

NUCLEAR SHORTS

Nuclear Navy

Covid-19 attacked the US aircraft carrier *USS Theodore Roosevelt* which is powered by two nuclear reactors. It's presumed that the virus found its way onboard the carrier after a stop in Da Nang, Vietnam. Sailors came into contact with sick British sailors. Captain Brett Crozier tried to warn his superiors. He wanted the ship evacuated and sterilized, but his commander, Rear Admiral Stuart Baker initially declined. Navy secretary, Thomas Modley refused to respond to Capt. Crozier's letter and fired him, claiming that he had done what he thought President Trump wanted. He resigned two weeks later. Captain Crozier became a victim of coronavirus along with 1,202 other crew members. Three of those testing positive on the *Roosevelt* worked in the reactor department. The outbreak resulted in one death. The crew was eventually quarantined on land in Guam for a month while the ship was disinfected. As of mid-May the *Roosevelt* was back at sea, this time with 14 sailors reinfected.

Crew members aboard the aircraft carriers *USS Ronald Reagan*, the *USS Carl Vinson*, and the *USS Nimitz* (each sub has two reactors) also have the virus. The Navy has stopped making public the number of active-duty Covid-19 cases. —*ABC News*, May 24, 2020

Covid-19 and Nuclear Reactors

Covid-19 and nuclear power present a myriad of complications and problems. For workers inside a reactor to safely perform jobs—deemed essential—physical distancing is complicated leading to at least seven different reactor sites with confirmed cases of coronavirus, some numbering in the hundreds, and an undisclosed number of deaths. Without Freedom of Information Act requests, exact numbers of positive cases are unknown as the Nuclear Regulatory Commission (NRC) refuses to make them public.

S&P Global reported 237 coronavirus cases as of May 13 at the Fermi reactor in Michigan. On May 19, there were 230 cases at Georgia's Plant Vogtle, still under construction. Eleven workers at the 3-reactor Millstone site in Waterford, Connecticut, have tested positive as of May 13. According to Jim Foley, a security officer at Millstone and president of the local chapter of the United Government Security Officers of America, Dominion employees have had to fight for personal protective equipment (PPE) and proper social distancing.

Amidst these complications the NRC has relieved itself of any responsibility to provide PPE, in hopes that the nuclear power utilities will assume this duty, while the utilities are seeking exemptions from safe operation and a \$23 billion bailout.

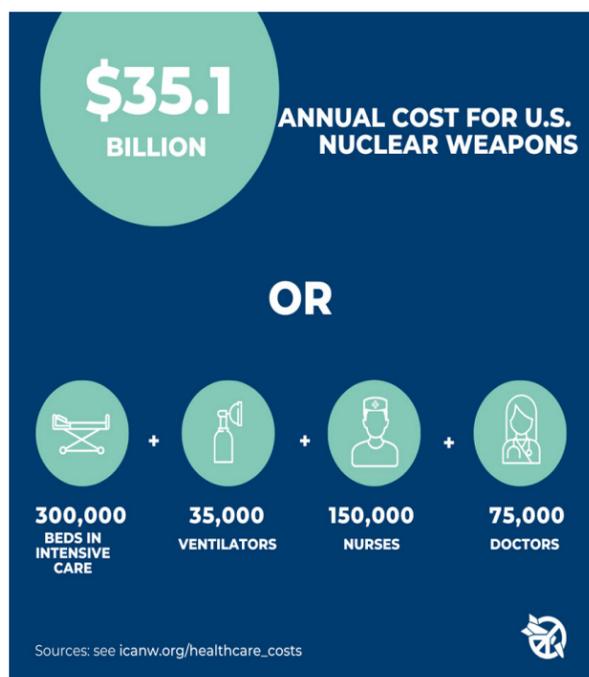
The NRC has permitted exemptions on work hour limits, reduced staffing, and deferring inspections of leaks and steam generator piping. Workers at Palo Verde Generating Station and others can be required to work 16 hours per day and the new increased overtime maximum of 86 hours per week. —*WRDW*, May 19; *Nuclear Hotseat #464* & *S&P Global*, May 13; *The Day*, May 5; *Crain's Chicago Business*, April 20; *Friends of the Earth*, Mar. 23, 2020

Flooding Jeopardized the Public and a Small Reactor in a Dow Chemical Town

By Diane Nahas

On May 19, after a torrential rainstorm, the Edenville and Sanford hydroelectric dams along the Tittabawassee River in central Michigan, two hours northwest of Detroit, collapsed causing flooding in the city of Midland, engulfing a Dow Chemical site which houses a nuclear research reactor, homes of thousands of local inhabitants, and the city's sewage system. The river crested at a record 35 feet on May 20 in the 500-year flood. The city went under an estimated nine feet of water. Michigan's Governor Gretchen Witmer declared an emergency and 11,000 residents were evacuated.

Part of the massive damage included floodwaters entering the containment ponds of the Dow Chemical factory, where waste from its Superfund cleanup is held from production of Saran Wrap, styrofoam, Agent Orange and mustard gas. This provoked fears about the floodwaters reaching the nuclear reactor or breaching the walls of the pond and further contam-



inating the Tittabawassee River, which eventually runs into Lake Huron.

Dow filed a Notification of Unusual Event with the Nuclear Regulatory Commission which states, "The reactor was in a shutdown condition at the time of the event...due to Covid-19." The nuclear gauges at the reactor are Category 3 radioactive materials, which are sealed radioactive sources that could be fatal upon exposure for periods of days to weeks, according to the International Atomic Energy Agency. —*Midland Daily News*, May 20; *NRC* May 19, 2020; *Dow Chemical Company*, Mar. 10, 2017

Help Keep Radioactive Waste Out of Regular Landfills

By Nuclear Information and Resource Service

Right now, the Nuclear Regulatory Commission (NRC) is planning a very dangerous change to the way radioactive waste from nuclear power is handled, creating a fictitious and deceptive name for nuclear reactor waste. Despite being extremely dangerous to human health and the environment, the NRC is trying to downplay Very Long-Lasting Waste by telling the Very Large Lie it is supposedly only "very low level"—or VLLW.

