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FINANCIAL CONDITION OF THE ELECTRICITY MARKET

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

то

RECEIVE TESTIMONY REGARDING THE FINANCIAL CONDITION OF THE ELECTRICITY MARKET

MARCH 4, 2003



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FINANCIAL CONDITION OF THE ELECTRICITY MARKET

TUESDAY, MARCH 4, 2003

U.S. SENATE, COMMITTEE ON ENERGY AND NATURAL RESOURCES, *Washington, DC*.

The committee met, pursuant to notice, at 10:03 a.m., in room SD-366, Dirksen Senate Office Building, Hon. Craig Thomas presiding.

OPENING STATEMENT OF HON. CRAIG THOMAS, U.S. SENATOR FROM WYOMING

Senator THOMAS. Thank you for being here this morning. The purpose of this hearing is to take testimony on the current financial conditions facing the electric sector and to explore potential solutions, of course, to improve the financial challenges. I suppose the primary questions we will discuss are what caused the current financial situation in the electric industry? What are the effects of current financial conditions on the energy infrastructure? What remedies should we consider? And we will look forward to hearing from the witnesses.

Very briefly, it seems to me that this is one of the real key issues that we have to deal with. Things have changed so much in the electric sector. We will be taking up hopefully an energy policy rather soon. I think that electricity should be part of that. It probably affects more people than any other aspect of energy. We have changed so much in terms of the method of generation and the transmission.

So I have introduced, as matter of fact, an electric transmission and reliability bill that I hope will extend and open nondiscriminatory access, remove some of the antiquated statutory barriers that stand there, increase investment hopefully, and deal something with the transmission.

So, Senator, do you have an opening statement?

[The prepared statement of Senator Smith follows:]

PREPARED STATEMENT OF HON. GORDON SMITH, U.S. SENATOR FROM OREGON

Mr. Chairman, I appreciate your willingness to put together this hearing to examine the financial condition of the electricity market. I must say from the outset, however, that while I am concerned about the finan-

I must say from the outset, however, that while I am concerned about the financial condition of the electricity market, I am equally as concerned about the financial condition of electricity users. In the Pacific Northwest, we are still feeling the financial effects of the volatile electricity market of late 2000 and 2001. Most ratepayers in the Pacific Northwest have seen their power rates go up by at least 40 percent, and BPA has begun another rate case to raise rates again next October.

Meanwhile, our energy intensive industries are shuttered, and Oregon continues to have the second highest unemployment rate in the country.

I become very concerned when I hear people say that the goal for the wholesale energy market is competition. In my view, the goal is to keep the lights on for every American, at reasonable rates. Businesses from Main Street to Wall Street must also have access to reliable and affordable energy.

I have read through the testimony of the witnesses before us today, and they outline the wide range of challenges facing electricity companies, particularly those with merchant plants or energy trading and marketing operations. These include: excess generating capacity and thin margins in parts of the country; extensive credit downgrades since 2001; high levels of debt; the need to refinance tens of billions of dollars in debt; reduced demand; and continued regulatory uncertainty.

I appreciate the suggestions made by the witnesses concerning the changes needed. As a new member of the Finance Committee, I will certainly review the proposals for changes in the tax code as well.

What is clear to me, however, is that there is no "silver bullet" that will cure the myriad of ills facing electricity providers, particularly those with unregulated generation.

In fact, in my view, these "poor industry fundamentals," as they are referred to by the witness from Standard and Poor's, are also the result of regulatory and legislative uncertainty that has been going on for more than 10 years now. Beginning as far back as 1988, we have seen major proposed rulemaking regarding the electricity industry every two to three years. Congress passed the Energy Policy Act in 1992, and we have debated energy legislation for three Congresses now. We are still working through the proposed rulemaking on standard market design (SMD). As you know, I have opposed this rulemaking, because I believe it is unnecessary and unwerkable nerticity in a participation for three are instances.

We are still working through the proposed rulemaking on standard market design (SMD). As you know, I have opposed this rulemaking, because I believe it is unnecessary and unworkable, particularly in the Pacific Northwest. If there are instances of undue discrimination on the transmission system, I believe that the Federal Energy Regulatory Commission (FERC) has the ability, under Order 888 or in the development of tariffs for regional transmission organizations, to remedy such discrimination.

I wonder how many members who voted for the 1992 Act, which was enacted before I began my service in the Congress, thought it would result ten years later in a 600-page proposed rulemaking on SMD. I only bring this up to illustrate that, as we contemplate additional legislation on electricity, I remain concerned that we are potentially extending for years—if not decades—the regulatory uncertainty facing the industry.

I want to know what the impact of our actions will be on the end user, such as the family-owned grocery store in rural Oregon. In closing, Mr. Chairman, while I appreciate this oversight hearing, I would ask

In closing, Mr. Chairman, while I appreciate this oversight hearing, I would ask that any proposed electricity title be the subject of a legislative hearing before we proceed to mark-up. I believe it is important that we build the record on such important legislation, and fully understand the impact of proposed language before moving forward.

I look forward to hearing from the witnesses today.

STATEMENT OF HON. JEFF BINGAMAN, U.S. SENATOR FROM NEW MEXICO

Senator BINGAMAN. Thank you very much, Mr. Chairman. I think this is a very important hearing. I welcome all the witnesses. I know the focus of this hearing is on the financial condition of the electric industry. And clearly, that is an important issue to focus on. I also am going to have some questions and hope the witnesses will be able to give us some insights on the issue of supply and whether or not we are building the necessary capacity to meet the demand that is going to be there.

I worry a little bit that some of the same circumstances that we saw leading up to the crisis in California and the Northwest with lack of hydroelectric power. All these issues seem to be back again. And, I know the issue of the financial condition of the industry and the issue of adequate supply are intertwined. I hope we can get into both a little bit in this hearing and then perhaps have a separate hearing on the supply issue.

But thank you very much for having the hearing.

Senator THOMAS. Thank you, sir.

Senator.

Senator CAMPBELL. Mr. Chairman, I have a conflict, like most of us do. So with your permission, I have a number of questions, some dealing with supply, as Senator Bingaman does. And I think, if it is all right with you, I would like to submit those to the witnesses and get some answers in writing. Most of them are general in nature. There are a few that are Colorado specific, however. Senator THOMAS. Absolutely. We will do that.

We are very pleased this morning to have Commissioner Svanda with us, the commissioner of Michigan PSC; Frank Cassidy, who is president and CEO of PSEG Power; Suzanne Smith, the director of Corporate and Government Ratings, Standard & Poor's; Frank Cassidy; and Evan Silverstein.

We are delighted to have you, gentlemen. We will-I am not going to have an opening statement. If you can hold your testimony to 5 or 6 minutes, we would appreciate it. And then we will have some questions.

So Commissioner, if you would like to begin?

STATEMENT OF DAVID A. SVANDA, PRESIDENT, NATIONAL AS-SOCIATION OF REGULATORY UTILITY COMMISSIONERS, AND COMMISSIONER, MICHIGAN PUBLIC SERVICE COMMISSION

Mr. SVANDA. Thank you, Mr. Chairman and members of the committee. I certainly appreciate this opportunity to speak before you. I am Dave Svanda. I am a commissioner in Michigan. I am also the president of NARUC, the National Association of Regulatory Utility Commissioners.

I would like to supplement my written testimony. And I would like to supplement it with some broader and also with some more specific observations. The first of these is to go directly to the question that you asked first of all. And that is, what are the current financial realities?

With respect to those financial conditions that we all care about, our statements, NARUC and Michigan, are virtually the same. Our views are the same. The analysis is the same. And it is consistent with all of the other commenters that we read comments from or hear from. And it is consistent in that we express that conditions are certainly not ideal today.

However, this sector does not operate in a separate vacuum from the rest of the economy or from other capital markets. I mean, we need to view this sector in the context of those broader markets.

On the system, demand is down. So the system is not being challenged today. This country has been on a capital investment starvation diet, especially with regard to transmission, for about two decades. Transmission transfer capacity, in fact, peaked in the 1980's. Reasonable estimates are that we need something north of \$55 billion invested in electric transmission upgrades alone, never mind the other components and never mind other related cornerstones, such as gas transmission.

Transmission assets are in fact bedrock American infrastructure investments and should be acknowledged by all for what they are. My written testimony provides very concrete examples of what great investments in transmission happen to be today.

In many respects, this country's transmission system is a dumb, mechanical switch system from the last century. Our investment incentives, our focus for the future, should be guiding us to an Internet smart and Internet speed type of grid to help us maintain our position of world leadership.

National average headline conditions do not really reflect the true on-the-ground electricity demand and supply conditions, as we experience them out in the States. Load pockets today are in fact crying for investment, but those cries are drowned out by headlines of national generation gluts and other circumstances. Investors really need help in seeing the trees in the forest.

Let me turn to my next topic, and that is incenting investment. Recognizing that there are some global uncertainties that affect all of our thoughts, there are still methods for opening the investment spigot. Those policies that should be pursued, I believe, incent investment that help us to accomplish other major national objectives.

The first would be to focus on customer needs and incent investment to enhance reliability, to support the information, manufacturing, and lifestyle practices of today, and to incent investing to remove bottlenecks. And I would suggest here a carrot and stick approach, that we in fact provide incentives for the removal of bottlenecks where they exist in the transmission system. And to the extent that the incentives of the carrots are not taken up, that stick be applied. And that stick would be penalties for those who own bottlenecks. And those penalties may apply after two or three years of congestion season ownership of those bottlenecks.

I think there should be a focus on technological advancement, incent investing on new smart, good technologies that exist today, but have simply not been rolled out in any major fashion. We could certainly export those technologies, both for our economic benefit and for global fuel efficiency purposes.

and for global fuel efficiency purposes. We need to focus on a balanced fuel portfolio and demand response mechanism, including those fuel sources that are most abundant on this continent, and I would note clean coal technology specifically. We need to focus on maintaining America's competitive advantages and fostering wise North American continental energy utilization and, lastly, focus on enhancing national security. The American public and the investing public would certainly understand these types of investment incentive objectives.

Let me speak briefly to restoring confidence or specifically corporate structure. Recent U.S. corporate history has taught most of us that it is important to have access to understandable, credible, ethically correct transparent and accurate financial information. Altering the allowed relationship between a public utility and its holding company parent should only be undertaken in a manner in which respects our recent history lesson and applies what it has taught us.

Examples of parent-induced problems are plentiful. I would be happy during question and answer or on follow-up to discuss details of which I am all too painfully aware with respect to this and if you have interest.

Let me summarize by saying that there are huge unmet electricity, and in fact energy generally, infrastructure demands. Investment is required for national security, for reliability, for replacing old and outdated technology, to feed and then sustain this country's economic recovery, to enhance fuel diversity and energy conservation, and to give U.S. customers the energy options that they need.

U.S. infrastructure is a stable investment and compares very favorably when you measure its returns against most indices available today. Investment options will generally fall into four categories. First will be the traditional public and IOU-type utilities; second, unbundled asset utilities; third, independent power producers; and fourth, transmission. All of these have their place. They are all right for particular circumstances.

A balanced strategy would include investment in each. A balanced investment incentive program crafted by this committee would give equal weight and value to each of these categories.

Thank you. And I look forward to your questions.

[The prepared statement of Mr. Svanda follows:]

PREPARED STATEMENT OF DAVID A. SVANDA, PRESIDENT, NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS, AND COMMISSIONER, MICHIGAN PUBLIC SERVICE COMMISSION

Thank you Mr. Chairman and Members of the Committee for this opportunity to share my perspectives with you on the financial condition of the electricity market and some suggestions I would offer to improve it. I am David A. Svanda, President of the National Association of Regulatory Utility Commissioners (NARUC) and a Commissioner on the Michigan Public Service Commission. I respectfully request that NARUC's written statement be included in today's hearing record as if fully read.

NARUC is a quasi-governmental, nonprofit organization founded in 1889. Its membership includes the State public utility commissions for all States and territories. NARUC's mission is to serve the public interest by improving the quality and effectiveness of public utility regulation. NARUC's members regulate the retail rates and services of electric, gas, water and telephone utilities. We have the obligation under State law to ensure the establishment and maintenance of such energy utility services as may be required by the public convenience and necessity, and to ensure that such services are provided at rates and conditions that are just, reasonable and nondiscriminatory for all consumers.

Energy drives our economy and indeed our entire society. Yet today, our energy markets are in turmoil. This turmoil may eventually undermine the country's economic recovery and future economic growth, unless we develop and pursue policies that restore confidence and open the capital spigot of this nation. These policy objectives need to provide stability and consistency, and in so doing, will promote the confidence necessary for renewed investment in our energy infrastructure.

I. CURRENT FINANCIAL CONDITIONS FACING ELECTRICITY SECTOR

The last two years have been among the most turbulent periods in the history of the electricity business in the United States. While investor confidence is lacking in the economy as a whole, these last two years in the electric industry have undermined the stability of the nation's energy markets, by shaking investor's confidence in the electric industry as a long-term investment and seriously eroding the liquidity necessary for the performance of efficient markets. According to the Electric Power Research Institute (EPRI), the electric industry's credit situation is the worst in over 70 years, with half the industry rated below investment grade. Today, a limited number of banks are controlling the lending market at a time when \$25 billion needs to be refinanced in 2003 alone. The equivalent of one year's electric industry. The equity value of the merchant power sector alone has dropped from \$145 billion to under \$10 billion. The combined capital expenditures of regulated and deregulated electricity companies, as a fraction of their revenues in the 1990s, was 12%. This is half the expenditure rate during the Depression and World War II. The electricity industry is almost last among the 53 largest U.S. sectors in terms of investment in infrastructure technology development.

Paradoxically, the industry is struggling with an oversupply of generation, in some regions, that has depressed wholesale power prices and further weakened generator finances. I have heard disheartening words from utility executives trying to describe an operating and business environment that they have never experienced.

Some of the nation's first attempts to restructure an industry that has remained essentially unchanged for nearly a century have produced some regrettable headlines, but have also revealed the vast opportunities that market restructuring can offer. In Michigan, we did a back-of-an-envelope calculation of the cost to Michigan ratepayers of continuing to have a constrained transmission system, versus an open access transmission system. With open access, Michigan customers could save from 5-15 percent on their energy bills. This represents hundreds of millions of dollars of potential savings to Michigan customers. To tap these potential savings, investments to alleviate transmission constraints must be made. Load pockets throughout the United States would benefit from additional generation investment or transmission expansion, and in fact represent excellent investment opportunities for savvy investors.

The price of doing nothing is instability, uncertainty and lost opportunities to use our resources wisely. These are characteristics that can only serve to depress further investment in this critical industry. Bringing clarity and certainty to the manner in which electricity services are provided in this country will go a long way toward settling the investor jitters so evident today.

II. POLICY GOALS THAT PROMOTE CONFIDENCE IN ENERGY MARKETS

A. Regional nature of electricity markets

Most critically, it must be recognize that electricity markets have developed based on regional differences. These regional markets have different population densities, unique transmission system characteristics, disparate local fuel sources, differing dispatch protocols and generation ownership. These all reflect unique regional characteristics of geography, and economic development.

FERC has recognized that there is not just one energy market in the country, but rather linkages between distinct regional markets. State regulators and others have taught this to FERC and also recognize the regional nature of electricity flows, siting needs, and transmission expansions and additions. NARUC along with the National Governors Association, regional Governors associations, FERC and others have been perfecting multi-state entities (MSE) to maximize the efficiency of the approval process for the implementation of infrastructure improvements. We have been collectively working with the Department of Energy to fund the creation and development of these regional organizations. We believe these regional organizations will be important for communications, coordination, and for building confidence between state, regional and federal industry agencies.

tween state, regional and rederal industry agencies. In the past, a state needed regional ties to improve the reliability of its electricity service, to help a state with a localized supply problem. Now, beyond reliability, states need strong regional ties to survive economically in the global market place.

Finance and regulation are no strangers to regional markets. Oil and gas production have long been associated with the Gulf area. The Midwest is known for its automobile production infrastructure and expertise. Aluminum production is the pride of the Northwest. However, investors will shift their investment philosophy from national to regional opportunities in the electric industry only if the uncertainty in the electricity market can be resolved by evidence of regional cooperation in critical areas. Policy makers at both the federal and state levels can encourage this investment policy shift by promoting and pursuing regional markets and policies.

B. Complementary regulatory practices

Next, consistent federal and state policies that support investment in energy infrastructure must continue. Complementary policies serve as the cornerstone for promoting consistency that is necessary to build confidence in the energy industry. These policies can lead to standard business practices that all industry participants can rely on. At the same time, they are critical to providing transparency and reducing market risks.

My own home state of Michigan provides an example of how such policies can induce investments in electricity infrastructure markets. Our two largest electric utilities were formerly fully integrated, owning generation, transmission, and distribution facilities. Recently, these two Michigan utilities have unbundled, or have chosen to divest, not their generation, but their transmission assets to non-affiliated entities. Trans-Elect and Kohlberg Kravis Roberts (KKR), the purchasing companies, are pursuing a competitive business model for transmission additions and expansions in a business environment with consistently supportive federal and state policies.

The purchase of the Consumers Energy transmission system by Trans-Elect was the first outright sale of a U.S.-based transmission system to an independent transmission company. It was also the first time FERC approved such a sale. The combination of FERC's strong endorsement of the Trans-Elect business model, the ability of Trans-Elect to function within the business standards adopted by the Midwest Independent System Operator, FERC's first qualified RTO, and the support of Michigan regulatory and legislative policy permitted Trans-Elect to bring the complicated transaction to a successful close. Moreover, this business deal has created a solid foundation for future transactions. The sale was worth approximately \$290 million.

At the end of last year, DTE Energy (DTE) announced that it was selling its transmission subsidiary, the International Transmission Company, to affiliates of Kohlberg Kravis Roberts for about \$610 million. This business decision was made in part because of consistent federal regulatory policy and Michigan law, both of which promote the independent operation of the electric transmission grid within the footprint of our regional transmission operator, the Midwest Independent System Operator.

DTE specifically commented on the foresight of the FERC and the Michigan Commission in creating a regulatory structure that supports a more competitive and efficient U.S. power industry. KKR is also looking forward to pursuing additional transmission opportunities as other utilities follow this investment trend. In both of these transactions, the gains from the sale were split 50/50 between the selling utilities and their ratepayers.

It is interesting to note that both of these transmission sales, almost one billion dollars of new investment, were made possible in part because of consistent state and federal policies that encourage participation in the new regional Midwest Independent System Operator (MISO). The stability of regional open access rules and the promise of transparent and vibrant Midwest transmission markets no doubt encouraged investors to commit substantial capital to an otherwise stagnant utility sector. Several other transmission construction that probably would not have occurred without the establishment of this FERC approved regional transmission organization.

Early on in the electricity restructuring saga Michigan realized that retail markets can only flourish if there is a vibrant regional wholesale market and have chosen this path as part of our state's economic development program. Although some of the other Midwest states have not embraced retail choice, they still benefit from and support participation in the MISO wholesale market.

A very positive development in supporting federal and state regulatory practices involves the common interest and cooperation in market monitoring. I don't need to describe the malaise created in California markets just a couple of years ago. What I want to highlight is the joint efforts of the federal government and states, working though regional organizations like the PJM and MISO, to prevent future market abuses. In doing so, much uncertainty has been removed from the markets and important steps have been taken to rebuild confidence in the fair and efficient operation of the nation's energy markets.

C. State regulatory environment

As a public utility Commissioner, I would be remiss if I failed to identify the significant influence that state utility regulatory commissions have with respect to energy investment decisions. A stable regulatory environment, characterized by fair and balanced oversight of utility operations, along with well-targeted incentives, can go a long way to encourage a supportive climate for investors within a state. Consistency is the hallmark for regulatory stability. Decision-making processes

Consistency is the hallmark for regulatory stability. Decision-making processes and approaches should be transparent and clearly understood so investors understand the ground rules and are able to effectively evaluate and assess the risks and rewards of conducting business within the state's jurisdictional purview. Abrupt and precipitous changes should be avoided, except under the most compelling circumstances.

Decision-making should be balanced, rewarding good performance as well as penalizing poor results. I firmly believe that an increased role for regulatory incentive initiatives is needed. Additionally, I am convinced the reward side of the regulatory equation to influence decisions is significantly underdeveloped. Greater reliance on the carrot approach is a tool in the regulatory kit that offers great potential to attract the investment community. The sharing of net proceeds from the transmission asset sales of Michigan's two large investor owned utilities discussed above is a specific example of how application of incentives can encourage decisions favorable to the investors, while accomplishing state and federal competitive policy goals relating to transmission independence. Likewise, securitization financing of stranded assets was a key factor encouraging Michigan utilities to agree to open their markets to competition, an initiative very positively received by Wall Street. Securitizing investment in strategic new investments may also be an attractive inducement to invest.

Though some states in some regions have questioned FERC's policy of encouraging investment in transmission assets by providing investment incentives and NARUC has taken no position on FERC's policy, I support it. FERC has come to the same conclusion that we in Michigan have come to, that there are advantages to well designed incentives. Incentives may improve efficiency and if done properly can be a good tool to encourage investment.

Working cooperatively with sister state and local agencies that exert influence over energy investment decisions is another way states can improve the investment environment. Fertile areas for coordination include siting, permitting, safety, economic development, and taxation. I am convinced that a strong cooperative effort among Michigan state and local agencies and stakeholders played a significant part in the several thousand megawatts of merchant plant generation brought on in Michigan over the past three years. In particular, I am pleased with the considerable Communicate the importance of these facilities to the State, in particular speaking to energy reliability and the State's competitive position as a place to conduct business.

With respect to the influence of state regulation on the energy investment environment, no discussion would be complete without mention of regulatory lag. Tardy recovery of prudent investment costs is troublesome to investors. There simply is no way to present regulatory lag in a positive light on that score. Unfortunately, while it may not be legally possible to eliminate the temporal distance between cost incurrence and recovery, increased focus and attention to substantial reduction should be considered as an option with substantial potential to strengthen the investment climate. Examples of efforts in Michigan to address this issue include a time deadline for Commission decisions in utility rate cases and responsive initiatives for electric fuel and power purchases and gas commodity cost recovery through variable monthly supply surcharges. Securitization of certain utility assets, discussed above, is another example. Other opportunities should be explored as well.

D. Public Utility Holding Company Act (PUHCA)

Traditional sources of capital have moved away from the electricity industry. However, there are potential investors that apparently are not considering investment because of PUHCA. Congress should reform PUHCA. However, in doing so should allow states to protect the public through maintaining effective oversight of holding company practices and expanding state access to holding company books and records, independent of any similar authorities granted to the federal regulatory bodies.

Access to books and records required to verify transactions directly affecting a companies regulated utility operations is of vital importance to state commissions. Requests for such books and records by a commission, its staff, or its authorized agents should be deemed presumptively valid, material, and relevant, with the burden falling to the company to prove otherwise.

FERC and the states ought to be given greater access to corporate documents to conduct investigations into financial dealings. Each time statutory exemptions were made to PUHCA, safeguards to protect utility consumers were included. Enhanced state and federal access to data and information will provide consumer protection safeguards in an environment without the PUHCA safety net, while promoting investment.

E. Promotion of Efficient Generation Technology

Renewable energy sources such as biomass, geothermal energy, wind and solar power make up 4 percent of U.S. energy production. A diverse generation portfolio provides the best assurances for a secure energy future and, yet, investment in renewable sources has remained low.

An increase in tax incentives for investments in renewable technologies would allow for a greater penetration of these sources in the U.S. energy market. Section 45 of the Internal Revenue Code currently provides the owners of wind facilities, closed-loop biomass facilities, and chicken waste facilities a production tax credit for each kilowatt-hour of electricity generated by those facilities. Such a credit has been instrumental in the development of the wind generation industry, providing the essential boost for this developing technology. The extension of the production tax credit to other renewable sources will promote the development of these emerging technologies.

III. CONCLUSION

The economic prosperity that we enjoy as Americans has been fueled by energy. Energy has fueled our evolution through agricultural development, through our industrial transformation, and into our premier status in the global economy. The nation's continued economic growth, indeed our national security, depends on the efficient operation of energy markets. Though these markets are facing some of the most turbulent times since the industry's infancy, there are important steps that we can take to the restore confidence of all market participants in the fair and efficient operation of these markets. These steps include: (1) recognizing and working with the regional nature of the energy markets; (2) encouraging complementary federal, regional, and state regulatory practices; (3) working as state regulators to exercise balanced decision making, providing the right incentives, and working cooperatively among ourselves and our national colleagues to provide a stable market with consistent rules; (4) reforming PUHCA in a manner that allows the states to protect the public and provide needed transparency; and (5) provide tax incentives to promote greater development and use of renewable energy. I am convinced that these policies can help build confidence of investors, consumers, utilities, and other market participants in our energy markets.

