### **Environmental Defense Institute**

#### **News on Environmental Health and Safety Issues**

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### **Nuclear Reactor Unsafe; Documents Show**

**B**ased on Department of Energy Idaho National Laboratory (DOE/INL) reports, gained by EDI and KYNF through Freedom of Information requests, there is a shocking increase in unscheduled shutdowns, scrams, and reactor power level restrictions at the Advanced Test Reactor (ATR) due to safety system failures. <sup>1</sup>

Scrams are emergency reactor shutdowns; manual shutdowns are more controlled shutdowns; reactor power level restrictions are implemented when safety system problems indicate that the reactor integrity would be compromised at that power level.

Year	Shutdown/	Power	Total
	Scrams	Restricted	
2007	2	-?-	2
2008	6	1	7
2009	7	1	8
2010	3	4	7
Totals	18	6	24

The total for this four year period is 24; with an average of 6/yr. <sup>2</sup> EDI's review of DOE's ATR Occurrence Reports released by DOE to EDI under a Freedom of Information request related to ATR shutdowns/scrams between 1991 and 1999 shows the following: ten during this nine year period, with an average of 1.25/yr.

The 2007 to 2010 period (6/yr.) represents a radical increase (480%) in shutdowns per year that is legitimately attributable to ATR's 47 year aging problem – built in the 1960s for a 20 year design life.

Experts can debate the relative importance of safety system failures but there can be NO debate when ATR operators initiate scrams/shutdowns as to the major safety issues that pose immediate and significant public safety hazards that continued ATR operations pose. No commercial nuclear power reactor in the world would

<sup>1</sup> Environmental Defense Institute and Keep Yellowstone Nuclear Free filed a Freedom of Information Act request with the Department of Energy in June 2010. It took until February 2011 for DOE to produce the requested documents that were however severely censored/redacted. DOE claims national security as justification for the redactions. The real national security issue is the public health/safety hazard that the ATR represents.

<sup>2</sup> "Advanced Test Reactor Unplanned Shutdowns, Slow Setbacks, Power Reductions for FY-2009 and FY-2010," Department of Energy, Idaho Operations, Freedom of Information Document # 18.

be allowed to operate with ATR's safety system failures.

DOE's own ATR Programs Nuclear Safety Oversight Committee (NSOC) report 5/17/10 that states: "There continue to be important operational events experienced at the ATR Complex due to issues with conduct of operations, maintenance and work planning. These issues are exacerbated and made more complex by latent plant conditions including material condition deficiencies and equipment functional failures that were subject of our 1/18/10 letter to you [DOE]." <sup>3</sup>

In an 11/11/10 NSOC report, the oversight committee states that DOE's ATR Aggregate Burden Issues document; "includes no overall assessment of the aggregate effect of these issues on the current safety risk for ATR."

"ATR has a high rate of equipment failure. Equipment failure can cause challenges to the plant and operations." "Much of the equipment at the ATR is obsolete. Obsolete equipment is a challenge for work planning and obtaining parts that can lead to extended equipment outages." "Failure to identify the real cause of issues/events can cause ineffective corrective actions that may lead to repeat events."

"Over the past year, ATR Programs has experienced a series of events that, while unrelated, are similar enough in nature to warrant management concern of potential latent organizational weaknesses preventing effective implementation of conduct of operations, work control, and use of human performance improvement tools." <sup>4</sup>

Why would the federal government put the residents of south-eastern Idaho, eastern Wyoming and northern Utah at risk? Because for over 60 years they have kept nuclear programs secret – keeping Americans largely uninformed about the effects on our health and safety. Over 1,000 nuclear bombs detonated at the Nevada Test Site, INL, Hanford, Sandia, Los Alamos, Oak Ridge, Savannah River, Rocky Flats radioactive emissions and waste dumping are national secrets yet to be penetrated even with the Freedom of Information requests by public advocacy groups or litigation.

