

DOE Continues to Censor Freedom of Information Documents on Advanced Test Reactor

In April 2008, the Environmental Defense Institute (EDI) and Keep Yellowstone Nuclear Free (KYNF) filed a Freedom of Information Act (FOIA) request with the Department of Energy (DOE) for documents related to the Advanced Test Reactor (ATR) located at the Idaho National Laboratory (INL).

Since April 2008, DOE Idaho Operations Office (DOE/ID) has dribbled out documents requested under FOIA. DOE recently released **some more** of the requested ATR safety reports needed by the public to document ATR's extended operation hazard to the residents living in the shadow of the ATR. Many of these documents have been censored (redacted). DOE claims that release of these documents will compromise "national security."

DOE states; "Specifically, some of the documents requested are internal, and their disclosure would significantly risk installations and projects that safeguard nuclear materials and facilities, and thus are not releasable under [FOIA] Exemption 2. Exemption 2's anti-circumvention protection is applicable in this case because some of the requested documents identify vulnerabilities to sabotage events, system configurations/capabilities that may be exploited and internal procedures for operating the reactor that are inherently internal."

The "anti-circumvention" exemption claimed by DOE only protects documents such as agency law enforcement manuals and procedures from public disclosure so that individuals may not use them to circumvent the law or law enforcement measures. The only security threat in jeopardy here is DOE's credibility to safely operate the antiquated Advanced Test Reactor.

DOE/ID additionally states in its FOIA "exemption" claim; "Those documents in which material is so inextricably intertwined as to make redaction impossible or reduce the document to worthlessness have also been withheld."ⁱ It is impossible to assess the veracity of this claim when DOE/ID refuses to specifically identify which documents have been completely withheld and under what grounds they are withheld.

The Environmental Defense Institute (EDI) and Keep Yellowstone Nuclear Free (KYNF) filed an Appeal (2/12/09) to DOE's Office of Hearings and Appeals challenging DOE/ID's censorship of requested FOIA documents.ⁱⁱ As the Statute shows, FOIA provides the public a right, enforceable in federal court to access

government documents and information. FOIA is to be broadly construed in favor of disclosure, and its exceptions narrowly construed. Furthermore, the federal agency that is resisting disclosure bears the burden of proving that the withholding is authorized by the statute. It's tragically ironic that national security is indeed at risk because DOE refuses to acknowledge that the 40-year old Advanced Test Reactor's continued operation poses a significant hazard to the residents of Idaho and Wyoming.

In August 2006, Keep Yellowstone Nuclear Free, Environmental Defense Institute and David McCoy filed a lawsuit in Wyoming Federal District Court. "This is an action under FOIA seeking to enjoin DOE from improperly withholding or redacting documents requested by the Plaintiffs. The documents in question relate to the engineering and seismic safety of the Advanced Test Reactor (ATR) a nearly 40-year old nuclear reactor operated by the DOE at the Idaho National Laboratory."ⁱⁱⁱ As of this writing nearly three years later, there has not been a final ruling on this lawsuit.

In January 2007, Keep Yellowstone Nuclear Free, Environmental Defense Institute, Mary Woollen, John Peavey and Debra Stansell ("Plaintiffs") filed a lawsuit against the DOE for violations of the National Environmental Policy Act (NEPA) for failure to conduct an Environmental Impact Statement (EIS) for the continued operation of the Idaho National Laboratory's Advanced Test Reactor (ATR).^{iv} Idaho Federal District Court Judge Winmill subsequently ruled against the Plaintiffs noting that since the ATR "Life Extension Plan" is an ongoing program, NEPA did not apply. Had DOE released the FOIA documents in both the Wyoming suit and the Idaho FOIA requests in a timely manner as required by law, a more comprehensive legal challenge could have convinced Idaho Judge Winmill that an ATR EIS must be conducted because of the public's need to know the imamate hazards posed by the ATR.

Moreover, as the information released by DOE below document, the NEPA lawsuit was prescient for identifying the ATR as a major public hazard deserving a full EIS so the general public could comment on its continued operation. Currently, the public only gets DOE's public relations statements touting the ATR as the "world's premier test reactor."^v

"**Why is this problem?**" DOE document states; "The Advanced Test Reactor (ATR) was designed and

constructed in the 1950s and 1960s according to the design and safety standards in place at the time.”^{vi} This reactor is suffering chronic “aging” of its primary operating systems. “The ATR Primary Coolant System (PCS) and the original six loops at the ATR were designed and constructed in the early 1960’s using the criteria of [American National Standards Institute] ANSI 1955 standards.”^{vii} [emphasis added]

The ATR is already close to 40 years old and well beyond its design life expectancy. Nonetheless, DOE intends to extend its operation to 2040 and beyond. Due to neglect, antiquated equipment, poor design, and many years of what DOE has termed “budget austerity,” the ATR poses a threat to public health and safety.^{viii}

DOE’s internal documents acknowledge the hazards to the public. “The ATR is a Category A [the highest] reactor with an operating power level of up to 250 MW, **with potential for significant offsite radiological consequences.** The ATR is classified as a Hazard Category 1 [the highest] nuclear facility in accordance with Department of Energy standards for hazard classifications of nuclear facilities.” [emphasis added] ^{ix}

DOE is extending the operating life of the ATR for decades into the future that poses a major threat to public safety. The ATR has no adequate containment structure (sealed concrete dome required by the Nuclear Regulatory Commission for commercial nuclear power reactors) that would protect the public and the environment in the event of a severe accident. ATR is housed in a thin sheet metal-walled industrial building.

