I. Market Conditions of the U.S. Telecom Sector, As Illustrated by the Bankruptcy of Global Crossing, Inc.

Global Crossing filed for bankruptcy on Jan. 28, 2002, representing the fourth-biggest U.S. bankruptcy in history. (Enron Corp. being the largest, followed by Texaco, Inc., and Financial Corp.). In its bankruptcy filing, Global Crossing listed assets of \$22.44 billion and debts of \$12.39 billion. From a broad perspective, the company's dramatic fall represents the leading case study of how quickly telecom-asset values diminished, possibly damaging both pure-play telecom firms and U.S. energy companies that invested heavily into the telecom sector. Global Crossing was once considered the strongest of the challengers taking on incumbents that were too slow to cater to "new economy" demands for more bandwidth. It was also seen as one of the most ambitious telecom ventures to emerge from the worldwide boom investment in the industry in the late 1990s. Consequently, its staggering fall can provide valuable insights to the exposure to the telecom sector currently faced by other companies.

In the interest of providing a cursory background, the following is a brief summary of Global Crossing's rise and fall. The company was founded in 1997 by former Drexel Burnham Lambert executive Gary Winnick. John Legere became CEO in October 2001. The company expanded aggressively and quickly, ultimately building 100,000 miles of cable spanning five continents. The network reportedly reaches 27 countries and 200 major cities around the world.

Global Crossing went public in 1998. Global Crossing's business objective was to become a telecom-sector titan out of the Internet age, and worked toward accomplishing this goal by carpeting the world's oceans with fiber-optic cable. Global Crossing reportedly spent \$13.7 billion to build its fiber-optic network. The construction of the network was greeted with great enthusiasm among many market analysts and investors, who collectively shared or accepted Global Crossing's expectations that the increase of Internet-based businesses would dramatically increase the need for broadband capacity. In fact, at first Global Crossing's plan made the company the darling of investors and telecommunications analysts. The company's executives remained confident, and convinced Wall Street, that Global Crossing would be able to sell capacity directly to big multinational companies such as Coca-Cola or American Express.

Further, Global Crossing found that capital markets were more than willing to loan the company money as it was building its network with grand expectations in the late 1990s and into 2002. In fact, the boom for Global Crossing came at a time when even some companies that didn't have investment-grade ratings could borrow without posting collateral. About 100 banks are now involved in the proceedings over Global Crossing to some degree. Since 1998, Global Crossing and its rivals involved in the telecom /

broadband sector raised over \$1 trillion from the capital markets in equity and debt, according to data from Morgan Stanley & Co. The figure doesn't include bank loans, financing from vendors whose equipment the carriers bought, or the money raised through securitizing their own accounts receivable.

However, the downfall of the company has its roots in the lack of demand in the telecom sector, which led to a glut in capacity for such high-speed networks as the massive one built by Global Crossing. A massive overinvestment in such "backbone" networks, along with slowing of growth in Internet traffic, produced a slump in demand for the wholesale communications capacity sold by companies like Global Crossing and left them unable to support mountains of debt. As a result of the lack of demand, prices for the bandwidth capacity plummeted in 2000 and into 2001. Global Crossing's financial status became impacted over the last two years as the dried-up funds among long-distance telecom carriers caused demand for leasing subsea communications links to evaporate. Meanwhile, the carriers that did want capacity were able to negotiate low prices between Global Crossing and its competitors.

It is clear that the fortunes of Global Crossing sank with the larger downward trends of the telecom sector. This became apparent to the public only when the company encountered serious financial trouble late last year. It should be noted, however, that the company's stock had been dropping since early 2001, tracking the general downturn in the telecom market. Further, although Global Crossing had built a worldwide fiber-optic network during the tech boom, the company has never made a profit. Global Crossing announced in mid-December that it would halve dividend payments to save \$46 million each quarter. The company then refused to honor a \$400-million loan agreement with its subsidiary, Asia Global Crossing, and warned that it would be in violation of covenants on loans worth \$1.8 billion by the end of the year. Its bankers agreed to a waiver on those covenants but attached new conditions. Those waivers were set to expire on Feb. 13. Global Crossing reported a third-quarter 2001 loss of \$3.35 billion and said that sales fell 26 percent from its second quarter to \$793 million. In addition, the company reported \$3.4-billion losses in the 4Q 2001, as sales of bandwidth continued to fall.

Capital expenditures at the company have historically been high as Global Crossing built its 27-country telecommunications network. Now, capital expenditures are expected to shrink to \$200 million in 2002 from \$3.2 billion in 2001. According to Mr. Legere, Global Crossing was spending \$2 million to \$3 million a day in interest payments on capital funding. When and if the company emerges from bankruptcy proceedings, it hopes that it will not have that kind of capital pressure. Share prices have been declining for a long time, falling from a 52-week high of \$169 down to 22 cents.

In addition to the downturn of demand for broadband capacity, the accounting techniques

used by Global Crossing have also come under question in a Securities and Exchange Commission investigation. Known as indefeasible rights of use (IRU), the technique that Global Crossing used is a fairly standard practice in the telecom market, but has the potential of distorting the financial earnings and losses of telecom companies. An IRU is a type of long-term lease of capacity on a fiber-optic network. Fiber-optic carriers frequently swap capacity with other companies that own fiber-optic networks. Swaps occur when a company such as Global Crossing sells IRUs to another company, and at the same time paid an equal amount to buy IRUs from the same company. In other words, this should have represented an even trade, but both companies might record earnings and capital expenses on their balance sheets. Global Crossing and its telecom competitors frequently bought space on one another's network in areas not covered by their own systems to offer corporate customers a more complete data system. Such swaps are attractive to carriers, because accounting rules allow them to book an incoming contract as revenue, and then book the outgoing contract as a capital expense, which they typically emphasize as separate from operating results.

It is known that Global Crossing used these IRU instruments to sell bandwidth on its fiber-optic network, typically in contracts lasting for 25 years. Further, according to many reports, since it went public in 1998, Global Crossing continued to emphasize metrics that removed capital and interest costs from its balance sheets, and the SEC investigation is looking into whether or not the use of IRUs at Global Crossing may have intentionally misled investors and commercial bankers about the company's financial performance. According to available evidence, in some cases Global Crossing would buy an IRU and book the price as a capital expense, which would spread the expense over a number of future years. It would then resell that capacity and book the proceeds as revenue, leaving some investors to see the increase in revenue, but not the expense. Obviously, the bottom line is that revenue at Global Crossing may have been inflated, giving investors an inaccurate impression of the company's financial status.

Global Crossing is presently trying to sell the business to other companies. On March 11, 2002, Mr. Legere said the company had attracted interest from 40 financial and strategic investors out of 76 contacted. The company is now reportedly less reliant on debtor-in-possession financing and a \$750-million preliminary bid from Asian technology companies Hutchinson Whampoa Ltd. and Singapore Technologies Telemedia Pte to purchase a 79-percent stake. Under that plan, creditors would receive \$300 million in cash and new equity in the reorganized company. A class-action suit could block this proposed deal. The company wants to keep additional cash on hand until demand for its fiber capacity increases.