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<sup>&</sup>lt;sup>3</sup> Letter to J.J. Grossenbacher, INL Laboratory Director, Battelle Energy Alliance, LLC; from P.C. Hildebrandt, Chairman, Advanced Test Reactor Programs Nuclear Safety Oversight Committee, May 17, 2010.

<sup>&</sup>lt;sup>4</sup> Ibid, footnote 3, November 11, 2010, pgs. 8 & 9.

# Pulled Omnibus Bill Included Plutonium Restart at INL

The beginning of plutonium-238 production at Idaho National Laboratory was included in the Omnibus Bill that was before the U.S. Senate last month. The plan is being advanced by the Obama administration. The bill was killed by Senate Majority Leader Harry Reid (D-NV) and not included in the House Funding Bill, but Keep Yellowstone Free is concerned that in the new-year the \$30 million plan will be back.

Plutonium-238 is radioactively hotter than its isotope plutonium-239, the type used to make nuclear weapons. Because of this property, plutonium-238 is used to make batteries, utilized in NASA space probes. The batteries harness the heat produced by the plutonium to produce electricity, which powers on-board electrical systems while missions are in space. The batteries are also to be used for "national security" purposes according to DOE.

In a June, 2010 Report to Congress, DOE cited the need to produce an average of 1.5 kilograms of plutonium-238 per year to compensate for a dwindling supply left by severed trade agreements with Russia to purchase the fuel. The report envisions the re-start of domestic plutonium-238 production utilizing existing facilities at the Advanced Test Reactor (ATR) at INL and the High Flux Isotope Reactor at Oak Ridge Laboratory. The ATR lies 90 miles west of Jackson and Yellowstone and Grand Teton National Parks.

Keep Yellowstone Nuclear Free (KYNF), a Jackson, WY based nuclear watchdog has been critical of the plutonium-238 production function for INL in the past. In 2005, when DOE had money appropriated for this same project, KYNF and others voiced concerns over safety issues associated with sending nuclear fuel into space as well as local concerns over the ATR's role in the production.

"There are enormous dangers in having this deadly radioactive poison overhead as well as having it fabricated at these national laboratories," said State University of New York Professor Karl Grossman, author of *The Wrong Stuff:* The Space Program's Nuclear Threat to our Planet.

James Powell, Executive Director of KYNF adds, "Producing the fuel for these batteries at the ATR is a great concern. The appalling safety conditions and obsolete equipment at the ATR are a case for the reactor's closure, not additional workload for NASA." Following the debate over the re-start, DOE ultimately abandoned the program.

Nevertheless, this plan made its way back into proposed legislation in 2010, and "unfortunately, the defeated Omnibus Bill is likely not the last that we will see of this project" stated Powell. "NASA and the DOE have made a

case to congress, and with Presidential support, this restart will likely be brought up in the incoming session of Congress."

Additional Resources: The DOE Report to Congress, titled "Start-up Plan for Plutonium-238 Production for Production for Radioisotope Power Systems," available at: <a href="http://dps.aas.org/public\_policy/docs/Pu238\_DOEplan.pdf">http://dps.aas.org/public\_policy/docs/Pu238\_DOEplan.pdf</a>

The report begins by declaring: "The Administration had requested the restart of plutonium-238 (Pu-238) production in fiscal year (FY) 2011. The following joint start-up plan, consistent with the President's request, has been developed collaboratively between the Department of Energy (DOE) and the National Aeronautics and Space Administration (NASA), and defines the roles and contributions of major users of Pu-238 in response to Congressional request."

# INL's Plutonium-fueled Mars Hoppers Headed for Space?

Keep Yellowstone Nuclear Free (KYNF) has been monitoring the legislative push for nuclear batteries in space for the last five years. Why? Because as efficient and innovative as these futuristic batteries seem, they are essentially putting nuclear material into our atmosphere. In addition, the plutonium fuel for the batteries is slated to come from the 47-year-old Advanced Test Reactor (ATR) in Idaho, "A reactor that KYNF has been desperately trying to have evaluated by safety boards for over a decade," says James Powell, Executive Director of KYNF.

