

Ten Big Lies!

Deadly Gamble: Nuclear Power and You

WE'RE TOLD IT IS SAFE, BUT THE EVIDENCE INDICATES SOMETHING VERY DIFFERENT.

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By Karl Grossman

Advocates in government and the private sector are engaged in a massive drive to “revive” nuclear power. Here are ten big lies they’re using to promote their deadly agenda:

1. No one in the United States has died as a result of nuclear power...and only 4,000 will die due to Chernobyl. People died and are still dying in the United States from this country’s biggest nuclear plant disaster: the partial meltdown at Unit 2 of the Three Mile Island facility in Pennsylvania. Lung cancer and leukemia rates downwind of the reactor were found to be two to ten times higher in years after the 1979 accident, according to research by Dr. Steven Wing, professor of epidemiology at the University of North Carolina School of Public Health.

The Radiation and Public Health Project (**Radiation.org**) has calculated tens of thousands of cancer deaths caused by the radioactivity released during the meltdown. “The accident had a devastating effect...especially for those who were infants and young children at the time,” says Joseph Mangano, the organization’s executive director.

In the book *Killing Our Own: The Disaster of America’s Experience with Atomic Radiation*, its authors—including energy expert Harvey Wasserman and former high U.S.

Department of Energy official Robert Alvarez—declare “People died at Three Mile Island.”

My television documentary, *Three Mile Island Revisited* (**EnviroVideo.com**) reveals how the plant’s owner has quietly paid out millions of dollars to area residents for health impacts they and their loved ones suffered.

The 1986 explosion at Ukraine’s Chernobyl plant was the worst nuclear disaster in the world. It probably shouldn’t be a big surprise that the Chernobyl Forum—a group led by the International Atomic Energy Agency, an entity set up by the United Nations to promote nuclear power—reported in 2005 that only 56 people had died as a result of that accident. The final death toll, the Chernobyl Forum said, can be expected to reach no more than 4,000.

However, reporting in 2006 that “at least 500,000 people have already died” from the Chernobyl disaster was Nikolai Omelyanets, deputy head of the National Commission for Radiation Protection in Ukraine. Dr. Alexey Yablokov, environmental advisor to former Russian President Boris Yeltsin and now president of the Center for Russian Environmental Policy, calculates a death toll of 300,000.

In my television interview *The Truth About Chernobyl*, Dr. Vladimir Chernousenko—the nuclear physicist in charge of the clean-up—estimated that a million people will die due to the accident. (Our conversation can be viewed at **YouTube.com**.)

It doesn’t take an accident for radioactivity to be emitted from a nuclear power plant. Because nuclear plants are not sealed, there are “routine releases” of krypton, xenon, tritium and other radioactive poisons. The Radiation and Public Health Project has

documented rates of cancer being significantly higher “for distances of up to 40 miles” around nuclear plants due to such emissions.

2. Nuclear plants can't explode. Then how come Chernobyl's Unit 4 exploded? And although the U.S. has a different design for its nuclear plants, they can explode, too. Nuclear physicist Dr. Richard E. Webb is the world expert on the problem. Indeed, the cover of his book *The Accident Hazards of Nuclear Power Plants* features an official U.S. government photo of a scaled-down nuclear plant exploding. This happened in the 1950s when the government conducted tests in Idaho on the explosive potential of nuclear plants.

We've been told that a meltdown or “China syndrome” accident is the worst mishap that can occur at a nuclear plant. It is caused by a stoppage in the massive amounts of water a nuclear plant needs to keep atom-splitting (or fission) in check. In fact, the worst-case scenario involves a control rod malfunction. There are approximately 200 control rods in a nuclear plant. A single control rod malfunction can trigger an exponential increase in the rate of fission, causing coolant water to flash to steam. A steam explosion will blow apart a plant's containment dome. That's what was tested for in Idaho.

Dr. Edward Teller, the scientist who led the development of the hydrogen bomb, warned then that because of the threat of such a reactor explosion, nuclear plants must be built underground. They weren't.

In 1961 in Idaho a reactor named the SL-1—built to generate power at remote military installations—underwent a steam explosion and meltdown, killing three servicemen. The propelled control rod in this accident flew into the groin of one of the

operators, pinning him, like a butterfly, to the ceiling of the reactor. His body was recovered but it was so hot with radioactivity, he was buried in a lead-lined coffin at Arlington National Cemetery.

But forget steam explosions. Dr. Webb has written extensively about how plutonium breeder reactors can generate a cataclysmic atomic explosion.