Thank you for your attention. I look forward to answering any questions you may have.

Senator THOMAS. Okay. And thank you, sir. Mr. Silverstein.

STATEMENT OF EVAN J. SILVERSTEIN, GENERAL PARTNER, SILCAP HEDGE FUND

Mr. SILVERSTEIN. Thank you. As you know, my name is Evan Silverstein. I am the general partner and portfolio manager at SILCAP, L.L.C., a market neutral hedge fund that principally invests in utility and energy companies. I want to thank this committee for inviting me here today so I can provide perspective on the current status of the energy industry and why are we in this position and what we can do to help transition to a more constructive framework.

I have spent almost 28 years, my entire professional career, specializing in the utility/energy industry, dating back to 1975. In my role, I have constantly evaluated macro- and micro-economic, political, and sociological trends in assessing the investment attractiveness of the industry and its companies. As a result, I would like to view myself as an expert, a student of the industry, and feel a strong sense of emotional attachment.

While my professional role is to evaluate these issues and make the correct investment decisions, to me that is less important than helping mold the more constructive atmosphere for energy policy.

I would like to summarize my testimony in the following points: It is critical that we develop a comprehensive energy plan that encompasses environmental and tax policy. This is the only way to create an environment that provides for capital at reasonable cost and availability to support infrastructure development. Anything short of that can endanger our ability to achieve low cost energy independence. I do not want to downplay the significance of what has happened over the past few years. But I am very concerned that, based on history, we may overreact to the short run and not stay focused on the more important issue of establishing policy for long run development. We need to take lessons learned from the past few years to improve future market structure.

Since 1975, when I entered the industry, fuel shocks, nuclear crisis, gas restrictions, PURPA have all served to produce financial stress and political and regulatory responses that were overreactions, that sacrificed constructive long-term policy development. Our energy and environmental policy has been in a state of flux for too long. We need some stability and certainty in our policy in order to attract reasonably price capital.

High anxiety and uncertainty are the chief causes of capital dislocation. We have to decide what our social objectives are and agree that a policy that obstructs building transmission pipelines, the use of coal and nuclear, and drilling for new natural gas is less of a policy than just say no.

Certainly the development of renewables, clean coal technology, hydrogen-based solutions and conservation are all part of the future. But they are not ready to carry the load. Recent stresses in natural gas are indicative of infrastructure shortcomings. We have to find a way to integrate State and Federal needs into a common goal. We need to complete our investigations as soon as possible. We need to move forward.

To be sure, many factors contributed to the current crisis. The 1990's were a euphoric environment that produced large amounts of cheap and undisciplined capital. Industry, such as merchant energy, technology and telecommunications, were unfunded, which resulted in significant excess capacity. Moreover, the extensive use of leverage, a declining economy, and an unprecedented credibility crisis produced a severe liquidity and capital crisis in the industry.

Greed was another characteristic of the 1990's. And this human trait, combined with questionable ethical and legal behavior, contributed to the collapse of the merchant and trading business. However, while competitive model has been damaged, I do not believe it has failed. In my view, the California model of forcing electricity into the spot market without ability to contract bilaterally was its fatal flaw.

Competitive markets are operating and developing in other parts of the country. Nevertheless, the market development is being hindered by the need for the development of some kind of independent transmission model that provides credibility and sends the right economic signals. I believe transmission should be independent under any model adopted.

A combination of market forces and properly incented regulatory structures are ideal. We cannot judge the success of any model by whether prices are going up or down. Whatever model we adopt is supposed to produce the most sufficient price at this point in time to meet short- and long-term needs, including capital investment.

The industry certainly needs to be monitored more closely, have some sort of regulatory oversight, and provide significant penalties for abusers. But we have to be careful not to over regulate. We need to allow market forces to drive good decision making and allow development of creative and ingenious solutions to our energy problems. In this regard, PUHCA needs to be reformed to allow for consolidation that is not in conflict with market power issues and allow for the injection of fresh capital. Consolidation is a natural response to financial stress.

Finally, we need fuel diversity. Every time in history when we have relied on one single fuel source for incremental needs it has been quite a mistake. Diversification is the key to long-term energy management.

The last few years have been characterized by severe dislocation. Nevertheless, if we do not focus on incorporating on the lessons learned into the future policy and structure, the pain went for naught. Our economic prosperity and perhaps national security is dependent on our ability to move forward.

I hope this hearing signifies the beginning of this process, because we need to succeed.

[The prepared statement of Mr. Silverstein follows:]

PREPARED STATEMENT OF EVAN J. SILVERSTEIN, GENERAL PARTNER, SILCAP HEDGE FUND

As you know, my name is Evan J. Silverstein. I am the general partner and portfolio manager for SILCAP LLC, a market neutral hedge fund that principally invests in utilities and energy companies. I want to thank this committee for inviting me here today so I can provide perspective on the current status of the energy industry, why we are here, and what can we do to help transition us to a more constructive framework.

I have spent almost 28 years—my entire professional career—specializing in the utility/energy industry dating back to 1975.

In my role, I have constantly evaluated macro- and micro-economic, political, and sociological trends in assessing the investment attractiveness of the industry and its companies.

As a result, I would like to view myself as an expert student of the industry to which I feel a strong sense of emotional attachment. While my professional role is to evaluate these issues and make the correct investment decisions, to me that is less important than helping mold a more constructive atmosphere for our energy policy.

Clearly, the energy industry is in a state of crisis at a particularly vulnerable time for our country. I believe it is imperative that we put aside self-interests and develop a cohesive energy, environmental, and tax policy in order to create a stable and more certain environment for energy investment.

and more certain environment for energy investment. Low cost energy and independence has been one of the great underpinnings of this great country, and I am concerned we are in danger of losing that advantage. As I will discuss later, I do not want to downplay the seriousness of events over the past few years that included unethical and possibly illegal behavior on the part of some industry participants. However, I'm very concerned that if we fixate on those issues, we may lose sight of the more important issue of developing a long term structure for energy investment. The tendency to overcorrect for the most recent problems starts us on a trend that creates other obstacles down the road. I have seen it happen before. While the specifics of each crisis may be different, we have been here before.

In 1975, when I first came into the industry, it was facing severe dislocation as result of oil and gas fuel shocks. A handful of companies were on the brink of bank-ruptcy and capital was tight and expensive. Our response was to eliminate the use of natural gas for electricity production and promote the development of nuclear power.

With runaway inflation and oil prices expected to exceed \$50 a barrel, nuclear was supposed to be our path to energy independence. However, lax oversight in the construction and operation of these facilities, highlighted by the Three Mile Island accident, led to the shutdown of the construction of these facilities in midstream and, once again, created severe financial crisis that led to major write-offs, some bankruptcies, and significant excess capacity.

We then decided that nuclear was not such a good idea. We imposed tremendous safety requirements as a reaction to the problems and effectively made nuclear a stranded asset. With fuel prices subsiding and gas now in oversupply, we removed restrictions on gas for electric generation and identified that as our environmentally preferred fuel. We also implemented PURPA, which was supposed to promote the development of the independent power industry. We developed pricing umbrellas theoretically based on avoided cost, but in reality

We developed pricing umbrellas theoretically based on avoided cost, but in reality wound up being overstated, resulting in another layer of significantly above-market stranded costs that needed to be addressed. In almost all these periods, the response to the most recent crisis created an overreaction that led to additional inefficiencies.

I am very concerned that we are in that very position today and it's what we need to avoid. The factors that have put us in the current crisis consist of macro, micro and psychological forces that came together to produce somewhat of a perfect storm. The 1990's were generally a euphoric environment for this country which led to the existence of cheap and easily available capital. This led to an unprecedented investment in merchant plants with little assessment of the risks involved. The expectation was that growth would continue unabated and every plant would be needed and produce attractive returns. The more companies invested, the higher there stock prices rose.

At the same time, another phenomenon was at work. The pressure to show earnings growth was severe across the entire stock market and the use of undue leverage became more and more prominent, especially since investors, fixed income analysts and even rating agencies did not seem to object. As these conditions were reaching their heights, industry conditions began to change. The failed deregulation experiment in California which led to runaway prices, the unethical and perhaps illegal behavior of certain market participants, the significant failure of many companies, overbuilding and a significantly weakening economy has created a credibility crisis that has effectively shutdown reasonable cost capital to the industry and promoted a liquidity crisis in some cases.

A significant pullback on the part of the banks because of overexposure to the merchant industry and the tremendous risk aversion on the part of investors have made capital availability way too tight and costly.

While I do not condone unethical or illegal behavior, we should not be surprised by what has happened. Most of it has been driven by the human trait of greed. Greed on the part of investors expecting to make easy money in the stock market, greed on the part of market participants who saw an opportunity to take advantage of market dislocations and inefficiencies and greed on the part of company managements trying to drive up stock prices to get rich. We all contributed in some sense.

While capital to the merchant industry is clearly limited, capital for infrastructure development is available as long some certainty exists. Infrastructure-type assets like pipelines and transmission are already changing hands and integrated energy companies that are financially strong and are not overwhelmed by merchant issues can raise capital on somewhat reasonable terms. Nevertheless, the uncertainty surrounding our energy and environmental policies at both the state and federal levels continues to be an issue and there is nothing that raises the cost of capital more than uncertainty.

When I think of how to remedy this situation, I submit that we have to make a strong commitment to developing a comprehensive solution that includes energy, tax and environmental policy. This cannot be piecemeal. We have to decide what our social objectives are and make it clear that a policy that does not allow for the building of transmission and pipelines, the use of coal and nuclear, and new drilling for natural gas is less of policy than a "just say no" approach.

Certainly, the development of renewables, conservation, and technological development of things like clean coal technology, all have a place in our future but will have to evolve and are not yet ready to carry the entire load. What we need is certainty and visibility. We need to commit to a plan that is agreed upon by all political factions such that it has staying power. To be sure, whatever is adopted may be modified over time as we learn from experiences, but we need to avoid radical shifts dominated by political influence.

Our ability to achieve this is even more challenged in electricity because of the constant state-versus-federal conflicts, but these need to be overcome to achieve a must-needed solution to a critical issue for our economy and society. We have to avoid the temptation of overcorrecting for recent problems and stay focused on long-term solutions. We cannot say a model is working only when prices are low and it is broken when prices are up. Any model is designed to achieve the most efficient price at any point in time to provide for short- and long-term needs, including capital investment.

In that regard, in my view, while the wholesale deregulated model has been damaged and is in need of change, it should not be discarded. While the California model failed, flaws in that model, primarily forcing all the power into the spot market and not allowing for contracting, were prime contributors to that failure. There are other places in the country such as Texas, PJM, New York, New England, etc. where models are working and continue to improve.

Nevertheless, one of the great failures of our move towards a deregulated model is that we did not solve our transmission problem prior to supporting major expansion in merchant capacity. I think this kind of thinking is also showing up in natural gas today. We promoted the growing use of natural gas for power generation but did not provide for the infrastructure needed to support this growth. Thus, with production declining and usage increasing, we are starting to see significant stresses.

In my view, both from a credibility and economic standpoint, transmission needs to be truly independently operated in order to avoid conflicts of interest and to send the right economic signals. I believe this is true under any model ultimately adopted. While clearly the trading of electricity needed to be monitored more closely and subject to some kind of oversight, we need to assure we do not overregulate. We need to allow for the development of market forces to drive good decision making and allow the development of creative and ingenious solutions to our energy problems

We should not prescribe solutions, but set good policy with proper incentives and allow the markets to work. In this regard, we need to examine PUHCA, which is an antiquated structure and at the very least allow for changes that would promote consolidation and the injection of fresh capital into the industry, which undoubtedly should be part of the rebuilding process. My final point deals with the need to diversify fuel sources. In my 28-year history,

My final point deals with the need to diversify fuel sources. In my 28-year history, anytime we have relied on one single fuel source to meet our incremental needs it has been a mistake. My recount of the past 28 years earlier should indicate that. We are starting to see the problems with our gas reliance right now even with a weak economy. Coal and maybe even nuclear has to be part of the mix. Thank you for your time. This hearing itself is indicative of you sharing my view of the importance of establishing a cohesive energy policy. In these difficult times with tremendous uncertainty and anxiety, we have to ensure we preserve our en-ergy independence. We need certainty, stability and visibility to bring capital back to this industry on reasonable terms. I am hopeful we all can agree we need to get this done. this done.

Senator THOMAS. Thank you very much.

By the way, I did not mention your full statements will be put in the record.

Mr. Cassidy.

STATEMENT OF FRANK CASSIDY. PRESIDENT AND COO. PSEG POWER LLC

Mr. CASSIDY. Thank you, Mr. Chairman. I am Frank Cassidy. I am president and chief operation officer of PSEG Power, which is located in Newark, New Jersey, and is a subsidiary of Public Service Enterprise Group, a diversified energy company, which is celebrating its 100th anniversary this year.

We are located within the PJMN interconnection, one of the Nation's largest and most successful competitive energy markets. And in addition to New Jersey and the PJM region, PSEG Power also has generating assets in operation or construction in New York, Connecticut, Ohio, and Indiana. I am pleased and honored to appear before this committee this morning to represent my company and the Electric Power Supply Association, or EPSA, which I currently chair.

Mr. Chairman, as you are aware, there is a constant need for capital to run our day-to-day operations, build new facilities, and develop new technologies. Many companies, even those that are prudently managed and producing excellent operating results, are facing severe limitations on their ability to access capital. This is a serious problem and the one that must be addressed today, if we are to build the 355 gigawatts of new electric capacity that the Department of Energy says we need by 2020.

The turbulence in our industry already has caused companies to cancel or postpone development of approximately 53 gigawatts of new capacity. And while not all of these cancellations can be blamed directly on the credit crunch, I am very concerned about the impact tomorrow of the financial difficulties facing us today.

I would like to briefly offer my thoughts on what conditions have contributed to today's difficulties, as well as what I view as necessary action on the part of industry and government to initiate recovery.

First and most importantly, we need to recognize that today's credit crisis is partly the result of a sluggish economy which has reduced the demand for electricity.

Second, part of our problem is self-inflicted. It would be disingenuous not to acknowledge that accounting difficulties, accusations of price manipulation, and inaccurate financial reporting have contributed to the lack of confidence now being expressed by financial markets and the financial community. The actions of a minority have affected the entire sector.

Clearly, our industry must take the lead in restoring confidence of investors, regulators, policy makers, and customers in our industry and in the value of competition in electric markets. We are moving aggressively to restore confidence on an industry-wide basis by implementing the EPSA code of ethics and through the work of the committee of chief risk officers.

On a company-by-company basis, we are shoring up our balance sheets, reducing debt levels, and making sure we live by the new Sarbanes-Oxley requirements. These efforts are essential, and they will continue.

The third and final part of the problem involves continued uncertainty about the outcome of the public policy debate on the future of our industry. This committee has asked what Congress can do to help remove barriers to the flow of capital. I think there are four areas on which Congress can and should focus.

First, Congress can help address regulatory uncertainty by enabling FERC to move promptly to established well-designed regional electricity markets across the country. In my view, the minimum requirements for a well-designed market include an independent grid operator, a real-time spot market with a means for managing congestion, a minimum resource adequacy requirement, and a market monitoring plan to assure that all participants obey the rules.

ket monitoring plan to assure that all participants obey the rules. Second, Congress needs to address the current patchwork of State and Federal environmental regulations for powerplant emissions. I am pleased that this topic is on the congressional agenda. And I encourage Congress to enact multi-pollutant legislation this year. This system will provide clear direction on environmental basis and a sound basis on which to make investment decisions about our facilities.

The third issue Congress needs to address is reform of the bankruptcy code. One of the realities of the credit crunch is that some companies will likely face bankruptcy. Our industry has done a very good job in mitigating counter party risk by negotiating netting provisions and standard contracts. It is important that Congress pass bankruptcy reform legislation that ensures that these contract netting provisions are honored in bankruptcy proceedings. Finally, I would suggest two changes to the tax code that I believe will help spur investment. The first is accelerated depreciation of generation assets. Companies that build powerplants should be provided the same treatment as other capital-intensive industries.

And for any publicly traded company like PSEG that pays dividends, elimination of the double tax would be a useful and important investment incentive. I realize this is a controversial component of the President's economic plan. And I hope that the debate focuses on the merits of the proposal, and it goes forward.

Mr. Chairman, competitive power suppliers are responsible for 80 percent of oil generation capacity added in the past decade. It is very important that we address the financial condition of the electric industry now in order to assure that our Nation continues to be served by reliable, affordable, secure, and environmental responsible supplies of electric energy.

Thanks for this opportunity. And I will be pleased to respond to your questions.

[The prepared statement of Mr. Cassidy follows:]

PREPARED STATEMENT OF FRANK CASSIDY, PRESIDENT AND COO, PSEG POWER LLC

I am Frank Cassidy, president and chief operating officer of PSEG Power LLC, based in Newark, New Jersey. My company is a competitive power supplier and a subsidiary of Public Service Enterprise Group, a diversified energy company which this year is celebrating its 100th anniversary. We are located within the PJM interconnection, one of the nation's largest and most successful competitive energy markets. In addition to New Jersey and the PJM region, PSEG also has generation assets in operation or construction in New York, Connecticut, Ohio, and Indiana.

I am pleased and honored to appear before this Committee this morning to represent my company and the Electric Power Supply Association. I want to thank Chairman Domenici and Senator Bingaman for their foresight

I want to thank Chairman Domenici and Senator Bingaman for their foresight and leadership on issues affecting the energy industry. We're here today to explore the serious financial challenges my industry now confronts. To put this problem in some kind of context, I've worked in the electric industry my entire career—more than 30 years. The financial conditions we are experiencing now are the most difficult that I can remember.

Mr. Chairman, as you are aware, there is a constant need for capital to run our day-to-day operations, build new facilities, and develop new technologies. Many companies, even those that are prudently managed and producing excellent operational results, are facing severe limitations on their ability to access capital.

This is a serious problem and one that must be addressed today if we are to build the 355 gigawatts of new electric capacity the Department of Energy states we'll need by 2020. The turbulence in our industry already has caused companies to cancel or postpone development of approximately 53 gigawatts of new capacity. And while not all of these cancellations can be blamed directly on the credit crunch, I am very concerned about the impact tomorrow of the financial difficulties facing us today.

I'd like to briefly offer my thoughts on what conditions have contributed to today's difficulties, as well as what I view as necessary action on the part of industry and government to initiate recovery.

First and most importantly, we need to recognize that today's credit crisis is partly the result of a sluggish economy, which has reduced the demand for electricity.

Second, part of our problem is self-inflicted. It would be disingenuous not to acknowledge that accounting difficulties, accusations of price manipulation, inaccurate financial reporting, and fudged and fuzzy balance sheets all have contributed to the lack of confidence now being expressed by financial markets and the financial community. The actions of a very small minority have affected the entire sector.

Clearly, our industry must take the lead in restoring the confidence of investors, regulators, policymakers, and customers in our industry and in the value of competition in electricity markets. We are moving aggressively to restore confidence on an industry-wide basis by implementing the EPSA Code of Ethics and the work of the Committee of Chief Risk Officers. On a company-by-company basis, we are shoring up our balance sheets, reducing debt levels, and making sure we live by the new Sarbanes-Oxley requirements. These efforts are essential and will continue.

The third and final part of the problem involves continued uncertainty about the outcome of public policy debate on the future of our industry.

This Committee has asked what Congress can do to help remove barriers to the flow of capital. I think there are four areas on which Congress can and should focus.

1. First, Congress can help address regulatory uncertainty by enabling FERC to move promptly to establish well-designed regional electricity markets across the country. In my view, the minimum requirements for a well-designed market include an independent grid operator; a real-time spot market with a means for managing congestion; a minimum resource adequacy requirement; and a market-monitoring plan to ensure all participants obey the rules.

2. Second, Congress needs to address the current patchwork of state and federal environmental regulations for power plant emissions. My company has been a strong advocate for national emissions caps with market-based compliance mechanisms. This system will provide clear direction on environmental policy and a sound basis on which to make investment decisions about our facilities. I am pleased this topic is on the Congressional agenda, and I encourage Congress to enact multi-pollutant legislation this year.

3. The third issue Congress needs to address is reform of the bankruptcy code. One of the realities of this credit crunch is that some companies will likely face bankruptcy. Our industry has done a very good job in mitigating counter-party risk by negotiating netting provisions in standard contracts. It is important that Congress pass Bankruptcy Reform legislation that ensures these contract netting provisions are honored in bankruptcy proceedings.

4. Finally, I would suggest two changes to the tax code that I believe will help spur investment. The first is accelerated depreciation of generation assets. Companies that build power plants should be provided the same tax treatment as other capital intensive industries. As an example, Mr. Chairman, facilities in shipbuilding and the pulp and paper industry are depreciable over seven years. The chemical and semiconductor industries are on a five-year schedule. Electric generation assets, however, are on a 15 to 20 year depreciation schedule. This is a disparity that should be corrected.

And for any publicly-traded company like PSEG that pays dividends, elimination of the double tax would be a useful and important investment incentive. I realize this is a controversial component of the President's economic plan. I hope the debate focuses on the merits of the proposal and it goes forward.

Mr. Chairman, competitive power suppliers are responsible for 80 percent of all generation capacity added in the past decade. It's very important that we address the financial condition of the electricity industry now in order to assure our nation continues to be served by reliable, affordable, secure and environmentally responsible supplies of electric energy.

Thank you again for the opportunity to appear before the Committee this morning. I will be pleased to respond to questions.

Senator THOMAS. Thank you, Mr. Cassidy. Ms. Smith.

STATEMENT OF SUZANNE G. SMITH, DIRECTOR, CORPORATE AND GOVERNMENT RATINGS, STANDARD & POOR'S

Ms. SMITH. Good morning, Mr. Chairman and members of the committee. My name is Suzanne Smith. I am a director at Standard and Poor's Ratings Services, where I am responsible for assessing the credit worthiness of companies in the electricity business.

Standard and Poor's provides independent financial information, analytical services, and credit ratings to the world's financial markets. We do not advocate any specific industry structures or regulatory and energy policies. I welcome the opportunity to be here today.

Since partial deregulation, financial conditions within the electricity industry have been unsettled. The industry-wide slippage in credit quality that started several years ago is still continuing. Last year the decline unexpectedly accelerated as electricity prices fell and access to capital became constrained.

Today some companies are trying to return to a regulated costto-service model by selling unregulated assets. And those companies that remain committed to competition are liquidating assets to shore up their balance sheets. Many are hunkering down for what could be an extended industry slump. All this represents a sea change from what had previously been an industry of strong, stable, and predictable financial performance.

Ratings for the electric utility industry have historically been investment grade, mainly because of the existence of regulation. The introduction of competition into the market and the increased level of investment in non-energy-related businesses, funded with high levels of debt, have caused an overall decline in the industry's financial health. Companies that are experiencing the most problems are those that have no regulated business to temper losses and no financial support from a stronger parent.

In the merchant energy segment, an unprecedented mix of financial and business risks have led to financial crisis and credit spiraling downward for some companies. Lower power prices, trading losses, and excess debt have substantially driven down cash flow and profitability.

Last year, companies engaged in energy marketing and trading found themselves without sufficient capital at a time when they needed more liquidity to fund losses and to meet calls for collateral. Energy marketing and trading is a confident, sensitive business. The last of transparency caused by energy marketers operating mostly bilaterally and relying on their own models to value energy contracts played a role in the loss of investor confidence.

The presence of contingent claims in loan agreements and trading contracts made the situation worse by creating a credit cliff. Loss of an investment grade rating has required that some companies immediately put up hundreds of millions of dollars of increased collateral. When lenders or trading counterparties are allowed to demand payment or terminate credit facilities upon a change to non-investment grade, the result can be a crisis that puts the company on the brink of default. It is important to note that there are hundreds of non-investment grade companies that operate normally with stable outlooks, but they do not have ratings triggers. Financing practices have also contributed to credit deterioration. Many generating companies relied extensively on shortterm debt to fund construction or acquisition of assets. Traditionally, generating assets have been funded through a combination of equity and long-term debt. Banks and borrowers expected companies to repay the loans through proceeds from capital market takeout issues. But today banks realize that the capital markets are not a viable source of repayment.

A small number of energy merchant companies are fighting for survival. If these companies cannot refinance the debts that became due in 2003, they may have to resort to debt restructuring in or out of bankruptcy. But even companies that successfully refinance can expect onerous terms and conditions.

