Newsletter for GANE — Georgians Against Nuclear Energy

Spring/Summer 1992

Truth on Trial in Georgia

or a week in March 1992, the National Labor Relations Board heard testimony between Allen Mosbaugh and Georgia Power Company.

Allen Mosbaugh, formerly third-highest manager of Plant Vogtle was fired by Georgia Power in October 1990 after blowing the whistle on safety concerns at the nuclear plant.

At issue with the Labor Department is whether Mr. Mosbaugh was fired legally or not. For almost a year Mr. Mosbaugh worked within "the system" at Vogtle from his position of command to address and correct unsafe procedures at the nuclear plant. As his efforts were thwarted and ran into deadends, it began to look to him as if the safety violations were deliberate and ordered from a level above him. He began using concealed tape recorders to gather evidence. During the period that he was taping, Georgia Power's cavalier attitude towards safety actually put the plant within five hours of a meltdown.

Mr. Mosbaugh testified that before he began the secretive taping, he checked extensively for state or federal laws or any company policy which would prohibit such activity. Finding none, his concern for the public health and safety led him to gather evidence that the Nuclear Regulatory Commission would find convincing enough to intervene—since Mosbaugh's power as a manager it was obvious to him was not enough to change Georgia Power's course at Vogtle.

Georgia Power for its part produced no evidence that the taping, the reason they give for terminating Mosbaugh, is against any law. The whole thrust of their argument is that secretive taping is against the rules of polite society and an invasion of Mosbaugh's co-workers' privacy.

How close are you to Nuclear Plant Vogtle?

Georgia Power has never heard some of the 276 tapes which Mosbaugh ended up giving to the NRC. The NRC has been conducting extensive investigations at Vogtle since September 1990 and has already cited and fined Georgia Power for numerous violations.

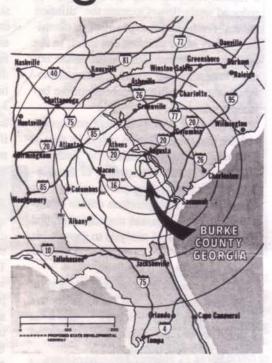
So — while Mr. Mosbaugh has sacrificed his job and possibly his career in an effort to protect the public from Georgia Power's careless attitude towards safety, and Georgia Power argues endlessly that his concerns have no basis and he was rude to tape his colleagues — the NRC continues its investigation of Plant Vogtle.

MOSBAUGH TESTIFIES

Mr. Mosbaugh did not put his job on the line lightly. Although the Labor Department will not rule on the validity of his concerns (that is for the NRC to deal with) the technical safety issues figured heavily into Mr. Mosbaugh's testimony.

From October 1989 until May 1990 Allen Mosbaugh reported directly to the plant's general manager, George Bockhold. It is during this time that Mr. Mosbaugh began to see risk-taking behavior in the company's policy decisions.

Mosbaugh expressed particular concern for strict observance of "reportability" requirements, a variety of requirements specified by the NRC in the Code of Federal Regulations for reporting events related to plant safety. Requirements set up by the NRC were being violated because



Burke County Chamber of Commerce

decisions were made to "stay on schedule" as opposed to safety. The reportability reports are analyzed in Washington. "If a plant is making lots and lots of these reports that plant may be viewed as a problem. If it is not making any of these reports, it might more be considered to be a better, well run plant," Mosbaugh observed.

Mosbaugh served as assistant plant support manager for Vogtle. He also served as vice-chairman on Vogtle's Plant Review Board (PRB). The PRB was established to review issues arising at the plant and to advise the general manager on all matters related to nuclear safety. It was in this position that Mosbaugh first became aware of an incident that should have been, but was not, reported to the NRC. The incident

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Truth on Trial

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occurred in October 1988 and had to do with certain dilution valves that had been opened during the "mid-loop" of a nuclear refueling.

At mid-loop, the fission control rods are fully employed in shutting down the reactor and the reactor coolant is reduced to one-third its normal level in the reactor vessel. At this critical time borated water is used for the coolant. Since boron prevents a fission reaction it compensates for the reduced water flow. Opening the "dilution valves" for the addition of any other chemicals or any other purpose can result in the addition of demineralized water to the borated coolant in the vessel, thereby diminishing the controlling capability of the borated coolant.

Technical Specifications (tech specs) require that these dilution valves be shut at all times during the "mid-loop" interval. Mosbaugh stated that opening of the dilution valves in mid-loop put the plant in an "unanalyzed" and therefore unsafe condition. The Westinghouse manual contained no formal technical analysis to show what reactions would occur within the reactor vessel under these conditions.

"... I continued to gather the facts on what had happened, and so I got control logs and shift supervisor logs... and what I found out is these valves had been opened on four different occasions.

"The first two occasions that they had been opened on, the reactor coolant system was not technically at mid-loop. On the second two occasions that they had been opened, the reactor coolant system was at mid-loop as indicated by the log entries in the main control room log," Mosbaugh testified.

At about this time, Mosbaugh heard rumors that the operations staff had refused to open the dilution valves during the interval in issue, that they had been overruled by their management, Skip Kitchens, and that Mr. Kitchens had opened the valves himself. Mosbaugh now believed that Skip Kitchens had deliberately violated the tech spec in October 1988 and was faced with the knowledge that this constituted criminal conduct.

Mosbaugh was flabbergasted. In 20 years working in the nuclear power industry he had never encountered a willful vio-

lation of tech specs. Not only that, but Georgia Power did not report the violation to the NRC, thus breaking another law. It was his attempts to deal with this violation that aroused his suspicions that these decisions were deliberate and from a very high level of management.

After several weeks deliberation Mosbaugh stepped into the unknown and became a whistleblower. He mailed a detailed, anonymous report of his concerns to the NRC, even using gloves to ensure that the tip-off would not be traced back to him.

