

Loving Nuclear Power

A relatively objective discussion by a Californian

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Why are growing numbers of 'green' visionaries hopping on the bandwagon of the most ill-conceived and dangerous energy source in the world?

One would think that environmentalists these days would be giddy over the high price of fossil fuels such as oil and natural gas. It has long been the prediction that when these finite and polluting fuels increased in cost due to supply shortages, that we as a society would finally make the transition to the renewable, sustainable energy system that has always seemed to lie just out-of-reach, beckoning to us just over the horizon.

But then something shocking happened. Growing numbers of "green" visionaries started beating the drum for more nuclear power, a technology that in the past has been a lightning rod to spur on activists to protest and demand for a greater reliance upon efficiency and solar, wind and other renewable energy technologies.

Among those endorsing the process of splitting atoms to generate the majority of our future electricity are the following "environmentalists:"

- James Lovelock, the fellow from London who came up the "Gaia" theory of the earth being a self-regenerating organism, proclaimed that nuclear power was "the only green solution" to our power supply woes, maintaining that there wasn't enough time to allow renewable energy technologies to fill the gap.
- The Bay Area's Stewart Brand, the utopian thinker behind the "Whole Earth Catalog," echoed Lovelock's claims, adding that the nuclear power industry's half century of experience rendered concerns about safety and waste as obsolete.
- Patrick Moore, co-founder of the radical Greenpeace activist group, has proclaimed: "There is now a great deal of scientific evidence showing nuclear power to be an environmentally sound and safe choice."

Nuclear power is suddenly in vogue. Even the alternative LA Weekly newspaper has a two-part feature touting nuclear power by author Judith Lewis, whose blog is entitled "Another Green World." In essence, she argues the good outweighs the bad when it comes to nuclear power. "Is it possible that we have come to this: a choice between a catastrophic warming trend and the most feared energy source on earth?" she asks in the first of a two part series entitled "How I tried to stop worrying and love nuclear power."

Our federal government has now launched a "Nuclear Power 2010" program that hopes to jump-start a nuclear industry that has not constructed a new power plant in two decades. Certainly, the biggest push for nuclear has come from the Bush Administration. While visiting a Maryland nuclear power plant earlier this year, President Bush proclaimed: "There is a growing consensus that more nuclear power will lead to a cleaner, safer nation. It is time for this country to start building nuclear power plants again." But you can add Democratic Senators Joe Lieberman of Connecticut and Barack

Obama of Illinois to the growing list of federal lawmakers calling for the construction of new nuclear power plants.

I first learned about nuclear power in my own backyard when I was living in Sacramento, California in the late 1980s. A laundry list of safety, environmental and economic issues resulted in a ballot initiative vote to close the Rancho Seco nuclear power plant in 1989. Energy experts across the country predicted that the owner of this nuke -- the Sacramento Municipal Utility District (SMUD) -- would be in dire straits once such a large portion of its power supply portfolio went away.

Interestingly enough, SMUD's closure of its nuclear power plant was the best thing to happen as it was forced to launch major solar, wind and energy efficiency programs. Instead of being viewed as one of the biggest losers among electric utilities, SMUD's embracing of clean power sources helped this troubled municipal utility turn around, gaining it respect from around the world. SMUD is now in the process of expanding its service territory due, in part, to its progressive and attractive clean power plans.

The underlying assumption of those now clamoring for a major expansion of nuclear power is that the threat of global climate change is so great, that we have no other choice. What a bunch of baloney! Wind and solar power have been the fastest growing power sources globally over the past several years, and we have barely begin to tap these abundant non-polluting and increasingly cost-effective sources of power.

Today, wind power is already cheaper than the dominant competition -- natural gas-fired power plants -- in many regions of this country and the rest of the world. Solar power, though still expensive, is the kind of modular, small-scale and customer-friendly power sources that allow communities, businesses and individuals to take control of their own energy needs, the key trend of the future if we truly want to become sustainable.

