

GANESAYER

GEORGIANS AGAINST NUCLEAR ENERGY

SUMMER 1999

PLUTONIUM CHALLENGE

Nuclear Goliath Hurtles Down Another Blind Alley in Pursuit of MOX

by Joan O. King

If there was ever a modern contest between David and Goliath, MOX is it.

On one side we have the international nuclear industry with money, power, and the imprimatur of the U.S. government.

On the other, a handful of dedicated workers, some, volunteers like GANE, some, working for grassroots organizations — all, basically, “little people.”

You could look at any of us and say, “Get a life!”

This ran through my mind as I spent a beautiful Saturday sitting inside at one more long, difficult, important meeting on MOX. Perhaps you remember reading about MOX in the GANESAYER. It's an idea of the nuclear industry's to make a new form of nuclear fuel from plutonium — mixed oxides of uranium and plutonium — MOX.

The nuclear industry touts MOX as a holy “swords to plowshares” concept that promotes peace. The fact is that the MOX idea is a profit-motivated, opportunistic grab by a dying industry. It's true that MOX fuel would be fabricated using plutonium from retiring nuclear warheads, but behind the benign mask lies a messy, dangerous and experimental business which has become a local issue for the Southeast, involving Savannah River Site near Augusta, Georgia, and regional commercial nuclear reactors.

It is new to us to have a “problem” from disarming nuclear weapons. Plutonium triggers from A-bombs pose an environmental hazard and a global security risk for at least 250,000 years. The plutonium must be dealt with as high-level nuclear waste. But MOX activity avoids dealing with the waste

problem — avoids closing the nuclear fuel loop and instead launches another open-ended cycle involving gargantuan facilities at Savannah River Site. These new factories would spew out radioactive waste to make a fuel which, when used, creates more plutonium! MOX is a blind alley, exacerbating the plutonium problem while diverting resources from needed research on technologies to protect the environment from plutonium over the long-term.

Nuclear industry proponents point out that MOX has been used in Europe since the 1960s. But in Europe the MOX is made from plutonium derived from commercial spent fuel, not warheads. The military plutonium has a different composition than commercially produced plutonium and the process to refine it for fuel is experimental. We do, however, have experience with Cogema, the French-government-owned company that DOE has chosen to make MOX at Savannah River — the experience of secrecy, deceit, greed and extensive radioactive pollution.

The U.S. has been a global leader in erecting a barrier between commercial and military nuclear applications. This is an important policy in preventing the spread of nuclear weapons, nonetheless, India, Pakistan, Israel, and perhaps Iraq and North Korea have all acquired nuclear weapons through their commercial research and energy programs. Still, it is the ethical high ground to work to prevent the proliferation of nuclear weapons, and the U.S. will lose any moral authority it has if we breach our own policy.

Goliath's campaign has gained some ground. DOE has a contract with Cogema

“I HEAR THE COLD PART OF THE COLD WAR IS OVER”



(the French reprocessing company who contaminated the coast of La Hague), Westinghouse, Duke Power and Stone & Webster to manufacture MOX at Savannah River Site. Duke Power and Virginia Power have each offered their reactors to use the new type of fuel provided they can make a profit (at taxpayers' expense). Vice President Al Gore is under pressure to forge a decision with the Russians in September to coordinate plutonium disposition efforts. The plan is for the U.S. to fund whichever program is agreed upon because Russia is broke.

So, the facts that MOX has never been made from weapons-grade plutonium, would require the modification and relicensing of U.S. commercial nuclear reactors, that billions of dollars of taxpayer money would be required to build a

continued on last page

Greetings from GANE!

It's been a long time since you've heard from us. What can we say? The successful campaign to shut the Georgia Tech reactor took a lot out of us! When we finished three solid weeks of evidentiary hearings before the Nuclear Regulatory Commission, we took stock. Yep, the treasury was depleted and the activists were exhausted.

We've built both back up, but meanwhile, the nuclear industry churns on. Sometimes it seems like its main product is bad ideas!

So, what have we been doing lately? We had a wonderful outreach effort at Sevananda in 1997, disseminating reams of literature, generating scores of letters, and we made some money! We're their Community Change Partner again for the month of August so drop by and get some healthy food and valuable information — and make a donation to GANE!

GANESAYER

Summer 1999

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Sources

Atlanta Journal & Constitution
Council for a Livable World
Creative Loafing
Navajo-Hopi Observer
New York Times
NIRS Monitor
Nukewatch Pathfinder
Science
Tonawanda Record-Advertiser
U.S. News & World Report
USA Today
Washington Post

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We've participated in several recent campaigns. For two legislative sessions GANE worked on behalf of Rep. June Hegstrom's bill to strengthen Georgia regulation of nuclear waste transportation. After the Georgia Power lobby worked on a key committee member all day, sure enough, we lost by one vote getting the legislation out of committee and on to the floor, but GANE caused an uproar in a packed house with our story of the night we met the midnight train through Georgia a few years ago. It's a work in progress, hauling society into the nuclear waste age!

As deregulation of electricity queues up in Georgia, GANE has worked with a coalition of Georgia groups to launch Georgia Alliance for Clean and

Affordable Power (Georgia CAP), a strong alliance that can provide an effective voice to protect the environment and consumers against the anticipated onslaught of a myriad of profit-motivated electricity providers without regulators. In California, the first state to deregulate, things have not gone well. Deregulation is truly a daunting and tricky business. GANE holds the hope that inefficient, economically overweight nuclear plants can be phased out without compromising their perpetual-care programs. Let us know if you would like to host the roadshow that has been developed.

GANE has put a lot of energy recently into opposing the MOX (plutonium fuel) proposal for Savannah River Site (see cover story). This national battle has

SOUTHERN COMPANY —

As the spent nuclear fuel pool at Plant Hatch near Baxley, Georgia, fills up, Southern Company (a.k.a. Georgia Power) is taking creative steps to address its nuclear waste problem. The U.S. Department of Energy missed its 1998 deadline to take the waste away, leaving Southern Company and other nuclear utilities holding the bag. GANE sympathizes with Southern Company's plight. We are all paying the price for procrastinating on the nuclear waste problem.

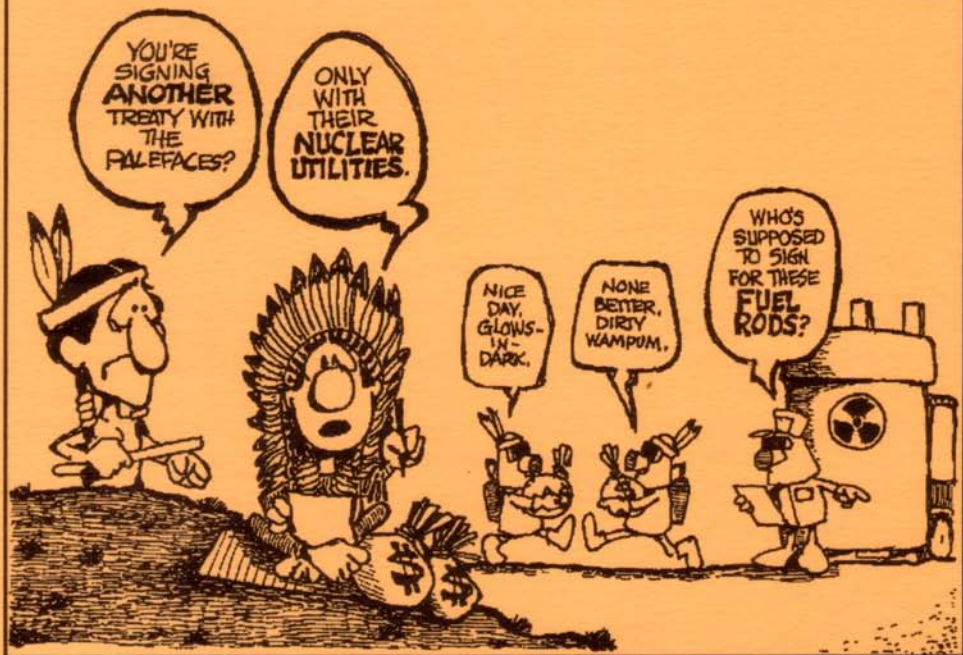
But GANE is concerned that Southern Company has fallen in with a rough crowd and is headed for trouble. Southern Company has joined a gang of eight companies calling itself Private Fuel Storage (PFS). PFS has hatched an evil plot to lease land from a tiny tribe of Indians, the Goshute Band in Skull Valley, Utah, for 50 years and rent the space to other utilities for "interim" high-level nuclear waste storage.

In addition, PFS is funding a nuclear waste cask manufacturer, Holtec International, to develop a new type of cask, a multi-purpose canister, that can be used not only to dry-store the waste, but for transportation, as well. PFS plans to sell the casks to utilities for on-site storage and at such time as the Utah dump may be licensed, built and opened ("over my dead body," says the governor of Utah) customers would just load their casks up and cart them out to Utah.

The only license the NRC ever denied was for environmental racism, a primary argument against this dump scheme. The beleaguered tribe of 200 is surrounded by a chemical weapons depot and incinerator, a magnesium factory which spews out chlorine gas, a low-level nuclear dump, and three toxic chemical sites. Nearby, the Army tests protective gear for chemical and biological warfare, and the Air Force trains F-16 pilots, who sometimes crash. The Air Force has become an unlikely ally with environmentalists, tribe members and Utah Governor Michael Leavitt in opposing the dump.

Of the 200 Goshute who are offered this devil's bargain, 160 are living in Salt Lake City where there are more jobs. Of 40 Goshute residing on the tiny, 18,000-acre patch of desert, 20 support the dump and 20 oppose it. Utah officials have seized control of roads and lands surrounding the reservation, effectively blocking the utilities from access to the proposed dump site.

The State of Utah is intervening in the dump licensing process at the NRC along with environmental and tribal groups. The multi-purpose canister is undergoing NRC license review concurrent with the dump and the two efforts are interdependent. The intervenors have raised several compelling issues before the NRC and the licensing process is expected to go on until 2002. GANE urges Southern



DEAR MR. DAHLBERG —

As head of the Southern Company with its vast international holdings, it must be difficult to keep abreast of all its activities. I ask you to give attention to a grave matter. Your Southern Nuclear division has applied, with several other utilities (as "Private Fuel Storage") to build a high-level nuclear waste dump in the Skull Valley of the Goshute Indian Nation near Salt Lake City, Utah.

This is a blatant example of environmental racism at its worst. You have a reputation for environmental leadership, Mr. Dahlberg, you must share my view that for us to dump on tribal lands is unacceptable.

I, too, am concerned about our nuclear waste problem. I wish you would stop producing it. The Holtec dry-cask being designed for use at Plant Hatch has dangerous flaws which must be addressed before it is built and used.

Thank you for your attention to this serious matter.
Sincerely,

20¢
STAMP

TO:
MR. BILL DAHLBERG
CEO
THE SOUTHERN COMPANY
270 PEACHTREE STREET
ATLANTA, GA 30303

come home to roost in the Southeast and has demanded many strategy meetings, hearings, briefings, and more meetings. This is a crucial battle to keep atoms for peace separate from atoms for war with serious ramifications for the environment and disarmament.

