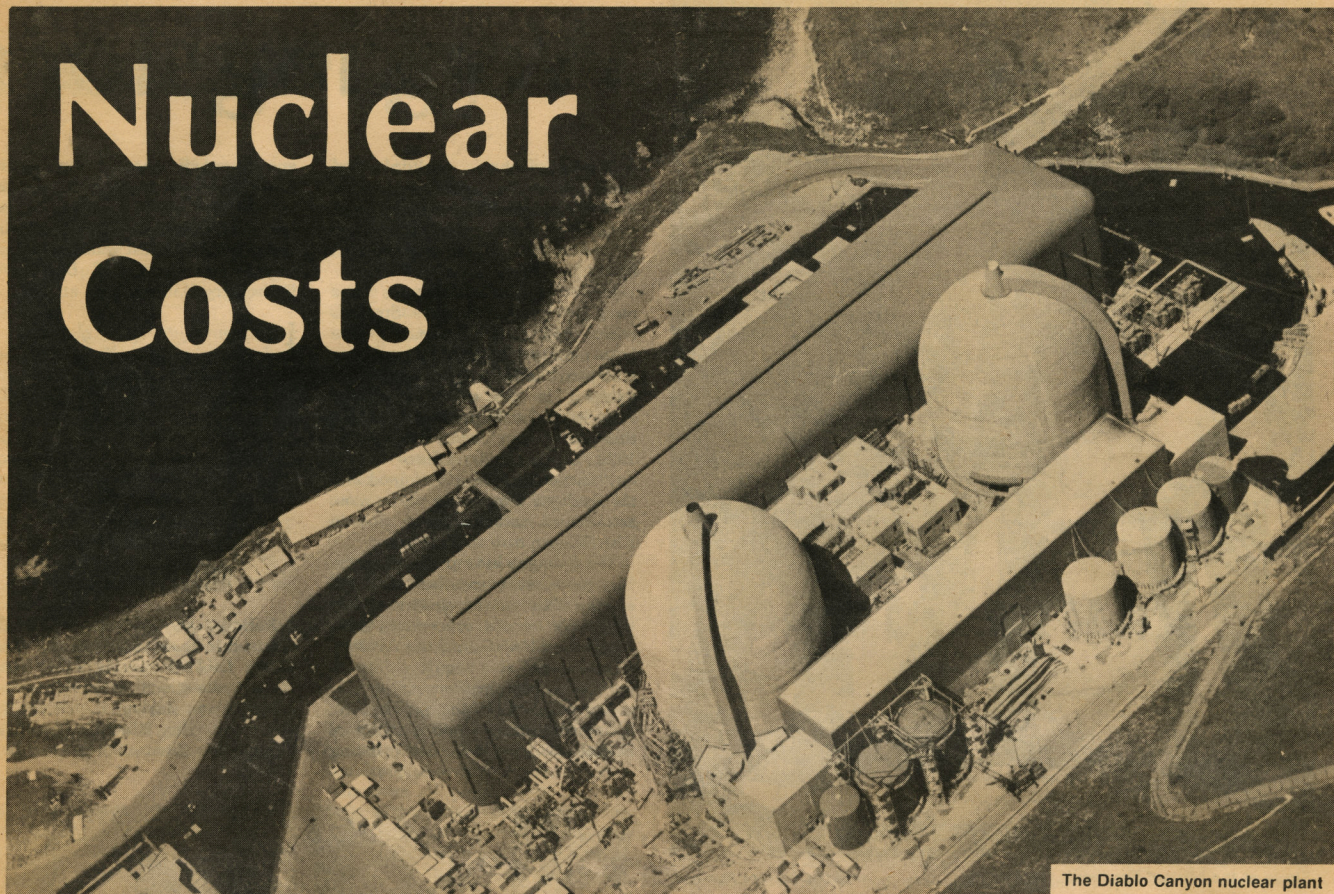


Nuclear Costs



The Diablo Canyon nuclear plant

Who will pay the price?