Amidst these problems it is critically important to also note that capital is still widely available for this industry. For example, in the past 2 weeks, Duke Energy, Virginia Electric Power, Southern National Gas, NiSource, American Electric Power have all issued bonds. And last week, Allegheny Energy and Center Point announced new bank loan deals. Last week, Standard and Poor's assigned it's A minus rating to the senior secured bank loan of a company called ITC that purchased the transmission assets of DTE Energy.

Even though a large part of the industry continues to perform well, it will take time to restore investor confidence. The market is capable of working out financial distress, but there will be winners and losers. Standard and Poor's has previously stated that a competitive wholesale power market requires marketing and trading functions. But the industry needs to improve these functions through increased transparency and disclosure, improve clearing mechanisms, better regulatory oversight, and probably the entry of some financial partners.

It is becoming increasingly clear that energy trading cannot function without a high investment grade rating. Most investors also agree that resolution of pending investigations would help investor confidence.

More certainty in the regulation and market structure would also improve investor confidence. Investors have long looked to the regulator safety net to provide stability to the industry. Standard and Poor's views regulation as generally being very supportive of credit quality, but does not see a trend of strong intervention by regulations to promote the financial health of utilities.

Lastly, partial deregulation has contributed to the financial deterioration of electricity markets by creating competition in the wholesale markets without corresponding competition in the retail markets, by not providing adequate incentives for investment and transmission, and by not providing clear market rules.

In offering these comments, I reiterate that Standard and Poor's does not advocate specific market structures or policies. But as industry analysts, we are available to comment and offer opinions on whether we see policies as supportive of or detrimental to credit quality and financial health. And, therefore, I appreciate very much the opportunity to offer our perspective in this hearing.

Thank you.

[The prepared statement of Ms. Smith follows:]

PREPARED STATEMENT OF SUZANNE G. SMITH, DIRECTOR, CORPORATE AND GOVERNMENT RATINGS, STANDARD & POOR'S

Good morning, Mr. Chairman and members of the Committee. My name is Suzanne Smith. I am a director in the Corporate & Government Ratings group at Standard & Poor's Ratings Services. I am responsible for assessing the creditworthiness of regulated utilities, diversified energy companies and energy merchants. Standard & Poor's, a division of The McGraw-Hill Companies, provides independent financial information, analytical services and credit ratings to the world's financial markets. Standard & Poor's does not advocate any specific industry structures or regulatory and energy policies. Standard & Poor's welcomes the opportunity to be here today to discuss current financial conditions facing the electricity sector.

INTRODUCTION

Over the past two years, there has been heightened attention paid to the financial condition of the electricity industry. There are a number of reasons for this. Following partial deregulation of the industry, the electricity sector that has resulted is marked by a greater degree of disparity in its financial health. An industry-wide slippage in credit quality that started several years ago (before the advent of deregulation) is still continuing. Last year there was an unexpected acceleration of the slippage as electricity prices fell and access to capital became constrained. Today, credit concerns dominate the industry's strategic decision-making and the management of its trading and marketing risk. For some participants, a return to a regulated, "cost-of-service" model is being pursued as a way to preserve financial health, while others, who remain committed to competition, are liquidating assets to shore up their balance sheets and are hunkering down for what could be an extended industry slump. Some so-called "merchant energy" and "diversified energy" companies are struggling for their very survival, while a handful of less-affected companies are pursuing opportunistic asset purchases and investments in the sector. All this represents a sea change from what had previously been an industry of strong, stable and predictable financial performance.

Historically, ratings for the electric utility industry have been investment grade (the top four categories of the rating scale, from "AAA" to "BBB") mainly because they were regulated. In addition to their regulated activities, some utilities have "unregulated" operations. In this competitive side of the industry, where there is no regulatory safety net, the restoration of investor confidence will require market participants to work out their current financial problems. It will also require participants to overhaul their trading and marketing models, to promote more and better transparency in their market rules and practices and provide for increased transmission access and investments.

RATINGS DISTRIBUTION AND OUTLOOKS

Over the last three years, the overall credit quality of the electricity industry has declined. Today only 2% of U.S. electric and gas companies are rated by Standard & Poor's in the 'AA' category. Two years ago the percentage of AA-rated companies was nearly 7%. Similarly, 18% of companies now carry ratings that are below the investment grade cut-off of 'BBB-'. Two years ago, the percentage below investment grade was only 6%. The average rating for the industry, while still investment grade, has slipped from 'A-' to 'BBB+' and is likely to fall to 'BBB'.

The introduction of competition into the electricity market and the increased level of investment in other non-energy related businesses, which were funded with high levels of debt, have caused an overall decline in the industry's financial health. What has most shocked the business and financial community, however, is the speed at which some of the largest players in the industry deteriorated in 2002, and the realization that the road to financial health is a bumpy one.

Since the advent of deregulation, the industry has generally moved from vertically integrated utilities to a mix of disaggregated electrical generation companies (gencos), distribution companies (discos), transmission companies (transcos) as well as integrated companies. They are not uniform in their financial health. For the regulated discos and gencos, the overall financial condition has generally remained stable. In fact, a small number of discos and transcos actually experienced financial improvement last year. Public power and municipality-owned utilities have also generally fared well. Standard & Poor's has observed that electric utility holding companies, especially those with unregulated generation or energy trading and marketing operations, witnessed a sustained decline in creditworthiness in 2002 that began at least three years ago. The companies that experienced the most dramatic and negative change in financial health are those that are operating in competitive power markets; companies that have no regulated business to temper losses and no financial support from a stronger parent.

ACCESS TO CAPITAL

Many companies operating in competitive power markets have experienced a severe reduction in capital availability from the debt and equity markets, and high hurdles in accessing the syndicated bank loan market. There is no single reason to explain why access to capital has become constrained. Rather, there has been an unprecedented collision of negative business and financial factors that have caused a downward credit spiral and financial crisis for some companies.

Low power prices, trading losses and excess leverage have substantially driven down cash flow and profitability for the merchant energy (the uncontracted-for) segment of the electricity business. Merchant gencos generally earn only marginal revenues and are characterized by a limited ability to cover their fixed costs. The weakened economy and incomplete or partial deregulation may also be contributing factors to a reduction in capital availability, but they are not as much of a driver as is the overall surplus of electric generation capacity that now exists in most regions of the United States. This surplus is expected to remain for the next several years. Last year, companies engaged in energy marketing and trading found themselves without sufficient capital at a time when they needed more liquidity to fund losses and to meet collateral calls. These developments occurred during a period of increasing regulatory uncertainty and investigations, and amid a perception throughout the United States of failures in corporate governance. Energy marketing and trading is a confidence-sensitive business. The lack of transparency caused by energy marketers operating mostly bilaterally (one-on-one with counterparties) and relying on their own models to value energy contracts may well have contributed to the loss of investor confidence. This lack of transparency may also have contributed to investor distrust about the adequacy of disclosure and it made more obvious company's abilities to manage earnings and valuations. Loss of investor confidence caused industry stock prices to plummet and virtually shut many energy companies out of the equity markets.

The presence of contingent liabilities in loan agreements and trading contracts made the situation worse by creating "credit cliffs". Contingent liabilities exist where the terms of borrowing change (or repayment is accelerated) if debt ratings or financial performance, or both, deteriorate below specified levels. In the electricity markets, "ratings triggers" are used extensively by counterparties as a way to determine collateral requirements. A common trigger is the loss of an investment grade rating, which required some companies to immediately post hundreds of millions of dollars of increased collateral. Thus, where an energy trading company contracts to provide power to a utility counterparty at a specified time in the future, the contract will provide that if the trading company falls below investment grade (and thus may be unable to procure the power for the utility) that the counterparty post sufficient collateral to allow the utility to shop elsewhere for its needs. If the trading company has triggers in a material number of its contracts, its capital can be quickly depleted. There are hundreds of non-investment grade companies that operate normally and finance normally—and, certainly, the majority of them are not expected to default. Yet, if, lenders or trading counterparties demand collateral or even the right to terminate credit facilities upon a change to non-investment grade, the result can be a crisis that puts the company on the brink of default. This is known as a "credit cliff."

Another contributing factor to credit deterioration is financing practice. Many gencos relied very heavily on the near-term debt markets, chiefly through the medium of short- and medium-term construction revolvers, acquisition bridge loans, and "mini-perm" loans to fund construction or acquisition of individual merchant energy plants and portfolios of merchant assets. This departs from the traditional way in which generating assets are traditionally funded, that is with more reliance on equity and long-term debt. Banks and borrowers as near-term lenders expected that their loans would be repaid within two to five years, mainly from proceeds from cap-ital market "take-out" issues. Standard & Poor's estimates the refinancing requirement to be \$90 billion over the next four years, with about \$40 billion coming due in 2003. Today, because of the uncertainties in the electricity sector, the capital markets are unwilling to invest in generating facilities and capital markets are not a viable source of repayment for the banks. Making matters worse, some banks want to reduce their exposure to the electricity sector and are reluctant to roll over or refinance outstanding loans. Some companies are deeply exposed as the vast majority of their capitalization consists of short- or medium-term bank loans that mature this year or next.

Amid these problems, it is important to note that capital is still available for many segments of the electricity industry, especially for the regulated side and for unregulated gencos having long-term contracts with creditworthy counterparties. Standard & Poor's utility, energy and project finance group is still frequently asked to assign ratings to new capital-markets debt issues and bank loan facilities. Examples of the past two weeks' activity includes ratings for Duke Energy Corp.'s \$500 million of mortgage bonds, Virginia Electric Power's \$400 million notes, Southern Natural Gas' \$400 million notes, and NiSource's \$345 million of senior notes. Last week, new bank loan ratings were announced for American Electric Power, Allegheny Energy and Centerpoint. On February 26, Standard & Poor's assigned its Arating to the senior secured bank loan of a transmission company called ITC that purchased the transmission assets of DTE Energy. Looking further back, bond issuance in the fourth quarter of 2002 totaled \$17 billion. While this amount represented a decline of 24% from two years ago, when bond issuance was \$22 billion, recent activity demonstrates that access to capital markets has not been denied to the sector as a whole.

STRATEGIC RESPONSES

Recently, poor industry fundamentals along with limited access to capital have caused industry participants to focus on creditworthiness more than in previous years. Credit issues now influence corporate strategies in ways that were not previously considered. Companies with relatively strong credit ratings that were previously willing to make aggressive moves in the market may now be unwilling to consider acquisitions because they do not want to jeopardize their access to the capital markets. However, there appear to be other companies and new entrants with cash that are interested in obtaining distressed utility assets.

Increasingly, strategies in the electricity sector are focusing on debt reduction, balance sheet improvement and scaling back on marketing and trading and merchant power generation. For most companies, the way to financial health rests, not surprisingly, through debt reduction by generating positive cash flow after paying capital expenditures, interest, and dividends. A common strategy features a return to the practice of increasing assets in the rate-base and collecting a regulated costof-service return. Some companies have obtained regulatory orders that transfer previously unregulated merchant plants into regulated rate-based assets. Companies with merchant asset portfolios are dealing with the spectre of a prolonged slump by canceling or renegotiating turbine contracts, canceling projects under development as well as partially completed plants, and, in a handful of cases, abandonment of nearly completed projects. Many companies announced that they were exiting or severely curtailing their marketing and trading operations. And regardless of whether the company is pursuing improved cash flow through operations, regulatory relief, or termination or abandonment, it is also likely to pursue asset sales.

Though Standard & Poor's views most of these strategies as prudent for maintaining or improving companies' financial health, they are not the only way the industry may recover. If successfully implemented, creditworthiness should strengthen. A few companies continue to expand through acquisitions without a loss in their credit rating.

ing. There are risks, however. Executing asset sales can be problematic and expensive. Assets sales are problematic because of the timing and price of the sale, as well as the loss of cash flow that occurs once the asset is sold. Although gas pipelines and power plants with long-term contracts are selling briskly, merchant power plants are not. Sales of international investments are showing mixed results, with many (Latin American assets, for example) selling at a loss. Additionally, in some cases these strategies will take several years to implement before material debt reduction will be realized, especially if the profitability of merchant plants remains low. One obstacle that is confronted in any sale of a merchant power facility is estab-

One obstacle that is confronted in any sale of a merchant power facility is establishing its value. In general, valuations are lower than was initially anticipated but by how much? At present, there is no clear answer. Standard & Poor's anticipates that market comparables will emerge over the next year as distressed borrowers and their lenders face decisions on how to handle merchant energy debt. Merchant plant valuations will need to be established and they will set the stage for restructuring and consolidation.

Standard & Poor's, along with the rest of the industry, observes that a small number of energy merchant gencos are literally fighting for survival due to a lack of market liquidity. Their future rests on the ability to refinance debt and, as such, their fate depends on the decisions of bank loan arrangers and syndicates. If these companies cannot refinance the loans coming due in 2003, they may resort to debt restructuring, either in or out of bankruptcy. Gencos or other distressed energy companies that refinance successfully can still expect onerous terms and conditions, including removal of the ability to "term out" (refinance through a long-term loan facility) one-year revolving loans, more stringent financial covenants, and commitments to reduce bank loans over time through asset sales or capital market issues. Pledges of collateral security are expected to continue. Higher fees and credit spreads are also to be expected. Again, however, there are bright spots in the survival camp. In December 2002, AES Corp. completed a major refinancing which extends by a few years many of the company's debt maturities. Under current conditions, the market has viewed AES's refinancing as achievement.

RESTORING INVESTOR CONFIDENCE

Standard & Poor's believes that investor confidence in the industry may take time to restore, even though a portion of the industry continues to perform well. Companies have already taken steps to restore investor confidence by revising business strategies, improving financial and risk disclosure, making provision for liquidity, and removing ratings triggers. Confidence should improve when near-term refinancings are worked out, when the handful of companies that may go bankrupt do so, when revised strategies prove successful or otherwise meet their fates, and when banks and borrowers complete the write-offs of their losses. All of this will take time—at least the next 18 months, and probably considerably longer. The market is capable of working out financial distress, but there will certainly be winners and losers.

In several of its publications, Standard & Poor's has stated that a functioning competitive wholesale energy market requires competent marketing and trading functions. These functions include robust, deep and liquid markets offering a range of products and tenors. A competitive wholesale energy market has proven difficult to establish. Nevertheless, Standard & Poor's has not moved from its original position. The restoration of investor confidence depends on effectively overhauling the existing model for trading electricity. It is currently unclear how the overhauling process will work out and what, exactly, will emerge. What is clear, however, is that trading operations, similar to financial institutions that conduct derivative trading businesses, require high investment-grade ratings. As noted previously, this is due to the requirement that energy marketers meet and pay short term trading losses without suffering material loss of liquidity. Trading operations at the low end of the investment grade scale (BBB-range) or at less than investment grade (BB and lower) are not viable because the dramatically higher capital requirements are an inefficient use of capital. This fact explains why so many companies have announced they are either exiting the business or are looking for partners. The volatility of earnings from trading and marketing make it a business that cannot sustain high levels of debt.

Restoring investor confidence also relies upon improving investors' understanding of how risk and credit exposure are measured. Standard & Poor's believes that a successful overhaul of the trading and marketing model will require increased transparency and disclosure, probably the entry of financial partners, improved clearing mechanisms, and better regulatory oversight. Most investors agree that resolution of pending investigations would certainly help investor confidence.

Finally, a measure of certainty regarding regulation and market structure might also improve investor confidence. Investors have long looked to the regulatory "safety net" to provide stability to the electricity industry. Ratings for the electric utility industry have historically been investment grade mainly because regulation traditionally allowed utilities to earn steady and predictable returns over sustained periods. As a result investment grade rated utilities have generally been able to enjoy lower cash flow ratios than their comparably rated industrial peers. Notwithstanding any other benefits wrought by deregulation, Standard & Poor's views traditional regulation as generally supportive of credit quality. In recent years, however, it does not appear that there has been a trend of strong intervention by regulators to promote the financial health of utilities. A Standard & Poor's survey of state regulatory commissioners conducted in 2001 indicated that credit quality ranked low on their list of priorities. Areas of concern include the apparent lack of attention that regulators appear to give to utilities' nonregulated investments, and the threat to utility credit quality from their parents' activities and uncertain rulings. Recent regulatory action to protect credit quality by isolating the utility from the activities of its parent or affiliates, such as the example of Westar Energy and Kansas Gas & Electric Co. appear to be a departure from the existing trend, but Standard & Poor's notes that the company first had to reach a crisis before regulators acted.

Partial deregulation has contributed to the financial deterioration of the electricity markets in at least three ways. First, the example of California indicates the problems of creating competition in the wholesale supply business without comparable competition in the retail side of the business. This mismatch has the effect of shifting business and financial risk from customers to shareholders and lenders. Second, unregulated gencos have encountered difficulty competing against regulated cost-of-service generation where regulated utilities are able to pass on to customers the fixed costs of generation. The competitive market, however, is not currently compensating merchant power producers for their fixed capital investments. Lastly, transmission congestion is still managed physically. Standard & Poor's believes that economic incentives to invest in new transmission facilities are inadequate. FERC's recent ruling to boost returns on transmission investments appears to create a positive economic incentive for increasing the transmission infrastructure.

CONCLUSION

In offering these comments, I would reiterate to the Honorable Members that Standard & Poor's does not advocate market structures, practices or regulatory policies. As analysts, we comment and offer opinions upon those structures, practices and policies as supportive of or detrimental to credit quality and financial health. This concludes my testimony on behalf of Standard & Poor's Ratings Services. I will be happy to answer any questions.

Senator THOMAS. Thank you very much. Mr. Sokol.

STATEMENT OF DAVID L. SOKOL, CHAIRMAN AND CEO, MIDAMERICAN ENERGY HOLDINGS COMPANY

Mr. SOKOL. Thank you, Mr. Chairman and members of the committee. My name is David Sokol, chairman and CEO of MidAmerican Energy Holdings Company, a diversified energy company headquartered in Des Moines, Iowa, with approximately \$18 billion in assets and operating in 22 of the United States.

This hearing goes to the heart of the most important energy issue facing Congress today, the financial crisis in the electricity and natural gas sectors. This sector is facing its greatest crisis in over 70 years as capital flees this industry at an alarming rate.

Among the 25 largest utilities alone, more than \$100 billion in market capitalization has been lost in the last 2 years. We have seen a net flow of capital out of utility funds in 48 of the last 60 months. The uninterrupted outflow over the last 2 years runs directly contrary to this sector's normal position as a safe haven in difficult economic times.

Indeed, 10 years ago, individual investors owned nearly 60 percent of U.S. utility stocks. But because of instability and dividend cuts, that percentage is now one half what it used to be. In the last 5 years, utility debt ratios have climbed from 54 to 63 percent, raising interest rates across the sector and causing new infrastructure to be built, if at all, with riskier and more expensive debt.

As interest rates have fallen 200 basis points across the board in the last 2 years, utilities costs of funds have actually risen by as much as 400 basis points over the overall credit index, whereas historically utilities borrowed money at a lower cost than other industries.

Between Moody's and Standard and Poor's in the last year they gave the energy sector 203 credit downgrades and only 6 upgrades, which is more downgrades than the total number of downgrades for the——

Senator THOMAS. I do not think your microphone is on. Mr. SOKOL. Sorry.

Senator THOMAS. Could you push your button?

Mr. SOKOL. You bet.

Senator THOMAS. Thank you.

Mr. SOKOL [continuing]. Previous 9 years. Twenty years ago, more than two-thirds of utilities held A or better credit ratings. Today that fraction is one-third. Now what does all this mean? It means that the capital markets no longer see electricity in the natural gas sector as a safe haven. And worse, barriers to investment are preventing willing companies, both in and outside of the industry from stepping forward with equity investments.

Experts estimate that up to \$100 billion in equity capital is available for this industry, but it sits on the sidelines today because of regulatory impediments. Indeed, this \$100 billion in capital would translate into hundreds of thousands of new jobs in this sector, if it were invested. Our largest investor, Berkshire Hathaway, one of the only AAA-rated companies in the United States, has publicly stated its desire to invest an additional \$10 billion to \$15 billion in the utility sector, if barriers to investment caused by the Public Utility Holding Company Act were lifted.

The real world impacts of these negative trends are far reaching. Utility dividends have fallen by more than 20 percent in the last 3 years. Combined with market losses, the effect on utility investors has been devastating. In the last 3 years, more than 170,000 megawatts of planned new capacity have been tabled or canceled. Some of these cancellations represented appropriate correction for the over building that was taking place, but many needed projects are also being suspended.

Moreover, there is significant under-investment in the transmission facilities also caused by this lack of capital availability. And it is not likely to be improved soon, notwithstanding the greatly increased need for redundancy because of homeland security concerns.

New projects and cancellations make headlines. But rarely do investors put up a red flag saying: I am not investing. But that is what is happening today. Ironically, this crisis has benefitted our company because much of the banking community has written off the electricity sector as a home to too much bad debt. As a result, Berkshire Hathaway and MidAmerican have become lenders of last resort in the industry, propping up companies through loans and with acquisitions.

We cannot make major equity investments in the electricity sector, however. But we have made loans to utilities where no other lender could be found. These loans represent good short-term opportunities for us. But this is not the way the industry should be capitalized in the long term.

What then must Congress do? For several years I have testified before Congress calling for comprehensive national energy legislation. We almost achieved that goal last year. But we came up short. But instead of finger pointing, let us look at the lessons we learned last year, which is that Congress cannot wait to act until political consensus is reached on every issue. That merely works to the advantage of those who take extremely positions in the policy arena or who prosper as a result of market failures.

This is no longer an exercise in academic policy making, but rather a critical component of any economic recovery program. Getting capital flowing back into this industry will have a direct impact on employment economic development and the quality of life for millions of Americans, particularly including senior citizens who depend on utility dividends and reasonable energy prices.

Congress cannot and should not spend billions of dollars trying to fix this problem, however. But it can pass legislation to permit the private sector to make long-term investments in the industry.

How? First, repeal PUHCA to allow for intelligent investment. Healthy players must be allowed to invest in utility assets to stabilize the industry.

Let me give you two first-hand examples. Last spring we purchased the Kern River natural gas pipeline from the Williams Company, which had planned to double the size of this critical piece of Western energy infrastructure to deliver more natural gas from the great State of Wyoming to Nevada and California. Williams, facing severe financial distress, could not have undertaken this \$1.2 billion expansion. We did. And the project will come on line May 1 of this year.

The Kern River employees, communities, and consumers in four Western States will all benefit. This expansion will bring nearly a billion cubic feet per day of additional natural gas to customers in Utah, Nevada, and California, who have already contracted for this capacity for 15 years. If we had not committed to buy Kern River, this expansion would not have occurred. But if Kern River were a wire, instead of a pipe, MidAmerican could not own it, because of PUHCA.

Another example, last summer we purchased the Norther Natural Gas pipeline system from Dynegy, who had just purchased it from Enron. This former Enron subsidiary is now on sound financial footing. And its employees once again have job security. In contrast, Enron's Portland General Electric facility remains subject to bankruptcy proceedings. And no qualified buyer has stepped forward to PGE. Enron, Portland General, and even their bankruptcy consultants have all come to us, encouraging us to bid on Portland General. But because of PUHCA, we cannot.

Secondly, we must make modest changes to the tax code to encourage the structural separation of transmission and generation assets and to encourage new investment in infrastructure and renewable energy.

Third, enact bankruptcy reform to help reduce counterparty risks associated with the energy markets. And fourth, streamline the siting of transmission infrastructure to facilitate new investment and reliability.

Congress's first goal this year must be to promote utility investment. You may not be able to resolve every policy issue facing the energy industry today, but the items outlined above must be addressed to help get this industry and our economy moving again.

Thank you.

[The prepared statement of Mr. Sokol follows:]

PREPARED STATEMENT OF DAVID L. SOKOL, CHAIRMAN AND CEO, MIDAMERICAN ENERGY HOLDINGS COMPANY

Mr. Chairman and members of the Committee, my name is David L. Sokol, Chairman and CEO of MidAmerican Energy Holdings Company, a diversified international energy company headquartered in Des Moines, Iowa with approximately \$18 billion in assets.

MidAmerican Energy consists of six major subsidiaries: CE Generation (CalEnergy), a global energy company that specializes in renewable energy development in California, New York, Texas and the West, as well as the Philippines; MidAmerican Energy Company, an electric and gas utility serving the states of Iowa, Illinois and South Dakota; Northern Electric/Yorkshire Electricity, an electric and gas utility in the United Kingdom; the Kern River Gas Transmission Company, operating in Wyoming, Utah, Nevada and California; Northern Natural Gas, the largest gas transmission system in the country, running from the Permian Basin in Texas and New Mexico through Oklahoma and Kansas, and into the entire Upper Midwest; and HomeServices of America, the second-largest residential real estate company in the country, operating in 14 states.