The NRC responded with a prompt onsite investigation of the October 1988 valve incident, questioning people at the plant and gathering relevant documents. It was in the succeeding weeks that Mosbaugh would decide to begin tape recording conversations on the job at Plant Vogtle. Mosbaugh was appalled to hear a licensed supervisor suggest intentional violations of tech specs if necessary to conclude a refueling outage more promptly. He ended up filing two additional anonymous charges with the NRC concerning safety violations by Plant Vogtle management.

When a near-meltdown occurred, again during refueling, in March 1990, Mosbaugh stepped up his clandestine investigation. This accident is the now-notorious incident when a fuel truck backed into a switch-yard power pole and Unit I lost all power to its safety systems for almost 45 minutes. Not only did the incident reinforce to Mr. Mosbaugh that the company held unhealthy attitudes towards safety, but in the NRCutility dialogue that always ensues from a serious incident at a nuclear plant, he witnessed high officials falsifying information about the reliability of the back-up power systems at the plant. At the time he was still on the Policy Review Board (PRB) at the plant, and he was able to alert his Board colleagues to the error. They drafted an accurate report, which was pre-empted by top-level Georgia Power officials.

Mosbaugh felt it was time to file his first whistleblower compaint with the Department of Labor when he was removed from the PRB in June 1990. A week later he also signed a confidential agreement with the NRC. He still continued with his secret audio tape recording activities, not even telling the NRC.

Always given high marks in his performance reviews — he received the first average rating of his career. Mosbaugh was more certain than ever that he was suspected of having gone to the NRC and was subjected to overt hostility and suspicion from his superiors. They talked frequently of a lack of teamwork and communication, and suggested he was the cause of inharmony between the department staff managers.

In August 1990, Mosbaugh's position in the company was downgraded, in September he was barred from the worksite and finally in October 1990 he was fired. During the 18 months since Mosbaugh was fired from Vogtle he has endured three bouts with Georgia Power over his labor case. The first two were decided in his favor and this hearing was prompted by Georgia Power's appeal to administrative court.

He has also entered a 2.206 "show cause" petition with the NRC. A "show cause" petition puts Georgia Power in the position of defending their license to operate a nuclear plant given the many allegations of wrongdoing. Meanwhile, the NRC continues to investigate the safety violations using Mr. Mosbaugh's taped evidence. Georgia is very fortunate to have a dangerous nuclear threat come under close scrutiny and has Allen Mosbaugh to thank for taking personal risk to make it happen.

- Glenn Carroll and Steve Watkins EPILOGUE-Since this issue of the GAIN-SAYER has been held up so long, this case has had some major developments. Administrative Judge Robert Glennon issued his final order on the labor hearing against Allen Mosbaugh. In a dreadful precedent, he says that Mosbaugh went too far in his taping activities. The basis of the decision as given in the judge's order is a sequence of events which is inconsistent with the record. Mr. Mosbaugh is appealing this latest decision with the new Secretary of Labor. We trust Judge Glennon is enjoying his new appointment in Florida. It is our hope that Mr. Mosbaugh will see justice prevail in this case and we express our appreciation that he has persisted in bringing these important issues to light.

On the NRC side where the investigation of allegations of criminal misconduct by managers of Vogtle and Southern Nuclear Operating Company is conducted — the NRC has completed its investigation and passed the case on to the U.S. Department of Justice where a grand jury is investigating for possible prosecution of crimes against the safety of people in Georgia.

OYSTERS & LAWMAKERS

Coalition of Georgia Activists and Groups Goes to the Gold Dome

he 1992 Georgia General Assembly legislative session found Georgia activists gathered be neath an open and long-held GANE umbrella in alliance with policy makers to oppose the restart of a nuclear reactor.

Fending off the Department of Energy's reign of control over operations at Savannah River Site has taken up much of Georgia activists' time and resources. The harrowing insidiousness of DOE's restarting a 37-year-old embrittled and leaking K reactor sparked activist ire when the Christmastime tritium leak from a broken heat exchanger in K's cooling system dumped 150 gallons of heavily tritiated water into the river.

Grassroots organizers set out to send a lasting message to DOE with the idea of getting policy makers involved. They figured a damaged oyster crop would push the right buttons.

Meanwhile the tritium leak caused water supply shutdowns in the Savannah River and Dixie Crystals had to ship water in for several days. Other companies like Savannah Foods and Fiji Oil were forced to shutdown production lines. Some smaller businesses (see related article) such as Teeple's Seafood Restaurant have yet to recover from customers' inquiries into the fresh oysters they're serving. Customers ask whether the oyster glow or if they're safe to eat. Even though the water in Savannah is back to normal, background and suspected further pollution from SRS nuclear weapons production wastes is worrisome, and legislators are speaking out loud and clear.

The entire Savannah delegation (three senators and seven house members) of the Georgia General Assembly signed on to support a joint resolution to encourage U.S. congressional members to oppose restart activities of the K reactor. Throughout the legislative session, these legislators worked closely with a newly formed coalition to lobby for passage of the resolution.

SAVANNAH GEORGIA The highlight of the citizen lobbying effort was affectionately called "The Oyster Campaign." GANE sponsored Oyster Day

in which many activ-

ists from groups all over the state gave cans of smoked oysters designated as "Tritium Free" with day-glo happy face labels to each senator and representative urging their support of the Senate and House resolutions.

