Testimony of

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Mr. Chairman, thank you for the opportunity to appear before you today on the important subject of energy and the environment.

The United States economy is a marvel and leads the world. In absolute terms, we represent one-third of total global output and approach $9 trillion in gross domestic product as compared to a worldwide economy of some $27 trillion.

More important, the U.S. economy is leading the world in almost every important area. Most significantly it is U.S. firms that are wiring the world. But for the United States and private enterprise here, the Internet would not be what it is today. Worldwide, Internet use approaches 300 million people. Wireless usage, which in the future will mean Internet use as well, approaches 500 million people.

Intel's vision has one billion people online in a few years. Projections of Internet access through wireless devices are even more staggering. With each passing day, there are media reports of new and amazing developments with respect to the penetration of the Internet and electronic commerce.

Electricity supply in the United States has enabled the Internet. In the 1970s, the United States government embarked on a bipartisan program to wean our dependence upon foreign oil. It was hoped we could rely on domestic energy resources for energy supply. President Jimmy Carter's program – called Project Energy Independence – has been a success, although we still import large amounts of oil.

It was a success because the vast coal reserves of the United States were employed to fuel a new generation of coal-fired power plants located all over the country, but primarily in the interior. In the timeframe between 1975 and approximately 1985, $125 billion worth of power plants were constructed. Today, in the United States, over 400 power plants burn close to one billion tons of coal per year. These power plants are capable of burning another 200 million to 300 million tons more if Federal policies accommodate this increased burn.

Coal-fired electricity in the United States is one of our great success stories. It is a story not well understood by the American people. This is no one's fault but the coal industry's, of course. We have taken for granted peoples' understanding of the benefits that coal provides to the United States. In fact, most people don't understand that 53 percent of our electricity comes from burning coal and fewer yet understand the importance of low cost electricity to our national economy.

Today, electric technologies – including computer-based technologies – are the primary source of economic growth. According to the Commerce Department, the majority of economic growth in the United States in the last fifteen years has been the result of the high tech industry.

The term "high tech" covers a lot of varied activity. But one thing is for certain, electricity enables high tech development in the United States.

The New Economy is enabled by electricity. Internet use – whether for information gathering, e-commerce, or recreation – and the broadband telecommunications revolutions are pure electricity plays. A year ago, it was conservatively estimated that eight percent of U.S. electricity demand originates from use of the Internet. That figure now stands at thirteen percent and is rising.

The technology revolution impacts electricity generation. Today there are many promising new ways to distribute and generate electricity that will have profound and important benefits for our society as we go forward. Included in these developments are the renewable electric technologies that have great promise and do have present day application under specific, but limited, circumstances.

Distributed generation and renewable electric technologies are important developments. We should encourage both. But while we do that, we need to understand that our society requires enormous quantities of electricity and will require more and more as we go forward. In that context, today's large, central generating stations are needed and must be operated at full rated capacity for as long as they can provide low-cost electricity. In addition, we will require new central station generation burning coal and natural gas if we are to fulfill our destiny and wire the world.

For example, power consumption in Silicon Valley is growing three times faster than it is in the rest of California. California pursued electricity policies in the last two decades that ignored the supply side. Instead, they focused on conservation and renewables. While California's electricity demand was

increasing, their supply came from surplus generating capacity in adjacent states.

Recently, the "no growth" electricity policies of the environmental community and the State of California hit a wall. Electricity is now scarce and expensive in California. It is a government-induced problem that confronts the people there.

The surplus electricity generating capacity in adjoining states is gone. Because no power plants have been built in California during the last decade, their backs are against the wall. Growth in that economy will continue to occur, but it will be at a reduced pace. Instead, electric intensive industries – high tech industries – will relocate their incremental manufacturing facilities in other parts of the country where supply is available.

California is an object lesson for the rest of the nation. Mr. Chairman, we cannot wish electric supply into being and we cannot wish renewables into a competitive mode. The price of electricity matters and its availability matters more.

What is true in the United States will hold true abroad. The technological breakthroughs that we see today are not reaching everybody on the globe. In fact, two billion live without electricity at all. Doesn't every human on earth have the right to live at the same standard of living that we enjoy? I believe they do. Is it not a proper goal of government to enable more people to live better? I believe it is.

In this context, the world requires utilization of vast amounts of coal, oil, and natural gas to generate electricity. In the U.S. we have a legacy that impedes placement of new technologies. Because of this it could be argued that the rest of the world will turn to new technologies even faster than the U.S.

As you've traveled around our great country, I am sure you have noticed as I do that there is no part of the nation untouched by economic growth. In the Rocky Mountain West, an area where Western Fuels Association does business, places that ten years ago were remote today are bustling. New people have moved in, new construction is underway and, yes, installation of fiber optics is underway so that such areas can become part of the World Wide Web. This same phenomenon will happen in parts of the globe where industrial activity has been light. Economic growth attendant with the technology revolution is robust and undeniable and it, too, requires vast quantities of electricity.

As we view what is going on in the world today, it may be said that we live in truly the best of times. Economic growth is beginning to reach parts of the world it never has before. Certainly in the United States our level of economic activity is unprecedented. It amazes each of us in our everyday lives as we observe what goes on around us.

But this growth depends on electricity in the same way we depend upon air to breathe, food to eat, and water to drink. Electricity is a necessity for our brave new world. It is necessary for people in their everyday lives.

Yet, under the Framework Convention on Climate Change (otherwise known as the Rio Treaty) and the Kyoto Protocol, governments of the world are moving toward rationing this essential element of our existence. They do so under the misguided notion that we can somehow change weather by controlling climate.