Global Crossing says that its problem is a balance-sheet issue, not an operational issue, after piling up debts of \$12.4 billion and has found it increasingly difficult to find new

clients to replace some of its major Internet customers, which either collapsed or dramatically cut back spending. Mr. Legere says that Global Crossing has a good business and a sick balance sheet. However, the company may not emerge from bankruptcy by the fall of 2002, as originally hoped. The company has more than \$1 billion in cash, up from about \$900 million when it filed for bankruptcy. Note that there is also a pending class-action lawsuit against Global Crossing that the company overstated revenue from the sales and gave a misleading picture of its financial performance. Also note that within weeks of the bankruptcy filing, the SEC and FBI began investigating the company's accounting practices.

Moreover, only little more than a year ago, the telecom sector was at its peak, with billions of capital investment flooding into the sector as wildly optimistic expectations for demand seemingly exaggerated the scale of the market. However, a massive downturn has ensued, impacting not only companies operating in the telecom space but the nation's entire economy as well. The bottom of the telecom sector has fallen out, due in large part to the fact that the increase in bandwidth capacity has outpaced the growth in market demand. While some companies maintain that a liquid market for telecom and bandwidth trading is still on the horizon, it most likely is another two years away (at the earliest), which could make the next several quarters rather difficult for those companies with exposure in the telecom sector. At this juncture, telecom does appear weak, but it could also be argued that weak telecom companies are being weeded out, leaving stronger operations to survive and potentially succeed as the market grows. The bottom-line criterion in this "survival of the fittest" process in the telecom sector may be the companies that can effectively manage their own costs will remain. Whether there are long-term prospects for growth in the telecom sector is the question to be asked when determining which companies will succeed in this sector. Regarding Williams Communications specifically, the company certainly faces a rather constricted telecom market. However, in hindsight, a case could be argued that Williams Cos. made a smart move in transferring the telecom business into a stand-alone operation in advance of the implosion that subsequently occurred in the telecom sector.

II. Risks Associated with the Expansion of U.S. Energy Companies Into the Telecom Sector

In the mid-1990s and into 2000, telecom seemed like a boom market to many energy companies, just as it appeared to Global Crossing. Like many other businesses, some power firms began buying telecom companies and building bandwidth infrastructures in anticipation of a liquid trading business. In addition, especially for small and mid-sized electric utilities, telecom seemed to present an opportunity to take advantage of wholesale broadband solutions to deliver value-added options to their customers. The pressure of keeping up with new technologies in the telecom arena led many energy

companies to acquire or partner with an already-established telecom company, as Dynegy, Inc. did with Colorado-based Extant Communications last year. The need for alliances arguably forced many firms primarily active in the power space to spend additional funds to support a venture into the telecom market. The convergence between energy and telecom got into high gear about two years ago (late 1999 and into 2000), and became somewhat of a "groupthink" trend in the industry in which Enron Corp. and Williams Cos. were leading participants. In fact, Enron's former CEO Jeffrey Skilling projected a \$450-billion worldwide market for communications bandwidth trading and services by 2005, and the valuation of Enron's own broadband business at \$40 a share, or \$35 billion. As a point of reference, Enron's expansion into the telecom market was spawned in part by its acquisition of Portland General, a utility in Oregon that had constructed some fiber-optic capacity in the Pacific Northwest.

Utility holding companies are allowed to purchase telecom businesses per an exemption provided under the Telecommunications Act of 1996. However, most utilities (for example, Southern Company) that typically fall under such restrictions from the Public Utilities Holding Company Act (PUHCA) have not plunged into the telecom sector to the extent that merchant energy companies such as Enron, Williams, Dynegy, Reliant, and AES did. Some utilities may have been drawn to the telecom market, either through a comparatively large or small investment, because electric utilities generally have internal expertise and assets such as transmission infrastructure that can be leveraged into the telecom business.

In any case, the fiber-communications market now finds itself at a stunning impasse, after having invested hundreds of billions of dollars in long-haul fiber networks that exceed current demand for voice and data services. Despite the increased investment in the sector, there still appears to be an insufficient infrastructure of fiber capacity to support the needs of end users, which has also caused demand to trail off. The boom-and-bust trend of the telecom sector has had a dramatic impact on the nation's economy as a whole, as some smaller telecom companies went bankrupt and investors remain very hesitant to put further large sums into the sector until supply and demand become more balanced. According to one report, the telecom business (including local, long distance and wireless companies, along with telecom equipment makers) reached a peak in March 2000, with a combined market value of \$2.7 trillion. Over the subsequent year, the market shed \$1.7 trillion of that figure, accounting for more than 90 percent of the net loss in stock wealth in the period. It is unlikely that energy companies as a whole will exit the telecom market altogether, as many companies continue to see telecom as a valuable long-term way to expand their customer base and eventually increase value for shareholders. However, it is clear that the next few quarters will be difficult and unlikely to provide any real profits for energy companies with telecom exposure. Looking forward, bandwidth trading may be another potential moneymaker in the postderegulation world of utilities' diversification ventures, but energy companies need to proceed with caution. At this time, capacity clearly has outpaced demand. However, if this equation becomes more balanced (as Enron, Dynegy and Williams, among others, are projecting), the market could still become lucrative in the next two years.

Other companies apparently foresaw the market downturn in telecom and began exiting the market altogether. For instance, in June of 2001, Conectiv announced that it had sold its telecommunications business (along with a stake in a New Jersey power plant) for a total of \$29 million, in order to focus more heavily on building a more targeted generation business. Conectiv's new approach seems to be particularly prudent as it gets the company out of the struggling telecommunications industry (which has also taken a tumble on Wall Street), and expands upon what is already a lucrative trading operation in advance of the company's pending partnership with Potomac Electric Power Company (Pepco).

III. Specific Examples of Energy Companies' Investments in the Telecom Sector

Enron Corp: Just as Enron Corp. appeared to achieve unparalleled success in electricity and natural-gas trading in the mid- to late-1990s and into 2001, the company also invested a great deal of capital into building a high-speed broadband communications network, under its subsidiary Enron Broadband Services, to support its planned move into bandwidth trading and marketing. Enron Broadband Services focused exclusively on two key areas: bandwidth trading and package services for business customers (which would basically include the delivery of data and entertainment through fiber-optics). As noted, Enron executives, particularly former CEO Jeffrey Skilling, confidently projected a

\$450-billion worldwide market for communications bandwidth trading and services by 2005, and the valuation of its own broadband business at \$40 a share, or \$35 billion. Again, as with the case of Global Crossing, Wall Street seemed to agree with Enron's aggressive projections for the telecom sector. Some analysts reported that interest in Enron's expansion into this area, validated by investor interest in new technologies in general, drove an 87-percent rise in the company's share price last year. The company planned to trade excess bandwidth capacity, and in order to do so began constructing its own network, which cost a lot of money. Enron acknowledged that it intends to sell between \$2 billion and \$4 billion in assets over the next 12 months in order to reduce debt and support the new business in broadband (among other businesses in pulp and paper, data storage and advertising).

