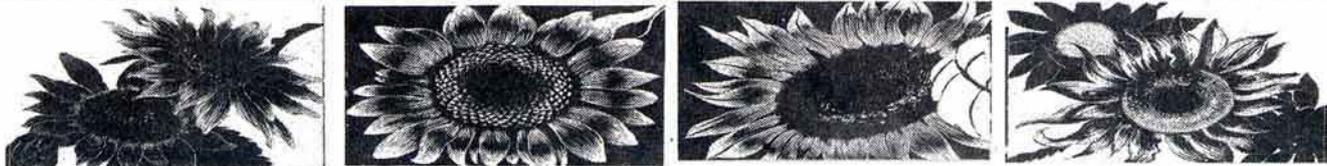


NUKEWATCH

QUARTERLY



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News & Information on Nuclear Weapons, Power, Waste & Nonviolent Resistance

FDA to Introduce Limited Oversight of Medical Radiation

Whistleblower Critical of CT Scan Sacked

By John LaForge

A rare and revealing sentence in the Feb. 10 *New York Times* reported what Nukewatch and other watchdog groups like Public Citizen have warned about for years: "Patients today receive far more radiation than ever before. The average lifetime dose of diagnostic radiation — excluding therapeutic radiation — has increased sevenfold since 1980, prompting widespread concerns that certain procedures are overused and that they needlessly expose patients to an increased risk of cancer. Children and women are particularly vulnerable." (1)

The warning was part of last winter's announcement by the U.S. Food and Drug Administration that it would expand its lax, and often unenforced regulation of medical radiation procedures that expose patients to high doses, in particular CT scans which can dose individuals with the equivalent of 400 chest X-rays.

The FDA's oversight decision came on the heels of several critical studies and after hundreds of radiation overdoses caused by poorly calibrated (and mostly unmonitored) radiation machinery and by undertrained operators.

The FDA is investigating why over 300 patients at four different hospitals were exposed to as much as eight times as much radiation as intended by powerful CT machines used to detect strokes. The largest overdoses were administered last year at Cedars-Sinai Medical Center in Los Angeles and at two other California hospitals.

The gross radiation exposures were only discovered after some patients lost their hair. In an April 8 announcement, the FDA admitted that it had reviewed over 1,000 reports of radiation exposure errors filed over the last 10 years. (2)

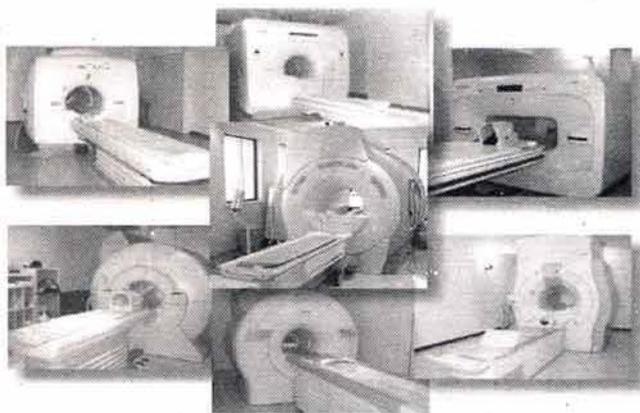
California's overdoses were echoed by similar events in Missouri at the CoxHealth hospital in Springfield, and at the Moffitt Cancer Center in Tampa, Florida. At CoxHealth, over a 5-year period, 76 patients, most with brain cancer, were "overradiated" according to a Feb. 25 report; and at Moffitt, 77 brain cancer subjects received 50 percent more radiation than what was ordered between 2004 and 2005. As the *Times*' January exposé said, these overdoses were caused by new equipment that was miscalibrated and by "hospitals that violate safety rules, injure patients and fail to report mistakes." (3)

CoxHealth president and CEO Robert Bezanson made public a letter he sent in February to FDA warning that its recent decision to toughen oversight of diagnostic radiation was too limited. "The initiative should be broadened to include regulation of medical radiation therapy as well," Bezanson said.

In April, the FDA seemed to take stock of the advice and announced it would work to prevent overdoses in radiation therapy, and in particular halt the use of "streamlined approval" for new machines, like those pictured below.

Some skepticism about the announcement was voiced by Dr. Howard Amols at Memorial Sloan-Kettering Cancer Center in New York, who told the *Times*, "It's not clear that FDA has the expertise to police this," considering serious nationwide shortcomings in staffing, competency and hospital quality control programs.

The new emphasis on oversight has also been clouded by allegations of FDA retaliation against one of its own scientists, Dr. Julian Nicholas, who says he was fired after he recommended against the approval of CT scanners for routine colon cancer



screening. "Nicholas said he objected to exposing otherwise healthy patients to the cancer risks of radiation," the AP reported. (4)

The Fall 2009 *Quarterly* reported on a study in the *New England Journal of Medicine* (5) that said 4 million people in the U.S. get high doses of radiation from the CT and PET scanners, and that 400,000 get very high doses. The over-use of medical scans are "unnecessary, wasteful and dangerous" and may be "causing tens of thousands of additional cancers," according to Dr. Atul Gawande, a surgeon at the Dana-Farber Cancer Institute and Dr. Rita Redberg, a cardiologist at the University of California at San Francisco.

The FDA says it hopes to reduce unnecessary radiation exposures from three principal medical imaging systems: CT scans, which create 3-dimensional images; radioactive ingestion studies, in which patients are given radioactive substances that doctors watch move through the body; and fluoroscopies, in which a radiation-emitting device projects an internal image on a monitor.

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Scrap Metal Killers

By Paul Vos Benkowski

NEW DELHI — A small piece of metal cut away from a discarded tube at Deepak Jain's scrap metal yard in Mayapuri, west of the capital New Delhi, caused the death of one man and sent eight others to the hospital with radiation poisoning. According to *The Indian Times*, Rajender Prasad died April 26 from multiple organ failure due to exposure to radiation from this capped steel tube about four inches in diameter. Prasad was working at the scrap yard when the tube was cut to establish its value. One man tucked the small strip of metal into his wallet as a souvenir of sorts, where it caused a sore and a black rash on his leg. He is one of the eight currently being treated for radiation exposure.

Upon hospitalization of the victims, the Indian Atomic Energy Regulatory Board (AERB) was notified and the police closed down all scrap metal yards in Mayapuri while a team of radiation inspectors recovered eight radioactive sources from Jain's shop, two more from a nearby shop and the "souvenir." Experts have deemed it India's most troubling radiation exposure in recent years.

More worrisome is the source of the radioactively-contaminated metal and how it reached the shop. The deadly material originated from an irradiation machine used by the chemistry department at the nearby Delhi University. The machine had been used in gamma radiation experiments since 1971 and was then sold to Jain at a public auction. Hoping he had bought something of worth, Deepak set about dismantling the machine and thereby exposing himself and others to cobalt-60. Cobalt-60 is a gamma emitter used to irradiate medical instruments, foods and spices. Because of its gamma radiation, it has the power to ionize other metals, such as those found in the human body. Police say that although the machine was old, the cobalt-60 was still of a high intensity.

Although apologetic for the death and the numerous illnesses caused by the radioactive scrap, it is not the first time Delhi University has carelessly discarded hot equipment. Recent investigations have led to the revelation by Ramesh Chandra, a professor in the chemistry department, that his colleagues on the physics faculty buried 20 kilograms of low-level radioactive waste in a pit on campus 20 years ago. "Instead of handing over the hazardous material ... for proper disposal, they just buried it," he said. "Though it's been 20 years the buried isotopes of substances like uranium could still be active." As a result of the most recent exposure, the AERB has suspended the university's license to handle radioactive materials.

The radiation death shines a light on the lax regulations surrounding such materials and the fact that certain countries have become dump sites for the rest of world. Safety appears to be the least important issue when seeking to get rid of unwanted contaminated materials. Four years ago, ten foundry workers were killed by exploding military shells hidden in a container of scrap metal in the city of Ghaziabad. In a country as poor as India, where thriving on the creative use of others' discarded materials is a way of life and survival, the cost of even one human life is too high for such negligence.

U.S. H-Bombs in Europe: Liberal Apologists Slowing Removal

In the last *Quarterly*, we reported that five NATO members, Belgium, Germany, Luxembourg, The Netherlands and Norway, formally asked for the removal of the 200 or so U.S. warheads "on European soil belonging to other NATO member states." Poland added itself to the call in April.

This first-ever government-to-government rejection of the nuclear option from within NATO came about partly because of the overwhelming European majority that has demanded that the U.S. weapons be withdrawn. NATO ministers are also conscious of a December 2008 Pentagon report that said a month would be needed to prepare the nuclear bombs for detonation — making a laughing stock out of the claim that they deter anything.

According to *Business Week*, the Pentagon report quoted one unnamed U.S. general as saying that the 200 U.S. H-bombs (deployed in Belgium, Germany, Italy, Turkey and The Netherlands), are useless "because the [U.S.] role of deterring a nuclear attack on its allies can be performed with weapons outside Europe."

Rightwing talking heads and weapons profiteers can be expected to shout that the nuclear abolition movement is "naïve and dangerous," and that what they still call "deterrence" is working in some sense. For 60 years, H-bomb enthusiasts have said exactly the same thing.

These days, the great obstacles to disarmament are liberals like Secretary of State Hillary Clinton and one of her predecessors, Madeleine Albright, who defend the Bomb and speak of "deterrence" — even in the face of authoritative rebuttals by such rightwing authorities as former Strategic Air Command Chief Gen. George Butler, former National

U.S. Posturing with Nuclear War Threats

By John LaForge

The key sentence from President Obama's April 6, Nuclear Posture Review — an occasional sort of nuclear war manual — is: "The U.S. will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Nonproliferation Treaty [NPT] and in compliance with their nuclear nonproliferation obligations."

However, Obama declared an exception for countries found to be in violation of the NPT.

While causing a stir in rightwing and militarist circles, there is a lot less in the statement than meets the eye.

The major disappointment in Obama's feint is the president's refusal to renounce any and all "first use" of nuclear weapons, which itself would still allow nuclear retaliation. By rejecting a "no first use" pledge, Obama's plan still allows for war plans in which conventional war would go nuclear under U.S. orders.

Peter Feaver, a former National Security Council staffer, notes in an April opinion piece that the U.S. "still threatens to use nuclear weapons against nuclear states that are party to the NPT — read: Russia and China — if they hit us with a nuclear weapon or with a chemical, biological or cyber-attack."

