titan Came Undone," *U.S. News & World Report*, March 18, 2002.

<sup>67</sup> John Glass, "Enron's Power Play Gives IPPs an Edge," *Boston Business Journal*, September 2, 1991.

<sup>68</sup> Suzanne Kapner, "A Rush to Hire Enron Employees," *The New York Times*, March 8, 2002.

<sup>69</sup> John Laxmi, "Enron: Restructuring an energy company," *Global Finance*, May 2000. See also Benjamin Esty, Peter Tufano, and Matthew Bailey, "Contractual Innovation in the UK Energy Markets: Enron Europe, The Eastern Group, and the Sutton Bridge Project," HBS Case No. 200-051.

<sup>70</sup> Samuel Bodily and Robert Bruner, "Manager's Journal: What Enron Did Right," *The Wall Street Journal*, November 19, 2001.

<sup>71</sup> Harry Hurt III, "Power Players," *Fortune*, August 5, 1996.

<sup>72</sup> Peter Coy, "Explaining Uncertainty: The 'real-option' revolution in decision-making," *BusinessWeek*, June 7, 1999.

<sup>73</sup> Agis Salpukas, "Firing Up An Idea Machine," *The New York Times*, January 27, 1999.

<sup>74</sup> Elizabeth A. Tilney (senior vice president for Advertising, Communications and Organizational Development, Enron Corp.), "Innovative Workplace, Testimony before The Subcommittee on Oversight and Investigations Committee on Education and Workforce," U.S. House of Representatives on the Subject of Innovative Workplace for the Future, May 20, 1997.

<sup>75</sup> Frank Gibney, Jr., "Enron Plays the Pipes," *Time*, August 28, 2000.

<sup>76</sup> Salpukas.

<sup>77</sup> *Ibid.*

<sup>78</sup> Julia King and Gary H. Anthes, "Enron Hits the Gas," *Computerworld, Inc.*, November 20, 2000.

<sup>79</sup> Barnes et al., *U.S. News & World Report*.

<sup>80</sup> *The Omaha World-Herald*, November 25, 1994, quoted from "Nation's Largest Natural Gas Company Turns to the Sun's Light," *The New York Times*.

<sup>81</sup> NewPower filed for bankruptcy on June 11, 2002. The company tried to revolutionize the retail energy business by establishing the first nationally recognized brand of electricity and natural gas targeted at residential and small commercial business. Enron took NewPower public in October 2000.

<sup>82</sup> See "Enron Producer Services," *Oil & Gas Investor*, April 1, 2001.

<sup>83</sup> Christopher Koch, "Reinvent Now," *CIO*, August 15, 1999.

<sup>84</sup> Zellner.



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<sup>85</sup> Dan Carney, "How Enron Alienated Just About Everyone," *BusinessWeek Online*, January 17, 2002.

<sup>86</sup> "Blind Faith: How Deregulation and Enron's Influence Over Government Looted Billions From Americans," *Public Citizen*, December 2001.

<sup>87</sup> Michael Hiltzik, "The Fall of Enron," *Los Angeles Times*, January 31, 2002.

<sup>88</sup> Michael Schroeder, "Accounting for Enron," *The Wall Street Journal*, January 21, 2002.

<sup>89</sup> Stephen Labaton, "Enron's Collapse: Regulations," *The New York Times*, January 23, 2002.

<sup>90</sup> Ibid.

<sup>91</sup> "Blind Faith," *Public Citizen*, p. 19.

<sup>92</sup> John D. McKinnon, "Enron Tried to Delay Paying Taxes on Foreign Profit, Documents Show," *The Wall Street Journal*, March 4, 2002.

<sup>93</sup> Michael H. Granof and Stephen A. Zeff, "Unaccountable in Washington," *The New York Times*, January 23, 2002; and "Summary of Statement No. 25," Financial Accounting Standards Board, issued February 1979.

<sup>94</sup> Neela Banerjee, "Who will Needle Regulators Now that Enron's Muzzled?" *The New York Times*, January 20, 2002.