DOE documents state; “Building Confinement; Review of the recent annual building leak-rate data indicate that the leakage was above the 125% acceptance line. In addition all of the primary dampers that are required to close during the leak-rate showed signs of seal leakage. BDM-1-5A continues to fail to open in cold weather.” ^x

According to DOE, a severe ATR loss of coolant accident would release a “source term” of 175,000,000 curies of radiation. ^{xi} Such an accident, according to the DOE, would result in a lethal dose of radiation for anyone within 19.4 kilometers of the facility and would require the evacuation of areas within 105 kilometers of the facility. This is an evacuation radius that would include all of Idaho Falls, Rexburg, and Pocatello as well, an area with a population well in excess of 100,000. This potential accident at the ATR would be second only to Chernobyl in severity.

Even a one percent ATR meltdown accident would have significant radioactive emissions. Internal DOE reports state: “Consequences of [ATR] Fission Product Release to Primary Coolant System; [A] release to the primary coolant system (PCS) of one percent of the core fission products has been considered and indicate that a release of 1% of the inventory would be approximately 2.4×10^6

curies of solids (Cs, Rb, Ba, Te), 1.0×10^6 curies of halogens (I, Br), and 1.0×10^6 curies of noble gases (Xe, Kr) [total 440,000 curies]. **Release of 1% of the [reactor] core fission products into the PCS could result in significant releases from the ATR stack.** Efforts would be made, upon experiencing a fission break, to control the immediate stack release rate to less than 400 Ci/day.” ^{xii} [emphasis added] This ATR accident scenario would be significantly worse than the Three Mile Island commercial power reactor meltdown in Pennsylvania.

Deterioration of the ATR beryllium reactor core reflector is a problem DOE has been aware of for decades. “Cracks in the reflector could lead to pieces of beryllium being washed out of the reflector and into the primary coolant system (PCS). The possibility of damage to reactor or PCS components by these free pieces of beryllium has been assessed. **Components for which the assessment was made include the heat exchangers, primary coolant pumps, primary coolant pump check valves, safety rods, neck shim rods, outer shim control cylinders, and fuel elements.**” [emphasis added] [Ibid. pg. 43] Failure of anyone or all of these primary ATR systems in a cascading (one failure causing others) could be disastrous especially if the Safety Control Rods were unable to shutdown the reactor.

Major problems with the Safety/Regulating Control Rods essential for reactor shutdown have a long history at the ATR. “Regulating Rod (Reg Rod); During removal of the reg rods one of the followers detached and fell into the tank...due to heavy corrosion. The new reg rod followers, however, are chrome plated and can be expected to experience the same failure mechanism. The metallurgical evaluation suggests that within two to three years the reg rod followers should be replaced with a different metal such as zircaloy.” ^{xiii}

“Spare Safety Rod Drive; There is currently no spare safety rod drive. In addition there are two other new safety rod drives that have deficiencies that prevent them from being used. Regulator Rod; The reg rod drives were not included in this upgrade.” [Ibid. pg.11]

DOE Safety Rod Failure report states: “This attempt to manually withdraw and insert the [Safety Rod] SR proved that the problem was in-tank. The problem was likely debris of some kind caught in between the safety rod and the inner or outer snubber tube and/or possibly debris on the safety rod rack tube. Problems of this nature have been experienced in the past with the safety rods.” ^{xiv}

Reactor safety rods also called control rods are crucial to safe shutdown of ATR reactor in an accident (scram) and therefore pose an ongoing safety issue. There is no indication that this problem has been adequately corrected. Also, this is a systematic problem with ATR’s “serpentine” fuel/control/safety rod configuration unlike conventional commercial reactors that use straight configuration of

fuel/control rods.

“The ATR PCS/SCS heat exchangers are operating beyond 200% of their 20-year design life. To date, the only failure has been a single case of pitting corrosion in the heat exchange shell of 670-M-85.”^{xv}

“Core Internals Chang-out [CIC] VI; The C/2 N-16 tube has historically failed two to four years following the CIC. The apparent design flaw with the C/2 N-16 tube **has not been investigated & corrected so it can be expected to fail two to four years from now.**” [Emphasis added][Ibid. pg. 3]

“Electrical Distribution; Although the electrical utility upgrade project updated a significant amount of the switchgear there is a fair amount of switchgear that is well beyond its design life. This includes the 50 year-old switch gear in building 609 and the 40 year old E-3 switch gear in the ATR.” [Ibid. pg.6]

DOE’s own previous Environmental Impact Statements (EIS) state the ATR released 1,802 curies in 2000 and 1,180 curies in 2003 to the atmosphere. ^{xvi} On average that is about 1,491 curies/year; so over a seven year period 2000 through 2007 about 10,437 curies are released to the air. These high emissions from ATR suggest liquid waste is first sent to the ATR cooling towers w/o treatment and the precipitates are then pumped to INTEC evaporators or the percolation ponds. This represents a significant hazard to INL workers and the downwind public.

