Coal Leader
COAL'S NATIONAL NEWSPAPER

These Are Interesting Times

J. Brett Harvey spoke to attendees of Eastern Coal Council's 28th annual conference recently in Kingsport, TN


J. Brett Harvey

These are interesting times for our industry. I have spent thirty years in coal, and it is remarkable how much the situation today resembles the situation when I started in the business. Both then and now, we have high oil prices and overseas production is unstable. Both then and now, coal prices are at higher levels than in previous periods, and coal is a hot industry. Both then and now, major legislation affecting coal has been or is expected to be passed.

In 1977, the legislation was the Surface Mining Act and the Clean Air Act Amendments, the legislation that set the first meaningful controls on S02. Today, we have the MINER Act now in place and the prospects of legislation on global climate change.

But one thing has changed during those 30 years, the need for coal. That's right. The need for coal has changed. America uses more coal now than ever before and America needs coal now more than ever. In fact, America can't do without us. In reality, the energy we provide by mining, transporting and converting coal into electricity is something that Americans not only need, but are unwilling to do without.

I would guess that not a day goes by where someone hasn't invented a new way to use electricity. Why? Because, in the United States, electricity is convenient, it's abundant and it's reliable.

I read that Apple has now sold more than 100 million iPods. That's 100 million uses of electricity that didn't exist 10 years ago.

In fact, our ability to produce affordable, abundant, and reliable electricity in the U.S. has fueled the whole age of information in which we live. Today we carry, in our pockets the computing and communications power that used to require a room full of hardware. Affordable, abundant, and reliable electricity has freed us from the confines of our office yet keeps us constantly in touch, constantly updated. Look around and you will undoubtedly see people doing the "Blackberry prayer" - you know, their heads down, as if contemplating life's meaning, while actually reading emails, sending instructions, or surfing the net. Former Microsoft executive Linda Stone calls this need to constantly check our electronic devices while doing something else "continuous partial attention syndrome."

While "continuous partial attention syndrome" maybe is one downside of electricity use, I think it is fair to say that coal use has brought enormous benefits to Americans. Coal powers the information age because coal is the foundation of America's affordable, abundant and reliable electricity generation. All of us in this room power the Information Age because we are the ones who mine, transport and convert that coal into the electrical energy that makes the age of information possible.

And yet, Americans often take for granted the reliability, affordability and abundance of this energy source. Does anyone at Best Buy or Circuit City buying some new electronic gadget ever ask themselves if there will be enough electricity to run the thing when they get it home? I bet nobody

does! Not even you and I, and we're the people who understand what it takes to make electricity! So is it any wonder that most Americans take electricity for granted?

In a way, it is a compliment to all of us. We have created an energy delivery system so good that its virtues have become invisible. So far as most Americans know, the only limit to electricity is the number of outlets they have in the wall. More important even than the conveniences of everyday life made possible by electricity, the relatively low price of electricity and our other sources of energy drives our economy and makes us competitive in world markets. Yet surprisingly, despite the manifest benefits we derive from our energy-abundant economy, there are those who say it is "wrong" for the U.S. to consume so much energy.

But this is not a moral issue. We shouldn't be embarrassed to use energy. If it were a moral issue, we would applaud energy use because by harnessing our energy resources, we have made the lives of millions of American's more productive, healthier, and more prosperous. And our prosperity has allowed us to clean our environment and to help those less fortunate than ourselves both here and abroad.

Today, America consumes 98.2 quads of energy. We meet 40% of our needs with petroleum; 23% with coal, 23% with natural gas and nuclear energy provides 8%. You notice that I didn?t mention wind or solar. That?s because their combined contribution to the energy mix is less than one half of one percent - effectively nothing in the energy life of this country.

As our energy consumption has increased, we have seen an enormous increase in wealth and health for individuals all along the economic spectrum. This link between energy use, wealth and health is undeniable, and a strong argument for continuing this nation's long standing policy of providing affordable energy to the economy.

While there are still economic disparities in the United States, access to affordable energy generally is not one of them. However, it is also true that any action taken that results in higher energy prices falls disproportionately hard on those at lower income levels.

With all the good that comes from energy use and the fossil fuels that make it possible, I am constantly amazed when I hear people cavalierly demanding that we stop using fossil fuels. If we thought seriously about it, replacing fossil fuels will be very difficult. Particularly coal!