We trust that every one of you has heard the news of India and Pakistan's nuclear tests. When the U.S. is bristling with nuclear missiles on high alert, effectively holding the entire world hostage, GANE concludes we've pretty much lost any moral authority to judge others' arsenals. Meanwhile, we allow Israel to maintain its sham secrecy about its nuclear arsenal (*see Vanunu story*) while breeding further disharmony in that volatile region.

We gloss over the Chinese spy scandal, a bizarre and confusing scenario that has dominated the media here lately. The main thing that seems to have come out of it, currently, is a move to return DOE to its days of secrecy in the name of national security. Remember when the veil of secrecy was lifted barely a decade ago and we were horrified to learn the gross extent of environmental contamination and overwhelming legacy of poorly contained nuclear waste that had been wrought? A more secret DOE only benefits the arms manufacturers that profit from war.

What you *can* read about in the GANESAYER is one of the most under-reported stories of 1998 — the Spanish steel mill accident that contaminated

much of Europe. We also have the scoop on Southern Company's vision for nuclear waste management. And for your environmental pleasure, hints from our man on the gnat line on how to unplug from Georgia Power!

This first GANESAYER in two years has been a huge undertaking. We present to you a lot of information, two years of NUKE NOTES! Take the time to read them, you will be among the most informed people in the world on these important issues. Pass your knowledge on to the folks with whom you work and break bread. The best strategy to turn the nuclear mess around is an informed public.

No nukes y'all!
GANE

Nuclear Waste Self-Help in the '90s

Company to reevaluate its situation and make immediate changes in its nuclear waste direction.

One objection to the dump location is that there is a bombing range adjacent to the site! Also, the Air Force conducts 800 F-16 stealth training flights a year in which the planes fly 600 miles an hour only 50' above ground and there is concern that an underhanging bomb will collide with a cask. If the NRC licenses the dump, the Air Force has vowed to take the matter before the FAA.

The NRC is reviewing many problems concerning the cask. Impact tests for the new type of cask do not simulate real-life conditions. Irradiated fuel rods are brittle, their cladding degraded from high-heat and high-radiation exposure. Holtec has not proven that already fragile, crumbling rods can withstand crashing and burning scenarios. Also, Holtec calculations assume the fuel rods to be rigid, homogeneous rods, when in actuality the rods are stacks of disks clad in a cylinder. Calculations assume all the rods are intact, when experience with spent fuel finds significant numbers of rods to be ruptured or leaking.

Thermal tests for the casks analyze the behavior of one cask, but not several casks in proximity to each other. In addition, but the casks would be in a hot desert environment, where the temperature will be raised as the casks react to

each other and the environment.

GANE opposes the Goshute dump outright. The transportation hazard to locate waste centrally is unacceptable. Besides, DOE has already missed one deadline to move nuclear waste — it is unlikely that the waste will be moved again in 50 more years, and the dump location is unacceptable for permanent storage, if only because its industrial and military neighbors are so dangerous. GANE is unequivocally opposed to exploitation and abuse of Indians in trying to solve a dilemma our own society created.

GANE is *not*, however, unequivocally opposed to the multi-purpose canister. Holtec's reputation and experience with wet fuel storage has been superior. Southern Company has already poured concrete to move waste into a Holtec cask. We could consider supporting a pilot dry-cask project at Hatch if *the goal is perfection*. We call on Southern Company and Holtec to heed critics' concerns with shortcomings in the multi-purpose canister design and keep going back



to the drawing board until the critics are satisfied with its excellence. We predict that Holtec and nuclear utilities will find that their future nuclear waste experiences will go better if environmentalists have confidence in their plans, and a great place to start is to perfect storage design.

Included in the GANESAYER is a postcard with a message to the Southern Company encouraging them to do the right thing. Support GANE's efforts (and the Goshute Indians, and the Governor of Utah, and activists all over the world) by mailing the card in today!

— Glenn Carroll

PETER PONDER

Over the Gnat Line and Off the Grid in Georgia

by Pete Sipp

My life really got going when . . . in the summer of '75, a woman in the health food store I used to go to in Hinsdale, Illinois, said, "Pete, you know what you should be doing, but you are just not doing it."

Twelve months later in Chateau, Montana . . . another woman (a real beauty) offers me a cookie at the New Western Energy Show. After several munches, she says, "Your cookie was baked by the sun."

Ka-Boom!!!

At the speed of sunlight! I was not the same. How could I possibly be??? The people at the show were making electricity with sunlight, wind and falling water. Water was heated with sunshine.

The women and men of the show so inspired me I can remember thinking, "Someday, I want a house powered by the sun."

I did more than want one. I turned it into an adventure. I actually did it! Without a mortgage, too. And twenty-two adventure-filled years later she's ready. Twenty-eight by fifty feet she is. She's 100% heated and cooled by the sun. Naturally.

Winter heating is accomplished by using the winter sun. The rays shine on the dark brown painted blocks (three high off the ground) all day. Inside the blocks and under the floor is dirt. Fifteen cubic yards of earth by dump truck and twenty-eight by wheel barrow and shovel. This dirt is packed down super hard. Then it was scraped off flat as a piece of glass. On top of this is two inches of styrofoam. The styrofoam's function is to resist the cold winter ground from taking the heat the sun has put into the house.

The 50-foot side of the house is east to west. This enables the low winter sun to shine on the three-high block wall all day (direct gain). A four-inch thick concrete slab rests on the blocks and inhales this heat and spreads it out, warming the whole house. Naturally.

During winter when there are extended rainy and overcast days we heat with our centrally located wood heater. This



▼ Mary Olsen, NIRS' high-level nuclear waste campaigner and Pete. They met this winter at a MOX meeting in Georgia

► First sunrise on the beautiful stainless steel 500-gallon tank known as Miss Water Tank. In the lower right are the two tanks, 200-gallon and 110-gallon, that Pete scrounged near the Augusta Power Canal.

▼ Pete's house in spring of 1998. Some of the wood dryers used to keep the rains off the wood show in the foreground.

enables the heat to spread out all by itself. As we know, the rain and sun make the trees grow. Trees are wonderful solar collectors (indirect gain). Naturally.

We dry our clothes inside. The whole house is our dryer. This is accomplished with the centuries-proven clothesline over the heater. While the heater warms our home and dries our clothes, it also warms our water.

Water when warmed is lighter and rises just like warmed air. The water heaters (we have two 30-gallon ones) are 18 inches over the heater. We heat the water from below because the warmed water rises to the top of the water heater. The cooler, heavier water falls to the bottom to be warmed and rises to the top . . . all by itself. Naturally.

For summer cooling we employ similar cosmic laws. The summer sun always gets high in the sky. The roof has a two-foot overhang. This prevents the good rays from warming the blocks that would in turn warm the floor.

Paramount in summer is the R-30 insulation in the 2x12 roof rafters. R-30

is nine inches thick. A 2x12 is actually 11-1/2" tall. This leaves a 2-1/2" air space that rids the roof of the warmed air trapped between the R-30 and the roof itself. At the bottom and top of the roof is a 2-1/2" opening all the way across. The warmed air then rises up and out, all by itself. Naturally.

We use Georgia Power's electricity for lights, refrigeration, washing clothes and hot water (when the wood heater's off) and occasionally for ceiling fans. Our electric bill is usually \$21 to \$23 per month. Our home is at work . . . all day, every day. We rely on the time-proven natural laws of our universe.

We know that to rely on the utilities is to be short-sighted. We built our house to need the utility's over-priced juice as little as possible. Georgia Power spends \$9 billion of ratepayers' money on Plant



photos by Pete Sipp



Vogtle and makes nuclear waste. The gall!

Well, our response to that is that soon we'll be making our own hydro electricity . . . without a dam! The structure to hold the 14' diameter x 13' wide wheel is 95% complete. Miss Water Wheel will be 95% aluminum. (I refer to my structures as feminine because they are beautiful and I love them.) She'll turn at 1-3/4 rpm. I'll tell you the rest of the story when it's finished.

Trust me, it's taken 16 years to figure out all the many, many details. Just as sure as the sun's gravity is holding the planets in orbit, Georgia Power WILL be coming to take their meter away one day.

As to water — we are blessed with an artesian well. She gives us 15 gallons per minute of sparkling, cool, lip-smacking refreshment. We are 100% grid-free in the water department. This is accomplished using a hydraulic ram pump. Our pump is a real jewel. Been pumping since May o' '83. I put in a new check valve every once in awhile. This is all she requires. The pump pumps a little more than one-half gallon per minute. We built a 500-gallon, 100% stainless steel holding tank. Gravity (of course) brings our water inside the home. In less than 17 hours, Miss Water Tank is full. The pump never shuts off. Once the tank is full, we capture the overflow in two tanks, 200 and 110 gallons. This water is used for miscellaneous tasks. Once those are full, the overflow goes to the creek. Naturally!



Pete, our man on the grnat line

This is an overview of our home and a fraction of what takes place here. The biggest event is — we are connected to our environment. We've made it so we can use the natural laws. (Isn't that what they're for?)

The "normal" way to live is to work-consume-work-consume . . . and view the natural laws as, "oh, well, yeah, that's the way people used to do things." The electric company wants people to be disconnected and to rely on it instead. Humph! *`%#@! We can rely on them to make nuclear waste! They get an A+ there!

The only time there is waste from wind or hydro-generated electricity is when they're not used! In future issues of the GANESAYER, we'll get into the nuts and volts of becoming more connected. 'Til then let's affirm together: *I am solar powered. I am fueled by the same sun that drives our universe.*

Yours renewably,
Peter Ponder

HALLOWEEN PARTY

Halloween 1998 was a magical night and an unqualified success for GANE's treasury! The Force was definitely with us. It was a balmy, full-mooned Saturday night with two hot bands — **Francine Reed** and **League of Decency** — and an army of GANE volunteers coupled with a legion of Halloween revelers netted GANE a cool \$5,000!

Many thanks to **Patti Kunkle** who fielded more than a few curveballs in lining up the music. Blessings to the **Right Reverend Feelgood Woody Jones** for setting us up — the Full Moon Bar was pure genius!

But the deepest of bows to **John Rick** who not only loaned us his building, but threaded miles of red tape through several hoops to get us the Special Event Permit that secured the blessing of the City of Atlanta Police and Fire Departments.

