

Nuclear Power Is Expensive and Bad for the Environment ... It's Being Pushed Because It Is Good For Making Bombs

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Nuclear Energy Is Expensive

Forbes points out:

Nuclear power is no longer an economically viable source of new energy in the United States, the freshly-retired CEO of Exelon, America's largest producer of nuclear power [who also served on the president's <u>Blue Ribbon Commission on America's Nuclear Future</u>], said in Chicago Thursday.

And it won't become economically viable, he said, for the forseeable future.

"I'm the nuclear guy," Rowe said. "And you won't get better results with nuclear. It just isn't economic, and it's not economic within a foreseeable time frame."

U.S. News and World Report notes:

After the Fukushima power plant disaster in Japan last year, the rising costs of nuclear energy could deliver a knockout punch to its future use in the United States, according to a researcher at the Vermont Law School Institute for Energy and the Environment.

"From my point of view, the fundamental nature of [nuclear] technology suggests that the future will be as clouded as the past," says Mark Cooper, the author of the report. New safety regulations enacted or being considered by the U.S. Nuclear Regulatory Commission would push the cost of nuclear energy too high to be economically competitive.

The disaster insurance for nuclear power plants in the United States is currently underwritten by the federal government, Cooper says. Without that safeguard, "nuclear power is neither affordable nor worth the risk. If the owners and operators of nuclear reactors had to face the full liability of a Fukushima-style nuclear accident or go head-to-head with alternatives in a truly competitive marketplace, unfettered by subsidies, no one would have built a nuclear reactor in the past, no one would build one today, and anyone who owns a reactor would exit the nuclear business as quickly as possible." An authoritative study by the investment bank Lazard Ltd. found that wind beat nuclear and that nuclear essentially tied with solar. But wind and solar, being simple and safe, are coming on line faster. Another advantage wind and solar have is that capacity can be added bit by bit; a wind farm can have more or less turbines without scuttling the whole project. As economies of scale are created within the alternative energy supply chains and the construction process becomes more efficient, prices continue to drop. Meanwhile, the cost of stalled nukes moves upward.

AP noted last year:

Nuclear power is a viable source for cheap energy only if it goes uninsured.

Governments that use nuclear energy are torn between the benefit of low-cost electricity and the risk of a nuclear catastrophe, which could total trillions of dollars and even bankrupt a country.

The bottom line is that it's a gamble: Governments are hoping to dodge a oneoff disaster while they accumulate small gains over the long-term.

The cost of a worst-case nuclear accident at a plant in Germany, for example, has been estimated to total as much as \notin 7.6 trillion (\$11 trillion), while the mandatory reactor insurance is only \notin 2.5 billion.

"The €2.5 billion will be just enough to buy the stamps for the letters of condolence," said Olav Hohmeyer, an economist at the University of Flensburg who is also a member of the German government's environmental advisory body.

The situation in the U.S., Japan, China, France and other countries is similar.

"Around the globe, nuclear risks — be it damages to power plants or the liability risks resulting from radiation accidents — are covered by the state. The private insurance industry is barely liable," said Torsten Jeworrek, a board member at Munich Re, one of the world's biggest reinsurance companies.

In financial terms, nuclear incidents can be so devastating that the cost of full insurance would be so high as to make nuclear energy more expensive than fossil fuels.

Ultimately, the decision to keep insurance on nuclear plants to a minimum is a way of supporting the industry.

"Capping the insurance was a clear decision to provide a non-negligible subsidy to the technology," Klaus Toepfer, a former German environment minister and longtime head of the United Nations Environment Programme (UNEP), said. And see this and this.

Interestingly, Harvey Wasserman reports that – even though everyone assumes that the new nuclear power plants approved under Obama will be built – economics <u>might kill them</u> <u>before ground is broken</u>:

The only two US reactor projects now technically under construction are on the brink of death for financial reasons.

If they go under, there will almost certainly be no new reactors built here.

Georgia's double-reactor Vogtle project has been sold on the basis of federal loan guarantees. Last year President Obama promised the Southern Company, parent to Georgia Power, \$8.33 billion in financing from an \$18.5 billion fund that had been established at the Department of Energy by George W. Bush. Until last week most industry observers had assumed the guarantees were a done deal. But the Nuclear Energy Institute, an industry trade group, has publicly complained that the Office of Management and Budget may be requiring terms that are unacceptable to the builders.