<sup>95</sup> Michael Schroeder, "Questioning the Books," *The Wall Street Journal*, February 11, 2002.

<sup>96</sup> "Blind Faith," *Public Citizen*, p. 24.

<sup>97</sup> Ronald Brownstein, "The Enron Inquiry News Analysis," *Los Angeles Times*, January 17, 2002.

<sup>98</sup> Rone Tempest, "With the Theater or PACs, Texans Saw Kenneth Lay as 'On Top of the World' Influence," *Los Angeles Times*, January 25, 2002.

<sup>99</sup> Albert R. Hunt, "A Scandal Centerpiece: Enron's Political Connections," *The Wall Street Journal*, January 17, 2002.

<sup>100</sup> Patrice Hill, "Clinton Helped Enron Finance Projects Abroad," *The Washington Times*, February 21, 2002.

<sup>101</sup> Thomas L. Greaney, "Editorial: Lining Up the Suspects in the Great Enron Caper," *St. Louis Post-Dispatch*, January 15, 2002.

<sup>102</sup> Editorial, "The Rise and Fall of Enron," *The New York Times*, November 2, 2001.

<sup>103</sup> Ken Lay, videotape interview, January 11, 2001, Harvard Business School.

<sup>104</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001; Bartlett and Glinska, p. 9.

<sup>105</sup> To underscore his commitment to a dynamic workplace, Skilling eliminated Enron's dress code when he took over as COO, reconfigured offices and space, and replaced walls with glass or write-and-wash capabilities to facilitate brainstorming and extemporaneous diagramming. Screens in

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elevators providing in-house CNN programming also contributed to a high-energy, high-tech physical environment. (See Preston and Koller.) This environment was for some invigorating and for some scary. “The firm’s organization and culture was by all accounts not a safe haven for those who believe the role of a large corporation is to fulfill entitlements for jobs” (Samuel Bodily and Robert Bruner, “Manager’s Journal: What Enron Did Right,” *The Wall Street Journal*, November 19, 2001).

<sup>106</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>107</sup> Hillary Durgin, “The Guru of Decentralisation,” *The Financial Times*, June 26, 2000.

<sup>108</sup> Ibid.

<sup>109</sup> Koch.

<sup>110</sup> Ibid.

<sup>111</sup> “Enron 2001: An Inside View,” Global Change Associates, p. 28.

<sup>112</sup> Ibid., p. 27.

<sup>113</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>114</sup> Barnes, et al.

<sup>115</sup> Ibid.

<sup>116</sup> Advocates of the 360-degree appraisal claim that it generates a more accurate picture of an employee’s performance and development needs and provides more thorough and helpful feedback than the traditional “one-sided” appraisal by a single supervisor.

<sup>117</sup> Jeff Skilling, comments in class at Harvard Business School, April 26, 2001.

<sup>118</sup> Ibid.

<sup>119</sup> Jeff Skilling, interview at Darden Business School, videotape, May 25, 2001.

<sup>120</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>121</sup> Global Change Associates, p. 32.

<sup>122</sup> Originators were often assisted in the complicated technicalities of deal structuring by structuring experts in Enron’s global finance group, located at the parent company headquarters.

<sup>123</sup> As noted on page 11 above, this variant of “mark-to-market” accounting is most appropriate when there is a ready and active market for such a contract as there is for oil. Where there is not an active market, as in the case of many (but not all) Enron contracts, assigning costs and recognizing revenues to these contracts can be quite arbitrary.

<sup>124</sup> This compensation system for originators and traders was not unique to Enron. Other energy traders such as Dynegy and Williams Companies had instituted similar practices.

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<sup>125</sup> Michael Brink, "What Was the Heart of Enron Keeps Shrinking," *The New York Times*, April 6, 2002.

<sup>126</sup> David Barboza, "Officials Got a Windfall Before Enron's Collapse," *The New York Times*, June 18, 2002, p. C1.