A special hit of the party was Photo Guy **Tom Meyer** who set up shop and delighted our guests with artful documentation of their awesome costumes. Heartfelt thanks to all of you who worked so hard to make this GANE success happen: **Johnny Adams, Vanessa Stratadakis, Jim Kulstad, Elaine Widner, Linda Fleete, Edie Kelman, Rita Kilpatrick, Glenn Carroll, Doug Denton, Jennie Caine, Linda Jones, Bob Caine, Laura Ellis, Julia Brooks, Adrian Bernal, Judy Parady, Dennis Hoffarth, Ed Arnold, Betsy Rivard, Tom Stratton, David McBride, Tom Ferguson, Darlene Carra, Stephen Wing, Peter Paluch, Zack Harrison, Lynn Hart, Maya Petrovic and Holly.** It takes a village to raise a wad of money!



photos by Tom Meyer

RESEARCH EDITORS *Ann Mahoney
Glenn Carroll
David McBride
Patti Richardson*

*NYT = New York Times
AJC = Atlanta Journal & Constitution*

9/5/97 **HOT CRABS** Greenpeace finds crabs near French La Hague nuclear facility to be contaminated with more than twice the maximum European allowed radiation level. *AJC*

9/17/97 **WHITE COLLAR CRIME** Criminal charges against Northeast Utilities possible in regard to evidence of coverup of nuclear waste contamination at Haddam Neck facility, permanently closed last year for safety reasons. *NYT*

9/26/97 **WORKERS POISONED** Nuclear Regulatory Commission finds deliberate radiation poisoning of NIH workers with radioactive phosphorus but cannot find culprit. NRC absolves NIH of blame. *Science*

9/28/97 **EXPENSIVE WASTE** After failure of DOE program for industrial use of highly radioactive waste for sterilization in the wake of multi-million dollar radiation leak debacle in Atlanta, DOE ponders what to do with deadly material costing \$10 million a year in maintenance. Material now consolidated at Richland, Washington in most radioactive spot on planet where a human being would get a lethal dose of radiation in less than half a second. *NYT*

9/28/97 **HOT TOPIC** National Food Processors and American Meat Institute acknowledge that until consumers demand that their food be irradiated with radioactive nuclear waste material, their industries will treat the topic with care. *AJC*

9/29/97 **HANFORD NUCLEAR WEAPONS PLANT** Explosion in building used to prepare plutonium sends lid of big steel tank flying through roof, cracking airtight seal and releasing noxious cloud of chemicals into atmosphere. Broken water pipe washes radioactive material out of the building. *NYT*

9/30/97 **PHOTO OP** Records declassified by DOE as part of "openness initiative" begun by former Energy Secretary O'Leary show that Kodak threatened to sue when alpha radiation from atmospheric weapons tests led to alpha particle bombardment resulting in damage to their film. DOE began to warn Kodak about the radiation but did not warn the public against drinking radioactively contaminated milk. *NYT*

10/2/97 **NUKE WEBSITE** Cancer study released on 1950s nuclear testing. Web users can enter their date of birth and county at www.nci.nih.gov and get a predicted dose for each of the 90 bomb tests. Report called late and inadequate. *NYT*

11/16/97 **NUCLEAR WASTE APPEAL** Appeals court refuses to force Government to take shipments of nuclear waste piling up at nuclear plants. Utilities may now begin to fight for compensation. Utilities running out of space for nuclear waste at sites. DOE can't provide a solution. *NYT*

12/3/97 **CANDU CANNED** Canada sells their unique heavy water Candu reactors to China after seizing and shutting down seven of Canada's own Candu reactors for safety and management problems. Concerns raised that these reactors are hard to manage and allow relatively secret extraction of the plutonium of which they are vigorous producers. *NYT*

12/3/97 **HOT BEEF** FDA approves food irradiation for beef by the use of highly radioactive cobalt-60. Future industry use of the process in doubt due to expectations that consumers will be wary of irradiated food products. *AJC*

12/6/97 **ARMS REDUCTION** Yeltsin announces unilateral one-third cut in Russian nuclear arms. Declares Germany and Japan to be nuclear weapons states. *AJC*

12/7/97 **WIND POWER** Denmark wind generated electricity level rises to 6% making Denmark the highest per capita output of wind energy in the world. Europe's wind energy industry now employs 20,000 people. *NYT*

12/8/97 **HOT FOOD** Irradiation destroys elements of food value while destroying bacteria. Exposes workers to risk, costs more and is unnecessary. *NYT*

12/8/97 **US GOES ALL OUT** U.S. shifts "all out" nuclear war guidelines. Instead of dropping and launching unlimited numbers of thermonuclear weapons in the event of nuclear war, U.S. will limit use to 2,500 thermonuclear devices. *NYT*

12/11/97 **REACTORS SHUT** Northeast Utilities, forced to shut down three nuclear reactors in Connecticut, today was assessed the largest NRC fine in history of \$2.1 million for serious safety violations. *NYT*

12/15/97 **ARMED AND DANGEROUS** Approximately 7,500 thermonuclear weapons still on hair trigger alert in U.S. nuclear heartland in spite of cold war end. *NYT*

12/16/97 **SRS LAYOFFS** More layoffs at Savannah River Site expected. Employees and stake holders desirous of restart of weapons related programs in order to keep jobs. 10,000 out of 24,000 already laid off. *AJC*

12/28/97 **RADIOACTIVE RUSSIA** *Journal of Nature* reports Soviet nuclear weapons factory at Mayak to be the most contaminated place on Earth. Russian-Norwegian team finds that the plant released over five times the amount of radioactivity as all above ground atomic tests. *AJC*

12/30/97 **NUCLEAR CHINA** Russia signs multi-billion dollar deal to build a nuclear plant in eastern China. China plans to build 150 reactors over the next 40 years. *AJC*

1/4/98 **NUCLEAR POWER IS DEAD** Nuclear industry lobby NEI struggles but fails to bring any likelihood of a revival of nuclear power. Combined cycle plants beat nukes. *NYT*

1/7/98 **RADIOACTIVE GROUNDWATER** Traces of plutonium from an underground test blast 30 years ago in the Nevada desert migrated nearly a mile through groundwater. This finding contradicts predictions about the behavior of plutonium in the environment. The U.S. conducted 828 underground nuclear tests between 1956 and 1992. *AJC*

1/9/98 **DEPLETED URANIUM** Pentagon admits Gulf War weapons were toxic to our troops and that soldiers were not warned of the hazards of exposure to uranium particles from exploding uranium rounds in use by the U.S. *AJC*

1/16/98 **ZION SHUTDOWN** Commonwealth Edison closing two nuclear plants at Zion, Illinois. The case for closing rather than upgrading the plants was overwhelming due to safety problems. *AJC*

1/16/98 **BIG CHILL** Panel finds Hanford nuclear weapons plant has atmosphere of intimidation. Government employees who manage the most dangerous and polluted nuclear weapons plant in the country fear for their careers if they raise safety concerns. *NYT*

1/17/98 **DERELICT NUKES** Norway concerns deepen over scores of derelict Russian nuclear subs rusting half submerged in waters off the Kola peninsula. Most U.S. aid to remediate Russian sites has been spent on missiles. The peninsula is littered with over 100 subs. *AJC*

I WILL CHOOSE

*I will choose what enters me, what becomes flesh of my flesh.
Without choice, no politics, no ethics lives. I am not your cornfield,
not your uranium mine, not your calf for fattening, not your cow
for milking. You may not use me as your factory. Priests and
legislators do not hold shares in my womb or my mind.
This is my body. If I give it to you I want it back.
My life is a non-negotiable demand.*

Marge Piercy
from
RIGHT TO LIFE

1/22/98 ILLINOIS NUCLEAR WATCH Illinois nuclear plant added to NRC watch list giving Illinois the distinction of having nearly two-thirds of the nation's most troubled nuclear facilities. *AJC*

1/25/98 WIPP NEWS DOE publishes plans to start up military nuclear waste dumping in New Mexico salt caverns. 39 anti-nuclear groups seek imprisonment of Energy Secretary Peña and his deputies. *NYT*

2/3/98 BREEDER FAILURE Plagued by costs and mishaps the French Government announced the permanent closure of the Superphenix fast breeder reactor. *NYT*

2/4/98 SUPER COMPUTER Clinton visits Los Alamos nuclear weapons lab to promote computer-based nuclear weapons testing and development arguing its strategic advantage to the U.S. *NYT*

2/16/98 CANCER INCREASE Breast cancer near Chernobyl increased by 236 percent in 18 kilometer zone. *NYT*

2/21/98 NUKE WASTE PUZZLER After years of study the DOE does not know what to do with its 1.2 billion pound nuclear weapons waste by-product uranium hexafluoride. Kentucky Health Department asked, "Is there somebody we can sucker into this? Maybe somebody inside the Beltway - there isn't anybody out here." The UF6 is stored in 28,000 14 ton cylinders in a Paducah nuclear weapons plant. As the cylinders sink into the earth and rust through, toxic smoke leaks out. *NYT*

2/26/98 DEREGULATION DISINTEREST California consumers show little interest in deregulation in spite of a \$73 million advertising campaign. *NYT*

3/1/98 HOT WATER Scientist charges Brookhaven nuclear weapons lab with jeopardizing drinking water by spilling millions of gallons of water over radioactive hot spots near groundwater. *NYT*

3/7/98 CLINTON URGES SENATE ON CTB The Clinton Administration urged the Senate to approve a ban against all nuclear weapons tests or risk losing a role in prodding India, Pakistan and North Korea into signing the treaty. The appeal was aimed at Jesse Helms who has refused to let the vote out of his committee. The Comprehensive Test Ban treaty has been signed by 149 countries and ratified by 13. 44 nuclear countries have to ratify it. U.S. has not. *NYT* [GANE note: As we go to press, 41 countries have ratified the treaty, the U.S. has not. Helms is still holding it hostage.]

3/27/98 U.S. CONDUCTS NUCLEAR TEST DOE conducted a series of underground explosions involving plutonium. 225 pounds of high explosives blew up five packages of plutonium 960 feet below Los Alamos, NM. Because the blast was not thermonuclear, the U.S. claims it is not in violation of the Comprehensive Test Ban Treaty. *AJC*

3/29/98 RADON KILLER The National Research Council has published a report saying that radon exposure is a leading cause of lung cancer, causing 15,400 to 21,800 cases each year. Indoor radon is the second leading preventable cause of lung cancer after cigarette smoking. *AJC*

GANE LEADER CAROL STANGLER

was bid fond farewell by her extensive Atlanta community last September as she relocated to Asheville, NC. Carol served in GANE for more than 15 years. Arrested in an act of civil disobedience in a massive South Carolina demonstration against the opening of the Barnwell nuclear dump in the late '70s, she held an unflagging commitment to stand against the tide of the nuclear industry. In the wake of the Three Mile Island accident, the ranks of GANE

swelled and Carol organized the scores of volunteers with creativity and grace. Carol led the opposition to construction of Plant Vogtle and worked tirelessly to expose the extent of contamination at Savannah River Plant. Whether in the position of coordinator, or as a "regular" volunteer, she was always generous with her wisdom, her writing ability, and her spirit. Her testimony to various government bodies was always compelling, and the press loved her and her artistic, potent protest signs. GANE whole-heartedly supports Carol in her move to Asheville, where she is already immersed in a "kick-ass-phalt" fight against an environmentally destructive highway proposal. Her organizing talent and experience is proving of great value to folks in Asheville. Thanks, Carol!



Carol Stangler and Danny Feig-Sandoval, famous friends and "co-co's" (co-coordinators) of GANE.