The nuclear industry once said that electricity from nuclear power would be "too cheap to meter". But it has turned out to be very expensive, and we pay in at least three ways.

We pay directly for nuclear power when we pay our electric bills. We also pay indirectly, in the form of government subsidies, when we pay our taxes. Finally, we "pay" in another sense, not with dollars, but with damaged health and the increased possibility of nuclear terrorism and nuclear war.

Nuclear plants are expensive to build. PG & E's Diablo Canyon plant, located near San Luis Obispo on the California coast, has cost over five times the original estimate. The accident two years ago at Three Mile Island prompted expensive new safety requirements at most nuclear reactors, including Diablo Canyon. These costs will go onto our electric bills if the plant is allowed to operate.

Nuclear plants are fueled with uranium, which is a dwindling resource like oil and is subject to price manipulation by energy companies and OPEC-like cartels.

Nuclear reactors are not very reliable. On the average, large nuclear plants produce only 60% of the electricity they would make if

they ran all the time. This unreliability drives consumer electric bills still higher.

Finally, we will have to pay the costs of decommissioning reactors. After about thirty years nuclear reactors become worn out and must be taken apart and disposed of. Decommissioning is a difficult and expensive process because of the massive quantity of highly radioactive material involved. The cost of decommissioning Diablo Canyon is presently estimated at \$192 million.

In a 1978 report, the House Committee on Government Operations concluded that "Contrary to popular belief, nuclear power is no longer a

cheap energy source. In fact, when [all the costs] are finally included in the rate base, nuclear power may prove to be much more expensive than conventional energy sources."

Electricity bills are only the beginning. We pay for nuclear power when we pay our taxes as well. The Federal government subsidizes and insures the nuclear industry with our tax money. Taxpayer money—over \$37 billion so far—subsidizes nuclear power research and development and the making of reactor fuel. The government pays for research on how to store radioactive waste, and the actual storage will probably be a public burden as well.

The Price-Anderson Act is one of the less obvious government subsidies. Insurance companies will not insure nuclear power plants—they are too high a risk. So a special law, the Price-Anderson Act, relieves utilities of their legal responsibility to pay for the damages caused by a serious nuclear accident. In the "worst case" accident, which a government study estimates could cost \$14 billion, less than four cents on each dollar lost would be returned to the victims—or a few thousand dollars for the loss of a house. In the event of a disaster, once again the

(continued to page 4)

Why not nuclear power?

- Nuclear power is unnecessary. A program of energy conservation can save more energy than nuclear plants can produce, at a fraction of nuclear power's cost. A properly designed conservation plan can make homes and apartments more comfortable and benefit poor people, renters and homeowners alike. A recent study by the Harvard Business School found that by making better use of the energy sources we already have, we could save "the equivalent of all imported oil—and then some."

- Nuclear power is too expensive. PG&E has spent nearly \$2 billion on its Diablo Canyon Nuclear plant, over five times the original estimate. Customers will have to pay this huge sum if Diablo is allowed to operate. Plants being built now are turning out to cost even more and accidents,

poor reliability, waste disposal, and other nuclear problems all add to the bill.

- Nuclear power is unsafe. According to several government studies, a major nuclear plant accident could kill 45,000 people and cause \$14 billion in property damage. The radioactive materials that are continually released by nuclear power plants and the rest of the nuclear "fuel cycle" can cause cancer and produce genetic damage that results in birth defects. Even if properly contained, some nuclear wastes are so toxic and long-lived that they will have to be guarded for hundreds of generations.

- Nuclear reactors produce plutonium, which can be made into atomic bombs. The worldwide spread of nuclear power spreads the materials

needed for weapons production and increases the danger of nuclear war and nuclear terrorism. In the United States and other countries, nuclear power programs are used to justify government laboratories that develop and promote new nuclear weapons systems. These new weapons do nothing to increase our security and use up huge amounts of money which could be used for more constructive purposes.