The leading culprit in their view, of course, is carbon dioxide. Carbon dioxide is a greenhouse gas that humans create everywhere, all the time, in simply living their lives. Burning fossil fuels is humans' greatest contribution of CO2. Well-meaning scientists dependent upon large research grants and sophisticated, but flawed, computer models tell us that by putting more CO_2 into the air through our industrial activity we will change the world's climate in ways we will not like. This will lead to apocalyptic global warming.

There is no greater proponent of this perspective than Vice President Albert Gore. He sets it forth in his book *Earth in the Balance*. He recently reissued the book and states that he would not change it in any significant way. Chapter Four, entitled "Buddha's Breath," sets forth his views in detail.

Vice President Gore sometimes has a hard time with facts and his misuse of facts gets him into trouble. Interestingly, as has been reported in the media, in his book he relies heavily on ice core data as a measurement of atmospheric CO_2 correlated with temperature in eons past. He concludes that more CO_2 in the air definitely means much higher temperature and a resulting apocalypse.

The Vice President did not acknowledge when he reissued his book that his factual premise for his belief on global warming has been proven to be in error. A study sponsored by the Scripps Institution for Oceanography last year stated that it is the reverse: it temperature that causes atmospheric CO_2 to increase and decrease, not *vice versa*. Yet, we are all proceeding down this road toward regulating greenhouse gases, and particularly CO_2 based on what is, at best, a questionable premise.

The urgency those on the side of the apocalypse feel is driven by computer models. While sophisticated and improved over time, these General Circulation Models are flawed and flux adjusted. They are flawed in that they can't hind cast. They are flux adjusted by their creators in order to reach predetermined outcomes. They are used to make important assumptions in areas of climate science where no real knowledge exists.

I don't challenge the good faith of most of those on the side of the apocalypse, but I do challenge their notion that we should live our lives based on sophisticated speculation.

We know from observations, such as weather balloons and satellites, that there is no current warming in the troposphere. According to greenhouse theory this has to occur before the apocalypse is upon us. We know from observations that more CO_2 in the air has been – and is – good for plants, agriculture, and forests. Sylvan Wittwer, Professor Emeritus from Michigan State University and an expert who has served on every U.N. and governmental committee that studies such matters, is the dean of the school of thought that more CO_2 in the air is a positive good and not bad. He has concluded that we now enjoy a ten percent, universally free, food premium from increased agricultural productivity as a result of more CO_2 in the air.

Based on these observations and our long time involvement in the argument over Vice President Gore's vision of apocalypse, I say in good faith to you today that I am not troubled about putting more CO_2 in the air, although I realize that many in our society are. I would include you in that category, Mr. Chairman, because I have read your comments. I understand them and I respect them. But the agenda of those who want to "do something now" about CO_2 is one that comes into conflict with the full utilization of our nation's coal-fired electricity generating base and the installation of new clean coal technology that holds so much promise for our future.

New clean coal technologies can create electricity with very little by way of emissions of sulfur dioxide and oxides of nitrogen. Under current regulations, airborne toxics remain. But much less is known in this arena than is portrayed. We know that we live longer and better notwithstanding minute emissions of mercury from burning of coal.

None of the clean coal technologies on the drawing board today do anything about carbon dioxide. Even though efficiency levels are up and are rising, you have to remember that under greenhouse theory going to seven percent below

1990 levels as called for under the Kyoto Protocol does nothing. Rather, under greenhouse theory, we must go to sixty percent below 1990 levels to avoid the apocalypse predicted by the computer models. The Kyoto goal is not achievable in any event. If implemented, it will only represent a start.

There is no doubt that the agenda of the environmental community and Vice President Gore conflicts with the growth of the world economy that is occurring. That growth is driven by the Internet and the broadband revolution. They are energized by electricity and most electricity comes from fossil fuel combustion, the greatest source of humans' contribution of carbon dioxide to the atmosphere.

Thus it seems to me, Mr. Chairman, that the prudent approach to take is that embodied in S.882 and S.1776, legislation proposed by Senators Murkowski, Hagel and Craig. It would provide an insurance policy in the highly unlikely event that we learn ten, twenty, or thirty years from now that the vision of apocalyptic global warming has some basis in fact. That approach would be to have the Federal government develop CO_2 sequestration technologies so that we can continue to utilize fossil fuels, but at the same time scrub CO_2 and sequester it that keep it out of the atmosphere.

This would be a very, very expensive proposition. But in the face of a looming global apocalypse, it obviously is something we would do. I think it equally unlikely that having developed the technology we would ever deploy it because of its expense. Nevertheless, I do support the concept of Federal involvement in this important area.

Let me say that I also support an activist Federal government when it comes to energy. It is the United States that owns most of the coal west of the Mississippi River. This is the coal the nation depends upon for its economic well-being. In the Powder River Basin between Gillette, Wyoming and the Big Horn Mountains sixty miles to the west, it is estimated that the United States owns up to a trillion tons of economically recoverable coal. So the government must be involved in energy. But the government should be involved in partnership with its people in the way it was in the 1970s and 1980s when we put in the coal plants, not as a punitive parent the way Vice President Gore approaches the question of government.

I'm an optimist by nature, Mr. Chairman. I know you are, too. I also know that it's optimists who get things done in the world, not pessimists. Those who would cap, tax, and limit our economic activity out of fear of catastrophic global warming are the ultimate pessimists. Those who would allow Americans and the people of the world to go about their lives as the world becomes "wired," as economies

become more robust, freedom becomes more entrenched, wealth creation rises, and more people live longer – they are the people who are the optimists and who will get things done.

So, Mr. Chairman, in your new position of influence and power in government and policy, I would urge you to lead the forces of optimism to allow a new generation of clean coal technologies to come into being, and to allow current coal-fired generation to be utilized at its full rated capacity for as long as those units continue to provide economic electricity for the American people.

Thank you very much.

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