

New Reactors, Same Old Risks

Making You Pay for the Next Chernobyl — *in Advance*

By Harvey Wasserman

Are you ready to pay for tomorrow's Chernobyls in advance? Are you willing to have nuclear power prevent a solution to the climate crisis?

Twenty-two years ago on April 26, an apocalyptic cloud rose up from Chernobyl's Unit 4, in the heart of Ukraine. For the next few hundred generations, you and your progeny will breathe its radioactive fallout, which was thousands of times worse than that released at Hiroshima and Nagasaki.

Conservative estimates of Chernobyl's financial costs are in the \$500 billion range. In downwind regions, festering with cancer and radiation-related birth abnormalities, the ultimate death toll is impossible to estimate.

Another Chernobyl could be happening as you read this. And you are already on line to pay for it.

The so-called "reactor renaissance" is built on high-priced lies and public liability.

Not one of the 104 U.S. reactors now licensed to operate, and not one of the new ones being hyped, can get insurance from private sources against another Chernobyl.

For a half-century — since passage of the 1957 Price-Anderson Act — your tax dollars have protected the reactor owners. Now the industry wants us on the hook for another century or so.

Check out your homeowners' insurance policy for its specific exclusions against liability for reactor-related radiation.

With an old reactor or new, a Chernobyl here will bankrupt the government — and *you*.

The first 9/11/2001 jet that flew into the World Trade Center passed, a minute prior, directly over the Indian Point reactor site. Had the terrorists targeted those reactors — one dormant and two active — plus the three pools full of

high-level waste fuel rods, the loss of life and property would have been beyond comprehension.

Billions of dollars in private money now pour into renewable technologies like wind and solar, which are the real solution to the climate crisis. Every dollar invested in increased efficiency saves seven times the energy a dollar invested in nukes can produce [according to Amory Lovins of the Rocky Mountain Institute].

Last fall a grassroots movement stopped an attempt to grab \$50 billion in federal loan guarantees (see nukefree.org). Now nuke-pushers want to load the Lieberman-Warner "Global Warming" Bill with still more taxpayer-funded subsidies.

But from the start of the fuel cycle to reactor decommissioning and waste management, nuclear power technology is a serious greenhouse gas emitter. The final "bootprint" is unclear because there's no actual solution to the waste problem, and no firm price for final reactor decommissioning.

A French "new generation" project in Finland is already two years and \$2 billion over budget. French reactors are gargantuan tax pits, Europe's most notorious radioactive polluters and ecological and public health nightmares.

In Florida, ratepayers may be gouged for up to \$24 billion for two new reactors that would destroy the Everglades, and billions more still for two more north of Tampa. The utilities involved don't know what kind of reactors they want to build and can't guarantee either when they would come on line or what they'll ultimately cost.



Three Mile Island at 29: Reactors and Infant Health

By John LaForge

March 28th marked 29 years since the partial meltdown and radiation disaster at Three Mile Island (TMI) near Harrisburg, Pennsylvania. News reports at the time noted the reactor's loss of coolant, melting fuel, multiple explosions, venting of radioactive gases, dumping of contaminated water and buildup of explosive hydrogen inside the core. The accident caused such a nationwide scare that the expansion of nuclear power ended in the United States.

Yet the environmental and health consequences of the TMI disaster aren't widely recognized and are regularly minimized. Official cover-ups, industry propaganda, and ignorance of radiation-induced illnesses have led to present-day trivialization of the accident and the proposed revival of new reactor construction. Any such revival is totally dependent on billions of dollars in federal subsidies (\$18 billion in a recent energy bill; see page five), because, as *Forbes* magazine blazoned across its Feb. 11, 1985 cover: "The failure of the U.S. nuclear power program ranks as the largest managerial disaster in business history, a disaster on a monumental scale."

The nuclear industry's attempt to raise nuclear power from the dead involves denying the damage resulting from TMI itself and flies in the face of 25 years of science regarding the effects of exposure to low-dose radiation. Indeed, one Wisconsin state legislator said on the record last December, "Three Mile Island was a success of containment."

Things weren't much different in 1979. President Jimmy Carter's Kemeny Commission hurriedly finished its report on the disaster, issuing it in October 1979. The commission neglected to consider any data on the effects of wind-borne radiation, although the wind blew 6-to-9 mph for days toward upstate New York and western Pennsylvania.