The Original ATR Design Specifications Indicate a 20-year Design Life For Key Reactor Components

Design specifications for four critical components of the ATR are part of the Administrative Record. Those specifications were prepared prior to construction of the ATR in the early 1960s for Ebasco Services Corporation, the company that designed and built the ATR for the DOE’s predecessor, the Atomic Energy Commission. They are: (1) ATR Specification for Primary Heat Exchangers; (2) ATR Specification for Reactor Vessel; (3) ATR Specification for Outlet Flow Pipe Assemblies; and (4) ATR Specification for Safety Rod Drive Mechanisms (the “Ebasco Design Specifications”). Three of the four Ebasco Design Specifications state that the component has a 20 year “design life.” The fourth gives a 10 year design life.

After DOE refused to release another FOIA request related to the ATR Life Extension Program operations, KYNF and EDI filed a separate lawsuit in Wyoming Federal District Court in 2006. DOE claimed release of the documents would compromise national security. Judge Downes agreed in December 2007 to review the documents “in camera” and determine if DOE’s claims of national security secrecy are justified. ^{xvii}

The purpose of this review is to give Judge Downes a concrete basis on how to rule on DOE’s claim that these documents must be exempt (for national security

reasons) from release under our FOIA.

The bottom line is we the public are again blocked from knowing the full risk the ATR poses. EDI cannot claim that all the relevant ATR documents are being released by DOE, however, those that have been released under FOIA, document critical ATR safety problems that could have enormous impact on residents in Idaho and Wyoming in the event of a nuclear accident.

President Obama’s recent actions are encouraging where he states: “For a long time now there’s been too much secrecy in this city. The old rules said that if there was a defensible argument for not disclosing something to the American people, then it should not be disclosed. That era is now over. Starting today, every agency and department should know that this administration stands on the side not of those who seek to withhold information but those who need to make it known.” ^{xviii}

President Obama’s directive must now be implemented by DOE/ID and DOE’s Office of Hearings and Appeals and appropriate action taken to release the requested FOIA documents.

For a more thorough analysis of the documents released by DOE see EDI’s website; <http://environmental-defense-institute.org/publications>

A New Energy Future Means a New Energy Department

By Robert Alvarez

As a Nobel laureate in physics and a respected advocate for reducing greenhouse gas emissions, Steven Chu, President-elect Barack Obama’s choice for energy secretary, appears to be well suited to carrying out Obama’s pledge to generate new green energy jobs and reduce U.S. dependence on foreign oil.

But among Chu’s most daunting challenges will be reforming the Energy Department itself. Created in 1977 in response to oil disruptions, Energy has done little since to stem the country’s burgeoning energy problems. With about 5.5 percent of the world’s population, the United States consumes more oil than any other nation, three-fourths of which comes from foreign sources. And as U.S. energy dependence has worsened, its greenhouse gas emissions have grown worse as well--increasing by 17 percent since 1990--accelerating potentially disastrous climate change.

The main reason for Energy’s ineffectiveness is that it’s not structured to usher in the country’s energy future. Why? Because its mandate to maintain the country’s large, antiquated nuclear infrastructure effectively places budgetary handcuffs on the energy secretary--whoever it is.

For example, last year, Energy’s biggest spending priority was to maintain some 10,000 nuclear warheads. More largely, for most of its existence, two-thirds of

Energy's annual spending has gone to maintaining the U.S. nuclear weapons complex. With a land mass greater than Rhode Island and Delaware combined and about 100,000 employees, Energy's nuclear complex would rank high among the country's largest corporations. Yet, if it were a private business, it would be well into bankruptcy. Facing hundreds of billions in liabilities that rivals the Wall Street bailout, the country's nuclear arms production legacy has stuck Energy with thousands of contaminated structures, an enormous amount of high-level radioactive waste, and some of the most severely polluted sites in the Western hemisphere.

Taking the perennial backseat is Energy's loose confederation of energy programs such as technology research and development, energy regulatory programs, the Strategic Petroleum Reserve, management of public power supplies in 19 states, and providing in-depth energy information. Last year, these programs comprised only 17 percent of Energy's \$23.8 billion budget. In terms of technology research and development, nuclear energy, which primarily benefits Energy sites, received the most at \$1 billion. Fossil fuels came in second, snagging \$904 million, and energy conservation took a distant third with \$468 million.

While Chu may have an aversion to coal and want to support alternative energy sources, his options are limited because of the heavy legacy of the weapons program, site cleanup, and the traditional priorities given to nuclear and fossil fuels, which have powerful constituencies in Congress.