4/4/98 CHINA BUYS SENSITIVE MISSILE KNOW-HOW A Federal grand jury is investigating whether U.S. companies Loral Space and Hughes Electronics' missile sales to China were legal. The space expertise significantly advanced China's missile program as the technology China acquired to put commercial satellites in orbit is similar to that which guides a long-range nuclear missile to its target. *NYT*

4/11/98 NRC IMPOSES PASS OR FAIL TEST FOR MILLSTONE Northeast Utilities is receiving especially stern treatment from the NRC after workers raised concerns about cooling pipes wrapped in duct tape, faulty gauges, torn filters and the mishandling of fuel rods. Complainants were demoted, transferred, or fired. The NRC ordered a corporate culture change. *NYT*

4/21/98 NO RATES FOR IDLE REACTOR Connecticut regulators recommended a rare penalty, that Northeast Utilities no longer charge customers for costs associated with the Millstone reactor that has been idle for two years. If passed, stockholders, not ratepayers, will have to pay for the management errors that caused regulators to keep the plant from producing power while safety problems were corrected. *NYT*

4/23/98 ROBOT TO MAP RUINED CHERNOBYL REACTOR Called the Holy Grail of environmental cleanup, NASA, DOE and robotics companies are working to design a \$2.7 million robot that can create a 3D map of the wreckage inside Chernobyl. A German-made robot only lasted seven minutes in the intensely radioactive atmosphere. The new robot, Pioneer, is hoped to last 41 days. The U.S., Canada, Britain, France, Italy, Germany and Japan — the Group of Seven economically powerful nations (G7) — agreed to spend \$380 million to shore up Chernobyl. The hastily built

sarcophagus is crumbling and according to one expert, "Doing nothing is not an option." If all or part of the tomb crumbles there will be another radioactive cloud dispersed across Europe. The robot, 56" h. x 30" w. x 46" long looks like a little army tank with arms and has eyes that can spot a cockroach from 15 feet. *USA Today*

4/23/98 SHARP RISE IN ILLNESS NEAR CHERNOBYL Ukrainians suffer almost four times more radiation-related diseases since the 1986 Chernobyl accident, said the Health Ministry. Children are the greatest sufferers, with five times the level of illnesses than recorded before the explosion. "Chernobyl will be with us forever," said Health Minister Andriy Serdyuk. "Our children will continue to be polluted by radiation." There are fears that radioactive water inside the reactor's steel and concrete tomb threatens the underground water table. Officials say the foundations of the reactor casing which holds tons of radioactive dust are crumbling. The death rate in 1997 among those who remained in contaminated zones was 18.27 percent higher than the national average. Thyroid cancers among children are 10 times the 1986 level. *NYT*

4/26/98 BELARUSSIANS PROTEST CHERNOBYL TREATMENT 7,000 Belarussian protesters rallied on the eve of the 12th anniversary of Chernobyl, demanding compensation for victims and permanent closure of the plant. Belarus claims that 2 million of its residents suffer from nuclear contamination from the world's worst nuclear accident. *AJC*

4/29/98 UKRAINE NEEDS HELP WITH CHERNOBYL SARCOPHAGUS The Ukraine launches a worldwide appeal for \$358 million to repair the tomb that shields the Chernobyl reactor which blew up 12 years ago. The cover has already started to crumble on the sarcophagus,

continued on next page

CHINESE NUMBERS

U.S. strategic nuclear weapons
capable of hitting China
7,200

Chinese strategic nuclear weapons
capable of hitting U.S.
20

Total U.S. nuclear weapons deployed,
in reserve, or waiting dismantlement
12,070

Total Chinese nuclear weapons
400

U.S. intercontinental ballistic missiles
(ICBMs)
550

Chinese ICBMs
18 - 24

U.S. long-range strategic bombers
174

Chinese long-range strategic bombers
0

U.S. ballistic missile submarines
18

Chinese ballistic missile submarines
1

U.S. Gross Domestic Product (GDP)
\$8.1 trillion
Chinese GDP
\$639 billion

U.S. military budget
\$270 billion
Chinese military budget
\$36.6 billion

U.S. aircraft carriers
11 (+1 being retrofitted)
Chinese aircraft carriers
0

Who threatens who? At this very moment, U.S. troops garrison South Korea and Japan, right on China's doorstep. U.S. battleships and submarines bearing nuclear weapons patrol the Pacific protecting Taiwan, a renegade province of China. China military vessels do not cruise the California coast or the Atlantic Ocean!

Former Secretary of Defense William Perry said recently, "If China is treated like an enemy it will become one."

Source: Council for a Livable World

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and if it falls it will be another disaster. Ukraine has already raised \$400 million. The 10-year job is estimated to cost \$758 million. *AJC*

4/30/98 IF RUSSIA ATTACKED New PSR study released analyzes possibility and consequences of an unauthorized nuclear attack from a Russian submarine. Study finds 12-missile attack would kill nearly seven million Americans and could be launched by a single political or military leader. Conspiracy on board a ship would only require the complicity of four officers. Study notes that about 40,000 U.S. military personnel were removed from nuclear weapons responsibilities from 1975 to 1990 for alcohol, drugs or psychiatric problems. *NYT*

5/3/98 CHERNOBYL RADIATION EVIDENT ON ALPS Campers, shepherds, park wardens, mushroom lovers and others who frequent the mountains could be at risk and should be warned according to the Center for Research and Independent Information on Radioactivity in Paris. The tests were performed on the French, Italian, Swiss and Austrian Alps in 1996 and 1997, more than 10 years after the world's worst nuclear accident. The Alps were particularly affected by the fallout because of their height and the trajectory of the toxic cloud from the explosion. *AJC*

5/5/98 DIRECTOR SACKED The director of Chernobyl was fired. He claims the firing was due to his expressing fears about the safety of the plant. *NYT*

5/6/98 CHERNOBYL MAY NOT SHUT IN 2000 In 1995 Ukraine vowed to close Chernobyl in return for \$3.1 billion from the "G-7," group of richest nations. The money was pledged to complete two new reactors to replace Chernobyl, but the group has reneged. The European Bank for Reconstruction and Development who was putting up the cash would rather see the Ukraine modernize its 14 oil- and coal-fired plants. But the bank agreed to provide \$50 million to strengthen the decaying concrete cap over the exploded reactor. *NYT*

5/6/98 NEW YORK NUKE WASTE CLEAN-UP Union Carbide processed uranium ore in the 1940s for the Manhattan Project. Wastes were taken to Ashland landfill in Tonawanda, NY, where DOE has spent more than a decade and several million dollars to determine that it could not find a cost-effective decision acceptable to the community. Of 170,000 cubic feet of contamination, 42,000 will be removed, which is not enough in the opinion of residents. The Army Corps of Engineers has taken over for the DOE. Meanwhile, residents are angry that Niagara Landfill which sits between Ashland 1 and 2 is not being addressed at all and is producing radon and methane which is vulnerable to explosion in the unvented BFI operated site. The Niagara site contains 117,000 cubic yards of soil with radium contamination. Prevailing winds carry radon to the City of Tonawanda. *Tonawanda Record-Advertiser*

5/13/98 WESTINGHOUSE FOR SALE? Westinghouse confirmed it was in negotiations to sell its nuclear and government contracting divisions but that talks were confidential. Sources told *The Columbia State* that one party

included French-owned Cogema and another party included British nuclear conglomerate BNFL. Westinghouse is attempting to shed its manufacturing and nuclear operations as well as its government and environmental services and transform into a media conglomerate since its purchase by CBS recently. There are national security concerns implied in foreign ownership of companies with nuclear weapons contracts in the U.S. *AJC*

5/17/98 NUCLEAR INDIA India conducted a series of underground tests near the Pakistan border. The explosions were measured at magnitude of up to 5.6 on the world's seismological network. *AJC*

5/24/98 RADIATION WARNING IN NEPAL Officials in Nepal warned that radiation, which may have leaked into the atmosphere during India's recent tests could reach the mountain kingdom. The atmosphere at the site of the Indian test shows traces of radiation. Precipitation will bring the radiated air mass down. *AJC*

5/28/98 VANDERBILT SETTLES RADIATION SUIT Vanderbilt offered \$10 million to settle a class-action lawsuit brought by pregnant women who were part of a 1940s Vanderbilt University nutrition study. 829 women unknowingly ingested radioactive iron. A follow-up study in the 1960s found four of their children died of childhood cancers. Another class-action suit against Vanderbilt is still pending. 188 elementary school children were given lemonade laced with radioactive iron to see how much iron they needed. Vanderbilt says it didn't know the radioactive iron posed a health risk. *AJC*

5/29/98 CLEANING UP Oak Ridge, Tennessee's huge, contaminated nuclear bomb factory space that dates back to the Manhattan Project is being leased to private enterprise under the name East Tennessee Technology Park. Several companies that have jumped on the bandwagon say they are "cleaning up" financially, leasing space for dirt cheap in exchange for decontaminating the space, and recycling any materials they can. DOE says it's lots cheaper than demolishing the site, never to be used again and besides there's a huge work force and a town that have been built just to service Oak Ridge, and it gives a legacy of gainful employment to the area. *NYT*

6/1/98 ISRAEL'S BOMB RILES NEIGHBORS Arab leaders have shared prevalent world opinion against India and Pakistan's nuclear tests. They call for attention to be focused on the danger of Israel's A-bomb program. Although Israel has never admitted it has nuclear weapons, experts estimate it has an arsenal of 200 devices. Not only does no other Arab nation have the bomb, but U.S. consistently looks the other way. *NYT*

6/9/98 WASHINGTON SUES DOE Washington Governor Gary Locke said they would take DOE to court to force the agency to honor a commitment to clean up the Hanford nuclear reservation. Leaking tanks containing radioactive waste are "a Chernobyl waiting to happen," said Locke. About 1,000,000 gallons of radioactive waste have leaked into the soil and aquifer and threaten the nearby Columbia River. *NYT*

6/13/98 CHERNOBYL SARCOPHAGUS RISK GROWS Ukrainian officials are warning that the concrete and steel building that was hastily erected following the explosion that ruined reactor 4 is rapidly deteriorating and the radioactive fuel inside could leak out. *AJC*

6/17/98 FUEL CELL POWER Breakthroughs are occurring with fuel cells which convert liquid fuel into electricity through a chemical reaction rather than combustion. The idea is over 100 years old, but fuel cells have become powerful, flexible and reliable, inspiring confidence they can be mass-produced and sold at reasonable cost. University students in California have built a street-ready car powered by a fuel cell. New Jersey has bought a fuel cell for traffic warning sign and a brick, ranch-style house in Latham, NY is receiving all its power from a fuel cell system. *NYT*

6/21/98 SEAFARING SENTRIES Deep-ocean trenches are being eyed as potential dumping grounds for nuclear wastes. Scientists have noted a common phosphorescent bacterium isolated from deep-sea fish reduces its glow when exposed to heavy metals, cobalt and other pollutants and may provide reliable monitoring of leaks. *AJC* [*GANE wants to know, how do you plug a leaking container in a deep-ocean trench?*]

6/21/98 FOR LEASE: NEVADA TEST SITE The Nevada Test Site, an area the size of Rhode Island, where nuclear weapons have been exploded for more than 50 years is "open for business" according to a DOE brochure. Following the 1992 moratorium on testing the site has seen personnel cut from 10,000 to 2,500 and has decided to transform parts of the base into a sort of business park. In an effort to generate money, terms like "commercial development" and "private investment" are replacing the old "kiloton yield." The only tenant so far is Fluid Tech, a radioactive clean up company. After building a facility in nearby Amargosa Valley, they were blocked from opening by local opposition. They have found a cozy home in an abandoned hangar where scientists tried to develop a nuclear-powered rocket in the '60s. The company said that even though they had avoided hassles by situating 15 miles inside the test site, the five-year lease cost "as much or more as in Las Vegas." One criteria for doing business on the test site is the creation of high technology jobs to employ laid-off test site workers. DOE has turned down a tennis-shoe manufacturer and a juvenile drug rehabilitation program. DOE has fielded a lot of interest from polluting industries who leave disappointed to find out that industries locating on the former test site will be subject to Nevada environmental regulations. *NYT*

6/23/98 RUSSIAN RENEGADE NUKE SALE Defying a global trend to vilify India for its recent nuclear tests, Russia closed a deal to sell two nuclear plants to India. The deal is worth \$3 billion to cash-starved Russia. The U.S. tried to head off the sale even before India exploded the bombs. *NYT*

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UNDERSTANDING LEAKED NUCLEAR WEAPONS SECRETS

Vf China already has the bomb, how bad can it be if they learn our recipes?

