

North American Energy Summit
Keynote address
April 15, 2004
7:30 p.m.
Albuquerque

Last August, Phoenix experienced one of the worst gas outages in history, and the northeastern United States saw its most severe blackout ever. At first blush, these two energy crises don't seem to have much in common beyond causing a lot of human discomfort on hot summer days. But different as they are, they are two facets of a larger problem facing the United States.

A little background: On July 30, a gasoline pipeline running from El Paso to Phoenix ruptured. This single 8-inch pipeline supplied metro Phoenix and Maricopa County – a population center of more than 3 million – with nearly half of its supply of gasoline.

It didn't take long for gas supplies to dry up statewide, and for the complex system that moves gasoline from pipeline to retail pump to break down. By the following Saturday night, pumps began running dry and panic-stricken consumers formed long, angry lines to buy up whatever gas they could.

Prices soared – to \$4 and \$5 per gallon at some gas stations, and price hikes spread throughout Arizona.

One week after the gas crisis began in Phoenix, an Ohio power generating station shut down.

Human failure to detect and mitigate the impact of this failure caused other power plants in the region to shut down to avoid equipment damage. Within just 3 minutes, that single Ohio plant failure had shut down 21 other plants throughout the northeastern United States and southeastern Canada, affecting more than 50 million people.

Now, what does a gas pipeline rupture in Arizona have in common with an electrical power outage in the Northeast? At least three common factors are present here, each of which represents a major shortcoming of our current national energy policy.

First, the Northeast blackout and the Phoenix gas crisis reveal our over-reliance on energy paradigms that worked during the 1900s, but that are increasingly problematic for this century.

Our electrical utilities are interlocking behemoths of centralized power generation and transmission capacity. Ohio's cascading power outage exemplifies how one outage can spell disaster for tens of millions of people.

Our gasoline distribution system is also over-centralized, especially in fast-growing regions of the country like the American Southwest.

Arizona receives virtually all of its gasoline through a pipeline owned by one company that brings gasoline from either Texas or California. And there always seem to be problems with California's refineries that cause temporary service disruptions.

Whether electricity, gasoline, natural gas or another energy supply, we should not be relying on an increasingly antiquated production and distribution system. Increased pipeline capacity, with backup systems in place in case of pipeline failure, needs to be created. And new generating plants must be smaller, more reliable and more evenly distributed so that we spread the risk of failure more evenly across the country.

We must also look to other sources of energy, as well. We have not moved as rapidly as we are capable with respect to developing renewable energy sources, particularly solar energy.

This energy supply certainly abounds in the Southwest, and the technology to convert it to practical human use exists. It now needs to be a priority.

Arizona alone has the potential of becoming the Persian Gulf of solar power. My state contains vast tracts of empty land that soak in sunshine more than 300 days a year. We ought to be harnessing this free source of energy on a large scale, and so should other sunny states. It holds the key to reducing our dependence on electricity generated by cumbersome and vulnerable plants using 19th and 20th century technologies.

Just as our power generation needs to become less reliant on non-renewable fuels, our automobiles ought to be less dependent on gasoline. For every year since 1988, fuel economy has declined in new cars, from an average of 22.4 miles per gallon in 1988 to about 20 miles per gallon today. While that may sound like a small change in fuel economy, consider that each year Americans drive about 2 trillion miles. That's trillion, with a "t."

And what is Congress doing? Giving tax rebates of up to \$100,000 for new Hummer purchases, and phasing out the \$2,500 tax break for the purchase of hybrid gasoline-electric cars. Unless Congress changes course, even that small hybrid tax break will be phased out by 2006.

Clearly, we are headed in the wrong direction. If we provide any incentives for vehicle purchases, it should be to encourage putting clean-burning, high-efficiency vehicles on the road.

While we await vehicles powered by hydrogen, hybrid gas-electric cars are proving to be popular, affordable, and highly effective. Japan pioneered them, but Detroit is rapidly catching up. In fact, Ford recently released a hybrid version of its Escape, the first “guilt-free” SUV. It gets 40 miles per gallon, and its tailpipe emissions are 97 lower than the average car.

That market is maturing, its product line is diversifying, and we should welcome the trend.

Government motor pools are under clean air mandates to ensure that 75 percent of new fleet purchases run on something other than gasoline. To date this has meant compressed natural gas. However, with Chevrolet recently announcing that it will no longer produce its natural gas-burning Cavalier, that leaves us purchasing expensive retrofit kits to keep our motor pools in compliance.