Increasing the demand for these space batteries, Idaho National Laboratory has invented a new fleet of Mars Hoppers, which rely on the power source to hop from site to site on Mars. The lab claims that the new nuclear-powered Hoppers are faster and more efficient than their solar-powered predecessors.

The researchers indicate that several of these nuclear powered Hoppers could travel on single space missions to Mars and deploy after landing. Once on the surface, the Hoppers travel alone to different areas of the surface to measure things like temperature, air content and of course, they will search for water. "It all seems very novel and great, but the fact of the matter is that we are risking our safety by putting these shuttles filled with nuclear material into our earth's atmosphere during takeoff, and ultimately dumping nuclear material on Mars," cites Powell.

State University of New York Professor Karl Grossman, a long time critic of the Space Program's plutonium battery program, notes a clear "threat to those who reside near launch sites in the event of a launch pad accident vaporizing the plutonium and it being disseminated," adding that "if the rockets carrying these things fall back to earth and break apart and the plutonium is vaporized and spreads in that scenario, even larger numbers of people (and other

living things) [will be] impacted."

The project's researchers *do* mention that ultimately the Hoppers could be removed and brought back to earth via an earthbound launch from Mars; however, the technology to launch a space mission to Earth from Mars with these Hoppers does not exist yet. And can we imagine anyone wanting to test this non-existent technology with a 'hot' load of radioactive waste on board?

"This is an ill-conceived plan from the plutonium production for the batteries at ATR to the launch of this toxic fuel into space. The Plutonium-Restart is something we have fought against in the past and it is a funding debate that likely to be brought up again during this congressional session," remarked Powell. KYNF called attention to the Plutonium Restart Plan included in the 111<sup>th</sup> session of congress. The funding for the restart was ultimately pulled. Article available online at <a href="https://www.kynf.org">www.kynf.org</a>

### **Recklessness with Nuclear Waste**

by Robert Alvarez

## Hanford remains one of the most contaminated zones in the western Hemisphere.

President Obama met 12/16/10 with the leaders of indigenous people in the U.S. One important issue is the fact that tribal people, because of their subsistence lifestyle, are the most vulnerable group of humans to environmental contaminants.

In 2002, researchers with the Centers for Disease Control reported that tribal people eating fish from the stretch of the Columbia River flowing through the U.S. Department of Energy's Hanford nuclear weapon production site in eastern Washington had a 1 in 50 risk of dying from radiation-induced cancer between the 1940's and late 1960's – the highest of any group living near this nuclear bomb plant. Along the near-shore, nine nuclear reactors used the river to cool their radioactive cores in order to make plutonium for the U.S. nuclear arsenal. During the production period, this stretch of the Columbia, known as the Hanford Reach, was considered the most radioactive stream in the world. Radioactive contaminants were found to migrate to the mouth of the Columbia in Portland OR and as far as the Baja in Mexico. Since then, most of radioactivity has decayed away.

The same year that CDC released its report, the Environmental Protection Agency also came out with a study that found that indigenous people eating fish at the present time from the same stretch of the Columbia have a 1 in 50 risk of dying from cancer due to pesticides, polychlorinated biphenyl's (PCBs) and heavy metals. For several decades, the Columbia River has been a disposal medium for huge amounts of farming chemicals and toxic dumping by the

mining industry. It's extremely difficult to determine how much of these contaminants are coming from the Hanford site. Normally, the EPA is supposed to take action when a human health risk exceeds 1 in 10,000.

