

Book Review - [Nuclear Roulette](#)

By: [David Swanson](#) Sunday September 16, 2012 9:49 pm



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As the [Coalition Against Nukes](#) prepares for a series of events in Washington, D.C., September 20-22, including a Capitol Hill rally, a Congressional briefing, a fundraiser at Busboys and Poets, a ceremony at the Museum of the American Indian, a rally at the Nuclear Regulatory Commission (NRC), a film screening, and a strategy session, the time seems ideal to take in the wisdom of Gar Smith's new book, *Nuclear Roulette: The Truth About the Most Dangerous Energy Source on Earth*.

Most dangerous indeed, and most useless, most inefficient, most destructive, and dumbest. How does nuclear energy make the human species look like the stupidest concoction since the platypus? Let me count the ways:

1. After the mining, processing, and shipping of uranium, and the plant construction, maintenance, and deconstruction, a nuclear plant only produces about as much energy as went into it — not counting the need to store the only thing it actually produces (radioactive waste) for hundreds of thousands of years — and not counting the sacrifice of areas of the earth, including those poisoned with uranium, which has a half life of 4.5 billion years and causes lung cancer, bone cancer, and kidney failure.
2. Wind, solar, hydro, and geothermal have far better net energy ratios.

3. If nuclear power actually worked against climate change, that fact would not be useful, because there is no way enough nuclear power plants to significantly contribute to the required difference could be built quickly enough.

4. If nuclear power plants could be built quickly enough, that wouldn't matter, because the financial cost is prohibitive. Only with multi-billion-dollar bailouts from the government can a tiny number of nuclear plants be considered for construction at all. The sainted Private Marketplace of Freedom will never touch nuclear construction on its own — or insure it. And the small number of jobs created by the “Job Creator” lobbyists who push for the generous public loan guarantees mostly show up in Japanese and French nuclear companies, thus depriving the whole enterprise of its anti-foreign-oil xenophobic appeal. (Not to mention, most of the uranium used in U.S. nuclear plants comes from abroad just like oil.) Deconstructing the plants when they grow too old to operate costs so much that the job is routinely and recklessly put off — and that doesn't count the fairly common expense of compensating the victims of accidents.

5. The nuclear industry is in debt up to its ears already, without our feeding its habit any longer. For example, Washington State's Hanford Nuclear Reservation has dumped 1.7 trillion gallons of contaminated waste into unlined trenches. The latest plan to try to deal with the mess comes with a \$12.3 billion price tag.

6. Even if nuclear power worked when it worked, it's remarkably unreliable. Between 2003 and 2007, U.S. nuclear plants were shut down 10.6 percent of the time, compared to 1 or 2 percent for solar stations and wind farms.

7. Nuclear power produces greenhouse gases in the mining, production, deconstruction, shipping, and waste storage processes. It also discharges 1000 degree Fahrenheit steam directly into the atmosphere. Considering the entire fuel cycle, a nuclear reactor burning high-grade uranium produces about a third as much carbon dioxide as a gas-fired power plant. As high-grade uranium runs out, low-grade ore will result in a nuclear plant producing just as much carbon dioxide as a gas plant.

8. Climate change may have reached a tipping point. Radioactivity could as well. Birds and insects near Chernobyl are adapting. Humans, too, may be beginning to evolve within the Radiocene era to which the earth has been condemned.

9. Climate change limits nuclear energy, as the heat forces plants to shut down for lack of cool water.

10. The Three Mile Island disaster killed birds, bees, and livestock. Pets were born dead or deformed. In humans, cancer, leukemia, and birth defects spread. Chernobyl gave cancer to about a million people. Fukushima looks to be far worse. Meltdowns and other major malfunctions are common, in the United States and abroad. Gar Smith documents dozens. The worst nuclear disaster in the United States was in Simi Valley, California, and no one was told about it. The rates of disease and death led residents to investigate. I shouldn't use the past tense; the disaster is still there and not going anywhere in the span of human attention.

11. The rate of break downs and failures thus far is very likely to grow as nuclear plants age. Meanwhile, the Nuclear Regulatory Commission (NRC), subservient to the nuclear profiteers, is drastically reducing safety standards.

12. In the normal course of proper nuclear power production, the water, air, and earth are poisoned.

13. The NRC publicly dismisses concerns about earthquakes, but privately panics. Earthquakes are on the rise. Fracking may cause even more of them. Fukushima should scare us all; but closer to home, a plant at Lake Anna, in Virginia, was shut down by an earthquake last year, possibly caused by fracking, and the first response was the publication of lies about the damage.

14. If anticipated solar flares (or anything else) collapse power grids, nuclear plants could overheat, melt down, or explode.

15. An average nuclear plant produces 20-30 tons of high-level waste and 70 tons of low-level waste per year. No proven long-term storage site exists. If one ever does, we won't know what language to post the warning signs in, as no human language has lasted a fraction of the time the nuclear waste will remain deadly.