- Safe and inexhaustible energy sources are practical today. For example, solar energy is now competitive with electric heating in many areas of the country. Several studies have concluded that the U.S. could get at least 20% of its energy from sunlight within twenty years—twice as much energy as produced by all the nuclear plants now running or being built.

This newspaper

was produced by members of the East Bay Anti-Nuclear Group (EBANG) to introduce ourselves to our neighbors. EBANG consists of people from the Berkeley-Oakland area who have joined together to inform our communities about nuclear power and the realistic alternatives to it. See page 2 for more about EBANG.



Three of the Mutant Sponges.

photo by Barbara Bowman

About EBANG

The East Bay Anti-Nuclear Group is a network of volunteers from Berkeley, Oakland, and nearby cities. EBANG is built around small groups of people who decide to work together. These groups may invent and work on their own projects or choose to do something for EBANG as a whole, such as fundraising or putting out the newsletter. Meetings of spokespeople from all interested groups are sometimes called when there are major decisions to be made.

New groups are often formed by friends and neighbors, and existing groups can give helpful suggestions and tips to people who would like to start a new one. Individuals are also welcome in EBANG and can choose

to help in an ongoing project. Some of the existing groups are introduced on these pages.

EBANG is one of 60 community organizations throughout California which make up the Abalone Alliance. The Alliance provides a way to communicate and coordinate our efforts with other people working for safe energy around the state. One focus of statewide activities is to prevent the operation of the Diablo Canyon nuclear plant, which we consider expensive, unnecessary and unsafe.

EBANG would like to provide more information about nuclear power and the alternatives to it. Some of us can talk with your household, club, or class, and some films are available at little or no cost. Please see the coupon on page 4.



These people just installed this solar collector on a San Francisco rooftop.

photo by Jon Katz

Working for s

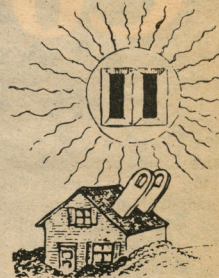
Mutant Sponges, well-informed speakers, artists, musicians, phone volunteers, newsletter folders, and writers of pamphlets like this one are all part of the safe energy movement in the East Bay.

Is it true Mutant Sponges have more fun? Ask one. The Sponges chose their name in honor of the huge mutant sponges found growing on leaking radioactive waste barrels dumped in the ocean near San Francisco. The original Sponges met through a nonviolence training in 1979. Some members have moved on, but new people have joined and the Sponges remain one of the most active and enthusiastic groups in EBANG.

The Sponges have produced some very successful events, and have had a good time in the process. They have held benefit concerts to raise funds for EBANG and the Abalone Alliance, and also bought a film on the medical implications of nuclear power to show to the public. The Sponges recently wrote a "City of Berkeley Survival Manual", listing

enough environmental hazards to make you want to move to Antarctica. In September, the Sponges and the rival "Mad Scientists" played the world's weirdest volleyball game on the court atop UC Berkeley's Etcheverry Hall reactor.

Tom Chalkley Graphics



Perhaps playing volleyball while encased in foam rubber is not your thing. EBANG members also use more conventional ways of telling people about nuclear issues. In the last year, the EBANG Speakers' Group has visited a 6th grade and a



In November 1979, EBANG co-sponsored a teach-in on the UC Berkeley campus.

How you can help

If you would like more information on nuclear issues, or if you are concerned and want to do something, here are some suggestions:

Learn about the issues: Read pamphlets, books, and magazine articles about nuclear power. Several books are available from EBANG—check the coupon on page 4. Talk with your friends, coworkers and other concerned people. Gather some friends and invite an EBANG speaker to your home. Attend films, forums, and teach-ins or classes about safe energy alternatives, nuclear power, and the nuclear arms race.

Express your opinion: Bring the issues to public debate by writing letters to the editor of your local paper or trade journal. Let elected representatives know your feelings on bills or local issues concerning nuclear matters by writing or attending public hearings. Ask officials for a statement of their position and support people or other groups that share your opinion.

