

IT'S ABOUT TIMES

MID-DECEMBER-JANUARY, 1980

PG&E Ordered to Make New Diablo Study

According to PG&E's November *Progress* (the little newspaper in your bill) the earthquake safety of the Diablo Canyon nuclear plant has been established once-and-for-all by a recent ruling of the Atomic Safety and Licensing Board. But in reality, official doubts about the plant's seismic safety remain.

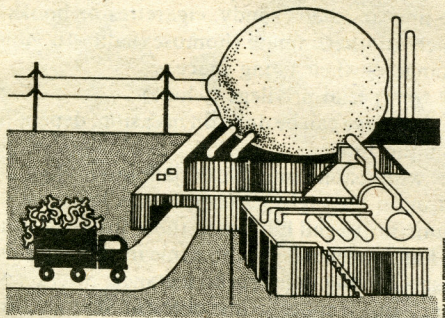
The Nuclear Regulatory Commission has ordered PG&E to undertake a new study at Diablo, centering on "systems interaction" in an earthquake. Although the NRC has approved the earthquake safety of some plant systems, others are yet unexamined—and the misbehavior of these systems could prevent proper plant shut-down.

According to the federal Advisory Committee on Reactor Safeguards (ACRS), the Three Mile Island accident forced the nuclear industry to face the long-neglected systems-interaction problem. The ACRS pushed to undertake this study at Diablo because of the plant's "high seismic environment." Much of the study will take place at the reactor site and will require PG&E to go through the plant "room by room, compartment by compartment" to identify potential hazards. According to the utility, the study will require the participation of five company divisions, outside consultants, and reactor supplier Westinghouse.

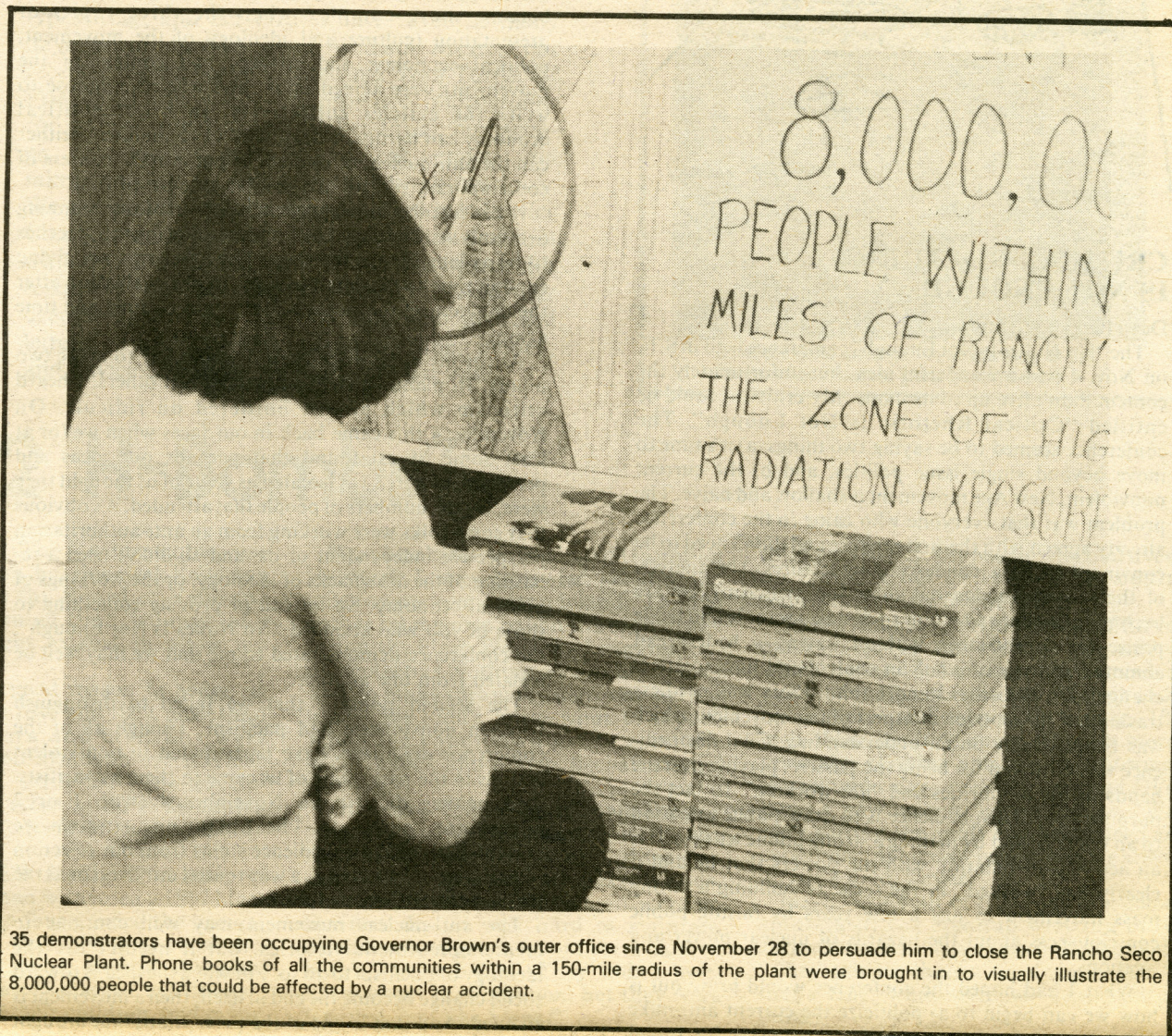
PG&E plans to submit the study outline to the NRC in early January. The utility estimates the project will take six months and will be finished before the NRC lifts the current licensing moratorium. But NRC attorney Don Davis believes the study will delay licensing, and the ACRS is pushing for public hearings on the study's findings.

According to the NRC's Davis, the study will have broad implications for nuclear plants across the country. But PG&E claims the new study will only show how safely Diablo is designed.

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35 demonstrators have been occupying Governor Brown's outer office since November 28 to persuade him to close the Rancho Seco Nuclear Plant. Phone books of all the communities within a 150-mile radius of the plant were brought in to visually illustrate the 8,000,000 people that could be affected by a nuclear accident.

Governor Gets Guests

On November 28, People United Against Rancho Seco took the nuclear issue to the governor's office in Sacramento. The coalition held a rally on the Capitol lawn, where several hundred people demanded that Governor Brown use his emergency powers to shut down the Rancho Seco nuclear power plant.

That same afternoon, members of the coalition confronted Brown's aide Gray Davis in the governor's office and presented a document prepared by Friends of the Earth, detailing hazards at the plant.

Governor Brown was not in Sacramento that day, but Davis said he expected a call from the campaign trail and gave the coalition permission to stay in Brown's office until the call came. Brown phoned the following day, and Davis reported that the Governor doubted his legal authority to order a shutdown.

Brown's response provoked further action. In an attempt to sit in at the Rancho Seco man-

ager's office, eight were arrested climbing the company fence. All of them plead *nolo contendere*, were sentenced to two years probation and fined. Since all eight refused to pay fines, they spent several days in jail.

Meanwhile, at the governor's office, 35 people resolved to remain until Brown's return. A week later, seven began a hunger strike. On December 4, a 10-person negotiating team met with Brown for 1½ hours, presenting half their material documenting the dangers of the plant.

At issue was proving *imminent danger*. Brown emphasized that enacting gubernatorial powers was dependent on that proof. And he suggested that closing Rancho Seco would only end in a federal court injunction questioning the Governor's authority, which would be hard to prove without evidence of imminent danger. Also, Brown said that closing the plant without sufficient data would be a clear abuse of power.

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Energy Mobilization Board: The Environment Gets the Axe

Congress and President Carter are moving quickly and as silently as they can to suspend many environmental laws and decrease the participation of state and local agencies in evaluating energy projects. The Energy Mobilization Board will be appointed by the President and will work out of the Executive Office. Its three members will decide which energy projects the country needs, and will have the authority to implement them with no provisions for review or accountability.

The AFL-CIO has joined the oil industry, the coal industry, manufacturers' associations, the auto industry, and the Chamber of Commerce in rallying behind Carter's energy program. Those opposing the legislation include environmental groups, the American Civil Liberties Union, and nationwide organizations of governors, state legislators, cities and counties. Despite the most intense lobbying yet seen in this Congressional session, the media has given little attention to the battle.

The House and Senate have each passed separate versions of the Energy Mobilization Board proposal. A joint conference is now working to merge the two. Although both bills are bad, the House version is much

worse than that of the Senate.

House version HR. 4985 allows for:

"Fast Track" legislation. The Energy Mobilization Board could agree to exempt a project from any federal, state or local law that is an impediment to its operation. Laws that took effect between the establishment of a project timetable and commencement of the commercial operation of a facility could also be disregarded.

Grandfather clause. Energy projects could automatically be immune from laws and regulations passed after they had received construction permits. Even if a project created an unforeseen hazard, no law could be written to force the owner of the project to correct the situation.

The House Bill also prohibits judicial review of a project until all permits have been granted and limits all regulatory agency actions to the U.S. District Court where the project was located. This means that a project would be well underway before its legality could be challenged.

The Senate version of the bill is similar, but contains no

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LETTERS



CRITICAL RHETORIC IS NOT ENOUGH

Dear It's About Times,

The "No Nukes Is Not Enough" conference held in S.F. on Nov. 4 was a wonderful idea, but unfortunately the content didn't live up to its name. My criticism could be entitled "Critical Rhetoric Is Not Enough". The conference seemed to be saying two things: a) it's time to move beyond single issue politics, and b) the current nonviolent, New Age movement is shallow and naive. The problem was that everyone who came to the conference already agreed with the first premise and didn't need to be convinced by long, condescending lectures. The analysis of the second pointed out some just criticisms (we are becoming too dependent on rock stars, granola and facile praise for decentralism without having a widespread common analysis of who's in control and how to effect change). On the other hand I think there was needless trashing of the nonviolent aspect of the movement which was based mostly on misunderstanding. Civil disobedience was criticized for being too passive, playing into the hands of the authorities and "not working". In fact the purpose of civil disobedience is to draw public attention to an injustice and by making a strong public witness. It is an active confrontation with the powers that be and it clearly has "worked" in the sense of building a strong mass movement in just a few years by raising public consciousness about the hazards of nuclear power and weapons.

What I had hoped the conference would bring out is how we can begin to a) politicize the current anti-nuke movement to become more of a movement for broad social change and b) how we can strengthen and expand our tenuous ties with Third World groups, labor and other constituencies. Unfortunately the tone of the conference seemed more divisive than unifying as speaker after speaker spoke out against different approaches but no positive steps forward were discussed.

I think the conference did have good points as well: the small group discussions, the collective writing of speeches, and most importantly the recognition that there are large numbers of people who want to go beyond "No Nukes". I hope we can begin to work together (more closely) to bring about some changes.

—Liz Walker

"NO NUKES IS NOT ENOUGH" COMMENTS

Many of the readers of this newsletter probably attended the "No Nukes Is Not Enough" Conference, held November 4 at the New College and the Women's Building in San Francisco.

As one of the organizers of the event, it's seemed important to me to put the conference — its goals, working history, and the event itself — into some perspective, so that unanswered questions, criticisms, and other queries may be resolved. However, let me also point out that not all conflicts are resolvable, and so we may have to live with our differences.

The two dozen or so people who put on the conference feel that the politics of anti-nuclear protest constitute one of the most potentially revolutionary forces in contemporary America. Not only because of its commitment in facing the question of energy development under capitalism, but in the **very way** the movement has **organized itself**, and its critique of issues such as leadership and power.

Yet in spite of all this, I believe we came together recognizing serious shortcomings in the movement; specifically, its social class makeup, its embrace of decentralization for its own sake and a steadily growing trend to popularize and advance the movement into reformist (i.e., electoral and other institutional) tendencies.

As for the organizing prior to the conference, our task became more complex when the three topics of presentation (culture and ideology of the movement; political economy; and strategy and context of the movement) were agreed upon, and when we choose to write the articles **collectively**. In brief, political economy can hardly be dealt with in 15 minutes; neither can the anti-nuclear movement be put into the context of contemporary society in a similar amount of time.

It has also become apparent that two of our planning decisions were wrong. The first was allowing the speeches to be as lengthy as they were. The other was not giving enough time to the small groups. In our evaluation after the conference, this point was brought up time and time again.

As for the conference itself, I would like to make two points. In planning the conference with others, I heard criticism which almost bordered on ridicule. On November 4 this came back in our faces when we (or at least some of us) found that perhaps our ideas and perspectives weren't as isolated as some of us thought they were. By the numbers of people that attended, it's obvious that some folks were working from an anti-authoritarian perspective independent of us, and so didn't need a rehashing of the drawbacks of ideology, or the workings of political economy. So instead of proving something to those of you who attended "No Nukes Is Not Enough", the conference demonstrated to me that we may well be isolated from one another.

The second point is that we failed to distinguish between nonviolence and pacifism. Though all of the conference organizers have participated in non-violent actions in the past, **none of us** came to them as pacifists. And neither did we on November 4 (with 1 or 2 exceptions, perhaps). The blistering criticism we presented on civil disobedience stems from our rejection of pacifism — as a tool, as a way to lead our lives, or as the method to give us our future.

The anti-nuclear movement may well continue to create non-violent victories, but it needn't use the ideology of pacifism to do so. For when the means toward social change become the end in itself, then a movement is stymied. And that is one of the perceptions that brought me to work on the conference.

—David Pingitore

WRITE TO US! BUT...

please follow these guidelines:

- Be as brief and concise as possible. More people will read a shorter piece, and we won't have to cut it as much to make it fit.
- Submit copy typed, *double-spaced* on one side of a sheet. This allows us to edit without having to re-type. We may return material not in this form. Keep a copy if you want one.
- Provide pictures or graphics whenever possible, particularly with longer articles. Black and white prints are fine, and most magazine photos will reproduce OK.
- Get copy to 944 Market Street, Room 307, San Francisco, 94102. Please get to us as early as possible, but at least before the deadline. **NEXT DEADLINE IS JANUARY 11.**



Jail for All

The comments and by-play about jail life in San Luis Obispo indicates a general lack of understanding of the societal institution which we all depend on for the protection of our property. Each jail is different. Learning to flow with the loss of freedom of movement can be a hard early lesson.

