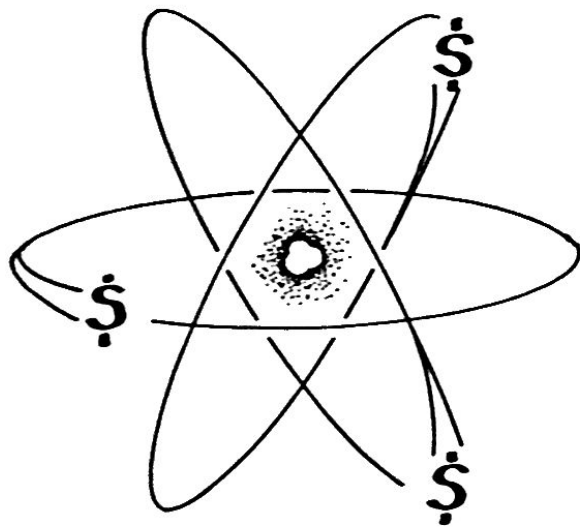


NUCLEAR POWER



Why do we need it ?

How much will it cost ?

Is it safe ?

Who is pushing it ?

What about jobs ?

What are the alternatives ?

A·Science for the People· pamphlet



A FEW TECHNICAL TERMS

Nuclear power and atomic power mean the same thing.

Uranium and plutonium are the fuels used in the reactor, the heart of the power plant where nuclear energy is turned into electricity.

The uranium is enriched, after it is mined, to make it useable in the reactor; this is a very expensive process. Plutonium, on the other hand, is produced in the reactor itself and special reprocessing of the nuclear fuel is needed to get it out. Plutonium is one of the most poisonous substances known; and with several pounds of enriched uranium or plutonium a devastating atomic bomb can be built.

The kilowatt-hour (kwh) is the unit used to measure the amount of electrical energy. One 100-watt light bulb burning for 10 hours consumes 1 kwh of electrical energy. In 1975 the U.S. consumed a total of two trillion kwh (2,000,000,000,000 kwh) of electrical energy.

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A SUMMARY OF THE NUCLEAR SAFEGUARDS INITIATIVE

1. Insurance coverage: Full compensation must be assured for liability to the public in the event of a reactor accident.
2. Reactor safety and waste disposal: Nuclear power plant operators must demonstrate the effectiveness of safety systems and must satisfy all reasonable doubts about waste storage handling. Satisfaction of these requirements to be determined by a 2/3 vote of the California Legislature, within five years.
3. An advisory committee: The State shall provide \$800,000 to fund this committee, to allow broad public participation in examining data and advising the Legislature on the above topics.
4. If requirements 1. and 2. are not met, no new nuclear power plants may be built and existing ones will be gradually turned down.

THE UNIVERSITY OF THE SOUTH ALABAMA

INTRODUCTION

The Nuclear Safeguards Initiative (Proposition 15 in the June 1976 California primary election) is really a simple and sensible idea. Basically, a YES vote for Nuclear Safeguards says that the state legislature must ok the safety of nuclear power plants operating in California.

But a political storm has built up around this issue. Many "experts" (scientists, economists, and government officials) and many politicians are voicing opinions on both sides. A lot of money is being spent on high pressure advertising to sway the voters.

The nuclear industry opposes this Initiative. They warn that passage of the Safeguards law will put them out of business. They warn of catastrophes to follow, such as shortage of electric power, depression of the nation's economy, and loss of jobs.

In this pamphlet we have tried to put together a provocative discussion of the major issues raised, avoiding technical jargon and pointing out the important political and economic ideas that lie behind this debate.