Volunteer your time: Call the EBANG office and let us know you want to help. Remember, everybody is new at first! If you can spend just

an hour addressing envelopes, you help inform more people about the dangers of nuclear development. This movement depends on people's energy—we don't have lots of money for slick ads or big mailing campaigns.

Join a group: Get together with friends, neighbors, and other interested people and start a group to study and spread information about the nuclear threat. Ask an EBANG organizer to help you start or put you in touch with other groups in your area. You may want to join an interest group to use or develop special skills.

Take nonviolence training: This is a good way to get basic information on California anti-nuclear activities and to meet other people who want to get involved. Part of the one-day session is set aside for interested people to form affinity groups that can continue with various activities as they choose.

Donate: Every time you pay your PG&E bill, you help pay for ads that promote nuclear power. PG&E doesn't give you any choice

safe energy

women's group in Richmond, a Rotary Club in Castro Valley, and an executives' luncheon in Fremont. Most speaking invitations come from high school teachers, and the Speakers' Group has talked with classes in subjects as diverse as biology and sociology.

The Speakers' Group formed after the Three Mile Accident, when suddenly *everyone* began asking EBANG about nuclear power. Nobody in the group started as an "expert". For most, becoming a speaker has taken a lot of studying and learning. For some it takes speaking practice and getting over stage fright. Many people started by talking with small, friendly audiences—and soon found out that public speaking no longer scared them.

EBANG is loosely organized and involved with many local and state-wide projects. The EBANG newsletter helps us to communicate with each other. The people who work on each monthly issue gather news of coming events and write occasional

informative articles. They also organize a meeting every month to send the Abalone Alliance newspaper *It's About Times* to safe energy groups around the state.

Several other groups are also active in EBANG. The Research Group has been studying the possibility of converting P G & E's Diablo Canyon nuclear plant to safer and cheaper fuels. Arts and Graphics has designed banners and posters for EBANG and printed a Three Mile Island anniversary calendar last year. Nonviolence trainers offer skills and information in nonviolent social change (see article). New affinity groups are forming all the time and choosing their own projects.

In addition to this on-going work, EBANG produces events which involve the cooperation of people from many groups. Last year these ranged from a film showing and orientation for new members, to a 50-prize raffle with a dance and 2 bands. Like most of the work of the anti-nuclear movement, these events are really the sum of dozens and sometimes hundreds of smaller tasks, the contributions of people who had an hour—or a week—to give. For the raffle and dance, people did all this, and more: came up with the idea, convinced other people to help, asked local businesses for prize donations, collected the prizes, designed, printed and sold the raffle tickets, *organized* all these things, reserved a dance hall, asked bands to play, designed, printed and put up posters, brought an information table to the dance, tended the bar, took tickets at the door, drew the winning tickets, cleaned up the hall afterwards, and counted the money!

There is always room in EBANG for people who want to volunteer their time. Could you make some of those phone calls? Help at an information table? Invite a group of friends to your house to talk with an EBANG speaker?

Join us! We'd love to have you!



photo by Julie Simons

about that. But you can help us give people information they won't get from P G & E. Consider making a monthly pledge (two hours' pay, for example) or send a donation to help us pay our bills. There's a donation line on the coupon.