Despite Obama's campaign pledge to cut nuclear arms, spending for bombs won't come down that much either. Energy's National Nuclear Security Agency has its own constraints, including growing safeguard and security costs, restoring aged facilities, and the high price of maintaining the U.S. nuclear arsenal.

What's needed is a major restructuring of Energy. The first step is to work with Congress to expeditiously transfer the department's nuclear weapons programs to the Defense Department. With the Cold War concluding almost 20 years ago, it's time to consolidate nuclear arms activities. In terms of cleaning up Energy sites, the United States should establish an independent nuclear decommissioning authority--such as Britain has recently done--to address its nuclear legacy. This could assure environmental compliance and public accountability. At that point, a new Energy structure should be established, based explicitly on meeting the nation's energy, economic, and environmental goals.

Freed from its nuclear weapons millstone, there's much Chu can do to make Energy a major player in constituting a sustainable U.S. energy policy--such as helping to establish a national electricity grid to tap into large potential sources of renewable wind and solar energy and investing in

conservation that can become a potent tool to reducing fossil-fuel dependence and stimulate employment. Energy also can play a major role in helping the ailing U.S. auto industry through its research-and-development and loan-guarantee programs. And as a premier scientist, Chu can help strengthen the nation's science base by sharpening the focus of academia and Energy laboratories to work toward President-elect Obama's goals of achieving energy self-sufficiency and major reductions in greenhouse gas emissions.

While undertaking such a comprehensive restructuring won't be easy, the status quo is far worse. Therefore, President Obama's positive energy vision can either be sustained by a new, more responsive Energy Department, or risk failing due to the department's dysfunction.^{xix}

Robert Alvarez is a former senior policy analyst to the Secretary(s) of DOE between 1994 and 1999. Prior to that, he was a senior analyst for the U.S. Senate Government Affairs Subcommittee. Currently, he is an EDI Board member, consultant to environmental organizations and accomplished author on nuclear policy issues.

Idaho Governor Otter Proclaims Downwinder Day

Idaho Governor "Butch" Otter issued a Proclamation January 22, 2009 that states:

* Whereas, January 27, 2009 marks the 58th anniversary of the beginning of nuclear weapons testing at the Nevada Test Site; and

* Whereas, Idahoans living downwind from nuclear tests suffered as a result of the nation's nuclear testing program; and

* Whereas, the Governor of the State of Idaho recognizes the sacrifices of the "Downwinders" and all the other participants in and victims of the Cold War, and hereby memorializes their losses.

* Now, Therefore, I C.L. "Butch Otter, Governor of the State of Idaho, do hereby proclaim January 27, 2009 to be Downwinders Day of Remembrance."

J. Preston Truman, Malad, Idaho Director of Downwinders – a national advocacy group- notes, "It's a proclamation for the anniversary of the start of Nevada nuclear testing in 1951. It declares a "Day of Remembrance" for Idaho's downwinders who still are not eligible for the same compensation for fallout induced injuries those of us from rural Utah and Nevada are! Together with Truman, are Mary Dickson of Salt Lake City based Downwinders United and Tona Henderson of Emmett based Idaho Downwinders who continue to work on expanding the Radiation Exposure Compensation Act (RECA) coverage to include Idahoans.

For more information go to: <http://downwinders.org>

Uranium for 20 nukes Repatriated from Japan in Special U.S. Operation

Associated Press, TOKYO, 12/27/08 reports; "The 579.7 kg (1,278 pounds) of highly-enriched uranium (HEU) from Japan was transferred into facilities at the Idaho National Laboratory and Savannah River Site in the United States for secure storage. More than 500 kilograms of highly enriched uranium -- enough fissile material to produce about 20 nuclear weapons -- has been repatriated to the United States from five Japanese nuclear research reactors over the 12 years up to last summer, a senior U.S. official and Japanese specialists involved in the process said in recent interviews.

Details of the special repatriation operations, initiated by the U.S. National Nuclear Security Administration, the Energy Department's special wing on nuclear issues, have remained undisclosed for more than a decade due to security concerns, even though the first shipment started in 1996.

Under the unique nonproliferation project, called the Global Threat Reduction Initiative, a total of 579.7 kg of highly enriched uranium had been returned to U.S. nuclear facilities from the Japanese research reactors by last summer, Andrew Bieniawski, NNSA assistant deputy administrator for global threat reduction, who is in charge of the GTRI program, told Kyodo News.

"Japanese research reactors have been very successful in shipping their spent HEU fuel to the United States," Bieniawski said. "These shipments contribute to HEU minimization efforts worldwide and provide the reactors with a disposal path for their spent fuel."

Since the mid-1990s, U.S. administrations have accelerated nuclear nonproliferation activities worldwide in order to prevent nuclear terrorism. The George W. Bush administration regards nuclear terrorism as one of the most serious threats in the current post-Cold War era, which some nuclear specialists call the "Second Nuclear Age" because peaceful use of nuclear materials could be applicable to weapons development.