3. A nuclear plant can withstand the impact of an incoming aircraft used as a missile. Concerns about nuclear plants being terrorist targets have existed for years. This concern was heightened after 9/11 when American Airlines Flight 11 flew over the two Indian Point nuclear plants just above New York City before crashing into the World Trade Center. Then came the revelation that al-Qaeda had been considering targeting nuclear plants. It still is.

The nuclear industry once insisted its plants were “robust” and could withstand such a hit. Earlier this year the U.S. Nuclear Regulatory Commission (NRC) stopped accepting this claim, ordering the builders of all new nuclear plants in the U.S. do a “design-specific assessment of the effects of the impact of a large commercial aircraft.” The industry would have to “avoid or mitigate to the extent practical” damage caused by a 9/11-like strike. But what about the existing 104 nuclear plants? They would be left as is—essentially “pre-deployed weapons of mass destruction,” says Paul Gunter, director of the Reactor Oversight Program of the organization Beyond Nuclear (**BeyondNuclear.org**). “Public documents within the NRC confirm that these plants were never designed or constructed for aircraft impact, particularly explosion and fire.”

4. Uranium fuel is abundant. Raw materials containing substantial amounts of high-grade uranium-235 are not abundant. “Startingly, there are only a few decades left

of the proven high-grade uranium ore it [nuclear power] needs for fuel,” says Andrew Simms, policy director of the New Economics Foundation (**NewEconomics.org**).

The foundation stated in its 2005 report “Mirage and Oasis” that by one estimate “uranium reserves will be depleted in around four decades...Even the International Atomic Energy Agency...estimates ‘enough to last only another 85 years.’”

This limit is why the nuclear establishment has long believed nuclear energy will need to be based on man-made plutonium. But plutonium-fueled breeder reactors can explode like atomic bombs. Kay Drey, a board member of Beyond Nuclear, notes that “every” 1,000-megawatt uranium-fueled nuclear plant “generates enough plutonium every year to create at least 40 atomic bombs.”

5. The “peaceful” atom. There has never been a “peaceful” atom. Any country with a nuclear facility has the materiel—the plutonium built up in a uranium reactor—to make nuclear weapons. Look at India. In 1974 it received a “civilian” reactor from Canada and training from the U.S. Presto: India had nuclear weapons.

6. France’s nuclear “success” story. The French nuclear power program is a health and economic mess. A Beyond Nuclear report—“Nuclear Power and France: Setting the Record Straight”—discloses leukemia clusters in communities around France’s La Hague nuclear reprocessing center. It notes that the facility discharges 100 million gallons of radioactive liquid waste yearly into the English Channel. Waters off La Hague have been “measured as 17 million times more radioactive than normal sea water,” and this contamination has affected waters as far as the Arctic Circle.

French nuclear plant mishaps in 2008 included a radioactive leak from a plant near Avignon polluting two rivers. People were warned not to drink water, swim or eat

fish from the waterways. “There is no French love affair with nuclear energy, but rather a deep mistrust of this most secretive of industries,” says Linda Gunter, a co-founder of Beyond Nuclear. A majority in France want nuclear power phased out, polling shows. There have been massive protests against construction of new nuclear plants.

In 2008, Global Chance (**Global-Chance.org**), a French research organization, issued a report declaring “France today has no industrial solution for all its long-term radioactive wastes,” It concludes that nuclear power in France is an “undemocratic choice.”

7. Nuclear power is inexpensive. It’s extremely expensive: \$12 billion just to build a plant. “No private money anywhere in the world is being used to build new nuclear plants,” says Michael Mariotte, executive director of the Nuclear Information & Resource Service (**www.NIRS.org**). “They are all being built with some sort of government subsidy.”

In 2008, with Wall Street unwilling to finance new nuclear plants, U.S. Senators Joseph Lieberman and John Warner advanced legislation to provide \$544 billion for new nuclear plant development. (See my article, “Half-Trillion Dollars for Nukes,” at <http://www.commondreams.org/archive/2008/05/29/9268>. That didn’t pass, but the nuclear establishment is still pushing to get your tax dollars.

Physicist Amory Lovins, cofounder and chairman of the Rocky Mountain Institute (**RMI.org**), says, “It [nuclear power] costs about three times as much as wind power, which is booming.”