The initial conceptual mistake was the expectation of many involved in August 1978 actions at Diablo Canyon; that civil disobedience would bring no consequence beyond arrest. Those two or three days while being held in the gym were O.K. because we were negotiating from "strength", we thought. That kind of jail time was not too bad because friends were there and the euphoria of the action kept people high, despite some discomforts and internal wrangling.

True, the Abalone Alliance did not talk much about spending time in jail. There was all that pressure for solidarity or "everyone do the same thing". The emphasis was on legal maneuvers rather than a full consideration of people's desires and needs. A few people, preferring not to play or be bound by the legal game, pled no contest and were sentenced to various amounts of time. The minute minority which ten refused the probationary system as unconscionable were hit with a tough, six-months time.

The four who did spend more than a few days in jail in 1978 effectively changed the balance among the usual clientele and Diablo protesters. The changes did not occur by talk, as much as by food sharing, keeping the T.V. tuned down a bit, and by, of all things, handball. The game playing pitted protesters vs. other inmates with "crime partners" playing together. Banging the ball released the tensions of close living by allowing people's bodies to stretch out.

The ball playing was a factor visible to staff and helped make the point that people could be in jail while maintaining different ideas.

Then, when the flood of mail started coming and going, jail administration had another measure of the protester inmate. This new light showed a kind of person who was truly different from the usual, one very much not alone.

The heavy mail at that time was not a point of friction, though it could well have been. Sharing mail effectively helped dilute the exclusive native of the inpouring.

People doing their bit of jail later in 1979 were no longer under the aura left by the influence of the long-termers. For the jailstaff and inmates (many of whom were different by then), the Diablo action was long past and remnants from it were just a nuisance.

Jail is its own society in which most of us are complete outsiders. There are some official rules (administration) and live rules (inmate). For the jailed at your peril:

- Monkey around with their food
- Interfere with their sleep
- Dip into another's candy, cigarettes or books
- Touch another inmate (homosexuality to violence)
- Impinge on their living space
- Ask for special privilege (whine)

All of the above can be done on occasion, depending on by whom and how.

Those who came into SLO jail after "lights out" intruded upon the night pattern. It was legitimate from the administrative end but not to those inside. It is on par with the hated weekenders who came in to party all night. One person coming in late is an instance, several coming in late are a disturbance. None of the attacks would have occurred if the same people had done their time in 1978. Spreading the sentences out brings it to the **ad nauseum** phase. No one was coming in long enough to become a part of the jail community, all were transient. For those who are not transient, and so have seniority and a life system to defend, all late Diablo protesters were for the birds.

Lockdown of a day at SLO jail means relatively little — tough sounding but just brings no yard (exercise) time which many did not use anyway — until handball became an important factor. There was a lockdown when Peter and I were released, so big deal.

When jail time is limited to a week or two, there is not time: to learn handball, to help people with letters, to hassle about books (with the administration), to generate a large mail flow, to have visitors bug the office, to talk with people so they understand a little of what Diablo is about or what they are about, to implement food sharing rather than dump it down the toilet. The opportunities to learn about our society from this very different angle is lacking in a few days' visit. But for this kind of overview one must be arrested for cause, not because you got caught. This is one of the great virtues of civilly disobedient actions.

—Samuel R. Tyson
Waterford, California



Three hundred people participated in the No Nukes Is Not Enough conference on November 4 in San Francisco. The conference was called to discuss the society that produced nuclear power and weapons and the politics of the anti-nuclear movement.

First Anniversary Issue

With this issue, we begin the second year of *It's About Times*. Our first issue was seven mimeographed sheets of paper, stapled by hand into a small booklet.

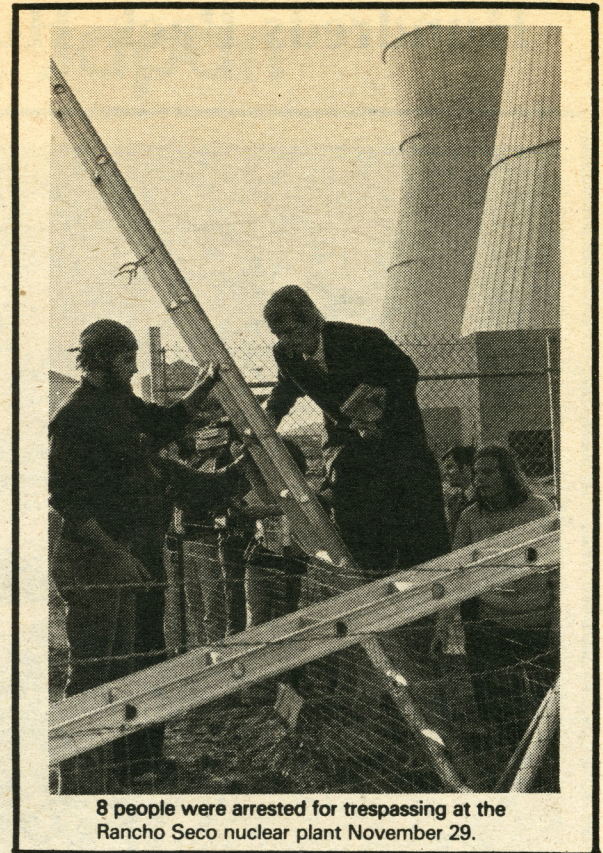
On the back page, we listed the 24 member groups of the Abalone Alliance. Every month since then, new groups have formed, and the list has now doubled in size. We hope *It's About Times* has helped in encouraging cooperation and communication within this rapidly growing Alliance.

Over the months, we have attempted to provide information not only on Abalone events, but also on nuclear-related issues and conflicts throughout the world. We are also trying to provide a medium for discussion of the political implications of nuclear technology—and a place to develop alternatives to corporate and government plans for the future. We welcome your comments and suggestions.

In the year ahead, money will be our main problem. Since we're all volunteers, we have gotten much farther on a small budget than a

"real" newspaper. But printing and mailing each issue costs about \$600, and our money will run out in a few months without new subscriptions. So we're asking those who've been with us since our first issue to resubscribe *now*. (See blank on back page.) If you have *never* subscribed, this is your last issue. Please—subscribe. Or let us know if you *can't* pay.

We would like to express our special thanks to several people. Cindy Cornell does much of our typesetting, and her efforts have saved us many days of production time. William Meyers has recently joined her in typesetting. Tom Turner of Friends of the Earth has provided photographs for several recent issues. Waller Press, our printer, continues to provide excellent service, and takes the time to correct mistakes we overlook. We are grateful to the American Friends Service Committee for sharing their production facilities with us, and to Bill and Myrtle Hayworth for tolerating our late night escapades. And our deepest appreciation to everyone who provided letters, articles, photos, graphics, time, money, and advice to help us through our first year.



8 people were arrested for trespassing at the Rancho Seco nuclear plant November 29.

"I Watched 22 H-Bombs"

Watching 22 hydrogen bombs go off does something to you," said Orville Kelly, formerly a sergeant first class in the U.S. Army. In 1957 and 1958, Kelly was stationed on Eniwetok Atoll in the Marshall Islands, while the Department of Defense conducted a series of atmospheric atomic tests.

What that did to him, he believes, is give him cancer. Kelly is now in the final stages of lymphocytic lymphoma. He'll probably be dead in a year.

"I can't find it in my heart to be totally bitter," Kelly said, at a press conference in San Francisco, this week. "But I do feel bitter that more people will die from cancer than died in the last 14 years of war. I'm bitter because I've been reading letters from widows with no money. I'm bitter because of the government's reluctance to compensate people injured in the Cold War." He stopped for a moment before continuing, "I guess I am bitter. I'm very angry that my life has been taken by the actions of my own country."

For the past six years, Kelly has been battling the Veterans Administration, trying to get recognition and compensation for the connection between his exposure to radiation from the H-bombs

and his cancer. The VA turned his case down three times, but this week Kelly was informed that the Board of Veterans Appeals had ruled that "enough of a reasonable doubt existed to allow my claim."

The VA has good reason to hedge its words. Between 1946 and 1962, more than 400,000 soldiers and civilians were involved in 183 atmospheric nuclear weapons tests. Until 1977, the government made no effort at all to determine the long-term effects of this radiation exposure.

When the HEW finally did a study of 3000 men who had witnessed a 1957 blast in Nevada, they found twice the normal leukemia rate. Atomic veterans are also suffering from bone marrow diseases, sterility, respiratory disease, eye disease, birth defects in their children, and many kinds of cancer.

In November 1957, when Orville Kelly took command of Japtan Island in the Eniwetok Atoll, no one told him that 21 nuclear bombs had already been exploded in the area. "There we were on a tropical paradise with a beautiful beach," he recalls. "Things weren't too bad until that May morning when they set off the first blast."

That bomb, the beginning of Operation Hardtack I, was detonated about seven miles away from Japtan Island. "I had to gather all my men out on the open beach facing the blast. We all had goggles, but no protective clothing at all. My orders were to make sure every man was on that beach. We didn't know what to expect. When the countdown got to zero, the island shook and a huge fireball started forming."

The blasts continued at about two per week, for twelve weeks, and each time the men on Japtan Island and others on ships, in planes and on other islands, observed the tests. "My men were so terrified that it was hard to maintain discipline and get them out there on that beach," says Kelly. "They didn't even know about the radiation, but they were terrified, just like I was."

The men at Eniwetok Atoll were measured only for gamma radiation and only by means of the film badges that many scientists today consider inaccurate. No attempt was made to monitor their exposure to alpha-emitting particles (such as plutonium) that were stirred up by the explosions. Even these cursory measurements were only taken during the time the bombs were being set off. In Kelly's case he wore a film badge for five months out of the twelve he was at Eniwetok. And the drinking water for Kelly and his men was distilled from the lagoon.

When Kelly was discharged, Army doctors told him he'd been exposed to 3445 millirems of gamma radiation. Dr. John Gofman estimates that in the situation Kelly describes, he probably received more like 20,000 millirems.

Several other ex-GIs joined Kelly at this week's press conference. Andy Hawkinson was an 18-year-old military police at Eniwetok Atoll during Operation Hardtack I. Today, at 40, he has had cataracts in both eyes, a condition that usually affects people much older. Besides the surgical procedures to remove the cataracts, Hawkinson has undergone five operations for retinal separation. "Being literate, I started to read about my condition," Hawkinson said. "Any ophthalmology textbook will tell you that cataracts are caused by radiation."

But Hawkinson hasn't received a nickel from the Veterans Administration. "I think the government owes me, at least my medical expenses—including the cost of the check-ups for cancer I'm going to get every six months. No one talks about the psychological effects—the hell and damnation you go through wondering when they'll find cancer or leukemia."

In spite of it all, Hawkinson says, "I'd go back in the Army today, if it was to defend the country. I'd go back to Vietnam. But if it meant being sent to Eniwetok, I just might not do it."

Orville Kelly also retains "a certain fondness for the military." He just wants the Armed Forces to realize that "because radiation is a silent killer, doesn't make it any less deadly."

The last nuclear bomb at Eniwetok Atoll was set off in 1958, but the islands, of course, remain highly radioactive. In 1977, the U.S. government agreed to clean

things up so that the people who had lived on Eniwetok before the testing could return from their forced exile.

Three thousand American soldiers participated in the cleanup operation, which involved burying 110,000 cubic yards of radioactive soil and debris in a bomb crater and capping it with an 18-inch thick concrete cover. Though more protective clothing and more monitoring are required now, recently returned GIs have a new crop of horror stories. "We were getting the shaft and being used as experimental human beings and we knew it," said John Levitt.

Mark Goodman of San Jose saw some soldiers in the cleanup wearing only surgical masks. "It's a Catch-22," he said. "They tell us there's no danger, but if that's true, what were we decontaminating?"

In addition to those at Eniwetok Atoll, GIs were exposed to significant doses of radiation during cleanup operations at Hiroshima and Nagasaki in the month following the 1945 bombings, and during nuclear tests in Nevada, where the government sent soldiers within 900 yards of ground zero, to determine how troops would be affected by nuclear war.