Four of the five Japanese reactors are located in Ibaraki Prefecture, just north of Tokyo, and have been managed by the Japan Atomic Energy Agency, a major Japanese nuclear institute. Its two HEU-fueled reactors have already

been shut down because of proliferation concerns, and the remaining two reactors were converted to a different type using low-enriched uranium fuel.

The density of Uranium 235, a key isotope for nuclear chain-reaction, in LEU is less than 20 percent, whereas weapons-grade HEU needs to be more than 90 percent. The JAEA had used 90-93 percent HEU fuels from the early 1960s until the mid-1990s, according to documents provided by the JAEA to Kyodo News.

The JAEA has returned a total of 523 kg of spent HEU fuel to the United States. "The JAEA is an example for the world to follow. The JAEA has done 95 percent (of the entire repatriation)," Bieniawski said.

Takeshi Inoue, general manager of the Nuclear Material Management Office of the Nuclear Nonproliferation Science & Technology Center at the JAEA, explained that the JAEA plans to send back the remaining 5 percent of HEU in the next five years.

The other research reactor is located in a suburban area of Osaka and has been operated by Kyoto University's Research Reactor Institute. The reactor, called KUR, started operation in 1964 and used 93 percent-density HEU as fuel until its suspension in February 2006. The institute is one of the major nuclear training centers in Asia and has accepted more than 3,000 researchers, including foreign students, annually.

KUR has suspended its operations to remove HEU fuel and repatriate it to the United States. Kyoto University has sent back about 50 kg of HEU to the United States as of summer 2008.

KUR will be converted to a LEU-fueled reactor by summer 2009, according to Hironobu Unesaki, associate professor and director of the Office of Nuclear Material Management at the institute, who is a key contact person with the NNSA for HEU repatriation and conversion operations.

These research reactors in Japan were constructed in the 1960s in the context of "Atoms for Peace," the U.S. Cold War project advocated by President Dwight Eisenhower, which exported several dozen research reactors, HEU fuels and related technologies to its allies including Japan, South Korea and South Vietnam. The Soviet Union rivaled this U.S. project and exported research reactors to its own satellite states.

Since the end of the Cold War, the United States has become increasingly concerned about these exported reactors and HEU which could be applied for nuclear

weapons development. In February 2005, Bush and then Russian President Vladimir Putin agreed on a cooperative plan calling for upgrading security at Russian nuclear facilities and accelerating efforts to return HEU that the two former Cold War rivals had distributed to research reactors around the world.

Since then, the GTRI has geared up its project and promoted worldwide operations with Russian counterparts in order to secure "Loose Nukes" which could be dangerous seeds of nuclear terrorism and other proliferation concerns. So far, more than 60 HEU-fueled reactors have been converted to LEU-fueled ones and about 2,000 kg of HEU has been repatriated to U.S. and Russian nuclear facilities, where some of it is to be blended down into LEU fuel.

It is much more difficult to produce nuclear weapons from LEU than from HEU, so LEU-fueled reactors are more proliferation-proof. The 579.7 kg of HEU from Japan was transferred into facilities at the Idaho National Laboratory and Savannah River Site in the United States for secure storage.

The JAEA and Kyoto University have taken collaborative steps with the NNSA and paid expenses for the shipping, storage and handling of HEU repatriated to the United States, even though the Japanese government made no financial or manpower contribution to the past and ongoing operations.

"If we can't make a new deal, research reactors in Japan would be forced to shut down. It's a fundamental issue for the Japanese government to deal with in terms of defining national nuclear policy in the long run," Unesaki said.

The incoming administration of Barack Obama is expected to maintain a robust approach to nuclear proliferation threats including nuclear terrorism. The president-elect pledged to secure fissile materials distributed around the world during the election campaign.

In Japan, there are four small research reactors which still use HEU. After removing almost all HEU from major Japanese research reactors, the NNSA is now shifting its focus to these small reactors.

The goal of the GTRI program is to minimize the use of HEU in civilian applications, thus the GTRI would like to discuss the possibilities for converting the remaining HEU-fueled reactors with the corresponding Japanese organizations," Bieniawski said, pointing to his next target." (PNA/Kyodo) DCT/rsm

Feds: Audit of South Carolina nuclear complex whitewashed

Magic Valley News reports 1/22/09 an AP story by Ben Evans; "A company managing South Carolina's Savannah River Site nuclear complex altered findings in a 2007 financial audit to justify expenses to the government, federal investigators said in a report released Wednesday.

The Energy Department's Inspector General said as a result, it cannot verify \$1.4 billion in expenses submitted by the Washington Savannah River Co. that year.

Under a federal program aimed at cutting down on auditing costs, the company was supposed to conduct independent self-audits to document its expenses. Instead, company managers worked closely with the audit department to smooth over discrepancies _ despite documented dissent from professional staff auditors, the report said.

Managers "directed inappropriate changes to valid audit results" and were "permitted to provide after-the-fact justifications and approvals for violations of various ... procedures designed to prevent or detect unallowable costs," the review said.