Production at Hanford ended twenty years ago, and left behind one of the most contaminated zones in the western Hemisphere. Some 400 billion gallons of liquid wastes were dumped into the soil-- enough to create a poisonous lake the size of Manhattan Island -- 80 feet deep. Enormous groundwater plumes containing radioactive and other hazardous wastes are migrating into the river. The most immediate threat is from hexavalent chromium, a potent carcinogen, made famous by the movie, Erin Brokovich. Large amounts were used in Hanford's reactors, and are now creeping into the Chinook salmon spawning beds. Tribal people are extremely dependent on the salmon for subsistence and their economic well being. The Chinook also make up a large portion of the total Pacific salmon harvest.

In 2000, a study by the U.S, Geological Survey found that juvenile salmon in the Hanford Reach are being seriously harmed by the chromium entering the river. It was heavily criticized by the DOE and effectively squelched. Further research was thwarted after a refrigerator that held samples of salmon tissue at DOE's Pacific National Laboratory was mysteriously unplugged.

The Yakama Tribe, whose land is occupied by the Hanford site, has repeatedly tried to get the U.S. government to acknowledge this problem. At a meeting in 2003, with EPA Region 10 officials, tribal members were told EPA had no money to reduce their risks and that they should be more concerned about pesticide residues on Mexican strawberries. In exchange for relinquishing their land, the Federal government has a legal trust responsibility to ensure that tribal treaty resources are protected and that the health of tribal people is not being harmed. Violation of this trust responsibility has a long, well-documented and tragic history. So far, no attempt by the U.S. government has been made to correct this injustice on the Hanford Reach.

Robert Alvarez is a Senior Scholar at Institute for Policy Studies, where he is currently focused on nuclear disarmament, environmental, and energy policies. Bob is also an Environmental Defense Institute board member. For more information and articles by Alvarez, go to www.ips-dc.org

# Radiation Study Set Up as Defense, Records Show

# It was supposed to be neutral probe into Hanford's effects on public

**K**aren Dorn Steele, staff writer for *Spokesman Review*, reports: "A \$27 million Hanford study that was the first to estimate radiation doses to the public from a U.S. weapons complex was touted as unbiased and scientifically neutral when it got under way in 1988.

But documents recently obtained for a federal trial show the Hanford Environmental Dose Reconstruction (HEDR) study was actually set up at least in part to defend the government against lawsuits by exposed people.

The records were obtained by lawyers for more than 2,000 people who sued Hanford contractors starting in 1990 over their exposure to radioactive iodine-131 releases during World War II and the Cold War. The first phase of their trial started in 2005 in Spokane.

The documents, part of the massive Hanford Nuclear Reservation downwinders' case file, show significant conflicts of interest in the taxpayer-funded dose reconstruction study. They show that:

- \* After the secret Hanford releases were finally made public in 1989, the U.S. Department of Justice opposed a dose study as useless "public relations" but changed its mind as soon as the first lawsuit for radiation damages was filed.
- \* The Energy Department and the Justice Department set up the study in 1988 to provide "litigation defense: to fight claims by exposed people, according to a highly placed government attorney.
- \* Some of the Battelle Pacific Northwest Laboratories staff in Richland who worked on the study also worked for the Justice Department and for Kirkland & Ellis, the Chicago law firm hired to defend Hanford contractors against radiation injury claims.
- \* Battelle changed its conflict-of-interest policy in 1992 to prohibit HEDR staff from also working for lawyers defending the government. But Battelle's chief records manager continued to work both for the study and for the government's litigation defense team.

The documents provide "startling evidence" that the study was shaped to "support the litigation positions that the government and Hanford defendants anticipated," including choosing radiation dose estimates the minimize the estimated radiation exposures, Seattle lawyer Tom Foulds said in a court motion.

Kevin Van Wart, of Kirkland and Ellis in Chicago, lead attorney for the Hanford contractors, denied that HEDR was set up to favor the defense. Plaintiffs' lawyers also wanted a dose reconstruction study in the 1980s as a guide

to future litigation, he said.

"It's absurd. This is all smoke. At trial, each side is going to present their own best estimates of the doses the plaintiffs received," Van Wart said.