Over 10 million curies of radioactive noble gases, including 43,000 curies of krypton-85 — which stays in the environment for 100 years — as well as 15 to 24 curies of radioactive iodine-131, were vented from the "containment" building. (A curie — 37 billion disintegrations per second — is a huge amount of radiation.) As the Nuclear Regulatory Commission (NRC) later noted, several "deliberate but uncontrolled releases" were used to vent radioactive gas. Official airborne release estimates are just guesses because of the insufficient number of faulty outside radiation monitors — half weren't working, and a large number went off-scale.

On the third day of venting these gases, half the population within 15 miles — 144,000 people — fled the area. By this time the bulk of the accident's airborne radiation was already spewed and drifting on the wind.

In addition, approximately 400,000 gallons of radioactive cooling water that leaked from the reactor were secretly dumped into the Susquehanna River, a source of drinking water for nearby communities. About 2.3 million gallons of radioactively contaminated cooling water were later allowed to be "evaporated" into the atmosphere.

In 1980, Pennsylvania State Health Department authorities reported a sharp rise in hypothyroidism in newborn infants in the three counties downwind from the reactor. Late in 1979, four times as many infants as normal were born with the disease. The NRC said the increase was unrelated to radiation released by TMI. Upwind incidence of the disease had dropped to below the national average.

The same year, six workers entered the heavily contaminated reactor building. Five of the six later died of radiation-induced cancers. David Lochbaum of the Union of Concerned Scientists reports that UCS opposed license renewal for the surviving TMI units and demanded health studies for neighbors. The NRC refused.

In the county where TMI is located, infant deaths soared 53.7 percent in the first month after the accident, and 27 percent in the first year. As originally published, the federal government's own Monthly Vital Statistics Report shows a statistically significant rise in infant and overall mortality rates shortly after the accident.

Studying 10 counties closest to TMI, Jay M. Gould, in his meticulously documented 1990 book *Deadly Deceit*, found that childhood cancers, other infant diseases, and deaths from birth defects were 15 to 35 percent higher than before the accident, and those from breast cancer 7 percent higher. These increases far exceeded those elsewhere in Pennsylvania.

Gould suggests that between 50,000 and 100,000 excess deaths occurred after the TMI accident. Joseph Mangano of the New York-based Radiation and Public Health Project (RPHP) says, "The NRC allows reactors to emit a certain level of radiation, but it does not do follow-up studies to see if there are excessive infant deaths, birth defects or cancers."

Leukemia deaths among kids younger than 10 (between 1980 and 1984) jumped almost 50 percent compared to the national rate. Mangano reports that "between 1980 and 1984, death rates in the three nearest counties were considerably higher than the period 1970 - 74 (before the reactor opened) for leukemia, female breast, thyroid and bone and joint cancers."

In the Spring 2000 edition of *Environmental Epidemiology and Toxicology*, Mangano and Ernest Sternglass reported that in counties adjacent to nuclear reactors, infant mortality falls dramatically after the reactors close. The RPHP study found that in the first two years after the reactors were shutdown, infant death rates fell 15 to 20 percent. In communities near Big Rock Point in Michigan, for example, the decrease in infant mortality rates was 54 percent, and at Maine Yankee the percentage decrease was 33.4 percent, after their reactors were closed.

The evidence of cancers caused by reactor operations brings to mind the words of Roger Mattson, former Director of the NRC Division of Systems Safety, who said during the TMI meltdown, "I'm not sure why you are not moving people. I don't know what we are protecting at this point."

— *A footnoted version of this article is available from Nukewatch <nukewatch@lakeland.ws>*

Another Leak at Braidwood, Illinois

BRACEVILLE — At the Exelon owned Braidwood reactor, 70 miles southwest of Chicago, a tritium leak was discovered when an employee noticed the soil surface was wet and found water bubbling up from a 4-inch pipe buried 8 feet in the ground. The leak of tritiated water is only the latest in a long series of leaks associated with the Braidwood reactor. The incident was reported to the Nuclear Regulatory Commission, the Illinois E.P.A. and the Illinois Emergency Management Agency in what company spokesman Paul Dempsey called a "courtesy." NRC public relations officer Viktoria Mitlyng said the cause of the leak had not even been determined but that workers were excavating and investigating the area. — *The Herald News & The Chicago Sun-Times*, Feb. 13, 2008

All that money should be going to renewables, which can solve global warming *now*, rather than at some alleged, inscrutable, incalculable time in the future. Wind, solar, tidal, wave, geothermal and a host of green "Solartopian" technologies are attracting huge quantities of private investment. Based on the natural bounty of Mother Earth, they promise tangible, immediate economic and employment opportunity, not radioactive catastrophe and endless waste problems.