The resolutions urged "... the Congress of the United States to oppose the restart of the K reactor at Savannah River Site until risks associated with the restart are shown to be necessary; to support the immediate commencement of decontamination, and restoration, of the SRS and environs, including the Savannah River ... " The resolution was revived from many efforts to have it "killed" but still never got to a vote. For three weeks a house subcommittee on Industry and Tourism held the resolution while waiting for DOE's materials in opposition. On the 38th day of the 40-day session, these materials were waved in the air by Augusta's Senators Charles Walker and Frank Albert. DOE says it doesn't lobby so we have to guess that this is their effort to provide our legislators with important educational materials.

The momentum of the coalition formed to work the issue at the General Assembly has propelled the effort towards Washington. Savannah's continued anger is being vented by their legislators and has broadened to take on Complex 21 as the effort to continue nuclear weapons production at SRS into the 21st century is called. Governor Miller and Savannah's legislators wrote letters to DOE Secretary James D. Watkins calling for the immediate halting of efforts to restart the K reactor and any future plans to continue nuclear weapons production at SRS, calling instead for responsible action from DOE to restore the environment. These letters were hand-carried to Washington, D.C. at the end of March and copies were delivered to Senators Nunn and Fowler as well as Representatives Lindsey Thomas and Ben Jones.

The point in this issue that seems to get the most mileage with policy makers has been the poor diversity-sapping economics of at least 17 DOE managed nuclear weapons production facilities across the coun-

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Teeple's Seafood Speaks Out about Living with the Bomb Plant

"I've known about the bomb plant all my life. I've known that it's dangerous but I haven't spent time worrying about it because I run a restaurant and my main concern is cooking and getting the meals out."

This is Mildred Hill's statement. She and her family own and operate a seafood market and restaurant in Thunderbolt, Georgia on the Wilmington River. Their growth has been gradual over the three and a half year period to the present - they now harvest their own crabs, oysters and shrimp. Their company, Teeples Seafood, has the only license in Chatham County to harvest oysters. Their volume has grown to 20 bushels a day and they sell and use all of it through their market and restaurant. New Year's Eve brings in the largest return of the season. So much so that an extra amount of oysters is ordered from a retailer in Texas. When the Department of Natural Resources came late Monday afternoon, the 30th of December, to tell Mildred that she could not harvest any more oysters from her beds because of the tritium leak from the Savannah River Plant, it was too late for her to add to her order from Texas.

"They asked me to voluntarily close my bed. But it was obvious that I had no choice. That two and a half weeks of closing the beds has been devastating to our business. We're still trying to recover."

Mildred's brother called the Savannah River plant and talked to their lawyer about



compensation for their lost business. "You get a lawyer. We don't want to talk to you directly" was their response.

Mildred now says, "I've not been active (in the environmental movement), but I've been thinking about nuclear energy for awhile. Now with the news media here and gone, I need to pick up the pieces and keep on with my business. I'm still going to pursue some settlement with the Savannah River Plant through my lawyer."

Teeples Seafood is but one of the many businesses affected by the tritium leak from the Savannah River Site. This is what our tax dollars are paying for. How many more accidents can we tolerate? How many more leaks into the river and our atmosphere before we acknowledge that enough is enough? Become pro-active — write your representatives both on the state and national levels. Tell them what you think and what you want! — Patti Richardson

OYSTERS & LAWMAKERS

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try. The point of the socio-economics argument is that the economic impacts of operating SRS must be realized to encompass the risks posed to public health and safety, environmental devastation and the hidden costs of continuing the Manhattan Project at SRS into the '90s. And the conclusion of that argument is to open up jobs and new construction opportunities as well as research in waste management and environmental restoration of this region.

One year ago the Augusta delegation won favorable comments on SRS from the General Assembly. This legislative session, the newly allied coalition came extremely close to convincing the Georgia State House and Senate to ratify resolutions opposing the restart and supporting immediate decontamination and environmental restoration at the site. This newly formed alliance between GANE, Georgia and South Carolina peace and environmental advocacy groups, and policy makers and industry has been a successful measure of the power of the people.

To learn more about the newly formed Savannah River Alliance and planned activities to define the SRS mission as one dedicated to energy research, waste management and environmental recovery call Laura Ludwick (404/942-0466) or Ed Arnold at Physicians for Social Responsibility (404/378-9078). —Laura Ludwick

GANE thanks these groups and legislators for their great work on the SRS issue: Athens Peace Coalition, Atlanta Greens,

Citizens for Environmental Justice, Clergy and Laity Concerned, Coastal Citizens for a Clean Environment, Episcopal Diocese, Georgia Environmental Organization, Glynn County Environmental Coalition, Greenpeace International, Physicians for Social Responsibility, SANE/Freeze, Sierra Club, Trident to Life Campaign, 20/20 Vision, Union of Concerned Scientists, Unitarian Universalist Peace Network, Women's Action for New Directions. The senators: Tom Coleman, Roy Allen, Joe Hammill (sponsor), Earl Echols Jr., Terrell Starr. The representatives: Tom Bordeaux (sponsor), John Merritt, DeWayne Hamilton, Jack Kingston, Anne Mueller, Dorothy Pelote, Sonny Dixon, Cynthia McKinney, Doug Teper, Roger Byrd.

4 GAINSAYER

A K-REACTOR CHRISTMASTIME STORY

Nutcracker Suite

When he took office in 1989, Department of Energy Secretary James Watkins placed restart of the K as one of his primary goals. In December of 1991 after years of delay and billions of dollars on repair and retraining, Watkins announced that the K would once again produce tritium, the radioactive hydrogen trigger for our nation's nuclear warheads.

Within days the safety rods failed, a thumbnail-sized nut dropped into the reactor core, and sometime over Christmas, 150 gallons of radioactive tritium spilled into the Savannah River.

The warnings were there. Watkins himself admitted to "serious flaws in management," to the "...fragility of the antique reactors" and to "insufficient scientific information." The Ahearne report, drawn from a panel of experts outside DOE, expressed grave reservations about any DOE reactor restart, but Watkins was not going to accept any more delay.