The climate for loan guarantees has changed since this one was promised. The \$535 million collapse of Solyndra prompted a rash of angry Congressional hearings and cast a long shadow over the whole range of loan guarantees for energy projects. Though the Vogtle deal comes from a separate fund, skepticism over stalled negotiations is rising.

So is resistance among Georgia ratepayers. To fund the new Vogtle reactors, Southern is forcing "construction work in progress" rate hikes that require consumers to pay for the new nukes as they're being built. Southern is free of liability, even if the reactors are not completed. Thus it behooves the company to build them essentially forever, collecting payment whether they open or not.

All that would collapse should the loan guarantee package fail.

Bad for the Environment

Alternet points out:

Mark Cooper, senior fellow for economic analysis at the Vermont Law School ... found that the states that invested heavily in nuclear power had worse track records on efficiency and developing renewables than those that did not have large nuclear programs. In other words, investing in nuclear technology crowded out developing clean energy.

Many experts also say that the "energy return on investment" from nuclear power is <u>lower</u> than many other forms of energy. In other words, non-nuclear energy sources produce more energy for a given input.

And decentralizing energy production and storage <u>is the real solution for the environment</u> ... not building more centralized nuclear plants.

Building the [nuclear] power station produces a lot of CO2

Nuclear power ... would do nothing directly to reduce CO2 from transport

Indeed, while it is admittedly an unusual argument, an International Forum on Globalization report – written by environmental luminaries Ernest Callenback, Gar Smith and Jerry Mander – have slammed nuclear power as <u>catastrophic for the environment</u>:

Nuclear energy is not the "clean" energy its backers proclaim. For more than 50 years, nuclear energy has been quietly polluting our air, land, water and bodies—while also contributing to Global Warming through the CO2 emissions from its construction, mining, and manufacturing operations. Every aspect of the nuclear fuel cycle—mining, milling, shipping, processing, power generation, waste disposal and storage—releases greenhouse gases, radioactive particles and toxic materials that poison the air, water and land. Nuclear power plants routinely expel low-level radionuclides into the air in the course of daily operations. While exposure to high levels of radiation can kill within a matter of days or weeks, exposure to low levels on a prolonged basis can damage bones and tissue and result in genetic damage, crippling long-term injuries, disease and death.

David Swanson - discussing the report - writes:

The energy put into mining, processing, and shipping uranium, plant construction, operation, and decommissioning is roughly equal to the energy a nuclear plant can produce in its lifetime. In other words, nuclear energy does not add any net energy.

Not counted in that calculation is the energy needed to store nuclear waste for hundreds of thousands of years.

Also not counted is any mitigation of the relatively routine damage done to the environment, including \bowtie human health, at each stage of the process.

Nuclear energy is not an alternative to energies that increase global warming, because nuclear increases global warming. When high-grade uranium runs out, nuclear will be worse for CO2 emissions than burning fossil fuels. And as global warming advances, nuclear becomes even less efficient as reactors must shut down to avoid overheating.

Good for Making Bombs

If nuclear energy is expensive and bad for the environment, why is it being pushed so heavily? And why did the Fukushima reactors <u>use plutonium</u> – instead of just uranium? We need a little background to understand the answers.

Virtually all of the nuclear reactors in the U.S. are of the <u>same archaic design</u> as those at Fukushima. This design was not chosen for safety reasons. Rather, it was chosen because it <u>worked in Navy submarines</u>, and produces plutonium for use in nuclear weapons.

Indeed, safer designs – such as thorium reactors – were left on the shelf <u>because they don't</u> <u>produce weapons-grade plutonium</u>.

Governments have been <u>covering up nuclear meltdowns for 50 years</u> in order to protect the nuclear plant production of weapons-grade nuclear material. They have also <u>suppressed the findings of their own top scientists</u> about the health risks of radiation. Indeed, "nuclear regulators" are really just <u>promoters for the nuclear cycle</u>.