For many, H-bomb development in the U.S. seems to be a thing of the past. We are told that the only work that is being done is to make the weapons safer and sure-fire. "Stewardship" is a common term that is used to describe what the weapons developers have been up to in the wake of the Cold War.

Well, they've been up to quite a bit. Amazingly enough most of the work is out in the open where interested members of the public can read about it. Most all weapons sites have web-sites and big initiatives are usually reported in major newspapers.

But back to the original question. If the Chinese have an H-bomb what else can they learn from intelligence gathered on "stewardship"? Well, let's look at one simple aspect of what we like to call H-bomb maintenance. This is the aggressive development of a new generation of ultralight, ground-penetrating thermonuclear bombs.

So, it turns out that maintenance is actually a program to develop new weapons. These weapons pack the same devastating power but weigh only the merest fraction of their predecessors. The new bombs weigh only 750 pounds as compared to thousands of pounds the old bombs weighed. The developers have compared this redesign to replacing the carburetor on an old car and not of any real import. Are we laypeople being silly to worry about how much easier it is to deliver 750 pounds as opposed to nearly 10,000 pounds?

The other insidious aspect is that the new bombs are ground-penetrating and thus more "usable." The old bombs would burst above ground so the attacker was at risk of fallout from his own weapon. The ground-penetrating bombs are more destructive locally with less atmospheric spread of fallout.

— DAVID McBRIDE

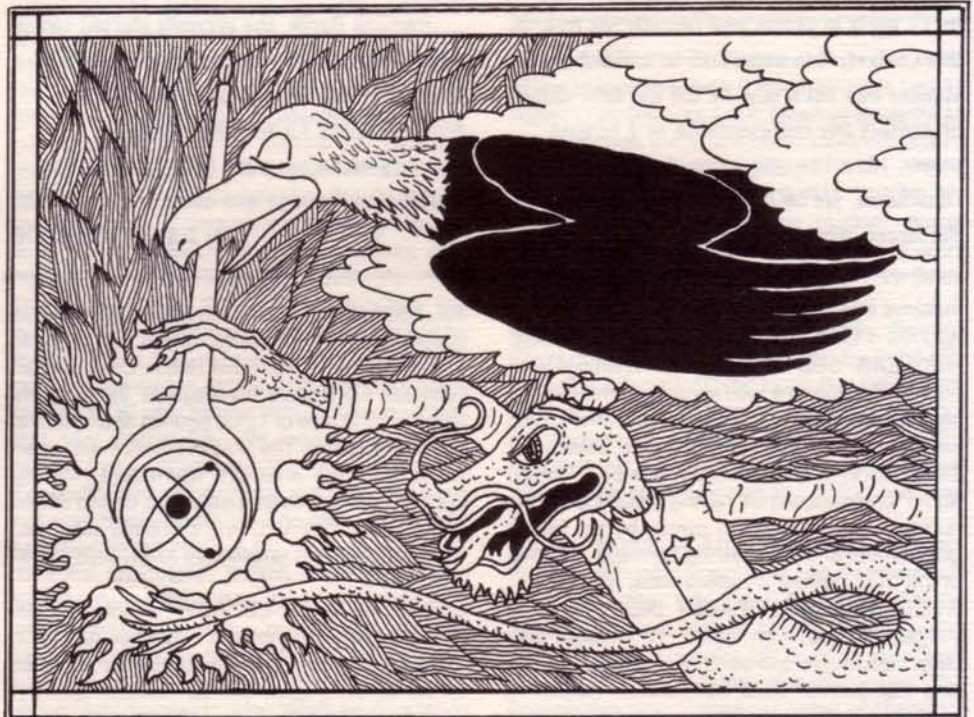


Illustration by Jack Weyler

JD Weyler-99

The Case of Mordechai Vanunu

About 13 years ago, Mordechai Vanunu revealed to the LONDON SUNDAY TIMES details of Israeli clandestine nuclear installation at Dimona, where he had worked for nine years. Subsequently, he was kidnapped by Israeli agents, convicted of treason and sentenced for 18 years in the prison Ashkelon in Israel.

Only last year, after 11 years, was he allowed to move from solitary confinement to a group cell. A member of the Knesset, the Israeli parliament, explained that this decision was based on the fact that Vanunu did not pose a threat to Israel's security. At the same time, however, Vanunu's appeal of the parole denial was rejected last January by an Israeli court, with the justification that he still remained a risk.

For Vanunu, it means not only that he remains in prison, his mail is still being censored, visits are restricted to members of his family, he is denied many privileges accorded to murderers and rapists. The contrast to the routine practice in Israel of granting parole to most prisoners after they had completed two-thirds of their sentences is striking. Take the case of Shimon Levinson, a KGB agent, who was convicted for spying on Israel's nuclear weapons program, sentenced to 12 years in prison and recently set free. In this context, it is important to remember that Vanunu was not a spy; he did not take money or contact any representative of a foreign power. His crime was a non-violent act of conscience, yet he has been demonized by the Israeli media.

Vanunu can only rely on unorganized, diversified international moral support. Amnesty International sent an action appeal in November last year, urging the respondents to contact Israeli officials and send copies of their letters to the members of Congress. A letter, initiated by Rep. Lynn Rivers of Michigan and backed by Vanunu's adoptive parents, was signed on March 18 by 36 members of Congress (almost three times the number of those who issued a similar appeal two years ago). President Clinton replied to the demand to intercede with Israel for Vanunu by confirming he would continue to raise the issue.

A possibility (nevertheless, neither advocated by all Vanunu supporters, nor by Vanunu himself) would be a swap involving Vanunu and Jonathan Pollard, who spied for Israel as a Pentagon analyst and is now serving a life sentence in a Federal prison in North Carolina. Benjamin Netanyahu, the former Israeli Prime Minister, strongly insisted that Pollard be set free. However, the bias against Pollard is so strong that some Congress members refused to sign the letter asking President Clinton for support for Vanunu, believing it involved advocating the swap.

Perhaps Barak, the recently elected Israeli Prime Minister, will be more interested in a solution of the Vanunu case. Meanwhile, demonstrations for the anniversary of Vanunu's kidnapping are being planned for Washington, London and other world capitals.

— DAVID McBRIDE

Several kilograms of deadly plutonium particles are scattered in the sediment of the lagoons at Mururoa and Fangataufa atolls from French atmospheric explosions. *AJC*

7/7/98 TMI FOR SALE Three Mile Island owners pulling weeds and planting flowers in the hope of selling aging reactor as residents laugh. The decision to attempt a sale comes after a year of nearly a quarter million dollars of NRC fines for a string of violations. *NYT*

7/7/98 20-YEAR LICENSE EXTENSION SOUGHT FOR OCONEE PLANT IN SC Duke Power filed an application to extend the life of nuclear plant Oconee on Georgia's border. The NRC license case is unprecedented and utilities, environmentalists and consumers all have a stake in the outcome. Duke has filed and begun the three-year process well before its 40-year license expires in 2013. In 1995 seven workers were injured, some seriously, when a steam line ruptured. In 1990, a line became disconnected from a reactor head and radioactive water leaked but was kept and treated in the containment building. *NYT* [*GANES notes: We remember the 1990 accident — it happened the weekend following Thanksgiving, the notorious "Turkey Dinner Effect." On Sunday night on the late news it was reported that the contaminated water would be released into Lake Keowee early Monday morning. GANE and NIRS both contacted the NRC Region II staff begging them to slow down and asking what the level of radiation was in the water. The NRC said they didn't know yet, they would monitor the water as it entered the lake(!) and that the containment building had worked and contained the water, but they couldn't continue operations until they cleared out the water. So much for safety systems. By the way, Oconee is the closest nuclear plant to Atlanta.*]

7/12/98 POST-NUCLEAR PAIN The 25-year-old nuclear plant Maine Yankee, long one of the most divisive issues in Maine, survived three referendums on closing it over the years. Ultimately it was stopped by economics. Plagued with safety concerns, it could no longer operate competitively. The plant provided 96% of the taxes for the little village of Wiscasset, a town of 3,500. Maine Yankee's work force of 480 has been reduced to 166 who are maintaining the plant and preparing it for decommissioning. One former worker with 27 years experience was offered a job at Millstone which was restarting after a two-year shutdown, but declined saying it was "out of the frying pan into the fire. Nuclear power is dead, has been dead for a long time, the public doesn't realize it." Now the community faces its high-level radioactive waste inventory. *NYT*

7/13/98 COLD WAR COST \$5.5 TRILLION Brookings Institute published a study on U.S. spending for the nuclear arms race from 1940 to 1996. The \$5.5 trillion figure is roughly equal to the combined 1997 revenue of all Fortune 500 companies. Divided equally among all of today's Americans the figure amounts to \$22,000 per person. Bombs were only 7% of the total cost. Bombers and delivery systems made up the far greater share of the cost, the latest of which is the B-2 bomber, racking up 55% of the obscene

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6/27/98 CBS SELLS WESTINGHOUSE NUCLEAR CBS is selling its Westinghouse nuclear division to a joint venture formed by the Morrison Knudsen Corporation and BNFL who will pay \$238 million and assume liability for \$950 million in debt. Concern has been raised about foreign countries having influence on the nuclear industry. BNFL is owned by the British government and has cleanup contracts with five of the DOE nuclear weapons sites. *NYT*

6/28/98 URANIUM DEALER DIES Alexander Pregel, Russian-born dealer in uranium and other radioactive elements died at age 91. He and his brother were middle-men marketing radium and uranium. Their company supplied Fermi and Szilard with the uranium ore for their early experiments. They supplied the uranium to

the Manhattan Project. General Groves was suspicious of their Russian origins and dropped their contracts. In 1950 the House Un-American Activities Committee investigated the brothers about a 1943 sale of 1,000 pounds of uranium to the Soviet Union. The brothers contended afterwards that "the shipment was made with the approval of the Government of the United States and Canada." In 1957 the company was convicted of exposing employees to excessive radiation. *NYT*

6/28/98 NUCLEAR LEGACY The International Atomic Energy Agency has confirmed fears that the area surrounding France's nuclear test sites in the South Pacific will be contaminated for centuries. The report was released two years after the last French test and the day after the French officially ended its testing program.

price tag. Ultimately the U.S. made more than 70,000 nuclear bombs in contrast with expert estimates that fewer than 1,000 were needed to protect against the Soviet threat. The study found that if the money had not been spent on nuclear weapons programs it still was unlikely it would have gone to schools, roads, or medical research. Rather, the money would probably have been directed to other weapons projects that would produce jobs in the congressional districts of vote-seeking lawmakers. *U.S. News & World Report*