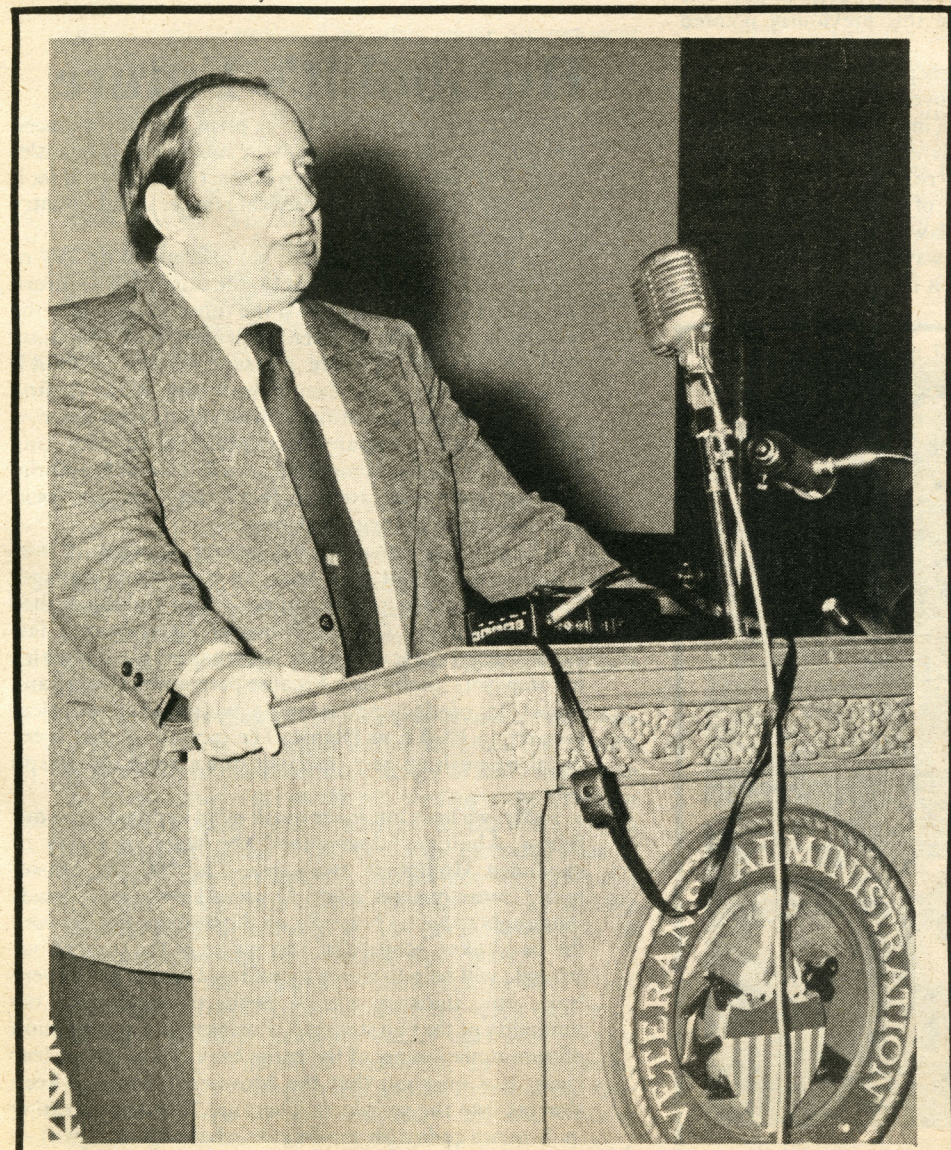
Eight hundred soldiers or their widows have claims pending against the Veterans Administration, for health problems they say are related to radiation exposure. Kelly, who founded the National Association of Atomic Veterans in 1974, believes that many more exposed veterans "remain in the closet," out of hopelessness or fear of revealing classified information. "When you're in the Army you do what you're told," he said, "and in the Army you're told to keep your mouth shut."

Another part of the problem is that GIs are not allowed to sue the government. "As it stands now, the military could order a man to march off a cliff and if he did it the government would not be responsible," Kelly explained.

So all claims for compensation must be made within the VA framework. The most a GI dying of radiation-induced cancer can hope for is disability payments, medical expenses, and benefits for his wife and children—the same as for any service-related problem. "It's costing \$100 million to clean up Eniwetok Atoll," Kelly pointed out. "But when I die my wife will get \$300 a month."

Though the National Association of Atomic Veterans is "a room in the basement, off the furnace room," the group has already been contacted by thousands of veterans or their widows for help with claims for radiation injuries. NAAV has also joined a national coalition that, this week, unveiled plans for "Citizens' Hearings for Radiation Victims," to be held "in the shadow of the Capitol in Washington" next spring. The "citizens' tribunal" will also provide a forum for nuclear plant workers, uranium miners, and people exposed to unneeded medical radiation.

—Marcy Darnovsky
from *The Berkeley Barb*



Orville Kelly witnessed 22 nuclear weapons tests in 1958. Today he has advanced cancer. Kelly has organized the National Association of Atomic Veterans to help victims of nuclear testing gain disability payments.

Hundreds Pack Humboldt Decommissioning Conference



PG&E had been repeatedly invited to participate in the Humboldt Bay Nuclear Plant Decommissioning Conference. They declined, and had to be represented by a cardboard Reddy Kilowatt.

"... Fail to honor people, they fail to honor you... good leaders talk little; when their work is done, their task fulfilled, the people will say, 'we did this ourselves.'"

The hundreds of people jammed into the Multi Purpose room of Humboldt State University stood up and roared as the first Humboldt Bay Decommissioning Conference got underway. The quote, by Lao Tsu, was offered by Hunter Sheldon Lovins, social activist and new wife of Amory Lovins, well known alternative energy expert, whose lecture opened the conference. Those attending had come from all corners of this rural county, representing all age groups, to gather spirit and expertise in decommissioning a commercial nuclear power plant, something PG&E, the major California utility, has refused to address. Although the plant has been closed since 1976, PG&E has failed to demonstrate the seismic safety of the site and has merely asked for one extension after another from the NRC. The plant sits within two thousand feet of an active earthquake fault, which has prevented the reopening of the facility after its refueling in 1976.

The conference, organized and sponsored by the Redwood Alliance, an Arcata-based Abalone Alliance affiliate, featured some of the most respected authorities on the energy scene today. One speaker was Greg Minor, one of three former General Electric engineers who quit in protest of haphazard nuclear development. Minor was one of the engineers responsible for the construction of the Humboldt Bay nuke. Also speaking was Hal Rubin, Sacramento State journalism professor and former technical writer for nuclear industry periodicals; George Williams, Campaign for Economic Democracy member who is working on the issue of Public Employees Retirement System funds invested in nuclear development; and Linda Brown, a Sierra Club Legal Defense

Fund lawyer representing the intervenors against the plant.

PG&E had been repeatedly invited to participate in the panel discussion by letter and in person, and by more than one hundred demonstrators who appeared at the plant as part of a meditation service the day before the conference. PG&E ultimately declined, and had to be represented by a cardboard Reddy Kilowatt who leered stupidly through the entire proceeding.

The panel discussion was followed by workshops covering various aspects of decommissioning. The question inevitably arose as to why Pacific Gas and Electric would pump nearly 126 million dollars into a futile effort to save the Humboldt Bay plant. The answer indicates an obvious, politically motivated delaying tactic designed to preserve PG&E's ever-steepening investment in Diablo Canyon, now approaching two billion dollars. PG&E can not afford to have one plant decommissioned for seismic questions on the eve of another's licensing, especially with the intense debate over earthquake safety which has surrounded Diablo Canyon since before the first yard of concrete was poured. The fall of Humboldt Bay could drag massive Diablo into nuclear limbo. On this scale, 126 million dollars is a paltry price to pay. The conference called attention to this previously ignored issue.

The aftermath of the conference was filled with a series of "Teach In" workshops covering many aspects of nuclear power issues. Speakers included Chip Reynolds, chairman of the American Friends Service Committee's Nuclear Cargo Transport Program. Reynolds also appeared at a county Board of Supervisors' meeting, prompting PG&E to send up a lawyer and a Bechtel Corp. representative to offset any swaying of the board to a more anti-nuclear stance than it has already assumed. A

surprise appearance was made by plant supervisor Ed Weeks, who only a week before had refused a public appearance at the conference.

"... Fail to honor people, they fail to honor you... good leaders talk little when their work is done, their task fulfilled, the people will say: we did this ourselves."

In Humboldt County, nuclear power is on trial. The issue is before the people. A decision by the NRC on whether or not to grant PG&E's latest request for a delay on the seismic questions is forthcoming this December. Public hearings could occur as early as this coming spring or summer. If Humboldt Bay is decommissioned, the people here can truly say, we did this ourselves.

Humboldt's Past

One of the oldest light water reactors in the nation, Humboldt Bay was opened amidst great optimism in 1963. Between 1963 and 1971 the plant was down 35 times due to malfunction. In 1965 and again in 1969, Humboldt Bay leaked more radioactivity than any other facility in the country. In 1971, technician Robert Rowen made national headlines by documenting more than 40 safety violations at the plant for the A.E.C. For his troubles, Rowen received a commendation from the Humboldt County Grand Jury, a dismissal from PG&E, and a dossier from the Eureka Police Department that called him "a possible nuclear terrorist". Soon after the Rowen incident, Humboldt State University geology professor Adam Honea began investigating reported earthquake faults in the vicinity of the installation. He discovered that, as a result of inadequate seismic surveys prior to construction, the Humboldt Bay reactor lay within 2000 feet of at least two earthquake faults (a third has since been discovered). In July 1976 — as a consequence of the Honea studies — Humboldt Bay shut down for refueling and has never reopened. Since that date, the NRC and the legal intervenors (Friends of the Earth and Sierra Club Legal Defense Fund) have repeatedly asked that the utility present its plans for insuring seismic safety at Humboldt Bay. Although PG&E keeps talking about spending millions of the ratepayers' bucks to bring the plant back on line, they have responded by requesting and obtaining three years worth of delays while it "completes" its own studies. A request for a fourth "motion to hold the proceedings in abeyance" (for at least one more year and possibly two) is currently pending before the Atomic Safety and Licensing Board. There are firm indications that the NRC staff is not prepared to grant further delay — on-site factfinding is scheduled within the next two weeks and a decision is expected before the end of the year. Meanwhile, the plant continues to leak heavy metals into Humboldt Bay. PG&E has already been fined by the State Water Quality Control Board for spilling excess chromate into the Bay. In 1977 — the first full year on cold shutdown — PG&E, in an effort to shore up its piping, irradiated more workers (1016) with more radiation (1.79 rems) than any other light water nuke in the nation. What the non-operation of Humboldt Bay means to the ratepayer is a matter we are currently raising before the PUC.

—John Ross

Humboldt's Future

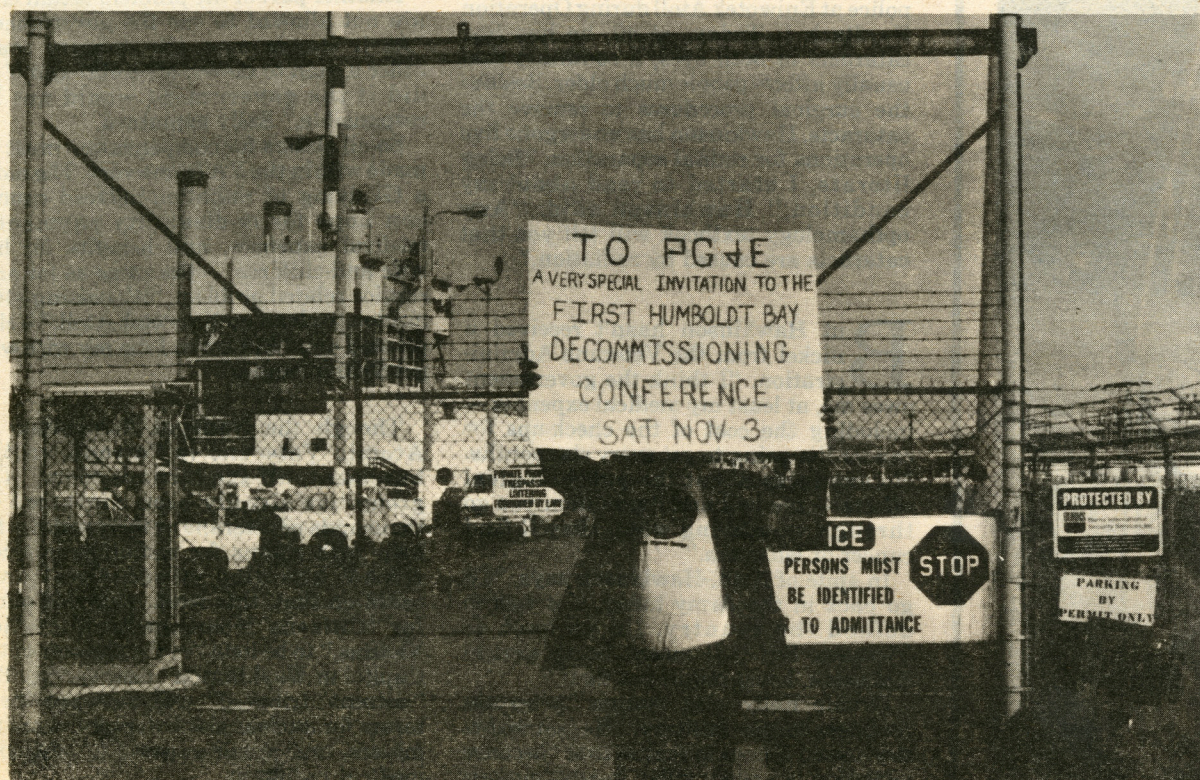
Given the present status of the plant, we are convinced that the decommissioning (and the subsequent dismantlement) of Humboldt Bay #3 is a distinct possibility. If so, it will be the first major commercial reactor in the country to be decommissioned.

The implications for PG&E are onerous. With 25% of its total assets tied up in Diablo, the utility can ill-afford to have a sister plant go down the tubes for precisely the same reasons Diablo has been challenged. And it becomes clear to us that the more pressure we put on PG&E towards disclosing its decommissioning plans (a first step), the shakier the utility behaves in its own defense. Recently, the company has resorted to picketing Redwood Alliance affairs (a Karen Silkwood Memorial too, just to demonstrate their bad taste). This is, at least, one indication of their desperation.

It is our belief that PG&E has no intention of ever bringing Humboldt Bay back on line. Plant manager Edgar Weeks even let a hint of same slip in conversations at the Humboldt County Board of Supervisors a few weeks back. It's clear to us up here that the plant remains in ratepayers' limbo only because permanent closure and initiation of decommissioning would spell political disaster to PG&E at Diablo. The message is that every pedal we push up here resounds down San Luis Obispo way.

Sadly, we have not made much of an impression on our fellow Abalones throughout the state in terms of expanded Humboldt awareness. The "off-line/out-of-mind" consciousness seems to prevail even inside heads that ought to have a better fix on the strategic ties between the two nukes. Hopefully, this notice of the state of our struggle will help to widen focus down south. At the very least, our literature has to begin to underscore the mutuality of the two struggles. Furthermore, the question of decommissioning, of the entire back-end of the nuclear cycle, is a question that the Movement seems to keep shoving into the periphery. There are 72 nukes operating in America today (depending on what's up or down) — what happens when their life expectancies (20-30 years) are exhausted?