However, while prior to the bankruptcy, Enron maintained that it still projected a strong market for telecom, losses in its telecom sector contributed to the company's financial collapse. In fact, for year-end 2000, Enron Broadband Services reported a \$60-million

EBIT loss, reflecting startup costs to build the new business. The company seems to have anticipated the slow growth of its broadband business. In fact, then-Enron CEO Jeffrey Skilling did not appear concerned over the loss and said that it took between five and six years for the company's natural-gas business to develop standardized contracts and increase liquidity. Mr. Skilling has said that these numbers do not dilute his belief that bandwidth trading will soon become a strong performer for the company. While Mr. Skilling remains optimistic about the potential of the broadband business, investors may not be as patient. (Note that while Enron's broadband business took a loss for 2000, the company as a whole reported a 25-percent increase in earnings per diluted share to \$1.47 and a 32-percent increase in net income to \$1.3 billion.)

In 2Q 2001, Enron's broadband business reported a \$102-million operating loss, compared to an average loss of just \$24 million for the four previous quarters. Former Enron CEO Jeffrey Skilling has openly acknowledged that revenue opportunities in the company's broadband unit have "dried up." Basically, Enron faced an unanticipated excess of fiber-optic lines, which has prevented the demand for the division's services from materializing as anticipated. Mr. Skilling remains optimistic that the business will become profitable, but that it is probably six to 18 months away. As of the third quarter of 2001, Enron stopped including its telecom financials in its wholesale and retail energy services sector. In other words, Enron stopped identifying telecom financials as a standalone line item anymore, which some investors perceived as an effort to hide additional losses. We do know that Enron took a \$638-million loss in the third quarter, which included such businesses as broadband and water. In any case, as has been well documented, by early December 2001 Enron Corp. had declared bankruptcy.

The company planned to trade excess bandwidth capacity, and in order to do so began constructing its own network, which cost a huge amount of money. However, Enron's exposure to telecom became one of many factors that brought the company into a downward financial spin. In its third-quarter 2001 earnings report, Enron posted \$180 million in charges related to the downsizing of its broadband operations (including severance costs and losses on inventory sales and customer contracts). Prior to that the company acknowledged that its telecom sector had "dried up." The problem with Enron's bandwidth unit, which now seems like a foreshadower to the problems that other companies exposed to telecom are experiencing, is that the company faced an unanticipated excess of fiber-optic lines, which prevented the demand for the division's services from materializing as anticipated.

Williams Cos.: Williams Communications launched a rather successful initial public offering (IPO) in October 1999 and became a fully independent company on April 23, 2001, when the tax-free spin-off was approved by former parent company Williams Cos. The IPO was seen as a move to make Williams Communications more independent from

the parent company, but as we will see an inherent financial relationship between the two companies kept them interconnected. Williams Communications provides broadband fiber-optic network services. The company's network customers are carriers of voice, data and multimedia, including the largest regional/national telecom companies, interexchange carriers, local exchange carriers, competitive local exchange carriers, Internet service providers, application service providers, and utility companies. A key component of the company's business model is its efforts to trade bandwidth, or the ability to move voice and data over fiber-optic networks. Toward that end, Williams Communications claims that it achieved a significant milestone at the end of 2000 by establishing 33,000 route miles of broadband capacity connecting 125 cities, a full year ahead of its initial schedule.

However, energy trader and pipeline operator Williams Cos. said on March 4 that it expects a restructuring of \$1.4 billion in notes to be completed in the "very near future," after favorable talks with investors. The talks concern \$1.4 billion of notes issued by the WCG Note Trust, an indirect wholly owned subsidiary of Williams Communications Group Inc. Williams Cos. has been under pressure by the potential bankruptcy filing of its former subsidiary Williams Communications. Williams Cos. spun off 95 percent of Williams Communications to its shareholders in April 2000, but may have to assume debts of \$2.2 billion under various financial guarantees arranged at the time of the spin-off. Credit-rating agency Moody's Investors Services said it was maintaining an investment-grade Baa2 rating for the senior unsecured debt of Williams Cos., but had downgraded the outlook for the company to negative from stable.

In addition to the potential bankruptcy that Williams Communications may have to declare to stave off its growing debt-ridden condition, the real story here may be the impact that the communications unit's problems could have on its former parent, Williams Cos. Despite the fact that Williams Cos. spun off 95 percent of WCG in April 2000, when prospects looked bright for the telecom and broadband trading markets, the energy-merchant and gas-pipeline company could still take a financial hit due to agreements that were made between the two firms when the spin-off occurred nearly two years ago. While conventional wisdom might have been used to make the argument that Williams Cos. made a smart move in transferring the telecom business into a stand-alone operation in advance of the implosion that subsequently occurred in the telecom sector, the reality now taking shape is that the former parent company may still hold some financial responsibility for the current problems of WCG. At the heart of this case is a complex, but increasingly common, use of financial accounting in which certain investments are backed by company stock. Although many issues are still being sorted out in its own bankruptcy proceedings, Enron apparently used this technique to back many of its off-balance-sheet partnerships. The current story unfolding around Williams Cos. and WCG is that the former parent of the telecom unit used its own stock as a

backing for certain financial obligations held by its former subsidiary that may have been kept off of Williams Cos.' balance sheets. The financial obligation would potentially expose Williams Cos. to the financial turmoil that currently hovers around WCG, unless the renegotiation of various bond notes on which Williams Cos. is presently working prove successful.

The current plight for WCG is that it reportedly spent about \$6 billion to build a fiberoptic network before the telecom boom faded, and presently faces about \$5.16 billion in debt, including about \$2.4 billion in notes and other obligations owed to Williams Cos., which has prompted the company's consideration of bankruptcy. For the fourth quarter of 2001, WCG reported a loss of \$372 million, or 76 cents a share, compared with \$547 million, or \$1.18 a share, for the period a year earlier. In addition to the debt, WCG shares have recently traded as low as 13 cents (down from a 52-week high of \$14.20). Given that the stock has been below \$1 for over a month, the New York Stock Exchange is presently reviewing whether or not shares of the company should be delisted.

The appendage that links Williams Cos. and WCG is Williams Cos.' decision to back bonds sold by the telecom unit, which reportedly were in the range of \$1.4 billion. In a financial-structuring move that is fairly common but for which Enron has received a great deal of negative publicity, the bonds issued by WCG were backed by Williams Cos. shares. As you may recall, a major catalyst in the swift and dramatic collapse of Enron was the fact that the company had backed many of its off-balance-sheet partnerships with Enron stock, even though debt for the partnerships was often not recorded on the corporation's balance sheets. Williams Cos. reportedly backed as much as \$2.2 billion of WCG's financial obligations. According to comments by Scott E. Schubert, chief financial officer of WCG, the company had interest payments of \$500 million this year and a payment on \$2.5 billion worth of unsecured bonds is due on April 1. However, although the debt in question belongs to WCG, Williams Cos. would have to pay \$1.4 billion in principal within 60 days if WCG cannot make its own payment (and if terms of the notes are not restructured). In fact, Williams Cos. has said in the past that it could face liability for up to \$2.2 billion of WCG debt under certain circumstances.