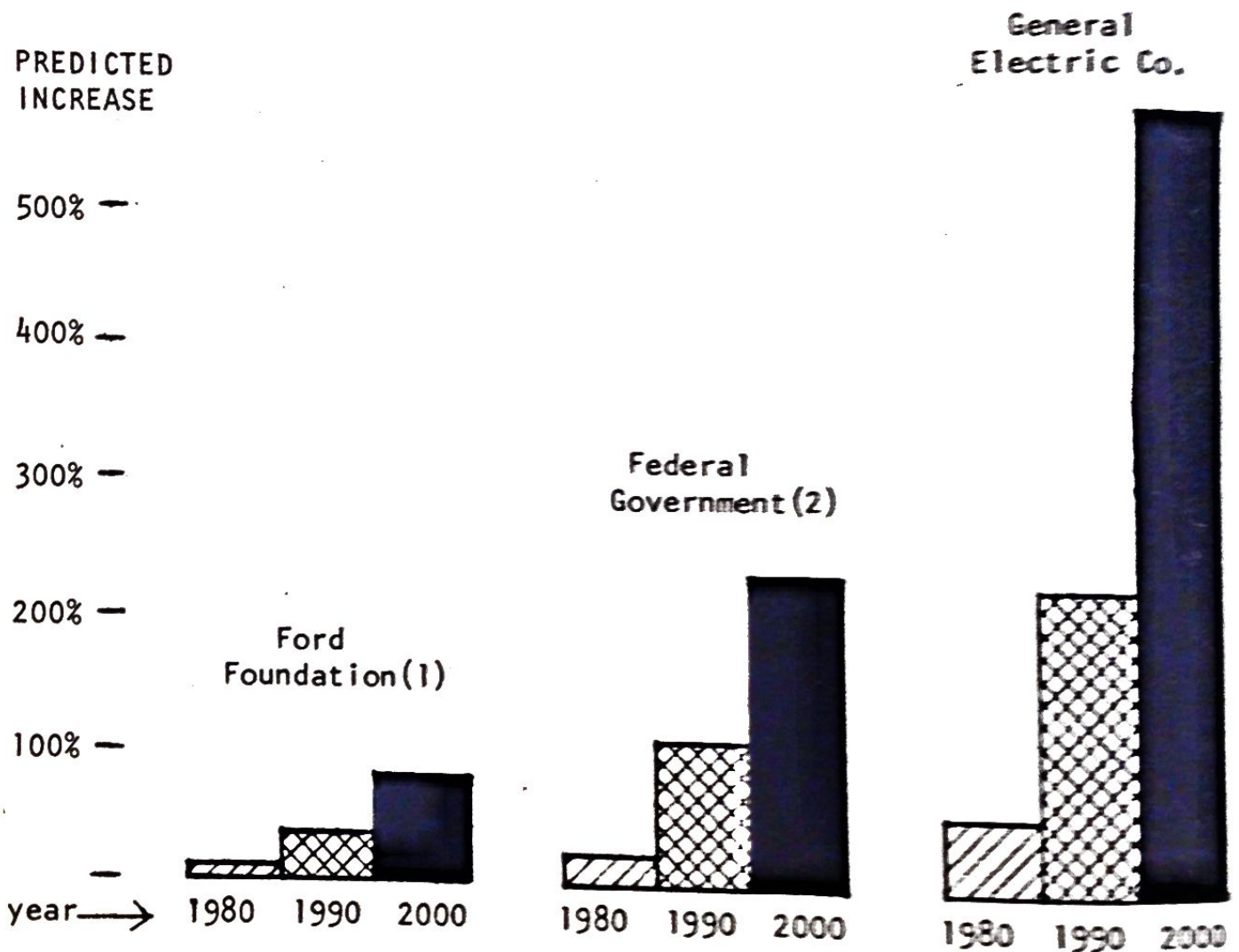
Who are we?

Science for the People is a nationwide group of scientists, engineers, students, teachers and other people who see the major decisions about how this society uses the fruits of science and technology as basically political decisions. We recognize that the heads of major corporations, aided by government agencies which they manipulate, shape most of these big decisions in their own interest. Their drive for private profits and power is too often the opposite of what is needed to benefit the great majority of people. Our task is to expose and oppose them and seek ways to have science serve all of the people.

WHY DO WE NEED NUCLEAR POWER?

We are told that many more nuclear power plants will be needed to meet the growing needs of America's future, especially for the production of electrical energy. Several groups of "experts" have calculated how much additional energy we will be needing in the years ahead. Let's look at some of their predictions.

The graphs below show the results of three different studies on how much additional electric power the U.S. will need to provide in the decades to come, compared to the amount used in 1975.



(1) "Energy Policy Project", third scenario.

(2) "Project Independence" report, extrapolated by ERDA.

All three predictions show an increased need; but it is remarkable how widely they differ about how big it will be. Depending on which prediction we decide to trust, we will reach very different conclusions about how much we need to have new nuclear power plants built.

