

Why a Nuclear Free World is Important

Contributed by Roger Herried
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Introduction

We are now facing an energy crossroad as a culture. Everyone was effected by the price of gas that peaked during the summer of 2008. The world has fallen into a consumer trap where a growing number of people around the world use finite oil resources to drive to work. The energy it takes to drive a car is like having 700 human slaves pushing that vehicle for a few cents per hour.

The era of oil is rapidly coming to an end as the entire planet hunts down the last accessible oil reserves. At the same time, the burning of fossil fuels is polluting the air and water. There is a global shift to move away from oil-driven cars. This means electric cars or, better, redesigning our communities so we work close to home.

Thirty years ago, energy and environmental activists warned Americans about this coming crisis but were drowned out by the energy industry and the news media's failure to be honest with the public. In 1992, one half of the world's Nobel Laureates signed onto a call that the world had 20 years to deal with our growing global energy and population crisis. That call was ignored by America's leaders and the media. Some experts say we only have a few years to keep from being bankrupted by energy costs and global ecological carrying-capacity collapses.

The nuclear power industry has been claiming that it can rescue us from climate change and the coming energy crisis. Wrong! The arguments from this failed industry should not be trusted and, in fact, represent a disastrous misuse of economic resources at such a critical moment. Their last experiment in science fiction has left the world neck deep in deadly wastes and economic boondoggles.

History

The nuclear agenda is at the heart of the military industrial complex. The promoters of Weapons of Mass Destruction have rationalized these unusable weapons to threaten opponents, yet its biggest victims have been Americans.

The use of nuclear fission to generate electricity could never exist without the nuclear weapons infrastructure. The nuclear weapons industrial complex is joined at the hip with nuclear power where uranium is mined and turned into either bombs or fuel. One estimate suggests that we have spent \$5 trillion for nuclear weapons since 1942. Once known as the Manhattan Project, it is managed today by the Department of Energy (DOE). The primary purpose of the 200,000 DOE workers is the design and construction of ever more sophisticated nuclear weapons and reactors. This is done at dozens of government laboratories across the country that were hidden in Cold War secrecy and vicious propaganda.

During the early Cold War this giant infrastructure was the single largest industrial operation in the world, using vast amounts of water and energy. Thousands of uranium mining operations dug up billions of tons of ore that then processed it into concentrated uranium, leaving behind sick workers and a contaminated environment. Since the collapse of the Soviet Union much of their budget has gone to clean up the toxic disaster left behind at sites around the country. But the George W. Bush administration launched a new push to rebuild the nuclear weapons infrastructure to cost hundreds of billions of dollars. Funny coincidence that there is a push for new nuclear weapons and power at the same time!

Safety

Radiation that comes from nuclear weapons and power production is deadly. This country's nuclear industry has spent decades covering up untold scandals around its failure to protect the public. Radiation standards strengthened throughout the 20th century until the arrival of the anti-nuclear movement and the Chernobyl disaster. Then nuclear power was killed due to accidents and economics, but there was also a push to shut down the nuclear weapons infrastructure after the Soviet collapse. Rather than shutting down, nuclear scientists covered up the call for tighter safety standards, although radiation was found to be from four to sixteen times more dangerous than previously thought. This male-dominated subculture of right-wing WMD warriors, led by its father Edward Teller, have had secret scandals exposed such as the following:

- Hid the economic and health impacts of a nuclear meltdown;
- Conducted radiation experiments on the public without their consent;
- Exposed nearly 1/2 million military veterans at close range to fallout;
- Exposed the entire country to fallout then hid the impacts until 1998;
- Secretly exposed Washington state residents to high levels of fallout;
- Exposed as many as 400,000 nuclear workers to contamination that has damaged their health and genetic future;
- Kept secret the scale of nuclear accidents from nuclear satellites, military accidents, reactors incidents like SL-1, TMI or Fermi;
- Exposed and killed hundreds of indigenous uranium miners in the southwest;
- Abandoned thousands of uranium mines that have yet to be cleaned up that could cost upwards of \$30 billion, including one tailings pond that is endangering the entire Colorado River;
- Used radioactive tailings to build the foundations and streets of Grand Junction, Colorado costing 3/4 of a billion dollars in state, federal and insurance to clean up;
- Contaminated dozens of nuclear facilities that will cost between \$270-330 billion and decades to clean up;
- Estimated \$50 billion cleanup of Hanford and Columbia River in Washington;
- Contaminated Asian Pacific Communities with radiation that has decimated their islands, health and genetic future;
- Forced to pay \$350 million in damages to Rocky Flats neighbors in 2006;
- Contaminated and dumped the health records of Mounds DOE workers in 2007;;
- Fighting payment to DOE workers who have died or had their health destroyed;
- Hid the danger of excessive use of radiation in medicine, and food sterilization;
- Initiated the use of Depleted Uranium in weapons;
- Has one of the worst nuclear waste protection standards in the world.

Only a few media outlets in this country like the Seattle Times, Rocky Mountain News or the Tennessean have ever fully covered this colossal maelstrom. Not since the Seattle Times week long multipage investigative report in the late 1980's has there been an attempt to lay out the full scope and numerous details of this radioactive nightmare. Hiding behind claims of scientific credentials, the scientists, corporations and politicians have damaged the health of untold numbers of people, due to the misuse of nuclear fission.

Fuel Cycle

The nuclear fuel cycle is the Achilles heel of the nuclear fission culture. From the mining of uranium to growing plague of nuclear wastes, we have watched the attempts to deal with the nuclear Pandora's box fail. The twenty year old attempt to bury the most deadly spent nuclear fuel in Nevada at the proposed \$100 billion Yucca Mountain repository is dead. The spent fuel ponds at reactors are full and have no place other than at very expensive dry cask onsite storage. The US attempted to force states to take nuclear wastes with a federal law in 1982. Not until Texas licensed a new dump in early 2009 has there been anyone willing to take n-waste. The media failed to cover the secret dumping of n-wastes at a landfill in Tennessee. Nor has there been coverage of the US secretly importing and incinerating wastes from outside the US that are then dumped in Utah.

Cleanup estimates for the collapsed uranium mining fiasco with several thousand abandoned mines yet to be dealt with could cost up to \$30 billion. A recent report warned that if the West Valley reprocessing facility in New York isn't quickly cleaned up at a price tag of \$13 billion, the wastes could contaminate Lake Ontario causing up to \$27 billion in damages.

Cleanup of the DOE's operations will be far over \$100 billion and take decades to do. Nearly \$5 billion in payments to workers who have had their lives destroyed has been handed out in an adversarial process that pits the government against the workers. In 2007, the DOE was caught dumping the records of health workers at one facility in Ohio into a nuclear waste dump. Over \$350 million was awarded neighbors of the Rocky Flats facility in Colorado in 2007 due to radiation contaminating their community. There are similar fights taking place across the country, all with no or little national media coverage.

Waste

The back end of the fuel-cycle is the planet's nuclear nightmare. What to do with the hundreds of man-made radioactive isotopes that have been produced by nuclear reactors here and around the world. As of this writing, The 25 year old, \$100 billion plan to store the most deadly wastes at an underground repository at Yucca Mountain Nevada is now dead. In 1982, the pro-nuclear industry passed legislation demanding that 13 regional nuclear waste dumps be opened and paid for by the public. None of the 13 regional compact projects was able to build a dump even though federal law ordered them to be open by 1994. With the closure of the Barnwell South Carolina dump in 2008, much of the country had no place to dump their nuclear waste. But, lo, in a scandal in mid 2007, it was discovered that n-waste was being dumped at commercial landfills in Tennessee.

Private attempts to create a spent fuel storage facility at Skull Valley, Utah was stopped, but another private contractor called Energy Solutions has been taking wastes, while Texas just licensed the first low-level waste dump in years.