As veteran investigative reporter Joseph Trento – who has received six Pulitzer nominations, worked for CNN's Special Assignment Unit, the Wilmington News Journal, and prominent journalist Jack Anderson – notes in a new report, <u>the U.S. circumvented national and international laws to secretly give Japan nuclear weapons</u>:

The United States deliberately allowed Japan access to the United States' most secret nuclear weapons facilities while it transferred tens of billions of dollars worth of American tax paid research that has allowed Japan to amass 70 tons of weapons grade plutonium since the 1980s, a National Security News Service investigation reveals. These activities repeatedly violated U.S. laws regarding controls of sensitive nuclear materials that could be diverted to weapons programs in Japan. The NSNS investigation found that the United States has known about a secret nuclear weapons program in Japan since the 1960s, according to CIA reports.

[Japan] has used its electrical utility companies as a cover to allow the country to amass enough nuclear weapons materials to build a nuclear arsenal larger than China, India and Pakistan combined. This deliberate proliferation by the United States fuels arguments by countries like Iran that the original nuclear powers engage in proliferation despite treaty and internal legal obligations.

That secret effort was hidden in a nuclear power program that by March 11, 2011– the day the earthquake and tsunami overwhelmed the Fukushima Daiichi Nuclear Plant – had amassed 70 metric tons of plutonium. Like its use of civilian nuclear power to hide a secret bomb program, Japan used peaceful space exploration as a cover for developing sophisticated nuclear weapons delivery systems.

Political leaders in Japan understood that the only way the Japanese people could be convinced to allow nuclear power into their lives was if a long line of governments and industry hid any military application. For that reason, a succession of Japanese governments colluded on a bomb program disguised as innocent energy and civil space programs.

Until the March 2011 tragedy, the Japanese nuclear industry had largely remained hidden from critical eyes. The less than thorough InternationA nuclear-armed Japan would relieve much of the drain on American military resources. The need to keep two divisions on the ground in Korea, as well as nuclear armed ships and aircraft in the Pacific as a hedge against China and the missile bases in the Soviet Far East detracted from the Pentagon's chief mission – preparing for all-out war on the plains of Central Europe. The Reagan administration's strategy was to push the Soviet war machine until it broke, taking the Soviet Union and its satellite regimes with it. The less than thorough International Atomic Energy Agency, the world's proliferation safeguard agency, also turned a blind eye.

In a rare glimpse of a Japanese industry that has remained top secret for so many decades, our investigation raises serious concerns about Japanese and Western nuclear policies and the officials who shaped those policies during and after the Cold War. International corporations and officials sacrificed the safety and security of the public to carry out the deception. Under the guise of a peaceful nuclear power program, they made huge profits.

Both the Monju fast-breeder reactor in 1995 and the Tokai reprocessing plant in April 1997 suffered serious, accidental radiation leaks; both accidents were the subjects of attempted cover-ups. Most egregious was the fire and leak of radioactive sodium at the Monju FBR. Japan's Power Reactor and Nuclear Fuel Development Corporation (PNC), the government corporation that operated Monju, lied repeatedly to the public about the accident. PNC attempted to suppress video footage that showed the cause of the accident: a ruptured pipe in a secondary cooling system that had spilled an estimated two to three tons of radioactive sodium – the largest such leak in the history of fast-breeder technology. One of the reasons PNC gave for releasing the misinformation was that Monju was too important to Japan's energy program to jeopardize the reactor's operation. In other words, the public's safety was secondary to the breeder program.

Had it not been for a courageous act by a group of Fukui prefecture officials in the early morning of December 11, PNC's attempted cover-up probably would have succeeded. Suspecting a cover-up, the officials entered the plant and secured the videotape. The action came as a direct result of a previous accident at Fukui's Tsuruga Unit I reactor in the early 1980s. Fukui prefecture officials were not permitted to investigate that mishap. When the Monju accident took place, the officials were determined not to be turned away a second time. Following revelations that the agency itself had been involved in trying to withhold the video, a PNC executive committed suicide.

The Fukushima nuclear disaster was not Japan's first close call with nuclear weapons grade plutonium. Japan came very close to contaminating the Chilean coast on March 20, 1995, when the Pacific Pintail, laden with enough waste plutonium to build hundreds of nuclear bombs, tried to head into the protection of Chilean waters during a storm [with] 40-foot waves crashing over her bow, the spray flying away horizontally in the storm. He was in the midst of an Antarctic gale off Cape Horn at the tip of South America – the deadliest ocean in the world....

BBC notes:

A veteran of the nuclear industry wrote this: "What the industry needs to regain the support of the British public is... something akin to a Truth and Reconciliation Commission."

It needs to be admitted that governments and industry lied to the public about the links with the military programme"

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