Why can't the experts agree in their predictions? The reason is that some assumptions have to be made in any prediction of future events; these assumptions are subjectively chosen and represent the "expert's" bias. This is what we are seeing here.

The General Electric Company (G.E.) prediction assumes that energy use will continue to grow in the future as it has in the past- at 7.5% per year. The government's "Project Independence" prediction assumes instead that the price of oil remains at \$11 per barrel and that some energy conservation measures are undertaken. The Ford Foundation prediction assumes a larger effort at energy conservation with a leveling off of energy usage after the year 2000.

These are all very establishment organizations; nothing radical can be expected from any of them. Yet their chosen predictions for the energy future of the U.S. are so different. The chief lesson to be learned from this is that there is nothing inevitable about future energy needs. Energy growth is a matter of public policy, not a law of science. The numbers represented by the graphs do not make predictions about the actual future. They are policy recommendations for the present and future organization of the energy industry and the economy as a whole.

Let's look more closely. Going back over many years, we find that in the past the actual consumption of electrical power did increase at a rate of about 7.5% each year. This is the number the experts from G.E. and Westinghouse use to predict rapidly rising needs in the future. As the dominant manufacturers of electrical equipment (for the home, for business, and for the electric generating plants themselves) the directors and large shareholders of these two giant corporations have profited greatly from this historically growing market and would naturally want to see this continue.

Much of this earlier rapid expansion was due to the aggressive sales policies of these companies, together with the utilities that shared in this growing market. As one G.E. official explained to a

group of utility managers, "Kilowatt-hour sales growth is a most significant determinant of profitability, second only to a corresponding increase in rates."

Remember all the ads urging people to "Live Better Electrically"? They pushed one appliance after another into the home and urged industry to use more electricity by offering lower rates to big users. When fuel oils (used to generate electric power) were cheaper, wastefulness was pushed as a status symbol for the consumer, while it earned larger corporate profits. Then, when the energy costs rose sharply, these big companies not only made the people pay the full burden in increased prices, but they even had the gall to blame us for our 'wasteful habits.'

But some significant changes are already taking place in the country's energy use pattern. The total electric power output remained constant in 1974 and increased by only 2% in 1975. (The utilities, which had predicted a 15% rise over this two year period, have been busily revising their statistical predictions.) The cancerous growth patterns of the past subsided readily under the impact of higher prices and a little attention to sensible conservation measures. These considerations lie behind the alternative predictions mentioned earlier - those from the federal government and from the Ford Foundation. They differ from each other mainly in how vigorously the ideas of conservation are pursued. Again, this makes clear that any statements about our future energy needs are very dependent on how wasteful our economic system is to be.

For another illustration of how policy choices sit at the top of the energy picture, consider the development of alternative energy technologies - solar power, geothermal power, and others. The energy companies and their friends in government tell us that progress in these new areas is slow. These are the same people who decided years ago to commit research money to nuclear power and to ignore development of these alternatives. With a lot of pressure on it, the federal government has recently started to increase its funding of solar energy research (\$4 million in 1973, \$45 million in 1975, and \$116 million requested for 1977). But the biggest chunk of tax money is still being poured into the nuclear power program (\$991 million requested for 1977), in recognition of the policy priorities that were set many years ago.

HOW MUCH WILL NUCLEAR POWER COST?

The nuclear power industry is now facing serious economic troubles. As Business Week describes it, "rapidly rising costs for everything from fuel to construction have lately thrown the economics of nuclear power, once an unchallenged selling point, into question." The cost of building a nuclear power plant, typically around \$1 billion, has risen 400% in the last five years. Last year these soaring costs forced electric utilities to cancel 20 previous orders for new nuclear power plants and to postpone over 120 others.

While some studies show that nuclear generated electric power is still less expensive than that generated from coal, it is expected that this advantage will last only until the early or mid 1980's. What this standard accounting fails to consider is that nuclear power's past and present economic advantage relies heavily on a massive program of government subsidies.

Over the years the government has spent tens of billions of taxpayers' dollars to subsidize the nuclear power industry. These subsidies have gone into uranium exploration and mining, uranium enrichment, research and development of nuclear reactor technology, and transportation and storage of wastes.