It is not. Disregarding the danger, the NRC proposes to allow regular landfill operators to dispose of this radioactive waste. The proposal would almost certainly result in more widespread radioactive waste leaks into our water, air, crops, and communities.

So-called VLLW is not clearly defined in law but includes extremely dangerous, long-lasting radioactive waste. The NRC claims only very "low levels" of radioactive waste would be disposed of with regular trash, but there is no safe level. Under the NRC's proposed radiation exposure allowances, one in every 500 people will get cancer if exposed over their lifetimes.

Powerful players in the nuclear industry are pushing for this change because deregulating this waste would save them millions of dollars. Tell the NRC and your members of Congress: Protect public health, not the industry's shareholders.

The NRC is taking this action behind the backs of the public, under the cover of the COVID-19 crisis, deregulating tons of radioactive waste without nearby communities knowing about it or having a say in it. Stand up to the nuclear industry and its friends at the NRC by telling them and your members of Congress not to dump radioactive waste in our landfills. NIRS has updates about this issue at NIRS.org, or call (301) 270-6477. —Diane D'Arrigo, May 28, 2020

Majority of Millennials Support Banning Nuclear Weapons

The majority of young people around the world support banning nuclear weapons, according to a new poll commissioned by the International Committee of the Red Cross.

The poll surveyed over 16,000 millennials (aged 20-35) across 16 countries and territories (Afghanistan, Colombia, France, Indonesia, Israel, Malaysia, Mexico, Nigeria, Occupied Palestinian territory,

Syria, Russia, South Africa, Switzerland, Ukraine, the United Kingdom and the United States) in 2019.

The use of nuclear weapons is "never acceptable" in wars or armed conflicts, say 84% of respondents. Support for this statement remains strong in nuclear-armed countries; 77% of in Israel, 81% in France, 86% in Russia, 83% in the United Kingdom, and 73% in the United States responded that nuclear bomb use in wars or armed conflicts is never acceptable. An even greater percentage of those surveyed in some countries find that the use of nuclear weapons is "never acceptable"—92% in Switzerland and 98% in Syria.

"The next generation has spoken: they don't want nuclear weapons in their future," said Alicia Sanders-Zakre, ICAN Policy and Research Coordinator, in response to the poll. "Today's leaders should take heed and join the Treaty on the Prohibition of Nuclear Weapons as a first step towards a nuclear-weapon-free future." —ICAN

Nuclear Reactors & the Quaky, Rising Sea

Forty percent of the world's nuclear reactors sit on coastlines, vulnerable to multiple climate catastrophes. With sea levels expected to rise 3.28 feet or more by 2100, reactors like St. Lucie in Florida, don't have a chance. Operators of Florida's Turkey Point reactor intend to run it for 80 years. The Nuclear Regulatory Commission claims that rising sea levels and their effect on Turkey Point are "outside the scope of the agency." Thus, in granting an extended operating license to Turkey Point, rising sea levels don't even figure.

Fukushima stands as the case study of Reactors v. Ocean. Site of the world's only triple meltdown, caused by an earthquake and its follow-on tsunami, Fukushima still spews radiation into the Pacific daily, nine years after it began. According to the Center for Marine and Environmental Radioactivity, coastal areas report an increase in cesium-137 from Fukushima, first detected 100 miles off the California coast in 2014. Today, of the 56 reactors currently under construction, 93% face the fury of rising tides and ever-more-severe hurricanes, cyclones, and typhoons. Unfortunately, China, Indonesia, and East Asia continue to build and host the reactors most at risk, since these regions are the most and first affected by the Earth's warming.

As the nuclear industry continues to blunder ahead building new reactors and operating old ones on vulnerable seafronts, coastal communities continually face Fukushima Roulette. —*Climate News Network*, Feb. 14, 2020; *Bloomberg*, Apr. 19, 2019; *Beyond Nuclear*, Sept. 19, 2019; *Woods Hole Oceanographic*, <cmer.whoi.edu>

Nuclear Convoys Roll across UK

British nuclear war readiness has faced decades of protest. Some groups focus on the dangerous convoys that move warheads and related materials along regular roads passing through dozens of villages. The convoys are tracked by campaigners, photographed and filmed for social media, and regularly stopped by protesters. The UK routinely moves nuclear warheads to and from their final assembly point in Burghfield, England, and the Royal Naval Armaments Depot in Coulport, Scotland—eight miles from the Faslane Trident submarine base. At Coulport, the warheads are loaded onto US missiles—leased to the British Navy by the US—that arm its four Trident submarines.

A warhead convoy passed through the countryside May 13, in the midst of the coronavirus pandemic, according to Nukewatch UK and Scottish Campaign for Nuclear Disarmament (SCND). The massive highway transports include up to 20 police vehicles, and at least 50 personnel, raising fears of covid-19 spreading to and from the Scottish bases. Jane Talents of Nukewatch UK, said May 13, "It is never right to possess and deploy nuclear weapons and to transport them on public roads. Doing it right now is completely irresponsible." SCND chair Lynn Jamieson said, "The transport of nuclear bombs across the English-Scottish border is always an unnecessary journey against the will of the majority of people living in Scotland ... risking a catastrophic accident." —*Nukewatch UK*, and *Scottish CND*, May 13, 2020; & *Morning Star*, Dec. 13, 2019