—John Ross
Redwood Alliance



More than 100 demonstrators appeared at the Humboldt Bay Nuclear Plant as part of a meditation service the day before the conference. One invited PG&E to attend.

Nuclear Opposition in Japan

With 19 operating reactors and 10 more under construction, Japan has the third-largest nuclear generating capacity in the world, after the United States and USSR. Ten percent of Japan's generating capacity is tied up in nuclear power and government and business continue to argue that Japan must develop nuclear power because it has no energy resources of its own. The ruling Liberal Democratic Party is conservative, pro-business and pro-nuclear and has held power almost continuously since World War II.

The anti-nuke movement in Japan is somewhat weaker than in the U.S. A Japanese public opinion poll released on Jan. 1, 1979, showed that 55% of the people supported the government pro-nuclear policy and 23% were opposed. However, only 22% of those polled said they would like to live near a nuclear plant.

Most Japanese identify with government and business. They have accepted that nuclear is in the national interest, so they go along with it — but they don't necessarily think nuclear power is so great.

Most opposition to nuclear power comes from residents of the rural areas where reactors have been or are being built, and to some extent from the labor movement. The fishermen, farmers and residents of the small towns near reactor sites have organized anti-nuclear groups in about 30 places.

Radiation seems to be the biggest issue, but fishermen also complain that heat from the plants will destroy their livelihoods. Farmers don't want to give up their land, since land is much more scarce than it is here. Residents of the towns don't like the disruption the plants bring to their communities and some argue that nuclear power harms economic development.

Plants Delayed... But Not Stopped

These groups have put up some strong fights, delaying nuclear plants for long periods. For example, a fishermen's cooperative near Onagawa delayed a nuclear plant for 10 years. The plant was proposed by Tohoku Electric, one of the country's nine electric utilities. It was first scheduled to go on line in 1975 and delayed six times; it's now supposed to start up in March 1983. The utility pressured the fishermen over a 10 year period to abandon their fishing grounds and finally got them to agree by paying the cooperative about \$27 million.

Last year, all the different local anti-nuke groups set up a National Liaison Council of Anti-Nuclear Movements to network themselves and pass around information. In that respect they're ahead of us in the U.S., but the residents still feel pretty isolated.

It's very hard for the Japanese to form their local opposition groups, because there is no tradition of citizen activism. In Japan, if you want to get involved in politics, you work through the political party. It was not until after World War II that this was broken down to some extent when the labor movement got involved in disarmament and compensation of atom bomb victims. Many trade union members still believe it's their duty to oppose nuclear bombs.

The predominant disarmament group is the Japan Congress Against A- and H-bombs, Gensuikin. They're very close to Sohyo, the country's largest trade union federation, which primarily represents public workers. Gensuikin is not only against nuclear weapons, but also against nuclear power. The other major disarmament organization, Gensuikyo, is only against nuclear weapons and not against nuclear power.

Sohyo's position on nuclear power is wishy-washy, but because they're a member of Gensuikin, they're always getting pushed toward an anti-nuclear power stance. However, there is a split between the national and local levels of Sohyo. The national level leadership is primarily concerned about forming national political coalitions, but some local Sohyo leaders are very involved in the anti-nuclear movement. Sohyo is tied to the Japan Socialist Party (JSP), the major opposition party in the country. The national-local split in Sohyo is mirrored in the JSP.



photo courtesy Friends of the Earth

The second largest trade union federation, Domei, is pro-nuclear. Domei represents mostly industrial workers in the private sector and looks to the Democratic Socialist Party for leadership.

Labor Groups and Residents' Movements Merge

One of the most spectacular anti-nuclear struggles in the country was made possible by a connection between the labor movement and the residents' movement. That was the cancellation of a plant on the western part of the main island, near Hohoku. Fishermen were central in the struggle to oppose the plant, but within the Chugoku Electric Power Co., workers in the Densan Chugoku union started wearing anti-nuclear buttons, putting up anti-nuclear signs, and passing out literature. On Oct. 26, 1977, they staged a one-day strike to coincide with a national day of anti-nuclear actions all over the country.

In the spring of 1978 the workers distributed anti-nuclear literature in the town. The company responded by disciplining the officers of the union and laying people off. But that got the other unions in the town upset and more involved in the anti-nuclear opposition. Finally an anti-nuclear mayor, a conservative, was elected in May 1978. In June the city passed an anti-nuclear ordinance.

Densan Chugoku is not the major union in the power company; only about 7½% of the workers belong to it. This particular union is analogous to the United Electrical Workers Union (UE) in this country. Until the late 1940s UE was the major U.S. electrical union, but during the anti-communist purges of 1949, UE was kicked out of the CIO and the International Union of Electrical Workers was established. Similar events in Japan left Densan Chugoku.

The labor movement also joined the citizen's movement last fall in an attempt to prevent a nuclear-powered ship, the Mutsu, from being moved to a new

port, Sesebo, to be repaired. Both Sohyo and the JSP organized a demonstration of 10,000 people and an attempted blockade.

In talking to unions Gensuikin stresses the radiation issue. That's probably appropriate for Japan, because people have a bit more consciousness about radiation.

Alternative Technology Movement Weak

Two approaches we use in this country, the consumer movement and the alternative technology movement, are fairly weak in Japan. The consumer movement in the urban areas is opposed to nuclear power because it will increase the rates, but it's not a major issue. People are more concerned about food contamination or bad drugs.

I was told that the concept of alternative technology only came to Japan two or three years ago. There's no real grassroots movement for solar, though some small businesses are involved in it. The best explanation I've seen of this is that the Japanese are not convinced that technology is a way to solve their problems.

There is also some criticism of the lack of feminist consciousness and process in the Japanese anti-nuclear movement. Most of the leaders are men; most of the speakers are men; most of the experts are men, etc. Part of the reason for this is that men dominate the trade unions.

What can we learn from the Japanese anti-nuclear movement? First, looking at labor, the U.S. anti-nuclear movement can try to exploit the radiation issue among plant workers to a greater extent. In community organizing terms, we can be quicker to organize against land grabs and power line plans by the electric companies. This is one way that local people, land owners particularly, are directly affected by a nuclear plant.

—Jim Kendall
St. Louis Chapter,
New American Movement

South Africa: Breeding Ground for Nukes

South Africa, where four million whites control the lives and labor of 22 million blacks, is the breeding ground for accelerated nuclear proliferation and serious threats to world peace. In the summer of 1977, U.S. and Soviet satellites discovered a nuclear weapons test site in the Kalahari Desert. This September, scientists detected what may have been a nuclear blast off South Africa's coast.

Through its illegal occupation of Namibia, the white minority regime in South Africa controls the world's largest known reserves of uranium (¾ of that available to the "non-communist" world.) According to the Uranium Institute, demand for this uranium should reach 67,000 tons per year by the 1980's. Given the increased rates of investment into this highly profitable industry (much of it from the U.S.), South Africa should have no trouble meeting such a demand. It has already stepped up production by 60% over the last three years.

South Africa is already manipulating the world uranium market. Documents uncovered last year revealed a secret uranium cartel that first met in Johannesburg. The cartel was made up of Australia, Canada, the U.S.-based transnational corporation, Kerr McGee, and several oil companies, with South Africa playing a leading role in establishing price increases. Between 1973 and 1976, the price of uranium went from \$6 per pound to \$41.

As the result of other secret bargaining, South Africa now has the technology to enrich U₂₃₈ into weapons-grade

material. But South Africa was expelled from the International Atomic Energy Agency in 1977 for human rights violations and the occupation of Namibia, and the country has never signed the Nuclear Non-Proliferation Treaty, so even these flimsy preventatives do not stand in the way of South Africa's marketing uranium all over the world — or using nuclear weapons.

Liberation movements in Angola, Mozambique, Zimbabwe and parts of Namibia surround South Africa and the territories it controls (Botswana and most of Namibia.) These movements present fundamental challenges to apartheid and are now allied with the internal resistance being organized by blacks within South Africa. The white regime has made it quite clear that it will use any weapons at its disposal if it comes to maintaining itself against liberation movements.

The potential for a super-power conflict over South Africa is enormous. Big money, big business, and big profits for U.S. and European-based multinational corporations are at stake in that country. Indeed, the U.S. has played a key role in both the maintenance of apartheid and nuclear developments in South Africa. The Fluor Corporation in Los Angeles recently signed a \$4.2 billion contract with the South African government to develop coal-oil conversion technologies there which will be critical for the country's energy needs since it has no oil. Union Carbide and Utah Mining have been heavily involved in the "uranium rush" into Namibia. Allis Chalmers Corporation designed and built Safari I, South

Africa's first nuclear reactor. The U.S. has sold the apartheid regime over 230 pounds of highly enriched weapons-grade uranium for their nuclear industry, and, in turn, we have accumulated nearly 50,000 tons of South African uranium over the last twenty-five years. At a cost of \$460 million, the purchase of 9.2 million pounds of South African uranium has been negotiated for use in the Seabrook and Yankee nuclear power plants.

In order to fight effectively against nuclear proliferation, we must look beyond our own country. We must understand how nuclear proliferation fits into the global flow of capital and the search for profits by the world's largest corporations. We must also see the suffering caused by each phase of the nuclear industry from the mining of uranium to the storage of plutonium. With these kinds of understandings, we can begin to build the global alliances that will be necessary to stop nuclear proliferation.

To oppose the situation in South Africa, Americans can demand an end to all U.S. bank loans to the racist regime and an end to technical collaboration in their nuclear development. We hope that this and similar strategies will help build a more wide-ranging anti-nuclear movement and reinforce our fight against nukes in the U.S.

—Kaigh Smith, Jr.
member of Africa Resource Center
and Stop Banking on Apartheid

California's Al Safe Energy: Nuclear Power



The state's total wind potential is "greater than 50,000 MW," according to the California Energy Commission Staff, or more than double the present average electrical demand in California.

On November 5, 1979 a PG&E spokesman predicted rotating blackouts in California if the utility is not allowed to open its Diablo Canyon nuclear power plant.

This threat should help the anti-nuclear movement to better understand the dimensions of our struggle with the utilities and the rest of the energy industry. PG&E has spent almost \$1.7 billion on Diablo Canyon, and can be expected to try anything -- including blackmail -- to recover its investment.

PG&E may need Diablo Canyon, but California doesn't. Detailed studies by the California Energy Commission (CEC) and others have shown that the state can meet all its future electricity needs through conservation and a wide variety of proven safe energy alternatives -- geothermal, small hydro, cogeneration, repowering, wind, solar and biomass.

Nevertheless, safe energy and conservation are developing only at a slow pace in California. This should be no surprise, since the utilities monopolize the production and distribution of electricity and any effective change in this system must be made by the utilities themselves. And the utilities have made it clear that they consider energy alternatives to be good public relations, but bad business.

While giving lip-service to conservation, the utilities have told the CEC that they plan to double electricity output in California in the next 20 years. To supply this much current, the utilities plan to keep on operating their nuclear power plants at Rancho Seco and San Onofre, start up Diablo Canyon, add two more reactors at San Onofre, and build no less than five reactors at Pal Verde, Arizona, to supply the California market. In addition, the utilities plan to build a number of huge coal-burning plants, with serious environmental impact.

It would be bad enough if the utilities had simply ignored safe alternatives in their push for nukes and coal. But the CEC says that the utilities have a history of active obstruction of plans by industry and government to make electricity using cogeneration, small hydro, and biomass. To us, these alternatives are literally life-savers; but to the utilities, they are just competition.

Repowering: The Unknown Alternative

One of the simplest and most promising energy alternatives is virtually unheard of outside utility circles. It is

called repowering, and consists of modernizing existing oil-burning generators by capturing waste heat and putting it to work. The result is "much more electricity from each barrel of fuel oil," say the CEC staff. Oil and gas burning plants provide 60% of California's electricity.

The repowering of three utility generators in Southern California boosted their capacity by 530 megawatts (MW) equalling the entire output of the San Onofre nuclear plant. Statewide, a CEC survey showed that a total of 5,000 MW could be added by repowering. The total generating capacity statewide is 38,200 MW.

But the utilities want nuclear and coal, not repowering. The last repowering proposal by a utility, at San Diego Gas & Electric's Silvergate plant, was withdrawn by the utility after the CEC said that repowering was one good reason why SDG&E didn't need its proposed Sundesert nuclear power plant.

Cogeneration: Utilities Aren't Buying

Utilities have killed cogeneration in California in the same way that General Motors wiped out the streetcar. Forty years ago it was very common for factories to generate electricity as a byproduct from the steam or heat used in industrial processes. The factories met their own electricity needs and sold the surplus to the utilities. Cogeneration almost disappeared, however in the 1940's and 1950's due to lower rates for central station power and hostile utility practices. Typically, the utilities would refuse to offer a fair price for cogenerated power, or would demand a prohibitively high price for standby power needed by the factory as a back-up for cogeneration.

California utilities were recently required by law to promote cogeneration. The CEC staff estimates that up to 6,000 MW is now economically feasible, compared to the 500 MW in use. The CEC recently listed 94 different cogeneration possibilities, ranging from a 200 kilowatt project at Union Carbide in Los Angeles to a 48 MW installation at the Modesto Irrigation District. The utilities dutifully file reports listing cogeneration projects under "discussion" or "study." There is much talk, but little action, because, as the CEC staff suggests, "utilities have viewed industry-owned cogeneration as a loss of profitable large baseload demand."

Biomass: Peach Pits and Sawdust

The same utility barriers exist to generating with "biomass" -- trash, woodwastes or food wastes which can be used as fuel.

Biomass is a proven technology. Twelve lumber mills in California use their woodwastes as a fuel to produce a total of 100 MW of electricity. Three major food processors burn wastes (such as peach pits) to produce steam and electricity. Sewage treatment plants and solid waste landfills are producing methane gas.

An "extensive effort" could bring on line 1,500 MW of biomass generation, according to the CEC staff. Most of this would be small-scale woodwaste burning generators. To overcome expected utility resistance, the CEC staff has proposed that the utilities be required to build a specified number of biomass generators.