Second, Feaver notes, Obama's declaration retains the U.S. threat to "use nuclear weapons against 'non-state actors' — think Al Qaeda — who seek weapons of mass destruction. Since non-state actors reside within actual

Uranium Weapons Update

AlliantTech Resisters Lauded by Judge

Four uranium weapons critics charged with trespassing at Alliant TechSystems (ATK) in Eden Prairie, Minnesota last Oct. 2, 2009 (Gandhi's birthday), were put on trial April 23.

The four (pictured below, l to r, Roger Cuthbertson, Geri Eikaas, Steve Clemens and Sr. Kate McDonald) defended their action as a legitimate act of international crime prevention allowed under state statute, a defense that has won jury acquittals in at least four other cases. At issue is ATK's culpability, the nation's No. 1 uranium weapons builder, in making munitions that have been condemned worldwide for their indiscriminate, poisonous and uncontrollable effects.

In his closing remarks, Hennepin County District Court Judge Peter Cahill suspended a decision on guilt or innocence pending dismissal of the charge. Judge Cahill said in part, "... following International Law or the Constitution as the supreme law of the land — which recognizes Treaty power — you may be right. [It may] violate international laws to make such munitions." For more details see <www.alliantaction.org>



Photo by Tom Bottolene

nations, this means that our [nuclear weapons] might hit the territory of those states offering a safe haven, regardless of their status under the nonproliferation treaty."

"Third," Feaver reported, "the new doctrine clearly implies that the U.S. reserves the right to threaten to use nuclear weapons against states that are not party to the non-proliferation treaty. And ... [against] states that are in violation of the treaty, a list that includes Iran, North Korea and Syria. [Feaver neglected Israel, which also refuses to join the NPT.]

"Crucially," according to Feaver, "since the new policy does not delineate what it means for states to be 'in compliance' with the NPT, the U.S. has a major loophole." And Eric Lipps, in a letter to the *Times*, points out that it's huge. "... hedging with what he calls 'outliers' like Iran and North Korea ... the president will retain the right to use nuclear weapons when, in his opinion, it's necessary — which is pretty much the standard that has prevailed since 1945."

As Pentagon boss Robert Gates said April 17, "If you're not going to play by the rules ... then all options are on the table in terms of how we deal with you."

Disarmament Rhetoric vs. Budget Reality

A year ago President Obama spoke in Prague of "a world without nuclear weapons." As recently as April 6, he said his policy was a part of "making nuclear weapons obsolete." The president's Nuclear Posture Review, unveiled the same day, was described as "renouncing the development of any new nuclear weapons."

Contrary to the speechifying, and photo op's, budget numbers indicate some lying in high places. Obama's 2011 budget for the National Nuclear Security Administration, which oversees bomb building, increases 14 percent over 2010. According to research by Dr. Robert Civiak, a former funding examiner for the Energy Department at the White House Office of Management and Budget, "The total includes large increases for research and development in nuclear weapons science and technology and to build new infrastructure for the production of plutonium and highly enriched uranium parts for nuclear weapons."

Budget plans for new production facilities include \$4.5 billion for a "Chemical and Metallurgy Research Replacement Project" at Los Alamos National Laboratory in New Mexico; \$3.5 billion for a proposed "Uranium Processing Facility" at Y-12 in Oak Ridge, Tennessee; and a billion or so dollars for a new "Kansas City Plant" to replace the severely compromised system of the same name in Missouri.

On May 14, the president outlined \$80 billion to be spent over the next 10 years to "modernize" the stockpile of nuclear warheads. One headline read: "Obama Expands Plan to Modernize U.S. Nuclear Arsenal." The term is a controversial one which avoids the word "new" in order to claim U.S. compliance with the Nuclear Non-Proliferation Treaty.

In contrast with Obama's plans was a suggestion by nuclear weapons enthusiasts Gary Schaub from the Air War College and James Forsyth of the School of Advanced Air and Space Studies. The two said in a recent opinion piece that the current U.S. nuclear arsenal of 5,113 H-bombs has "4,802 more than we need." They say 311 warheads — with a total of 1900 megatons of explosive power — is all the U.S. could possibly use in a nuclear war.

Security Advisor Paul Nitze and the alleged war criminal Henry Kissinger, who have all become cautionary advocates of the elimination of the arsenal.

On April 22, Secretary Clinton told foreign ministers at a NATO meeting in Tallinn, Estonia that U.S. nuclear weapons should stay. As the 28-nation alliance discussed nuclear weapons for the first time, Clinton said, "... as long as nuclear weapons exist, NATO will remain a nuclear alliance."

Likewise, former Sec. of State Madeleine Albright, was recently put at the head of a team of experts that has published a proposal called "NATO 2020." In it, the Clinton-era military hawk echoes the views of NATO Secretary General Anders Fogh Rasmussen, who said April 22, "I do believe the presence of American nuclear weapons in Europe is an essential part of a credible deterrent." Albright's report, released on May 17, is something of a reply to the dissident NATO members and a rejection of former Secretary of State Henry Kissinger and former senator Sam Nunn all of whom have urged the elimination of so-called "short-range," "tactical" or "battlefield" nuclear weapons of the sort deployed at European bases. "NATO 2020" openly suggests that the U.S. H-bombs remain deployed there "at the minimum level required by the prevailing security environment." Most Europeans now believe that minimum level amounts to zero.

Yet, while Democratic liberals appear out of step, the prevailing security environment is skeptical of nuclear weapons.

Consider the former nuclear hawks who have endorsed abolition. Four former senior Belgian officials, including a retired NATO Sec. Gen. wrote last winter, "U.S. tactical nuclear weapons in Europe have lost all military importance." These retirees come late to the view of Gen. Butler (USAF, Ret.), who as SAC commander controlled the entire U.S. arsenal, and who has said since retiring, "Nuclear weapons are not weapons at all. They are insanely destructive agents of physical and genetic terror. ... They're some species of biological time bombs whose effects transcend time and space, poisoning the earth and its inhabitants for generations to come."

Kissinger, who once advocated the idea of "winnable" nuclear war, wrote in a recent *Newsweek*, "Any use of nuclear weapons is certain to involve a level of casualties and devastation out of proportion to foreseeable foreign-policy objectives. Efforts to develop a more nuanced application have never succeeded. ..."

Paul Nitze, an extremist founder of the anti-Communist Committee on the Present Danger, wrote 11 years ago, "I see no compelling reason why we should not unilaterally get rid of our nuclear weapons. To maintain them ... adds nothing to our security. I can think of no circumstances under which it would be wise for the United States to use nuclear weapons, even in retaliation for their prior use against us. ..."

To holdout against voices of reason coming from all quarters, Clinton and Albright and the Old School will have to work harder than ever. The NATO summit meeting set for Lisbon in November is certain to attract massive anti-nuclear demonstrations. — JL

Giant Human Chain in Germany Demands Retention of Reactor Phase-Out

By John LaForge

At least 100,000 Germans joined hands to form one of the longest human chains ever recorded, to protest a federal government plan to repeal the 1999 statutory phase out of nuclear power. The action came two days before the 24th anniversary of the world's deadliest radiation disaster at Chernobyl in Ukraine.

"Today will spark a countrywide chain reaction of protests and resistance if the government does not reverse its [pro-] atomic policy," organizers said in a statement, Reuters reported.

A police spokeswoman in Schleswig-Holstein told the Agence France Presse (AFP) at least 100,000 people took part in the human chain which stretched for 75 miles along the Elbe River. Organizers put the total at more than 120,000, and demonstrations were also held in other cities around Germany where public opinion is staunchly anti-nuclear.

Dubbed "Chain Reaction — Stop Nuclear Energy," the protest stretched between the northern towns of Brunsbuettel and Krümmel, each the site of an aging, accident-prone nuclear reactor and through the center of Hamburg, Germany's second largest city.

The demonstration was aimed at Chancellor Angela Merkel's plan to postpone the shutdown of the country's 17 nuclear reactors beyond a 2020 target date.

Disclosed: French Radiation Experiments

The disclosure during the 1990s of human radiation experiments, conducted in the U.S. for decades upon unwitting and often impoverished and disabled civilians, was understandably appalling. Government-sponsored scientists used hospital patients, mentally ill children, pregnant women, prison inmates, the elderly and the terminally ill, without their consent, to see what immediate or near-term effects radioactive contamination would produce.

Up to 16,000 individuals were subjected to the secret poisonings. In addition, at least 400,000 U.S. troops were treated like lab animals by military scientists and the general staff who used them in above-ground bomb tests. They were ordered to endure at close range, to march toward and to breathe the radioactive dust of nuclear weapons detonations in the desert.

Former Department of Energy Secretary Hazel O'Leary voiced shock about the details in 1993. "I said, 'Who are these people and why did this happen?'" The only thing I could think of was Nazi Germany," she told *Newsweek*.

Now it turns out some of the Nazi-like doctors were French, too, and deliberately exposed French soldiers to bomb blast fallout in the Sahara. Researchers at the Armaments Observatory in Lyon, unearthed formerly secret documentation of the same treatment of its soldiers by French military higher-ups who wanted, they said, "to study the physiological and psychological effects of nuclear arms on man."

Citing a confidential military review of a 1961 bomb test written in the late 1990s — parts of which were published in *Le Parisien* — researcher Patrice Bouveret told the press, "Up till now we had never had direct account of 'foot soldiers' being used in these maneuvers. [The French authorities] knew they were putting them in danger ... and at the very least they should have taken measures to protect their health."

Like U.S. troops, the French recruits were ordered to move to within a few hundred yards of bomb blast sites shortly after detonation. In January, French lawmakers adopted a law to compensate some of the veterans, but many are demanding that more of them be made eligible and that the law include more bomb tests, a larger geographic area, and a greater number of illnesses.

The coalition of environmental, religious, youth, union and political organizations called for the government to "correct its policy" and retain the planned shut down schedule, known as the Nuclear Exit Law adopted in 2000.

The coalition demands that the government "definitively" shut down the reactor complex.

Speaking to a Nukewatch-sponsored workshop on nonviolent action in New York City, May 1, Marion Kuepker, international coordinator for Nonviolent Action for Nuclear Abolition in Hamburg, said the huge turnout was expected. "There's been a strong anti-nuclear movement ever since Chernobyl," she said. Moves by the federal government to weaken the phase out statute have angered the public, especially farmers and the medical profession. This is because "a large 2007 government study showed that childhood leukemia cases increase significantly the nearer children are to operating reactors." The highest rates of leukemia were found around the Brunsbuettel and Krümmel reactors near Hamburg, Kuepker said. In addition, people "wanted to speak to the May 9 regional elections."

The latter seems to have succeeded, as the elections saw the Green Party almost double its previous tally to over 12 percent. Merkel's conservative bloc lost its majority power in the upper house and as a result will have to compromise on the question of weakening the reactor retirement law.