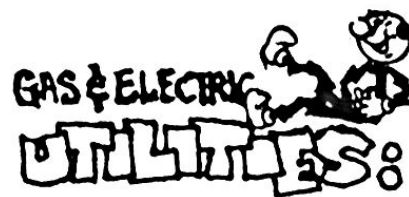
Let's examine uranium enrichment. The uranium ore must be treated in a very expensive enrichment process before it can be used as fuel in a reactor. This is now done in huge plants built at government expense for this purpose; and thus the government determined "market price" of this fuel is kept artificially low, at our expense. Incidentally, in this process the enrichment plants consume 2% of all the country's electric power. Now, private industry is asking to take over and expand this fuel enrichment business - provided that the government will give them an \$8 billion guarantee to insure that they will profit from the investment. This new subsidy is called the Nuclear Fuel Assurance Act.

Another subsidy area close at hand concerns fuel reprocessing. Spent fuel from a nuclear reactor is to be reprocessed to recover plutonium for use as new fuel. This technique is supposed to ease the shortage of uranium ore as a primary fuel as well as to alleviate the waste disposal problem. General Electric Company recently tried to build a reprocessing plant - at a cost of \$80 million -

but it was a failure. The safety hazards were much worse than had been anticipated. We expect that industry will force the government to take over this problem, again letting the taxpayers pay the bills to protect the industry's profits.

In the future, we anticipate the government being called in to take over or dismantle nuclear power plants that no longer run profitably, and to bail out (Lockheed-style) the most profit-pinched corporations.

Thus, if the energy industry is allowed to have its way, the public will be squeezed plenty to pay - through higher prices or through government subsidies - whatever it takes to protect the industry's billion dollar investments and to continue its high rates of profit. In addition, we must remember what happened to the price of uranium at the time of the "energy crunch": while the price of oil quadrupled, the price of uranium rose from \$7 per pound in 1973 to \$40 per pound today. This happens because the people who control the price of oil also control the price of uranium. Exxon and Gulf, two of the biggest names in oil, are also two of the biggest names in the nuclear industry. (We'll talk more about this later.) With monopolistic control of the various sources of energy, the choice between nuclear power and other sources - on economic grounds - will be no choice at all.



(For further information on the economics of nuclear power and its relationship to safety and environmental issues see Nuclear Power: Economics and the Environment, Scientists' Institute for Public Information, 6052 Claremont Ave., Oakland, Ca. 94618; \$2.00/copy.)

IS NUCLEAR POWER SAFE?

Serious questions have been raised about the safety of nuclear power:

1. An accident in the operation of a nuclear power plant could lead to the release of vast amounts of deadly radioactivity. Its harm can extend to future generations.
2. The spent fuel from a nuclear power plant must be reprocessed into new useful fuel or stored permanently as waste. The harmful radioactivity of some of these wastes lasts for thousands of years and must be stored so that it cannot leak out to reach plants, animals and people.
3. Large amounts of uranium and plutonium will be present in an expanded nuclear power industry - in reactors, in reprocessing plants, and in transport between them. This raises the fear that some might be stolen to make an atomic bomb; and one "solution" to this problem is the creation of an extensive national police force, with the severe social consequences that implies.

Those who speak for the nuclear industry and the government agencies claim that extensive safety precautions are taken and that nobody has ever been killed by radioactivity from a reactor. They admit that they do not yet have a satisfactory plan for the disposal of radioactive wastes (all their previous plans have had to be given up) but they ask us to have faith in the ingenuity of their technology to solve this problem.