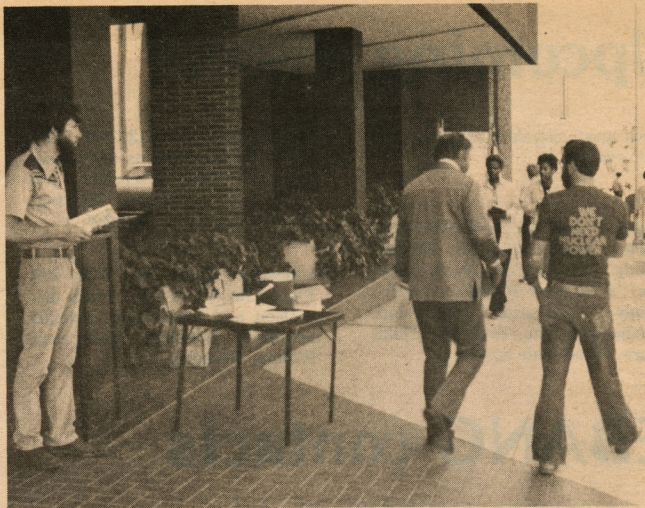
SOME TIPS ON PLUGGING IN

Be persistent. Call until you reach someone with the information you want. If someone doesn't call you back, keep leaving messages!

Figure out what you want and what you can contribute. Learn or do a few things at a time and build up your strengths. Lots of people can benefit from things you already know.

Have a good time. Find a group where you like the people and can do the things you're interested in. Be realistic about how much time you have and plan the times you want to do anti-nuclear work.

Don't be shy. Everybody has to pick up the phone the first time. We're all volunteers doing what we can to stop nuclear power because we think it's important.



EBANG members talk with customers at the Oakland PG&E office.

photo by Arleen Feng

Nonviolence

Nonviolence is both a theory and a practical approach to social change. It is an important part of the anti-nuclear movement. Some people choose nonviolence as a guiding philosophy for their lives, while many others see it mainly as one useful and effective tactic. Many concepts of nonviolence are familiar from the civil rights and anti-war movements, and have also been used to promote peaceful change in other countries. In working nonviolently we assume:

- We must respect the humanity of our opponents if we want to gain respect for our own views. Although we may disagree with someone, we need to understand their reasons for thinking the way they do.
- Everyone knows part of the truth, but no one person or group has a monopoly on truth—all of the parts must be combined or considered in order to discover the best direction for society.

• Nonviolent change comes about through active expression of our opinions. For some people, this may include a personal decision to disobey certain laws in order to challenge injustice or to bring neglected issues to public attention.

• It is important that we sort out our emotions and consider the consequences of our actions. We try to keep from provoking strong emotional reactions that close off communication.

• We must be willing to be flexible, educate ourselves, and listen to each other in order to reach people. At the same time we also learn to share responsibilities and become stronger in maintaining our own beliefs.

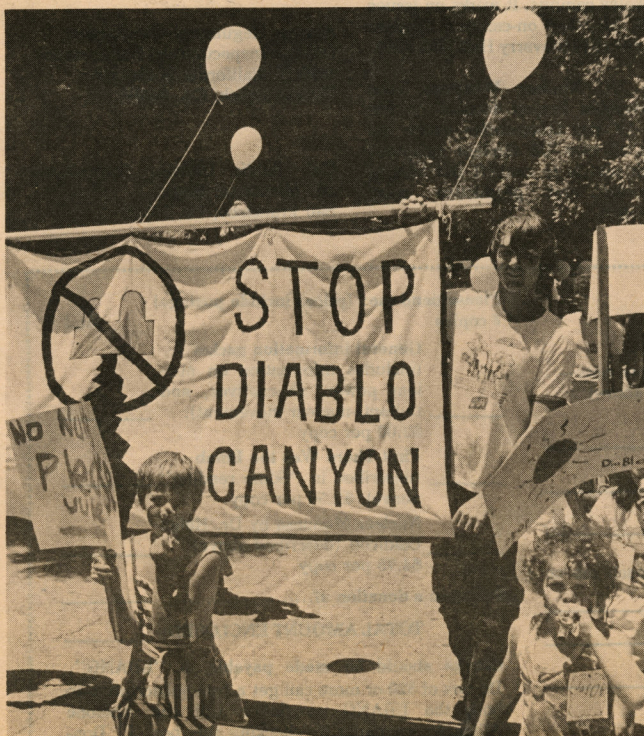
Practicing Nonviolence: These working assumptions have led to an emphasis on educating our community and promoting safe energy sources that people can control and use cooperatively, without relying on experts or politicians.