7/18/98 NRC CRITICIZED Utilities are criticizing NRC rule systems that do not in their opinion contribute to safety, leading a movement in Congress to cut NRC staff by 700. Full Senate committee bars effort. *NYT*

7/26/98 WIPP IN FEDERAL COURT The effort to clear the way to dump plutonium contaminated waste in New Mexico salt beds is tied up in Federal court. *NYT*

8/1/98 IBM SELLS VITAL WEAPONS TECHNOLOGY IBM pleaded guilty to 17 counts of felony export control violations and will pay \$8.5 million in fines for selling advanced computers to Russian nuclear weapons developers. *NYT*

9/2/98 DUMP PROTESTED DOE is pushing efforts to dump nuclear waste on the poor Hispanic community of Sierra Blanca in west Texas amid protests. *NYT*

9/4/98 OAK RIDGE PLAYGROUND CONTAMINATED Soil samples taken where playing children complained of breathing problems found traces of highly enriched uranium near Oak Ridge bomb factory. DOE says not to worry. *NYT*

9/6/98 RADIOACTIVE PLANTS British Nuclear Fuels Ltd. (BNFL) is researching soil decontamination through cultivation of dwarf sunflowers, spinach, sugar beet and Indian mustard which may draw contaminants from the soil more cheaply than other clean-up methods. *AJC*

10/2/98 "SUBCRITICAL" TEST Under criticism from Japan and Greenpeace, the U.S. conducted a nuclear blast in Nevada. *AJC*

12/3/98 GEORGIA VET TESTIFIES Gulf War Veteran former Sgt. 1st Class Carol Picou of Toccoa, Georgia testified before a gathering of 600 Iraqi scientists and doctors. Picou related having suffered brain damage and neurological disorders following her service as an Army nurse and truck driver. The meeting intended to explore the claim that depleted uranium exposure is responsible for the high incidence of cancer among civilians in southern Iraq. Depleted uranium is a hard metal cladding on shells and bombs designed to penetrate tank armor. On impact a poisonous airborne dust is created. More than 100,000 of the 700,000 U.S. troops who fought in the Gulf War have complained of service-related illnesses. *AJC*

12/98 BOMB MAKER TURNED PEACE MAKER DIES Leonard Rieser, a physicist who helped usher in the nuclear age with the Manhattan Project and then crusaded to curb the arsenals it spawned died at age 76 of cancer. He chaired the Bulletin of the Atomic Scientists from 1985 until he retired in June 1998. Witness to the first atomic explosion, Dr. Rieser was seen in many news photographs

setting the "Doomsday Clock" that dramatized the threat of nuclear annihilation. In June he advanced the clock to only nine minutes to midnight in response to nuclear tests in India and Pakistan and warned of perilous times. *NYT*

12/9/98 NUCLEAR INDUSTRY ADS LIE The Better Business Bureau told the nuclear industry to change ads that falsely claimed that nuclear reactors make power without polluting or damaging the environment. The bureau cited that nuclear fuel is made by using electricity produced by coal plants, that reactors kill fish by sucking them in with cooling water and by dumping scalding water back into lakes and rivers, and that nuclear waste poses a health threat. *NYT*

12/9/98 AUSTRALIA REJECTS WORLD'S NUCLEAR WASTE Robert Galucci, adviser to Clinton, told BBC News that Australia's geography and political stability make it ideal for storing the world's n-waste. Australia's Industry and Resources Minister said, in effect, "Nuclear Waste? No Thanks!" *NYT*

12/15/98 N-WASTE REPORT CONTAINS CONTRADICTIONS After 15 years and \$6 billion of research, DOE released its first detailed analysis on Yucca Mountain, Nevada, where it would like to bury high-level nuclear waste for eternity. DOE's report concludes that the site appears suitable although within the report are findings that water has moved through the desert mountain faster than expected and that the peak period of radioactive releases will be after man-made features, like the corrosion-resistant canisters, will be reliable. Independent reviewers brought in by DOE said Yucca Mountain, now one of the driest places on earth, may no longer be a desert in 2,000 years. *NYT*

12/15/98 DOE CREATES FUND FOR ECO GROUPS DOE promised to establish a \$6.25 million fund for environmental groups, community organizations and Indian tribes to spend on technical and scientific analyses of DOE clean-up work at nuclear sites and to create an Internet database about radioactive and chemical contamination there. Groups that have opposed DOE for more than a decade will qualify to apply for funds. Counsel for the DOE confessed that DOE has trouble keeping track of what it knows about its sprawling complex. *NYT*

12/23/98 CIVILIAN POWER PLANT TO PRODUCE H-BOMB GAS DOE selected two nuclear power plants in Tennessee to provide tritium, a move that violates a decades-old U.S. policy of not mixing atoms for peace with atoms for war. DOE will contract with TVA to use Watts Bar near Spring City, TN, and Sequoyah, 11 miles from Chattanooga as a back-up. Feasibility and safety tests at Watts Bar have not even been completed. The plan must still be reviewed by the NRC. *AJC*

12/31/98 NUCLEAR BOMB PHYSICIST R.E. SCHREIBER PASSES Dr. Raemer E. Schreiber who helped usher in the nuclear age with the Manhattan Project died 12/24/98. He was the key person for assembly of Fat Man, the bomb dropped on Nagasaki. After WWII he decided to continue working at Los Alamos because of the heady atmosphere there. He was leader of the team that developed the first H-bomb called



MARIANNE BOND WEBSTER 1946 - 1998

We mourn the passing of a great lady,
a great activist,
and a lovely friend to GANE.

WAND has created a fund
for the continuation of Marianne's work.

To support

MARIANNE'S FUND

make check payable to

Atlanta Women's Foundation

and send to

MARIANNE'S FUND

Atlanta Women's Foundation

The Hurt Building

Suite 401

Atlanta, GA 30303

Mike exploded in 1952 on Eniwetok. The width of the Mike's stem was 8 miles wide, its top, 27 miles. The blast was 1,000 times as powerful as the Hiroshima bomb and would have obliterated all New York City's five boroughs. *NYT*

1/8/99 INPO REQUIRED TO PAY TAXES BY COBB COUNTY Institute of Nuclear Power Operations which is headquartered in a 12-story glass and marble building it built at Cobb County's posh Galleria mall applied for a \$1 million tax refund as a tax-exempt charity. Georgia Court of Appeals upheld decisions by Cobb officials and a Superior Court judge that INPO's primary purpose is to benefit, not the public, but the owners of nuclear power plants. INPO's beneficiaries are 100 member power companies whose profits exceed \$12 billion per year. *AJC*

1/29/99 NUKE PLANT FOR SALE Niagara Mohawk is hoping to sell Nine Mile Point nuclear plant on Lake Erie near Syracuse, NY, to Amergen, a joint venture of PECO Energy and British Energy. The price will likely be much less than the \$1.5 billion listed value of the plant. The prospective sale caused the value of Niagara's stock to rise. *NYT*

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THE CHAIN

For 15-thousand years
the plutonium
in the smoke detector
lay in the Woodstock dump

till the day
the grade-blader scraped it out
& smashed it to chiplets
the chipmunk pulled
to the pouch of his cheeks

& during
the next 200
years

it caused
6 cancers

in a skunk
a crow a deer
a dog a dog
and Johnny McQuaife

— Ed Sanders

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1/31/99 RUSSIAN REPORTER OF NUCLEAR WASTE DUMPING JAILED Capt. Grigory Pasko has spent 14 months in jail for documenting and reporting dumping of military waste at sea for *Boyevaya Vakhta (Battle Watch)*, newspaper of Russia's Pacific Fleet. The Russian Navy was dumping weapons and nuclear waste at sea. As a freelancer he also sold his stories to Japanese TV. Pasko's lawyers suspect that his arrest may have less to do with exposing the Russian environmental scandal than inquiring into the alleged theft by local officials of Japanese aid for processing radioactive waste. Currently he is being held in solitary confinement. *NYT*

2/5/99 CDC REPORT FINDS HIGHER LEVEL OF RADIATION RELEASES FROM SRS The 1,400-page draft of CDC's Dose Reconstruction Project finds about 57,000 curies of radioactive iodine-131 were released in early days of plutonium production at SRS, compared with previous estimate of only 2,500 curies. *AJC*

2/5/99 RUSSIAN SUPREME COURT HEARS NIKITIN CASE Retired Russian Navy Captain Aleksandr Nikitin was arrested three years ago

after helping document submarine accidents, radioactive storage sites, ocean dumping of nuclear waste and other environmental abuses of the Russian military. The Russian Supreme Court sent the case back to security services in St. Petersburg for further investigation. The case has had a chilling effect on the Russian will to investigate the military's handling of nuclear waste. His lawyers are afraid that the case of Aleksandr Nikitin will be buried in red tape. Nikitin has attracted the support of Vice President Gore and Secretary of State Albright who have protested the case to Russian authorities. *NYT*

2/7/99 RESIDENTS SICK AFTER PLANE CRASH A cover-up is alleged in the crash of an Israeli Boeing 747 cargo plane in a low-income housing project in Amsterdam. 1,100 residents have reported unexplained illnesses including sleeplessness and fatigue, pain in their joints and respiratory problems. Area physicians link the symptoms to chemical or radiation exposure. Medical and other specialists are stressing the dangers of depleted uranium used as ballast in the plane's tail. During cleanup, 300 pounds of depleted uranium was never accounted for and may have burned. Lab tests found high uranium content in some victims including one woman who helped crash victims and has mysterious black scars on her neck and legs as if cigarettes were stubbed out on her skin. *NYT*

2/10/99 JAPAN BUSTS HITACHI EXEC Former senior managing director for a Hitachi affiliate was arrested for selling telecomparators to China by way of South Korea. Telecomparators are measuring devices that are accurate to less than two-thousandths of a millimeter. The equipment is used in nuclear weapons manufacture. *NYT*

2/11/99 A-BOMB OPPONENT LONG DIES AT 88 Cornell Professor Emeritus Franklin A. Long died. A chemist by training, he advised Eisenhower and Kennedy. His nomination to director of the National Science Foundation ran afoul of Nixon's White House because of Dr. Long's opposition to its anti-ballistic missile project. Dr. Long argued that ABM would create "strong pressure toward acceleration of the arms race." Dr. Long's case alarmed other scientists that the government only wanted to hear from advisers who agreed with its policies. He served on the boards of The Bulletin of Atomic Scientists, Albert Einstein Peace Prize Foundation and the Fund for Peace. He was also active in the international Pugwash movement of scientists concerned about the world's war arsenals. *NYT*

2/25/99 FEDS MAKE ANOTHER NUKE WASTE PLAN DOE proposes to take title to spent nuclear fuel stored at reactor sites and pay for storage at the sites using nuclear waste fund monies collected by utilities. DOE has missed its deadline for taking the waste from the sites because it has been unable to open its planned site in Yucca Mountain, NV. The utilities want the fuel moved but DOE is only offering to perhaps buy plots of land where waste is stored so utilities can terminate their ownership. *NYT*

3/99 COOL BEER This could be the reason you've been looking for to increase your beer consumption: a Colorado brewery, the New