<sup>127</sup> Jason Leopold and Jessica Berthold, "Enron's Filings Show Lavish Compensation Was Awarded to Many Senior Executives," *The Wall Street Journal*, March 18, 2002. Phantom equity is designed to track the performance of the relevant unit's performance, even though the unit has no stock of its own.

<sup>128</sup> Leopold and Berthold. According to this article, Skilling's attorney, Bruce Hiler, confirmed the transaction but added that Skilling had only collected on a third of the \$100 million because he "didn't need all that money." In addition to Skilling, Lou Pai, the former chairman and chief executive of EES, owned a 3% phantom-equity stake in the unit. (See March 27, 2002 correction by *The Wall Street Journal* to Leopold and Berthold's March 18 article citing data on Pai's holdings.) Pai converted over a four-year period his stake in EES into Enron common stock, accounting for the bulk of the \$268 million in shares he sold before leaving the company in June 2001. Other senior executives benefited from similar arrangements.

<sup>129</sup> Other possible, and commonly used, financial performance metrics stress earnings growth, cash flow, and the productivity of capital employed in the business.

<sup>130</sup> Enron Corp. proxy, filing date May 4, 1999, p. 22 and May 1, 2001 filing, p. 21. Lay's and Skillings's total cash compensations were \$4.5 million and \$3.1 million, respectively, in 1998. For 2000, the comparable amounts were \$8.3 million and \$6.5 million.

<sup>131</sup> Mark and Sutton actually traded these cash bonuses for Enron stock options that vested over time.

<sup>132</sup> Ellen Schultz and Theo Francis, "Accounting for Enron: Enron Pensions Had More Room at the Top," *The Wall Street Journal*, January 23, 2002.

<sup>133</sup> *Ibid.*

<sup>134</sup> Robert J. Samuelson, "Stock Option Madness," *The Washington Post*, January 30, 2002.

<sup>135</sup> Laura Goldberg, "Lay Borrowed Millions, Repaid Enron with Stock!" *Houston Chronicle*, February 16, 2002.

<sup>136</sup> "The Role of the Board of Directors in Enron's Collapse," Permanent Subcommittee on Investigations, Committee on Governmental Affairs, United States Senate, July 8, 2002, p. 54.

<sup>137</sup> Bartlett and Glinska, p. 11.

<sup>138</sup> Global Change Associates, p. 34.

<sup>139</sup> *Ibid.*, p. 79.

<sup>140</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>141</sup> Kaminski and Martin, p. 49.

<sup>142</sup> Bartlett and Glinska, p. 9.

<sup>143</sup> Neela Banerjee, David Barboza, and Audrey Warrant, "Enron's Many Strands: Corporate Culture," *The New York Times*, February 28, 2002.

<sup>144</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>145</sup> Salpukas.

<sup>146</sup> Jeff Skilling, speech at Harvard Business School, April 26, 2001.

<sup>147</sup> Bartlett and Glinska, p. 9.

<sup>148</sup> Koch.

<sup>149</sup> Bartlett and Glinska, p. 9.

<sup>150</sup> Koch.

<sup>151</sup> Bhatnagar and Tufano, p. 11.

<sup>152</sup> Kaminski and Martin, p. 45.

<sup>153</sup> Gallagher Polyn, "Getting a Better Risk Picture," *Risk*, August 2001, p. 33.

<sup>154</sup> Kaminski and Martin, p. 45.

<sup>155</sup> Enron 2000 Annual Report, p. 28.

<sup>156</sup> Ibid. "Monte Carlo simulation" is a tool often used in capital budgeting to analyze the sensitivity of investment outcomes to changes in one variable at a time. It thus enables one to inspect an entire distribution of project outcomes. While controversial in some quarters, this technique has long been associated with David Hertz and McKinsey & Company, the management consultants. See D. B. Hertz, "Investment Policies That Pay Off," *Harvard Business Review*, 46 (January–February, 1968): 96–108.

<sup>157</sup> The Powers Committee Report, p. 44.