

## ATOMIC ENERGY CAN MAKE ARIZONA A VERY RICH STATE

Any practical plan for our future must include alternate energy sources and any alternate energy plan must include atomic energy. In truth, Arizona can be a very rich and prosperous state with plentiful and affordable electricity through atomic power, and we can also have plentiful and affordable water through desalination. Giving us an additional advantage is that Arizona has the political will to do this and most of our neighboring states do not. By making Arizona the most welcoming state, not only to solar energy producers but atomic energy producers, we will have plentiful, well-paying jobs for our people, a taxable export that other states will happily pay for, a steady stream of funding for priorities like education, and a phenomenal utilities base that will help us to attract additional industries and jobs.

The Electric Power Research Institute (EPRI) states that by 2030, states with atomic reactors will see their electric rates rise 45% and states with no atomic reactors will see their electric rates rise over 265%. When one looks at the cost to produce electricity per Kilowatt Hour (KWH), atomic energy is 2.5 cents compared to solar and wind at 14 to 17 cents. Coal and natural gas are 4 to 7 cents, yet over time those costs are bound to increase. To have a solar photo voltaic facility that produces the same daylight electricity as the Palo Verde Nuclear facility in Phoenix, it would take solar panels 250 miles long (almost the distance from Tucson to San Diego) and one mile wide with a footprint of 250 square miles compared with Palo Verde's foot print of 6.3 square miles. There is a definite role for solar to play in fulfilling Arizona's energy needs but the base load of 80% of all of our electrical needs could and should be met by atomic energy.

Atomic energy is safe and clean. The US Navy has been underway on nuclear power for over half a century, without incident. Yet while no one knows atomic power like the United States, we have not built a commercial atomic reactor in our country in over 30 years. We need to start now.

K-12, community colleges and our three major universities accounted for 57.7 % of the Arizona General Fund budget in 2007. That comes to \$5.45 Billion out of \$9.5 Billion. Education interests will tell you that they want a steady, reliable source of funding that can be counted on year in and year out. With the closing of the Yucca Mountain facility in Nevada, Arizona has an opportunity to make this happen by becoming the atomic energy recycling center for the USA. For over 30 years, because of an executive order from President Jimmy Carter, our 104 commercial atomic reactors only burn 5% of their

nuclear fuel, leaving 95% unused. The rest of the world does just the opposite by burning and recycling (re-burning) 95% of its nuclear fuel and leaving 5% unused. There are two major nuclear fuel recycling facilities in the entire world. One is in France and one is in Japan. If a third one was built in Arizona, we could charge a premium to the Federal Government that would pay for education in Arizona. That isn't just good news for education, it's a \$5.45 Billion tax cut for Arizona taxpayers. Can you imagine the economic boom that would result from that?

The Arizona Legislature is understandably busy dealing with the current economic crisis and the effects of the national recession and local housing collapse. But we must continue to plan for long-term solutions. A reasonable debate on the merits of atomic energy is a great place to start. To learn more about this topic, please visit [www.senatormelvin.com](http://www.senatormelvin.com) and check out the Helpful Links page. You can also contact me through that website if you have any questions on comments on this subject.

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