Nonviolent change is sometimes slow, but its effects are long-lasting. We want to convince people that conserving and using renewable energy is in their own interest, and we want to build effective, long-term political support for our ideas.

Nonviolence Training is an introduction to the ideas and working of nonviolence. East Bay trainings are currently focussed on preparing people for working on the planned blockade of the Diablo Canyon nuclear plant, but also present useful information for handling other situations.

Nonviolence training sessions include background on nonviolence theory and various anti-nuclear activities, an overview of the Diablo Canyon issue and how people can work on it, and discussions and roleplays to give participants a chance to try out nonviolent techniques.

For more information or to sign up, contact the EBANG office at 655-1715 or use the coupon on page 4. The next training is scheduled for April 5 in Berkeley.



Abalone Alliance marchers near the Diablo Canyon nuclear plant in San Luis Obispo.

photo by Jeffrey Dooley

Upcoming events

Check local calendars or notices for other events.

Sunday March 15, 1:00 PM Film: "Paul Jacobs and the Nuclear Gang." Speaker: Dr. Henry Vyner on "Effects of Radiation on the Body." Unitarian Fellowship, Cedar at Bonita, Berkeley. Child-care, wheelchair access.

Thursday March 19, 7:30 PM Film: "Medical Implications of Nuclear Energy", with discussion and orientation. Friends Meeting, Walnut and Vine, Berkeley.

Wednesday April 22, 7:30 PM Film: "No Act of God", with discussion and orientation. Friends education building, Vine near Walnut, Berkeley.

EBANG contacts

If you want to help with a particular group or activity, call one of the people listed below. If you can't get through or want other information, you can call the EBANG office at 655-1715. There is an answering machine to take your message if no one is there.

The office is located in a donated garage at 585A Alcatraz (near Telegraph) in Oakland. Sharon, the EBANG volunteer coordinator, will be there most Wednesday afternoons through May 10. She can also be reached on Tuesday evenings at 548-8457.

Nonviolence Trainers:
Nicole 234-5409
Arleen 654-1930

Speakers Group:
Barbara 848-2518
Bob 849-3624

The Sponges:
Jack 525-3939

Arts and Graphics:
Charlie 655-7597

Fundraising:
Arleen 654-1930
Victor 549-2928

ABALONE ALLIANCE PROJECTS:
It's About Times [newspaper]:
Ward 548-0703
Bob 849-3624
Labor Outreach
liv 845-8128

Other organizations

Here is a selection of other groups in the Bay Area which are working on alternative energy, nuclear, and related issues:

The Alternative Energy Collective "Solar Station" can provide practical advice and materials for energy conservation and renewable energy systems. 5829 Adeline, Oakland. 849-3816.

The Berkeley Ecology Center runs an energy-saving recycling program, with monthly curbside pickups throughout Berkeley. It has a good library and can help connect you with other environmental groups. 2701 College Ave., Berkeley. 548-2220.

Friends of the Earth lobbies for environmental preservation and ecologically sound energy policies. FOE has an office in San Francisco and publishes books and a newspaper. 495-4770.

People's Anti-Nuclear Collective is an Abalone Alliance group on the UC Berkeley campus. It works on issues such as the on-campus nuclear reactor at Etcheverry Hall. 642-8165

The UC Nuclear Weapons Labs Conversion Project focuses on the two UC-run laboratories which design all new US nuclear weapons. Their aim is to convert the labs to peaceful and productive uses. 982-5578.

Nuclear Costs

(continued from page 1)

victims and the general public would bear the costs.

In addition to high electric bills and tax bills, nuclear power has other costs which can't be measured in dollars and cents. Radiation can cause cancer and birth defects. Low level radiation is routinely released in all the phases of nuclear power generation—from mining the uranium to transporting radioactive materials to storing the radioactive wastes. There is mounting evidence that this low level radiation causes serious health problems. A major accident at a nuclear plant would involve much higher levels of radiation causing widespread damage to the surrounding area. Our security is also threatened because reactors produce plutonium which can be used to make atomic bombs.

