What Does Nuclear Power Mean To Us

This is my final column for the New Mexican and as I would like to go out with a whimper, not a bang, the topic will be nuclear power. Is our nation inexorably headed down the nuclear path and if so, does it make any sense? There is a growing sense that the only way to meet our increasing need for electricity and to counter the challenge of global warming is to go nuclear. I found myself starting to think this way recently, and I even considered researching investments in nuclear related technology until some friends helped clarify the issues which have nothing to do with protecting the environment or reducing our dependency on foreign oil.

Before continuing, I would like to thank a few people for help in getting these columns to press. Year after year my staff: Juliana Henderson, Patricia Cody and Jeff Sand, have continuously read and reread my drafts and their suggestions have kept me out of hot water! For outstanding scribe and wordsmith abilities, thank you to Dana Hees and in former years, my good friend and outdoor training buddy, Dr. Bill Johnson. Back to the nuclear story.

I fly around the U.S. frequently for work and play and enjoy this freedom. So, I wonder if we really have only one choice for abundant on-demand energy: nuclear power. Thanks to my friend, Cathie Sullivan and her partner, I was reintroduced to the economic realities of nuclear energy through research conducted by the Rocky Mountain Institute and written by its CEO, Amory Lovins. They present a compelling story that the prospect of nuclear power is dismal and that, uniquely among energy technologies, nuclear power plants produce plutonium which can be used to make nuclear weapons. For example the plutonium for India's first weapons was produced in a commercial nuclear power plant.

It is easy to compare the costs, benefits and risks associated with nuclear energy versus decentralized wind, solar, and cogeneration power plants (the burning of waste by-products close to the source of their production). All we need to do is simply look at what market forces are telling us.

The trend in much of Europe is towards wind energy. In 2004, Spain and Germany each added as much wind power generating capacity as the entire nuclear industry added worldwide. The International Atomic Energy Agency expects nuclear power to be responsible for only 1/177th of new net capacity over the next 10 years. This is surprising because we hear that countries such as China are going all out to bring nuclear power on line. We rarely read about our nation's plan to reduce America's dependency on foreign sources of oil by reigniting a domestic nuclear energy program.

The 2005 Energy Policy Act passed by Congress gives \$13 billion to nuclear power plant expansion, provides federal loan guarantees up to 80% for new and ongoing nuclear energy projects, grants \$3 billion in research and development funds to the industry, subsidizes half the cost of going through the licensing process for new nuclear plants, gives \$2 billion of insurance against delays, provides operating subsidies of \$6 billion caps the industry's liability for accidents, gives payments for waste shipping (to as yet undetermined locations), offers free security and provides tax breaks to private companies for the eventual decommissioning of plants, though no one yet knows how to accomplish this. Does any of this make sense?

The overall question is when will the nuclear industry finally turn profitable, as all this government aid adds up to approximately the cost of six new nuclear power plants. The answer is that even if these six new plants are given free to their owners, at a cost to taxpayers of around \$30 billion, the unknown cost of taking care of them once their useful life (40 years) is over and disposing of their wastes makes it a business venture that no private company will ever undertake.

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