Today, more than 95% of the coal mined in the United States is used domestically for a single purpose, to generate electricity. Coal generates about half of the electricity in the United States. That's 300 gigawatts of generating capacity. So you might correctly say that coal keeps the lights on.

There is no other means of generating electricity that, under foreseeable circumstances, can remotely come close to replacing coal in the generation of electricity. For example, to replace all the coal-generated electricity with residential-scale "solar roofs," we would need almost 300 million solar setups. And that source of energy only works well in places where the sun shines a lot. Under the best conditions, it would take about 860,000 of the largest windmills in the world to generate the amount of electricity produced from coal. Those windmills would occupy an area the size of Ohio, Pennsylvania, New Jersey and Maryland combined. In reality, most of the eastern part of the United States, where the majority of the people are does not have sufficient "wind resources." The Department of Energy estimates that if all the potential wind resources in the 36 states east of the Mississippi River were used, it would generate less than 10 percent of the electricity produced from coal. Wind, unlike coal, cannot be transferred from where it blows to where it is needed. To replace coal with nuclear power, we would need to build 300 1,000-megawatt plants. Given the long permitting and construction periods for these plants, it could take 50 years or more to replace the existing coal-fired fleet.

Then there is gas. Gas was really the energy strategy of the '90s. Because of its clean burning nature, power generators were encouraged to use gas for nearly all new generation. The power generators responded and virtually all the new capacity built in the 1990s was gas-fired. What was not recognized was that the amount of gas required to displace even a few percent of coal?s share

of electricity generation was, in fact, a huge amount of gas. Not surprisingly, when the U.S. tried to significantly increase power production from gas, demand quickly outstripped supply and gas prices spiked to more than $10 per Mcf. Of course, there are other factors influencing gas prices, but the fact that gas prices have stayed significantly higher than a decade ago makes gas uncompetitive for electricity generation in many regions of the country. Not only that, the high price of natural gas has forced many domestic chemical operations that depend on natural gas as a feed stock to locate overseas.

So what are we to do with regard to our power needs? Well, we shouldn't ignore the importance of solar, wind, or nuclear, as potential sources of electricity. But neither should we dismiss the value of our existing fossil fuel producing industries, particularly coal. They are valuable national assets that ensure the United States economy has access to reasonably priced energy.

Let me switch gears and discuss what I believe is our most important asset - our people. Their well being is paramount to our business success.

I also believe that the way in which the industry is perceived on the issue of safety affects nearly everything else we want to do. It is, in fact, a key reputation management issue that, as an industry, we are not managing very well. I believe it to be axiomatic that safe mines are productive mines.

As many of you know, CONSOL is predominantly an underground mining company. We operate 14 mining complexes including nine very large underground mines, eight in Northern Appalachia and one in Central Appalachia. In 2006, we had three mines that each produced more than 10 million clean tons of coal. Those of you familiar with underground mining know that mines of that size require a tremendous effort to coordinate people and equipment, both above and below ground, to keep the coal moving.

Of our six largest underground mines, which account for more than two-thirds of our total production, four had accident incidence rates below 2.00 per 200,000 man-hours. By way of reference, the U.S. industry average for underground coal mines is about 7.00.

Without a doubt, safety costs money. For example, we anticipate spending as much as $37 million in 2007 just to meet the equipment related requirements of the new federal and state safety statutes that were passed in the aftermath of the Sago and Alma accidents last year. Despite the costs in dollars and in management time, ensuring the safety of our employees is our Number One priority. The underground environment is constantly changing. Proper planning, continuous observation, and immediate correction of potentially unsafe conditions are a predicate to preventing accidents.

The human element also is involved in preventing accidents. We emphasize the importance of safety to every employee through training and through activities that continuously create safety awareness. We have built a new training center that allows us to provide year-round training for both current and new employees.

The physical and human elements of safety are not management's responsibility. They are not the employees' responsibility. They are our responsibility. They are everyone's responsibility, from the guy shoveling belts, to the accountant at headquarters, to me. We are all responsible and we are all accountable for the safety of ourselves and that of our fellow employees.

To achieve our goals, we need to join the science of safety with a culture of safety. We will use technology to help us monitor conditions, to provide early identification of problem areas, to improve communications between sites underground and between the underground and the surface, and to enhance the safety of equipment. By deploying technology to augment the efforts of our employees, we strive to eliminate the physical conditions in a mine as a source of an accident. We are great engineers, and we intend to focus our skills on engineering our mines so that the physical conditions in the mine are as predictable as those inside a factory.