The cost (and time involved) in adding a whole new fleet of nuclear reactors around the world is just as staggering as the alternative route: a gradual shift to all renewable energy fuels, including solar, wind, geothermal steam, biomass (including urban waste streams), hydroelectric, wave, ocean current and tidal power technologies. Renewable energy technologies keep dollars in communities and spread far greater amounts of good jobs throughout rural and urban areas. In contrast, nuclear power concentrates power and money into the same entities that created our current power supply woes in the first place.

If we indeed look at the power supply imbroglio from a total systems standpoint, the goal is to make our power grid look like the Internet. In this utopian view of the future, each of us employs smart appliances, intelligently monitoring of our consumption and real-time power costs, and, where possible, generating clean electrons right on-site or right in our own communities. Nuclear power, with its emphasis on central power stations controlled by technologists trusted with guarding us against terrorist strikes, tragic safety accidents or other risks, is the outright antithesis of this vision of a decentralized, self-empowering and intelligent energy future.

The key to virtually all of society's pressing problems -- global climate change, terrorist threats, fossil fuel price spikes and poverty in the developing world -- can be solved by democratizing our energy supply through the development of indigenous renewable resources.

The basis for calling nuclear power "green" is the amount of emissions -- so-called greenhouse gases -- that are not going up into the atmosphere because of our existing fleet of nuclear reactors. If all of our nuclear reactors were suddenly replaced with coal-fired plants, 600 million tons of carbon dioxide would spew into the atmosphere. For that, I suppose, we should be thankful for. Indeed, coal is the cheapest and dirtiest source of electricity.

But does that mean nuclear power is green? What about the fact that nearly 90 percent of the US uranium deposits have been found in the Rocky Mountain States, the vast majority of which reside on Native American lands. Do we really need to find new ways to insult our own indigenous peoples? Then there is the dirty little secret that during the nuclear fuel processing process, the uranium enrichment process depends on great amounts of electricity, most of which is provided by two extremely dirty fossil fuel plants releasing all of the traditional air pollution emissions not released by the nuclear reactors themselves (albeit relatively small sums of pollution in the grand scheme of things). Still, it is not entirely accurate to say that the US nuclear industry emits no emissions contributing to global climate change.

And then there are the abandoned mines contaminated with high-level radioactive waste can continue to pose radioactive risks for as long as 250,000 years after closure. Despite all of the claims about safety, the fact remains that any catastrophic accident could easily kill as many as 100,000 people or more. And in today's scary world of smart terrorists, these risks have only increased in magnitude.

The US, with its 103 operating nuclear power plants, is already the world's top consumer of electricity generated from nuclear fission. Still, we have yet to build a federal repository for nuclear waste. Given the fact that reactors currently in operation produce about 2,000 tons of high-level waste every year of operation, calling for greater reliance upon nuclear power is not only economically questionable, but a grave disservice to the true values of the environmental movement.

Of course, the prime problem with nuclear power is that it is really the most expensive power source there is. No other technology requires greater subsidy and government intervention than nuclear. Congress, with strong backing from President Bush and other Republican leaders, just re-authorized the Price-Anderson Nuclear Industries Indemnity Act, a law dating way back to 1957 limiting the nuclear industry's liabilities in the case of a major accident. Fresh and outrageously generous tax credits for nuclear power were also just signed into law.

The fact that Republicans can call for more nuclear power with a straight face is truly an outrage, given the GOP constant calls for free markets. There has never been a more subsidized, socialized power technology as nuclear.

In the final analysis, no other technology offers so little benefit -- climate change mitigation -- with such a long list of drawbacks. If we really need to turn to nuclear power to stave off global climate change, then maybe we as a society deserve whatever calamities the weather Gods bring upon us. With a plethora of abundant and barely tapped renewable energy fuels surrounding all of us everywhere, we surely can respond

to the global climate change with a more sane, innovative and democratic energy strategy!

There has been much talk recently about whether the environmental movement is dead. If nuclear power moves forward in the US with the blessings of those deeming this expensive monster of a technology as "green," I am willing to write the epitaph. Hopefully, cooler heads will prevail on global warming, and the misguided leaders pushing nuclear power will once and for all see clearly that this is a technology that will never, ever pass the laugh test if judged on the basis of our collective long-term sustainability.