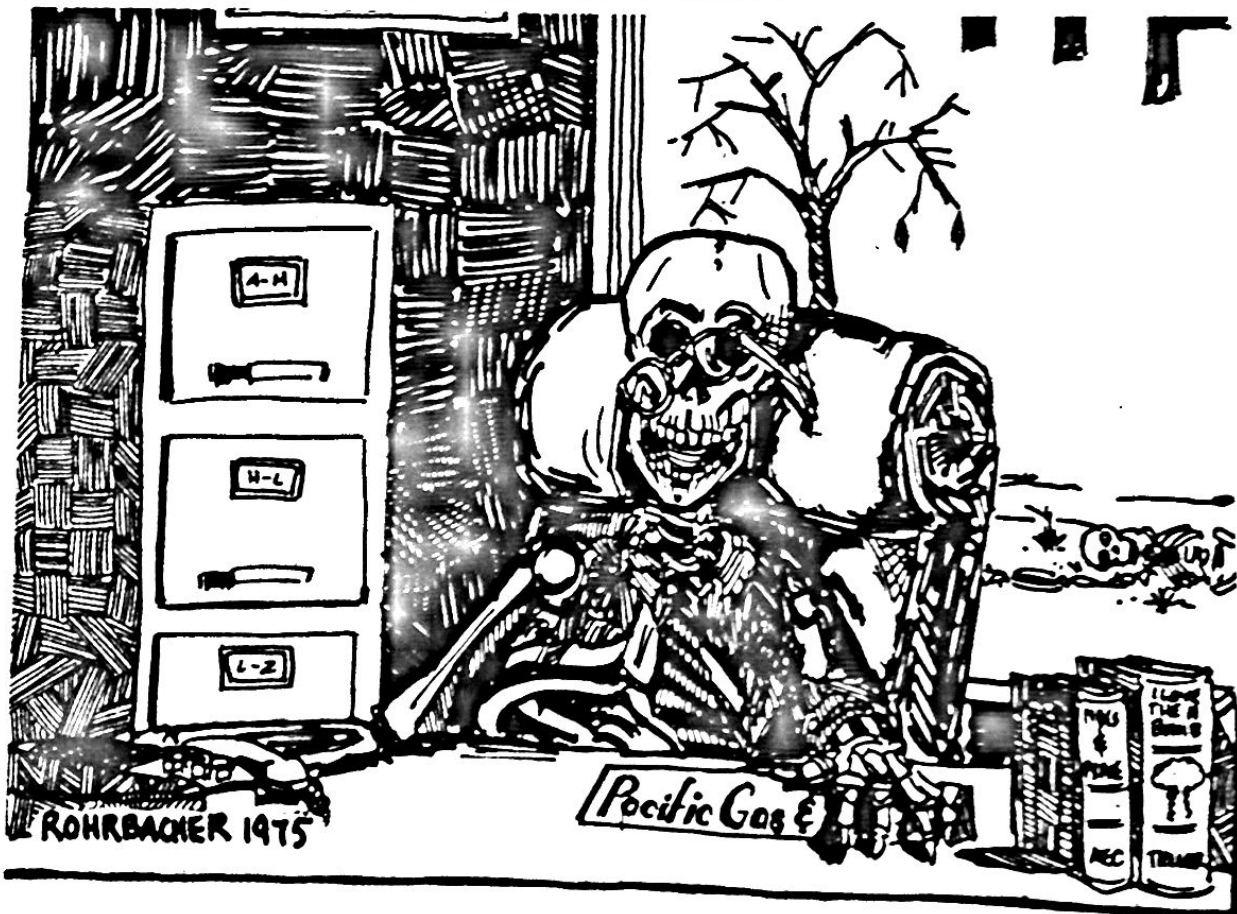
Critics of the nuclear establishment, among them many highly respected independent scientists, point out that a number of safety plans have not yet been tested and a number of "half-disaster" accidents have already occurred in operating nuclear power plants. The history of the nuclear safety debate records numerous instances where the government and industry lied or suppressed the truth about such accidents and the risks involved. The few "inside" experts who dared to disagree with the official line on safety questions have found themselves out of a job.

In this confusing atmosphere, with experts so strongly at odds with one another, what is the ordinary person to believe? The Nuclear Safeguards Initiative offers a sensible approach: have our elected representatives in the state legislature pass on the safety of the nuclear power plants, acting on the widest spectrum of

technical advice they can assemble. If the public is going to have to run some risk, then we ought to make that choice through informed legislative process, rather than letting the captains of industry force that choice upon us. Anyway, if the nuclear reactors are as safe as their proponents claim, then there should be no problem about having the legislature certify them.

This makes the whole debate seem so simple; but this is exactly where it begins to pinch the big business interests. They simply can't stand the idea that popular will should interfere with their "freedom" to make profits by whatever means they choose. Behind all the talk about energy, dollars and safety lies the real question: Who is to be in control?

(For detailed discussions of nuclear reactor safety see articles in The Bulletin of the Atomic Scientists, September 1975; and Environment magazine, July/August 1975.)