Thus, as noted Williams Cos. remains tied to WCG, and could suffer some financial consequences as a result of WCG's current debt-ridden condition, due to the agreement over financial backing that was reportedly reached between the two companies back in 2000. Now that WCG is struggling financially, it has the potential of also impacting its former parent. That is why Williams Cos. is feeling the heat to restructure about \$1.4 billion in notes and is stressing its belief that the restructuring will be resolved in the "very near future." Williams Cos. is also negotiating with bondholders to reach an agreement that, if it does take over responsibility for making payments on the bonds for WCG, the payments would be made over time rather than being forced to pay the entire

principal in a lump sum. A valid concern among some investors is that if Williams Cos. is forced to pay the debt obligation it might have to issue more common stock, further damaging the company's share price which has been impacted by larger market conditions including the Enron collapse and softening wholesale prices. A year ago, Williams Cos.' shares were priced at almost \$50 and were priced at about \$22 (as of March 16). Along with the renegotiation of bond terms, Williams Cos. also announced that it would sell its Midwest natural-gas pipeline to raise cash to help WCG. Also note that Williams Cos. has delayed the release of its own 4Q 2001 net earnings report while it continues to sort out the financial exposure to its obligations to WCG.

In another set of challenges that continue to bind Williams Cos. and WCG, the companies face mounting shareholder lawsuits alleging that the communications venture was fraught with misstated financial results and debt. Those launching the litigation against Williams Cos. and WCG say that Williams Cos. misrepresented the actual finances and future potential of the telecommunications firm, which led to an artificially inflated stock price when WCG first went public. According to the claims, this alleged misrepresentation enabled Williams Cos. to transfer what may have been mounting debt accrued by WCG off the balance sheet of its former parent. In other words, the suits charge that WCG was operating below expectations, revenue forecasts were overstated, and costs and expenses were understated. The end result, the argument goes, was that Williams Cos. appeared financially stronger and was able to continue growing its energy-merchant and pipeline businesses while shareholders supporting the telecom business may have been misled.

Of course, it should be noted that Williams Cos. claims that the lawsuits are baseless and that the company will be vindicated in court.

When we break down the various lawsuits now facing Williams Cos. and Williams Communications, the legal claims against the companies essentially boil down to one core issue. In a nutshell, those launching the litigation against Williams Cos. say that the company misrepresented the actual finances and future potential of the telecommunications firm, which led to an artificially inflated stock price. Nevertheless, whatever financial misrepresentation may have taken place at Williams, perhaps the important subtext to this story is the ongoing meltdown of the telecom sector and how many of the energy companies that aggressively plunged into the telecom sector may find themselves ultimately burned by the expansion.

Moreover, although both Williams Cos. and WCG are presently trying to avert the potential bankruptcy filing of WCG, perhaps the larger issue to be addressed at this juncture is the financial exposure that Williams Cos. may continue to face with regard to the existing bond notes. Obviously, WCG does not have the available cash to repay the bonds and Williams Cos. has put itself at risk given the financial-backing arrangement

forged between the two companies. Although Williams Cos. is now espousing confidence that the notes will be restructured in a favorable manner for the company, the lesson learned from this case may be the dangers of backing business deals, particularly those in off-balance-sheet arrangements, with company stock. Further, this case demonstrates the now-obvious risks associated with the telecom sector, to which Williams Cos. exposed itself when it financially supported the loan obligations of its former telecom unit.

Dynegy, Inc.: Dynegy has not fared much better with its telecommunications unit, which it initiated in late-1999. During the first six months of 2001, Dynegy Global Communications lost a total of \$31 million. Losses in the second half of the year are not expected to be that severe, however Dynegy's CEO Chuck Watson disclosed that the telecommunications unit will lower overall corporate earnings for the year by 13 to 16 cents. Without naming any companies specifically, Dynegy claims that its exposure to the market downturns in telecom are not as extensive as other power firms that have developed a telecom unit, due to its decision to be cautious about its invested capital. "We didn't beef up our personnel and assets, so we don't find ourselves in the same position as others," Mr. Watson said. Further, however, Mr. Watson conceded that Dynegy can't make any money off of its telecom business until its own network is completed, which could be still a year out or more. Dynegy has been focused on developing a state-of-the-art, cost-efficient global network to enable the company to participate in the broadband marketing and trading arena. The network reportedly will consist of approximately 20,000 route miles and more than 40 points of presence (POP) and should be completed by the fourth quarter of 2001. In addition, in late-2000 Dynegy completed its purchase of Extant, a privately held, Colorado-based communications solutions and e-commerce company. Extant provides centralized clearinghouse services, OSS integration and network-expansion capabilities to communications service providers.

Denver-based Dynegyconnect, L.P., a subsidiary of Dynegy Inc. announced the launch of Dynegyconnect Internet Service, a connectivity product that enables service providers to expand their networks or add Internet access to their service portfolios using Dynegyconnect's optical mesh network. "Competitive pricing and reliability make Dynegyconnect Internet Service a dynamic product for our customers," said Mark Stubbe, president and chief operating officer of Dynegyconnect. "Our goal is to provide network products and services that will help our current and future customers to be competitive in the marketplace." Dynegyconnect, a joint venture between Dynegy Inc. and Telstra Corp., is aggressively following opportunities in the converging energy and communications marketplace.

AES Corp.: AES is taking one step that is both clear and positive. The company has said it wants to return to its "core business of power generation and marketing." This might be

viewed as a veiled reference to AES' intent to retreat from an expansion into the telecom sector, which has not been received well by investors. Specifically, AES spent a great deal of time and money launching a \$1.37-billion hostile takeover of Venezuelan telecommunications firm CANTV, or Compania Anomima Nacional Telefonos, in which it already owns a 6.9-percent interest. AES ultimately dropped its bid when CANTV launched its own share-repurchase program. However, the fact that AES seemed adamant in launching a risky expansion into the telecom market of Latin America did not sit well with investors, and clearly was one of the factors that sent the company's stock price on a downward cycle in the fall of 2001. AES' venture rattled confidence in the company, as some investors believed that the company was imprudently expanding into the telecom sector, which was already significantly troubled, and becoming too heavily entrenched in Latin America, a market that is prone to political and economic volatility. I think AES' newly renewed focus on its core generation business is a direct response to the negative reaction it received from investors last year. Nevertheless, while the return to its generation focus may help to present the company's business model in a clearer light, AES could find that it is making this retreat back into power generation and marketing at the wrong time. Since the time that AES became more diversified, the unregulated power market has clearly become restricted. Among other factors, demand for power and wholesale prices have both dropped, which has resulted in considerably less favorable market conditions for the generation market than existed a year ago. Only time will tell if AES' retooled business model will be sufficient to restore confidence in the company.

Montana Power / Touch America: The case of Montana Power Corporation (MPC) represents the extreme scenario in which an electric utility exited the energy business and transformed itself into a pure-play telecom operation, suffering some negative consequences as a result. Montana Power announced its decision about 23 months ago to exit the utility business and morph into a stand-alone telecom operation. The company sold its generation assets to PPL Corp. and was in the process of selling its T&D operation to NorthWestern, a provider of electricity, natural gas and communications services to Midwestern customers. Under an agreement established in October 2000, NorthWestern was slated to acquire MPC's utility operations for approximately \$602 million in cash and the assumption of \$488 million in existing debt.

However, a series of setbacks collided and called into question whether or not MPC's transformation would ever be completed. The setbacks included financial losses for the company, a lawsuit launched by shareholders, and community backlash in response to MPC's intention to raise electric rates by 20 percent to cover its subsequent costs for purchasing wholesale power. Note that MPC is considered the default provider to about 288,000 customers and needs to buy an average of 670 MW to serve them. The company also needs to keep a total of 1,050 MW as a peak load during the winter months and aims to keep 100 MW of reserve power.