I believe that MidAmerican provides a clear example that an energy company can be large, but still maintain a singular focus on the customer; diversified in scope and operations, yet concentrated on business fundamentals; growth-oriented, while resistant to the fad of the moment.

Mr. Chairman, this hearing goes to the heart of the most important energy issue facing Congress—the financial crisis in the electricity and natural gas industries. This sector is facing its greatest crisis in 70 years as capital flees the industry at an alarming rate. Among the 25 largest utilities alone, more than \$100 billion of market capitalization has been lost since 2000.

We have seen a net flow of capital out of utility funds in 48 of the last 60 months and in the few months that saw positive flows, most were negligible. Most disturbingly, the uninterrupted outflow over the last two years runs directly contrary to the sector's normal position as a safe haven in difficult economic times. Indeed, ten years ago individual investors owned nearly 60% of utilities' stock. Because of insta-bility and dividend cuts, that percentage has been cut in half today. The mom and pop investors, "the widows and orphans" who financed so much of this industries' growth for decades, are fleeing the sector as the risk profile of the industry has in-creased dramatically. Even companies that do not have substantial exposure in process on the sector in the sector is the substantial exposure in the sector is the sector in the sector is the substantial exposure in the sector is the sector areas such as trading and merchant generation have suffered because of negative

areas such as trading and merchant generation have suffered because of negative perceptions of the industry in general. What, then, has taken the place of the individual investor? Unfortunately, in many cases, the answer is debt. In the last five years, utility debt ratios have climbed from 54 to 63 percent, raising interest rates across the sector and causing new infrastructure to be built, if at all, with riskier and more expensive debt. As interest rates have fallen 200 basis points in the last two years, utilities' cost

of funds has risen as much as 400 basis points above the overall credit index-whereas historically utilities borrowed at rates below other industries. When you consider that the electric and gas industries are the most capital-intensive sectors of the entire economy, the negative impact of this trend is magnified even further.

Moody's and S&P gave the power sector 203 credit downgrades last year and only 6 upgrades. This is more downgrades than the total number of downgrades for the previous nine years. In the two previous years, downgrades outnumbered upgrades by almost 2-1 and more than 5-1, respectively.

Twenty years ago, more than two-thirds of utilities held "A" or better credit rat-ings. Today, that fraction is one-third. Some retrenchment in the sector was inevitable, as too many companies followed a "build it and they will come" model that ignored the natural limitations on sector growth that characterize the industry. Hopefully, the days when energy comparies were pressured from all sides to "be more like Enron" are gone and won't soon be forgotten. However, as long as the sector remains subject to competition and uncertainty and access to capital remains re-

tor remains subject to competition and uncertainty and access to capital remains is stricted, we do not see this negative trend reversing. What does all this mean? The capital markets see the electricity sector as high risk. And worse, barriers to investment are preventing willing companies, both in and outside of the industry, from stepping forward with equity investments. In this riskier, highly competitive environment, willing investors must step forward with the term environment that near the investible fluctuations in the business cycle. long-term equity that can ride out the inevitable fluctuations in the business cycle. Unfortunately, federal law continues to restrict this.

Experts estimate that up to \$100 billion in equity capital available for the industry sits on the sidelines today because of regulatory impediments. Indeed, this \$100 billion in capital would translate into hundreds of thousands of new jobs in this and related industries. Our largest investor, Berkshire Hathaway, one of the only AAArated companies in the United States, has publicly stated its desire to invest \$10 to \$15 billion in the utility industry if the barriers to investment caused by the Public Utility Holding Company Act—PUHCA—are lifted.

Healthy players must be allowed to invest in utility assets to stabilize the industry. The real world impacts of these negative trends are far-reaching.

Utility dividends have fallen by more than 20% percent in the last three years. Combined with market losses, the effect on utility stocks has been devastating.

In the last three years, more than 170,000 megawatts of planned new capacity have been tabled or canceled. Some of these cancellations represent an appropriate correction for overbuilding, but some needed projects are also being suspended. Moreover, there is significant under-investment in transmission facilities, also caused by the lack of capital availability, and it is not likely to be improved soon, notwithstanding the greatly increased need for redundancy because of homeland security concerns. New projects and cancellations make headlines, but rarely do inves-tors put up a red flag to say: "I'm not investing." But that is what's happening today.

If we fail to turn this situation around, I fear we will be laying the groundwork for a repeat of the Western energy crisis. For the many Senators on this Committee from the West, I hope you will ask yourselves why an Enron was able to manipulate markets in your region, but not the markets of other regions. The answer, I believe, is that the West was dangerously short of both capacity and the infrastructure to deliver that supply to market. Coupled with the terribly conceived California market structure, conditions were ripe for anti-consumer behavior. Adequate supply and sensible market rules have delivered billions of dollars of savings to consumers in markets such as the Northeast, Midwest and Texas, with no evidence of significant anti-consumer behavior.

Ironically, the capital crisis has benefited our company, because much of the banking community has written off the electricity sector as home to too much bad debt. As a result, Berkshire and MidAmerican have become lenders of last resort in the industry, propping up companies through loans and acquisitions. We cannot make major equity investments in the electric sector, but we have made loans where no other lender could be found. These loans represent good short-term opportunities for us, but this is not the way the industry should be capitalized in the long term. What, then, must Congress do?

For several years, I have testified before Congress calling for comprehensive national energy legislation. We almost achieved that goal last year, but came up short. Instead of finger pointing, let's look at the lesson learned from last year: Congress cannot wait to act until political consensus is reached on every issue. That merely works to the advantage of those who take extreme positions in the policy arena or who prosper as a result of market failures.

This is no longer an exercise in academic policy making, but rather a critical component of any economic recovery program. Getting capital flowing back into this industry will have a direct impact on employment, economic development, and the quality of life for millions of Americans, particularly senior citizens who depend on reasonably priced energy and utility dividends. Congress cannot, and should not, spend billions of dollars trying to fix this prob-

Congress cannot, and should not, spend billions of dollars trying to fix this problem, but it can pass legislation to permit the private sector to make long-term investments in this industry.

How? First, repeal PUHCA to allow for intelligent investment. Let me give you two first-hand examples of why you should: Last spring, we purchased the Kern River natural gas pipeline from the Williams Company, which had planned to double the size of this critical piece of Western energy infrastructure to deliver more natural gas from Wyoming to power-hungry Nevada and California. Williams, facing severe financial distress, could not have undertaken this \$1.2 billion expansion. We did, and the project will be completed on time this May.

The Kern River employees, communities and consumers in four Western states will all benefit. This expansion will bring an additional 900 million cubic feet per day of natural gas to customers in Utah, Nevada and California, who have fully contracted for that capacity for 15 years. If we hadn't come in to buy Kern River, this expansion would not have occurred. But if Kern River were a wire, not a pipe, MidAmerican could not own it—because of PUHCA.

Another example: Last summer we purchased the Northern Natural Gas pipeline system from Dynegy. This former Enron subsidiary is now on sound financial footing and its employees once again have job security. In contrast, Enron's Portland General electric utility remains subject to bankruptcy proceedings, and no qualified buyer has stepped forward to own PGE. Enron, PGE, even the bankruptcy court, have all encouraged MidAmerican to bid on PGE. Under PUHCA, we can't.

Leaving aside for a moment the fact that Enron caused its own problems with its irresponsible and, at times, outright illegal behavior, there is a larger systemic issue here. One of the biggest problems in the market is that when Congress chose in 1992 to expose electric utilities to competition, it provided no means for assets to be reallocated when a company does poorly in the competitive environment.

Federal and state regulators have expansive authority to ring fence regulated utility assets to insulate them from bad investment outcomes from parent companies or competitive affiliates. Long-term, however, you don't want a utility operating under a parent that cannot maintain healthy finances. You can't just leave the walking wounded out there, but that's what current law does. Once PUHCA is repealed, it is important to note that utility mergers and major transactions will still be subject to FERC, state regulatory and DOJ or FTC approval to ensure they are consistent with the public interest.

Second, make modest changes to the tax code to encourage the structural separation of transmission and generation assets and encourage new investment in infrastructure.

The provisions on separating transmission from generation enjoy broad support from industry stakeholders as necessary to facilitate the formation of RTOs. FERC Chairman Pat Wood has testified on a number of occasions that this is one of his highest priorities in any energy bill that Congress considers. While this provision carries a budget scoring "cost," there is no real world cost to making this change in the tax code.

Companies simply will not take a 30 percent tax hit on selling their transmission assets, so there is no real revenue to be lost by making this change. The main issue is whether companies are forced to structure sub-optimal transactions to avoid a taxable event or whether the law can be changed to accommodate a straightforward spin-off.

Another element of the tax package should include incentives for socially beneficial energy infrastructure investments. Among the provisions that should be considered are expanding the production tax credit to all renewable resources, accelerating depreciation for investments in new transmission and new transmission technologies, and accelerating depreciation for new investments in pollution control, repowerings, and high-efficiency technologies.

Last year, the Senate passed a bipartisan package of tax provisions related to the electric and gas industries that enjoyed broad support. These provisions were not highly controversial and would have encouraged new investment in electric transmission and renewable energy. Like PUHCA, these tax issues have been around for years, enjoy broad support, and would send a clear positive message to Wall Street.

Also, while the President's proposal on eliminating the double taxation of dividends is more of a macro issue and would not have a major direct impact on MidAmerican because we are a privately-held company, the overwhelming majority of electric and gas companies are dividend payers, and enacting the President's proposal would broadly benefit the industry.

Third, enact bankruptcy reform to help reduce counter-party risk associated with energy markets. I believe the days of expecting energy trading to be a huge profit center for a large number of companies are probably over. At MidAmerican, we have always thought of trading as a way to hedge risk, not as the means to generate asset-free profits.

However, there is a critical role for energy trading in the marketplace as a whole. Efficient wholesale energy markets depend on a liquid trading sector to help match buyers and sellers. While I understand that bankruptcy reform has been derailed over somewhat extraneous issues in recent years, the element that is important to the energy industry is allowing for "cross-product netting." This provides counterparties with the assurance that all transactions between two parties can be safely enforced under a Master Netting Agreement.

In the earliest stages of the Enron meltdown, I ordered all of our business units at MidAmerican to review their levels of counter-party risk and take immediate actions to avoid exposure to potentially insolvent parties. For individual companies, that's a prudent course of action. The downside of hundreds of companies each moving to reduce counter-party exposure is that, in the aggregate, transaction costs are increased and markets become less liquid. Clarifying these provisions is a cost-free action that Congress can take to get energy markets moving in the right direction again.

Fourth, streamline the siting of transmission infrastructure to facilitate new investment and enhance reliability.

For several years, proposals to give FERC greater authority over the siting of interstate transmission lines have languished in Congress. It may well be the case that, at this time, this is simply a bridge too far. Anything you can do here would be a step in the right direction. Demands on the transmission system continue to soar while investment levels are flat or declining. A major cause of this is Wall Street's fear that a major interstate transmission project can be a black hole of company time, money and focus. There are important steps that Congress can take that are less controversial than interstate siting authority, such as requiring the establishment of joint federal-state siting boards and streamlining federal agency processes for siting transmission across federal lands.

Finally, I have serious reservations about legislating on FERC's Standard Market Design proposal. SMD is neither the regulatory Frankenstein nor a laissez-faire Dracula that opponents have painted. Reasonable people can differ over exactly what market design rules should be, but attempting to legislate them will most likely increase uncertainty in the markets.

Policymakers need to study successfully working electricity markets to determine how best to avoid the next California crisis. As I discussed earlier, a significant factor is creating incentives for new investment and infrastructure. A second element is applying lessons learned in well-functioning markets to those that have evident structural flaws. A third needed component is to smooth out the seams between regional markets to allow power to flow more freely to demand. I am concerned that even if Congress could arrive at a conceptual agreement on how to address issues related to SMD, writing that agreement into legislative language could be next to impossible. Moreover, as markets develop, if a provision that was good policy when enacted needs to be changed down the road, we are all well aware how difficult making even the most common sense changes in the law can be.

Our electric and gas systems can function under either a competitive or regulated cost-of-service model, but the existing "one foot in the boat, one foot on the dock" formula has been a recipe for disaster. The most likely outcome of Congress legislating on the SMD would be to perpetuate this untenable situation.

In summary, Congress' first goal this year should be to promote electricity investment. You may not be able to resolve every policy issue facing the industry today, but the items outlined above must be addressed to help get this industry, and our economy, moving forward again.

Thank you.

Senator THOMAS. Okay. Thank you, sir. I am interested in your comments particularly. You have spent some time in Wyoming, I understand.

Mr. SOKOL. Yes, sir, in Jackson.

Senator THOMAS. Good.

Let me just ask a question and we will take maybe 5 minutes each on those. If PUHCA is eliminated, what—do you think that there are consumers and investors who will be protected? That is the reason it is there, to keep funny things from happening between outside investors. What is your reaction to that?

Mr. SOKOL. Well, PUHCA was enacted in 1935. And it had, I think, a very real reason to exist back at that time, when less than half of the United States even had utility regulation. And it dealt with some issues, corporate raiding that were taking place. Today we have a very different situation. Every State in the United States has a very effective public utility commission or public service commission. The industry is clearly regulated, both very effectively at the State level but also through the Federal Energy Regulatory Commission, the SEC, the Justice Department, as well.

But what is really important to recognize is that PUHCA today really does not protect consumers. And in fact, the Oregon Public Utility Commission recently filed documents with the SEC saying that PUHCA will in fact harm the consumers in the State of Oregon, because it will not allow them to operate that utility in a way that they believe is in the best interest of consumers.

What has happened over the last 65 years with PUHCA is that today we have some 5,000 very capable State regulatory employees, who are in fact protecting these assets. And yet people think that the mirage of 24 employees at the Securities and Exchange Commission in the PUHCA section are in fact doing that job. The reality is the States are doing it. But what PUHCA is doing is keeping, in our case, a AAA-rated company from investing in this sector.

Senator THOMAS. The States really do not have any authority over some kind of merger between companies that are in interstate commerce, right, merchant companies?

Mr. SOKOL. They do in regard to how those assets—as an example, when we purchased MidAmerican Energy, the utility in Iowa, they placed, the State of Iowa placed, restrictions on the capital structure, rate-making procedures, and every other element of that acquisition, or they would not let it go forward. Senator THOMAS. What if the company that is purchased was in another State?

Mr. SOKOL. I am not aware of any State that does not impose capital restriction requirements, et cetera, on their utilities in an acquisition.

Senator THOMAS. Okay. You mentioned, sir, that the committee and the Congress should do something. Specifically, what do you think are the couple most important things the Congress could do?

Mr. SVANDA. Still on PUHCA reform or-

Senator THOMAS. No, just in general.

Mr. SVANDA. Okay. I believe that the list of items that I mentioned to incent investment would be the number one priority. I agree with nearly all of the comments made by the other people on your panel with regard to that being the highest priority. And it would certainly be where I would focus. And the list of items that would incent investment would be the first item.

I think with regard to PUHCA reform, certainly reform is appropriate, so that investment is not deterred where it is appropriate. But as I mentioned in my oral comments, it needs to be done in a way that is sensitive to the lessons learned over the last couple of years, open access to information, assuring that States and other market monitoring entities have full access to all of the information that they need to make good assessments.

Senator THOMAS. If one of the reasons for the difficulty is access to transmission, is being able to move the power to the markets and so on, it does not look like incentives to invest would by itself be the answer.

Mr. SVANDA. I think that incentives to invest across the board in a balanced way that focuses on the need for transmission in many areas of the country, as documented in the Department of Energy's report on transmission, the \$55 billion plus of investment that is necessary today, and that does not take into account economic growth when the economy turns and begins to move and those kinds of things, as well as balanced investment over into additional generating facilities where there are load pockets. And to enhance the technologies utilization of diversified fuel mix across the country are also important components.

Senator THOMAS. So the idea of incentives that could be provided here need to be aimed at different things, need to be aimed, for instance, at increased capacity and transmission, interstate transmission. So just the idea of depreciation, for example, would not by itself point where we want to go, would it?

Mr. SVANDA. I think that—no. I agree with you, Senator, that just across the board depreciation relief would not focus on those other national objectives that are really important that we worked to accomplish.

Senator THOMAS. So we need pretty much a policy and then follow it up with incentives to initiate and implement that policy.

Mr. SVANDA. That would be my suggestion, yes.

Senator THOMAS. I see.

Senator.

Senator BINGAMAN. Thank you very much.

The main regulatory activity that is going on right now affecting this industry in a very direct way is the standard market design proposal that has come out of the FERC. And I understand they have been taking comments. They are going to issue a white paper in April.

I think one theme that I heard from almost all of you, maybe all of you, is the need for more certainty in the regulatory environment in order to restore investor confidence. That is one of the justifications offered by Pat Wood at FERC for propounding the standard market design: that it will give people some certainty and consistency about what the rules are.

And, I would just ask maybe each of you to comment as to whether you believe that, as a general matter, FERC is correct to be trying to enact or put in place a standard market design like this and whether it will achieve that and benefit the industry as a result.

Mr. Sokol.

Mr. SOKOL. Senator, let me say that I think a standard market design that is developed through the FERC in cooperation with the States is a long term and an essential element to the infrastructure of this country on the energy side. If we had a comment for FERC, it would be to do it in a very cooperative fashion with the States, because there are certainly State issues that have to be coordinated effectively. But the reality is the transmission system in this country is unlikely to get the adequate investment that it needs without the limitations of PUHCA being dealt with and a set of rules established that both the States and the Federal agencies are in coordination with.

Senator BINGAMAN. Do you believe both are important things to try to accomplish, the repeal of PUHCA and some adoption of some standardized rules and regulations?

Mr. SOKOL. I believe they are. I would caution only that with respect—that that should be done in a regulatory framework versus a legislative. Because whatever those rules are that the States and FERC agree with are going to change over the next 20 and 30 years. And legislation is very difficult to modify, where properly executed regulation, I think, is, in our view, the more appropriate place to do it.

Senator BINGAMAN. Ms. Smith, did you have a point of view on this?

Ms. SMITH. Well, I basically agree with the other comments that the market would benefit from a comprehensive market design and more regulatory certainty. I think particularly in the sense that it might increase investment in transmission, which is really where the acute investment need is right now. You know, overlooking overall standard market design from a credit perspective, there probably would be some segments of the industry that might benefit and some that may, you know, suffer some losses. But overall, I do not think we see that standard market design in itself is a major credit driver for any of the companies in the industry right now.

So I think overall it is a benefit, but we do not see it as a driver in credit.

Senator BINGAMAN. Okay. Mr. Cassidy. Mr. CASSIDY. Senator, I was careful in my testimony not to use those three little words, standard market design. But I did say that number one on my list is enabling FERC to put in place well-designed regional markets that have the characteristics that I outlined. And I do think that would go a tremendously long way towards shoring up confidence in the future of the industry.

A number of my colleagues on the panel have talked about transmission investment. I just note that one of the characteristics of a well-designed regional market that I mentioned is a real-time spot market with congestion management. And what that congestion management piece means is that price signals are sent that tell investors where to make investments in the transmission system, so that a well functioning market provides its own incentives to build new transmission.

Senator BINGAMAN. Very good.

Mr. Silverstein.

Mr. SILVERSTEIN. Yes. Notwithstanding everything else, I think part of the problems in the competitive model was seen that we did not attack transmission first and develop a strong and liquid transmission grid by which we have some idea of how electricity, which is a very complicated commodity, moves and understands the costs of moving it. And I think we went around this backwards, quite frankly, by opening up generation before we had approached the transmission problem.

I really think an independent transmission network, regional as it starts out, is critical to get the most efficient structure that we can have and, as I said in my testimony, under any model that we adopt.

I think a real issue that concerns me is the current conflict between States and Federal Government, because there is a lot of self-interest involved. And for some generation plans, that would benefit. Others would be penalized, when the transmission system is operating on a most efficient way. And so there are a lot of conflicts that are going on. But for the good of the overall country, a regional transmission system.

As far as investment, there was some reference to that. I think transmission should be our first focus. It really needs to be. There is a fair amount of generation around right now. Certain pockets need generation. But we have to get this transmission issue right in order to have everything else be supported. And a final comment, if I could, on PUHCA. I do not know if full

And a final comment, if I could, on PUHCA. I do not know if full repeal is what is necessary. But one aspect of PUHCA, which is indicative of the problem, is, on one hand two companies that are not interconnected are restricted from merging by PUHCA requirements, which is needed for efficiency.

On the other hand, market power is a restriction of two companies that are in the same markets of combining. And so there is a conflict between what we need to do and what PUHCA says we cannot do. And there is a court case on the AEP situation that exemplifies that. So I think we have to look at PUHCA and what it is restricting and solve for the issues.

I think when we start with this, what are we trying to solve for? And we have to have an idea of where we are going before we start doing piecemeal actions, in my view. Senator BINGAMAN. Mr. Svanda.

Mr. SVANDA. Senator, as you might imagine, the State regulators have spent a lot of time thinking and working on this issue. And I need to first of all say that I need to give you a slightly schizophrenic answer. In Michigan, we have long been supporters of a move toward a standardized market. And we think the lessons of making all the railroad tracks the same gauge across the country is applicable here. We think that there are electronic versions of that same innovative approach of standardization, and that it would be beneficial to the electricity marketplace as well.

We, Michigan, exist in a region that has generally taken that approach. And we point to Michigan and Indiana as a great example of how States with very different perspectives on retail open access come together on the issue of wholesale open access. And Indiana presents a State that has firmly committed to not moving to retail restructuring. Michigan has firmly committed to retail restructuring. And yet the two States are hand in glove on the issue of open access and standard market design development. So we are very supportive in our region and join other very good regions of the country in that support.

Now I become schizophrenic because I am also here as the president of our national association. And the regions, for a lot of different reasons, and I have developed a pretty exhaustive list of why the regions of the country are different, how they are different, the fact that the regions did grow up with different institutions and different economic mixes, and a whole listing, as I said, of differentiators across the regions. And so for that reason, as NARUC's president, I need to let you know that NARUC has not taken a position with regard to standard market design, that there are regions of the country and States in the country that are very supportive. And equally, there are States and regions that are not supportive.

And so as president, as I have tried to blend those two positions on the spectrum, I guess what I have become is an advocate of regional differentiation, that there are real ways to accommodate free wholesale markets and open access to the transmission system and still to respect the regional differences and the State differences that exist in the country.

Senator BINGAMAN. Thank you very much.

Senator THOMAS. Thank you.

Let me follow up just a little bit on that. In order to do it regionally, there have to be functional RTOs I believe. And that is not necessarily the case yet. How do you provide an incentive for that?

Mr. SVANDA. I think functional RTOs or some equivalent in the Western States, for example, Senator, there have been great efforts historically from governors of that region and other political leaders, as well as the institutions themselves, to establish many of the mechanisms that we today recognize are critical parts of RTOs.

mechanisms that we today recognize are critical parts of RTOs. Now there are also components of RTO development that need work across the country. And I think there is a real recognition, for example, with regard to market monitoring, that it is an area where States and RTOs and the FERC and others share a common interest in assuring the strong development market monitoring mechanisms. So it is an area where we can all work, in spite of the fact that in the Midwest we have the Midwest ISO and PJM working to be the RTO in the West.

There are different structures in the South and Southeast. There are different structures still in the Northeast corner of the country. In fact, just a couple of days ago, the Northeast initiated their version of a standard market design system across the northeastern States.

Senator THOMAS. Well, that is one of the reasons we had problems trying to put something together last year, is the different regions that had the same industries felt quite differently about the solution. And then you throw into that particularly the Bonnevilles and the public powers, who did not want to integrate particularly with their transmission into the investor owned. Then you have a real standoff. And we need to find a way to resolve that.

Mr. SVANDA. And, Senator, that is why I suggest that respect be given to those regional differences in the institutions that work well for them.

Senator THOMAS. Exactly.

Mr. SVANDA. I do not see that as a fatal impediment to the development of a standard market design. I have long said that. And I believe and I am hoping that FERC white paper in April will also reflect some of that type of thinking. Senator THOMAS. There has to be some independence.

Mr. SILVERSTEIN. You talked quite a bit about investment in the transmission. Who do you—who should have the ownership of that? I mean, transmissions have traditionally been put into place by the power providers and the generators who are not excited about having other people on there. And if you have a third-party operator,

where do you get the investment? How does that work? Mr. SILVERSTEIN. Well, I think right now a transmission type of investment is perceived as a very attractive investment for the capital that is out there. The capital that Mr. Sokol suggests is out there, which it probably is. And Suzanne talked about there is capital coming into the industry.