Belgium Brewing Company of Fort Collins, announced its commitment to become the largest private purchaser of wind power in the U.S. The brewery will purchase all of the power from a 660 kw wind turbine being constructed near its plant. Although the brewery will pay a premium for the wind power, the issue was put to a vote of its 70-person staff. The staff voted unanimously to go with wind, even though it could mean somewhat smaller staff bonuses. *NIRS Monitor*

3/6/99 REACTOR FOR SALE Boston Edison put the Pilgrim Nuclear Plant in Plymouth, MA, up for sale last summer, saying if a buyer could not be found they would have to shut and decommission the plant. For Plymouth, population 50,000, the shutdown of the plant which employs 670 would have been a serious economic blow. Entergy placed the winning bid of a mere \$80 million. Industry analysts say Entergy got a real bargain. Of the \$80 million, \$67 million was for nuclear fuel, only \$13 million was paid for the plant which has a book value of \$700 million. A trust fund of \$466 million towards the cost of decommissioning will also pass to Entergy. This is the second sale of a nuclear plant in the U.S. but experts predict that within a decade all of the country's 103 operating nukes will be in the hands of a few companies. *NYT*

3/7/99 NUCLEAR INDUSTRY EXTINCTION IN SIGHT The nuclear industry appears to have peaked in terms of the number of working reactors and their share of power generated nationally. No new reactors are being built and the last ordered were three Palo Verde units in Arizona in 1978. One thing that has changed is the level of secrecy, today anyone can log on to NRC's web site and see detailed specifications for each reactor (www.nrc.gov/AEOD/pib/pib.html). The real reactor killer is thought to be deregulation in the utility industry. *NYT*

3/24/99 BUSINESS LEADERS CHALLENGE PENTAGON BUDGET Reacting to a Pentagon budget increase request of \$10 billion per year, business leaders including Ted Turner of Time Warner, Inc.; Laura Scher of Working Assets; Paul Newman, Newman's Own; Ben Cohen, Ben & Jerry's; and Frank A. Butler of Eastman Kodak took out a full-page ad in the *New York Times* to expose obscenities of Pentagon spending. The ad states that the Pentagon cannot account for \$43 billion that was misplaced in the last 10 years. The U.S. and its allies spend five times as much on the military as the entire rest of the world. Senior military advisors agreed that we can cut the Pentagon budget by \$40 billion per year and still have the strongest military force in the world. \$40 billion per year can provide: 425,000 teachers; HeadStart for 971,000 kids; health insurance for 11 million children. *NYT*

3/26/99 DESERT GRAVE AWAITS NUCLEAR WASTE After \$2 billion and 25 years of environmental studies, political protests and legal challenges the Waste Isolation Pilot Plant (WIPP) near Carlsbad, NM, will receive its first waste shipment from Los Alamos. Barrels of plutonium waste are to be placed in chambers carved from an ancient salt bed nearly half a mile below ground. Over the next 35 years 40,000 truck-

loads of waste are planned to be taken to the plant. So far the only A-bomb plants authorized to send waste to WIPP are in western states. The site has been controversial since it was proposed in 1974. Opponents of the dump call for waste to be stored above ground at the generating sites in a retrievable state in hopes that effective technologies may yet be developed. The waste is mostly items contaminated with plutonium and soils and sludges from earlier disposal efforts. The State Environment Department of New Mexico has not issued legal permits. The issue is still under litigation and New Mexico predicts that DOE will have to take the waste back to Los Alamos. WIPP is the first deep geologic site to operate anywhere in the world. *NYT*

3/27/99 NUCLEAR WASTE SHIPPED TO NEW MEXICO After 25 years of lawsuits, studies and protests, WIPP received its first truckload of nuclear waste from Los Alamos. The plant is 25 miles from Carlsbad, NM. *AJC*

3/27/99 TRITIUM STUDY FOR GEORGIA CONTAMINATION NEVER COMPLETED During a DOE pitch to the Georgia legislature of their plans to produce MOX fuel it was revealed that the 1991 study commissioned by Gov. Zell Miller to find the extent of groundwater contamination in Georgia from decades of tritium production at Savannah River Plant was canceled by DOE before completion. Rep. Nan Orrock asks, "How on earth can we contemplate expanding the mission and continuing to generate nuclear waste? . . . It's like sticking our heads in the sand." *Creative Loafing*

3/28/99 THREE MILE ISLAND SOLD AmerGen, a joint venture of PECO and British Energy, has agreed to buy the Three Mile Island nuclear facility for \$100 million. It is the first time a nuclear plant has changed hands in the U.S. but it is not expected to be the last. The current owner, GPU Inc., is getting out of the power generating business in light of deregulation and intends to seize opportunities in energy transmission, sales and service. Three Mile Island was shut until 1985 after Unit 2's hydrogen explosion and radioactive contamination of the Susquehanna River in 1979. GPU was forced to buy power from other utilities which sent rates for its customers skyrocketing. Shareholders were not paid dividends for several years and stock dropped from \$18 to \$3.50 per share. *AJC*

4/4/99 PROPOSED NUKE DUMP DEAD! The Mojave Desert's Ward Valley in southern California, 18 miles from the Colorado River, was selected by U.S. Ecology to build a low-level radioactive dump. Former California Governor Pete Wilson supported the plan in the face of relentless opposition from environmentalists who predicted radiation would migrate to the river. Interior Secretary Bruce Babbitt challenged the legality of a land transfer that gave U.S. Ecology access to the site, and a Federal judge upheld Babbitt's position. U.S. Ecology says it will not appeal the decision and that "Ward Valley is dead." *NYT*

4/7/99 WESTINGHOUSE (CBS) AND FLUOR DANIEL RIP-OFF FEDS Two Federal contractors involved in environmental clean-up at Hanford in Washington used a computerized

K.Z. MORGAN — Life Linked to Nuclear Age

KARL Z. MORGAN, a founder of the field of health physics, and a long-time friend of GANE died June 8, 1999, in Oak Ridge, Tennessee, at age 91.

Dr. Morgan participated with Enrico Fermi and other physicists in the Manhattan Project that developed the world's first atomic bomb. After joining the project in Chicago in 1943 he was sent to then-secret Oak Ridge where the uranium was processed for the Hiroshima and Nagasaki bombs.

After World War II he remained for 29 years at the plant and was director of health physics there until he retired.

Dr. Morgan founded the Health Physics Society and was its first president from 1955 to 1957. He also founded the JOURNAL OF THE HEALTH PHYSICS SOCIETY and was its first editor, serving from 1958 to 1977.

Dr. Morgan is counted as one of six persons who developed and established the new science of health physics. In 1955, Dr. Morgan believed that the nuclear age was here to stay and that its future rested on successful control of radiation exposure. He called for understanding the consequences of radiation exposure and controlling it in order to reap the benefits of the new age.

After decades as a pillar of the nuclear establishment, Dr. Morgan began to testify

on behalf of people who had been harmed by nuclear weapons and the nuclear power industry. In 1982, he testified in a lawsuit brought by 1,200 people accusing the U.S. of causing leukemia and other cancers

through negligence in atomic weapons testing in Nevada in the 1950s. Dr. Morgan testified the radiation protection measures in the tests were sub-standard and "not in the spirit" of what was known at the time about the health hazards of radiation. He said the Atomic Energy



Agency regulations had been set using manipulated data to support the conclusions they wanted to reach.

Dr. Morgan testified on behalf of Navajo uranium miners and their survivors, saying regulators had failed to protect the miners from known radiation dangers. Dr. Morgan testified in the case of Karen Silkwood against Kerr-McGee, as well.

Dr. Morgan was influential in the campaign for a 1968 law that regulated medical X-rays.

His autobiography, THE ANGRY GENIE: ONE MAN'S WALK THROUGH THE NUCLEAR AGE, by Ken M. Peterson was published earlier this year by the University of Oklahoma Press.

Thank you, K.Z. Morgan. You lived well.

— Glenn Carroll
Source: New York Times

accounting scheme to overbill DOE by at least \$85 million over the last 12 years. Area residents have been concerned about how much of their cleanup dollars go to the contractor's overhead and called the recent discovery "obscene." The U.S. General Accounting Office identified DOE in 1990 as "a high-risk area vulnerable to waste, fraud, abuse and mismanagement," citing DOE's "history of weak oversight of contractors." A-bomb materials production at Hanford stopped in 1987 and most of the work since then has been cleanup, with a budget exceeding \$1.4 billion a year. *NYT*

4/8/99 NEW PROJECT AT BROOKHAVEN DISTURBS LONG ISLAND NEIGHBORS Brookhaven National Laboratory on Long Island, NY, which released a tritium plume that has traveled over a mile through groundwater from the test reactor, has a new mission. A \$600 million ion collider is being used to answer esoteric questions about the origin of the universe. Island residents have lost confidence in the laboratory which they blame for a cluster of 19 young neighbor children with an extremely rare form of cancer. Having been assured all along

continued on next page

AUNTIE NUKE SCOREBOARD

MILLSTONE 1 Connecticut	SHUTDOWN!
ZION 1 AND ZION 2 Chicago, Illinois	SHUTDOWN!
BIG ROCK POINT Michigan	SHUTDOWN!
MAINE YANKEE	SHUTDOWN!
HADDAM NECK Connecticut	SHUTDOWN!
OYSTER CREEK New Jersey	SHUTDOWN!
COLD WAR PRICE	\$5.5 TRILLION!
WARD VALLEY NUKE DUMP	DEAD!

contractor, and looking for another direction. The process is called in-tank precipitation and was a step in processing 35 million gallons of high-level radioactive liquid at Savannah River Site into glass logs for storage. Begun in 1983, the process produced large amounts of explosive benzene gas. *AJC*

6/17/99 **NEW DOE SECURITY CZAR** General Habiger has been retained to "rebuild the entire department's security and cybersecurity apparatus" following an intelligence report that said DOE has a "culture of arrogance" and is "incapable of reforming itself" when it comes to security. In response to the recent Chinese spy scandal, the report recommends an autonomous agency within DOE to deal with nuclear weapons programs. Secretary of Energy Bill Richardson said it was "not good logic" to insulate the defense programs. *AJC*

6/23/99 **REPUBLICANS PUSH FOR DOE RESTRUCTURE** "The nuclear weapons complex needs to be rescued from the Energy Department," said Republican Senator Shelby. The recently published Rudman report recommends overhauling DOE for security lapses, a bloated bureaucracy and lack of accountability. Nuclear Control Institute points out that DOE is already too arrogant and too autonomous and that a new agency would make them even more insular. *AJC*

6/23/99 **GENIUS GRANT** A MacArthur Foundation grant of \$350,000 has been awarded to Bruce G. Blair, 51, of Washington. Blair is a foreign policy analyst specializing in ways to reduce nuclear risks. *AJC*

7/7/99 **GULAG ON-LINE** Russian whistleblower Grigory Pasko, thrown into Russian prison for exposing Russian nuclear waste dumping at sea, has put his experiences and struggle to keep his sanity in the squalid, disease-infested Vladivostok jail on-line. You can visit the website at <http://www.polit.ru/index-dossier/mayday/> (see 1/31/99 for background on Pasko). *NYT*