The culture of safety, on the other hand, involves engaging the mind of every employee and creating safety as an accepted value. This involves constant training regarding safe work practices, regular discussion of safety issues, both at work and at home, and developing programs to acknowledge and reward safe work practices and safety achievements.

We have a good safety record at CONSOL, but it is not zero. We can reach zero, but not if we continue along our traditional path. Our traditional approach to safety has been to set a goal each year and strive to achieve it. The next year, we set a new goal, say 10% better than the previous year. This is a well-established corporate approach to many things - incremental, steady improvement.

But, in effect, we have created our own version of Zeno's Paradox. Zeno was a Greek philosopher who viewed the universe as a static, unchanging entity (kind of the way environmentalists think of earth's climate would be if man weren't around!). Zeno developed a series of paradoxes designed to discredit any notion of change. In one paradox, he argued that you can never get from one point to the other. Going from point A toward point B, if you cut the distance in half, and then half again, and half again and so forth, you approach where you are going, but you never actually get there.

And so it is with our current approach to safety. We can never get to zero, because we keep trying to approach zero in increments, slicing off some percentage of the remaining increment. But, we never actually get to zero.

We are in the process of developing a new approach to safety awareness and training that we believe will accelerate our drive to zero accidents. We will start with the premise that our normal state of operation is no accidents. An accident is an abnormality that is unacceptable. Now you may be saying this is just a parsing of words without any real distinction between the two approaches. But our new approach means safety trumps everything else we do. It trumps production, it trumps profits, it trumps all other rules, policies or procedures. It empowers every employee, whether hourly or salaried, to stop the normal course of operation if he or she believes that safety is being compromised.

There are, of course, some challenges and risks in this. Convincing employees that they have the right to interrupt work in the name of safety without suffering a consequence will take time. Convincing managers that employees should be empowered in this way may be hard to sell. Demonstrating to investors that any negative impact on profitability from this approach will be short-term and will actually contribute to the long term gain in profits may require well documented evidence.

I firmly believe it is possible for CONSOL to achieve "zero-accidents" performance at all our mines and we intend to achieve that result within the next five years. Some of you may say that this is a very risky decision from a business perspective. But I say, failing to eliminate accidents carries far greater risks to the company and its reputation. And if our industry fails to eliminate accidents, then the entire industry will bear a similar risk.

Today the coal industry suffers from what some reputation management experts call a reputation-reality gap. In the coal industry's case, the gap relates to our current safety record compared with the public's perception of our industry's safety record. We are all justifiably proud of the progress that our industry has made in reducing fatal injuries and in lowering the overall accident incidence rate. Our progress far exceeds that of many other industries or sectors of the economy.

Yet, look what happened when the accidents at Sago and Alma occurred. The media coverage of the industry and the tone of the discussion about the industry among legislators and regulators would have you believe that the coal industry had made no progress in safety in the last 100 years. That people still died by the thousands every year. That coal mining was "a very dangerous way to make a living." Because of the gap between our reputation for safety and our actual safety performance of the past decade, we were largely unable to control the legislative process that resulted in the MINER Act at the federal level and the numerous legislative and regulatory actions that took place at the state level. These actions, in many instances, were ill-conceived and probably contributed little to improving safety in the mines, but were enacted because political leaders felt compelled to further control this "dangerous industry."

Despite the fact that all the evidence, including the latest report from MSHA, shows that a lightning flash, not human error or the overall safety performance of the Sago Mine, was the cause of the Sago tragedy, the reputation of the industry will remain tarnished by this event. This hit to our

industry's reputation certainly impacts the safety regulatory environment in which we must all now operate. But I would also argue that our poor reputation in safety, however undeserved, impacts our ability to manage other issues of equal importance to us.

Remember the scene from the movie "The Godfather?" Don Corleone explains why he must say no to the drug dealer who wants the Don's political protection. He says, "It's true I have many friends in politics. But they wouldn't be my friends for long if they knew my business was drugs, because ....frankly...drugs is a dirty business."

This is the situation we face with regard to our industry's reputation gap regarding safety. Because we are perceived as unsafe, as dangerous, as an industry that doesn't care for the welfare of its own employees, our ability to convince lawmakers and regulators to work with us on other important issues can be compromised.