The Chernobyl nuclear disaster occurred in the early hours of April 26, 1986 when a graphite-cooled reactor



Photo by Agence France Presse

Over 100,000 Germans created a human chain April 24 dubbed "Chain Reaction — Stop Nuclear Energy" marking the 24th anniversary of the Chernobyl catastrophe.

exploded and burned uncontrollably for weeks, contaminating the then Soviet states of Ukraine, Russia and Belarus with fallout that also fell heavily on western Europe and went on to contaminate the whole of the Northern Hemisphere. More than 125,000 people known as "liquidators" — most of them Ukrainians, Russians and Belarussians — died after constructing a concrete shield over the wreckage, according to Ukrainian official figures.

Israel's "Secret" Nuclear Arsenal Now Routinely Outed

The Israeli government has always refused to acknowledge its possession of nuclear weapons. Middle East observers estimate the size of its stockpile at between 150 and 600 warheads.

Even after imprisoning Mordechai Vanunu for 18 years — when he gave photos and documentary proof of Israel's arsenal to *The Times* of London — Israel's policy remains one of extreme state secrecy and bogus "nuclear ambiguity."

Israel's double standard of condemning Iranian reactor fuel production and even bombing Iraqi and Syrian reactor systems, while in possession of a large cache of H-bombs, is the cause of no little resentment and hostility. Many Muslim countries, represented at a March Arab League meeting in Libya, insist that the whole region, Israel especially, must become nuclear-free.

The Obama Administration plays dumb and stays mum on the subject (even in the face of dozens of confirmations, both direct and indirect of Israel's nuclear war system), in order to promote the arms industry's happy pretense that Iran is the only real threat to the peace of the region.

Israel's bomb stash is the one arsenal of WsMD in the Middle East of which the United States feigns ignorance, even while it bombs and invades other countries under the pretense of confronting WsMD that it well knew were gone.

The two-faced charade of condemning Iran, which has no nuclear arsenal, and sternly acting out a mock, exaggerated fear of its rulers, while artfully refusing to recognize, inspect and disarm Israel's illegal arsenal, is outdone only by the United States' own counterfeit discussion of a "world without nuclear weapons," which is laughingly mocked by Obama's planned 10-year, \$80 billion warhead fund (see p. 1)

"Iran Angrily Defends Nuclear Program," *New York Times*, May 4, 2010:

"Although Israel does not take part in the non-proliferation treaty, its arsenal, estimated at 100 to 200 warheads, has overshadowed the conferences in recent years."

"U.N. Chief Seeks to Strengthen Nuclear Pact," *New York Times*, Apr. 29, 2010:

"Although Israel does not take part in the treaty, its nuclear arsenal has overshadowed the recent conference."

"Dreams of Disarmament," editorial, *Wall Street Journal*, Apr. 8, 2010:

"India and Pakistan joined the nuclear club by staying outside of the treaty, as did Israel, though its nuclear program reportedly predates the [March 5, 1970] NPT."

"Israel Plans for 3rd Nuclear Reactor," *New York Times*, Reuters, Mar. 8, 2010:

"Israel already has two reactors, the Dimona reactor in the Negev desert, which is widely assumed to have produced nuclear weapons, and research reactor at Nahal Soreq. ..."

"Jimmy Carter says Israel had 150 nuclear weapons," *BBC*, May 25, 2008, and *The [London] Times*, May 26, 2008:

In Wales, former President Carter said, "The U.S. has more than 12,000 nuclear weapons. ... Great Britain and France have several hundred, and Israel has 150 or more."

German television news, Dec. 10, 2006:

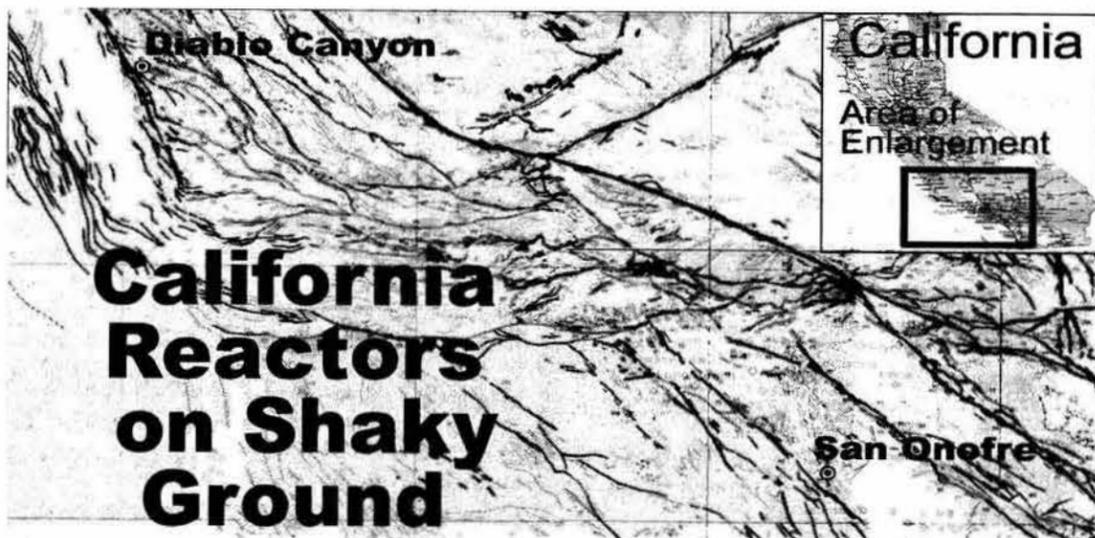
Israeli Prime Minister Ehud Olmert indirectly acknowledged his government's nuclear arsenal on Dec. 10, 2006. While speaking about Iran on a visit to Germany, Olmert asked rhetorically, "Are [Iranians] aspiring to have nuclear weapons, as America, France, Israel, Russia?"

Transcript of hearing, *Washington Post*, Dec. 5, 2006:

During his Senate confirmation hearing Robert Gates said about Iran: "They are surrounded by powers with nuclear weapons: Pakistan to their east, the Russians to the north, the Israelis to the west and us in the Persian Gulf."

Seymour Hersh, on *Democracy Now*, Nov. 21, 2006:

Interviewing investigative journalist Seymour Hersh, author of *The Sampson Option* about Israel's nuclear arsenal (Random House, New York, 1991), news anchor Amy Goodman asked how many warheads Israel possessed. Hersh replied, "I wrote a book about Israel's bomb, what, 15 years ago, and at that time it was 300-400. So we're talking about a country that could have 600." —JL



California geologists have published an updated seismic atlas of the state "that includes more than 50 new fault lines discovered over the last two decades" the AP reports. The newly-identified earthquake faults are among an estimated 15,000 in the state. Officials hope the new chart, last updated in 1994, will improve earthquake preparedness and offer direction for construction of schools and hospitals. The graphic above shows the location of the San Onofre and the Diablo Canyon nuclear reactors. Diablo Canyon is three miles from an active fault line, and San Onofre is 20 miles from another. Earthquakes have affected reactors in Japan, Taiwan, Bulgaria, Armenia, Turkey, Chile and India. The new California Geological Survey maps have interactive digital versions and can be seen at: quake.ca.gov/gmaps/FAM/faultactivitymap.html

Rebuilt Experimental Breeder Reactor's Stumbling Restart

TSURUGA, Japan — Like a ghoulish revenant that returns from the dead, Japan's prototype Monju fast-breeder reactor is staggering its way back to life. Located in Tsuruga in northern Japan, Monju has been shut down for 14 years, after operating for only four months, following an accidental leak of contaminated liquid sodium — flammable in air — from a secondary cooling system, a fire and a subsequent cover-up. *The Daily Yomiuri* reported that, "The handling of sodium, a coolant that removes heat from the reactor's core, is often problematic at these reactors."

And problems are what Monju has had since its halting restart on May 6, including a gas leak, a dysfunctional oxygen meter and temperature alarms sounding at different sections of the cooling system. Japan's Nuclear and Industrial Safety Agency said it would study the cause of what it said was a false fuel leak alarm. But alarms continue.

Two days in a row, alarms sounded because temperatures in auxiliary cooling pipes were too high or too low. The faulty oxygen meters measure oxygen in nitrogen gas-filled areas where the gas prevents sodium coolant from burning in the event of a leak. *Japan Today* reported that one of the meters failed for five and a half hours.

The fast-breeder plutonium-uranium-fueled Monju is not set to reach full power until 2013. At \$9.5 billion and counting, the Monju type is supposed to be used as a model for 20 more breeder reactors by 2030.

— *Japan Today*, May 15; *Mainichi Daily News*, May 9; *Kyodo News International*, May 8; *Japan Times*, May 10 & 7; *Daily Yomiuri*, May 7; Bloomberg, May 6; AP & BBC, May 5, 2010

NUCLEAR SHORTS

New Radiation Leaks Found Searching for Others

VERNON, Vermont — Entergy officials, owners of the rusty 38-year-old Vermont Yankee reactor, were caught lying on record about underground pipes and the fact that they were leaking tritium to the groundwater. The ensuing scandal caused such an uproar that last April, the Vermont Senate voted 26-to-4 to deny Entergy's request to extend the operating license another 20 years. For now, Vermont Yankee will be shut down for good when its license expires in 2012.

On March 25, company officials stepped forward to say that their technical people had found and "fixed" what they said were the only "two holes" in the culpable underground pipe. The Nuclear Regulatory Commission (NRC) may want to verify this "all fixed" claim, since lying seems to come easily to Entergy spokespeople.

After two and a half months of repair work, executive V.P. Mark Savoff delivered another PR sound bite, saying Entergy would become a leader in "tritium leak prevention, detection and mitigation." The company is getting a lot of practice. On May 29, the company's spokesman Larry Smith said that radioactive water and vapor leaked from a pipe in a pit that workers dug to find the source of the earlier leaks. The latest leak involved 13 different radioactive isotopes including the extremely hazardous strontium-90. — *New York Times*, April 6, & March 26; & WPTZ TV, May 30, 2010

Hefty Fines for Blocking French Radioactive Waste

PARIS — For the last six months Greenpeace activists have been tirelessly blocking trains and spotlighting ships carrying radioactive waste from France to Russia. The organization calls for a halt to all such nuclear waste dumping. Activists tore up tracks in Tricastin in southern France, chained themselves to tracks near Montoir-de-Bretagne for more than four hours, were arrested at the French Embassy in St. Petersburg, Russia, met ships in ports going and coming, and blockaded a train bound for Russia from the Eurodif reactor in Le Havre. The actions led to Areva getting a court decree to ban disruptions of their transports. The court ordered a \$94,000 fine per violation and banned activists from ships and rail sides. Greenpeace estimates that 700,000 tons of depleted uranium has been abandoned in Russia. Read about the ongoing actions at Greenpeace.org.