#### Thyroid study criticized

The Hanford Environmental Dose Reconstruction (HEDR) radiation dose estimates, compiled in a complex computer program, were also used by a second group of scientists at the Fred Hutchinson Cancer Research Center in Seattle for the \$21 million Hanford Thyroid Disease Study, an epidemiological study that exposed the possibility of a link between Hanford releases and thyroid disease in 3,400 people exposed as children.

In 1999, that study concluded it could find no link between Hanford's radiation clouds and excess thyroid death and disease downwind.

But if the HEDR "source code" – radiation data fed into a computer program to determine estimated doses – were skewed or inaccurate, that would affect the outcome of the Hanford thyroid study, which stands as an anomaly among other studies in the Marshall Islands and Ukraine that show clear associations between iodine-131 exposures and an increase in thyroid cancers and disease at higher doses.

The National Academy of Sciences has criticized the thyroid study for its weak statistical power – its ability to detect a radiation effect. 'Die was cast in 1989.'

Lawyers for the downwinders will critique the two Hanford studies at the April trial, while the defense will present them as sound science.

The HEDR study has long been suspect, said Bob Alvarez, a prominent nuclear critic and former aide to Sen. John Glenn, D-Ohio. Alvarez served in the Clinton administration as deputy assistant secretary for planning and security at the Energy Department.

Washington and Oregon pressed for a dose study totally independent of the Energy Department after documents released in March 1986 showed massive clouds of radioactive iodine-131 escaped from Hanford in the 1940s and early '50s during the production of plutonium for nuclear bombs.

The states lost that battle because the Energy Department refused to pay for an independent study, Alvarez said. "The die was cast in 1986 when DOE bestowed on Battle the responsibility for dose reconstruction at Hanford. The primary motivation was to stave off liability associated with these large releases," Alvarez said.

Lawyers representing thousands of Hanford downwinders were barred by the case's previous judge, U.S. District Judge Alan McDonald, from pursuing any discovery about HEDR until the mid-1990s in a "hands off" order that allowed the scientists to finish their work without interruption. The study was finished in 1994.

Meanwhile, the Energy Department was portraying the study as independent and unbiased. The HEDR study "will

answer the questions of Northwest citizens regarding the facts of Hanford's past operations with hard, scientific evidence that has been fully and completely reviewed by independent, outside experts," DOE said in a Jan. 27, 1988, press release.

After the study was finished, plaintiffs' lawyers encountered resistance to their renewed records requests. The Energy Department claimed "privilege" over 16 of the documents requested, but eventually released 14 of them.

The lawyers also learned they'd been denied 18 boxes of other HEDR project records \that Battle had designated as "non-records." Many of the "non-records" were from the files of project manager Kilbert "Dil" Shipler and Shirley Gydensen, Battelle's information resources task leader. Those records show that litigation defense was central to the government's plans for the Hanford study.

In May 1986, when the Justice Department was first considering such a study, Avrum Fingeret, DOE's assistant general counsel in Washington, D.C, requested a meeting the Pacific Northwest.

John Till, a South Carolina scientist appointed to lead the project's Technical Steering Panel, also called about the controversy, the meeting notes show.

"Policy – no HEDR staff to work on litigation," the notes say. In a recent deposition for the downwinders' trial, Till said he wasn't aware that some Battelle staff had dual roles, and he defended the independence of his project steering panel. Till has been hired as an expert witness for the defense in the upcoming trial. "I'd prefer not to comment on this," Till said last week when contacted.

#### **New Guidelines created**

As a result of the controversy, HEDR's project management plan was revised in 1992. HEDR staff was directed to follow new guidelines about ongoing lawsuits to "preclude misunderstandings or conflicts of interest and maintain public confidence." The plan says. However, Gydesen continued to serve a duel role.