They want to invest in stable infrastructure investments. KKR just invested in a transmission line in Michigan. In this very uncertain and risk adverse time, that is one of the investments they are willing to invest in. What we need is some certainty.

Senator THOMAS. Why have we not investment in it then, if it is so attractive?

Mr. SILVERSTEIN. Well, it is just beginning. One of the key issues on the sale price is the tax issue. There is a tax exposure to the seller. There is tax leakage. And they wanted-there are some suggestions about some tax modifications to give them an incentive. FERC just provided incentives to move transmission into independent hands on a return equity basis. And I think this is going to start to move the process along.

You know, this is an evolutionary process. But I do believe there is capital available for transmission investment. In my view, transmission looks like a lot like what the traditional integrated utility model looked like years ago, when it was considered a very stable, low risk investment.

So I think the capital is there. We just need to set policy incentives.

Senator THOMAS. My question is: Who is going to be the thirdparty operator?

Mr. SILVERSTEIN. Well, the third-party operator is probably a utility type or some other type of management that is totally independent of either the generation or the distribution. There are plenty of engineers and companies that will operate transmission. We have to demonstrate that they are capable of operating transmission. I do not think that is really the issue. The issue—to me, RTOs were always an interim step to the ultimate goal of having the totally independently owned and operated transmission system. I believe if we were setting up this model from scratch, that is the way it would be. The problem is this model is a legacy model that we are trying to transition to. And that is what is creating all the problems. I do not think there is an issue of—

Senator THOMAS. But the fact is, and the reliability council indicates, that for the next ten years there is only projected of 10,000 miles of additional transmission. And we have 160,000 miles. That is not likely to keep up. I mean, there is no indication that what you are talking about as investment is taking place.

Mr. SILVERSTEIN. Well, I do not think it is because the capital is not there. I think there are impediments on building transmission. The focus has been on generation. I do not think that looking at what the plan is indicative of what the reality is. I think transmission capital is available. This is—the capital is not coming into the industry now to invest in merchant.

Senator THOMAS. But what happened, as you know, is the generators have been now gas fired, small generators built close to the market to avoid the transmission question. Were we in the coal business, we would love to transmit electricity. But we have not had an opportunity to have transmission.

Mr. SILVERSTEIN. I can respond to that in that some of that generation that you said was built close to the market is not close to the market. That undisciplined capital built generation in a lot of places that are not going to access markets because the transmission constraints are there and are not available.

Senator THOMAS. But they are small. They are 100 megawatts or something.

Mr. SILVERSTEIN. I mean, but I just think the impediments of not being able to get transmission sited, as you know, has really been the major constraint.

Senator THOMAS. Right.

Mr. SILVERSTEIN. When you look at what you are talking about, constraints, we have to look at all the solutions, whether it is transmission, generation, distributed generation, conservation. In my testimony, that is why I talk about all those options have to be looked at to solve the problems. In not every case transmission is the answer. In not every case generation is the answer. There should be multiple solutions to every problem. And it is a decision that we have to make as to what that solution is, but not on a broad scale individually.

Senator THOMAS. Okay. Thank you.

Senator.

Senator BINGAMAN. One of the things we encountered when the crisis hit in California and the west coast was the buyers of power

were having to essentially sign on to very high-priced, long-term contracts, or did sign on to high-priced contracts. And some of them are still trying to figure out how to get out of those.

Now that power is cheap, do you have buyers going into the market, and are they able, under these circumstances, to lock in longterm supplies of power at low prices? I mean, that is something I would think would be happening and would be a good thing from the point of view of consumers and companies that need this electricity.

Mr. Cassidy, is this happening, or am I—it just seems to me there is some logic in thinking it would.

Mr. CASSIDY. I agree with you, Senator, that there is logic to thinking that it would. And I would tell you that those of us in the generation and marketing sector are more than willing to enter into long-term contracts, because that provides us a level of financial stability that we would not otherwise have.

I would say that on the consuming side, that we have seen less of that than I would have expected. And I think it may have to do with issues concerning just being gun shy from things that have happened in the market in the past.

Senator BINGAMAN. Any of the others have any comments?

Mr. Sokol.

Mr. SOKOL. Yes. What you are saying would make perfect sense and one would think it would happen. But in an industry where there is a lot of breakage and there are a lot of uncertain rules, what you saw happening up until California got into trouble, no one wanted to enter into any contracts. We had power available to sell into California prior to 2000. And the utilities would not even talk to you.

The reason was prices were low. They thought they would stay low. The supply-demand imbalance occurred. People wanted to rush to make sure they would have adequate supplies. So they signed long-time contracts. A natural response occurred. More generation came on line. Prices came down. And today you do not see them signing long-term contracts. It is—there are a lot of perverse incentives out there that are creating some pretty odd situations.

But to speak to your question at the introduction, we do have, I think, an excess of supply of generation in most parts of the country today, in some parts a significant oversupply. But there is no investment going on. And there are dozens of plants that have been stopped mid-construction. One that I am aware of, a thousand megawatt plant, was stopped 70 percent completed.

So there is a real shifting set of dynamics. And if the economy does pick up steam and utilization of energy goes up, coupled with natural gas prices and the reality of the natural gas industry today, it will not very long in the future that you will be holding hearings on why are electricity prices so high again.

Senator BINGAMAN. That has been a concern. And I tried to sort of allude to that in my opening comment about us having a hearing on the supply situation because when you look at the price of natural gas, where it is today, and you look at the lack of rainfall in the Northwest, and the lack of hydroelectric power coming out of the Northwest, it sounds like the same set of circumstances are coming into place that caused some of the crisis on the west coast a couple of years ago.

I mean, I think what we are seeing here is you are not seeing people going ahead and signing on to long-term contracts as purchasers. It is a little like the way we deal with the SPRO around here. There is a big push to fill the Strategic Petroleum Reserve once the price the oil gets high, because people realize that this is a valued commodity and one we need to have a bunch of. And when the price drops down to \$10 or \$12, as it did a few years ago, you cannot get anybody interested in filling the SPRO because they assume it is not a big deal; there is plenty of it around.

Mr. Silverstein, did you have a comment? Mr. SILVERSTEIN. I think it is three things. And one is human behavior, which you just described, that it seems like prices have to start going up before you incentivize people or get them to respond to long-term contracts. It happens in mortgages. When interest rates go up, there is a rush to do mortgages.

I think it is the general uncertainty of the environment. And I think it is the credit quality concerns on the part of providers of the power, that there were contracts that were signed with providers in these last couple years that had to be broken, because they were not truly supported by economic and financial strength behind these companies.

So we have this uncertainty and this risk adverse. What we are starting to see, because the gas prices go up pretty substantially here in the last three months or so, and if that continues, I think you will see buyers of power or purchasers of power starting to push towards signing longer term contracts to lock in the low cost supply.

Senator BINGAMAN. Mr. Svanda, did you have a comment?

Mr. SVANDA. I did, Senator. And your interest in the description of long-term contracts is exactly what we are experiencing in Michigan. We have had, over the past couple of years, more than a couple thousand megawatts of new merchant plant development. And we have additional probably 3,000 megawatts of merchant plant coming on line fairly shortly, including some very significant plants up to 1,100 megawatt in size generating plants. And they are based on long-term bilateral contracts and arrangements with third parties for marketing and those kinds of things.

So it, again, is one of those areas where, I think if you build the crutch kind of harmonized regulatory climate from all of the parties involved, that you can incent investment and encourage it to move forward.

I think that ties into the question that you started initially with, and that was are we building enough on the supply side. And I do think that work needs to be done there. As I mentioned in my comments, the demand for electricity is down considerably with the slowed down economy. We are not testing our system at all.

If we were in fact experiencing a robust economy today, we would be wondering why we had not taken advantage of the time available to us to invest and build transmission and generation support and environmentally sensitive and diversified fuel sources to support that vibrant economy.

Senator BINGAMAN. Thank you very much.

Senator THOMAS. Welcome, Senator Johnson. Would you care to make a statement or ask questions?

Senator JOHNSON. Thank you, Mr. Chairman. I will submit a statement. I apologize for being late to this hearing. I, as so many members do, I have just a lot of things going on simultaneously here. And I will submit a statement for the record.

Senator THOMAS. It will be put in the record.

[The prepared statement of Senator Johnson follows:]

PREPARED STATEMENT OF HON. TIM. JOHNSON, U.S. SENATOR FROM SOUTH DAKOTA

Mr. Chairman, thank you for holding this important hearing today.

This is a difficult and critical time for electricity providers and the energy industry. Our economy and the nation is directly reliant on a healthy electricity system. Our providers do a great job of keeping the country wired and bringing power where is it is needed. Providing affordable and reliable power to consumers has been one of the biggest reasons that the nation has progressed in the last century. In my part of the country, the electrification of rural areas in the early to mid-1900s literally brought the modern world to these spots and enabled states like South Dakota to grow and prosper.

However, it is clear that this is becoming far more difficult. The demand for electricity is growing rapidly, faster than most providers can keep up with it. The blackouts in California, the collapse of Enron, some failed investments and the slow economy have adversely affected utilities and other electricity providers. Moreover, the entire energy system is strained. The increasing volatility in gasoline and diesel prices, the growing tension in the world from the terrorist attacks, and the possibility of war with Iraq have affected all of us. It is clear that we need to bring stability and more certainty to the situation so that we don't face shortages and blackouts in the future. Our economy depends on it.

in the future. Our economy depends on it. The main issue facing utilities and other electricity providers is the lack of access to capital. Many are reluctant to invest when there is so much uncertainty in the future. Perhaps nowhere is this more acute than in the transmission system. In many parts of the country, the transmission system is balkanized and literally maxed out. The constraints cause more pressure and can lead to blackouts and people not receiving the power they need. Improving the ability of the transmission system to move power from one area to the next is the key to making the system improve with the demands of the 20th century. We need to search for ways to encourage more building of transmission, and for the creation of innovative technologies to move power. As demand grows, so does the need for a modern system to handle the nation's needs.

Congress has looked at many options to aid the system and more will likely be considered as part of an energy bill or as stand-alone bills. These are very difficult and complex problems that we are addressing. It is important that all parties and regions participate in the discussion and work toward solutions that benefit everyone. The nation depends on a stable and modern electricity system and everyone must work together to maintain that goal.

Senator JOHNSON. Let me ask just briefly, however, to Mr. Sokol, I noticed in your full investment agenda that you included extension and expansion of the renewable energy tax credits. Is that something that is of interest only to the renewable side of your business, or does your utility see value in that, also?

Mr. SOKOL. Thank you, Senator. Our utility does see value in that. To be fair and honest, it predominantly driven by the States that we operate in as a request of the magnitude, because currently that production will cost a premium. But we do think that, as a broader analysis of the generation mix, it makes sense to have as much renewable as is reasonably affordable.

Senator JOHNSON. Let me ask Mr. Sokol or any other members of the panel who would be so inclined, a concern I have about attracting more investment into transmission systems, how can we assist with that? And also the connected question of whether the lack of investment affects the ability to create new technologies for transmission, and whether that is in fact one of the consequences of the lack of our inability to attract capital right now.

Mr. SOKOL. I think just to start a comment, the chairman of NARUC, who is here, made a comment earlier that one way is, and it is a great term, harmonizing State and Federal regulation is probably the most significant issue for transmission investment.

Secondly would be an issue that I sound like a broken record on, but PUHCA limitations, which is you have to allow people to own more than 4.9 percent of something, or you will not find the level of investment that I think you are looking for.

But the harmonization of State and Federal rules, whether that is a cooperative or regional SMD or some other process, is essential, I think, for this industry.

Senator JOHNSON. Any other comment on that issue?

Ms. SMITH. I would just say that some of the incentives that have been structured recently with independent ownership of transmission are, from a credit perspective, are good, because they do offer predictable, reliable returns for transmission owners and probably would be a good incentive for investment. A comment has been made already that the constraints for investment is probably not capital constraint. And I agree with that. It is not a shortage of capital. It is really a question of siting is one of the bigger issues.

Senator JOHNSON. Mr. Silverstein.

Mr. SILVERSTEIN. I just think independent transmission, if it is in the hands of independents, there is a better shot of those owners being in different technological achievement and investment. Because they are in the business to make that system as efficient as possible, indifferent to what it does to the generation side of the business. And that is why I believe under any model transmission is better off in independent hands.

Mr. SVANDA. Senator, I would just speak to your interest in technological development and investment. And in earlier comments I did make the claim that that is one of the most important things that we could be doing, that we do have, as a national grid, a fairly dumb system based on mechanical switching systems out of our industrial past, and that we do need to be upgrading. We need to make that system smart for reliability and homeland security and a lot of other reasons. And there is not any better way than investing in technology.

There also is not any better way to take advantage or rights-ofway and other constrained land areas than by intensifying the utilization. And we can only do that through technological advance.

Senator JOHNSON. Right.

Thank you, Mr. Chairman.

Senator THOMAS. Thank you, sir.

Commissioner, let me say that some utilities have described the dilemma they face in satisfying State regulators and the Federal Regulatory Commission. And this tends to undermine in their view some of the costs of recovery. The Supreme Court, as you know, is hearing a case of Louisiana Public Service Commission. To what extent do you think the State rate makers authority has to do with financial distress and resistence to investing?

Mr. SVANDA. Well, certainly State regulators—and as I indicated with your earlier comment—can contribute significantly to harmonizing the total environment that we operate under. We can—we can ask the State regulators across the country to meaningfully ensure that they are contributing to stability and an investor climate that is appropriate. We cannot predict how they will respond as individual commissioners or as individual States to that appeal.

But the issue has been elevated for every State commissioner across the country in terms of the importance of representing a stable and reliable environment for investment. One of the fortunate experiences that we, as State regulators, have is that we do view the capital markets from a few perspectives, including this one and telecommunications. And we see some real similarities in terms of how investment patterns have developed recently. And I think we are serious across the country.

Senator THOMAS. I guess my question is, have they been part of the obstacle to moving forward? Have regulators been part of the problem?

Mr. SVANDA. In truth, yes, regulators can be part of the problem. They can also be part of the solution. It depends on how they approach their particular job.

Senator THOMAS. Okay. Good.

Mr. SOKOL. If we get rid of PUHCA, PURPA, do we have sufficient resources and organizations to outlaw the practice of round trip trading, false information, which is something that apparently has been happening, at least in the west coast system? Do we have adequate price and transmission visibility, openness? What do you think?

Mr. SOKOL. Well, I think there are two different questions there. In fairness, I would argue, Mr. Chairman, that PUHCA has nothing to do with any of those items. And I think in truth it does not.

I would respond to an earlier comment or question that you had asked. Customer and consumer protections, those that do exist in PUHCA, from our standpoint and I think from the industry's standpoint, should be kept, whether they are kept as a revised PUHCA or in some other area. Because if the State regulators have access to books and records and proper availability of information, I think in the 14 States we operate in, they do a very effective job of regulating.

As far as round trip trading and that, as a company, we think that the derivatives industry and the energy sector should be regulated. Trading should be regulated, just as the financial trading industry is. I think a great deal of the chicanery and nonsense and illegality that took place would have been avoided if, in fact, there had been both oversight and the fear of retribution or penalty.

So—but PUHCA certainly did not stop Enron from doing what they were doing or we are doing or a number of other players. And—

Senator THOMAS. Well, but the question is: If you have investment that is around different places and so on, PUHCA, you have some potential to do some things that are unusual.

Mr. SOKOL. True, although I would point out that of the Enron assets that have any remaining value, they were those assets that were protected by either State or Federal regulation, which are their pipelines or their utilities. Senator THOMAS. Ms. Smith, I think you indicated that you thought more regulation was better than the marketplace. Is that what—

Ms. SMITH. Well, I was making the point that for credit quality, where regulation provides a predictable return, that is good for credit. But in terms of whether more regulation is necessary, you know, I think it would be in many cases better to have more for——

Senator THOMAS. Well, that, of course, is—this is the whole situation as to where we are. We came from a regulated industry, totally regulated industry. And now we are finding one where generation, at least, is no longer regulated. And we are going into a marketplace. And so do we not have to deal? I think if we want to be in a marketplace, which I suppose most of us do, then do we not have to deal with that?

Ms. SMITH. Absolutely. I think you have to look at having clear market rules, probably better oversight of the regulatory system. I mean, what we are saying is that the marketing and trading function, in particular, needs to be overhauled and would benefit from better oversight. That is one part of it. There are other, you know, overhaul issues, I think, that are related to that. But oversight is one of them.

Senator THOMAS. Someone might suggest that, frankly, we do not have much of a policy, number one, which we should have. And number two, our currently regulatory thing has not kept pace with the change in the industry.

Ms. SMITH. Right.

Senator THOMAS. We seem to be resistant to doing that, even though the changes have taken place to a large extent.

Ms. SMITH. We have also noted that, you know, regulators generally have the jurisdiction and the authority to take actions, particularly on a State level. But they have been reluctant to do that. You have situations, like in California and Nevada, where I do not think—where the regulators could certainly have acted, but they did not. Or similarly in the State of Minnesota, with the situation with Excel Energy and NRG, you know, maybe now the regulators are looking at trying to protect the utility from the activities of its unregulated business component. But a crisis really had to occur before that took place.

So there is a question of whether the regulation is preemptive or reactionary. I think more preemptive regulation would benefit credit quality as well.

Senator THOMAS. Most of us want a minimum of regulation, but it has to be enough to do the job. And we certainly come from an industry where the generators and their distribution systems were all integrated. And there was much less regulatory, intrastate regulatory, things that had to happen.

Senator.

Senator BINGAMAN. Yes. Let me just question on this. Mr. Sokol, you have indicated that were it not for the existence of PUHCA, you would be perhaps interested in looking at purchase or acquisition of the Portland General Electric Company, or at least that is a possibility. So PUHCA is keeping you from doing that. And I understand your point of view, and I have agreed with you that PUHCA has outlived its usefulness in that regard.

But those who oppose the repeal of PUHCA say that without PUHCA Enron would not have just owned PGE, Enron would have owned 10 or 20 utilities around the country. These guys were highrollers. They had a stock price that allowed them to buy anything they wanted, essentially. So what do you believe we would have to put in place to properly guard against that circumstance of a company coming in, a company that did not have the financial soundness to be doing that, and wind up with a whole lot more instress utilities at the end of things than we have under what happened this time?

Mr. SOKOL. Well, I think two things. First of all, Enron was actually trying to sell Portland General for 2 years prior to them going bankrupt. And the reality was they were trying to leave an asset heavy industry. But the reason Portland General still exists today as a utility and has its own financial capability is the fact that the State ring fenced Portland General from the rest of Enron and required that it stay that way.

None of the States that we operate in would handle that any differently. I mean, they required—and in fact the State of Iowa, even with Berkshire as the 80 percent economic owner, required the same thing, that that utilities capital structure be rigidly established.

I think that between the Justice Department and the FTC under the same provisions that any other industry would consolidate under, which would protect for market manipulation or excessive market power, you would have those today in the United States as we have for every other industry. So from the standpoint of a company acquiring two or three, I think the protections, other than PUHCA are the existing Federal requirements for antitrust and then State regulatory body oversight for that same issue.

Senator BINGAMAN. You do not think FERC should have additional authority to oversee and intervene in case of mergers and acquisitions?

Mr. SOKOL. Our company's policy is we do not have a problem with FERC having that. We would be willing to support that. Having reviewed what the other Federal agencies have already as a right, it would seem duplicative. But from our perspective, it does not matter.

Senator BINGAMAN. Okay. I will stop with that, Mr. Chairman. Thank you.

Senator THOMAS. Senator Johnson, any more questions?

Senator Alexander.

Let me just finish with one here, Ms. Smith. We do not want to let you get away too easy here. The credit rating for many energy companies has been reduced, some below the investment grade. Agencies have been accused of reactionary downgrading and changing valuation criteria. How do you react to that?

Ms. SMITH. Well, I think there are various reasons why the credit decline has occurred. And, you know, they really have very little or nothing to do with the actions of Standard and Poor's directly or any credit rating company. The presence of ratings triggers, in particular, has been a problem and caused acceleration in credit downgrades, because the companies are particularly vulnerable, op-

erating at a low investment grade ratings triggers. Because of liquidity, really severe liquidity, issues, we have taken a look at, you know, at the ratings very carefully. Liquidity has become a very important component of ratings. It always has been. But I guess our emphasis has changed a little bit.

But we have not changed in any fundamental way our criteria for evaluating companies. Criteria is always evolving. But it has not really caused any slide in creditworthiness as it applies to a particular industry or the electricity industry.

So I think that the comments that we have been reactionary are misplaced, in that we are responding to really a serious decline in industry fundamentals and financing practices that have really caused the decline, more than any action that rating companies have taken.

Senator THOMAS. Thank you.

I am ready to close, Senator, if you have nothing more.

Thank you all for being here. And I hope you will stay with us during the policy efforts and have some input as to how we can work on making these problems work out a little better. I think that is our challenge.

Thank you all for being here.

[Whereupon, at 11:25 a.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

MIDAMERICAN ENERGY HOLDINGS CO., Omaha, NE, March 18, 2003.

Hon. PETE DOMENICI,

Chairman, Senate Energy and Natural Resources Committee, Dirksen Senate Office Building, Washington, DC.

DEAR SENATOR DOMENICI: In response to your March 5 letter to me, enclosed are my answers to the list of questions that have been submitted for the record in connection with my March 4 testimony before the Senate Energy and Natural Resources Committee regarding financial conditions in the electricity markets.

Please do not hesitate to contact me if you or other members have any additional questions. Once again, I appreciate your giving me the opportunity to discuss my views on these important issues.

Sincerely,

DAVID L. SOKOL, Chairman and CEO.

QUESTIONS SUBMITTED BY SENATOR DOMENICI

Question 1. I would like each of you to explain what you think the primary factors are that have led to the current financial situation in the electricity sector.

Answer. I believe there are four primary factors, in addition to the recessionary economy we are facing:

a. Congress introduced wholesale competition into this sector with passage of the Energy Policy Act of 1992. This competition increased the risk profile and complexity of the industry, thus diminishing the sector's historic position as a safe haven for small investors. However, Congress did not eliminate PUHCA at that time, so it provided no mechanism for large investors who are able to ride out volatility to enter the marketplace or to invest in the market. As a result, individual ownership of utility equity has declined rapidly, often replaced by debt.

b. The failure of Congress, FERC and the states to reach agreement to harmonize the regulatory environment has created a level of uncertainty that has discouraged investment and driven up the cost of debt. Investors won't invest in regulated assets unless they are clear as to how those investments will be recovered. Investors will also hesitate to invest in competitive generation assets if it appears that Congress will turn away from wholesale competition.

c. Many companies made honest investment mistakes, failing to appreciate the cumulative impact of numerous companies pursuing overly aggressive growth strategies at the same time. That resulted in a glut of generation, and since almost all the new generation is gas-fired, the situation may get worse. In addition, a number of companies overpaid for international assets and trading platforms. d. It is difficult to overstate the negative impact on the industry of the Enron col-

d. It is difficult to overstate the negative impact on the industry of the Enron collapse and the revelation of other examples of severe corporate misconduct. These types of situations are by no means unique to our industry, but the fact that Enron was the first and the most high profile company to collapse under its own accounting fictions and excesses has resulted in a disproportionate impact on the electricity and gas industries.

Question 2. To what extent do you think the challenges facing the electric industry are related to the general downturn in the economy?

Answer. Electricity demand is closely tied to GDP growth, trailing GDP growth by about 1% (except for peak demand). Although residential electricity demand has remained relatively consistent over the past few years, there has been an actual decline in electricity use in the industrial sector. The general downturn in the economy has thus undoubtedly contributed to the set of problems caused by the excess supply of generation in some regions, but our weak economy is actually masking the longer term structural problems our industry faces. Infrastructure growth continues to lag far behind load and transactional growth. I share Senator Bingaman's concern that in a few years we may see the conditions that contributed to the Western energy crisis recur.

Question 3. Can you give us some perspective on other industry sectors and whether they are facing challenges similar to those confronting the electricity sector?

Answer. As competition has been introduced into the electricity sector, it has begun to confront the same market risks common to other capital-intensive industries. Like steel, chemicals, paper, and oil and gas, the electricity sector must manage business cycles, supply costs and risks, technological changes, and susceptibility to boom and bust.