So why do they do it? Why is the nuclear industry trying to sell us this dangerous, expensive and unnecessary energy program? Here are a few reasons:

- When nuclear power was first being planned, many scientists and engineers were convinced that it would be clean, safe and efficient. They were mistaken, but by the time

some of them started questioning their assumptions, the nation was already committed to a nuclear program.

- State laws regulating utility companies usually guarantee them a profit based on how much they invest in generating equipment. Since customers pay for this equipment, utilities naturally invest in nuclear power, which costs a lot, rather than cheaper alternatives.

- There is a lot of money to be made in building a nuclear plant. Manufacturers of reactor parts, designers and builders of nuclear plants all benefit from their construction. However, the intensive short-term construction typical of a power plant causes a "boom and bust" in the local economy. In regular operation only a few specially trained operators are employed at the plant. Alternatives to nuclear power such as solar heating and home insulation can employ more people in more areas for a lot longer.

Bills, taxes, health and security costs—when you add it all up, we can't afford nuclear power.

(For details and documentation on these points, check the books listed below, arrange for EBANG to send a speaker, or send in the coupon.)

Some reading

FIRST THERE WAS THE BOMB- A collection of over 25 articles about nuclear power, nuclear weapons, and the links between them. Illustrated with cartoons and photographs. Edited and published by the Abalone Alliance, \$1.50. Available at local bookstores or from EBANG (see coupon).

NUCLEAR MADNESS- A compelling discussion of the threat which nuclear technology poses to our

health and survival. Written by Dr. Helen Caldicott, published by Autumn Press, \$3.95. Available from EBANG (see coupon).

NUCLEAR POWER- A very clear and enjoyably written book, ideal for the layperson who wants a more thorough understanding of nuclear power and its problems. By British nuclear physicist Walter Patterson. A Pelican paperback, \$3.50. Available at Cody's Books, Berkeley.

Useful addresses

Nuclear Regulatory Commission
Office of Inspection and Enforcement
1990 N. California Boulevard
Walnut Creek, CA. 94596

Cal. Public Utilities Commission
350 McAllister Street
San Francisco, CA. 94102

For names and addresses of elected representatives, contact:

League of Women Voters
477 15th St.
Oakland, CA. 94612 834-2031

A short letter that covers one or two points clearly is better than a long involved one.

Please contact me about:

- ☐ nonviolence trainings
☐ available films and speakers
☐ volunteering to help EBANG (please note—you can contact us at the numbers above)

Name (please print) _____

Address _____

City _____ Zip _____ Phone _____

The best time to reach me at this number is _____

Comments _____

Please send this coupon to: **EBANG**
585-A Alcatraz Ave.
Oakland, CA. 94609

Please send me: (prices include postage) # copies

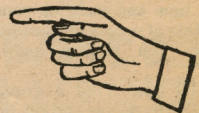
General information packet (includes information on nuclear power, alternatives, and the anti-nuclear movement).	_____	total
\$2.00 per copy	_____	
First There Was the Bomb (described in "Some reading" above). \$2.50 per copy	_____	
Nuclear Madness by Dr. Helen Caldicott (described above).	_____	
\$4.75 per copy	_____	

I enclose a donation of..... _____

TOTAL AMOUNT ENCLOSED: _____

Checks should be made payable to "EBANG". Donors of \$20 or more can get a free subscription to both the EBANG newsletter and the Abalone Alliance newspaper by checking this box. ☐ Donations of over \$25 are tax deductible if a separate check is made out, payable to the Agape Foundation.

The coupon



This newspaper was produced by Barbara Bowman, David Bowman, Arleen Feng, Nicole Magnuson, and Bob Van Scoy. Typesetting by Graphic Intervention, Berkeley. Thanks to all who helped distribute this paper and raise the money to print it.

Spring 1981