— Greenpeace, April 7, March 11, 26; *NuclearNews.ans.org*, Jan. 26; *RIA Novosti*, Feb. 1, March 11, 17 & April 20, 2010; *Radio France International*, Dec. 12, 2009

Without Taxpayer Giveaways, No Nukes

SOFIA, Bulgaria — According to Bulgarian Prime Minister Boyko Borisov, "The country has no money for an atomic power plant." As a result, construction on the country's second reactor at Belene on the Danube River, has been stopped. An offer for a Russian investment of \$2 billion (\$2.48 billion) was turned down as was an offer by Serbia for a 5 percent stake in the project. Bulgaria is looking for a full investor to help cover the \$12.38 billion cost, up from an earlier estimate, or public relations ruse, of \$4.95 billion. The German energy company RWE, withdrew its financial support last fall and GDF of France did the same in Feb. 2009.

On the other hand, Westinghouse is exploring building a 7th reactor at the Bulgarian Kozloduy site which it says can be done in three years. Kozloduy has four idle and two operating reactors, one of which had an emergency shutdown early in March due to a short circuit in the control panel. — *Earth Times*, May 4; *Novinite.com Sofia News Agency*, April 7; *Reuters*, March 3 & May 19; *PressTV*, May 4, 2010

Davis-Besse's Replaced Reactor Head Already Broken

OAK HARBOR, Ohio — The corrosion-plagued Davis-Besse reactor shut down for refueling Feb. 28, and inspections began March 12. Once again, investigators uncovered cracks around corrosion-proof alloy tubes and rod mechanisms (which penetrate the reactor vessel head) used to control the nuclear reaction inside the core. An investigation is underway to determine why cracks developed in 16 of the 69 control-rod drive cylinders. The reactor's entire vessel head was replaced in 2002 after the discovery of a football-sized boric acid-eaten hole that left just 3/8 of an inch of stainless steel to hold pressure of more than 1-ton-per-square-inch. FirstEnergy Corp. contracted with the giant French firm Areva to fix the new tube defects in a vessel head that's only been in use since the 2004 restart. Two of the 16 defective nozzles have cracks large enough to have allowed radioactive coolant to leak and make its way to the top of the lid as evidenced by the presence of boric acid — a repeat of the past problem. Ten other nozzles have cracks and four have flaws that could become cracks. The nickel alloy used in both the old and the replacement vessel head at Davis-Besse is being phased out by the nuclear industry for its inability to take the heat. — *Sandusky Register*, Mar. 18; *Cleveland Plain Dealer*, Mar. 17; *Toledo Blade*, Mar. 15, 2010

Drought Sends Desert Reactors in Search of Water

WINTERSBURG, Arizona — Water is scarce in the Sonora desert, and if a reactor needs anything it's water. The Palo Verde station, with three reactors, is 36 miles west of Phoenix which is in the midst of Arizona's 11th consecutive year of drought. In April, the consortium that owns Palo Verde, renewed a contract with the cities of Phoenix, Mesa, Glendale,

Scottsdale and Tempe to buy billions of gallons of their effluent or "waste" water for cooling reactors and their waste fuel. The cities wanted higher returns, and the new price is a cool \$1 billion over a 40 year period. By 2025, the consortium will pay \$300 per acre-foot (325,851 gallons) for the recycled non-potable water, as the rate will increase gradually from the current rate of \$53. The contract sets aside 80,000 acre-feet of water per year for the Palo Verde reactors, unique in the world for using gray water for cooling. — *The Arizona Republic & the Phoenix Business Journal*, April 1; *Arizona Investment Council*, 2010

Army Corps Slowing Cleanup of WW II-Era Waste Site
LEWISTON, New York — The federal government's failure to clean up a World War II-era radioactively contaminated dump site is the source of ongoing protests on the shore of Lake Ontario. The Niagara Falls Storage site is a 191-acre parcel in the Town of Lewiston. It is owned by the Department of Energy and boasts a 10-acre "interim waste containment structure" left from Manhattan Project work on the first atom bomb. A dispute with federal regulators over public input into the investigation has been going on for several years. A volunteer Restoration Advisory Board for the site questioned federal regulators about how they handled an investigation. The board was then abruptly disbanded. Vincent Agnello, secretary of the Niagara Watershed Alliance complained, "Anytime an active citizen's board starts asking questions, they disband it." Several nearby towns, villages and Niagara County have since passed resolutions calling for the advisory board's reinstatement.

— *Buffalo News*, & WBFO-TV May 23, 2010

Nuclear "Secrets" Available Online

HARRISBURG, Penn. — The Department of Energy (DOE) recently removed a report published on its website describing the areas of a nuclear power station that would cause the greatest amount of damage to the reactor and release radiation, if targeted by a plane. The report, "Evaluation of Air Craft Crash Hazards Analyses for Nuclear Power Plants," is no longer available for download. The DOE defended the posting as an effort to inform the public about the scientific work of the department, never mind the dangers inherent in such a report. Officials were quick to down play the severity of the gaffe. The incident harkened back to 2009 when the newly minted Obama Administration published a "highly confidential" 266-page list of America's nuclear weapons sites. That report was ordered for the International Atomic Energy Agency in the hopes of convincing other countries to do likewise. No other country followed suit. — *Mercury News*, April 25, 2010 & *UK Guardian*, June 3, 2009

Improving Reactor Cooling Systems

CALIFORNIA — Every day, the Diablo Canyon and San Onofre reactors draw in over 15 billion gallons of sea water for cooling, according to World Nuclear News. The water is returned to the sea 20 degrees hotter than it was. California's State Water Resources Control Board voted May 4, to require construction of cooling towers to minimize the environmental impact of this "once-through" cooling system. San Onofre must meet the requirement by 2022 and Diablo Canyon by 2024. (New York and New Jersey have also introduced draft policies requiring similar replacement of once-through with cooling towers.) The cooling water intakes kill tens of thousands of fish and crabs and billions of fish larvae every year, and it warms the sea. The goal of the new requirements is to reduce this damaging impact by 90 percent. Of 104 operating reactors in the U.S., 60 use the archaic once-through systems. — *World Nuclear News & San Clemente Times*, May 6; *San Luis Obispo Tribune*, May 17; *KSBY (NBC Santa Barbara) & North County Times*, May 5, 2010

From Here to Eternity

OLKILUOTO ISLAND, Finland — Michael Madsen, a Danish filmmaker has produced "Into Eternity," a documentary about the Finnish radioactive waste dump called "Onkalo" under construction on Olkiluoto Island. Finland claims that the 3-mile long tunnel and storage area at the end of it (1,600 feet below the earth's surface) will contain the radiation for longer than the span of human civilization. The copper cans that will hold the reactor waste have an estimated 200-year life span, after which the used fuel rods are expected to end up in a sort of pile on the rocky floor where it will threaten water resources. Engineers took into account a future ice age, expected about 20,000 years from now, that could cover the site with ice two miles thick. The film poses questions about human curiosity that may — in the end — uncover what's meant to be forgotten. The world's reactors have produced between 250,000 and 300,000 tons of the deadly and extremely long-lived waste fuel, while storage proposals remain experimental. — *New York Times*, May 10; *Uutiset News (Finland)*, May 12; *Tribeca Film Festival review*, 2010; *Spectrum*, Dec. 2009; *BBC News*, April 27, 2006

Savannah River Site Given a Radiation "Time Out"

AUGUSTA, Georgia — A laboratory technician was blamed for contaminating herself and her clothing with plutonium at the Savannah River Site (SRS) in March. A radiation control officer detected radiation on a hood where the employee worked. Angie French, a lab spokeswoman, said in the *Augusta Chronicle* that it was a small amount of radiation and the employee inadequately monitored her gloved hands as she moved them in and out of the hood. Between September 2009 and February 2010, seven incidents of contamination occurred. The increase in contamination incidents led to a three-week "time out" or work stoppage in order to scour facilities for radiation and reevaluate monitoring rules. Radiation was discovered on shoes, clothes, a chair, on a wall, in a break room and other rooms. The 310-acre site, used for plutonium production for nuclear weapons, is high on the list of radioactively contaminated places in the U.S. — *Augusta Chronicle*, Mar. 16 & 18, 2010, Dec. 24, 2009; *EPA website*, 2010

Attorney General Calls for Indian Point Shut Down

NEW YORK, NY — Andrew Cuomo, New York's Attorney General, and a candidate for governor, filed objections to extending the license of Entergy's Indian Point nuclear reactor, and he called for its immediate shut down. The renewal process is overseen by the Nuclear Regulatory Commission, which has been investigating the reactor since 2007. An extension would allow Indian Point to operate for another 20 years. Cuomo has sited the reactor's history of unsafe operations as well as its proximity to New York City just 42 miles to the south. With more than 17 million people living within 50 miles of the reactor, Indian Point has the power to contaminate more people than any other reactor in the country. Cuomo said, "Standing by and letting Indian Point operate today without adequate emergency plans and with unremediated safety flaws represents a failure of leadership." — *Reuters & Albany Daily News*, March 19, 2010

Pentagon Chief Denounces European War Resistance

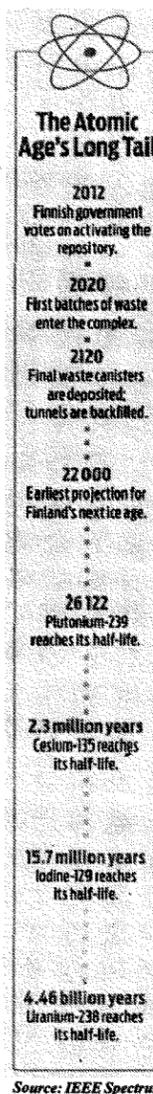
WASHINGTON D.C. — Defense Secretary Robert Gates bluntly ripped Europe's "aversion to war" in a speech delivered at the National Defense University Feb. 23. Gates said that Europe's "weakness" could provide a "temptation to ... aggression," by hostile powers, and that public opposition to the military was directly affecting the U.S./NATO war in Afghanistan. He complained that limited military spending by NATO partners had caused a shortage of helicopters and cargo aircraft needed there. Gates' belligerent comments were not taken kindly by U.S. partners in Europe whose opinion of the Afghan war, polls show, has grown more and more unpopular. — *The New York Times*, *BBC*, *The Sydney Morning Herald*, February 24, 2010