Hydroelectric: Small is Beautiful

Big dams have long been an important source of hydroelectric generation in California. There is also a large, untapped potential in small dams, irrigation canals and aqueducts which were ignored until recently because of the relatively low price of fuel oil.

The CEC staff has identified 500 MW in firm hydro projects ready for development, and estimates that a total of 1500 MW could be tapped. Again it is the utilities that have slowed development. They have offered to buy the power generated by small dam owners for a price as low as 1.4¢ per kilowatt-hour, at a time when it was costing 3.2¢ in fuel alone to generate with oil. When dam owners have found other customers besides the utilities who were willing to buy their power output, the utilities refused to "wheel" or transmit the power through their grids to the potential buyer. The CEC staff believes that the utilities must be ordered to take the necessary steps to promote hydroelectric development.

Another important source of new hydropower is the upgrading of existing large hydroelectric generators by rewinding them more tightly. The capacity of the generator at Shasta dam was boosted from 424 MW to 525 MW by rewinding. The Army Corps of Engineers estimates that 900 MW could be added in California by rewinding. Like repowering, rewinding is an obvious step that the utilities don't seem willing to undertake on their own initiative.

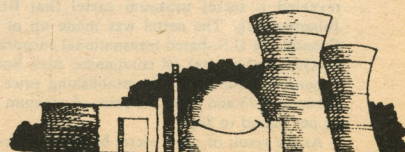
Blowin' in the Wind

If the utilities wanted to, they could build nothing but wind generators to meet future needs. The state's total wind potential is "greater than 50,000 MW," according to the CEC staff, or more than double the present average demand in California. A 1978 law committed California to building up to 10,000 MW of wind power by the year 2000, but it remains unclear exactly how this will be done. The CEC has published a map of the state covered with black splotches representing the places where average wind speed is more than 16 mph, giving "excellent" wind generation potential.

The federal government and the utilities seem to want wind energy developed, but not so fast as to threaten their nuclear and coal master plan. There is lots of government-financed testing, but no significant commercial development. At four different sites nationally, utilities are feeding power into their transmission grids from 200 kw generators, and a 2 MW wind generator recently went on line in North Carolina.

In California, Southern California Edison is building a 3 MW generator in the San Geronio Pass. The utility does not seem to be in any great hurry to get this wind machine on line. Originally the generator was supposed to start up in early 1979, then late 1979, and now not until spring 1980.

High cost is usually raised as the main objection to a massive program of wind development. But the CEC staff estimates that if as few as 200 large wind generators were built, the construction cost per megawatt of capacity would drop to \$800,000, which happens to equal the figure for PG&E's \$1.7 billion Diablo Canyon nuclear power plant. Unlike Diablo Canyon, of course, wind generators will cost nothing for fuel or disposal of radioactive wastes, and they are highly unlikely to ever cause a single death by cancer.



ternatives to

The Sun on Ice

Of all the solar technologies, hot water heating with the sun is among the cheapest and most common. Yet almost all buildings in California still use electricity to heat water, or natural gas which is thereby made unavailable for electricity generation.

It is only a matter of time before California adopts laws that require solar water heating in all new homes, and eventually in older homes when they are sold. Once again, however, we find the utilities doing their best to hold us back. A recent ordinance before the Santa Barbara County Board of Supervisors passed 3 to 2 to require solar water heating in every new home. Southern California Gas Co. promptly launched a massive lobbying drive which convinced one supervisor to switch his vote, making the new law inoperative in any area served by SCG's natural gas lines. This incident should clarify the underlying hostility of the utilities to the full and rapid utilization of solar power. Solar water heating is threat enough, let alone solar space heating or the direct generation of electricity by solar photovoltaic cells at hundreds of small sites.

Much more attractive to the utilities is solar power they can own, through large central stations in the desert. By covering a square mile of land with mirrors to concentrate the sun on a steam-generating boiler, such an installation can produce 100 MW. It is this kind of solar technology that gets the lion's share of federal research funds. The U.S. Department of Energy estimates that this central station technology could theoretically be used to generate 500,000 MW in California. But there seems to be no rush. Like wind, the utilities see solar as an option for the distant future...perhaps sometime in the next decade, says DOE. A small scale demonstration project is underway...slowly...in the desert near Barstow.

Geothermal: The Manhattan Project of Alternative Energy

Geothermal is the one alternative energy source that is fully acceptable to the utilities. Rather than being free like the wind and sun, or owned by public agencies like hydropower, or owned by a diversity of ordinary businesses like cogeneration and biomass, geothermal steam is mostly controlled by the oil companies. The list of developers of new geothermal wells at the Geysers includes Union Oil (6 wells), Shell Oil (2 wells), and Aminoil (3 wells). Chevron is developing three wells in the Imperial Valley.

PG&E, the main purchaser of geothermal steam for electrical generation, is an old fuel oil customer of Shell, Union, Chevron and others. In fact, the oil companies have generously allowed PG&E to pay them only for the steam actually put to work to generate electricity, rather than the total steam output blasting out of the ground. When PG&E makes a large purchase of fuel oil from these oil companies, it may turn off its geothermal generators. "Because the wells cannot be shut down without damage, the (oil company) developer vents the untreated, unused steam directly into the atmosphere. In the Geysers, this venting releases hydrogen sulfide emissions, frequently causing violations of the state ambient air standard for hydrogen sulfide. It also wastes steam that otherwise would be productive," says the CEC staff, which advocates a ban on the practice.

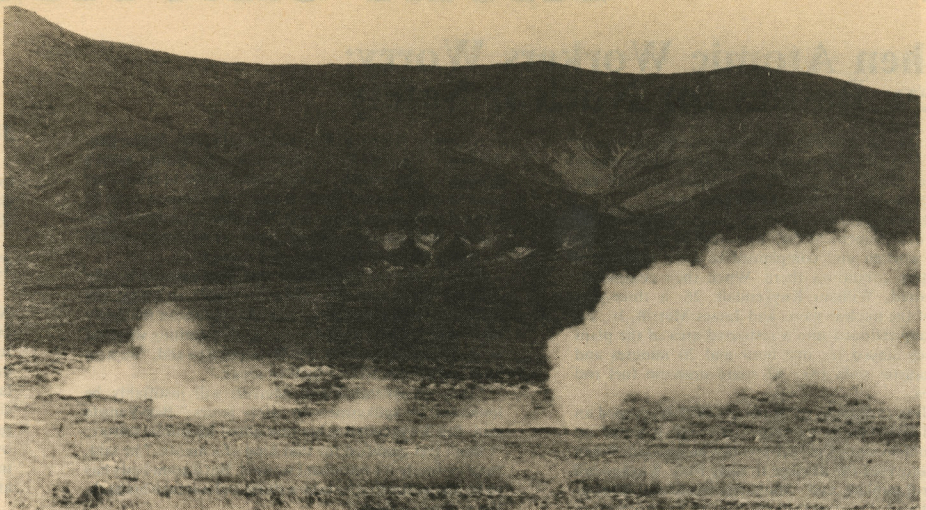
As of August, 1979, 663 MW of geothermal power was coming from the Geysers, making it the largest geothermal field in the world. The utilities have proposed new wells totally 2,439 MW by 1987, and total geothermal potential for the state is estimated by the CEC to be as high as 14,000 MW.

Technical problems, while used as excuses by the utilities for the slow progress of solar, wind, biomass, cogeneration and conservation, seem to be tackled with more vigor when they arise in geothermal development. Noxious hydrogen sulfide is mixed with the Geysers steam, so sophisticated "scrubbers" were developed. The Imperial Valley geothermal hot water is so corrosive that it destroyed conventional pumps and valves. The oil companies rose to the challenge. "Since 1976, large scale engineering test facilities have been in operation in the Imperial Valley," says the CEC. Special materials were developed. The effort is succeeding. The Imperial Valley is expected to produce the nation's first hot water geothermal power by the end of 1979.

The record shows that geothermal is, clearly the "Manhattan Project" of alternative energy, embraced by the utilities while half a dozen equally promising alternatives are neglected.

Conservation: The Biggest Alternative

The utilities' claim that electrical output must double by the year 2000 is based on the assumption that California will continue to use electricity with few changes in our habits or technology. Yet electricity is wasted so widely



663 MW of geothermal power come from the geysers, making it the largest geothermal field in the country. The California Energy Commission estimates the total geothermal potential for the state to be as high as 14,000 MW.

and freely that it defies precise calculation. A recent Harvard Business School study estimated America's waste of power at 40%.

Perhaps the most startling proof of conservation potential comes from recent tests that used "immediate feedback" electricity meters inside the home to tell the occupants how fast they were running up the bill. The mere act of installing these meters, without any other conservation measures, resulted in cuts in energy use of up to 15 percent.

Equally dramatic is the impact of building code reforms and public education in Davis, California, where total electricity use fell 6 percent from 1975 to 1977, despite a 7 percent increase in the number of customers.

Virtually every electrical device we use can be replaced by more efficient versions now available or under advanced stages of development. This includes televisions, refrigerators, air conditioners, water heaters, driers, street lights, and industrial electric motors. The U.S. Department of Energy, not known for its wild claims, has estimated that introduction of more efficient electric motors alone could save 5% of America's electrical consumption by 1990. In California, the CEC has adopted its own regulations for the energy efficiency of some appliances, but the CEC staff admits that "enforcement is negligible."

Vast amounts of electricity are wasted by overlighting of commercial buildings. Twenty years ago, office buildings were designed with lighting levels of 2.5 watts per square foot; but recent buildings have used up to 5 watts. A massive program of "delamping" of commercial buildings could reduce state electricity demand by 1,000 megawatts.

Other measures are available to immediately cut consumption. These include installing simple, inexpensive flow restrictors in showers to reduce hot water use and covering water heaters with insulation blankets to reduce heat loss.

To eliminate the need for new power plants, we don't even have to cut total electricity use—we just have to spread it out more evenly. The biggest electrical supply problem is the "peak load," the unusually high demand on hot summer afternoons. Average demand statewide in 1978 was only 23,000 MW, but a peak load of up to 32,900 MW was sometimes reached. The utilities have installed a total of 38,200 MW of capacity, spurred on by the regulatory policy that guarantees them a sizable profit on all capital investment in their "rate base." But if "load management" could be used to even out the peak demand during the day, there would be less need for surplus

generating capacity. Fortunately, such a technology now exists. One system is called "remote switching." Without causing any discomfort, the utility can turn off a customer's air conditioner, water heater or swimming pool pump for brief periods of time by sending a coded signal through the transmission lines. Pilot programs show that 90% of residential customers agree to participate in remote switching when offered a discount on their electrical rates. The CEC has required California utilities to offer remote switching, but the utility response is sluggish, and the CEC staff wants a greatly expanded program.

A Matter of Politics

The obstacles to conservation and safe energy are not technical in nature. They are political. Our energy future remains under the control of the utilities. And their vision of the future is more consumption, more coal, and more nuclear.

How can they get away with it? The California Energy Commission suggests that "One possible explanation is that a strong public constituency has not yet developed for unfamiliar-sounding solutions such as cogeneration and repowering."

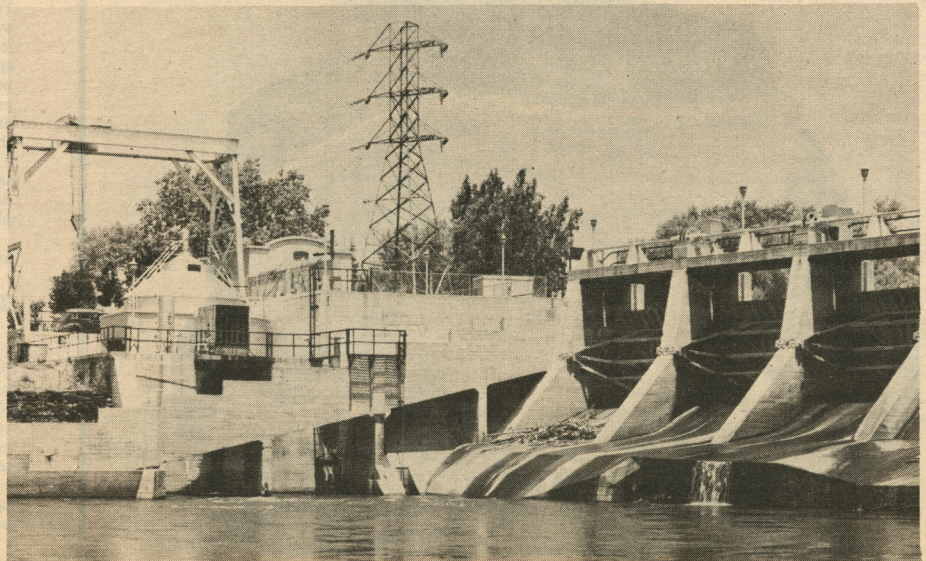
The anti-nuclear movement can build that "strong public constituency" for safe energy. We must, if we hope to stop nuclear power.

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By Michael Sweeney

This article is available as a leaflet for 50¢, prepaid, from SO NO More Atomics, 833-E Sonoma Ave., Santa Rosa, CA 95404.



This 50-year-old hydroelectric installation near Merced generates 3.5 MW from a water drop of only 26 feet. The California Energy Commission says that 1,500 MW could be developed statewide from similar facilities.

— SHORT CIRCUITS —

When Atomic Workers Worry: New Battles for Nuclear Safety

Nuclear energy safety hazards are part of life for atomic workers. They think about them, worry about them, and at times enter formal complaints about them. After all, the safety they're concerned about is their own.

Two former operator-trainees at Virginia Electric and Power Co.'s (Vepco) Surry, Va., nuclear power plant thought, worried and complained to their supervisors about safety conditions there. When their complaints were ignored, William Kuykendall, 26, a three-year veteran of the nuclear navy, and James Merrill, Jr., 24, walked unquestioned into a restricted area of the plant where they stayed for one hour and 20 minutes and poured caustic soda over 62 spare uranium fuel rod assemblies.