The decline in the industry's credit outlook has resulted in part from the beginning of deregulation. Electricity's traditional monopoly status, with a captive base of customers, provided the industry with strong credit quality and easy access to capital markets. The advent of competition has shifted risks to lenders and away from ratepayers. That certainly comes as no surprise, as regulation has always supported credit strength.

Competitive industries, of course, need customers, and that is where the partial deregulation of the electric industry has resulted in challenges that are different from other industries. Regulatory reform in our industry has proceeded more slowly and more narrowly than in other industries. As a result, the factors that support competitive markets still do not broadly exist, as our industry continues to have "one foot in the boat, one foot on the dock." This, in turn, has resulted in redistribution of risks and market distortions that continue to plague our industry. For example, competition generally ends at the wholesale level instead of reaching the retail level. In addition, retail rates in some markets are mandated to drop, thus benefiting consumers while dramatically shifting investment costs from ratepayers to investors and lenders.

Question 4. The credit rating for many energy companies has been reduced, some to below investment grade. The credit rating agencies have been accused of reactionary downgrading and changing valuation criteria. How do you respond to those allegations?

Answer. There may be some degree of overreaction, but overall I believe the agencies are responding responsibly to market realities. Blaming the rating agencies for the industry's problems is more blaming the messenger than acknowledging that many companies made mistakes.

Question 5. Do you thing that developers overestimated the demand?

Answer. Generation developers clearly overestimated demand, and I agree with Mr. Silverstein that the financial community became undisciplined in many cases. In such a high capital industry, it will take years to unwind some of these mistakes.

Question 6. Are the problems now faced by competitive generators due to overbuilding?

Answer. Overbuilding and the lack of regulatory certainty are the two main problems facing competitive generation. We clearly have overcapacity in some regions of the country, and the fact that we haven't settled the regulatory groundwork or made any inroads in increasing transmission infrastructure makes matters worse. Some investors might be willing to acquire significant stakes in generation if the roadmap to large regional transparent markets were more clear. With transmission constraints and regulatory uncertainty, investors can't count on even the long-term value of these assets.

Question 7. Is there an over abundance of generation supply? Is it concentrated in certain regions of the country? How long will it last?

Answer. In the late 1990s, there were regions of the country that needed or were close to needing new capacity to meet consumer demand. In response to the demand, approximately 150,000 MW has been constructed since 1997, and another 55,000 MW is scheduled to come online this year.

The generation supply situation today is not uniform throughout the country. California and southern Nevada, New York, southern New England, and parts of the upper Midwest will be the first regions to face renewed supply constraints, while Texas and the mid-Atlantic have the most excess supply. Nationwide, it is estimated that the average U.S. reserve margin will peak at 34% in 2004. How long the overabundance lasts will depend in part on the economy. Our best estimate is that it will be five to ten years before prices will come to the level that would justify building new plants. Plants today are selling at \$50-\$200/kw, while the cost of construction is about \$600/kw. It will take at least five years before forward margins would generate a return on investment that would warrant a \$600/kw investment.

Question 8. What is your response to this potential issue of insufficient natural gas supplies and increased dependence on LNG?

gas supplies and increased dependence on LNG? Answer. The adequacy of natural gas supply and infrastructure is one of the most critical long-term policy issues facing the country. Of the new 144 gigawatts added between 1999 and 2002, 138 were natural gas-fired facilities. The percentage of generation from natural gas is projected to increase from 17 percent in 2001 to 29 percent in 2025, including generation by electric utilities, independent power producers, and combined heat and power generators. While I understand the attraction of using natural gas for generation because it is clean and efficient, I am concerned that this trend may lead us into a supply crisis for natural gas and require increased dependency on foreign imports of LNG. This winter, for the second time in the last three years, natural gas prices have

This winter, for the second time in the last three years, natural gas prices have soared, straining family budgets, disrupting manufacturing activities, and placing further pressure on agriculture. The fact that the system can't absorb a moderately cold winter during a slow economy demonstrates how fragile the situation is. Congress needs to adopt a multi-pronged approach to this situation. First, we must obtain more supply. Even at current prices, we are depleting supply sources faster than we are drilling new wells. Some of the most promising areas for new development have been placed off-limits by federal policy, and exploration in other areas is severely restricted. The United States should not have to import our way out of this problem, given North America's domestic reserves. And LNG can only be a partial answer.

The second element of problem is on the demand side. The environmental policies of the previous Administration resulted in almost no new coal generation, and we still do not have the regulatory certainty for investors to move forward with new nuclear projects. We need to identify responsible approaches to maintaining coal and nuclear generation (which together account for almost 80% of U.S. generation), in order to ease demand pressure on gas.

Third, we also must make more use of renewables and CHP (combined heat and power) through long-term extensions of the production tax credits that help offset the high capital cost of renewable development. I believe we can increase the percentage of renewables in the generation mix to 6-8% by 2020 without mandates or negative impacts on consumers.

Question. Between January 2000 and July 2002, more than 90,000 MW of capacity were delayed and more than 86,000 MW of capacity were cancelled. The costs associated with these delays and cancellations are significant. For example, there are reports that merchant generators must refinance \$90 billion of debt over the next four years, with \$30 to \$50 billion coming due in the next two years alone.

9. Do you think that these companies will successfully refinance their substantial debt? Or should we prepare ourselves to see a series of generating assets fall into the hands of banks?

Answer. A number of companies that were overly aggressive in generation expansion face either bankruptcy or complete restructuring. The number ranges from 6 to 12 depending on the overall health of the economy and natural gas prices. A substantial amount of generation will be put up for bid and some assets will undoubtedly end up in the hands of financial institutions. While I believe that some huge mistakes were made by companies that followed the merchant generation model, Congress, FERC and the states should work to harmonize policies on market structure and transmission development so that the majority of this investment can ultimately be put to beneficial economic use.

Question 10. Given these financial constraints, will the merchant generator model survive?

Answer. The pure merchant generation model may not survive, but that should not mean that competitive generation doesn't survive. If—and hopefully when— PUHCA is repealed, it will be possible to build electric companies with geographically diverse asset mixes that include both competitive generation and regulated distribution and can be owned by any willing investor.

Question. Energy security requires a reliable, efficient transmission system. Some reports claim that annual investment in transmission has declined by almost \$120 million a year for the past 25 years. The North American Reliability Council found that transmission investment over the next 10 years will grow by little more than 10,000 miles. The transmission system consists of 158,000 miles, so that is about a 5% increase.

11. What are the reasons for this lack of investment in transmission infrastructure?

Answer. See answer to question 14, below.

Question 12. What potential solutions should be considered to improve this situation?

See answer to question 14, below.

Question. Over the past decade, transmission service policy has required increased open access to promote competition in generation supply. Generation supply has expanded, sometimes exceeding consumer needs; transmission expansion has lagged. Are there immediate consequences for this failure to expand transmission?

Answer. See answer to question 14, below.

Question 14. What do we need to do to ensure adequate transmission for the future?

Answer. There are three major problems with getting new transmission built: (a) regulatory certainty in terms of cost recovery; (b) procedural barriers to siting new

regulatory certainty in terms of cost recovery; (b) procedural barriers to siting new transmission; and (c) PUHCA's limitations on investment. Large multi-state projects that provide dispersed regional benefits will not get built until the regulatory environment is more clear. The procedural and environmental barriers to building new transmission can also be enormous, with some needed projects languishing for decades. This is particularly true of renewable projects, which are location-specific and therefore cannot be flexibly located. The environmental community simply must become more responsible, given the massive benefits in terms of clean air and avoided emissions that a robust and efficient

transmission grid will provide. Finally, PUHCA is making the financing and governance of independent trans-mission companies extremely challenging. The ownership of transcos must be heav-ily dispersed to prevent investors from triggering PUHCA's limitations. It is difficult enough to assemble the capital and management structure to establish one of these entities without PUHCA. It's that much harder to do so 4.99% at a time, which is the limitation imposed by PUHCA.

Based on our conversations with the financial community, MEHC and a number of other electric companies have developed an agenda for addressing the capital crisis that includes four legislative recommendations on transmission:

a. Enact some form of the transmission spin-off language so that utilities can meet their Order 888 requirements.

b. Decrease the depreciable life of transmission assets to a more reasonable level. c. Streamline transmission siting by coordinating federal agency actions and establishing cooperative regional organizations that are ideally supported with federal authority; and

d. Replace or eliminate PUHCA.

Finally, Congress should work to encourage harmonization of the federal-state relationship in order to smooth the transition to open competitive wholesale markets.

Question. FERC recently proposed incentive transmission rates for entities that transfer their transmission assets to RTOs (Regional Transmission Organizations) or Independent Transmission Providers.

15. Do you think that this is an effective inducement on companies to transfer transmission assets to RTOs?

Answer. This is one of a number of incentives that would serve as effective in-ducements. Others would be to repeal PUHCA and to harmonize state and federal regulations.

Question. Many claim that difficulties in transmitting siting and permitting procedures are a major reason why transmission development has not kept pace with need.

16. What are viable solutions to this challenge?

Answer. From a strictly operational standpoint, I would recommend the natural gas pipeline model. This has worked well to facilitate new infrastructure development. At the same time, I recognize the intense political passions that arise from any discussion of federal siting authority, particularly in the West. Regional approaches are needed, but I understand these are constitutionally difficult to implement. An evolutionary approach that relies on joint federal-state boards (or interstate compacts) and leaves specific siting decisions in the hands of the states may be the best Congress can do. Congress must, however, do something.

Question. The electric industry has been evolving toward a more competitive model, specifically in wholesale power market. Given where we are today, some seriously question whether this is the model that will best serve consumers and our national interest.

17. Do you think that increased competition in the electricity market promotes reliability, economic pricing and environmentally safe power?

Answer. Given sound market rules that conform with fundamental economic principles and the technical realities of the industry, wholesale electric competition should produce lower prices relative to regulation, more innovation, and higher levels of reliability. As has been noted elsewhere, the DOE's most recent estimates are that wholesale competition saves consumers \$13 billion annually. Well structured markets in the mid-Atlantic and Texas are providing substantial consumer savings, even with rising fuel costs. Our economy simply cannot afford to throw away these benefits. In the post 9/11 world, one of the greatest challenges our industry faces is not only increasing system redundancy to insure reliability, but also increasing overall reliability by several orders of magnitude. If we are to do this, and do it affordably, we cannot simply rely on old-style regulation that provides little incentive for innovation.

Question 18. Competition in electricity brings volatility in prices, but does it also bring lower prices for consumers?

Answer. There are two main ways to reduce volatility: First, build a robust transmission grid supported by clear market rules, so that willing buyers and sellers can be brought together over the widest possible area. Second, establish regional capacity markets that spread out the cost of meeting demand peaks more evenly. Critics of the SMD's requirement that RTOs establish some form of regional capacity markets are off-base. This is not an intrusion on state authority, but the best way to insulate states in a region against the failure of another state to meet its supply obligations.

Question. While much of my focus has been on expanding the physical power infrastructure, I would also like your input on the following.

19. What are other effective ways to improve our energy infrastructure that do not include the expansion of generation or transmission facilities?

New emerging technologies such as fuel cells, distributed generation, CHP, high conductivity transmission, and metering systems that support demand-side solutions all should play a role in meeting the country's energy and environmental challenges. Last year's energy bill included broadly supported bi-partisan approaches on these issues. This is one more reason why Congress must leave behind adversarial gridlock and pass an energy bill. *Question 20.* What kinds of incentives are needed to encourage energy companies

to invest in advanced technology for both generation and transmission?

Taking the legislative and regulatory steps to create vibrant competitive whole-sale generating markets should provide the major incentive for generators to invest in new technology. For renewables, extending the Section 45 production tax credit and expanding it to cover all renewables will help offset high capital costs. On transmission and generation, regulatory certainty of cost recovery for advanced technology investments and ratemaking structures that reward these investments are the most important components.

QUESTIONS SUBMITTED BY SENATOR BUNNING

Question 21. While there is currently an abundance of electricity generation, if demand continues to increase steadily and building of new electricity generation, in de-tinues to remain stagnant, we are expected to face under-capacity of electricity in the very near future. Besides repealing PUHCA (Public Utility Holdings Company Act), what else do your propose would spur investment in new generation to meet future demands?

Answer. For the most part, market forces should govern the generation market. However, we also need to recognize that electric generation is part of an integrated network system. It is a high capital, large footprint, long-lead time in development industry that has to deal with fairly unique environmental challenges

Because of these characteristics, there are a number of policy challenges that generation faces:

a. As emissions limitations become increasingly stringent, Congress should look to provide incentives to the industry to keep available capacity on-line while meeting these new environmental requirements. Depreciation schedules for pollution control equipment installed on power plants built after 1975 are 20 years, as op-posed to 5 years for pre-1975 plants. Congress should consider reducing the post-1975 class depreciation schedules to facilitate emissions reductions that will have broad social benefits.

b. Any legislation that improves transmission siting will provide a large, indirect benefit to generation, particularly renewable resources. One of the greatest challenges we face with our geothermal operations in California is the need for a more robust transmission system to bring power generated in a remote location to load centers. The same problem can hold true for conventional projects such as mine mouth coal.

c. Although MidAmerican owns only a minority share in two nuclear units, I also would strongly encourage Congress to finally finish the job of reauthorizing the Price-Anderson Act.

d. Utilities are also facing increasing demands at the state level to increase their share of renewable generation. Extending and expanding the Section 45 tax credits to all renewables will help bring these resources to market at affordable rates for consumers.

e. On the regulatory side, the more certainty we have in areas such as contract sanctity, the more likely the financial community is to return to the industry.

f. Finally, FERC's ongoing regulatory efforts should ensure that adequate price signals are sent to develop regional capacity markets. This will have the advantage of reducing price volatility and diminish the tendency of the industry to go through boom and bust cycles. *Question 22.* On January 15, 2003, FERC issued a Proposed Policy on Transmission Rate Incentives to force structural change in the electricity market. FERC

Question 22. On January 15, 2003, FERC issued a Proposed Policy on Transmission Rate Incentives to force structural change in the electricity market. FERC investigations have shown that utilities have turned away transmission customers even though space was available on utility lines—in order to eliminate competition for power sales by their own affiliated generators. This practice in effect deprived consumers of access to lower cost power. FERC has said its proposed order will reduce the sway held by utilities over the grid, and thereby help consumers. Do you believe that the proposed order will help consumers have lower rates?

Answer. I believe the overwhelming majority of utilities operate their transmission systems consistent with FERC Order 888 and the principles of wholesale open access. The problem has been that it is difficult to ensure that this is being done due to the real-time nature of electricity markets. In a competitive market, the financial stakes of these issues can be huge, thus casting a cloud over operational decisions.

The best working competitive markets, both in the United States (ERCOT, PJM) and abroad, have fully separated operational control of the transmission system from generation to ensure that there is not even a question of preferential access. That increases confidence in a truly competitive wholesale market and will encourage the financial community to give a second look to merchant generation. We are not aware of a specific case in which FERC has actually found that a util-

We are not aware of a specific case in which FERC has actually found that a utility has turned away a transmission customer when space was available on its lines in order to eliminate competition, although there still remains a conflict between the requirement for open access and the state requirement to give preference to serving native load in order to meet the traditional obligation to serve.

Question 23. Many energy companies are currently facing severe financial difficulties. Some of these companies hurt by bad investments are attempting to pass their financial burden onto stable utilities that have survived the energy crash. Because of this, many utility customers are paying millions more for their utility bills due to the energy companies improperly pushing utility affiliates to pay for their expenses. As many of you know, I am not a proponent of unnecessary regulation. But how else do you propose we fix this problem so that we can protect our consumers? Answer. Both state regulators and FERC have full authority to review all rate-

Answer. Both state regulators and FERC have full authority to review all ratebased costs under their jurisdiction and deny recovery of any costs that are not prudently incurred. Additionally, state and federal regulators have extensive authority to prohibit cross subsidization to prevent any attempts by companies to encumber utility assets with debt that supports competitive ventures.

utility assets with debt that supports competitive ventures. FERC's recent draft order under its Section 204 authority concerning utility financings of non-utility ventures is an important step in the right direction.

Most state commissions have done an excellent job protecting utility ratepayers from negative impacts of competitive investments by utility parents. Regulators have extensive tools to do this, though in some cases events of the last two years may provide the impetus to use these tools more aggressively.

Question 24. Standard Market Design (SMD) has been proposed by FERC to fix instability in the marketplace. Kentucky has the lowest residential electricity rates in the country. Do you believe that FERC's proposed SMD rule will work? Will the rule penalize states with low costs to benefit those with high costs? Do you believe that the proposed SMD rule takes into account unique regional differences and individual state interests?

Answer. The Standard Market Design (SMD) proposed by FERC provides an appropriate outline for wholesale electricity markets. At the same time, I have encouraged FERC Chairman Wood to take more time to explain the SMD to Congress, the states and industry stakeholders, and to show as much sensitivity to regional concerns as possible.

I don't see any reason why SMD should harm Kentucky's consumers or consumers in the state of Iowa, where the majority of MidAmerican's utility operations are lo-cated. Like Kentucky, Iowa is a relatively low-cost state in the middle of the country that maintains traditional regulated retail electricity service. A robust wholesale electricity market with clear market rules and no barriers to investment benefits our company and our consumers each time we either have extra power that we can sell on the market (profits are split between the company and ratepayers) and each time we can buy power on the market at a favorable price.

Though there are many challenging transitional issues to consider, it's important to remember that transmission is by far the smallest component of a monthly utility bill. Generation costs are more than three times the cost of transmission service in the average utility bill, and that's where the real savings for consumers lie.

QUESTIONS SUBMITTED BY SENATOR CAMPBELL

Question 25. As this Committee moves forward on developing a comprehensive energy bill and as FERC evaluates its proposed "Standard Market Design" rule, the effect on consumers must be given the highest consideration. Answer. I strongly agree that the impacts on consumers of SMD or any other leg-islative or regulatory change should be both Congress' and FERC's primary concern.

Question. Delivering electricity across wide expanses is costly, and changes in to-pography increase those costs dramatically. My state of Colorado, which lies on the edge of the Western interconnection probably has the most difficult topography in the lower 48 states. Yet, Colorado ranks in the top quarter of least expensive states for electricity prices in the nation. Denver's electricity prices rank as one of the nation's five least expensive.

26. Why should we seek to change a policy that has worked well for states like Colorado?

Answer. Colorado benefits from having abundant natural resources, including plentiful supplies of coal and natural gas relatively near the state's population centers. More than any other reason, this is why Colorado and Denver electricity prices are low. At the same time, they could be lower. The Front Range of Colorado is constrained by inadequate transmission capacity to the north, west and south. In addition, the state's largest utility is electrically surrounded by a federal power-marketing agency, the Western Area Power Administration. This results in inefficient and discriminatory use of the existing transmission grid by prohibiting the flow of low cost power outside of Colorado to the Front Range. FERC's SMD proposal would take baby steps to remedy such inefficiencies by making transmission services reciprecal and comparable to all users of the grid, on a non-discriminatory basis. True reciprocity and comparability require enabling legislative action.

It is important to note that there is a significant amount of misunderstanding as to what FERC's SMD does for states that maintain traditional regulated retail service. Nothing in the SMD would make any state change its regulatory scheme from regulated service to retail competition. The details of the SMD should continue to be improved through the ongoing regulatory process, but I agree with the financial analysts who testified at the Committee's hearing, as well as those who testified at the FERC technical conference in January, that regional differences should be manageable within the SMD framework. *Question 27.* How can we be sure that any policy change would not detrimentally

impact ratepayers?

Answer. FERC's SMD proposal contains provisions that assure customers can continue receiving the same types of services at prices they are used to, if they so choose. Customers have an option to enter into long-term contracts that would preserve existing prices and terms of service. In addition, existing contracts would be "grand fathered" or preserved for the remainder of the contract term.

Nevertheless, there is no way to guarantee that prices in a competitive energy market will be lower in the future than they are today. There are too many variables, as the recent spike in natural gas prices demonstrates, to make an iron clad guarantee of that sort. However, if SMD accomplishes its goal and makes it easier, more certain and less expensive to move power around the grid, the overwhelming majority of consumers, even those in low-cost states, should benefit. While some may view the scope of the SMD proposal as broad, the fact remains

that transmission plays a fundamental role in achieving savings in this sector. As the MIT economists Paul Joskow and Richard Schmalanzee pointed out 20 years ago in their book, *Markets for Power*: "The practice of ignoring the critical functions played by the transmission system in any discussion of deregulation almost certainly leads to incorrect conclusions about the optimal structure of an electric power supply system."

Failure to address competitive issues in the transmission system will result in continued high risks for this industry, with concomitant low credit ratings, higher costs of capital, and higher rates for consumers.

Question. Central to SMD is the idea that transmission assets will be placed in the hands of Independent Transmission Providers (ITPs). These ITPs will not have any ownership interest in the assets, but rather will be expected to operate them in the "public interest." Can you give me examples of when such a system has worked well in the past.

28. There seems to be general agreement that needed investments in our transmission infrastructure are not now being made. But, I can't find anything in the SMD proposal that improves the incentives of the private sector to make these investments. The proposal seems to envision a rather cumbersome planning process involving the ITPs and other regulatory entities. Navigating this regulatory labyrinth would seem, by itself, to be a disincentive to investment. In your view, does the SMD improve the incentives for transmission investment and, if so, how does it do it?

Answer. The not-for-profit ITP is one of two options that the SMD provides for operation of transmission assets. The other option, and the one MidAmerican prefers, is the independent transmission company, or ITC, that is a for-profit business. The independent transmission organization MidAmerican will participate in, TRANSLink, includes not only investor-owned utilities (such as Colorado's largest utility, Xcel Energy), but major public power and rural cooperative systems as well.

The not-for-profit model works well in both the PJM system and ERCOT, but the model that is evolving with or without the SMD is to have for-profit transmission companies operating within an umbrella regional transmission system.

As far as the concern that the SMD is a "regulatory labyrinth," obviously the proposal is complex, and I hope when FERC gets around to issuing a final ruling it can find a way to shave a few hundred pages. Any concern about the complexity of the SMD is significantly outweighed by the benefits of finally clarifying transmission jurisdiction so that we know who will have regulatory authority to ensure that investments in necessary transmission expansions and upgrades are made. Unless investors know how they will recover the costs of investments in interstate transmission, they simply will not invest.

The system desperately needs harmonization between state and federal regulatory authorities. Deputy Secretary McSlarrow put it very well in his recent statement before the House Energy and Commerce Committee, noting that on transmission we have three choices: 1) turn back the clock, which is impossible; 2) remain stuck in transition, which is untenable; or 3) complete the transition to competitive, regional energy markets for the benefit of consumers.

With respect to incentives, FERC's SMD proposal, in and of itself, does not provide sufficient incentives, FERC's SMD and generation investment. The proposal acknowledges the important role independent transmission companies can play as a result of their single-minded focus on a transmission-only business, and it provides for greater pricing transparency than now exists by requiring locational marginal pricing for congestion management, thus signaling to investors where to locate sorely needed infrastructure.

Legislative action is required to truly spur investment in badly needed infrastructure. This would include repeal of PUCHA, clarification of FERCs authority over all transmission rates and terms of service, and modification of tax policies that penalize compliance with Order 888 and 2000 requirements. Interstate electric transmission should not be treated differently than interstate natural gas pipelines, both in terms of the allowed rate of return on equity and depreciation schedules, but it is. In fact, electric transmission infrastructure may be a more risky investment than a natural gas pipeline when taking into account construction, permitting, siting and capital risks.

Question 29. Some of you are in the wholesale power business where the SMD proposal would impose price caps. Won't those price caps distort investment incentives in this market?

Answer. I am philosophically in favor of free markets, and I view anything like price caps as an absolute last resort when markets are clearly dysfunctional. The price caps envisioned in the SMD are reasonable as "circuit breakers" to keep markets from spinning out of control. I would expect if regional capacity markets are established as envisioned in the proposal, the price caps would rarely, if ever, be applied.

Question 30. The SMD proposal doesn't apply to public power, which is outside of FERC's jurisdiction. Since large areas would not be covered, how can SMD lead to a "standard" market design?

Answer. A robust SMD would bring all owners of significant interstate transmission assets under some form of FERC jurisdiction. Under existing law, FERC does not have that authority, so it would take Congressional action to give it that authority.

I understand that Senator Thomas' electricity proposal would include the "FERC lite" compromise that was negotiated in the house almost four years ago. I support that, as do virtually all private sector energy companies, both utilities and independents. There are also public power systems that are voluntarily joining regional transmission organizations (RTOs), such as the two large Nebraska systems that are our partners in TRANSLink.