\$38 Million to be Used for Nuclear R&D

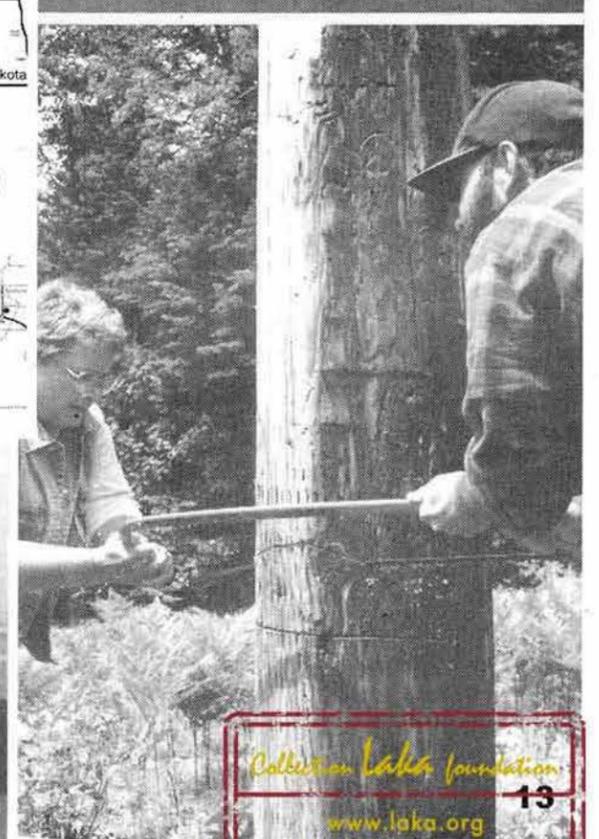
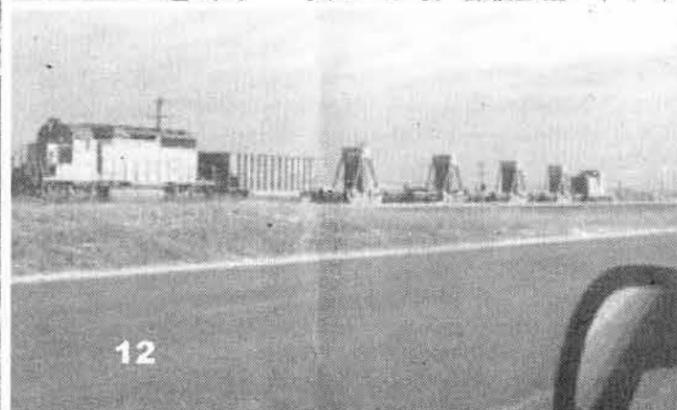
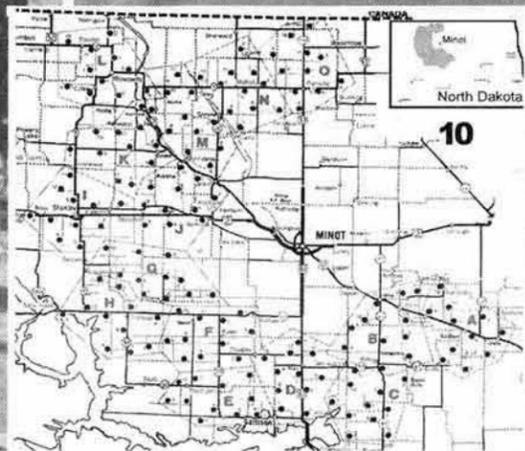
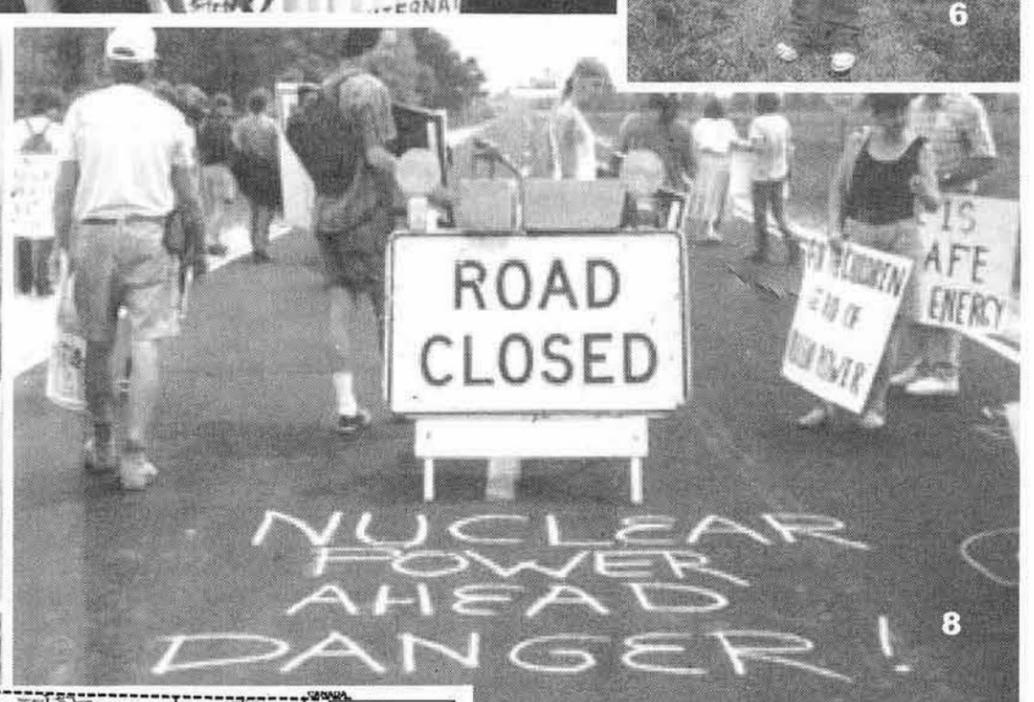
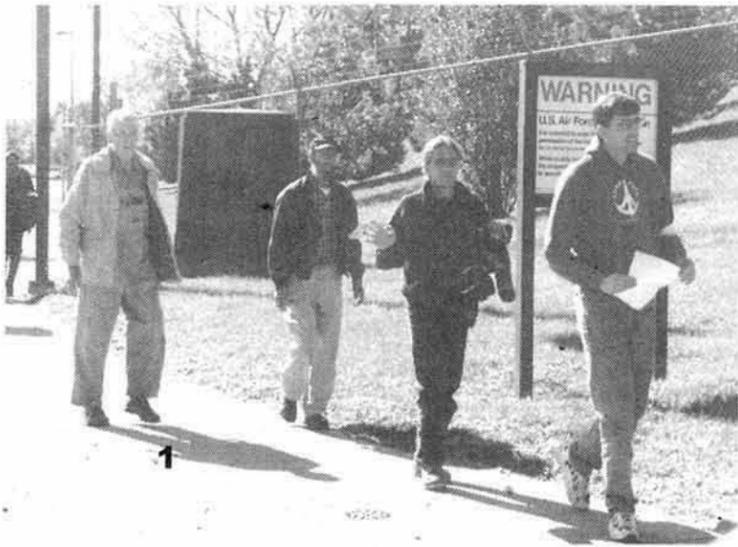
WASHINGTON, DC — Forty-two universities will split \$38 million dollars over four years for nuclear education, research and development, under Energy Department oversight. Secretary Steven Chu announced May 20 that the agency is "taking action to restart the nuclear industry." The grants focus on four major areas of interest. First, the uranium fuel cycle, where money will be used to "engineer a course of action" for high-level radioactive waste. Second, new reactor designs with an aim to producing more energy with less waste. (The DOE, "small modular reactors would significantly expand the options for nuclear power ... in terms of economics, performance and security.") Third, "stability for existing reactors," involving research into extending the lives of operating reactors partly through the study of aging and degradation in reactor materials, safety characterization and inspection plans. Fourth, a pro-nuclear grab bag which simply supports a broad spectrum of engineering, physics, materials science and nuclear chemistry. — *Department of Energy*, May 20; *World Nuclear News-online*, May 26, 2010

RESOURCES

- * **AlliantACTION**, Web: alliantaction.org
Email: alliantaction@circlevision.org;
- * **Beyond Nuclear**, 6930 Carroll Ave., # 400, Takoma Park, MD 20912; (301) 270-2209;
Web: beyondnuclear.org; Email: info@beyondnuclear.org
- * **Clean Wisconsin**, 122 State St., # 200, Madison, WI 53703; (608) 251-7020; Web: cleanwisconsin.org
- * **Physicians for Social Responsibility**, 1875 Connecticut Ave., NW, # 1012, Washington, DC, 20009; (202) 667-4260; Web: psr.org. **Wisconsin Chapter**, PO Box 1712, Madison, Wisconsin 53701-1712; (608) 232-9945; Email: info@psrwisconsin.org
- * **The Nuclear Resister**, P.O. Box 43383, Tucson, AZ 85733; (520) 323-8697; Email: nukeresister@igc.org;
Web: nuclearresister.org
- * **Union of Concerned Scientists**, Two Brattle Sq., Cambridge, MA 02238; (617) 547-5552; Web: ucsusa.org
- * **War Resisters League National Office**, 339 Lafayette Street, New York, NY 10012; (212) 228-0450; Email: wrl@warresisters.org; Web: warresisters.org



30 Years of Resistance for a Nuclear-Free Future





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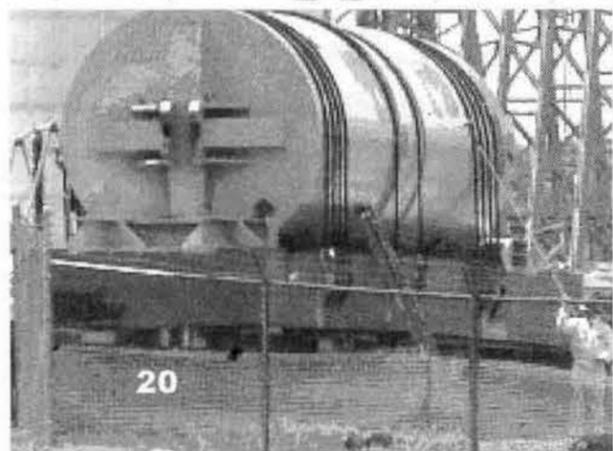
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Join 'Resistance for a Nuclear-Free Future'

Nukewatch and *The Nuclear Resister*, along with dozens of co-sponsors invite you to join us at Y-12 in Oak Ridge, Tenn. over the 4th of July weekend for the Resistance for a Nuclear-Free Future celebration. While it's too late to get dorm space on campus, you may opt for church hospitality space or a local inn. Join us for three days of workshops, nonviolence training, vigiling and action at the nuclear weapons facility. Info. at: <<http://www.nukewatch.com>>