7/8/99 **NUKES Y2K COMPLIANT?** The NRC announced that computers controlling safety systems at 103 U.S. nuclear plants are free of Y2K problems. 35 nuclear plants still have work to do on other computers that control power generation or administrative work. The NRC said plants that could not prove by October 1 that all software modifications were running smoothly would be forced to shut down. *NYT*

7/9/99 **CHINESE SPY FALLOUT** Energy Secretary Bill Richardson has bowed to congressional pressure and a rumored signal from the White House in the wake of the Chinese spy scandal and agreed to the creation of a semiautonomous agency to oversee DOE's nuclear weapons work. *AJC*

7/11/99 **PLUTONIUM ROCKET RETURNS** The controversial Cassini launch with 72 pounds of plutonium on board has successfully rounded Venus twice and is scheduled to make its fly-by of Earth August 15 in a slingshot maneuver that will send the probe to Saturn. The Venus flybys were as calculated. All of Earth hopes that the Earth flyby will go as planned. *AJC*

continued from previous page

that there was no risk to residents from the lab, residents are loathe to embrace a mysterious project which has no other purpose than to amuse scientists. *NYT*

4/19/99 **CARIBBEAN UNITY** An annual summit of Caribbean countries signed a declaration which, among other things such as promoting tourism, condemned the transport of nuclear waste shipments through the Caribbean. *NYT*

4/24/99 **MISSING PLUTONIUM** More than a third of the plutonium pumped into the Irish Sea from England's Sellafield nuclear plant over the last 40 years is missing. Inhaling a tiny speck of plutonium is enough to trigger cancer, so scientists are alarmed and anxious to explain the absence of 160 pounds that they expected to find in sea sediments. Environmentalists are concerned that tides washed the plutonium dust to shore where it dried, blew inland and is evidenced in the cancer and birth defect clusters along the Irish Sea's coastline. *AJC*

4/28/99 **JUDGE BARS RESTART OF MILLSTONE REACTOR** A Connecticut judge barred the restart of the Millstone 2 nuclear reactor on Long Island Sound one day before the generator was to resume power operations for the first time in three years. Environmentalists have brought a lawsuit contending that the reactors would devastate the local flounder and fish population which is drawn into the giant water intake pipes used to cool steam from the plant. The lawsuit claims that the number of breeding

female flounder in the Niantic River near the plant has been reduced from 200,000 in 1981 to 4,000 in 1993. Robert F. Kennedy, Jr., a lawyer for Riverkeeper pointed out that a fisherman catching an undersized flounder out of season would be fined \$250 per fish and that the law should be applied to Millstone. Millstone does not have cooling towers which would prevent the problem. A cooling tower would cost \$80 million to build. Millstone 2 sits between Millstone 1 which is decommissioning and Millstone 3 which has added a ladder and sluiceway to assist fish in getting out of the screens and back into the river. *NYT*

5/12/99 **FEDS PREEMPT TRIBAL RIGHTS** The U.S. Supreme Court decided that Federal courts have jurisdiction over nuclear-related claims, not tribes. The decision involves uranium mining on the Navajo Nation. El Paso Natural Gas and Cyprus Minerals, who were being sued by individuals over sickness and death caused to their family members, claimed they were covered by the 1988 Price Anderson Act which limits liability of companies involved in the nuclear industry. The Navajo Nation sees this as the latest in a trend of the Supreme Court to reverse 100 years of tradition regarding Indian law. *Navajo-Hopi Observer*

6/3/99 **NUCLEAR WASTE SET-BACK AT SRS** After spending \$500 million DOE has admitted that an important step in nuclear waste disposal is not working and should have been abandoned years ago. It is firing Westinghouse, the

Cesium-137 Released in Spanish Steel Mill Accident

In May 1998, high measurements of radioactive cesium-137 activated alarm systems in France, Switzerland, Italy, Austria and Germany. A cesium-137 plume was said to have caused "the highest nuclear contamination on the continent since the Chernobyl disaster in 1986." France measured levels 2,400 times higher than normal which prompted a health scare in Switzerland. Similar rises were registered in Bulgaria, the Czech Republic and Greece.

The May 25 accident was not made public until June 11 when the Spanish Nuclear Security Council reported a "small accident" had taken place at the Acerinox steel mill and smelter in Algeciras, southeast of Gibraltar. The company admitted no negligence. The scrap metal was screened for radiation but the apparatus containing the cesium-137 was shielded, so did not show up. Acerinox uses scrap metal from the Netherlands, the U.S., Canada, the U.K. and Germany.

Although the accident occurred May 25, it was June 9 before Acerinox operators disclosed that there were high radiation levels in the furnace and fly ash. That was the first time a connection was made between the surge of cesium contamination across Europe and the steel mill. Since the company smelted the cesium-137 unknowingly, workers wore no protective gear to shield themselves. It was not until June 15 that the contaminated parts of the factory were sealed off and personnel who might have been exposed underwent radiation checks.

So, for nearly three weeks, employees, visitors, and delivery personnel were exposed to contaminated personnel, factory equipment, buildings, and ash hauling equipment. It is likely that workers contaminated their homes and families.

As if things weren't bad enough, the cesium-137 contaminated two processing facilities to which Acerinox sends its waste ash. The two factories, in Huelva and Badajoz were irradiated to the same extent as the Acerinox plant. The two contaminated factories were shut down and access to irradiated areas was forbidden, but not before one of the trucks used to haul the ash was heavily contaminated and contaminated ash mixed with a concrete-like substance was spread in a wetlands area of Spain.

In the Chernobyl accident, between 4.5 billion and 9 billion curies of fallout was spewed across Europe and around the world. Cesium-137 was one of the extremely toxic poisons in the cloud and is hazardous for 300 years. Cesium-137 mimics potassium, a primary cellular building block in Earth-life, and thus poses a particular threat since it is readily taken up and retained in cells causing eventual cancers in its victims.

The source of the cesium-137 that was smelted is still a mystery. The Spanish Minister of Industry and Energy publicly speculated that the likely source of the cesium-137 was medical X-ray equipment. Spain's Nuclear Security Council later declared that scenario

"impossible." The French daily *Le Figaro* said, "This small cloud of cesium announces a tempest — the poorly managed proliferation of small nuclear doses."

Georgia emergency radiation personnel have been wrestling for the past year with army surplus vehicles containing radium gauges turning up in scrap yards, with or without accidental releases. Meanwhile, GANE has been contacted by the Nuclear Regulatory Commission

and invited to participate in the creation of a law that would allow for radioactively contaminated scrap metal to be released for recycling. Looks like they're trying to resurrect BRC (Below Regulatory Concern). Several years

ago, GANE members told the NRC unequivocally that such a concept was abhorrent and would result in unacceptable injuries and deaths. It is inconceivable that we will ever back down from that position — **NO RECYCLING OF RADIOACTIVE MATERIALS.**

Although we were unsuccessful in passing local legislation that prohibited radioactive substances in local landfills, two Georgia communities, Decatur and Athens, have in the meantime declared themselves nuclear free zones.

— Glenn Carroll

Sources: *Nukewatch Pathfinder*, *NYT*, *AJ*



YES! I'd rather be active than radioactive!

I am a "Georgian Against Nuclear Energy."

I support the goals of phasing out the use of nuclear energy as soon as possible, optimizing the use of energy conservation and renewable energy, and opposing the use and manufacture of nuclear weapons.

SIGNATURE _____

DATE _____

NAME _____

ADDRESS _____

CITY _____

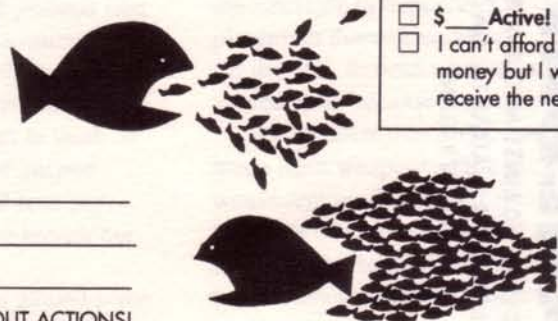
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PLUTONIUM CHALLENGE

continued from page one

MOX fuel factory while sending years of U.S. non-proliferation efforts down the drain . . . and that even DOE says MOX is not cost-competitive with other plutonium disposition concepts, haven't stopped Goliath.

But we may!

As I looked around at the people who sacrificed their Saturday to work on the anti-MOX campaign, I realized that I was in league with the Davids of this world, people who do have lives, and use them for life-affirming work. And sometimes we win!

While Goliath has been conducting its stealth campaign, public awareness of the MOX issue has been rapidly increasing as a result of a global effort to bring the issue to light (Russians are opposed to MOX, too). GANE, along with a coalition of groups working on MOX, hosted a Congressional briefing in Washington in January, which was reported on the front page of ENERGY DAILY. Not a bad start for David!

Georgia's Environmental Protection Division is well aware of the situation and filed strong comments responding to DOE's Environmental Impact Statement. EPD representatives have been sympathetic and supportive of the environmental viewpoint in several meetings. Experience with tritium contamination and safety attitudes at SRS over the years has fostered in EPD a pronounced skepticism toward DOE schemes and assurances.

DOE will be stymied in any MOX effort if there are no reactors to use MOX

fuel. A shareholder's initiative opposing the use of MOX received significant support at the Duke Power board meeting in April. Duke Power now faces resistance to using its McGuire reactors in North Carolina and Catawba reactors in South Carolina for MOX.

South Carolina State Senator Phil Leventis held an unprecedented hearing on MOX in June posing several very pointed questions to DOE, Duke Power and Cogema representatives. Goliath was concerned enough to fly in three Cogema representatives from Paris! Concerned citizens had to be turned away from the standing-room-only event. Senator Leventis tirelessly moderated over five hours of testimony and questions from the packed house.

Georgia State Representative Nan Orrock, National Chair of WAND's Women's Legislative Lobby, has made the MOX issue a focus of several committee meetings and is preparing a report for Governor Barnes. Barnes has a strong environmental record from his years in the legislature and inherits a unique banner which was unfurled by Governor Jimmy Carter and has been flown by every governor since. It has been Georgia policy for nearly a generation now to oppose new manufacturing missions at Savannah River Site until the ability to contain radionuclides from the environmental is demonstrated. Many of you will remember Governor Miller's effective stand against a new tritium reactor a few years back.

One of the most powerful forces that drives decisions at SRS is jobs. The jobs

that GANE supports for the area are for environmental restoration and nuclear waste management. There is evidence of tritium contamination in Georgia's groundwater. There are still 35 million gallons of high level nuclear waste that must be contained and the program to do that recently suffered a serious setback. We call on Governor Barnes to use the power of his office to protect Georgia's environment and to influence the direction that SRS takes.

Please "do the David thing" and write or call Governor Roy Barnes about the MOX issue. MOX places Georgia's environment at risk, while accomplishing nothing for the urgent global problem of nuclear waste. SRS has the skilled, experienced work force to face the plutonium challenge, to develop technology that contains plutonium from the environment and future generations. Let's support them on a mission that promotes peace and environmental health for us and for future generations.

— Joan O. King

GANE members owning stock in Duke Power or Virginia Power are encouraged to call Joan for information on how you can help, 706-878-3459.

The Honorable Roy Barnes
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State Capitol
Atlanta, GA 30334
404-656-1776
e-mail: www.ganet.org
click on Governor Barnes

Glenn Carroll contributed to this article

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