In one case, managers were allowed to insert required approvals for expenses three years after they were made, according to the report. "These actions violated professional standards," the report said.

WSRC officials did not immediately respond to a request for comment, but the report says the company disputed some of the findings. The company lost the Savannah River Site contract in competitive bidding last year. But a joint venture formed by its corporate parent, San Francisco-based URS Corp., recently won a six-year contract worth up to \$3.3 billion to handle nuclear waste at the site, which sits outside Aiken, S.C., near the Georgia line.

In October, WSRC agreed to pay \$2.4 million to settle fraud allegations involving the Savannah River Site's employee pension fund. The government accused the company of failing to disclose projected cost increases for the fund during contract negotiations with the Energy Department.

URS' Washington Division is based in Boise, Idaho. Among other federal contracts, the division does extensive cleanup work at southeast Washington's Hanford nuclear reservation and the Idaho National Engineering Laboratory. At Hanford, the work includes ridding 177 aging underground tanks of millions of gallons of radioactive waste.

Pentagon Spending Will Not be the Kind of Stimulus We Need

by Winslow T. Wheeler

As the economic news darkens in the United States, the ideas for stimulating new jobs get worse. A sure-fire way to advance deeper into recession is now being spread around: spend even more on the Department of Defense (DoD). Doing that will not generate new jobs effectively and it will perpetuate serious problems in the Pentagon. The newly inaugurated President Barack Obama would be well advised to go in precisely the opposite direction.

Harvard economist Professor Martin Feldstein has advocated in the *Wall Street Journal* ('Defense Spending Would Be Great Stimulus', 24 December 2008) the addition of \$30 billion or so to the Pentagon's budget for the purpose of generating 300,000 new jobs. It is my assertion, however, that pushing the DoD as a jobs engine is a mistake.

With its huge overhead costs, glacial payout rates and ultra-high costs of materials, I believe the Pentagon can generate jobs by spending but neither as many nor as soon as is suggested.

A classic foible is Feldstein's recommendation to surge the economy with "additional funding [that] would allow the [US] Air Force [USAF] to increase the production of fighter planes". The USAF has two fighter aircraft in production: the F-22 Raptor and the F-35 Joint Strike Fighter (JSF). The F-22 has reached the end of approved production (with 183 units) but the air force would love at least 60 more. However, even if Congress appropriated today the \$11 billion needed for them, the work would not start until 2010: too late for the stimulus everyone agrees is needed now.

Feldstein thinks it can be otherwise. He is probably thinking of the Second World War model where production lines cranked out thousands of aircraft each month: as fast as the government could stuff money, materials and workers into the assembly line.

The problem is that there is no such assembly line for the F-22. Although they are fabricated in a large facility where aircraft production hummed in bygone eras, F-22s are today hand-built, pre-Henry Ford style. Go to Lockheed Martin's plant; you will find no detectable movement of aircraft out the door. Instead you will see virtually stationary aircraft and workers applying parts in a manner

more evocative of hand-crafting. This 'production rate' generates one F-22 every 18 days or so.

The current rate for the F-35, now at the start of production, is even slower, although the USAF would like to get its rate up to a whopping 10 to 15 aircraft per month.

Why do we not just speed things up? We can't. The specialized materials that the F-22 requires must be purchased a year or two ahead of time and, with advance contracting and all the other regulations that exist today, the Pentagon's bureaucracy is functionally incapable of speeding production up anytime soon, if ever.

In fact, adding more F-22 production money will not increase the production rate or the total number of jobs involved. It will simply extend the current F-22 production rate of 20 aircraft per year into the future. Existing jobs will be saved but no new jobs will be created.

Note also that the \$11 billion that 60 more F-22s would gobble up is more than a third of the \$30 billion that Feldstein wants to give to the DoD. How he would create 300,000 new jobs with the rest of the money is a mystery. More F-22 spending would be a money surge for Lockheed Martin but not a jobs engine for the nation.

Even if one could speed up production of the other fighter, the JSF, it would be stupid to do so. The F-35 is just beginning the testing phase and it has been having some major problems, requiring design changes. That discovery process is far from over. The aircraft should be put into full production after, not before, all the needed modifications are identified.

Over-anxious to push things along much too quickly to permit a 'fly before you buy' strategy, the USAF has already scheduled the production of around 500 F-35s before testing is complete. Going even more quickly would make a bad acquisition plan even worse.

Even other economists are skeptical about Feldstein's numbers. An October 2007 paper from the University of Massachusetts-Amherst found that each \$1 billion spent on defense would generate 8,555 jobs, not the 10,000 calculated by Feldstein. Given the problems with the F-22 just discussed and the lack of jobs I believe it will generate, even this lower estimate sounds extremely optimistic.

More importantly, the same amount of money spent elsewhere would generate more jobs, often better ones, and it would do it faster. For example, according to the above study, \$1 billion in spending for mass transit would generate 19,795 jobs (131% more than for the DoD) and in education would generate 17,687 jobs (107% more) – and

the hiring could start in early 2009.