The US has one of the poorest nuclear waste disposal standards of countries that handle nuclear wastes. Canada for example, is also trying to open up a spent fuel repository, but currently stores all of its waste in monitored and retrievable storage facilities. The US allows wastes to be dumped into the ground and covered over with dirt with no long term

monitoring of contamination. Every nuclear waste dump this country has ever had has leaked, was forced to be shut down and cleaned up at public expense.

The largest source of nuclear wastes in the country by volume comes when the nuclear industry mines uranium. There are some 120 million cubic yards of long-lived tailings that have been not been properly disposed of, with an estimated cleanup cost over over \$30 billion. Then there is low-level wastes, which can be dumped in the ground, yet include any and all of the most deadly, long-lived wastes that can last can stay radioactive for millions of years. Most of this is produced by nuclear reactors; a small percentage of the radiation comes from medical wastes.

High level nuclear waste is classified as only that waste that comes from spent nuclear reactor fuel. This is the smallest volume of waste but is the most deadly and must stay isolated from the environment hundreds of thousands of years.

There is also a military grade of waste called Transuranic wastes which are being shipped to a salt dome repository in New Mexico called WIPP. The military cleanup of all kinds of wastes, especially those at a massive liquid tank farm in Hanford, Washington represents the most dangerous wastes next to the spent fuel.

There is no real solution to dealing with wastes at this time. The industry's claimed solutions the first time around all failed, resulting in the massive contamination of nuclear facilities that are currently estimated to cost at least \$270 billion to clean up. A recent warning at the long closed West Valley reprocessing facility said that unless \$13 billion is spent to clean up the site soon, the deadly wastes there will escape into Lake Ontario, causing an even larger cleanup fiasco that could reach nearly \$30 billion.

The industry has been claiming that it could burn up nuclear wastes or safely store them in glass are more than likely failed, or way too expensive technologies yet to be dealt with. The state of Nevada was able to show that the DOE's environmental protection from the deadly spent fuel would last at best 500 years if that. Nuclear waste scandals regularly hit the press around the world but are only covered locally. This issue alone should have been enough to stop any further expansion of nuclear fission, but thanks to the corporate media is little known by the public.

Economics

The nuclear industry made many claims to the public upon its inception including that it could produce nuclear energy "Too Cheap to Meter". Yet in 1984 it was Forbes Magazine who wrote the epitaph of the nuclear industry, calling it the most expensive financial disaster in U.S. history. And then the 2001-2009 Bush Cheney team tried to sell us a brand new version of the same old deal. Billions of dollars of federal money was handed to the nuclear industry to hype and jump-start its "Nuclear Renaissance" in 2005. They promised once again to be able to deliver the cheapest power around, claiming that they could build a KW of installed nuclear power for between \$1,200 and \$1,800. By the end of 2008 estimates had rose five-fold and were likely to double to ten fold before a single reactor is ever built!

Only massive federal subsidies can pay for the true costs of nuclear power. Prior to its collapse it had been getting the lions share of federal energy subsidies, most of it hidden within the DOE nuclear weapons infrastructure.

The recent push undermined renewable energy funding which has become the leading source of new electricity in the country today.

The Bush agenda of reprocessing uranium (GNEP), creating a global plutonium infrastructure, would cost hundreds of billions of dollars.

Insurance and decommissioning costs are hidden sinks.

Nuclear waste costs will cost humanity lives and money far into the future.

A weakened economy could open the culture to poorly maintained reactors and infrastructure supports.

Corporate

The giant nuclear corporations such as GE, Westinghouse, Bechtel and the private electric power industry have long fought against renewable energy and conservation. These giant combines feed off of government money, and nuclear is one of their most profitable operations. The bigger the project the more profits.

This country has been captured by corporatists who believe that consumption is the holy grail of human existence and that includes the sale of energy. This country represents 5% of the global population but uses nearly 25% of the world's energy. It is physically impossible for the rest of the world to misuse energy so poorly as we do today. The invasion of Iraq by Cheney-Bush's corporate oil interests will not be the last of this world's energy wars if we don't quickly break our addiction to fossil fuels. The idea that nuclear could save the world is patently insane as the expansion of nuclear fuels would create a global off-the-shelf marketplace for nuclear technology that will fuel the growing fights to come. These Strangelovians are pushing to create a global nuclear security state, 1984 style.