In 1993, according to her signed job description, Gydensen's goals were to provide documents to Till's panel and the public "to ensure public credibility." Her job: "Through a contract with Golder or through other approved methods, provide historical information essential to the U.S. Department of Justice and other litigation teams, in their preparation of defense to the numerous cases filed against the DOE, DuPont and General Electric Co. and other named Hanford contractors. Develop unique approaches to these legal information requirements through you in-depth knowledge of the materials."

No retired in the Tri-Cities, Gydensen said she left Battle in 1992 but continued to work part time on document retrieval. She said she provided documents to Kirkland & Ellis "if requested." But they go nothing from me but publically available documents," Gydensen said.

Hearer's resume mentions his work for HEDR, but not

his consultation for the Hanford's defense. But in a deposition taken by Seattle attorney Foulds on Jan. 28 in Spokane, Hearer admitted his dual role. Now semi-retired and living in Spokane, Haerer didn't return a reporter's phone calls.

Randy Squiers, of Seattle, a Hanford defense attorney who represented Haerer at the recent deposition, refused to let him answer questions about his meetings with the defense lawyers, saying the conversations are privileged.

Foulds asked Haerer whether Shipler, the HEDR manager he reported to at Battelle, knew he was working both for HEDR and for Kirkland & Ellis. Yes, Haerer said.

Shipler, reached Thursday on Kauai, said he didn't remember Haerer's dual role as a consultant. "I'm not aware of any conflict of interest," Shipler said.

While Battelle was working on the \$27 million HEDR project, the company was doing \$7 billion to \$8 billion in other business worldwide, said company spokesman Geoff Harvey. "For us to jeopardize our credibility by marginalizing the science, is just wouldn't happen," Harvey said.

The credibility of the Hanford study will be a central focus in the upcoming downwinders trial. During the trial of seven "bellwether" cases, the plaintiffs' lawyers will submit their own version of dose reconstruction. Some of their experts argue that the Hanford iodine-131 doses – especially I outlying areas like Spokane – could have been up to 12 times higher than the HEDR estimates.

U.S. District Court Judge William Fremming Nielsen, who took over the case in 2003, ruled last week that the plaintiffs can present their alternative dose reconstruction analysis. Lawyers for the contractors had argued the analysis should be rejected.

Hearings over which scientific experts will be allowed to present evidence to jury continue in Nielsen's courtroom in Spokane."

Éditors Note: Karen Dorn Steele is the most dedicated journalist covering the Hanford Downwinder issue. Though the above article was posted 2/13/05, the issues raised are current; moreover, they apply to government health studies at other DOE sites – specifically - Idaho National Laboratory. Steele is currently writing a book that will lay out the history of this national tragedy. For more information see; www.spokesman.com/downwinder

# Time for Nuclear Savings Bonds? by Robert Alvarez

The National Nuclear Security Agency within the Energy Department estimates it will need about \$168 billion over 20 years to maintain the nuclear arsenal and refurbish the U.S. weapons complex.

Thanks to Hans Kristensen at the <u>Federation of American Scientists</u>, I've learned that about 2,500 nuclear war-

heads are currently deployed, with 2,500 held in the "war reserve" and 3,500 discarded by the military awaiting dismantlement. This means that 70 percent of the America's warheads *are not* being deployed — more than 40 percent of which the military doesn't need. These weapons have a destructive power that's about 400 times greater than the explosives, projectiles, and bombs used by all combatants during World War II.

Meanwhile according to the Energy department, nuclear warhead dismantlement spending will be curbed by 50 percent, and the current backlog of retired nuclear warheads will take 15 years to eliminate. If Congress approves the nuclear weapons treaty known as New START, nearly 80 percent of U.S. nuclear warheads won't be deployed, with some 5,000 warheads waiting to be eliminated.

According to Kristensen and his colleague Robert S. Norris at the Natural Resources Defense Council, the current rate of weapons dismantlement is what it was in the 1950s during the height of the Cold War. My children might live long enough to see the existing stockpile of discarded weapons disappear. But, if proponents increased nuclear weapons spending, led by Sen. John Kyl (R-AZ) have their way, our grandchildren will find America still bristling with nuclear arms.