Westinghouse, the contractor at the SRS plant, was also anxious to begin restart. Despite a "readiness rep" by the Defense Nuclear Facilities Safety Board citing a long list of unsolved safety problems, Westinghouse General Manager Paul Rice said his operators were prepared to handle any problem that might occur. The radioactive spill, when it did occur, went unnoticed for over two days.

As 6000 curies of radioactive tritium drifted downstream, Beaufort and Jasper counties shut off their water intakes, food processing plants downstream were shut, and the oyster industry was told to close at the height of its season. So far none of these people have been compensated for lost business. The DOE says of those people, "they over-reacted."

Just how dangerous was the radioactive water that floated down the Savannah River and is still sloshing somewhere along the Georgia/Carolina coast? Tritium is a form of hydrogen. It emits beta particles, tiny nuclear bullets that can damage or kill living cells. It combines readily with water and can be taken into the body. What does it do in the body? Where does it go? What does it leave behind? This is one of those sensitive areas where we have "insufficient scientific information."

When talking about radioactivity the DOE measures exposure against things like diagnostic x-rays, increased background radiation received on transcontinental airline flights, or a walk in the sun. The DOE says "no problem" — but we know x-rays are dangerous, that's why the x-ray technician uses a lead shield. We've discovered that stewardesses on intercontinental flights have a higher than average rate of spontaneous abortion. Skin cancer is on the rise. No form of radioactivity is without risk.

The public is being forced to take the DOE's idea of risk, a risk that is essentially unknown. The public, when it has a chance to speak out as it did in Aiken, South Carolina the week before the restart, is almost unanimously opposed to this kind of human experimentation. The cold war is over. Thousands of weapons are being dis-

mantled, providing large quantities of recyclable tritium. There is no foreseeable need for more tritium in the next 10 to 15 years. Secretary Watkins' single-minded military approach to DOE policy jeopardizes not only our health and safety, but our democratic way of life as well. - Joan O. King The K reactor is still being worked on with the goal to restart it over a year after this tragic spill. Our public involvement is still needed to return us to policies that make rational sense. Maybe next Christmas we can relax and listen to the Nutcracker Suite without wondering how many nuts are cracked that hold together the K reactor, and how many cracked nuts are setting insane, suicidal policies on weapons production.Write Senator Nunn for help: 303 Dirksen Senate Office Building, Washington, DC 20510. 202/224-0072.

PEACE IN ACTION

Has the time come to put an end to the nuclear testing nemesis, once and for all? Let's hope so. Such sentiment has been growing worldwide, as is reflected on several recent events on the anti-nuclear front.

The European Peace Pilgrimage, a group of Europeans from the Netherlands, Germany, England and Belgium are in the process of walking 2700 miles across America, from St. Marys, Georgia, to the Nevada Test Site, where nuclear weapons are tested. Along the way they hope to meet with local people, raising awareness of the abusive treatment of Native Americans, the theft of Western Shoshone lands for the test site itself, the threat to world peace posed by the U.S. weapons testing program and a host of other environmental issues. The Pilgrimage passed through Atlanta on March 23rd and expects to reach the test site on October 12, 1992 - Columbus Day.

Also in Nevada, the West Coast activist group The Hundredth Monkey organized an eight-day event in April to demand an end to nuclear testing. On April 10 people gathered for a festival of music, international speakers and communing then walked five days through the desert to the test site, for a non-violent action. And, of course, Hundredth Monkey founder Rick



Springer surprised everyone, including the Hundreth Monkey when, after a demonstration in front of the Las Vegas DOE office he walked over to the International Media and Broadcasting honor banquet to share the stage in a glass crashing entrance with former president Reagan. The next day it became obvious why Rick had made such a dramatic statement. The DOE had once again raped our indigenous peoples land with yet another underground nuclear

Reprinted from Atlanta Journal/Constitution

- Kevin Murray

NUKE



NOTES

12/12/91: Nuclear plant technician drunk on the job: A group that opposes the Pilgrim nuclear plant in Massachusetts says that the recent discovery that a worker was drunk at his post indicates that random testing is not sufficient to ensure plant safety. Boston Edison spokeswoman Elaine Robinson said it was the first positive result in 1,849 random screenings.

1/6/92: A group of firms have signed an accord to build the world's first commercial-scale wave power generating station on the Shetland Islands north of Scotland. Wave power exploits the flow of water, unlike tidal power, which captures energy from the rise and fall of the sea. The plan is to funnel waves through narrowing concrete channels, up over a concrete wall into a reservoir above mean sea level. Power is generated as the water returns to the sea through a turbine generator.

1/11/92: SOUTH CAROLINA: A small amount of radioactive tritium has contaminated groundwater in an area of Barnwell County that was not believed to have been, vulnerable to such pollution. It was detected two months ago in groundwater beneath the Chem-Nuclear Services Inc. landfill and has raised concerns because it may indicate the movement of groundwater is not as well as understood as believed.

1/17/92: ATLANTA: Hal and Cherry Clements Honored During King Week: Mr. Clements is a retired principal and his wife is a retired teacher. Together they have directed their energies toward nuclear disarmament and environmental issues, including Habitat for Humanity and the homeless. "I firmly believe my life has been extended and enriched by serving others," says Mr. Clements, who is in his 70s.

1/17/92: The U.S. Department of Energy has added five more names to its list of jurisdictions willing to consider siting a \$1.5 billion temporary storage facility for civilian nuclear power plant waste. Now on the list are Tremont County, Wyoming and four Indian tribes — the Sac and Fox Nations of Oklahoma, the Chickasaw Nation of Oklahoma, the Prairie Island Indian Community of Minnesota and Washington State's Yakima Nation. Grant County, ND and New Mexico's Mescalero Apaches already have Phase I grants.