The Nuclear Regulatory Commission and the Department of Energy’s Sandia National Laboratories conducted a report titled “Calculation of Reactor

Accident Consequences for U.S. Nuclear Plants” (acronymed CRAC-2). Every nuclear plant in the U.S. is evaluated as to “early fatalities” in the event of a meltdown with breach of containment. “Property damage” costs are estimated as high as \$314 billion for a single accident. And that’s in 1980 dollars, which would be tripled today. Deaths are estimated at up to 100,000.

Meanwhile, the 1957 the Price-Anderson Act was passed to shield the nuclear industry from having to pay for those damages. That was made necessary because insurance companies refused to insure nuclear plants. It was supposed to be only temporary, but the act has been extended and extended.

Based on the Price-Anderson Act, all the nuclear industry would have to pay to compensate people for deaths, injuries and property damages in the event of a nuclear plant accident would be \$10 billion—even though that’s just a fraction of what CRAC-2 estimates would be the costs. (For more about CRAC-2, see NIRS.org.)

8. Nuclear Power “Doesn’t Contribute” to Global Warming. This claim is part of the current push to “revive” nuclear power. What you’re not supposed to know is that the overall nuclear “chain” or “cycle”—including uranium mining and milling, enrichment and fuel fabrication—generates significant greenhouse gas emissions.

In its report “Nuclear Power Can’t Stop Climate Change,” the Nuclear Information & Resource Service notes: “The nuclear industry conveniently omits [that] the emissions related to nukes are caused by the fossil fuel-intensive processes involved in uranium mining, conversion, enrichment, transport and construction. As a result nuclear power produces direct and indirect emissions of 73 to 230 grams of carbon dioxide per kilowatt hour of electricity produced. Wind and solar, by comparison, are

virtually greenhouse-gas free, recouping construction emissions in the first years of operation.”

“Nuclear power makes a substantial contribution to global warming,” says Michel Lee, chair of the Council on Intelligent Energy & Conservation Policy.

9. Nuclear power is needed. In fact, there’s absolutely no need to undergo the life-threatening dangers of nuclear power. In a 2008 edition on safe, renewable energy technologies, the prestigious British magazine *New Scientist* pointed to a United Nations report declaring that “renewable energy that can already be harnessed economically would supply the world’s electricity needs”

From solar to wind (now the fastest-growing and cheapest new energy technology) to wave-power to tidal-power to bio-fuels to small hydropower to co-generation (combining the generation of heat and electricity) and on and on, a renewable energy windfall is here today.

Consider the breakthrough at the Department of Energy’s National Renewable Energy Laboratory (NREL) in Golden, Colorado, regarding the use of solar power to break down water into oxygen and hydrogen, with the hydrogen then usable as a fuel. “It’s the forever fuel,” Dr. John Turner, senior scientist at NREL told me. “This uses our two most abundant natural resources—sunlight and water—to give us an energy supply that is inexhaustible.”

10. New designs are inherently safe. The nuclear industry is touting its “new and improved” nuclear plant models as “inherently safe.” They’re not. They, like all nuclear plants, are “inherently dangerous,” stresses Paul Gunter. They are subject to catastrophic accidents, they have “routine emissions” of radioactivity, and they produce

nuclear waste which must somehow be isolated from the human environment for millions of years. Moreover, says Gunter, the new plants “may be even more risky, more dangerous, because they are using less concrete,” and the manufacturers are “papering over a lot of the risk.”

Says Michael Mariotte of the Nuclear Information & Resource Service, the purportedly “inherently safe” new nuclear plants “do not exist.”

Admiral Hyman Rickover made the same ominous observation. The “father” of the nuclear Navy, he also supervised the construction of the Shippingport (Pennsylvania) Atomic Power Station, this country’s first commercial nuclear plant, which began operating in 1957. Rickover testified in his farewell address to a Congressional committee in 1982: “I’ll be philosophical. Until about 2 billion years ago, it was impossible to have any life on Earth; you couldn’t have any life—fish or anything. Gradually, about 2 billion years ago, the amount of radiation on this planet...reduced making it possible for some form of life to begin...Now, when we go back to using nuclear power, we are creating something which nature tried to destroy to make life possible...I think there the human race is going to wreck itself.” Finally, Rickover declared that we must “outlaw nuclear reactors.”

Karl Grossman has been investigating nuclear energy for more than three decades. He is the author of *Cover Up: What You ARE NOT Supposed to Know About Nuclear Power and Power Crazy*. He is also the host and writer of many television programs on atomic technology—notably *Enviro Close-Up*—and such documentaries as *The Push To Revive Nuclear Power* and *Three Mile Island Revisited*.