"Nonviolence is not inaction. ... It is not for the timid or weak. ... Nonviolence is hard work. It is the willingness to sacrifice. It is the patience to win." — Cesar Chavez

1. The late Lee Schaal, left, a WWII conscientious objector, joined many protests against the Navy's Extremely Low Frequency (ELF) transmitter system, this one at Michigan's transmitter, 1995
2. Former staffer Erica Overgard joined Nukewatch's interruption of Madison's 1991 Gulf War "victory" parade
3. One-time staffer Cory Bartholomew helping block ELF in Wisconsin, circa 1994
4. Kevin Kamps, Beyond Nuclear's nuclear waste analyst, with bull horn, at Michigan's faulty D.C. Cook reactor
5. Nukewatch helped with trainings & nonviolent action, protesting the Cassini plutonium launch, Cape Canaveral, 1997
6. Sarah Miles represented Nukewatch at the Youth Action Camp for nuclear disarmament, in northern Germany, 2008
7. A sit-in atop one of the Minuteman missile silos in Missouri, circa 1986
8. Protesting Wisconsin's Point Beach reactor's plans for high-level waste storage, 1995
9. A die-in in Antwerp, Belgium during peace walk from The Hague to Brussels, protesting U.S. nukes in Europe, joined by staffer John LaForge
10. Nukewatch published *Nuclear Heartland*, the first atlas of U.S. land-based nuclear missiles, 1988
11. Anathoth Family Band members & friends sing out at Wisconsin ELF: (l to r) Mike Miles, Denise Breeden, Linda Miles, Barb Kass, Glenda & Bill Breeden, and Jim Miles, circa 1996
12. Nukewatch publicized shipments of the Navy's highly radioactive waste fuel from propulsion reactors moving cross-country to Idaho, 1992-94
13. Bonnie Urfer and Michael Sprong enacting "Silence Trident" disarmament of ELF antenna, June 2000
14. March leading to a nonviolent blockade at the Prairie Island reactors in Minnesota, August 1994
15. The late journalist, editor, Nukewatch founder, mastermind, friend & mentor, Sam Day
16. Former staffer Linda Urfer and a friend during the H-bomb Truck Watch near Oak Ridge, Tennessee, 1989
17. Former staffer Molly Mechtenberg-Berrigan getting the 500th trespass citation issued over a nine-year period at the Wisconsin ELF site, 1999
18. Cassandra Dixon, a staffer in the 1980s, at Nukewatch's Missile Silo Peace School in Missouri, 1990
19. John L. helping build current Nukewatch office on Plowshares Land Trust, Luck, Wisc., 1998
20. Bonnie caught a worker painting the transport cask used to ship decrepit Genoa reactor core from La Crosse, Wisc., to a dump in South Carolina, 2007
21. Adina Stackhouse and friend joined a summer ELF protest in Wisconsin, 2000
22. Long-time Nukewatch employee, board member and volunteer Barb Katt (l) and Bonnie Urfer bring fence-climbing gear to the line at the Wisconsin ELF site, circa 1992
23. Sam Day, with cane, arrested with sisters after removing survey stakes for the doomed Ground Wave Emergency Network near Medford, Wisc., 1993 www.laka.org

Utilities Hit Taxpayers for Failed Rad Waste Schemes

By Bonnie Urfer

For 50 years, corporate nuclear reactors have been producing long-lived (as in millions of years) and deadly waste fuel at sites across the country, with no permanent storage facility in sight. The federal government signed contracts with over 100 utilities, between 1983 and 1987 — the days when the rods were used to produce nuclear weapons — to take the high-level waste fuel rods off their hands. With the end of the Cold War, the contracts signed in the heat of weapon's buildup no longer served the U.S., so the Department of Energy (DOE) reneged on the agreements. When the utilities win the law suits, taxpayers get the bill.

Currently, 71 utilities are suing the DOE for failure to take possession of radioactive waste, in part because the proposed Yucca Mountain waste dump was declared a technical failure and canceled. In the midst of \$565 million in damages paid to just five utilities so far, and facing \$790 million in appealed judgments, the DOE in 2008 — during the Bush administration — signed more contracts with a dozen utilities to take future waste from 21 reactors yet to be built. The costly radioactive waste cycle begins again.

By 2020, taxpayers will have paid about \$12 billion in court judgments against the DOE for its failure to comply with the 1998 deadline under the Nuclear Waste Policy Act of 1982, according to the Congressional Budget Office. The figure could go as high as \$50 billion. The DOE has spent \$154 million in taxes to defend itself against what could become a perpetual string of lawsuits. Some utilities have sued the government and won settlements for a specific time frame for storing waste and are re-suing because of additional delays. In the case of Xcel Energy/NSP in Minnesota, the corporation was awarded \$116 million for

costs accrued through 2004, then in 2007 filed another lawsuit for costs accumulated between 2005 and 2007.

The new contracts, signed in 2008, promise to provide waste fuel storage no sooner than 2068, by which time there will be enough of the high-level waste to fill a space more than twice the size of the failed \$10 billion Yucca Mountain project.

Utilities pay about \$750 million in fees annually into a government fund established to cover the cost of waste fuel disposal. This fund does not cover the additional cost of maintaining the waste in cooling pools and dry cask storage at reactor sites. On-site waste fuel already generated totals about 63,000 tons; 42,000 tons more are expected from operating reactors; and another 21,000 tons could follow from proposed but unbuilt reactors.

In spite of the high cost of the law suits, the Obama administration has asked Congress for an additional \$9 billion in nuclear loan guarantees which will bring the taxpayer bill to \$18.5 billion to support loan guarantees for private utilities, money not forthcoming from investors. Southern Company plans to avail itself of \$8.3 billion to construct the first new reactor in 30 years, in Burke, Georgia.

Radioactive Waste Specialist, Kevin Kamps with Beyond Nuclear says, "Twenty-eight years after passage of the Nuclear Waste Policy Act, 35 years after the repository search began, 53 years into commercial nuclear power, and 68 years after Fermi first split the atom during the Manhattan Project, the U.S. still has no safe, sound, permanent storage plan for high-level radioactive waste." — *The Christian Science Monitor*, March 24; *Salem News*, March 24; *World Nuclear News*, May 23; *IEERS*, March 24; *AP*, May 20; *Chataooga Times Free Press*, March 22; *Minnesota Legislature - Resources on Minnesota Issues*, January 2010



By Bonnie Urfer

The Navajo Nation's air, land and water have been severely contaminated by uranium mining and milling. Airborne radioactive emissions in the Church Rock region are now higher than Nuclear Regulatory Commission allowances. In a convoluted NRC decision approving a new in-situ uranium mining permit for Hydro Resources Inc., the Commission states that only airborne radiation from future mining operations need be considered, and the agency discounts currently elevated levels, radioactive trash on site and soil contamination from defunct mines. The Navajo Nation challenged the NRC decision and on March 8, the 10th U.S. Circuit Court of Appeals in Denver, sided with the NRC citing the outdated Atomic Energy Act which discounts current and future surface and water contamination. The Appeals Court decision also relied on the National Environmental Policy Act, which requires only that the agency consider and disclose negative effects in future mining operations.

The Navajo Nation has banned uranium mining on its land, and while attorneys argued that the permitted sites fall within Native boundaries, the Court discounted the argument. Municipal water supplies for 15,000 Navajos and

Diné near Crownpoint and Church Rock are located within a half mile of the permitted site in northwest New Mexico.

In 1979, Church Rock was the site of the worst liquid radioactive spill in the U.S. with 94 million gallons of heavy metal and radioactive waste released from a holding pond into the Rio Puerco River. After 30 years the Native community still suffers with cancer, birth defects, immune deficiencies and endocrine system failures.

Uranium mining prospecting has skyrocketed in recent years. New claims total more than 1,100 in the Grand Canyon area, up from just 10 in 2003. Overall, the Department of the Interior registered 43,000 uranium mine claims for 2009 in five western states. President Obama's call for a new generation of nuclear power is partly to blame for the renewed uranium land grab.

The NRC said pre-mining conditions would be the restoration target for the mining operation. Failing that, the goal would be to meet the Environmental Protection Agency's drinking water standards. Failing that, the company would have to demonstrate to the NRC that there "would not be a threat to public health and safety and that, on a parameter ... basis, water would not be significantly degraded."

Judge Carlos F. Lucero, the dissenter on the three panel Court, said the decision, "will unnecessarily and unjustifiably compromise the health and safety of the people who currently live within and immediately downwind" from the permitted area.

— *Associated Press*, May 19; *High Country News*, March 26; *Indian Country Today*, March 21; *The New Mexico Independent*, March 11; *The Navajo Times*, March 8, 2010

Struggling to Streamline Nuclear Workers' Comp

By Paul Vos Benkowski

Since 1943, workers in every aspect of the nuclear industry have been knowingly exposed to dangerous levels of radiation. In thanks for their sacrifices and service they have been honored with a Cold War Patriots National Day of Remembrance, October 30, and little else. The governmental bureaucracy in place to compensate for the illnesses incurred during the past 70 years has been an ineffectual, inefficient labyrinth costing some \$90 million in administrative costs and numerous fixes that only seem to underline the inherent dangers of nuclear power and weapons.

In 2000, the Energy Employees Occupational Illness Compensation Program Act was signed into law. Its stated goal was to compensate former nuclear workers with lump sum payments to offset medical bills directly linked to their exposures to radiation, but its result was a multi-faceted series of hoops which an often times seriously ill worker had to leap through. At the heart of the compensation issue is the government's reticence in admitting that there are any dangers involved in the nuclear industry. Such culpability is not in the government's best interest and it seems quite content to take its sweet time in processing claims. The average wait for a claimant is three years.

The Charlie Wolf Nuclear Workers Compensation Act was introduced in March of 2009 to speed up the process, but in true Washington fashion, its implementation has stalled while the Government Accountability Office studies the bill. While politicians can point to these hang-ups as necessary fruitful steps, needed to make sure that all workers are covered, the folks suffering from years of poisoning and neglect are left to fend for themselves in a sea of red tape.

Claimants are asked to find former colleagues to prove they were employed at a nuclear site, gather medical reports, and most troubling, identify the toxins to which they were exposed. Keeping in mind the secrecy surrounding the industry, this is no easy task. Coupled with loss of health, chemotherapy and undue stress, this is more than any citizen should have to suffer.