1/23/92: DAWSONVILLE, GA: A special task force of nuclear experts reported that low levels of radiation in two areas of 10,000-acre Dawson Forest Wildlife Management Area near Dawsonville are no threat to human health. Gov. Zell Miller asked the four-member group last year to study the state-owned site after newspaper reports suggested that the radiation left over from Air Force fuel experiments in the '50s still posed a health threat.

1/27/92: ATLANTA: Radioactive cargo hard to track. More than a dozen trucks filled with radioactive materials travel Georgia's highways in a typical week. Officials and environmental activists say they believe this includes nuclear warheads, contaminated clothing worn by nuclear power plant workers, medical diagnostic fluids and used power plant fuel rods, encased in lead capsules. The PSC requires most transporters to obtain permits to carry the materials through Georgia, but the companies need not specify what kinds of radioactive materials they carry, how large their loads are or how dangerous they are.

2/5/92: Nuclear Violations Bring Fines: Duke Power Co. was fined \$125,000 by the NRC for violations at its Oconee nuclear power plant, near the Georgia border in South Carolina. In one incident, the plant failed to use proper procedures after refueling allowing 12,400 gallons of reactor cooling water to spill onto the reactor building floor. In the other incident, heat built up in the reactor because a valve had been set improperly.

Other fines imposed were the Farley nuclear power plant in Alabama — \$450,000, Carolina Power and Light's Brunswick nuclear plant at Southport, NC — \$125,000, Georgia Power's Plant Vogtle was runner-up with a \$100,000 fine for an incident in October of 1988. [NRC Press Releases]

2/19/92: FRANCE: Consortium Would Bury Chernobyl in Cement: France's cement and building giants have offered to bury the core of the damaged Chernobyl nuclear reactor with a new aluminum-based cement guaranteed to last a century. Ukrainian officials, concerned about safety hazards posed by the reactor, are taking bids on ways of burying it forever. The reactor has

been temporarily encased in concrete, but there are increasing fears about radioactive particles seeping into the environment.

2/27/92: BOSTON, MA: Oldest Nuclear Power Plant to Be Scrapped: The nation's oldest commercial nuclear power plant, a target of safety protests because of its age, is being shutdown for good and will be dismantled. The board of Yankee Atomic Electric Co. voted unanimously against restarting the 185-megawatt Yankee Rowe plant, which has been idled since October. They insisted economic factors, not safety questions, prompted the decision. The plant had eight years left on its operating license. 3/92: The Whale and the Reactor: The nearly complete fossil skeleton of a whale from the Middle Eocene period was unearthed during the construction of Nuclear Plant Vogtle near Augusta, Georgia. Paleontologists consider this a valuable find, as not many fossils of this kind are found in Georgia. [One wonders what future paleontologists will find when excavating the Vogtle site?] [Georgia Mineral Society Newsletter1

3/14/92: Mutations: Gruesome details of genetic mutations caused by the Chernobyl nuclear disaster six years ago were described to a British environmental conference in Bristol. Six-legged piglets and two-head calves were among the many deformed animals born after areas of the Ukraine were highly contaminated by the explosion. Most of the deformed animals were stillborn.

3/20/92: OAK RIDGE: The DOE is investigating an incident earlier this year that involved the nuclear contamination of a commercial truck shipment from the Pantex facility in Texas to Oak Ridge. It was learned belatedly that the truck had stopped and unloaded cargo at two Oak Ridge firms before it arrived at the DOE's Y-12 plant. One of those companies was Boeing; the other company asked not to be identified. [Knoxville News Sentinel]

3/20/92: UKRAINE: Chernobyl Inflicts Heavy Cancer Toll: Ukrainian authorities said 37 Ukrainian and 51 Belarussian children were diagnosed as having thyroid cancer in 1991 and 1992. Before the Chernobyl accident in 1986, the average was one or two cases a year. Birth defects and growth

problems in children have increased 230 percent in Ukraine, the panel said.

3/21/92: Checks by officials in Belarus have revealed dangerous levels of radioactivity in 1,300 tons of meat in the region around Chernobyl, six years after the world's worst nuclear accident occurred there. Farmers in the region say they have buried their animals found to be contaminated.

3/23/92: TVA Accused of Nuclear Addiction: The TVA is wasting billions of dollars on nuclear programs that ultimately will force customers to pay higher elec-

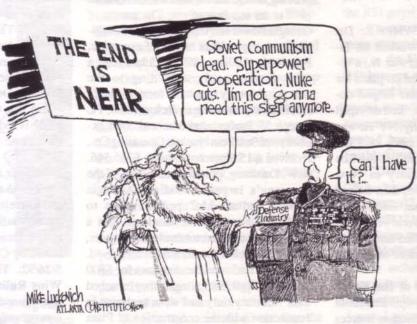
tric bills, a former TVA chairman, S. David Freeman, was quoted as saying. He accused current TVA Chairman Marvin Runyon of having a "slavish, almost addicted devotion to nuclear power."

3/28/92: Microbe May Aid in Uranium Cleanup: A common microorganism has the potential to help clean up uranium-contaminated wastes, says a report by the U.S. Geological Survey. The microbe is Desulfovibrio desulfuricans which plays an important role in metabolizing sulfates, from whence it draws its name. The government researchers found that it also has an affinity for metals such as uranium. [Mmm. Pass the plutonium, Mom.]

3/28/92: Small amounts of radioactive gas were released into the atmosphere near St. Petersburg after a malfunction forced a Russian nuclear power plant to be shut down. The incident was officially classified as "not serious."