One alternative is to allow gas/electric hybrids to qualify as replacements for natural gas vehicles to meet clean air mandates. Sen. Domenici, one provision of your energy bill calls for adding hybrid vehicles to the list of qualifying cars, and I commend you for that.

Beyond driving more fuel-efficient cars, we ought to take an honest look at how to make wider use of public transit. Getting people out of cars and into buses and light rail is a challenge in this car culture of ours, especially in the West. But it can – and must – be done.

Cities like Dallas and Los Angeles, once laughed at for laying tracks in cities built for cars, are now running light rail trains full of passengers. Los Angeles expects ridership to double in 10 years. As recently as 2002, Dallas actually was faced with over-crowding on their light rail trains.

Expanding light rail and bus services should continue in America's urban centers. They are increasingly viewed as alternatives to getting in the car, pumping in the gas and pumping out tailpipe emissions.

The second factor connecting the Northeast blackout to the Phoenix gas crisis is the implication for homeland security. When the pipeline burst and the power plants failed, the first thought on everyone's mind was: "Is this an act of terrorism?" The answer was "no," but it could easily have been "yes." Dams, nuclear power plants and other large assets present irresistible targets to terrorists, and we are spending considerable resources protecting those assets. However, transmission lines, generating stations,

and gasoline pipelines are also potential targets. And, should the unthinkable happen, we must be better prepared to rapidly respond.

Both the Northeast blackout and the Phoenix gas crisis showed that, in the throes of an emergency, confusion reigned. For my part, I could not get a straight answer out of the owner of our ruptured pipeline, Kinder Morgan, as to the extent of the damage or the length of the disruption.

The Arizona Corporation Commission couldn't help much because it was not delegated enough authority by the US Department of Energy's Office of Pipeline Safety to address safety issues in a meaningful way.

The same was true for the blackout in the Northeast. Failsafe procedures either were not in place or they were not observed. Simply ascertaining the cause and extent of the blackout was an ongoing concern played out on live television.

All of this suggests that our federal and state departments of homeland security must focus more on infrastructure protection and prepare more for the eventuality that our next 9-11 could be an attack on our energy and transportation systems, rather than an aircraft hijacking. Can you imagine Los Angeles without lights or gasoline? Such an eventuality is not Hollywood; it's a foreseeable occurrence if we do not more aggressively address our energy vulnerabilities.

This brings me to the third factor connecting the Northeast blackout with the Phoenix gas crisis – the proper balance between federal authority and

the need to retain state jurisdiction. There is nothing like the protection of states' rights to unite the governors of both political parties.

The increasing use of federal pre-emption in all areas, from consumer fraud to education, is a growing concern. This concern is particularly acute in the energy arena.

The notion that the Federal Energy Regulatory Commission will control decisions about energy from transmission line siting to each state's generating capacity is chilling. Understandably, FERC wants to improve on the status quo. But the problems it aims to solve do not exist everywhere, and certainly not in the West. The massive northeast outage probably could not occur here, because western utilities have already taken major steps to ensure the reliability of the western grid by voluntary implementation of mandatory "reliability management systems".

So if FERC wants to increase its regulatory reach, it must listen to the individual needs of states and regions, and take a corresponding flexible approach.

If you want an example of over-concentration of federal power, one need look no further than the federal Office of Pipeline Safety. After Arizona's pipeline burst, it became apparent that our state regulators' efforts to thoroughly inspect, monitor and fine when necessary had been hampered by the bureaucratic maze created by the Office of Pipeline Safety.

The federal standards were far less stringent than what state regulators thought was best and the OPS regional and national offices, neither of which were located in Arizona, had overridden several of the on-site inspectors' decisions.

If we want better assurances that our pipelines are safe, OPS should give states more discretion to conduct more frequent and tougher enforcement operations. Had the Arizona Corporation Commission been granted permission by OPS to conduct inspections beyond the minimum federal guidelines, we might have improved the chances of avoiding last August's catastrophic rupture.

Our country needs a plan for 21st Century energy production, distribution and consumption. It needs to be structured with regional flexibility, but must address the three concerns I have raised: how and what kinds of energy we consume, homeland security, and the proper balance of power between the states and Washington, DC.

We know the problems and we have known many of the potential solutions for years. We even have two compelling examples of what happens when we do not act. Gas pumps run dry, buildings go dark, and chaos takes root. To repeat the old cliché, "those who forget the past are doomed to repeat it." Let us take advantage of what we have learned from the past and from this summit to draw an energy blueprint that will take us well into the 21st Century.

Thank you.