

The Danger from Nuclear Reactors

DuPree Moore

From 1968 to 1973, I was an engineering officer aboard U. S. nuclear submarines. The chief engineer would routinely sneak back into the engineering spaces and trip some piece of equipment off the line. These were not computer simulations. The equipment really would be in an emergency condition. We would be sitting in the reactor control room, and suddenly alarms would go off. We would have to figure out what had happened, and recover from it. The equipment is designed to survive such accidents. After many decades of operation under those conditions, the Navy has had zero deaths from nuclear power. You are more likely to drown in your bathtub than to die from operating a nuclear reactor.

A coal-fired electric power generating plant uses 120 railroad cars full of coal every day. A nuclear plant uses one semi truckload of nuclear fuel rods every few years. All the spent fuel from every nuclear reactor in the United States could be stored on one football field, a pile nine feet tall. Recycle it as the French do, and the pile shrinks to three inches. In 500 years it will be less toxic than coal ash.

It is preposterous to talk about nuclear waste remaining toxic for tens of thousands of years. It is preposterous to talk about tens of thousands of deaths from a nuclear accident. Those analyses are based upon a laughable error. If one person eats 200 aspirin, he will die. These people figure that if 200 people eat one aspirin each, there will be one death. If two million people are exposed to a dose rate of one aspirin per person, there will be 20,000 deaths. In fact one aspirin is beneficial, and low levels of radiation are beneficial. Geographical areas with higher background radiation have lower levels of cancer.

Chernobyl proved just how safe nuclear power is. There was no containment vessel. All radiation was released to the environment. There were less than 200 deaths, all among on-site personnel. An exhaustive international inquiry under the UN found no documented health damage beyond the immediate vicinity (except for a slight increase in thyroid cancer among children, which can be completely prevented by taking inexpensive iodine supplements in the event of a nuclear accident). The area around Chernobyl has been declared a radioactive dead zone at radiation levels about the same as downtown Warsaw, Poland, and five times lower than Grand Central Station in New York City. Plants and animals flourish in the region, showing no ill effects. It is stark raving mad.

Three-Mile Island nuclear accident caused zero deaths, zero injuries, and zero radiation release to the environment. And it was not a close call. It might have been a close call from having much more extensive equipment damage, but the worst possible accident would still have been kept entirely within the containment vessel. There would have been zero deaths, zero injuries, and zero radiation released to the environment. If terrorists flew an airplane into a nuclear reactor, it would not rupture the containment vessel.

During the 1970's there was an anti-nuclear campaign, similar to the global warming campaign today. It was based on grossly inaccurate information, but it prevailed politically to impose onerous regulations which killed nuclear power as a source of electricity. I have seen a comparison of two nuclear power plants in the United States which began construction at about the same time. One finished up before the new regulations went into effect. It came in on budget, and generates to this day the cheapest, safest, and cleanest electricity on this planet. The second reactor ran afoul of the new regulations. It ran into massive cost overruns, and never was completed.

Lawrence Solomon was part of the anti-nuclear campaign during the 1970's. Today he has done some excellent research disproving the global warming theory, especially disproving the assertions of a scientific consensus about it; but to this day he is wrong about nuclear power. To this day he says, "Nuclear reactors run flat-out 24/7", and cannot be adjusted to match power demand. He is simply wrong. The reactor remains critical 24/7, but a reactor can be critical at zero power. The power output automatically matches the power demand. I have personally operated nuclear reactors, and I know for a fact what I am talking about. That is the kind of misinformation which has destroyed nuclear power, the greatest scientific advance in the history of the world.