16. When a country develops nuclear energy, as the United States encouraged Iran to do in my lifetime, it brings that country very close to developing nuclear weapons, which has become a leading excuse for launching and threatening wars. It doesn't help for the CIA to give Iran plans for building a bomb, but ridding the world of that sort of stupidity is just not within our reach. Ridding the world of nukes needs to take priority.

17. There is no purpose in a nation developing nuclear weapons if it wants to target an enemy that possesses nuclear power plants. Sitting duck nuclear catastrophes waiting to happen — by accident or malice — exist in the form of nuclear power plants within 50 miles of 108 million people in the United States. Nuclear reactors could have been somewhat protected by being built underground, but that would have cost more. Haruki Murakami, a Japanese novelist, commented on Fukushima: “This time no one dropped a bomb on us. . . . We set the stage, we committed the crime with our own hands, we are destroying our own lands, and we are destroying our own lives.”

18. The latest designs in nuclear reactors don't change points 1-17.

19. The Associated Press in 2011 found that, “Federal regulators [at the NRC] have been working closely with the nuclear power industry to keep the nation's aging reactors operating within safety standards by repeatedly weakening those standards, or simply failing to enforce them.”

20. [Helping to shake the nuke habit](#) would take 30 seconds and be ridiculously easy, and yet many won't do it.

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US Poised to Violate Nuclear Non-Proliferation Treaty

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by [Pat LaMarche](#)



Technicians

at the Pantex Plant in Texas, where nuclear bombs are disassembled for testing, prepare to start the evaluation process on a B61 nuclear bomb, the oldest in the arsenal. The B61 is about to undergo a major overhaul that the Pentagon estimates will cost up to \$10 billion, or \$25 million per bomb. (National Nuclear [Security](#) Administration) To the best of my knowledge from information gleaned from internet data sources, there are three countries that have not signed the Nuclear Non-Proliferation Treaty (NPT). They are India, Pakistan and Israel. One additional country -- North Korea -- withdrew in 2003 after being a signatory for 18 years.

Iran signed in 1968 and ratified the treaty in 1970. In light of their alleged insistence on starting a nuclear weapons program, some might say that the treaty is a joke. I'd [agree](#) to the farcical nature of the document, but not because of Iran's actions -- although hat's off to the North Koreans for withdrawing publicly in the face of being labeled by George W. Bush as members of the Axis of Evil.

No, this week's big [Washington Post story](#) about the U.S. revamping their nuclear weapons is reason enough to scoff at the legitimacy of the NPT. And it's not just the nuclear weapons program that the U.S. is improving; it's the bombs. The *Washington Post* confirms, "At the heart of the overhaul are the weapons themselves." And this revamp won't be cheap. "Upgrading just one of the seven types of weapons in the stockpile, the B61 bomb, is likely to cost \$10 billion over five years, according to the Pentagon."

But wasting money on weapons when the U.S. is reeling from overwhelming [debt](#) and consequently slashing assistance to the needy isn't the only reason to question this enormous expenditure. The big looming unknown is the value of U.S. ink on paper.

Here's what we [pledged](#) in 1968 and our Senate ratified in 1970, according to the U.S. State Department, "countries with nuclear weapons will move towards disarmament; countries without nuclear weapons will not acquire them; and all countries can access peaceful nuclear energy."

How can the upgrade of the entire U.S. nuclear arsenal -- to make it more effective and assure its deadlines -- possibly be a move "towards disarmament?"

According to the *Washington Post*, part of the pending stockpile problem is that each of the last three presidential administrations had cut the U.S. inventory by 40 to 50 percent during their time in office. Additionally the [aging](#) infrastructure has contributed to a decline in the U.S. ability to launch from sea, land and air. That sounds like the U.S. has reduced its ability to wage nuclear war, which was exactly what the country promised to do when signing the NPT in the first place.

Full scale nuclear war -- which the U.S. and the Russians are still more than capable of launching -- would leave the planet [uninhabitable](#) by human beings. Clearly, the [intent of the NPT](#) is to avoid such worldwide destruction as well as to avoid the sort of "small scale" destruction which occurred in Hiroshima and Nagasaki.

But because I spend most of my time writing about poverty this plan by the U.S. to [invest](#) an *estimated \$352 billion dollars making nuclear war more likely* -- in direct violation of a treaty we have signed to the contrary -- I insist we recall the words of President Dwight D. Eisenhower,

"Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children. This is not a way of life at all in any true sense. Under the cloud of threatening war, it is humanity hanging from a cross of iron."

And on that "cross of iron" tens of thousands of children die each day.

According to the World Hunger Education Service [925 million people](#) in the world went hungry in 2010. I use worldwide statistics because nuclear war has a worldwide impact. Doing a little quick math, each hungry person in the world could have more than \$380 for food -- all 925 million of them -- for what the U.S. alone will spend on upgrading its nuclear arsenal.

But those are only hungry people. What sort of investment could be made on behalf of those children dying of starvation? The United Nations puts that number at [18,000 per day](#). 18,000 kids dying of hunger each day! That means about six and a half million children die of starvation each year. If the U.S. spent the \$352 billion on them, we could spend about \$53,576 per kid and obey the terms of a treaty we signed more than 40 years ago.

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