The spending logic of these numbers seems simple. The more nuclear warheads we have sitting around, the more money can be spent on delivery systems, babysitting bombs, while trying to make more. According to Steve Schwartz of the James Martin Center on Non-Proliferation, the United States spent about \$54 billion in 2009 on nuclear weapons and their delivery systems (including bombers and ground and submarine missile launchers). If you include these expenses, each nuclear warhead costs about \$6.3 million per year to keep around.

Furthermore, the National Nuclear Security Agency within the Energy Department estimates it will need about \$85 billion over the next 10 years, and about \$168 billion over 20 years to maintain the nuclear arsenal and refurbish the U.S. weapons complex. This doesn't include the additional \$100 billion estimated for the weapons delivery systems in the Defense Department.

Given that the Obama administration sees no need to tax the wealthy and that we'll have to borrow billions of dollars from China for nuclear weapons, we might need to issue new "Nuclear Savings Bonds" to help pay for all of this."

## **Obama and Our Disney Nukes**

by Harvey Wasserman

Barack Obama is about to address a nation whose greatest potential liability is its Disneyesque illusion of atomic power. Despite the nation's huge debts and fears of

foreign terror, America's 104 licensed reactors are the most dangerous threat to our future. After a half-century of operations, the industry still cannot get more than \$11 billion in private insurance against possible accidents whose human and property damage could easily run from mere trillions to the simply incalculable.

In the face of terror or error, earthquake or tidal wave and more, every tick of the atomic clock marks a moment in which a single glitch at a single reactor could forever bankrupt the nation. Escalating decay at clunkers like Vermont Yankee, New York's Indian Point and so many others define our worst untold crisis. Yet Obama may ask Congress to bilk taxpayers to build still more.

In the 1950s a cartoon called "Our Friend the Atom" portrayed atomic energy as a "too cheap to meter" savior with no apparent problems. Our very houses would be built with uranium whose glow would provide heat and light on the spot. Atomic airplanes would soar through the sky. Hiroshima-sized "devices" would dig our canals and divert our rivers.

Radioactive waste, lethal emissions, ecological dysfunction, soaring costs, human error, the threat of terror-none had a role in the carefully sanitized Hollywood myth of nukespeak non-realities.

Today the fantasy has been deepened. Nuke waste is "stored energy." Three Mile Island was a "success story" where "nobody died." Chernobyl "killed 31 people." Reactors are an economic disaster because of "over-regulation."

The industry's apparently endless cash still pays for such happy-faced illusions of a technology that has spawned some 450 potential Chernobyl's worldwide. Hyped to the hilt, showcase projects in Finland, France and elsewhere are melting amidst interminable delays and astronomical cost overruns. Proposed new US reactors have doubled and tripled in projected price well before the first shovel is turned.

Meanwhile, an energy industry that has disputed climate science for decades now sells its atomic product as the "ultimate cure." Its backers have demanded---and got--exemption from liability for the full destruction that could be done by future melt-downs or explosions.

And they now want untold billions in loan guarantees. Since 2007 a highly effective grassroots movement has kept the fund at \$18.5 billion. With estimates for a single reactor now soaring to \$10 billion and more, the industry demands \$50 billion, \$100 billion, whatever.

Rub the genie's bottle and you might get a firm number. Wish upon a star and you might hear what just one melt-down could actually cost. In 2010 Obama granted the first \$8.33 billion in loan guarantees for a two-reactor project in Georgia. Its price is already soaring. Electric rates there and in any other state that goes nuclear are destined for the twilight zone.

Obama needs to tell it straight---only a total com-

mitment to renewable and efficiency will get this country back on track. The Disneyesque illusion of a "safe, clean, cheap" nuclear industry is a veritable herd of oxymorons.