4/2/92: SAVANNAH: The Savannah River Plant's tritium spill last December has provided a rare opportunity for Savannah-area scientists to study ocean currents. Scientists collected 200 to 300 post-spill water samples from coastal waterways. After the samples are analyzed with sensitive radiation-detection equipment, the results could add to knowledge about how fresh water moves when dumped into the ocean.

4/5/92: TENNESSEE: TVA Cited for Violations on Watts Bar Construction: TVA has received a Notice of Violation from the Nuclear Regulatory Commission about the troubled Watts Bar Nuclear Plant,



identifying problems with the "same work plan for electrical cable installation" that resulted in a stop-work order at the plant in December 1990. Construction on the two-reactor plant located near Spring City, TN, was begun in the early 1970s. The plant has yet to be licensed by the NRC.

Following the December 1990 work stoppage, TVA decided to get out of the construction and modifications business and hire contractors for such work at its facilities. [Chattanooga News-Free Press]

4/8/92: ALABAMA: Shipment of Radioactive Dirt Probed: A shipment of radioactive soil from a nuclear weapons plant in Tennessee to a landfill in western Alabama has attracted the scrutiny of Alabama's chief prosecutor.

A grand jury is trying to determine whether manifests on the shipments to the Chemical Waste Management landfill in Sumter County complied with state law. Environmental officials have said shipping documents did not indicate that the dirt contained uranium.

The company said the waste contained dirt and debris at one-tenth the level considered dangerous under NRC regulations. NRC, however, requires radioactive waste of any kind to be sent to a facility licensed to handle radioactive material.

4/11/92: TENNESSEE: Waste Shipments Probed: A federal grand jury in Knoxville apparently has joined the probe into radioactive waste shipments from the federal government's nuclear facilities in Oak Ridge, TN, to Alabama.

Clyde Hopkins, president of Martin Marietta Energy Systems, said that three of his employees were subpoenaed to testify before a grand jury in Knoxville. A grand jury in Alabama also is in-Martin vestigating Marietta, trying to determine whether manifests on the shipments from Martin Marietta Energy Systems Inc. to the Chemical Waste Management landfill in Emelle, AL, complied with state law.

4/11/92: TENNESSEE: Three Exposed to Radiation at Chattanooga Nuclear Plant: Three

workers at the Sequoyah Nuclear Plant in Chattanooga were slightly contaminated by radiation in the Unit 2 reactor containment building, federal officials said.

The incident occurred during a routine maintenance procedure called shotpeening, in which employees fire tiny balls through steam generator tubes to condition the tubes. A hose broke, releasing one of the balls into the lower part of the Unit 2 containment unit and triggering some airborne radiation, according to NRC spokesman Ken Clark in Atlanta. Mr. Clark said contamination was limited to 2 percent of the allowable limit and the incident posed no threat to other workers or people outside the TVA plant.

4/11/92: TESTING: France has decided to suspend South Pacific nuclear tests for one year, and has called for "a rapid conclusion to ongoing strategic disarmament talks and a halt to nuclear testing. "The announcement was one of the first official acts of the new Premier, Pierre Beregovoy.

4/11/92: ARKHANGEL: Russian scientists in the northern city of Arkhangel have found that thousands of seals are dying of "blood cancer" as a result of Soviet nuclear testing in Novaya Zemlya. The discovery was made during a study that was launched in in 1990 after millions of marine animals were found dead in the Barents and White seas. The researchers say that in addition to a halt to further testing, efforts should be made to remove accumulated radioactive waste from the seabed.

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NUKE NOTES

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4/16/92: DEATH ELSEWHERE: Dr. Henry Hurwitz Jr., 73, Worked on H-Bomb Plans: Dr. Henry Hurwitz Jr., a research physicist who worked on plans for the hydrogen bomb and later helped develop nuclear power plants, died on April 14 at his home in Schenectady, NY He was 73. He died of cancer, his family said. Dr. Hurwitz worked on the bomb at the Los Alamos National Laboratory in New Mexico from 1943 to 1946, then helped design power plants and set safety standards that were adopted worldwide. Fortune magazine in 1954 called him "probably the most brilliant student of nuclear reactor theory in industry."

4/26/92: Nuclear Threat of the Soviet Sub Fleet: The Soviet Navy operated about 150 nuclear submarines. Pentagon sources told Jack Anderson, PARADE'S Washington bureau chief, that this undersea fleet is a disaster waiting to happen. Its nuclear reactors don't measure up to American standards, they warn, and are plagued with problems.

Since the Kremlin began opening its military secrets to the Pentagon, our admirals have been learning about exploding reactors and irradiated submarine crews. One malfunctioning reactor was simply dumped on an uninhabited Arctic island, where it remains a hazard to marauding polar bears and inquisitive seals.

Reports indicate that at least three Soviet nuclear subs have sunk as a result of accidents - scattering five nuclear reactors and 38 nuclear warheads on the ocean floor. Meanwhile. several of the 150 submarines still are patrolling the high seas. Scientists fear that their next nuclear accident could contaminate some nation's shores. [PARADE]

4/28/92: FLORIDA: Leak Shuts Down Nuclear Reactor: A radioactive water leak from a primary cooling pump shut down one of Turkey Point's two nuclear reactors near Miami. No one was contaminated in the incident, which was reported to the NRC, said Mel Klein, spokesman for Florida Power & Light Co. The leak occurred in Unit 3, which went back on line late last year after 11 months of safety upgrades. Turkey Point's Unit 4 reactor remains operating.