According to Vepco, the April 27, 1979 act caused an estimated \$310,000 in damages, although it posed no safety problem since the fuel was not being used. When Vepco discovered the damage in early May, Kuykendall and Merrill publicly and voluntarily admitted responsibility and said they damaged the rods to focus attention on safety and security problems at the plant.

Kuykendall and Merrill say they wanted to publicize their concern for making nuclear energy safe and secure, and they believed that this was the only way to get the attention of officials at the Nuclear Regulatory Commission (NRC).

They sent a letter to the NRC on Oct. 10, 1979 explaining their case as they intend to present it as part of their defense in court, a case which they apparently believed would vindicate their actions. As it happens they say they no longer believe their case will have the impact they anticipated when they intentionally committed the crime.

Kuykendall and Merrill didn't get a chance to make their case in court because Surry County (Va.) Circuit Court Judge Ligon L. Jones stopped them from discussing specific safety issues, despite their basic contention that they acted to alert the community to unsafe plant conditions which were ignored by Vepco and the NRC. Judge Jones ruled that because the damaged rods were not part of plant operation at the time they were damaged, safety issues of operation could not be included in the trial.

On Oct. 16, a Surry county jury of three men and nine women found them guilty of intentionally damaging the power plant, a felony, but recommended that they receive no more than two years in jail, (the minimum sentence).

On November 27, Kuykendall and Merrill were sentenced to two years. They intend to appeal the decision.

"Vepco is not going to change," Kuykendall said one week after he and Merrill were found guilty, "and I don't think the NRC has enough people or could hire enough to enforce the (safety and security) regulations in Vepco."

Attorney Richard Ben-Veniste, former Watergate Assistant Special Prosecutor, said the Surry plant's managers were people, "you wouldn't trust to take apart your vacuum cleaner." Still, he said, "the industry must be obliged to make its plants safe." Like his defendants, Ben-Veniste believes that nuclear power is necessary, which increases the need for safety and security.

Victory for the defendants will be measured by the distance Kuykendall and Merrill are able to budge the NRC toward investigating their charges about the Surry plant. Kuykendall is the first to say that nothing was won in the course of the trial. But he is quick to add, "we now have a platform from which to speak."

"They (Kuykendall and Merrill) will justifiably be looked to as spokesmen on safety issues," Ben-Veniste said. But Kuykendall is hesitant about his public stature. "I don't feel qualified for that kind of a mantle," he said, "and certainly it's not what I wanted. But if somebody has to be one of the first to take a stand and not turn his back, I'm willing to do it."

—Mark Alan Pinsky
Critical Mass Journal, October 1979

SABOTAGE, ETC.

There are new problems at San Onofre. According to the California Coastal Commission Marine Review Committee, Southern California Edison doesn't know how much radioactive material the San Onofre plant is dumping into the ocean. And the Commission has warned that if the utility doesn't develop an adequate monitoring program, it will formally intervene in the N.R.C. operating-license proceedings for reactor units 2 & 3.

The Coastal Commission has other objections to reactor expansion. They say Units 2 & 3 may damage the San Onofre kelp bed and kill millions of nearshore marine organisms.

But already, it seems, the animal world is retaliating. Recently, a "stray life form" caused a short circuit that shut San Onofre down for six days. The field mice that created the electrical malfunction caused \$75,000 in damage — not including shutdown expenses.

PG&E PROFITS UP

PG&E's just-released third quarter financial report has good news for stockholders — and bad news for ratepayers. PG&E's annual profits have risen to \$476 million from last year's \$368 million — an increase of 29%. The company cited an "improved regulatory climate" as one reason for the profit surge, and "anticipates that earnings will continue to improve."

JUST ANOTHER JOB

John O'Leary, who was Deputy Secretary of Energy up to a few months ago, has been elected to the board of General Public Utilities, the parent company of the Utility that Owns Three Mile Island.

—*Critical Mass Journal*

OIL GLUT COMING?

In an article titled "The Surprising Surplus in Oil", the November 19 *Fortune* notes, "In the view of many observers, a potential glut in world crude is beginning to loom for 1980". The business magazine reported dropping oil consumption worldwide, and U.S. oil use last quarter down 5% from a year ago. Higher prices are cited as one factor in the drop, with the average U.S. prices of heating oil and gasoline rising 30 cents a gallon over the last year. *Fortune* comments, "Of that price increase, only half has gone for higher crude costs, and about as much into expanded profit margins".

HIGH COST OF TMI CLEAN-UP

Cost and clean-up are the two major questions in Harrisburg, Pennsylvania. Three Mile Island owner Metropolitan Edison says that last March's accident could cost nearly \$2 billion — if the plant resumes operations. That estimate will go far higher if the plant can't be salvaged.

Also, General Public Utilities will have to pay up to \$1 billion for substitute power while the reactor is out of service. And G.P.U. already has had to pay \$155,000 in fines for 44 safety violations at the plant.

Now G.P.U. is requesting that the federal government finance the reactor clean-up as "a good research opportunity."

Meanwhile, decontamination continues. Though G.P.U. has stuck by their statement that they would not dump irradiated water into the nearby Susquehanna River, the utility is chafing under restrictions on venting krypton gas trapped inside the facility. They warn that a rise in atmospheric pressure could cause a spontaneous leak. But the local antinuclear group's protesting that there's no way to "safely" vent the estimated 51,000 curies of radiation.

—Julia Randall

50% CUTBACK IN ENERGY GROWTH RECOMMENDED

The State Energy Commission staff wants to change the shape of California's energy future. Their biennial report recommends a 50% cutback in the state's annual energy growth, limited dependence on conventional fuels and an increased reliance on local energy sources.

Specifically, the report proposes cutting state oil imports by a third before the year 2000 and avoiding coal and further nuclear development altogether. In addition, it approves the use of domestic natural gas and recommends that the state provide incentives for the development of solar, wind, co-generation and geothermal technologies.

The report also discusses energy finance and suggests ways to offset consumers' high energy costs. According to staffperson Stephanie Bradfield, the expansive program is designed to persuade officials to come to grips with the entire energy situation, rather than tackling each symptom as it appears.

After a hearing before the Energy Commission, the report is headed for Governor Brown and the state legislature.

—Julia Randall

SOVIET NUCLEAR DOUBTS

After years of praising nuclear power, the Soviet Union is openly conceding serious doubts about the scope, safety and environmental consequences of its nuclear power program. In an article in the Soviet Communist Party's leading theoretical journal, *Kommunist*, two top energy specialists expressed the first doubts to surface in the official Soviet press. They warned that unless the program is altered radically, more densely populated areas of European Russia may soon reach the limits of their "ecological capacity" to cope with nuclear power. They also cautioned it would be wrong to assume that safe, economical and time-tested technologies have been developed for all stages of the complex uranium-plutonium fuel cycle.

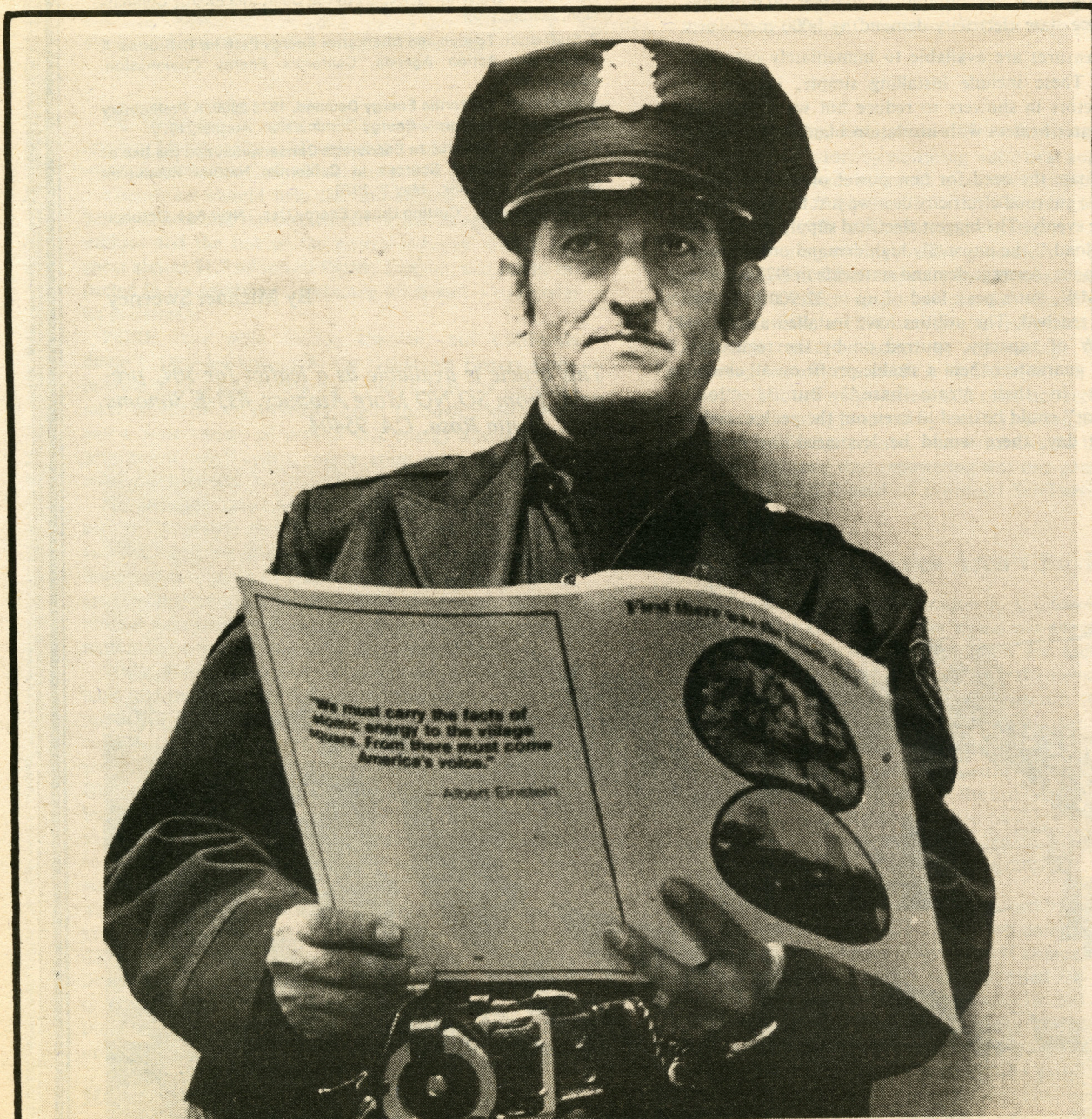
The present Soviet nuclear capacity is about 12 million kilowatts, about a quarter of that in the U.S.

—*The Wall St. Journal*, 10/15/79

THIS'LL KEEP YOU WARM!

While browsing through my local library, I came across a 1972 book called *The Atomic Establishment*, by Dr. Peter Metzger. One passage caught my eye: "The AEC has produced plutonium-heated 'long-johns' for the Navy. Designed to be worn under a diver's suit, they contain about one thousand grams of plutonium 238, the heat from which keeps Navy divers warm at depths down to six hundred feet. This amount of plutonium is about sixteen thousand curies, or one trillion maximum permissible lung burdens." Metzger states the atomic underwear was developed by Monsanto Research Corporation. There is no note on whether it was ever actually used. Metzger also reports that Monsanto was working on (believe it or not!) a plutonium-powered cordless coffeepot. Hot coffee, anyone?

—Bob Van Scoy



The officer is reading a booklet on nuclear weapons and power produced for the Fall teach-ins. Available from your local group or Abalone Alliance office.

photo by Julie Simons

A Month in the Life of *It's About Times*

Most issues of *It's About Times* have been produced at the American Friends Service Committee in San Francisco. As we've gained practice, the process has been cut back from 36 hours to about 15 hours. We usually start work about 10 a.m. on a Sunday. We've acquired the talent of spreading out our materials to fit the size of our work space, so copy can be found or lost in every corner of the room. Time is often spent looking for material that we saw just a moment ago. And of course, work can't continue until the lost copy is found.

At 1:00 a.m. we realize a caption is needed for a photograph. Turning on the typesetting machine will wake up the guest sleeping in the next room. The only solution to the problem is to hunt through back issues of the paper looking for the right words.

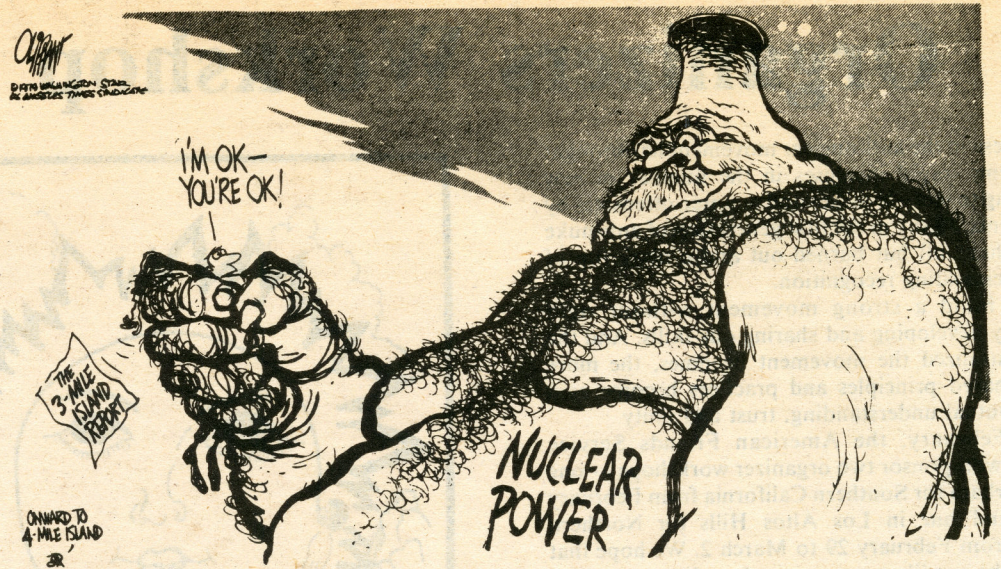
Eating is always a problem. A proposal will be made at 5:00 to get some food. An agreeable breaking point never happens until 9:00. Finding an open restaurant on Sunday night becomes difficult.