Along with general concern about the business prospects of Touch America, considering that the market for telecom has significantly diminished since MPC announced its plans 21 months ago, there were essentially two main obstacles facing the sale of MPC's utility business to NorthWestern. The first obstacle was a concern about the impact that the sale would have on MPC's distribution customers, particularly after the start of new powersupply contracts MPC has negotiated that are set to take effect in the summer of 2002. The second obstacle related to questions about how MPC would be able to pay off its existing stranded costs, which reportedly are in the range of \$300 million. Under Montana restructuring law, MPC was entitled to the full recovery of its stranded costs. However, the issue became clouded when the company voluntarily decided to sell its generating plants and dams to support its transformation into Touch America. In a nutshell, both obstacles facing this sales transaction relate to money and how much of the profit of the sale of MPC's utility business would be returned to the company's customers. MPC had routinely argued that the 20-percent rate increase would be necessary for it to secure power on the wholesale market, and that the stranded costs should be charged to its electricity customers as they resulted from expenses associated with the company's obligation to serve.

Nevertheless, the Montana Public Service Commission (PSC) unanimously approved an agreement on Jan. 29 that let MPC sell the last of its utility holdings and reduce the size of a rate increase expected in July. The five-member commission's approval ends months of uncertainty for Montana Power, clears the way for the Butte-based utility to complete transformation into its telecommunications subsidiary, Touch America Holdings Inc., and resolves regulatory issues that have been before the PSC for four years. The ruling was an endorsement of the settlement agreement between MPC, NorthWestern and the Montana Consumer Counsel, which represents residential and small business commercial customers, and the Montana Large Customer Group.

In mid-February, Touch America Holdings, Inc. announced that it had completed its transition to a stand-alone fiber-optic network and broadband products and services telecommunications company with the sale of its Montana electric and natural-gas utility subsidiary to NorthWestern Corporation

Reliant Energy: Reliant Resources can now be added to a growing list of energy companies that have found their expansion into the communications sector to be far less than lucrative. At this juncture, it appears that Reliant Resources is pondering two options: sell off the telecom unit altogether or partner with another company to gain scale and possibly buy some additional time to grow the business. However, rather than sinking any additional capital into this market, Reliant Resources, which was partially spun off from parent Reliant Energy in 2001, seems to be leaning toward a complete

divestiture of this business unit (although partnerships may keep it alive). What may make for an interesting turn of events are the market realities of the telecom sector, which for the most part remains quite depressed. Just as Reliant Resources takes steps to exit from its telecom business, other power firms—some located in Reliant's hometown of Houston—seem to be the exception of the lackluster telecom trend and in fact are expanding their communications business. What this means is that Reliant Energy Communications could find itself significantly undervalued and an acquisition target for one of Reliant's competitors.

For background, Reliant Energy first ventured into the telecom space in 1999, two years before it split its operations into regulated and unregulated businesses. Reliant's approach toward telecom was rather parallel with other energy companies that believed the communications space—perceived as offering high-growth potential in the 1999/2000 timeframe—would become a natural extension of the expertise that the company has cultivated in the energy space. Its telecom business was inaugurated when Reliant became a competitive local exchange carrier (CLEC) and was later expanded in April 2000 when the company bought Insync Internet Services. Presently, Reliant Energy Communications is a facilities-based communications provider that offers Web, data and voice services to business customers and governmental agencies in Texas. The company's services include high-speed Internet connectivity, co-location facilities, Web hosting / design, and managed data services. The unit also offers data services related to private fiber-optic networks.

Attempting to capitalize on the anticipated growth of its unregulated businesses, Reliant Energy spun off approximately 20 percent of Reliant Resources into a stand-alone company in May 2001. The newly formed public company consists of Reliant Energy's unregulated power generation and related energy trading, marketing, power origination, and risk management services in North America and Europe; a portion of its retail electric operations; and other operations including Reliant Energy Communications, an e-business group and a venture-capital operation. The company's IPO raised about \$1.56 billion and was considered one of the most successful offerings this year. Reliant Energy presently owns a little more than 80 percent of Reliant Resources, whose business model is focused primarily on wholesale power marketing, maintaining generating and trading assets, and selling retail energy. The spin-off is expected to be fully completed by May 2002.

While it remains purely speculative at this point, the names of power companies operating in the telecom sector that might have an interest in acquiring Reliant Energy Communications represent a short list. Thus, even though Reliant Resources maintains that it has made no ultimate decision about whether to sell its communications unit or expand it through partnerships, a case can be made for several prospective buyers. One obvious prospect might be Aspect, LP, a new provider of Internet-based financial risk-management services. The two companies recently announced a partnership in which Reliant Energy Communications will provide managed Internet hosting and security services to Aspect. It is important to note that Aspect is an affiliate of Koch Internet Business Strategies, the e-business development arm of Koch Industries, which is involved in energy trading and has an extensive partnership with Entergy Corp. While Reliant Energy Communications does operate in business lines that are outside of Aspect's current scope, Aspect may find that the company's high-speed Internet connectivity and fiber-optic assets could be used to support further expansion of its operations.

Other possibilities are companies that are direct-line competitors to Reliant, operating in both the energy and telecom markets. For instance, TXU Communications, which has more than 206,000 access lines throughout Texas and operates an 1,800-route mile fiber-optic network, just announced that it is expanding its senior management team. TXU Communications is reportedly ranked as the fifth-largest telephone company in Texas and the 16th-largest in the nation, and presumably could benefit with an expansion of Reliant Energy Communications' assets. Further, Dynegy, Inc., Reliant Resources' Houston neighbor, also has a telecom unit (known as Dynegy Global Communications), which has created a network of approximately 16,000 route miles and more than 40 points of presence. Dynegy intends to become a leader in the broadband marketing and trading arena. Across the country, DukeNet Communications, Duke Energy's telecommunications subsidiary, just announced that it will be expanding its fiber-optics network with an acquisition of more than 500 miles, which may or may not be located in its primary service area of the Southeastern United States.

Moreover, given the depressed nature of the telecom sector these days, should Reliant Resources opt to sell Reliant Energy Communications instead of growing it through partnerships, the company could be undervalued and represent a strong buy for one of the companies that I've mentioned. The telecom business does tend to be geographically based, so it would make more sense for one of the Texas-based companies to move in for an acquisition of Reliant Energy Communications. However, as some power companies that have ventured into telecom remain optimistic that the broadband trading market will offer liquidity within two years, purchasing the telecom service business and fiber-optics network construction business of Reliant Energy Communications could be attractive to any number of companies operating in this space.

On the other hand, divesting Reliant Energy Communications could make for a tough sell. Only little more than a year ago, the telecom sector was at its peak, with billions of capital investment flooding into the sector as wildly optimistic expectations for demand seemingly exaggerated the scale of the market. However, a massive downturn has ensued, impacting not only companies operating in the telecom space but the nation's entire economy as well. By heeding the sage advice of stock analysts in a macro sense to "buy low, sell high," now is definitely the time to buy as the bottom of the telecom sector has fallen out, due in large part to the fact that the increase in bandwidth capacity has outpaced the growth in market demand. While some companies maintain that a liquid market for telecom and bandwidth trading is still on the horizon, it most likely is another two years away (at the earliest), which could make the next several quarters rather difficult for those companies with exposure in the telecom sector.