4/29/92: Southern Co. Execs Get Pay

Raises: Southern So.'s finances are improving, and so are the salaries and bonuses paid to its top executives. The parent of Georgia Power and four other electric utilities paid its president and chief executive, Edward L. Addison, \$971,815 last year, a 9.96 percent raise, according to the company's proxy statement for the May 27 stockholders meeting in Jacksonville, FL Joseph M. Farley, chairman and chief executive of Southern Nuclear Operating Co., received a 15.4 percent raise to \$745,546. A.W. Dahlberg, president and chief of the company's largest subsidiary, Georgia Power, had an 11.2 percent raise to \$613,011. Southern Co. disclosed that a dispute between directors and a stockholder, Kenneth E. Peller, finally has been resolved. Mr. Peller had sued the directors for \$800 million in April 1986, alleging they breached their fiduciary duty and were negligent in connection with the construction of Plant Vogtle and another power plant.

4/30/92: 800 JOBS: 800 jobs will be cut from the Y-12 nuclear plant in Oak Ridge, Tennessee by the end of September.

5/1/92: NEVADA: A nuclear weapon was set off in a tunnel 760 feet beneath the surface of Ranier Mesa, 90 miles northwest of Las Vegas, to determine the effects of such a blast on space and military hardware. It was the first test conducted since France declared a testing moratorium April 8 and challenged the United States to do the same. Russia is also observing a moratorium, which expires in October. But President Bush opposes a suspension.

5/4/92: NEW JERSEY: Brush Fire Shuts Nuclear Plant: A brush fire raged out of control on 1,500 acres in Lacey Township, forcing authorities to close a nuclear power plant and evacuate a senior citizens development. Tom Tansley, a state fire warden, said the fire began in a dry wooded area and quickly spread across the Garden State Parkway toward the Oyster Creek Nuclear Generating Station. More than 10 miles each of northbound and southbound lanes of the parkway were closed, and the nearby Pheasant Run senior citizens development was evacuated, Mr. Tansley said.

5/9/92: RUSSIA: Nearly 100 forest fires broke out in an area of southeastern Belarus still contaminated by radioactivity from the 1986 Chernobyl nuclear reactor accident. 5/19/92: FLORIDA: Southern Florida, with its increasing population, may be the first in line for a new nuclear power plant

under federal regulations nearing congressional approval; environmentalists are vowing a fight.

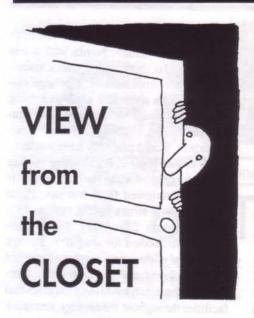
5/22/92: TEST: Huge Blast Marks Chinese Nuclear Test: China set off the largest underground nuclear explosion it has ever conducted. Nils-Olov Bergkvist of the Swedish Defense Research Agency estimated that the bomb was 1,000 kilotons, which is about 70 times more powerful than the atomic bomb dropped on Hiroshima, Japan.

China has the smallest nuclear force among the acknowledged nuclear powers, and has rejected any participation in disarmament talks until the nuclear superpower reduce their arsenals to levels now maintained by China.

5/26/92: TENNESSEE: Whistleblower Wins Ruling: A judge in Knoxville has recommended reinstatement, back pay and compensation for a TVA whistleblower who was laid off in 1989 after he reported nuclear safety concerns. It was the second time William Dan DeFord had won a discrimination case against the TVA. Daniel Roketenetz, a U.S. Labor Dept. judge, recommended that Labor Secretary Lynn Martin order the TVA to reinstate Mr. DeFord to a management job with duties and pay comparable to his 1989 post. He earned \$72,000 annually as No. 2 manager in the engineering assurance division in Knoxville. The judge also recommended that the TVA pay Mr. DeFord \$50,000 for the emotional distress he suffered as a result of "the unlawful discrimination against him " and all net back pay with interest, estimated at about \$66,000.

(Unless otherwise noted all items reprinted from Atlanta Journal/Constitution)





Time flies when you're having fun!

It's hard to believe that it has been three years since my wife was setting type for Glenn Carroll as she created the GAIN-SAYER before macintosh. Seems like yesterday that nutty blonde came in waving a fluorescent orange newsletter and raving about a nuclear plant that I assumed was near Vogel State Park. Well, the name sounded the same, and I sure didn't know any better.

Ah, the joys of innocence!

Anyway, Glenn and I were kindred spirits(I get a little nutty myself, on occasion). Later, when my practical wife and my abstract self came to the inevitable split, it was your GAINSAYER editor that I called to find out what was going on.

Pretty soon, she had me aware of all kinds of nuclear and environmental groups and issues, and I was stepping out of my closet with regularity. NRC hearings on BRC, DOE hearings on "modernization", and DeKalb County hearings on dumping radioactive water in to the sewers. Unbelievable — but happily — the county commissioners seemed to hear us, and denied the dumping permit.

One small step for us, one giant leap for new clear thinking!

Perhaps through natural progression, I later volunteered to help the politician who had vehemently opposed the dumping in the first place, and ended up being appointed to a couple of citizen advisory committees in DeKalb.

I'm still not sure that our efforts at hearings or on such committees are any more than window dressing, but I figure if you can keep pitching the message to the decision-makers, some of the time you've got a shot at getting through. Doesn't do any good to sit home in a closet.

And, it had occurred to me that the fallout(pardon the term!) from my nerverattling, palm-sweating, voice-cracking testimonials might just be even more important than getting through to the august, Rushmore-like faces on the government panels.

Whenever we, or others like us, get a bit of coverage in the op-ed or news pages, or get a sound-byte on the nightly news, there is no telling how many other "little people" get the message.

Recently, I enjoyed a first-hand reinforcement of the broader audience theory. I called the county department that tapes public meetings and broadcasts the commission meetings, and set up a meeting to discuss a committee project. I walked in, introduced myself, complimented their studio, accepted a cup of coffee and sat down to discuss the project. Before I could utter word one, the fellow across the desk said, "You're one of the RSI guys!"