The only way for us to close the reputation-reality gap is to eliminate accidents - to be at zero. All of us need to be there. Only when the perception among our key stakeholders is that accidents in our industry are the exception rather than the rule will we truly be able to effectively manage all the public policy issues we face.

Let me close with a discussion of a looming environmental issue that has the potential to impact coal use to a degree that none of us at this conference would like to contemplate. I am talking, of course, about climate change and the potential for creation of a massive, new regulatory system that could, if poorly drafted, preclude or severely restrict the use of coal.

A few weeks ago, I was flying out to Las Vegas to attend the National Mining Association Annual Meeting. The flight path took us over the Grand Canyon. It is a beautiful site, but it is also a great lesson in geologic history. At the bottom of the canyon is the Vishnu Schist - metamorphic rocks that have been dated at more than 1.5 billion years old. On top of these very old rocks are younger rocks, some of which date back to the early Cambrian period, about 600 million years ago. What is most interesting, though, is that the various rock layers that make up the Canyon walls show a history of constantly changing climate and sea level change. Some rocks were deposited in a true marine environment, while others were deposited in marsh-like conditions. These different rocks, located one atop the other, tell us that sea levels rose and fell numerous times in that area over hundreds of millions of years. The point that I am making, of course, is that things like warming climates and rising sea-levels are nothing new. In fact, the geologic record everywhere teaches us that a changing climate is the norm, not the exception, for this planet. Yet the debate in going on today in the United States regarding the issue of global climate change proceeds from the assumption that change is the exception not the rule, that any change is bad not good, and that change, regardless of the cost, must be arrested and reversed.

The political environment in the United States has shifted and the potential for global climate legislation is greater than at any time in the 15 years that this has been a political issue in the America. However, I think the Congress will discover, as they investigate various legislative proposals, that solutions will not come easy, and that the potential effects on the U.S. economy and on U.S. competitiveness are significant, because energy derived from fossil fuels is such a huge and pervasive part of our economy. Coal should be our energy security blanket, but several of the current bills that have been introduced would throw a wet blanket on coal's future.

If the government is determined to enact legislation then we would support it only if it incorporates the following principles:

1. Any GHG control program must be implemented on an economy-wide basis and include all GHGs. The situation cannot be addressed only by coal-fired power stations.

2. Regulatory barriers to power generation efficiency projects, advanced coal use technologies, and carbon capture and storage programs should be eliminated. There is much to be gained here, but government sometimes is in the way.

3.Market mechanisms should be used to ensure that compliance requirements are cost-effective.

4.Compliance timetables should be set to allow sufficient time for new technologies to be developed, demonstrated and deployed. If the technologies are not available to capture and store carbon when mandatory reductions are required, we will be creating horrendous impacts on our economy, many of which will hit hardest on those who can least afford it.

5.We should encourage accelerated, sustained, long-term public/private funding of the technologies needed to address the problem to allow critical fuels such as coal to continue to be key parts of our nation's energy portfolio.

6.The United States should insist that all nations make meaningful emission reductions in addressing this global issue. The problem cannot be solved by the U.S. alone.

7. Any legislation attempting to regulated GHG emissions in the United States must have economic and scientific "safety-valve" reviews in place to allow appropriate changes as new information becomes available. If the "consensus" on the science of this issue proves to be wrong, or if the economic consequences of our actions prove to be disastrous, common sense says that we should go back and change our plans. That's what we would do in business, and that is what the government must be prepared to do as well.

It is not clear to me yet whether this issue will be resolved during this term of Congress or not. If history is any guide, legislation dealing with complicated environmental issues usually requires five or six years of effort by Congress before legislation is enacted. Legislation that purports to address a global issue will be far more complicated than anything Congress has attempted to address in the past. Nevertheless, I think it is prudent for the industry to be engaged in a positive way on this issue - to secure a seat at the table, if you will, to help influence the debate in this earlier, formative stage of the legislative process.

I have confidence that as Congress studies the options for dealing with global climate change that they ultimately will not eliminate coal from the nation's energy mix. In fact, almost any rational outcome will respect coal's important role as a fundamental building block of our economy, and will provide the mechanisms for appropriate technologies to be developed to address the CO2 issue. Like most miners, I am, by nature, an optimist. If we can manage our reputation, particularly by addressing the safety issue, and participate in the process of crafting rationale solutions to address climate change, I believe the next 30 years may truly be the golden age of King Coal. cl