Chernobyl proved that atomic energy's most significant ability — by terror or error — is to spread radiation over large parts of the Earth. While blocking the real solutions to climate chaos, nuclear power can bankrupt entire nations in a single moment. They can inflict birth defects and cancer on millions of humans with a single cloud.

Twenty-two years after, it's time to ask the ultimate question about the last reactor catastrophe: In money, body and soul, do you really want to pay for new ones?

Harvey Wasserman, a co-founder of Musicians United for Safe Energy, edits nukefree.org and is the author of Solartopia! Our Green-Powered Earth, A.D. 2030, at www.solartopia.org.

Counterfeit Safety

The Nuclear Regulatory Commission has officially warned nuclear utilities about counterfeit equipment being sold to reactor operators, after inspectors uncovered fake parts. In one instance, the Hatch reactor near Baxley, Georgia installed a counterfeit valve on a cooling water skid, and in the other instance three different reactors had circuit breakers that would fail to trip if overloaded. The NRC took the opportunity to remind all U.S. reactor operators — and possible future operators — of their responsibilities to prevent such fraud.

— *World Nuclear News*, April 8, 2008, & Nuclear Information and Resource Service

Pre\$idential Nuclear Politic\$

With three major hopefuls now vying for the Presidency, we checked in on their nuclear energy views hoping for some fresh insight. Unfortunately, the "Republicrats" are as stale and myopic as ever when it comes to a sustainable future.

Last month, Republican Senator John McCain cited France as a nuclear utopia, where 80 percent of the nation's electricity comes from nuclear power. Critics quickly lampooned McCain for the thoughtless quip, since for the U.S. to generate 80 percent of its electricity from reactors would require the building of over 700 new nukes.

Illinois Senator Barack Obama has made no secret of his romance with nuclear power. In September 2006, he introduced a watered-down, industry-endorsed bill that would free utilities from the burden of immediate public notification in the event of radioactive leaks. Also, the bill made clear that state and local authorities would have no regulatory oversight of nuclear power reactors. To date, executives and employees of Illinois-based Exelon Corp., the nation's largest producer of nuclear energy, have donated more than \$225,000 to Obama's campaign.

Sen. Hillary Rodham Clinton has said that she is "agnostic" about nuclear power but her campaign donations tell a different story. NRG Energy has given Clinton nearly \$80,000 in campaign contributions and the company's president and CEO, David Crane, is a "Hillraiser" — a Clinton backer who has raised at least \$100,000. NRG Energy has also given \$175 million to the Clinton Global Initiative run by former President Bill Clinton. Unless a third party nuclear skeptic like the Green Party's Rep. Cynthia McKinney of Georgia can be elected, the country is wired into another four years of spills, leaks, shutdowns, contamination and cover-ups.

— Center for Responsive Politics via Campaign Action Fund, *New York Times*, Nov. 28, 2007, Progressive Media USA Research, April 23, 2008

Secret Safety Study Slammed

LACEY, New Jersey — Oyster Creek, the nation's oldest nuclear reactor, is seeking a 20-year license extension, but prior to approval, further analysis of its corroded drywell has been ordered by the Atomic Safety and Licensing Board. The drywell is a critical steel barrier surrounding the reactor which is designed to contain radiation during an accident. Suspiciously, Oyster Creek officials and federal regulators do not intend to make public the details of the analysis. Opponents of the relicensing have petitioned the NRC to make the whole report public instead of a mere summary. Oyster Creek spokeswoman Beth Rapczynski said, "we will be confident of those results," which shouldn't be released, she said, because they will be "proprietary." A member of the citizens' group Grandmothers, Mothers and More for Energy Safety told the press, "The [reactor operations] impact not only the safety of my family, but of everyone living in the death zone of this reactor, and for that reason the data cannot be kept secret." — *The Star Ledger*, & *The Asbury Park Press*, April 7, 2008