IV. Comparisons Between the Telecom Industry's Use of IRUs and the Energy Industry's Use of the Mark-to-Market Technique

Many energy companies have used a reporting technique known as "mark-to-market accounting." Put in a nutshell, this legal technique (endorsed by the Financial Accounting Standards Board, an accounting rule maker) has enabled a good number of energytrading companies whose earnings come in large part from forward contracts and spotmarket transactions, to include in current earnings the profits they expect to realize in future periods. Under current conditions, energy-trading companies have been given rather wide latitude to estimate the fair value of pending contracts that have yet to materialize and record the projected value, either as assets or liabilities, on their balance sheets. With every quarter, and sometimes long after the quarter has ended, trading companies typically declare non-cash earnings based on the current market value of trading positions. Further, some trading companies can tweak their price curves if markets are illiquid enough so that mark-to-market results meet earnings expectations. The unrealized gains often can account for a huge chunk of an energy trader's estimated earnings. For instance, Enron's unrealized trading gains reportedly accounted for slightly more than half of the company's \$1.41 billion of originally reported pretax profit in 2000. It is important to note that credible companies do not tweak their price curves, but the important point is that price curves are subject to interpretation.

However, in the volatile trading market where forward prices can fluctuate wildly, it is not uncommon that a large portion of expected earnings go unrealized, causing the company to issue earnings revisions. Due to the rather limited disclosure requirements that are currently in place, it has become increasingly difficult for investors or analysts to assess when a company might be making assumptions that are overly aggressive, or anticipate any market conditions within the trading sector that might have an impact on the company's projected earnings. Enron acknowledged that it had a hand in creating these accounting standards through aggressive lobbying efforts with the SEC, but it is by no means the only trading company that has engaged in the mark-to-market technique. Other large trading companies such as AEP, Duke, El Paso Energy, Entergy, Mirant, and Williams have also engaged in this common practice.

It is important to note that the mark-to-market technique is also used for risk management among many energy companies. Its use has an important purpose from the perspective of risk management, and therefore should not be eliminated entirely. The component of the mark-to-market technique that has proven troubling via the Enron case is that the methodologies for how a company is determining the value of its future transactions has been considered proprietary information up to this point. The fact that this information was not disclosed in the past made it difficult for analysts and investors to determine the accuracy of the company's valuations. Consequently, it is unlikely that the mark-tomarket technique will be prohibited. Instead, the SEC will probably call for fuller discloser requirements on the methodologies that companies use within the mark-tomarket technique.

There is a striking parallel between the use among energy companies of the mark-tomarket technique and the use among telecom companies of the IRU technique. The similarity lies in the fact that companies in both industries were able to inflate current earnings on the basis of projected revenue that may have materialized down the line. In the use of mark-to-market, energy companies that sold futures contracts for power trading counter potential and subsequent revenue as real and current revenue. In addition, energy companies had fairly unrestricted ability to assign the value of the futures contracts without having to divulge the methodology that they used to determine those values. In the use of IRU techniques, telecom companies often swapped capacity with other telecom companies at equal value, but recorded revenue or expense in such a way as to make their financial reports look stronger. Although used differently and embraced by different markets, the mark-to-market and IRU techniques both have the potential of creating artificially inflated financial earnings. Investors and analysts who are not educated on the intricacies of these techniques (the methodologies for which are often undisclosed) may be misled into thinking that the company is financially stronger than it actually is. In addition, as we have seen in the staggering and sudden bankruptcies of Global Crossing and Enron Corp., companies that had appeared as market leaders and fiscally strong to the general public crumbled when faced with their respective financial setbacks.

V. Comprehensive Solutions to Revive Investor Confidence in Financial Disclosures of Energy and Telecommunications Companies

While my testimony chooses not to speculate on what changes the Committee on Financial Services should make to revive investor confidence in the financial disclosure of energy and telecommunications companies, it is fairly clear the changes that should be expected along these lines from the Securities and Exchange Commission. Responding to growing pressure over Enron's collapse, the head of the SEC has proposed to have a group of outside experts discipline accountants rather than relying on the industry to police itself. Harvey L. Pitt, the SEC chairman, said that antiquated rules on corporate disclosure and accounting ethics had allowed investors to suffer from a series of auditing lapses over the last decade. "This commission cannot and, in any event, will not tolerate this pattern of growing restatements, audit failures, corporate failures, and then massive investor losses," Chairman Pitt said. "Somehow, we have got to put a stop to a vicious cycle that has now been in evidence for far too many years."

While there is little doubt that changes in the accounting practices of U.S. corporations are necessary, just what those changes will be and how they will be implemented remains a complicated issue. The Enron collapse certainly has brought a host of accounting problems into a national debate, as the company's bankruptcy seems to be the direct result of manipulation that occurred with regard to corporate financing. However, those immersed in the development of financial standards know that many fundamental problems have persisted for decades and have just recently boiled over to a level that is publicly intolerable. Clearly, the conditions necessitating market reform have elevated in recent years, which the Enron collapse accentuates. The last report I saw indicated that the number of restatements of financial statements of publicly traded companies increased from 116 in 1997 to more than 230 in 2000, supporting the argument that the existing standards offer too many loopholes that result in unreliable financial reports. It should be noted that the new measures taking shape are primarily for the benefit of investors, analysts, credit-agencies, employees, and other stakeholders, and not necessarily for the benefit of the companies that will be impacted. In other words, the changes that may be imminent from the SEC would not be put into place to protect other companies from declaring bankruptcy. Chairman Pitt realizes that bankruptcy filing may be an inevitable reality among businesses. Instead, the changes that are likely from the SEC would be put into place to require companies to provide fuller and more accurate information about their financial position to investors and analysts.

In other words, Chairman Pitt has made it clear that the SEC, or other lawmakers and regulators for that matter, should not intervene if a company such as Enron is going under. The chance of bankruptcy, according to Chairman Pitt, is an essential counterpart to the dynamic of a free and fairly operating marketplace. Rather, the sweeping changes that appear probable for the accounting industry should seek to address the manipulation that can occur from the wide opportunity for individual interpretation that companies presently have when formulating their own financial records.

Granted, dysfunctional aspects of the methods that American corporations use to report their financial health to investors, lenders, credit-rating agencies, employees, and other stakeholders represent a complex arena of policymaking that may take many months or years to resolve. The impact that the Enron collapse will have as a catalyst for change in the financial accounting is not fully known, as this is a story that is still unfolding. However, based on both formal and informal material that has been released by the SEC (including cautionary advisories, public notices, speeches, and comments by Chairman Pitt, and actual rules), there are various pending changes that can be expected with regard to financial reporting that should come to fruition in the future. Looking at the energy industry as a whole, all corporations (including utilities that have regulated and unregulated operations and energy companies that are strictly merchant energy companies) will be impacted by these changes to one degree or another. Based on the information that we have at this time, I project that policy changes anticipated by the SEC will manifest in the following ways:

A new, independent review board focused exclusively on accounting standards. Auditing firms exist to determine whether a company's financial statements fairly reflect its condition within the broad parameters of what accountants refer to as generally accepted accounting principles (GAAP), sometimes referred to as MOPAP (for "my own personal accounting principles," a reference to the lack of standardization in methodologies). However, as financial statements and the methods of reporting income and losses have become more complex, the general consensus appears to be that those principles are no longer adequate.