In an effort to right the situation, the Department of Justice has sent out a taskforce to the Four Corners region of the U.S. in order to spread the word about radiation exposure payments. This is a little too late for those who have died, and their families are unable to file a claim. Nevertheless, it is a step in the right direction as Native Americans in the uranium-rich area have long suffered abuse at the hands of the nuclear industry. Tony West, assistant attorney general for the Justice Department's Civil Rights Division, said in a news release that workers and their families may be entitled to compensation under the Radiation Exposure Compensation Act (RECA). Under the act, people in three categories may receive payments: uranium miners, millers and ore transporters; people who were present at nuclear weapons test sites; and people who lived in certain areas "downwind" of the Nevada Nuclear Test Site.

The compensation of poisoned and sick workers is a slippery slope for the government because it admits the dangers of an industry they have long championed. While the Obama administration pushes for more nuclear power, the grudging compensation given to workers who have suffered the ravages of this dangerous endeavor, should inspire a nation-wide rallying cry against further production of illness and death.

One-Third of U.S. Reactors Leaking Tritium

Thirty-three U.S. nuclear reactors have been or are currently leaking cancer-causing tritium, a radioactive isotope of hydrogen with a half-life of 12.3 years. A leak of 180,000 gallons of tritiated water in 2009 contaminated the aquifer beneath the Oyster Creek reactor near Lacey, New Jersey. Some drinking water wells are only one mile from the now tainted supply. Two pipes with holes caused the corruption. Radiation levels have been measured in concentrations of one million picocuries per liter, the allowable limit is set at 20,000 pCi/l.

New Jersey took over clean-up operations intending to bill Exelon, since the Nuclear

Regulatory Commission does not require clean-up and company operations have moved too slowly. Exelon installed additional monitoring wells to track the plume of tritium which is thought to be moving three feet per day. The State Department of Environmental Protection (DEP) suggested it could keep radiation out of drinking water by pumping contaminated water out of the aquifer, pumping clean water into injection wells to push back and retain the radioactivity at its current location, or do nothing and rely on dilution as a solution. With the water already poisoned, detecting new leaks is made more difficult.

Exelon is now required to move all pipes that carry radioactive water either above ground or place them in concrete "vaults" to prevent leaks into the environment. (Note that leaking "vaults" have been a source of tritium leaks in Illinois.)

Oyster Creek, the oldest operating U.S. reactor, received a 20-year operating license extension just one week before Exelon revealed its off site tritium contamination.

Operations at Oyster Creek have killed 80 million pounds of aquatic organisms during 40 years of producing power, and the DEP has suggested that Exelon stop using the ocean as its cooling water source. Instead of seawater intake, the DEP wants to see a closed cooling loop using towers. Exelon has said it would shut down if cooling tower construction is mandated.

— *Jersey Newsroom & The Star-Ledger*, May 7; *Asbury Park Press*, March 22 & May 13; *Associated Press & Press of Atlantic City*, May 8, 2010

Exelon to Pay \$1 Million in Fines

On March 11, Exelon agreed to pay \$1 million to settle lawsuits filed in 2006 by Illinois' Attorney General and Will, Ogle and Grundy County State's Attorneys, after tritium leaks poisoned drinking water and or land at its Braidwood, Byron and Dresden reactors (all in Illinois). Part of the money will fund environmental projects in the three counties, and Exelon has purchased one home and agreed to compensate additional homeowners for loss of property value. Godley, a village near the Braidwood reactor is in the process of building a new water system to replace the contaminated source, for which Exelon will pay \$11.5 million. The Nuclear Regulatory Commission cited Exelon for failure to notify the agency of 22 leaks dating back to 1996. Illinois enacted legislation mandating reporting of tritium leaks at the time they occur. — *Chicago Tribune*, March 12; *Braidwood Journal*, March 17; *Chicago Breaking Business*, *IllinoisAttorneyGeneral.gov* & *Exeloncorp.com*, March 11, 2010

Vermont Yankee Tritium Moves Underground

A tritium plume from Vermont Yankee is moving toward the Connecticut River at what the Vermont Department of Health claims are "undetectable levels." In spite of being undetectable, measurable contamination at the source of the reactor leaks has decreased, while it has increased in test wells east of the site. Drain lines with cracked concrete ducts are blamed for the tritium release and have been rerouted in a temporary fix. Still leaking tritiated water is being collected via a sump and returned to the facility for processing. Entergy, owner of Vermont Yankee, is digging up contaminated soil on-site and during a recent outage, the company examined and repaired a range of pipes. Vermont's legislature voted down a license renewal for the decrepit reactor and the facility will shut down in 2012. — *Brattleboro Reformer*, March 18; *WMUR.com News*, April 19; *WPTZ.com News*, March 31, 2010

What's With Tritium?

A radioactive form of hydrogen, tritium is a gas in its elemental form. But, like ordinary hydrogen, tritium combines with oxygen to make water, called tritiated water, with the crucial difference that tritiated water is radioactive. As radioactive water, tritium can cross the placenta, posing some risk of birth defects and early pregnancy failures. Ingestion of tritiated water also increases cancer risk. Every exposure to radiation produces a corresponding cancer risk — low exposures produce low risk, and that risk increases with exposure. There is no threshold below which there is zero risk.

— *Science for Democratic Action*, August 2009

On the Bright Side

At the NPT 10,000 Demand Abolition

I was happy to represent Nukewatch at the International Conference for a Nuclear-Free, Peaceful, Just and Sustainable World, May 1st in New York City. The gathering came just before the start of the United Nation's month-long Nuclear Non-Proliferation Treaty (NPT) Review Conference.

Article VI of the 1970 NPT explicitly pledges signers like the U.S. to pursue *in good faith* the complete elimination of nuclear weapons. The treaty is reviewed by UN members every five years.

Two workshops proposed by Nukewatch were accepted by the Nuclear-Free conference organizers, so I joined presenters from the U.S., the UK, Germany, Japan and Costa Rica in speaking about nonviolent nuclear resistance campaigns and about coalition work against "depleted" uranium weapons.

On May 2, it was encouraging, in spite of the blistering heat, to be part of more than 10,000 people who marched across Manhattan from Times Square to the United Nations Plaza calling for nuclear disarmament.

In spite of the large numbers, news of Sunday's march was drowned out by wall-to-wall coverage of Saturday's Times

Square bomb scare. Even New York's tabloid press ignored the massive protest which included large delegations from every corner of the world, especially Japan and Germany.

Likewise, news of the more than two dozen arrests May 3 at Grand Central Station — during a War Resisters League-organized die-in and banner hanging ("Nuclear Weapons = Terrorism") — went unreported in the press. Still, thousands of commuters passing through the station got the message, particularly NPT Review Conference-goers who otherwise could have gotten the impression, because of the news blackout, that people here aren't concerned with nuclear weapons.

The night before, the War Resisters League hosted a special event and presented its annual Peace Award to our dear friend and co-conspirator Kathy Kelly of Voices for Creative Nonviolence. Congratulations — *JL*



Nukewatch staffer John LaForge, center, joined thousands of marchers in Times Square May 2 as delegates from around the world demonstrated their support for the Nuclear Non-Proliferation Treaty and abolition.

Massachusetts Wind Farm Wins Approval

NANTUCKET SOUND, Mass. — Massive wind generation in the Nantucket Sound is a step closer to reality with the Federal Aviation Administration approving Cape Wind's 130 turbines. The wind farm will be located on Horseshoe Shoal, with the closest population in Yarmouth, four miles away. The project is being developed by Energy Management, Inc. (EM), a New England company with a history of energy conservation and pollution control. Construction could begin this year with completion two years out.

After a decade of disputes, environmental impact surveys, characterizations, alternative proposals, bird and aquatic data and state permitting, Cape Wind promises to be the first large U.S. renewable energy project in public offshore water. It will stretch across about 24 square miles. It will provide 75 percent of the energy needs for the Cape, Martha's Vineyard and Nantucket. Cape Wind was scaled down from

early plans for 170 turbines to minimize the visual impact, one of the reasons area residents oppose the project.

As part of Cape Wind's approval process, EM agreed to update — at a cost of \$15 million — the air traffic control system at Otis Air Force Base and the Massachusetts Military Reservation to prevent interruption of radar. On May 18, the Federal Aviation Administration declared that the proposed project will not be a hazard to air navigation.

The states of Delaware, New Jersey and Rhode Island all have hopes for similarly large wind energy projects and are supported by a 2008 Department of Energy report that called for wind to produce 20 percent of the U.S. energy supply by 2030. The DOE also suggested 18 percent of the nation's wind power should come from offshore turbines.

— *Cape Cod Times*, May 18; *Washington Independent*, April 29; *CNN*, April 28; *New York Times*, Jan. 14, 2010

Radiation Lobby Loses Big in Wisconsin

This spring, for the third time in as many years, environmentalists in Wisconsin defeated a sophisticated and well-financed attempt by the radioactive waste industry to repeal state law that regulates new reactor construction.

Even with four Nuclear Energy Institute (NEI) lobbyists — call them the Liar's Club — working the state legislature since January 2009, the industry failed again to undo Wisconsin's 1983 statute which requires high-level radioactive waste producers (think reactors at Kewaunee and Point Beach) to have a federal answer to the waste problem before new reactors can be built.

According to research by Diane Farsetta of Clean Wisconsin, the Liars Club has been lobbying legislators on "nuclear generation ... engineering education and other issues related to state policies on energy, job creation and environmental law." This greenwashing of poison power cost NEI \$27,115 in the first half of 2009 and \$22,037 in the second half. Figures for 2010 aren't yet available.

The Liar's Club got its plans for repeal written into the Clean Energy and Jobs Act by pro-nuclear legislators, but the bill was too tough on pollution to avoid the opposition put up by the state's big business group, Wisconsin Manufacturers and Commerce. The Liars then got a stand-alone repeal measure introduced, but it died in committee.

With great leadership from Farsetta, (former Nukewatch staffer) Bill Christopherson, Pam Klies of Madison Physicians for Social Responsibility, Jennifer Nordstrom from the Carbon-Free & Nuclear Free Campaign and many others, the radiation lobby was sent packing — until next year.

Nuclear Power Troubled as 'Ultimate Heat Sink' Warms

In climate change circles, there is little discussion of the harm done by nuclear power in the warming of the earth. Like any hot industrial operation, reactors consume vast amounts of water to absorb the waste heat.

In New York for example, Indian Point's two reactors suck up 2.5 billion gallons of water every day then pour it back in the Hudson, hot and untreated. Hundreds of billions of gallons are heated up every day by the industry. The cold water of nearby lakes, rivers or oceans is returned at least 20-to-30°F hotter after making steam (for electricity), and after absorbing heat from reactor cores and from their extremely hot waste fuel, tons of which is kept for years in cooling ponds.