After dinner, the standard resolution is to hustle and get the job done in a couple of hours. Resolutions are made to be broken, and at 4:00 a.m. we creep down the stairs trying not to make any noise, and worrying about the hole we accidentally burned in the table.

At 7 a.m., we deliver the final copy to the printer. The following day, we spend about 12 hours preparing the mailing to subscribers, and shipping bulk orders to local groups.

One week later we evaluate the issue, and a brief period is spent mourning our mistakes. The next issue is planned. Research begins on the articles.

Stories begin to come in, and are divided up for editing. The following week, we hold another meeting to decide what will go into the issue, since there is almost always too much. After a few hours of agonizing, the edited copy is given to volunteer typesetters. Production week rolls around, and the process begins again.



'Are you sure that's the only way left?'

Board (continued from page 1)

fast track legislation, and has a more restrictive grandfather clause. A conflict of interest provision for members of the Energy Mobilization Board was adopted. However, the Senate bill authorizes the Board to determine which environmental laws should be altered to facilitate energy facility construction.

The Energy Mobilization Board will become another NRC for non-nuclear energy projects. All authority and control will rest within a small presidentially-appointed body. States and communities will have no control at all over their local energy sources, nor will they be able to object to any facility deemed necessary by the Oval Office. The Board will be exempted from Sunshine laws, the Administrative Procedures Act, the Advisory Committee Act, and the Freedom of Information Act.

Amory Lovins, creator of Soft Energy Paths and energy representative for Friends of the Earth, in commenting about the Board, writes, "There is simply no substitute for the wisdom of the informed populace working through an intricate and deliberate political process at many different levels. Democracy... is messy, but not easy to replace. Those anxious to replace the idiosyncratic, unpredictable meanderings of democracy with a clean, neat, once-and-for-all decision by some central body, subject to minimal and essentially ineffectuated safeguards, are seeking to vent their impatience with the caprice, complexity, and rigor of democracy by doing away with them — and in an area of political controversy... A prudent government does not treat its constituents as enemies."

—Mark Evanoff

Thanks to Friends of the Earth, People for Safe Energy, and the Sierra Club for background information.

In the Spirit of the Christmas Season ...

Creative Cast of Characters Produces Gaithersburg Play

The combined talents and energy of the Gaithersburg Galas created a magical 1978 Christmas play entitled "The Plight of the Christmas Tree."

The Galas, a group of 25 Bechtel wives, spent six months planning and producing the play for Bechtel employees and their children.

The process of producing the play was as exciting as the play itself, according to Mary Smith, coordinator of the Galas' annual Christmas play. When she first broached the subject at the bridge table one day in June, Mary's remark fell on fertile ground. Eileen Hanna, whose husband, John, is a project manager for Gaithersburg's international hotel group, had dreamed the night before about what Christmas would be like in "nu-clearland." An avid golfer and busy volunteer, Eileen added play writing to her list of activities.

"The Plight of the Christmas Tree" is a simple story of challenge, effort and triumph. The scene is Powersville, U.S.A., where residents are gathered in the town square to light the community Christmas tree. Tragedy strikes when the town's power supply fails and the tree lights die out moments after being lit.

A number of characters rush in to

try and save the day — Father Fossil Fuel, Gus Gas, Olive Oil, Connie Coal, Sally Steam, Tommy Turbine, and Molly Cule. Their efforts are fruitless. Finally, along comes a little guy, long stuck in a corner and neglected, but "with a steady motor that would not quit." He's Reggie the Real Great Reactor, and he becomes the hero by supplying power to light the tree.

The parallel between the play and the story of Rudolph the red-nosed reindeer was no accident. Rudolph's song provided the tune for the play's theme, the first line of which is "Reggie the real great reactor/has a bright and shiny cone." Another song was written to the tune of Jingle Bells, with the catchy refrain "Oh, fossil fuel, fossil fuel, fossil all the way."

Imagination was abundant in the costume design, as well. Tommy Turbine dressed in a huge, white, box-bone costume replete with various like costume replete with various gling noises. Connie Coal wore a black padded outfit with a real miner's hat and carried a bucket of coal. Father Fossil Fuel sported a long, white beard and a cane, while Reggie the Great Reactor was a silver creation topped with flashing lights. The rest of the costumes were equally imaginative.

The play was directed by Cecilia



THE CAST OF 'THE PLIGHT OF THE CHRISTMAS TREE'
Back row (l-r): Betty Stone, Shirley Stevens, Betty Collins, Zlata Udbinac, Betty Young, Marj Dilling. Second row (l-r): Cecilia Santee (standing), Barbara Steen, Charlotte Hess, Maryanne Patterson. Front row (l-r): Mary Smith, Becky Gruber (as Reggie), Terry Burke, and Eileen Hanna.

Santee and featured Mary Smith, Becky Gruber, Shirley Stevens, Zlata Udbinac, Marj Dilling, and Betty Stone. Maryanne Patterson provided the guitar accompaniment. A host of others gave technical and moral support, a total of 1,500 hours of work, in Eileen Hanna's estimate. More than

650 delighted children and 1,500 adults attended the performances.

Close friendships were forged during the staging of "The Plight of the Christmas Tree." A group of play alumni still meets frequently.

They'll have to work hard this year to top that performance.

From September 1979 *Bechtel News*

Organizers Workshop

Our success in the anti-nuclear movement has brought new problems: rapid increases in the number of new people trying to work together and counter-offensives by our opponents. Many in the first generation of anti-nuke organizers have all but burned out and a new crop of leaders is demanding recognition.

We can build a strong movement without rigid hierarchy by developing and sharing our skills. And the more decentralized the movement becomes, the more vital our shared principles and practices become as a source of mutual understanding, trust and unity.

In late February, the American Friends Service Committee will sponsor two organizer workshops — one in Santa Barbara for Southern California from February 22 to 24 and one in Los Altos Hills for Northern California from February 29 to March 2. We hope that these workshops will empower people to become skilled organizers in the anti-nuclear movement and that those who participate will share what they learn with their own local groups.

These workshops are for people actively involved in the anti-nuclear movement. The skills we'll be sharing should be useful both in opposing nuclear power and weapons and in developing programs for soft energy development and peace conversion. We hope that each local group will carefully choose two to four representatives. Each workshop will be limited to 35 participants, so we may have to limit the number who attend from any one area.

For more information and an application form, contact David Hartsough, AFSC, 2160 Lake Street, San Francisco, CA 94121, ph: 415-752-7766 or Tony Mitchell, SP-PANP, 312-1 East Sola St., Santa Barbara, CA 93101, ph: 805-966-4565.



Utilities Attack State Nuclear Laws

There have been several new developments in the PG&E and Southern California Edison lawsuit against the California Energy Commission (CEC) and the California nuclear statutes, now scheduled for a Dec. 18 trial.

After several months of preliminary legal motions, a hearing was held on Nov. 8 in Sacramento in the U.S. District Court, before Judge Michael Real. PG&E argued that the California laws were invalid and unconstitutional because the Atomic Energy Act of 1954 and later laws have assigned jurisdiction over all nuclear matters to the federal government. The utilities contended that they had been "injured" because the California laws allegedly prevented them from planning and constructing new nuclear power plants.

The California Energy Commission, represented by Michael Jencks Law Offices, mounted a strong attack on PG&E's and SCE's affidavits, pointing out contradictions between the utilities' allegations of injury and the evidence that they had continued to plan and proceed with nuclear power plant development after the laws had been passed. In particular, PG&E had spent over \$400,000 on Stanislaus alone since 1977.

After a long day in court, Judge Real decided not to grant PG&E's motion for summary judgment, and ordered a trial, scheduled for Dec. 18 at the Federal Courthouse in Sacramento, on the issue of the credibility of the utility executives' statements in their suit. It was a small, small victory for the CEC, but surprised PG&E and SCE, who expected to win easily and had not planned on such aggressive defense by the CEC.

A follow-up article next month will detail how the utilities have made big plans to supply California with nuclear power, and their unrealistic forecasts for future energy use in California. We'll deliver some very, very interesting news items to you about their plans.

—Phil Grueneich

Calendar

December 24: Candlelight procession and vigil at the NRC. Join Contra Costans Against Nuclear Power and take time from the busy holiday season to take a positive stand against nuclear power. Meet at 4:00 P.M., Bullocks', 1200 Broadway Plaza, Walnut Creek, and walk to the NRC, 1990 N. California Blvd. Please bring your own candles. For more information call 415-934-5249.

January 2: John Baker, labor organizer from Australia, will speak about the anti-nuclear movement in his country. The unions are strongly anti-nuclear, and have employed a variety of creative tactics during nationwide strikes. 7:00, Park Branch Library, 1833 Page, San Francisco. For more information call 781-5342.

January 26-27: Northern California Trainers gathering in San Francisco. Contact Liz Walker 415-752-7766.

January 19: People for a Nuclear Free Future Santa Cruz will host a day long series of "hands on" workshops entitled "Talking with Folks about Nuclear Issues" to be held from 9 a.m. to 5 p.m. in Santa Cruz. The workshops will focus on both speaking and writing about anti-nuclear issues.

Preregistration is requested with a suggested \$5.00 donation. Childcare will be available with advance request. Phone Lee or Marfa at the PNFF office 408-425-1275. Contact people: Lee Henrikson and Marfa Levine



NUCLEARLAND

Safe Energy Groups

ABALONE ALLIANCE OF MARIN*
8N. San Pedro Rd.
San Rafael, CA 94901
415-472-4007 or 472-4047

ABALONE ALLIANCE CLUB
WEST VALLEY COLLEGE
1400 Fruitvale Ave.
Saratoga, CA 95070
408-867-1096 or 374-6459

ALLIANCE FOR SURVIVAL
944 Market St. Room 808
San Francisco, CA 94102
415-982-6988

AMERICAN FRIENDS SERVICE
COMMITTEE
2160 Lake St.
San Francisco, CA 94121
415-752-7766

BOLINAS AGAINST NUCLEAR
DESTRUCTION
P.O. Box 708
Bolinas, CA 94924
415-868-1401

ALLIANCE AGAINST NUCLEAR
POWER
c/o Carroll Child
University of California Medical Center
N319X
San Francisco, CA 94143
415-681-1028 (h) or 666-1435 (UC)

ALLIANCE FOR SURVIVAL*
712 S. Grand View St.
Los Angeles, CA 90057
213-738-1041

CHICO PEOPLE FOR A
NUCLEAR FREE FUTURE
708 Cherry St.
Chico, CA 95926
916-345-8070

CITIZENS ALLIANCE FOR
SAFE ENERGY
Box 887
Mendocino, CA 95460

CITIZENS FOR ALTERNATIVES
TO NUCLEAR ENERGY
424 Lytton
Palo Alto, CA 94301
415-325-6049

CITIZENS FOR A BETTER
ENVIRONMENT
88 First St. Suite 600
San Francisco, CA 94105

CAMARILLO COALITION
FOR SAFE ENERGY
1759 Marco
Camarillo, CA 93010
805-482-7321

COMMUNITY NETWORK FOR
APPROPRIATE TECHNOLOGY
709 Davis St.
Santa Rosa, CA 95401
707-528-6543

COASTSIDERS FOR A
NUCLEAR FREE FUTURE
P.O. Box 1401
El Granada, CA 94018
415-728-7406

COMMUNITY ENERGY ACTION
NETWORK
P.O. Box 33686
San Diego, CA 92103
714-236-1684 or 295-2084

CONTRA COSTANS AGAINST
NUCLEAR POWER
P.O. Box 743
Concord, CA 94522
415-934-5249 or 938-3062

DOWNWIND ALLIANCE
P.O. Box 183
Covelo, CA 95428
707-983-9969

EAST BAY ANTI-NUCLEAR GROUP*
585 Alcatraz, Suite A
Oakland, CA 94609
415-655-1715

GROUP OPPOSED TO NUCLEAR
ENERGY
300 South 10th St.
San Jose, CA 95112
408-297-2292

LOMPOC SAFE ENERGY
COALITION
238 South J St.
Lompoc, CA 93436
805-736-1897

ABALONE ALLIANCE OFFICE: 944 Market St., Rm. 307, San Francisco, CA 94102 415-543-3910

DIABLO PROJECT OFFICE: 452 Higuera St., San Luis Obispo, CA 93401, 805-543-6614

*Denotes that several community/neighborhood groups and affinity groups are working in the vicinity.