A powerful, effective national grassroots movement has kept more billions from being dumped into this bottomless pit of bound-to-lose guarantees. We can write Obama asking him to keep the <u>atomic error out of Tuesday's speech</u>. But whatever Obama says, we must win again in 2011. Disneyesque illusions aside, atomic power is about to be transcended by green technologies that are cleaner, cheaper, safer and essential to our real survival.

Harvey Wasserman's SOLARTOPIA! OUR GREEN-POWERED EARTH, A.D. 2030, is at <u>www.solartopia.org</u>. He is senior advisor to Greenpeace USA and the Nuclear Information & Resource Service, and writes regularly for <u>www.freepress.org</u>.

## **Nuclear Commission Hid** the Facts

**D**avid B. Mccoy reports 2/11/11 in the *Albuquerque Journal* that: "President Obama's Blue Ribbon Commission on "America's Nuclear Future" was held in Albuquerque on Jan. 28. The obvious bias of the commission members for promotion of nuclear power rather than a future for alternative energy is disappointing.

Bringing high radioactive level waste or spent fuel to New Mexico, which is the eighth poorest state in the United States with a large low-income, minority population probably will be attempted despite decades of widespread public opposition, environmental justice concerns and widespread radioactive contamination.

The commission allotted a two-minute time period for public comment. That provided a pretense of public involvement to allow predetermined decisions made by powerful corporate and political interests that favor nuclear power development to go forward. The early start and early termination of the public comment period in Albuquerque was unnecessary and indicated poor judgment by the Department of Energy moderator.

The DOE and nuclear industry boosters are grossly out of touch with the public desire, both in the United States and internationally, for alternative and sustainable safe and sane energy policies that can provide greater peace and prosperity in the world.

Because of the perceived success of the Carlsbad Waste Isolation Pilot Plant, WIPP is currently under consideration for high-level waste disposal despite the conflicting use of the area for extensive petroleum and mining interests. New Mexicans were told if we took the non-high level radioactive waste from the military, then high-level reactor waste

would not be brought to New Mexico.

Nuclear power and the problems associated with the high-level reactor waste disposal do not meet the need for safe energy policies. Instead, DOE and the nuclear industry offer programs that fail to consider the significant environmental, political and economic obstacles. Nuclear energy production creates unsolved problems like transportation of waste and potential accidents that can kill or injure thousands and contaminate large areas.

The DOE is an abysmal failure at locating a disposal site, managing spent fuel and the recycling (reprocessing) option of wastes. The Yucca Mountain site proved to be both a technological failure for choice of location and a political failure that cost the taxpayer \$15 billion.

There is no technology that DOE possesses to prevent massive environmental contamination from reprocessing the spent fuel to recover the uranium and plutonium.

The historical record for past and current reprocessing of reactor waste shows the United States, Europe, Russia and Japan have released huge quantities of radionuclides to the environment. Sellafield (UK) and La Hague (France) have released 32 times more radiation than the quantities released from all atmospheric testing of nuclear weapons.

La Hague and Sellafield's radioactive contamination of the ocean reaches all the way to the Arctic seas contaminating fish and shellfish. Seaweed used for fertilizer is putting radionuclides into the food chain. An accidental release from the liquid waste inventory at Sellafield could dwarf the Chernobyl accident by 50 times just for Cesium alone.

Tens of thousands of trips will be necessary to transport nuclear waste from utility reactors to a central repository. Containers used to transport high-level nuclear waste are subject to a massive car bomb or a hand-held missile attack. A terrorist attack on such containers in the midst of a major urban area would cause death, injury, illness, wreak economic havoc, generate enormous cleanup costs and contaminate a large area for future livability.

The decision, to allow interim storage at reactor sites or high-level waste deposition in Carlsbad or elsewhere in the nation, demands widespread awareness of the issues involved. The issues go beyond a two-minute comment in a meeting that had the goal of hiding facts from the public.

David B. Mccoy is the Executive Director of Citizen Action New Mexico and is a Board Member of the Environmental Defense Institute.