Question 31. The SMD proposal is advertised as promoting competition, but isn't it really just a new regulatory regime. Moreover, given the complexity of the market that FERC is attempting to "design" isn't it inevitable that there will be serious errors—errors that will be difficult to correct in a regulatory context?

Answer. It's accurate to note that the SMD is a new regulatory regime, but it is primarily a restructuring of the regulated transmission grid to facilitate competition in generation. Transmission, by definition, is a monopoly function, and it will always be regulated. Those who are trying to claim that in transmission there is some philosophical issue between regulation and competition are simply being disingenuous.

On the issue of whether there will be errors made in developing the SMD, or even if we didn't move forward with the SMD but simply implemented Order 888 requiring all utilities to join regional transmission organizations, the answer is yes. Mistakes will certainly be made, and we will have to learn from them. It is important to remember, however, that California's market design that wreaked so much damage on the state and the west, wasn't the result of the SMD or even Order 888.

The issue of mistakes is exactly why I believe Congress should not try to legislate a market design. I'd much rather try to fix mistakes made through regulation than those that are written into public law.

QUESTIONS SUBMITTED BY SENATOR CANTWELL

Question 32. One of the reasons the Public Utility Holding Company Act (PUHCA) was established was because of cozy relations between utilities and their affiliate companies. I have read that Berkshire Hathaway holds an interest in Fitch rating service, that Fitch has been more aggressive than the other rating agencies in downgrading various utilities, and that MidAmerican has bought assets—at attractive prices—from down-graded utilities. I am not accusing your company of unduly influencing the prices of the assets you purchased, but the appearance is not favorable. Wouldn't stand-alone PUHCA repeal lead to more transactions with similarly questionable appearances, and won't this shake investor confidence in the market?

Answer. Berkshire Hathaway owns no interest in the Fitch rating service. It does, however, own an approximate 15% interest in Moody's. Berkshire Hathaway has absolutely no influence on Moody's ratings determinations. In light of the fact that the rating agencies derive their fees from debt issuers, a rating company that were to engage in the conduct you suggest would soon lose its client base and be out of business. No such allegations have ever been made, and this type of innuendo should have no place in this record. These charges are unfounded, inappropriate and unwarranted in light of Berkshire Hathaway's long record in support of shareholder rights, increased corporate disclosure, expensing options, and other corporate and accounting reforms that have made it a model for corporate governance transparency.

Question 33. You talked today about the impediments on your company making additional investments. I agree that we want to further investments in generation and transmission, but my understanding is that an exemption already exists for generation investments. So its investments in new transmission that might be restricted by PUHCA. [Sic.] Why don't we look at a narrow PUHCA amendment addressing the transmission issue, rather than repealing the entire statute and its other important protections?

This question raises an important point. PUHCA is, as any reasonable person would agree, an impediment to investment in the industry at a time when it is desperately needed. If you break down the industry into its basic components, you can understand why PUHCA repeal will benefit consumers and that concerns about its repeal are misplaced.

Generation is partially free from PUHCA investment restrictions, but registered companies are limited in the amount of exempt generation they can own, while PUHCA-exempt utility and independent generators are not. That is a clear competitive distortion. PUHCA's geographic integration requirement prevents geographic diversification of assets, and that is counterproductive to all antitrust principles of the past century.

As to transmission and distribution, a transmission company exemption would address stand-alone transcos, but PUHCA would continue to restrict ownership of transmission assets that are still owned by a utility but placed under the operation of an RTO. Another example pertains to our interest in expanding our Imperial Valley geothermal operations. These plants currently provide the California electricity market with approximately 340 megawatts of baseload, emissions-free, renewable electricity. We are planning to double the size and output of these facilities, providing more renewable electricity to the California market. This project will require the construction of additional transmission lines, which we considered undertaking, but PUHCA's restrictions stood in the way.

Rather than hearing from MidAmerican on this issue, it might be better to consider the arguments of the Oregon Public Utilities Commission (OPUC) to the SEC on the issue of whether Enron's single-state utility exemption for Portland General Electric (PGE) should be revoked. OPUC, presumably acting to protect Oregon's ratepayers and to seek lower rates, made three key points in its opening and reply briefs: First, the state of Oregon, through the OPUC, has adequate regulatory authority to protect the regulated utility customers of the state without PUHCA:

The OPUC has adequate authority to regulate [PGE's] utility activities regardless of whether [PGE] trades at the Oregon border or elsewhere. . . . The OPUC effectively regulates these [PGE] activities through the regulatory scheme provided for in Oregon. Although [PGE] enters into some wholesale transactions outside of Oregon, the OPUC has access to the books and records of these transactions. Opening brief, p. 3.

Second, applying the provisions of the administrative law judge's proposed ruling revoking the exemption would effectively punish Oregon consumers by causing PGE to limit its wholesale sales to avoid PUHCA registration, thus discouraging PGE from: (a) using supply management tools that reduce costs to consumers and (b) making off-system sales that result in shared savings for PGE and its consumers. "It benefits Oregon ratepayers that Portland General transacts purchases and sales of electricity at wholesale in the most cost effective markets available in the Western Interconnection, regardless of where such markets happen to be located." Opening brief, p. 3.

ing brief, p. 3. Third, forcing a utility to sell excess power in-state in order to maintain a PUHCA intrastate exemption "has the potential to result in adverse utility behavior." As OPUC explained: "Nearly all utilities sell excess power, which often ends up out of the state. Adoption of [a strict "bright line" test of out-of-state sales] could result in utilities deciding to sell excess power within the state, often at lower prices." Reply brief, p. 3. This test could also hinder the ability of utilities needing excess power to purchase that power at the most effective location. As OPUC explains, when Portland General has the opportunity to purchase cheap hydro power, it can sell excess thermal power in the wholesale market and benefit its customers:

If the [SEC], however, creates a disincentive for [PGE] to sell excess power out of state by subjecting it to [PUHCA], [PGE] may decide not to purchase the less expensive hydroelectric power and, instead, serve its native Oregon load with its higher cost thermal resources. [PUHCA] should not create an incentive for [PGE], or other utilities, to pursue behavior adverse to its retail customer, especially in this situation where the OPUC adequately and effectively protects all of [PGE's] retail customers. Reply brief, p. 3.

The simple, well understood answer to this investment problem is to replace PUHCA and its counterproductive unintended side effects with enhanced books and records access so that state and federal regulators have complete access to all utility holding companies. That's the basis of effective regulation: holding utilities accountable "by the rate base."

QUESTIONS SUBMITTED BY SENATOR FEINSTEIN

Question. You have all testified about the poor financial condition of energy companies and the challenges they face in the financial markets. I believe companies have seen their credit ratings downgraded and their stock prices plummet because there is a crisis of confidence among consumers and investors.

34. Do you agree that prudent government oversight to prevent against fraudulent and manipulative behavior and more transparency in the marketplace will help improve the financial condition in the energy sector?

Answer. As I have stated on several occasions, CFTC oversight of energy trading and futures markets is appropriate. Some believe the CFTC already has authority in this area, but current law is unclear at best. *Question 35.* Currently the energy trading sector is devoid of transparency and adequate oversight. I plan to re-introduce legislation with Senators Fitzgerald, Lugar, Harkin, Cantwell, Wyden, and Leahy to bring oversight to unregulated en-ergy trading and increase penalties for misconduct. Do you support the goals of this legislation? Answer. I believe it is appropriate and desirable to clarify which federal agency has authority over energy trading.

has authority over energy trading. *Question 36.* If you have had the opportunity to review the specific text of the bill, do you wish to go on record as a supporter? Answer. MEHC is reviewing the text of the bill you have introduced. We support the intent of the bill and will provide comments in the near future.

Appendix II

Additional Material Submitted for the Record

STATEMENT OF THE EDISON ELECTRIC INSTITUTE

Mr. Chairman, Members of the Committee, the Edison Electric Institute is pleased to submit this statement for the record of the Committee's hearing on "Financial Conditions of the Energy Market." EEI is the association of U.S. shareholder-owned electric utilities and affiliates and associates worldwide. In this statement, we will first provide an overview of the current financial situation in the electric utility industry. We will then height describe whet Common statements and the current financial situa-

In this statement, we will first provide an overview of the current financial situation in the electric utility industry. We will then briefly describe what Congress can do to help address many of the financial challenges facing the industry today.

THE ELECTRIC UTILITY INDUSTRY IS RESPONDING TO UNPRECEDENTED FINANCIAL CHALLENGES

The past year has brought some of the most significant financial challenges ever experienced by the electricity industry. Shareholder-owned utilities are feeling the sharp impact of an economic slowdown and the aftershocks from the implosion of Enron, and they are aggressively taking steps to promote greater transparency in electric power markets to rebuild investor confidence.

They are selling non-core assets, downsizing, issuing new equity, canceling acquisitions, reducing significant levels of capital expenditures, realigning trading around their own generation assets and customer obligations, and accelerating debt repayment. Many are adopting a "back-to-basics" strategy with its primary focus on their core regulated business.

In addition to individual company actions, EEI, along with Chief Risk Officers of utilities, is leading industry efforts to develop best practice models in disclosure, risk management, and market oversight. Working with Deloitte & Touche, EEI developed a comprehensive study of "best practices" financial information disclosure guidelines that are responsive to the Sarbanes-Oxley Act. EEI also has developed guidelines for a Model Audit Committee Charter, and a Master Netting Agreement designed to enable companies to better manage their risks and improve liquidity by netting electric, gas, and financial contracts.

Financial Situation

For the electric utility industry, one of the most capital-intensive industries in the world, the erosion of investor confidence has a devastating impact on their access to capital on reasonable terms. Higher cost of capital makes it more difficult to fund infrastructure projects to maintain reliable electric service.

The shareholder-owned electric utility sector lost \$78.3 billion in market capitalization between December 2000 and December 2002, a 23.9 percent drop over two years. This is based upon the stock performance of 65 shareholder-owned electric utility companies. If one expands the coverage to include unregulated utilities, the drop in market cap is even steeper. The EEI Index, a measure of the overall stock performance of electric utilities, was down by 14.7 percent in 2002.

Credit Ratings

Throughout 2002 credit rating changes in the energy sector were overwhelmingly negative. According to Standard & Poor's (S&P), the ratio of downgrades-to-upgrades rose to 10:1 as of September 2002, up from a 3:1 ratio in 1999, 2000, and 2001. Downgrades outnumbered upgrades 65 to 20 in 2000. In 2001, that ratio was up to 81 to 29. This past year, downgrades outnumbered upgrades by a whopping 182 to 15. S&P currently rates 54 percent of energy companies as stable, down from 60 percent in 2001. The percentage of companies on negative watch has risen to 25 percent in 2002. Currently, 18 percent of firms are non-investment grade, as recently as 2000, this percentage was only 5%. "These actions not only have a significant impact on cash flows, but also add to the volatility of the sector's stock prices." The industry is divided in terms of credit quality. The ratings of merchant energy, trading and marketing, and some companies with a significant degree of non-core activities have fallen drastically. By contrast, most regulated utilities, either vertically integrated or transmission and distribution companies, have been affected to a far lesser extent. These companies have maintained positive valuations through the challenging times and remain in investment grade categories.

As companies are downgraded, they are required to post additional cash or other collateral to meet contractual calls. A majority of these additional cash requirements are associated with trading operations. Ongoing corporate financing needs for any capital improvements—distribution, transmission or generation—and general operating needs, including scheduled debt repayment, will require ready access to capital markets at reasonable rates. However, as 2002 progressed, this access became more difficult as ratings dropped and fewer lenders were willing to extend credit. The result was increased borrowing costs, additional collateral requirements, and in some cases, the inability to secure the level of borrowing being sought.

Trading

Companies are closing or reducing trading operations primarily to reduce liquidity pressures, related credit rating downgrades and an overall decline in trading activities in the industry. Furthermore, companies are eliminating trading risks as a means to gain financial health, contributing to an overall decline in trading activity. Although the future for electricity trading for the shareholder-owned electric sector remains uncertain, industry participants agree there are strong business reasons to trade around a company's own assets, but the business is very complex and those that remain will find a limited number of trading counter-parties. The EEI Master Netting Agreement also will help mitigate some of the risk around trading and improve liquidity in the marketplace.

Generation Plants

Due to the current state of the markets and the economy, many companies are curtailing capital spending by deferring construction plans or canceling plants. The sector's cash crunch, increased cost of capital, credit pressures and extremely low power prices all contributed to the decline in construction activity.

Cancellations of power projects and delayed projects increased in the last half of 2002 and into 2003, as the cost of capital and refinancing escalated. According to Platts, a total of 475,085.9 MW is scheduled to come on line between 2002 and 2007. Cancellations or delayed announcements reached 33.8 percent or 160,491.5 MW by the close of 2002.

Despite the ongoing cut backs in construction plans, because so many projects are already in the pipeline, analysts believe new plant additions for 2003 will continue to outpace electric demand growth, which is lagging in the sluggish economy. This trend is expected to continue through at least the end of this year. Reserve margins are vastly higher than prior years in most regions of the country. With economic recovery, however, will come the need for more generation to meet a resurgence in demand growth.

Debt Restructuring

It is estimated that the power industry will require \$100 billion in refinancing of short and long-term loans during 2003. The potential for new financing is affected by the drop in project value as power prices collapsed and cash flows declined significantly. Additional refinancing needs are stemming from bridge loans for acquisition activity over the past decade and general corporate credit facilities that are scheduled to expire shortly. Increasingly, companies are required to pledge assets to secure new financing arrangements, reducing financial flexibility. Companies are striving to improve cash flow by executing asset sales, controlling costs, and minimizing collateral calls.

WHAT CONGRESS CAN DO

The electric utility industry is taking significant steps to restore investor confidence among investors and on Wall Street, and EEI is leading an aggressive action plan for the electric industry that embraces vastly greater transparency and best practices models in disclosure, accounting, and market oversight.

Congress also can play an important role, including the adoption of a comprehensive national energy policy that provides the right incentives to grow the electricity system and sets a clear direction for the future.

Promote Investment and Market Liquidity

Competition in U.S. wholesale electricity markets lowers consumers' electricity bills by nearly \$13 billion annually, according to the U.S. Department of Energy. However, it also has brought major changes in the use of, and explosive growth in the number of transactions on, the nation's transmission systems. As a result, transmission systems are facing dramatic increases in congestion, which threatens reliability, makes it more difficult for new entrants to sell power in the market, and increases costs to consumers. According to data from the North American Electric Reliability Council (NERC), executed transaction volume has increased 400% in the last four years, as measured by requests for "transmission loading relief."

For the past 25 years, however, investments in transmission loading feller. For the past 25 years, however, investments in transmission have actually been declining an average of \$81 million per year compared to the investment needed to maintain the current level of adequacy. Interminable delays in getting siting approvals and permits necessary to build facilities on public lands are just some of the obstacles that contribute to uncertainty and make it more difficult to attract investment in transmission projects.

Meanwhile, the Federal Energy Regulatory Commission (FERC) is moving forward aggressively with its transmission policies. In response to FERC Order 888, shareholder-owned utilities are providing open, nondiscriminatory access to their transmission systems. Under FERC Order 2000, they are forming Regional Transmission Organizations (RTOs), which will develop, operate and maintain regional wholesale markets and infrastructure on a day-to-day basis. FERC is also seeking to develop a standardized market design for wholesale markets. It is critical that this design reflect the market differences in various regions of the country, and provide the right market signals to facilitate transmission upgrades and expansions. We are working with FERC and state regulators to that end.

Congress can help to ensure the development of a robust electricity market by taking steps aimed at removing barriers and supporting incentives to enhance transmission infrastructure and other investments necessary to support competitive, regional electricity markets:

- Repeal the Public Utility Holding Company (PUHCA) and transfer consumer protections to FERC and the states. PUHCA is an outdated statute that stifles investment and poses a barrier to competition. PUHCA repeal has been part of every major electricity bill and has long been recommended by the SEC and other federal agencies. With the current investment crisis faced by the industry, PUHCA repeal is more important now than ever.
- Grant FERC backstop authority to help site new transmission facilities that would relieve national interest transmission bottlenecks identified by DOE if a state fails to act on an application within a year or materially alters the transmission plan. As wholesale markets become more regional in scope, new transmission lines are needed to move power across and between regions. It has become increasingly difficult to obtain siting approvals from authorities in states and localities across which these regional lines must cross, which makes it harder to attract the massive investment needed for major transmission projects. FERC backstop transmission siting authority would be similar to its longstanding authority to site natural gas pipelines. It would be used only as a last resort.
- a last resort.
 Provide for the coordination of transmission siting activities among multiple federal land management agencies by designating a lead agency and streamlining the permit process. This legislation is especially important in western states, where the predominance of federal land ownership creates a situation where lack of coordination among agencies, or even a single uncooperative federal land management employee, can hold up a badly needed transmission project for months or longer.
- Require FERC to issue a rule providing for innovative pricing policies for RTOs or a transmitting utility whose facilities are controlled by an RTO. FERC has indicated a willingness to take some steps in this direction, but Congress can ensure that additional measures are taken to attract the capital to fund needed investments in transmission.
- Eliminate transmission divestiture tax barriers to the formation of independent regional transmission entities. Federal tax laws impede the divestiture of transmission assets to RTOs or independent transmission companies (ITCs) by imposing a tax cost on any transfer of transmission from an electric utility to an RTO or ITC, which has the effect of discouraging new investment and the construction of new facilities. DOE and FERC have expressed support for concepts embodied in the House and Senate energy bills in the 107th Congress that would have addressed this problem.

- Reduce the depreciable lives of transmission assets from their current 20-year recovery period to a period more consistent with other capital-intensive industries. Speeding up the depreciation period for transmission assets will reduce the required rate of return for new investment because it lowers the cost of capital. It will also increase cash flow, thereby providing additional resources for utilities to invest in modernizing and increasing the capacity of their transmission systems.
- Eliminate the double taxation of corporate dividends. Under current tax law, corporate dividends are taxed twice—first at the corporate level and then again at the individual shareholder level. The double taxation of corporate dividends is fundamentally unfair and is bad tax policy. Congress is now considering a proposal to eliminate the double taxation of corporate dividends. This proposal is extremely important to America's electric companies, which have a long history of paying dividends to their shareholders, and to the millions of people who own shares in these companies.
- Extend and expand the amortization of pollution control equipment. Five-year amortization of pollution control equipment at all generating plants—older plants (pre-1976 vintage) as well as new plants—would promote modernization or construction of new pollution control facilities. Congress should: (1) extend the current law's five-year amortization for pollution control equipment to all older plants and (2) modify current law to make it applicable to all power plants.
- Amend the bankruptcy code to protect the value of cross-commodity netting. Over the past year, EEI developed a Master Netting Agreement designed to enable companies to better manage their risks and improve liquidity by netting electric, gas, and financial contracts. These in turn help promote a liquid, wellfunctioning marketplace. In 2002, provisions were agreed upon in the bankruptcy reform bill that would have addressed netting concerns, but the bill died in conference due to unrelated concerns.
- Update the tax treatment of nuclear decommissioning costs. All owners of nuclear power plants make contributions to external trust funds to ensure that monies are available to decommission the plants when they are taken out of service. Federal tax law allows owners to deduct from taxes the amounts contributed to these funds, but the law was designed to operate within the structure of a fully regulated electric industry. The U.S. Tax Code should be updated to assure that companies can deduct decommissioning funds in a deregulated generation market, and to ensure that the transfer of nuclear plants to new owners can occur, and without penalty. Provisions to accomplish these two goals were approved by both the House and Senate as part of the energy bill during the 107th Congress.
- Reform FERC's merger process by streamlining the process and setting deadlines for decisions regarding electric utility mergers. Utility mergers are among the most heavily scrutinized of any industry, due to a complicated and duplicative regulatory review process by multiple federal and state agencies that often results in costly delays that can sometimes drag on for years.

Promote Wholesale Competition

Congress can help promote the growth and efficient operation of robust wholesale electricity markets by taking steps to close gaps in federal regulation of wholesale markets and other measures.

Approximately 30 percent of the transmission system is owned by governmentowned utilities and cooperatives not subject to FERC authority. As a result, FERC's open access rules and the market structures being designed to make wholesale markets operate more efficiently and fairly do not apply to these nonjurisdictional entities. This bifurcated regulatory regime creates the potential for gaps in the system, which means additional uncertainty.

Jurisdictional gaps in federal regulation of wholesale electricity markets allow some market participants to exploit flaws or loopholes in the system, which undermines the overall strength of the market. Congress should ensure that FERC has the same level of authority to address market power concerns relating to actions by non-jurisdictional utilities as it has over shareholder-owned utilities:

• Grant FERC authority to require non-jurisdictional utilities that own transmission to provide nondiscriminatory open access to their transmission facilities at rates comparable to those that they charge themselves and on terms and conditions comparable to those shareholder-owned utilities are required to offer. FERC lacks jurisdiction over about 30 percent of the transmission lines nationwide; in some areas of the country, particularly the Northwest, a vast majority of transmission lines are owned by nonjurisdictional utilities such as government-owned utilities and electric cooperatives. According to December 2002 GAO report, "Lessons Learned From Electricity Restructuring,"

"As a result of the lack of jurisdiction across wide regions of the country and over significant transmission lines connecting some areas of the country, FERC has not been able to prescribe the same standards of open access to the transmission system. This situation, by limiting the degree to which market participants can make electricity transactions across these jurisdictions, will limit the ability of restructuring efforts to achieve a truly national competitive electricity system and, ultimately, will reduce the potential benefits expected from restructuring."

- Establish a self-regulating reliability organization, with FERC oversight, to develop and enforce reliability rules and standards that are binding on all market participants. With the growth of competition, the traditional system of voluntary reliability standards is no longer workable. Congress should enact consensus reliability language agreed upon by stakeholders in 2002, which also accommodates special regional issues.
 Clarify the ability of federal utilities to loin RTOs. There is some legal uncer-
- Clarify the ability of federal utilities to loin RTOs. There is some legal uncertainty as to whether federal utilities can join Regional Transmission Organizations (RTOs), a cornerstone of regional wholesale market structure. In some regions, especially the West, where federal utilities own a majority of the transmission system, RTOs simply cannot work without federal utility participation.
- Reform the Public Utility Regulatory Policies Act (PURPA) by repealing the mandatory purchase obligation protecting existing contracts and providing for the recovery of federally mandated FERC-jurisdictional PURPA costs. PURPA costs electricity consumers nearly \$8 billion annually in excess power costs, and it has outlived its usefulness with the development of open access to wholesale markets. PURPA reform is another item that has been part of every major electricity bill considered by Congress.
- Grant FERC authority to order refunds from non-jurisdictional utilities if it determines that the prices charged by those utilities are unjust and unreasonable. Consumers of shareholder-owned utilities should be able to receive refunds if FERC determines that the wholesale power prices charged by governmentowned utilities and cooperatives are unjust and unreasonable. One of the most important lessons learned from the California energy debacle is that FERC's refund authority should cover all market participants, regardless of ownership structure.
- Expand FERC's investigative authority and information reporting requirements to all entities that participate in wholesale electricity markets. For, wholesale markets to work properly, there can be no distinction among different types of suppliers when it comes to market transparency.

In summary, the nation's electric system is a key part of our critical infrastructure. It is also one of the most capital-intensive industries in the world. The electric utility sector is facing some of its most significant financial challenges ever. Electric companies are taking the necessary steps to restore investor confidence in the industry. However, we also encourage your support for the measures we have outlined to help restore capital investment in our critical electricity infrastructure and promote the smooth and even operation of wholesale electricity markets to the benefit of consumers and the economy.

STATEMENT OF THE AMERICAN PUBLIC POWER ASSOCIATION

The American Public Power Association (APPA) is pleased to submit testimony to the Committee for its hearing on the financial conditions of today's energy markets. APPA represents the interests of more than 2,000 publicly owned electric utility systems across the country, serving approximately 40 million citizens. APPA member utilities include state public power agencies and municipal electric utilities that serve some of the nation's largest cities. However, the vast majority of these publicly owned electric utilities serve small and medium-sized communities in 49 states, all but Hawaii. In fact, 75 percent of our members are located in cities with populations of 10,000 people or less. Further, most publicly owned utilities are not generation self-sufficient but depend on wholesale power purchases to meet the retail loads of the communities they serve.