MID-PENINSULA CITIZENS
FOR SAFE ENERGY
75 Ladato Ave.
San Mateo, CA 94403
415-574-3245

MOTHERS FOR PEACE
1415 Cazadero
San Luis Obispo, CA 93401
805-544-4955

MOUNTAIN PEOPLE FOR
NUCLEAR FREE LIFE
1121 Scenic
Felton, CA 95018

NAPA VALLEY
ENERGY ALLIANCE
P.O. Box 97
Napa, CA 94558
707-255-7493

NEVADA COUNTY PEOPLE
FOR A NUCLEAR FREE FUTURE
P.O. Box 457
Nevada City, CA 95959
916-272-4848

PELICAN ALLIANCE
P.O. Box 596
Pt. Reyes, CA 94937
415-663-8483

PEOPLE'S ANTI-NUCLEAR
COLLECTIVE
U.C. Berkeley
607 Eshelman Hall
Berkeley, CA 94720
415-642-6912

PEOPLE AGAINST NUCLEAR
POWER
U.C. Santa Barbara
P.O. Box 14006
Santa Barbara, CA 93107
805-968-4238 or 968-2886

SANTA BARBARA PEOPLE
AGAINST NUCLEAR POWER
312 East Sola St. #1
Santa Barbara, CA 93101
805-966-4565

PEOPLE AGAINST NUCLEAR
POWER*
944 Market St., Room 808
San Francisco, CA 94102
415-781-5342

PEOPLE FOR A NUCLEAR
FREE FUTURE
433 Russell
Davis, CA 95616
916-758-6810

PEOPLE FOR A NUCLEAR
FREE FUTURE
515 Broadway
Santa Cruz, CA 95060
408-425-1275

PEOPLE GENERATING ENERGY
452 Higuera
San Luis Obispo, CA 93401
805-543-8402

PEOPLE FOR SAFE ENERGY
c/o Grant Marcus
2069 E. Harvey
Fresno, CA 93701
209-268-3109

REDWOOD ALLIANCE
P.O. Box 293
Arcata, CA 95521
707-822-7884

RIVERSIDE ALLIANCE FOR
SURVIVAL
c/o 3150 Redwood Dr.
Riverside, CA 92501
714-748-0047

ROSES AGAINST A
NUCLEAR ENVIRONMENT
4400 Fair Oaks Ave.
Menlo Park, CA 94025
415-322-2759

SONOMA ALTERNATIVES FOR ENERGY
P.O. Box 452
Sonoma, CA 95476
707-996-5123

SHASTANS FOR ALTERNATIVES
TO NUCLEAR ENERGY
1620 Fig Ave.
Redding, CA 96001

SO NO More Atomics*
883-E Sonoma Ave.
Santa Rosa, CA 95404
707-526-7220

STANISLAUS SAFE ENERGY
COMMITTEE
P.O. Box 134
Modesto, CA 93354
209-529-5750

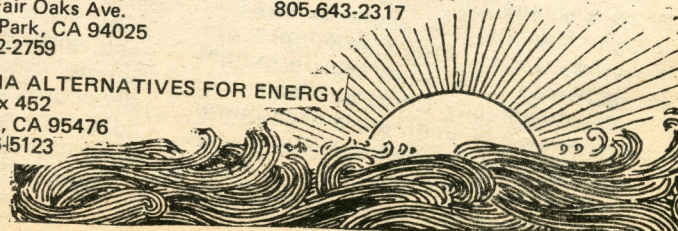
STOP URANIUM NOW
P.O. Box 772
Ojai, CA 93023
805-646-3832

SOCIETY UNITING FOR
NON-NUCLEAR YEARS
580 Lighthouse Ave.
Monterey, CA 93940
408-375-7794

TEHAMANS AGAINST NUCLEAR
POWER
905 Jackson No. 2
Red Bluff, CA 96080
916-527-8054

UPPER NAPA VALLEY
ENERGY ALLIANCE
1513 Madrona Ave.
St. Helena, CA 94574
707-963-7835

VENTURA SAFE ENERGY ALLIANCE
P.O. Box 1966
Ventura, CA 93001
805-643-2317



Radioactive Smoke Detectors

Most of the smoke detectors currently being sold are ionization devices containing americium-241, an intense alpha-emitting radioactive isotope with a half-life of 458 years. It is created by the neutron bombardment of plutonium, itself a toxic byproduct of fission in a commercial nuclear reactor.

Neither the manufacturers of ionization detectors nor the U.S. Nuclear Regulatory Commission have addressed either the short term problem of the detectors' destructibility or the long term problems of retrieval of these radioactive devices for safe disposal.

Inside a smoke detector, americium oxide salt is contained within a very thin gold and silver plated wafer. Careless handling, attempts at home repair, and normal disposal practices can rupture the thin protective plating and disperse the americium. Residents would have no way of detecting the leakage and would remain unaware of this constant exposure.

Aside from the short term health and environmental hazards of these smoke detectors there are the very disturbing long term threats as well. While radioactive smoke alarms have a useful life of only about 15 years, americium has a half-life of 460 years and will remain a potential threat to human health and safety for thousands of years. To date, four million ionization detectors have already been purchased for homes and offices, and more devices are entering the market at the rate of 9 million per year. Theoretically, these radioactive detectors are to be returned to the manufacturing company, which in turn hands them over to the U.S. Nuclear Regulatory Commission for disposal. Although most ionization type devices contain a warning to this effect in fine print, few people ever read it, and there is no provision for enforcement, no penalties for non-compliance. Most consumers don't even know if their smoke detector is an ionization or safe photoelectric type—let alone when and where to return them.

Clearly some detectors, if not *most* of them, will end up in the trash cans, incinerators and junk yards of the nation. Dr. Karl Z. Morgan, the "father of health physics," claims:

"Some americium will certainly seep into the soil and water. The only question is where and how much."

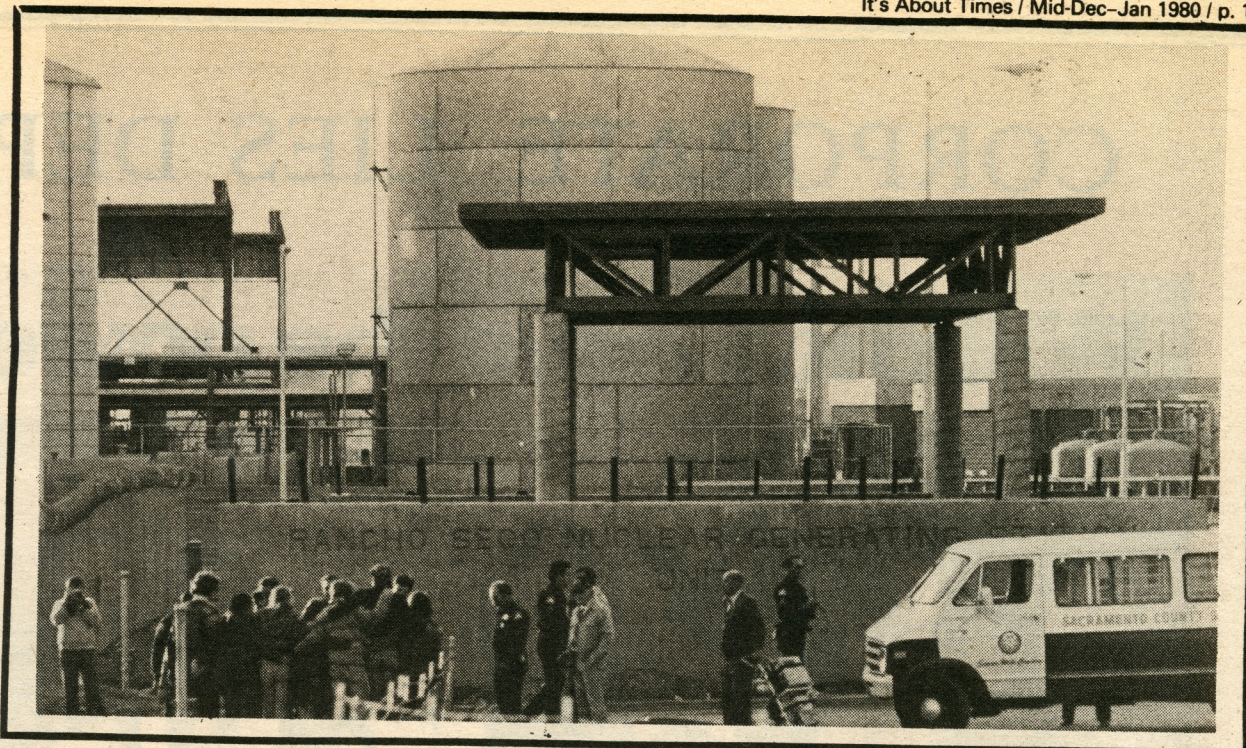
Americium, which unlike plutonium is soluble, accumulates in soil and water and enters the human food chain in drinking water, plant foods, fish, and animals. Once ingested by the human organism, it moves readily from the gastrointestinal tract into the blood stream, where it remains to irradiate the liver and highly sensitive white and immature red blood cells in the bone marrow. According to Dr. Edward A. Martell, an environmental radiochemist for the National Center for Atmospheric Research in Boulder, Colorado, even "if americium doesn't hurt us, it's going to hurt our children and grandchildren." As an environmental specialist, he is "horrified" by the widespread distribution of radioactive smoke detectors, which he regards as "grossly irresponsible...and insensitive to the risks."

1. Photo electric smoke detectors are safe and effective. In tests performed by *Consumer Reports* in 1976 and *Canadian Consumer* in 1975, photo electric smoke detectors proved more sensitive to smoldering, smokey fires which are the type that account for most fire deaths. Ralph Nader's Health Research Group reports that 75% of home fires begin as slow smoldering or smokey types. If you or someone you know has an "ionization" smoke detector, return it to the retailer or manufacturer and demand a photo electric one in exchange.

2. Urge your Congressional Representative to support House Bill HR-10688, which bans the manufacture of ionization type smoke detectors containing radioactive isotopes.

The smoke we need to detect is that which keeps us blind to the truth.

—Carroll Child
senior nursing student,
U.C. Medical Center, S.F.



HOT JOB OPPORTUNITIES!

HEALTH PHYSICS PROFESSIONALS

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technologies
now unfolding at
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THREE MILE ISLAND

Unprecedented opportunities
for new scientific experience
and achievement

Firmly committed to the advancement and perfection of nuclear power generation, Metropolitan Edison is also critically involved in establishing advanced health guarding techniques needed to support ongoing nuclear power development. This creates immediate ground floor opportunities for dedicated scientists and engineering personnel who want to be in the forefront of emerging technologies.

The challenge is new, of the highest order, and unprecedented in its reach for meaningful results as we move aggressively to put TMI Units 1 & 2 back on line. Helping to solve related health problems can only increase your professional stature, technical strength and potential for growth. Join your energies and creativity to a drive for answers. If you qualify for one of the following positions.

RAD/HP TECHNICIANS (Jr./Sr. levels)

Jr: Requires background in physics, math, and chemistry, minimum high school degree, 6 months nuclear experience required if you have less than 1 year of formal training. Sr: Requires minimum 2 years experience in nuclear field. Associates' degree desirable. Special consideration given to NRRPT certification. Openings are rotating shift, bargaining unit positions.

RAD/HP SUPERVISORS

Requires 5 years experience in rad protection HP, certified training and supervisory capabilities. Processing or power plant experience preferred. Special consideration given to NRRPT Certification. Job requirements according to ANSI/ANS N. 3. 1-1978. Also standard current regulation guide 1.8.

RADIOLOGICAL ENGINEERS (ALARA)

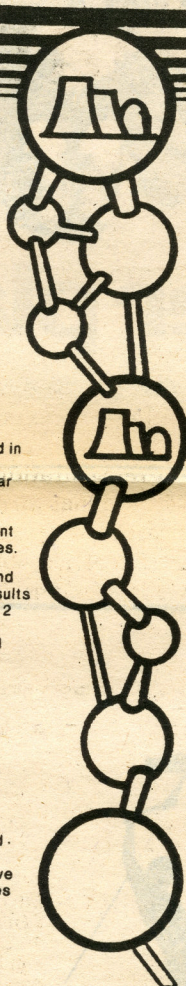
Requires: 3-10 years processing or power plant experience and BS or MS in Health Physics-related discipline. Job requirements according to ANSI/ANS N. 3. 1-1978. Also standard current regulation guide 1.8.

We offer excellent salaries, competitive benefits and clear prospects for advancement as your knowledge and capabilities expand. Our Harrisburg, Pennsylvania area location offers flexible living opportunities in urban, suburban and rural settings. Excellent cultural, educational, entertainment, and indoor/outdoor recreational sources are prominent features of this attractive region.

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Met-Ed GPU

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THE GENERAL PUBLIC UTILITIES SYSTEM
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RANCHO SECO TRIPS

The troubled Rancho Seco Nuclear Power Plant has been readjusted to "trip" (or spontaneously shut down) more frequently due to changes instituted after Three Mile Island.

The NRC doesn't trust the relief valve which stuck open at Three Mile Island, twin to Rancho Seco, and led to uncovering of the reactor core. According to an internal NRC memo obtained by the intervenors at Rancho Seco in early December, the valve is not considered "safety-grade status", and might malfunction during high pressure situations, such as pressure-response failures in the secondary system.

As a solution, the Sacramento Municipal Utilities District has lowered the reactor's trip point. This means that in unusual or emergency situations, the Rancho Seco reactor will automatically shutdown rather than risk continued operation and the chance that the valve might stay open.

Friends of the Earth contends that SMUD's solution has only amplified Rancho Seco's problems. They say that spontaneous shutdown stresses the entire reactor system and increases the chance of failure. The NRC claims that cycling the system makes the reactor less reliable, not less safe. The agency has stated that Rancho Seco is designed to withstand 400 reactor trips—roughly 10 per year or one per month.

—Julia Randall

Rancho Seco (continued from page 1)

Since the negotiators were not given enough time to present all the data they'd brought, they agreed to meet with Brown on December 17 for an open-ended discussion.

Coalition members' views on their five-day effort varied. Most felt positive about the meeting with Brown, though some called it "the same old song and dance." Several coalition members said internal political conflicts marred effective action, and one negotiator said she felt that people should have dealt with their political differences before the Sacramento meetings.

And there were lots of question marks about the wisdom of counting on Brown. At Friends of the Earth, Mark Vandervelden said he feared forcing Brown to take a stand might center public debate on the governor's authority, not Rancho Seco's safety.

—Julia Randall

Ed. Note: Just before press time, we talked to sit-in participants in Brown's office, who are busy preparing for their December 17 meeting with the governor.

"Brown could choose any minute to put us all in jail," said John Roshek of SO NO More Atomics. "At our last meeting he wanted to know whether we were on his side or whether we were adversaries. I saw him open up and be grateful that we would work with him."

Roshek feels that Brown "is committed to shutting down Rancho Seco, but has problems with our strategy" (of demanding that he use his emergency powers).

What then is Brown's strategy for closing the Rancho Seco plant, we wonder? Should we be working with Brown or confronting him? We invite your comments on this issue and any others raised by the Rancho Seco sit-in for the next It's About Times.

(From the Nov. 25 SF Chronicle)

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Cartoon by Bill Oetinger.