Presently, the accounting profession is "regulated" by the Public Oversight Board, a group affiliated with the American Institute of Certified Public Accountants (AICPA), which oversees ethics and rules violations. AICPA is a professional association for accountants and makes recommendations to the Financial Accounting Standards Board (FASB), which actually makes the rules. The SEC traditionally files complaints for more egregious violations, particularly federal violations. In addition, state boards can take the extreme measure of stripping an accountant of his or her license if it is determined that rules have been violated. However, in reality, there really is no regulatory oversight of the accounting industry that occurs on a day-to-day basis. In fact, since 1977, the accounting industry has operated on a peer-review system, in which one accounting firm monitors how another firm conducts its audits. The new agency proposed by Chairman Pitt would oversee the disciplinary reviews of accountants and also spearhead a series of accounting-industry reforms. Further, the organization would reportedly have full regulatory authority to investigate wrongdoing by accountants and to issue penalties ranging from censures to bans from the industry. Interestingly, Chairman Pitt has said that the federal government cannot afford to front this new separate advisory panel, and thus is looking for private funding to front the proposed agency. In fact, under Chairman Pitt's vision, the private-sector panel would replace the functions currently provided by the Public Oversight Board and the AICPA. The fact that Chairman Pitt has called for private-company funding for the new agency has sparked the ire of many politicians, who have likened the idea to letting "a fox guard the hen house." Chairman Pitt claims that the

panel would ensure its objectivity by employing a majority of public members who are independent from the accounting industry.

In my opinion, the funding issues around the creation of this oversight board are rather troublesome. If an oversight board is to receive funding from private interests such as utility companies, it raises conflict of interest issues. It would be preferable to not have the board funded by private interests. However, at the same time, it should be noted that electric utility companies often fund state and federal regulatory boards, so the practice of private funds supporting a regulatory oversight agency is not unprecedented.

Distrust for pro forma accounting. In recent history, many corporations have embraced pro forma accounting, a practice that essentially allows a company to show profits and losses without demonstrating these changes in tangible values on their main balance sheets. Some would go further and say that pro forma accounting enables the management of a company to issue upbeat financial results by hiding unprofitable deals or other financial problems. The technique came into heavy practice in the late-1990s with the dot-com craze and the emergence of Internet companies, which use pro forma accounting to keep off of their financial reports disadvantageous expenses often related to mergers or sudden changes in an accounting period. Pro forma accounting has been particularly advantageous to start-up companies that do not have strong cash flow, because they are able to appear financially strong based on their goals instead of realized gains. Under pro forma accounting, items kept off the financial records can be classified as one-time occurrences (also known as non-recurring items) and therefore the company can justify excluding them on the primary balance sheet. The result, according to some observers, has been a new accounting system without any set rules to govern it, and companies have been given wide latitude to report their performance in any way they want to (regardless of its correlation to reality).

Moving forward, the SEC will most likely require greater transparency in the financial statements that companies provide, along with placing an intent eye on how companies may attempt to transfer debt off of their balance sheets. The requirement of real-time financial reports appears inevitable, but could take many years to implement as the transition could be quite complex for many companies. As a side note, Amazon.com just posted its first profitable quarter and announced its intent to replace pro forma accounting with cash-flow accounting. This example could be used in the argument that any publicly traded company should adhere to a strict accounting standard rather than the more flexible pro forma approach.

In my opinion, one option that the SEC should consider would be to require companies to submit both pro forma and cash statements. Instead of requiring one or the other, if both pro forma and cash statements were submitted by companies, then investors would have

more information about the company and be able to make decisions that are better informed. In addition, also in my opinion, subsidiaries of larger companies should be required to submit financial reports just like their larger parent operations. Often, the financial statements of a subsidiary company are buried within the larger and more complex statements of the subsidiary's parent. In my opinion, subsidiaries should not be exempt from financial reporting standards that will be created for larger parent operations.

Scrutiny of mark-to-market techniques. This is another likely change for which Enron can be seen as a primary catalyst. As has been well documented, Enron embraced this accounting technique as it enabled the company to inflate its present financial strength on the basis of projected earnings. In other words, in Enron's derivative trading business, the company was able to count all contract revenues, no matter how forward looking, as current income, which obviously gave a skewed vision of the company to outsiders. The mark-to-market technique (which was endorsed by FASB) has enabled a good number of energy-trading companies whose earnings come in large part from forward contracts and spot-market transactions, to include in current earnings the profits they expect to realize in future periods. Under current conditions, energy-trading companies have been given rather wide discretion to estimate the fair value of pending contracts that have yet to materialize and record the projected value, either as assets or liabilities, on their balance sheets. With every quarter, and sometimes long after the quarter has ended, trading companies typically declare non-cash earnings based on the current market value of trading positions. Further, trading companies often can tweak their price curves if markets are illiquid enough so that mark-to-market results meet earnings expectations. The unrealized gains often can account for a huge chunk of an energy trader's estimated earnings. Moving forward, the mark-to-market technique may remain an acceptable accounting technique, but the SEC could mandate that companies using this approach clearly identify the individual methodologies that they use to quantify projected earnings.

Full, fair and real-time financial reporting. One of the keys to the Enron collapse is that the company was not particularly forthcoming with its financial methodologies, either internally or externally. One of the significant changes that can be considered a direct result of the Enron case is the call for full disclosure in the operation of capital markets. Moving forward, executives, analysts and accountants will most likely be required to fully disclose a good deal of what was previously considered proprietary information. On both a company's balance sheet, which shows its assets and liabilities, and its profit-and-loss statement, companies will probably be required to incorporate a policy of full disclosure. Enron's convoluted use of special purpose entities (SPEs) has been a catalyst in this area, as new standards for full disclosure will most likely weed out financial statements that are dense or overly complex. In addition, increasingly a case is being made that quarterly and annual reports, the mainstay of access that investors and analysts

have into a company's financial performance are no longer relevant or useful because it takes so long for auditors to certify them. Perhaps more importantly, we are finding that, given current market conditions, a company's financial standing can change quickly over the course of three months, so reliance on the financial report from the previous quarter may not be sufficient for investors or analysts to make an educated decision on the company's performance. According to reports I've seen, the system that Chairman Pitt envisions regarding real-time disclosure is one in which companies and their auditors seek the guidance of regulators in advance of an action, rather than after a violation has occurred. This would dramatically change the financial reporting process that companies have become accustomed to, and would require a radical calibration of a company's financial records.

In my opinion, the call for real-time financial reporting may be unrealistic. However, monthly reporting (as opposed to quarterly reporting) is more feasible and is something that companies could be reasonably called to submit.