I swear, I don't know if I'd have been more stunned if I'd been sitting at ground zero at the Nevada Testing Ground! The RSI hearing was two years ago, and I had just stumbled through an ad-libbed diatribe on the stupidity of dumping the radiation contaminated water. Even before I had settled back down to earth, questions tumbled over each other.

"Did you see the article this week?"
"What happens to the radiation as the water
evaporates?" "What good is radioactive
cement?" "Do you want to see the tape?"

For a moment, I longed for support from Hoffarth or Carol or Glenn, anyone whose technical expertise exceeded my conceptual grasp. But, since my hosts seemed at least as plugged in to the issue as I was, I accepted the activist role, and we spent the meeting trying to figure out why the "safer than water" water had been turned down by Oak Ridge and Barnwell, and how much "raising the temperature slightly" to expedite evaporation really meant.

Now, we have to schedule another meeting to talk about my project!

I really have more pressing survival matters to attend to, and could surely have better used the first meeting time taking care of myself. But in the broad scheme of things, we've got to be concerned with more than just our own survival.

Somehow, discovering two sympathetic and supportive folks behind the scenes served as justification for the efforts of those who have come out of a closet — and those who have never been in a closet!

It's not a waste of time at all.

-Dennis Bishop

I am a "Georgian Again I support the goals of ph as soon as possible, opti	rather be active than rast Nuclear Energy." assing out the use of nuclear energy mizing the use of energy conservation and opposing the use of nuclear weapons.	\$10 Active! * \$25 Active! \$50 Active! \$ Active! \$ Active! \$ Active!
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ATOMIC PRIMER

Q. How does a nuclear reactor work?

A. The heart of a nuclear power plant is an array of long, thin rods filled with pellets of uranium fuel. As uranium atoms are split within these fuel elements, energy is produced to heat water circulating through the reactor. This heated water produces steam which is carried to a turbine generator, which spins to produce electricity.

Q. Is there concern that a nuclear plant will explode like an atomic bomb?

A. No. This cannot happen. Nuclear plants explode differently than atom bombs, but they can explode.

Q. Why, then, is there so much concern about nuclear power?

A. One concern is simply that an accident may release leakage of an immense amount of radioactive material, much of it gaseous, that will expose the neighboring population to the risk of death or radiation injuries such as cancer and genetic defects.

Q. Aren't there safeguards within nuclear plants to prevent this?

A. Yes, at least in principle. Every nuclear plant has a safety system known as the Emergency Core Cooling System (ECCS). If a pipe breaks which carries water to the fuel, ECCS is supposed to provide emergency cooling water within 60 seconds to prevent overheating, melting and subsequent release of radiation from the massive fuel "core" of the power plant. If ECCS

fails to work properly, the reactor core would overheat and the stage would be set for major radiation release into the environment. If that happened, radioactive material in gaseous form could be carried by the wind to nearby cities.

Q. But since there IS a safety system, why is there concern?

A. The Emergency Core Cooling System has never been adequately tested. In sworn testimony, many senior Atomic Energy Commission research scientists have expressed misgivings about this safety system. Internal government documents suppressed by federal officials - but obtained by investigations carried on by the Union of Concerned Scientists — catalog numerous defects in current ECCS equipment. Doubts about the safety of nuclear plants were reflected when power companies refused to develop nuclear energy until Congress released them from full financial responsibility to the victims of any accidents. (See Summer 1990 GAINSAYER, Atomic Primer on Price-Anderson Act)

Q. You said that ONE thing of concern is accidents. Are there other dangers to the public connected with the production of nuclear energy?

A. Yes. The fear of sabotage... the problem of storing deadly nuclear wastes... and the growing number of nuclear reactors shipped to other nations. A typical nuclear plant produces 500 pounds of plutonium a year. It takes only 20 pounds to make a bomb. The nuclear industry wishes to separate this material. If it does, the danger from a terrorist group getting hold of plutonium is vastly

increased. Even small groups of terrorists could build homemade bombs with stolen plutonium. To show this, a public television station commissioned a college student to design a nuclear explosive using only readily available technical information. His design, according to one reviewing expert, would probably have worked.

Nuclear Wastes. Radioactive nuclear wastes are created when nuclear fuel that is used up is removed from reactors. These wastes include strontium 90, cesium 137, and plutonium 239—very deadly substances. No method for long-term storage or disposal of these radioactive wastes has been developed and proven reliable. Currently, radioactive waste is stored in several facilities throughout the country, and much of it sits in temporary installations at reactor sites.

An additional and frightening dimension of nuclear power comes from export sales of nuclear reactors. Nations not having nuclear weapons can buy reactors and use their nuclear energy programs as a stepping stones to nuclear explosives. India demonstrated this when she surprised the world by detonating a nuclear explosive built with material from a reactor furnished by Canada. [GAINSAYER's Note: Iraq is one current example of this serious threat as is the smuggling of nuclear materials going on around the former Soviet Union.] From "Answers to Your Questions About Nuclear Dangers" by the Union of Concerned Scientists, 1616 "P" Street, Suite 310, Washington, D.C. 20036, 202/332-0900

GAINSAYER Spring/Summer 1992

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COMMON SENSE

Now here's an interesting thought. I have always heard that nuclear waste cannot be destroyed, eliminated, dissipated.

Impossible you say?

How much money have we spent to find out if we can or can't? As much money or mental energies spent to make a neutron bomb? A B-2 bomber? A Trident sub? Waterproof mascara? Cereal that will stay crisp long after you've added milk?

Nuclear waste could be interpreted as guilt personified, If we could put our guilt in a 55-gallon drum and bury it in a field somewhere, we wouldn't have anywhere to put our shopping malls.

And sooner or later, guilt leaks out . . .

JOHN KUNZ