In fact, if employment is the aim, it makes more sense to cut defense spending and use the money in programmers that do it better. As for the defense budget, less money offers the opportunity for reform – just what the doctor ordered. Despite high levels of spending, the combat formations of the services are smaller than at any point since 1946. Major equipment is, on average, older, and, according to key measurable, our forces are less ready to fight.

The F-22 and F-35 programs typify the broken system that fostered this decline. Real reform would do much more for national security than giving the Pentagon more money to spend poorly.

Winslow T. Wheeler currently directs the Straus Military Reform Project of the Center for Defense Information in Washington.

Nuclear Veterans must be Compensated

The *Manawatu Standard* reports 1/26/09; “Veterans from New Zealand, Britain, Australia and Fiji, are locked in a court battle in London, claiming they were used as guinea pigs during Britain's nuclear bomb tests in the Indian and Pacific oceans in the 1950s.

All have suffered a variety of illnesses since they were told to face the bomb without their masks as part of a study to see the effects of radiation fallout. The 800 veterans want compensation.

But lawyers acting for the British government have told the court that there is no solid evidence to prove that their health problems were caused by the radioactive blasts. What more evidence is required? Aren't the shocking tales of our veterans who have had to live and breathe the effects enough?

The young men, who simply believed they were doing their duty, were treated like laboratory rats. If the case favors the veterans it will pave the way for them to sue the MoD. If the British government win, based on their argument that too much time has passed since the tests were carried out, a huge travesty of justice would have occurred.

The veterans who took part in the tests can't reclaim their lives and free themselves of the many illnesses they have developed, but compensation could go some way to easing the pain for their family, many of whom have also been genetically damaged.”

Economic Stimulus must Include Cleanup Backlog of DOE Waste Sites

Previous Bush Administration and Congressional funding of massive cleanup of DOE's radioactive waste dumps have been radically cut, resulting in contamination of regional water sources. This is an immediate threat to populations living near these dump sites.

Because of these funding cuts, DOE has rammed through grossly inadequate “cap-and-run” agreements with state governments that only ensure the continued migration of radioactive and hazardous waste into the groundwater.^{xx}

On July 1, 2008, the State of Idaho and the Department of Energy (DOE) filed a legally binding agreement in U.S. Federal District Court called “Agreement to Implement U.S. District Court Order Dated May 25, 2006. This new Agreement details DOE's Idaho National Laboratory (INL) buried radioactive waste removal obligations.

Idaho is again capitulating to DOE in this new Agreement by vacating crucial parts of the original 1995 Settlement Agreement with DOE that stipulated 65,000 cubic meters (cm) of transuranic and other specified waste be exhumed and sent to a permitted non-Idaho deep geologic repository.

This new Agreement only requires DOE to exhume not less than 6,238 cm from the Radioactive Waste Management Complex/ Subsurface Disposal Area (RWMC/SDA). This is significantly less than the 1995 Agreement stipulating removal of 65,000 cm of transuranic waste, which continues to be, a gross underestimate.^{xxi}

Also the 96.8 acre SDA “Retrieval Area” is now reduced to only 5.65 acres based on DOE's “review of shipping and disposal records.” Leaving the remaining 30.2 acres of SDA buried waste permanently in place in a flood zone to continue leaching hazardous and radioactive contaminates into the underlying aquifer is unconscionable. The RWMC lies in a localized depression about 40 feet lower than the nearby Big Lost River that flooded the RWMC numerous times in the past.

The accuracy of these disposal records have been repeatedly shown to be grossly deficient especially during the earlier years when there was no attempt to segregate waste types and shipments were simply loosely dumped in whatever pit/trench was open at the time. [Ibid]

DOE's secrecy is common knowledge and its intent to keep its previous/current operations buried. But this Agreement goes further by stating that retrieval operations must be suspended when it “implicates national security issues involving classified information, such factors constituting the exclusive basis upon which DOE may request the suspension of a retrieval obligation under this

Agreement.” [pg. 8]

National security for whom – protecting DOE’s illegal dumping at INL over the past 50 years? This eviscerates any concept of national security based on protecting public health and welfare.

Equally troubling is DOE will only “visually” determine (using a video camera) if the waste is “targeted” for retrieval. This is based on the absurd assumption that the waste containers after being buried for decades have legible shipping labels. As previous retrieval tests show, the majority of the waste containers (drums and wood/cardboard boxes) have disintegrated. At the very minimum, multiple alpha/gamma radiation sensors must be mounted on the robotic excavator to determine retrieval. The “targeted waste” for retrieval is ridiculously narrow and the non-targeted waste will be returned to the pit and reburied. [App. F, pg. 1]

Idaho also allows DOE to leave “large objects” in place. This is another way of saying the numerous buried nuclear reactor cores from previous operations will remain in the SDA burial ground. Idaho is again allowing DOE to obfuscate its 1995 Settlement Agreement (SA) commitment to exhume all spent nuclear fuel, mixed hazardous, transuranic and alpha emitting waste from the SDA. [SA, pg.6]

Independent documentation shows this buried waste contains 640,000 curies of radioactive material in about 57,000 cubic meters of waste in the SDA.