The failure of electric utility industry deregulation in California has had and continues to have broad and far-reaching adverse effects throughout the West. Electric utilities and their consumers in Western states have experienced unprecedented volatility of electric prices. Discoveries of market manipulation and abuse by energy traders and private utilities have sent a shockwave through the industry that has forced several energy companies to file for bankruptcy and prompted credit downgrades of investor-owned utilities. The large drop in the stock prices and credit ratings of energy companies further demonstrates evidence of the electricity industry's poor financial state. Conversely, during this crisis public power has continued to receive strong credit ratings. Citing sound management strategies, credit rating agencies have projected a positive outlook for public power and as a result public power is well positioned to continue to provide the low-cost, reliable service that has been our trademark.

Throughout the second half of the 1990s investors bought energy company stocks based on large reported profits and strong balance sheets. The stock price of Enron, formerly one of the nation's largest energy traders, reached all time highs of \$90 in the summer of 2000 as Enron and other energy traders benefited from the introduction of electricity deregulation in California. As a result of deregulation the average price of a megawatt of electricity, which was approximately \$30 before deregulation, spiked to as high as \$10,000. Some investor-owned utilities created affiliate energy trading companies as a means to capitalize on deregulation. While these and other energy trading companies were pulling in record profits, consumers in the West were suffering rate increases and power outages that will ultimately cost billions of dollars.

In 2002, the so-called Enron "smoking gun memos" that identified manipulative trading practices utilized by Enron traders to drive up the price of electricity were uncovered. In addition, it was discovered that Enron had overstated it's earnings while at the same time hiding debt from the public. It was soon revealed that other companies had engaged in similar market manipulation schemes intended to increase electricity prices at the expense of consumers. As more and more questionable trading practices by companies were uncovered Wall Street investors responded with an understandable anxiety that crippled the stock values of these companies. Many investor-owned utilities are now suffering the negative effects of their diversification efforts and the volatility in earnings generated from their trading operations.

Unlike regulators, the markets have not been slow to punish corporate corruption. Enron is in bankruptcy-court proceedings and the stock price of Dynegy, another large trader, which in May 2001 had been traded at a high of \$57, is now being traded at approximately \$2. Other energy trading companies, such as the Williams Companies and El Paso Corp., have also suffered dramatic decreases in the value of their stock. Even Duke Energy, consistently rated among the top IOUs, had its credit rating reduced and its rating outlook revised to negative. In 2002, 182 investor-owned utilities received credit downgrades from Standard & Poor's. The weakened financial condition of energy companies clearly hurts both investors, who have lost billions of dollars, and consumers, who will pay higher rates as the result of utility companies' lower credit ratings and higher cost of debt.

Public power has not been unaffected by the Western energy crisis. For example, public power systems that comprise the Northern California Power Agency voluntarily participated in the state's ISO load curtailment program and as a result were subject to blackouts, even though they had sufficient resources to meet their own loads. In addition, public power systems in the northwest had to increase their electricity rates to procure long-term power to get through the energy crisis.

The formation of the power systems in the northwest had to increase their effective rates to procure long-term power to get through the energy crisis. However, in contrast to energy trading companies and investor-owned utilities the credit ratings of public power systems have remained stable. During 2002, out of 197 public power entities evaluated by Standard & Poor's, there were only 14 down-grades. Furthermore, these downgrades were balanced by 12 upgrades during the same period. More than 80% of the total public power entities rated by Standard & Poor's are rated A- and higher. In its' "Outlook 2003: U.S. Power and Gas", Fitch Ratings states "Public: power was by far the most stable utility sector in 2002, and the outlook remains clear for the coming year." Standard and Poor's and Moody's Investors Service also project a strong outlook for public power in 2003.

the outlook remains clear for the coming year." Standard and Poor's and Moody's Investors Service also project a strong outlook for public power in 2003. Credit rating agencies cite several reasons why public power has been able to weather the Western energy crisis and maintain a stable outlook. The previously mentioned Fitch Ratings report "Outlook 2003: U.S. Power and Gas" states as an explanation of public power's success:

"Part of public power's success reflects a conscious decision by utility managers and board of directors to avoid the riskiest parts of electric deregulation, such as wholesale power marketing and merchant transactions. By nature public power agencies tend to be a more conservative group. They view their primary mission as serving native load customers on a mostly not-for-profit basis." Public power's first and only purpose is to provide reliable, efficient electric service to its citizens. Unlike private power companies, public power systems do not have to serve stockholders as well as customers. Public power's measure of success is how much money they can keep within their communities through low rates and reliable service, not how much can be taken out to send to distant stockholders who are not part of the community.

As California is learning, electric prices drive local economies. For years, public power has had a proven track record of providing customers with lower-cost electric rates than private power companies on a national average. For instance, residential rates for public power systems are nearly 17% lower than for private companies, while commercial rates are approximately 10% lower for public power. Several factors help explain this, one of the primary ones being local control, where public power systems are regulated by local, citizen-controlled boards.

In a report entitled "Stability Expected in the U.S. Public Power Sector Despite Increasing Risk and Market Volatility", Standard & Poor's states that "Public power should be recognized for having demonstrated the ability to adapt to the heightened risk and to continue to meet native load demands while maintaining the financial health and operational consistency that has led to stabile credit quality." The report further states, "Public power entities nationwide continue to adapt both operationally and financially to new challenges."

One example of a public power entity successfully adapting during the Western energy crisis to provide affordable electricity to their customers while maintaining financial integrity can be seen in the actions of Tacoma Power. Faced with significant costs related to wholesale power purchases, Tacoma Power was able to quickly act on a plan to maintain financial stability. The six-point plan included a surcharge on rates, borrowing, conservation, cost cutting, new generation, and legislative and regulatory action. The rapid development and implementation of this plan insured that the utility's financial condition was maintained and system reliability was assured.

Public power utilities make good business decisions each and every day, as demonstrated by their lower rates, reliable service and solid credit ratings from Wall Street. Many of these decisions are made through local democratic processes that prevent the committing of major errors that threaten the future of a business and its customers. Political pressure on public power officials, when it occurs, is pressure to provide consumers with low-cost and reliable electric service, not greater profits to stockholders.

In a report entitled "As Electric Industry Restructuring Continues, Municipal Electric Utility Risk Management remains a Major Challenge", Moody's Investors Service states that "utility management strategies to position for a more competitive workplace, including improving financial liquidity and risk management" has been a major factor in maintaining credit stability. For example, the Sacramento Municipal Utility District (SMUD) has implemented a financial plan over the past several years to position the utility for competitive retail markets. When natural gas prices rose and SMUD had to purchase power to replace lower hydroelectric production, SMUD had the liquidity to manage for a period of time. SMUD was able to devise a rate restructuring that established a rate surcharge to maintain its sound financial position and to replenish a rate stabilization fund to be available for future market disruptions.

Because of their solid management and commitment to the core value of serving all their customers, public power utilities were able to survive the turmoil of the Western energy crisis. While some Western public power utilities were hurt by the skyrocketing wholesale power prices during the energy crisis, they were able to minimize the effect on their consumers and remain fiscally responsible because of their flexibility and local control. The overall performance of publicly owned utilities has clearly shown that the traditional concept of not-for-profit operation subject to local control works. As the Committee considers measures to restore the financial condition of energy markets APPA urges opposition to any efforts that would impair the principle of local control that has allowed public power to serve its members for over 100 years. Further, it is critical that Congress understand the lessons of the Western energy crisis before proceeding with changes affecting the \$200 billion wholesale electric utility market. Enacting electricity legislation without full understanding of the Western energy crisis will almost surely result in unintended adverse consequences that will cause further harm to energy markets as well as consumers.

STATEMENT OF KARA M. SILVA, VICE PRESIDENT, MBIA INSURANCE CORPORATION

Thank you, Mr. Chairman and members of the Committee for the opportunity to provide testimony regarding the financial condition of the electricity markets. MBIA believes that regulators and the U.S. Congress can play an important role in helping to address the current state of the electricity markets. Much can be done to help ensure that utilities are financially healthy, so that the markets, investors, and consumers will not be further harmed.

In my testimony, I will describe provisions of current law that may serve as important safeguards for maintaining the financial health of utilities. I will explain why it is vital these provisions not be repealed, but rather strengthened. Finally, I will make recommendations for legislative changes to guard against the further weakening of utilities' financial position.

DESCRIPTION OF MBIA

I am Kara Silva, a Vice President of MBIA Insurance Corporation. Because MBIA tracks the performance of utilities so closely, we are often among the first to see problems within this sector. MBIA approaches the critical issues facing the electricity industry from its perspective as an insurer of the bonds of many domestic electric investor owned utility companies ("IOU"), and as a representative of bond-holders' interests. The financial distress and increased risks facing the industry are serious problems that must be addressed.

MBIA is the premier financial guaranty insurance company in the world. We are a Triple-A rated monoline financial guaranty insurance company regulated primarily by the New York State Insurance Department. As opposed to multiline insurance companies, monoline financial guaranty insurance companies engage in only one line of insurance—financial guaranty insurance. Our Triple-A ratings from Moody's Investors Service, Standard & Poors and Fitch enable us to offer qualified issuers the ability to borrow money in the public markets at the lowest possible interest rate. Once these debt obligations are sold, MBIA guarantees—unconditionally and irrevocably the timely payment of principal and interest to bondholders. We effectively step into the shoes of the bondholders and represent their interests in the capital markets.

I am responsible for managing MBIA's global utility portfolio which consists of over 1,300 issuers worldwide and which has a total par value of over \$63 billion. My primary responsibilities include monitoring this portfolio to identify and mitigate credit decline of financially troubled obligors.

PROFOUND CHANGES IN IOU SECTOR: FINANCIAL DISTRESS AND INCREASED RISKS

The domestic electric investor-owned utility sector has undergone profound changes in recent years. Many IOUs are experiencing financial distress because of aggressive expansion sanctioned by recent deregulation. The regulatory safety net has not performed as expected. And the electric IOU sector has experienced several shocks due to ill-conceived restructuring plans and instances of corporate malfeasance.

As a result, the risk profile of the electric IOU sector has changed significantly. What formerly were "safe" utility credits are now performing like corporate credits in other sectors. In order to understand the effects of this change on the ability of IOUs to access the capital markets, it is important to focus on the legislative, corporate, regulatory, business and financial risk points. In each of these areas, exposure to risk has been heightened.

From a legislative standpoint, the sector faces risk as states enact inconsistent legislation and utility customers that are most at risk have open access to choose alternative providers. The ability to recover stranded costs and the sale of generating assets all increase risk exposure as restructuring occurs.

On the corporate side, we carefully monitor mergers and acquisitions—particularly as utilities expand into deregulated or international lines of business. We have seen an unusually high number of distressed parent companies, as well as heavy litigation and governmental investigations into corporate activities. Regulatory risk at the state level comes from rate caps combined with the inabil-

Regulatory risk at the state level comes from rate caps combined with the inability to pass through costs, as well as from differences in state regulatory decisionmaking. On the federal level, regulatory risk comes from the possible repeal of the Public Utility Holding Company Act of 1935 ("PUHCA") and the potential elimination of the Federal Energy Regulatory Commission's ("FERC") merger authority.

Finally, the sector faces business risks from capacity issues, a core business highly impacted by weather and the economy, and a high cost structure with impending competition—not to mention fuel supply and environmental costs. These factors combine to create significant financial risk in this sector. Poor non-utility investment decisions have led to weak balance sheets. Weak balance sheets have led to liquidity problems and downgrades by the rating agencies. Downgrades have led to collateral calls and other rating-related triggers that accelerate the liquidity problem. Furthermore, overbuilt capacity reduces the value in planned asset sales meant to reduce debt and improve liquidity.

Weak balance sheets, poor liquidity and uncertainty of restructuring plans have made access to the capital markets very difficult and very expensive. An overall theme has emerged from the current market dynamics: it is difficult to have regulated and non-regulated activities in the same corporate family. Regulators are having to adapt their current authorities to the emerging challenges presented by the co-existence of utility and non-utility affiliates, and it is unclear at this point whether those authorities will be sufficient in all instances. Moreover, some utilities do not want to diversify into non-regulated business.

ROLE OF REGULATORS: REGULATORY "CHECKPOINTS"

MBIA has urged state commissions and other regulators to exercise their full authority toward fashioning realistic solutions. The most difficult dilemma for regulators is the jurisdictional context in which agencies must operate to protect consumers. Jurisdiction over corporate structure, finance, and governance is shared by the FERC, Securities Exchange Commission ("SEC"), and state regulatory commissions-and the jurisdictional split is not easily discernible. A single corporate transaction might require authorizations from more than one agency.

When a utility is financially troubled, there are several regulatory "checkpoints" that can serve as warning signals to regulators and to the public that regulatory intervention might be warranted. These checkpoints include regulatory proceedings at FERC, the SEC, and before state commissions. Regulators have the opportunity at these checkpoints to assure that the proposed action by the utility's corporate family will not harm the utility's financial position.

However, while state and federal regulators have the ability to address many problems when utilities are financially troubled, their abilities sometimes stop short of what is needed to reach all trouble spots. Jurisdictional limits and uncertainty regarding jurisdiction can in some instances be a barrier to needed regulatory ac-tion. MBIA believes that Congress should step in to close regulatory gaps and add certainty to regulatory jurisdiction, to help ensure that the financial health of regu-lated utilities is restored and maintained. MBIA would urge the Committee to strengthen, rather than weaken, the regulatory review performed at these checkpoints.

FERC

At least two of the regulatory checkpoints are at FERC—electric utility applications filed under Sections 203 and 204 of the Federal Power Act.

Section 203

Section 203 requires FERC's approval of any sales or other dispositions of FERC-jurisdictional facilities that exceed \$50,000 in value.¹ This includes mergers and acquisitions, certain divestitures, and corporate reorganizations. Given that many parent energy companies are seeking to shore up their balance sheets and those of their non-regulated subsidiaries, and utilities are merging with more risky non-utility counterparts, such as power marketers, these kinds of transactions warrant careful monitoring.

At the moment, many parent companies may be looking to the regulated utility to help improve balance sheets, and questions arise whether Section 203 transactions will always be in the best interest of the regulated utility. At this check-point, FERC may wish to consider whether the Section 203 transaction helps, hurts or is neutral to the utility. Intervenors, such as state commissions and other stake-holders, may also add to FERC's deliberations.

For example, in the case of a sale of jurisdictional assets, it is appropriate for FERC to question, as it has in a recent letter to an energy company, how the proceeds of an asset sale will be allocated within the corporate family, and whether the regulated utility will be left holding indebtedness related to the asset that has been sold.² Such scrutiny insures that the utility subsidiary does not become laden with debt unrelated to its own assets and activities.

¹16 U.S.C. § 824b. ²*El Paso Corp.*, Docket Nos. FA02-36-000 and IN02-6-000, Letter Order (unpublished) issued Feb. 26, 2003.

Another example is the acquisition of a utility by a non-utility corporation, such as a diversified company or power marketer. MBIA believes that FERC can, and should, review such acquisitions to ensure that the credit and financial strength of the utility is not weakened by its induction into a corporate family of more risky businesses. If FERC were to require as a condition to such a merger the establishment of appropriate corporate and financial separations-so-called "ringfencing"utility investors and consumers would be safeguarded from harm.

Broadly speaking, ringfencing is simply an effort to wall off certain assets or li-abilities within a corporation. For example, this can be done by creating a new subsidiary, or by limiting or prohibiting internal financing to an existing subsidiary. Ringfencing has been a common practice among businesses with large liability exposures, such as tobacco companies, to protect less risky affiliates. But MBIA believes that thoughtfully applied ringfencing techniques can be effective tools for regulators to protect the public interest by shielding core utility assets from affiliated non-utility businesses.

Standard & Poor's views the Oregon Public Utilities Commission ("OPUC") as being among the most supportive of utility credit quality in the country—in large part because of the restrictive ringfencing conditions imposed on Enron when it acquired Portland General Electric Company ("PGE") in 1997. In its decision-making process, the OPUC specifically considered the effect of the acquisition on PGE's financial structure and utility assets.

Among the OPUC's conditions were the maintenance of a 48 percent equity level at PGE and advance notification of special or large dividends to Enron. In addition, PGE was required to maintain a separate accounting system. As a result of these and other conditions, PGE was one of only a handful of Enron assets to emerge in-tact after Enron's bankruptcy. While PGE's future is still uncertain, its corporate credit rating is significantly higher than would be expected as a result of the ringfencing criteria.

Under the Federal Power Act, FERC cannot approve proposed Section 203 trans-actions unless they are "consistent with the public interest." In making this determination, FERC currently considers three factors: the effect of the proposal on rates, the effect on competition, and the effect on regulation. We believe it to be in the public interest, and consistent with the three factor test, for FERC to consider the effect on the health of the regulated utility, and to require ringfencing as a condition to mergers in which utility and non-utility businesses are mingled. The current state of the electricity industry makes it critical for FERC to have

clear, strong authority to review mergers and other dispositions of facilities so that IOUs, and their ratepayers and shareholders are not harmed. FERC has the exper-tise and experience necessary for the job. And as the number of mergers, corporate reorganizations, and divestitures increases in the current financial climate, FERC must have clear authority to do so. MBIA recommends that Congress enact legisla-tion that would clarify FERC's authority to protect the financial health of the regulated utility, in the context of Section 203 transactions. And in contrast, the repeal of Section 203 as has been advocated by some would remove a significant tool to protect utility financial strength.

Section 204

Applications filed under Section 204 of the Federal Power Act also serve as a regulatory checkpoint at FERC, where regulated utilities must obtain FERC's approval for debt and equity offerings.³ FERC, in its recent Westar Energy, Inc. order, has revised its criteria for approval of Section 204 applications.⁴ FERC's new policy atdebt authorized by FERC. MBIA commends FERC on its action in this important case, because these conditions are aimed at protecting utilities from the cost and risk of non-utility debt. The Westar conditions will provide important safeguards at least for those issuances that come before FERC for approval.

However, not all debt and equity issuances are subject to FERC review. In the case of registered holding companies, the SEC is the agency with such authority. And, to the extent a state regulator reviews issuances, no application before FERC is necessary. Thus, Section 204 is at present not a complete safety net for issuances that pose risks to utility financial strength.⁵

³16 U.S.C. § 824c. ⁴Slip op., Docket No. ES02-51-000 (issued Feb. 21, 2003) ("Westar"). ⁵The Kansas Corporation Commission ("KCC") also has been proactive in scrutinizing cor-porate applications with a view toward shielding utility investments from poorly performing non-utility ventures. The KCC recently used its authority over corporate governance and debt management to require an application to transfer its utility division to a utility-only subsidiary,

SEC

In addition to FERC, the SEC is another federal venue that provides regulatory checkpoints for troubled utilities. The proposals of multi-state utility holding companies, or holding companies that are registered under PUHCA, must often be reviewed by the SEC, under PUHCA's requirements. Utility holding companies that are exempt from PUHCA's registration requirements are subject to much less regulation. lation. One of the areas within the SEC's jurisdiction is review of registered holding companies' proposed investment in non-core, non-utility businesses. Poor non-utility investment decisions have led to weak balance sheets in the industry. While registered company acquisitions of some non-utility businesses are exempt from the SEC's review, such as acquisitions of exempt wholesale generators and foreign utility companies, the associated financing of such diversified investment must usually be approved by the SEC.

Financing in the form of the issuance and sale of securities for non-utility invest-ment is subject to SEC approval under Sections 6 and 7 of PUHCA.⁶ Under PUHCA, the SEC must not allow a proposed financing of non-utility investment if the terms of the financing are "detrimental to the public interest or the interest of investors or consumers." Consideration of the potential impact on the regulated utilities in a holding company system should fall squarely within this inquiry. Intervenors, such as state commissions and other stakeholders, can add to the SEC's deliberations.

Proposed registered holding company acquisitions of non-utility businesses, that are not subject to any special exemption from SEC review, must be reviewed under Sections 9 and 10 of PUHCA.⁷ Together, Sections 9 and 10 require that acquisitions of interests in businesses-not just utility businesses-must not be "detrimental to the public interest or the interest of investors or consumers or the proper functioning of the holding company." Here again, the impact of proposed non-utility investment on the system's regulated utilities can be considered. State commissioners and others can file comments on these proposals, as well.

The SEC also has jurisdiction over mergers and acquisitions and certain affiliate transactions proposed by utility holding companies. However, the SEC's regulation of non-utility investment is often an area where the SEC has exclusive jurisdiction, and poor non-utility investment decisions represent a risk factor in the electric utility industry.

MBIA has encouraged state commissions and other stakeholders to file comments in SEC proceedings, to present any concerns and questions about non-utility ven-tures. However, the fact remains that the SEC has routinely approved most applications filed under PUHCA. But, given that the SEC often has exclusive jurisdiction to examine these acquisitions and financings, it is important that concerns about non-utility investment be effectively addressed.

The proposals of multi-state holding companies, or holding companies that are registered under PUHCA, are of particular importance to state utility regulators since states tend to have less regulatory authority over these multi-state entities. Moreover, even if a holding company is exempt from PUHCA due to its status as a primarily intrastate entity, this status does not guarantee that state commissions will be able to effectively monitor or regulate the non-utility business of utility holding companies, even under current law. The prospect of PUHCA repeal has taken on a different aspect in light of the dete-

rioration of the financial strength of utilities. In recent years, PUHCA repeal has been viewed as the removal of a barrier to deregulation, with state regulators and FERC presumed to step in and fill the gap. However, the financial distress experi-enced by the utility industry even with PUHCA in place raises a compelling question: without PUHCA, what limits will exist on the ability of holding company sys-tems to shift debt and risk to utilities and away from non-utility subsidiaries? Although not strenuously enforced in recent years, PUHCA has served as somewhat of an inhibiting factor on utility investment in non-utility businesses—and non-utility investment in utilities. Without the constraints of PUHCA, FERC and state reglayer of effective corporate and financial separation MBIA believes is vital to the health of utilities. Even with PUHCA, state regulators have had to struggle to pro-tect utilities. For these reasons, MBIA favors PUHCA reform, rather than repeal.

and ordered institutional safeguards to separate the utility and non-utility businesses. This deci-sion preceded, and complemented, the FERC's decision on Westar's application to issue securi-⁶ 15 U.S.C. §§ 79f and 79g.
 ⁷ 15 U.S.C. §§ 79f and 79j.

To the extent that there is an effective "gap" in regulation of non-utility diver-sification, we believe that Congress must fill the gap and ensure that regulated util-ities are not harmed by the non-utility side of a holding company's business. Congress should not prohibit the intermingling of utility and non-utility business. Con-the same corporate family, but it should enact legislation that places conditions on holding company acquisitions and financings of non-utility investment, to help to en-sure the financial health of the regulated utility. MBIA supports the transfer of PUHCA's consumer and investor protections to FERC.

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For instance, Congress should empower the federal regulatory body with authority over holding companies with the authority to require that the utility subsidiaries be properly financially separated from non-utility affiliates. To the extent that a utility merges with, acquires or is acquired by a company with non-utility subsidiaries, federal regulators should be empowered to condition such transactions with the requirement that state regulators of utilities within a holding company system have sufficient authority to protect the regulated utility from harm that non-utility affiliates can cause. FERC should have the authority to review transactions between a utility and its affiliates, to guard against cross-subsidization. Legislation should require that state commissions and/or FERC have sufficient audit authority, and full access to the books and records of the holding company and its entities. In addition, legislation should require that holding companies maintain separate books and records for non-utility and utility entities.

Whether or not PUHCA is ultimately repealed by Congress, we believe it is impor-tant that such requirements be in place. Proper monitoring and treatment of non-utility ventures can only be achieved if the appropriate regulators have the tools to be effective.

Congressional Action Needed

In closing, I would like to commend the Committee for recognizing the importance of addressing the financial distress in the utility industry. A financially imperiled utility erodes investor confidence, which can lead to higher rates and service and reliability problems. Federal and state regulators have a role to play in helping to ensure the financial health of utilities, but Congress must also act to provide regu-latory certainty and fill any regulatory "gaps." MBIA recommends that Congress enact legislation to accomplish the following:

- Clarify FERC's authority to protect the financial health of the regulated utility, in the context of Section 203 transactions under the Federal Power Act.
- Reform PUHCA and transfer its consumer and investor protections to FERC, including authorities related to securities issuances, mergers and acquisitions, affiliate relationships, and the financial separation of the utility from non-utility affiliates.
- Help ensure that state commissions that regulate the rates of utilities within a holding company system have sufficient authority to protect the regulated utility from harm that non-utility investment can cause. Conditions on holding company acquisitions and financings of non-utility investment should include the following:

Requirement that state commissions have sufficient audit authority.

Requirement that state commissions have full access to the books and records of subsidiaries within the holding company system, and the authority to review the relationships of utility and non-utility subsidiaries.

Require that holding companies maintain separate books and records for nonutility and utility entities.