Ensuring the independence of auditing firms. There are two issues at play within this area, and they are the expected restriction against a firm having both auditing and consulting practices, and the scrutiny of whether the compensation that auditing firms receive has made them less likely to conduct a thorough examination of a company's books. For reference, the so-called "Big Five" accounting firms include Arthur Andersen (which Enron used, but recently fired), Ernst & Young, KPMG, Deloitte Touche Tohmatsu, and PricewaterhouseCoopers. Historically, the fees associated with auditing services have not been particularly lucrative, so such firms moved into other lines of business such as consulting (for personnel, technology or legal issues) that had a higher monetary yield. In fact, according to the AICPA, more than 90 percent of the nation's accounting firms are engaged in consulting, financial advising or something other than traditional tax work. However, conflicts of interest between auditing and consulting, particularly when one firm is serving a company in both capacities, have been the source of concern for years.

The Clinton-era SEC had tried to implement a separation between auditing and consulting services but was unsuccessful. The issue may have more support now, but it is important to note that Chairman Pitt reportedly has dismissed suggestions that he take steps to keep auditors from performing other work for the same clients. Chairman Pitt has defended auditing firms' rights to continue cross-selling consulting services to auditing clients. However, given the publicity over the Enron collapse, Chairman Pitt may change his mind on this issue and decide to invoke a separation between consulting and auditing services.

Another area of concern is the high level of compensation that some auditing firms

receive, either for straight auditing work or consulting. For instance, Andersen reportedly received \$25 million to audit Enron's books and another \$27 million for consulting services. The concern is that many auditing firms are not operating at arm's length from their clients and thus may be dissuaded from asking tough financial questions that could reveal concerns about a company's financial performance. Certainly, the issue has been raised with the Enron / Andersen partnership, as both companies have engaged in some finger pointing against the other and the industry is still sorting out the extent to which Andersen bears culpability for Enron's misleading financial statements.

These are just some of the changes that are likely on the horizon from the SEC that will impact the financial practices of energy companies, along with other corporations. There are other changes as well, impacting pension programs (including rules related to 401(k) programs), campaign finance and other securities regulation. Many of these changes may still be years away, as the SEC and possibly the U.S. Congress gather additional data and work toward constructing new policy that may in some parts rely on approval from various parties. In any case, we know at this point that the entire accounting industry is under intense review and on the verge of major overhaul.

VI. Summary and Findings

The market downturns in telecom and energy merchant sectors need to be analyzed separately. Although there is some overlap (best illustrated by the Enron case as Enron Corp. invested heavily in the telecom market), the telecom and energy industries faced different market dynamics that led to the extreme cases of Global Crossing and Enron Corp., respectively. The overlap seems best defined by the use of questionable (although legal) accounting that might have misled investors and analysts by artificially inflating the financial performances of the companies that used said techniques. The accounting techniques used by telecom and energy companies are presently under investigation by Congress and the Securities and Exchange Commission, and modifications to or limits on those accounting techniques may be made as a result.

If we summarize the complex market conditions that brought about the downturn in the telecom market and the bankruptcy of Global Crossing, it essentially can be distilled to a collectively exaggerated projection for the demand in broadband capacity. Telecom companies, and energy companies that expanded into the telecom market, invested heavily in the construction of fiber-optic cable (often with funds obtained through capital loans). As stated in this testimony, the massive overinvestment in such "backbone" networks, along with slowing of growth in Internet traffic, produced a slump in demand for the wholesale communications capacity sold by companies like Global Crossing and left them unable to support mountains of debt. Global Crossing's debts prompted a bankruptcy filing, but other telecom firms such as Qwest and Level 3 are also struggling

with impacts from the market downturn in the telecom sector.

However, available data indicate that the telecom sector has been on a market downturn for well over a year, and the sector as a whole began facing extreme volatility in late 2000 and into 2001. As the Global Crossing case represents, the volatility in the telecom sector stems in large part from the extreme imbalance between a surplus supply of fiber-optic network capacity and a much-lower-than-anticipated demand for such capacity.

Consider the following data related to telecom stocks. The following plot reiterates my statement that the telecom sector has been in decline for well over a year.



The SEC or other regulatory or legislative bodies may seek to enact restrictions on telecom companies' use of the IRU technique, especially when swaps are used and an equal-value exchange is reported as income or capital expenses by a company. Global Crossing will certainly be a case study for changes in the telecom sector.

The telecom sector could very well rebound if and when demand for broadband capacity increases. Most estimates suggest that a measurable increase in demand may begin to develop in the next four to five years. In the meantime, we may continue to see ongoing volatility among companies that heavily invested in fiber-optic networks and yet could

not sell capacity to gain a profit on those networks.

If we summarize the complex market conditions that brought about the current volatility in the energy market, there are a number of factors that have impacted the earnings potential of merchant energy companies and relate to the bankruptcy of Enron Corp. The downturn in the energy market began in the second quarter of 2001, when wholesale prices began a dramatic decline. In addition, mild weather conditions and increased conservation efforts caused demand to drop in many areas of the country. This impacted the earnings potential for energy companies primarily based in the unregulated marketing and trading of power. Companies that have a regulated utility operation did not seem to be as impacted by the drop in wholesale prices because they had a steady stream of revenue coming from the utility. In addition, concerns about a glut of generating capacity began to concern investors and raised doubts about the ability of energy companies heavily invested in power-plant construction or power trading to make a profit under conditions of excess generating capacity.

These concerns began to drive down the energy merchant business as a whole in the second and third quarters of 2001, after following a period of profitability and strong investor enthusiasm for energy companies throughout most of 2000. Certainly the dramatic collapse of Enron in the third and fourth quarters of 2001 shook the energy market as a whole and cast a shadow over the energy merchant business in particular. Capital markets that had been generous only a year earlier significantly constricted, further impacting the growth and expansion plans that energy merchant companies had previously espoused. However, it must be understood that the collapse of Enron was not the sole precipitator of the downturn in the energy market. The following information shows that the decline in the energy market began about one year ago (in February and March of 2001), and was certainly accelerated by the Enron collapse.



Current data suggest that market conditions may keep the energy market rather constricted for the next three or four years. Wholesale prices for natural gas should remain about \$3.00/MMBtu for the next year at least and probably well into 2003. This will tend to lower earnings for energy companies primarily involved in the marketing and trading of power in wholesale transactions. In addition, according to RDI, a research consulting firm, more plants were added in 2001-2002 than were added in all of the 1990s combined. As a result of this perceived glut, an increasing number of merchant companies are modifying their once-ambitious plans for generation capacity expansion. Thus, claims of an energy glut may be overestimated. In a time period in which many experts suggest is three to four years out, demand and supply balance should even out once more, which would drive the need for additional generating capacity and possibly increase wholesale prices if adequate supply does not exist.

Moreover, energy companies such as Enron and Williams that invested heavily in the telecom market clearly encountered some negative financial consequences as a result of that expansion. However, in the case of Enron's bankruptcy, the telecom exposure was only one factor among many other market conditions within the energy sector and capital markets that contributed to the company's collapse. It would not be accurate to suggest that the company's exposure to the telecom sector was a major contributing factor to Enron's collapse. Further, it would not be accurate to suggest that the market downturn in the telecom sector has been a major driver for volatility among those energy companies that have expanded into telecom. Market conditions in the energy sector (including the dramatic drop in wholesale prices and decrease in demand) and the current restriction in capital markets are clearly the driving forces behind any existing volatility among the earnings and stock prices of energy companies. While exposure to the telecom market may be an added problem for energy companies, it is not the primary factor for the current volatility we are seeing among energy companies.