Groundwater monitoring data show extensive migration of radioactive and hazardous contaminants into the underlying Snake River Aquifer.^{xxii} Idahoans’ and downstream Snake River populations are legitimately outraged by this Agreement and the State’s complicity to allow DOE to leave most of this waste in place where it will continue to pose a significant hazard to the public.

Full funding of a comprehensive INL cleanup (exhuming all the buried waste) is a “shovel ready” program that would employ thousands of workers and ensure that more radioactive and hazardous chemical waste does not contaminate the underlying Snake River Aquifer that the whole region relies on as a “sole source” of water.

Similar inadequate cleanup problems exist at DOE’s Hanford, Sandia National Laboratory and Los Alamos National Laboratory radioactive waste dumps.^{xxiii}

What makes more common scents, Obama’s Treasury Secretary Tim Geithner lavishing \$700 billion of our dollars on his corrupt, insolvent big bank friends (a continuation of Bush’s Treasury Secretary Henry Paulson’s bank bailout scheme), or spending our taxpayer dollars on programs that will protect generations in the future from

contaminated water ?

Endnotes

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- ⁱ Clayton Ogilvie, DOE/ID FOIA Officer 12/16/08 letter, Partial Response to Freedom of Information Act Request from EDI & KYNF.
- ⁱⁱ Environmental Defense Institute and Keep Yellowstone Nuclear Free Appeal to DOE Office of Hearings and Appeals, 2/12/09, Concerning USDOE Idaho Operations Office Partial Response to Freedom of Information Request (FOIA-08-018). The full text of this Appeal is available at <http://environmental-defense-institute.org/publications>
- ⁱⁱⁱ Keep Yellowstone Nuclear Free, Environmental Defense Institute, et al., v. DOE, Complaint, Wyoming Federal District Court, Case No. 06-CV-205-D
- ^{iv} Keep Yellowstone Nuclear Free, Environmental Defense Institute, et al., v. The United States; U. S District Court, Civ.No. 07-36-E-BLW, <http://www.id.doe.gov/insideNEID/>
- ^v Deficiency Reports, ICARE No. 3518 and 3519
- ^{vii} ATR In-service Inspection Plan Fourth Inspection Interval February 2006 to January 2015; Doc. ID: PLN-859, 12/18/06. Response to Request No. 4. Appendix C-1.
- ^{viii} KYNF v. DOE, Idaho Federal District Court, Civ. No. 07-36-E-BLW, Complaint, page 2.
- ^{ix} Document ID: SAR-153, Revision ID:16, Effective date 4/7/05, page ES-9. Safety Analysis Report AR-02710 and Administrative Record-026753.
- ^x Interoffice Memorandum, INL, March 29, 2005, Plant Systems Engineering Review for Facility Certification No.29, From D.J. Schooner. Page 4. [Request No. 4c]
- ^{xi} KYNF v. DOE, Idaho Federal District Court, Civ. No. 07-36-E-BLW, Administrative Record 006517. “Source Term” is defined by DOE as “The quantity of radioactive material released by an accident or operation that causes exposure after transmission or deposition. Specifically, it is that fraction of respirable material at risk that is released to the atmosphere from a specific location. The source term defines the initial condition for subsequent dispersion and consequence evaluations.” DOE/EIS-0287D, pg D-33
- ^{xii} Advanced Test Reactor (ATR) Reflector Safety Analysis, T.A.Tomberlin, Internal Technical Report, PG-T-89-018, July 1989, Response to Request No. 4 n. Page 25.
- ^{xiii} Interoffice Memorandum, INL, March 29, 2005, Plant Systems Engineering Review for Facility Certification No.29, From D.J. Schooner. Page 5, [Request No. 4c]
- ^{xiv} Southeast Safety Rod Failure, INL, Interoffice Memorandum, 2/17/05, from D.G. Robinson, Response to Request No. 4i.
- ^{xv} Interoffice Memorandum, INL, March 29, 2005, Plant Systems Engineering Review for Facility Certification No.29, From D.J. Schooner. Page 4. [Request No. 4c]
- ^{xvi} DOE/EIS-0287 pg. 4-30; DOE/DEIS-0373D, pg 3-26.
- ^{xvii} U.S. District Court for Wyoming, Case No. 06CV205-D
- ^{xviii} Jon Wiener, “Let the Sun Shine In,” The Nation, February 16, 2009.
- ^{xix} Source URL (retrieved on 01/08/2009 - 18:29): <http://www.thebulletin.org/node/5383>
- ^{xx} Idaho Again Capitulates to DOE on New INL Buried Waste Agreement, EDI June-July 2008 newsletter.
- ^{xxi} Chuck Broschious, EDI Comments on Buried Waste Plan, 11/21/07; and Citizens Guide to Idaho National Laboratory, page 130.
- ^{xxii} EDI Aquifer Report, available on EDI website.
- ^{xxiii} Citizen Action litigation against DOE and New Mexico State Environment Department. Dave@radfreenm.org