This country has been trapped by the military industrial complex as warned by Eisenhower. These giant corporations are driving the nuclear agenda. For example, nearly 200,000 DOE jobs are contracted out to giant corporations such as GE, Bechtel and Westinghouse, most delivered to right-wing Cold War centers of pork like Hanford, Oak Ridge, Livermore or the Los Alamos Labs, etc.

During the 2001 energy crisis in California it was exposed how the electric power companies fought against renewable and energy conservation, refusing to support its development. Only legislation ordering them, carrot/stick style, worked at bringing them around (and only to a modest extent).

It is time to bring out the long-censored history of public power and how it played the primary role in bringing most Americans into the electric era, against the will of the private companies. The public vs. private fight was at the center of FDR's election and massive public works projects that finally brought electricity to farmers and poor people across the country. If America had relied on the corporate agenda rather than public's, much of this country would still not have access to electricity.

If we are not careful the country will end up with an AT&T of electric power that will be unregulatable.

Strategies

Anyone who dares question the corporate consumer mindset will be attacked by the largest propaganda machine in the world, the corporate media. Like the Iraq invasion, the corporate media played a central role in promoting and prosecuting the war. They are doing the same with the nuclear renaissance. The media's "renaissance" framing should be replaced by one that gives the nuclear stage an 8 second soundbite followed by a shift away to more important issues. For example, the so-called "renaissance" is an Edsel scam trying to vamp its way back from the dead -- letting a loser technology get a second chance that will likely fail again, wasting even more money. Wind and solar energy, along with energy efficiency will create more jobs and be cheaper and cleaner.

Nuclear fission is a failed technology that should not be trusted. From huge historic scandals, deadly health and environmental consequences or economic boondoggles, this technology is being pushed by those who have a dominator agenda of the world. These people are the ultimate terrorists in the world, using threats of global war to promote their agenda.

The corporate media have protected the Machiavellian nuclear agenda from serious scrutiny or the call to replace it. They violently attack any opponent, disguising themselves as patriots protecting America. Only an online education campaign that exposes the true scope of this failed agenda -- and suggestions on how the world could live without it -- offers a chance for a better future.

Alternatives

Alternatives to nuclear fission are far more clean and less costly. The primary problem with getting them put in place is that the electric power industry is opposed to them. The most important step is to pass legislation that pays these companies to implement conservation programs or nationalizes them. The corporate media has censored the national battle over public vs. private electricity during the first half of the 20th century. Its about time that history is brought back and the benefits of public power be promoted.

A combination of wind power and energy-efficiency programs could quickly help to shift us on the road to energy independence. The biggest key is dumping the private gas guzzling car and working towards redesigning our society so that most people live within a short distance of where they work.

The U.S. no longer can afford to use energy as if there was no tomorrow. Living simpler doesn't have to mean discomfort or poverty. It is absolutely urgent that anyone who wants to understand the complex shift to a truly sustainable culture must realize that our current economic model is unacceptable and will collapse.

References

"Radiation Effects Judged More Serious: Radiation is up to 16 times more dangerous than previously thought", by Marvin Resnikoff, 1988:

energy-net.org

The "nuclear fuel cycle""

energy-net.org

The above tour de force is by the archivist for Abalone Alliance, an effective anti-nuke group from 1977–1985. The article is, according to the author Roger Herried, a "work in progress." Reach him via email: abalone "at" energy-net "dot" org Website: energy-net.org

Abalone Alliance used nonviolent civil disobedience to try to stop the Pacific Gas and Electric Company's Diablo Canyon nuclear power plant on the coast of central California. Abalone Alliance was a resource for anti-nuclear activists around the world and for the press. See en.wikipedia.org

Next: a very informative article titled "Nuclear Power - One of Humankind's Biggest Mistakes" that adds to Roger's. Author Jim Bell is ecological designer based in San Diego, California, who is a perennial mayoral candidate there.