So much water is being heated up by nuclear power that in the article, "Climate change puts nuclear energy into hot water," Craig Nesbit, of Exelon, the giant Illinois corporation that runs the largest number of U.S. reactors, told the *New York Times*, finding enough water for nuclear plants "is front and center of everything we will do in the future."

One gets a hint of the industry's view of the world's water from its official terminology. The oceans, lakes and rivers — upon which the reactors and waste systems depend — are called the "Ultimate Heat Sink" or UHS.*

Consider how hot the old sink is getting. Average temperatures of waters at the oceans' surface in July 2009 were the highest ever recorded, the National Oceanic and Atmospheric Administration said last August. The decade ending in 2009 was the hottest ever recorded, and the year 2009 was the second warmest year ever (2005 was the hottest since 1880, when modern temperature measuring began). According to a January 2010 report by NASA, all the hottest recorded years have occurred since 1998, and in its most comprehensive study to date, the National Research Council said May 19 that climate change is already happening and is driven mostly by human actions.

David Lochbaum, a nuclear engineer who is with the Union of Concerned Scientists, told the press, "We're going to have to solve the climate-change problem if we're going to have nuclear power, not the other way around."

Thank You RESIST
for a grant in support of Resistance for a Nuclear-Free Future. RESIST funds grassroots groups organizing for peace, economic, social and environmental justice.

LEDs Will Lead

Light Emitting Diodes (LEDs) greatly improved within just the past few months, with their light now brighter and even more efficient than ever before. The newest LED technology is bright enough for street lights and automobile headlights. In Whittington, England, the village replaced old sodium bulbs with LEDs, and not only are the streets more effectively lit but the town is saving 70 percent on its electric bill. Comparable sodium lights emit 132 lumens (measurement of brightness), fluorescent bulbs 90, Tungsten 17 and, as of February, LEDs have reached 208. Osram, Sylvania and Philips will have bulbs on the market this year that effectively replace a 60-watt incandescent. General Electric will have a 40-watt available soon and 60s ready for next year. Advances in lighting have been encouraged by a federal law requiring bulbs or lamps to be 30 percent more efficient by 2012. The old incandescents cannot meet this standard and are disappearing from store shelves.

While LEDs cost much more than other bulbs, they last 100 times longer. Incandescents work for 2,000 hours, fluorescents for 8,000 and LEDs for 25,000. A bulb used for 4 hours a day will work for 17 years. — *UK Telegraph*, Apr. 21 & *New York Times*, May 16, 2010; *Los Angeles Times*, July 30, 2009

Both types of U.S. systems — pressurized water reactors and boiling water reactors — are about 33 percent efficient regarding heat. That is, one third of the heat they generate is used to make electricity, while two-thirds is dumped into the increasingly warm global environment.

The New York State Department of Environmental Conservation ruled in April that Indian Point's reactors violate the federal Clean Water Act by thermally polluting the Hudson River — with heated water that kills vast numbers of fish. The department refused to issue Entergy, the owners, a water quality permit which is required in order for the company to renew federal licenses and operate into the 2030s. The environmental action raises the possibility that the two reactors would be shut down sooner rather than later.

The group Public Citizen reported two years ago that the reactor at Clinton Lake, Illinois run by Exelon, discharged water that at times was 25°F hotter than when taken out, raising average temperatures of the lake by 14°F.

In France, Germany and Spain, reactor operators have been forced to lower power outputs and even shutdown dozens of reactors during summer months ever since 2003 — the hottest on record in Europe.

In April, the UN's Intergovernmental Panel on Climate Change warned Europeans to expect severe water shortages for decades to come because glaciers will continue to shrink, annual snowfalls decrease and average temperatures rise.

Alternatives are clear. According to researchers Sue Wareham and Jim Green, water consumption by renewable energy "is negligible" compared to nuclear. "Operating a 2,400-watt fan heater for one hour," they found, "consumes 0.01 liters of water if wind is the energy source, 0.26 liters if solar is the energy source ... or 5.5 liters if nuclear power is the energy source."+ — *JL*

* "Got Water?" by David Lochbaum, Union of Concerned Scientists (2007)

+ "Nuclear power and water scarcity," by Sue Wareham and Jim Green, *ScienceAlert* (2007)

NUKEWATCH QUARTERLY



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Through the Prism of Nonviolence

Arizona Police State: Death Rattle or Birth Pang

By John Heid

On April 23, Arizona Governor Jan Brewer enacted SB 1070, which makes failure to carry immigration documents a crime and gives police broad power to detain anyone suspected of being in the U.S. illegally.

In April, the Pima County (Tucson) Forensics Science Center recorded the recovery of 14 bodies in the area of the Tucson Sector patrolled by the human rights organizations No More Deaths and Samaritans. This is a 30 percent increase over last year. *Presente!*

The Sonoran desert has been turned into a killing zone and the country is — in the judgment of many observers — more bitterly polarized than at any time since the Civil War. — David Ray, from Preface, *Sanctuary for All Life*

We were just sitting there, eating breakfast on the front porch, savoring one of the last cool days of spring. The telephone rang and our housemate, Cruz, was on the line. "ICE, DEA [Immigration & Customs Enforcement & Drug Enforcement Agency] agents and Tucson police are all over South Tucson, blocking streets, going door-to-door, taking Latino and Latina children from bus stops. Come now! Bring cameras. We need you!"

Continued from Cover

FDA to Introduce Oversight of Hazardous Medical Radiation

"These types of imaging exams expose patients to ionizing radiation, a type of radiation that can increase a person's lifetime cancer risk," the FDA now warns. A 2007 study published in the *New England Journal of Medicine* reported that as many as two percent of all future cancers in the U.S. may be due to radiation from CT scans being given now. (6)

The group Public Citizen and others have repeatedly charged that the FDA allows manufacturers to sell the imaging machines "without first having to prove their safety." Now, the FDA says it might require manufacturers of scanners and fluoroscopic machines to build in new safeguards and provide better training to operators. Some FDA recommendations raised eyebrows among patients and public health practitioners who presumed the radiation systems were already being well regulated and monitored.

FDA-proposed improvements include: that the equipment display, record and report calibration settings and radiation dose; that an alert be issued when the radiation exposures exceed the optimal dose for most patients; and that machines be required to capture and transmit radiation dose information to a patient's electronic medical record and to national dose registries.

Dr. James Thrall, professor of radiology at Harvard Medical School and chairman of the American College of Radiology told the *Times* that a major hazard with most scanners is that "there is nothing on the machine that tells the technologist that they've dialed in a badly incorrect radiation exposure."

Notes:

1. "F.D.A. to Increase Medical Radiation Oversight," by Walt Bogdanich & Rebecca Ruiz, *New York Times*, Feb. 10, 2010
2. "Seeking to Cut Radiation Errors, F.D.A. Toughens Process for Approving Equipment," by Walt Bogdanich, *New York Times*, April 9, 2010
3. "While Technology Surges, Radiation Safeguards Lag," by Walt Bogdanich, *New York Times*, Jan. 27, 2010
4. "Scientist says FDA retaliated over his opinion on radiation," by Matthew Perrone, AP, *Minneapolis Star Tribune*, March 31, 2010
5. "Exposure to Low-Dose Ionizing Radiation from Medical Imaging Procedures," *New England Journal of Medicine*, Vol. 361; and "Study Finds Radiation Risk for Patients," by Alex Berenson, *New York Times*, Aug. 27, 2009
6. "Study: CT Scans Raise Cancer Risk," by Marilyn Marchione, AP; and "Report Links Increased Cancer Risk to CT Scans," *New York Times*, Nov. 29, 2007

The ink was barely dry on SB 1070 the morning we left our cereal bowls half full and ran to witness the latest saga in the border wars. The new law has rubbed raw the 2,000 mile scar that is the U.S.-Mexico border. This fresh wound exposes a pathology just beneath the socio-political skin, which is as lethal as cancer.

It is as difficult to imagine a humanity in which no one is an alien as it once was to imagine a civilization in which no one is a slave. — Jim Corbett, *Sanctuary for All Life*

Before there were walls there were ideas. Desmond Tutu notes that abominations start small, not with an entire population. Little by little, boundaries that protect a foundational abomination — and laws to protect the boundaries — grow. Unchallenged, they metastasize.

I was in Chicago the afternoon Governor Brewer signed SB 1070 into law. A leaden stillness came over the Pakistani restaurant where I was eating. Many of the customers appeared to be of Middle Eastern ancestry. They could read the writing on the wall. In my mind's ear I could make out a faint death rattle. A nation-state which is capable only of constructing discriminatory laws and walls (one current proposal would see a triple barrier along segments of the border) is not far from moral rigor mortis. But wait ... there was a second sound, faint at first, then rising. It came a couple of mornings later. Birth pangs and cries. I opened the *Chicago Tribune* to see in black and white, women and men, multi-colored, clerics and laity, documented and not, blocking an immigration bus. A movement long in gestation is breathing fresh air.

As civil association under the rule of law, nonviolence is more than practicable; it is essential to a truly human life, and we will be able to live a fully human life only when no one — including every nonhuman being — is excluded as alien. — Jim Corbett

The border is everywhere now. So, we can roll up our sleeves, sit down, stand up, march, build community right where we are at this moment in time. Not on behalf of others, not even in support of others so much as side-by-side with one another. In solidarity. "The chain of hand in hand."

Borderlands have no clear-cut boundaries save those carved out by empire. That is why no wall or law can ever effectively divide us. Creation occurs within this fragile, fecund, ever-in-transition terrain between individuals, cultures and races. This dynamic cannot be legislated or reformed, only transformed.

No superstate can do what basic societies of friends can do to mend a humanity that is broken into segregated aliens. — Jim Corbett

Passion and compassion are the twin locomotives on the peoples' train to justice. Law and legislatures have always been the caboose on this train... if they were on the tracks at all.

— John Heid is a member of the Restoration Project at Casa Mariposa in Tucson, Arizona.

Arizona's SB 1070

As enacted into law, SB 1070 makes it a crime for an undocumented person to be present in the state of Arizona; requires permanent residents to always have their immigration papers on them; requires law enforcement officers who have a "reasonable suspicion" that someone is an undocumented immigrant to determine that person's immigration status "when practicable; permits persons to be detained on suspicion that they are in the country illegally; makes it illegal to solicit work as a day laborer or to hire day laborers; makes it illegal to transport a person who is in the country illegally; prevents any government agency from formulating policies to prevent enforcement of immigration laws; and permits citizens to sue if they believe a law enforcement agency is failing to enforce the immigration law."

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