THERE IS NO CAUSE FOR ALARM...CLICK...WHILE THERE HAVE BEEN MINOR ACCIDENTS IN THE PAST...CLICK...NUCLEAR REACTORS ARE A SAFE AND MORE IMPORTANTLY, PROFITABLE SOURCE OF ENERGY...CLICK...THERE IS NO CAUSE FOR...

WHO IS PUSHING NUCLEAR POWER?

The campaign to defeat the Nuclear Safeguards Initiative and push ahead rapidly with nuclear power expansion is based upon a series of threats: The safety requirements of the Initiative will cause a "nuclear shutdown" in California; this will increase our dependence on foreign oil, will raise utility bills, will lead to more air pollution from burning coal, will cripple California industry and create massive unemployment. Who are these people who tell us our choices are between nuclear energy, coal energy, or unemployment ?

A tremendous million-dollar publicity campaign to promote nuclear energy has been launched by the Atomic Industrial Forum(AIF), the public relations arm of the nuclear power industry. Its strategy (exposed in Win magazine, March 13, 1975) is a multi-media Madison Avenue blitz to sell the "economic benefits of nuclear power." The plan, financed by the nuclear manufacturers and utility companies, has as its principal "targets": "Governmental Decision Makers," "Influential Organizations"(bankers, labor unions, educators and major civic groups are mentioned) and "Other Interested Segments of the Public"(like business and professional associations.) "In addition," the AIF strategy plan states, "ways must be found to overcome the major media's reluctance to carry positive stories about nuclear power."

Who belongs to the AIF ? The board of directors of the AIF consists of presidents and vice-presidents of such companies as

Exxon Nuclear, General Electric, Westinghouse, Kerr-McGee, General Atomic, Union Carbide, Chase Manhattan Bank, First National City Bank, El Paso Natural Gas, Southern California Edison, Pacific Gas & Electric, Combustion Engineering, Bechtel, ...

In other words, the people running the AIF are the top management of the country's largest banks, utilities, nuclear industries and oil companies. Oil companies ?

Oil companies are not just oil companies any more: they are energy companies with vast holdings in coal and uranium reserves. The seven major oil companies now control 30% of the coal reserves in the country and from 50% to 80% of the uranium reserves. The AIF is a propaganda arm of a vast energy monopoly. AIF members are not from independent "free enterprising" industries, banks and private utilities. They are linked together in a great many ways to control

(continued on page 12)

THE ATOMIC-INDUSTRIAL COMPLEX

The Atomic Energy Commission (AEC) was the federal agency created in 1946 to manage the government's wartime system of atomic research and production. It recently had its name changed to ERDA - Energy Research and Development Agency. From the beginning it was set up to protect the special interests of big business and the military, with minimum interference from the general public.

The huge factories for producing and using the nuclear fuel, built at government expense, were operated by established big businesses -- G.E., Westinghouse, DuPont, Union Carbide, etc. -- on a "cost-plus" contract basis by which the government guaranteed these companies a handsome profit. Labor relations within the atomic industry were "stabilized" by a special government board empowered to prevent "interruption" of production during labor disputes.

The AEC was run by a five member Commission which established policy, and a General Manager who carried out these policies. It is instructive to look at who some of these top AEC officials were.

Lewis L. Strauss, a successful Wall Street investment banker, was on the Commission 1946-50; he then resigned from the AEC to become financial advisor to the Rockefeller brothers, then returned as AEC Chairman in 1953.

John A. McCone, a west coast industrialist -- in aircraft and shipbuilding and in partnership with Bechtel Corp. which is now a leading firm in nuclear power plant construction -- was AEC Chairman 1958-60. After leaving the AEC he was Director of the CIA for several years. He now sits on the boards of directors of Standard Oil Co. of California, United California Bank, IT&T.

Marion W. Boyer, a vice president of Standard Oil Co. of N.J. (now Exxon), was AEC General Manager 1950-53; and then he returned to a top position at his old company.

Kenneth D. Nichols, a former Major General in the army, was AEC General Manager 1953-55; afterwards he was chairman of Westinghouse International Power Co., a director of Detroit Edison Co., and others.

Robert E. Hollingsworth, AEC General Manager 1964-74, is now working for Bechtel Corp. Bechtel is at the head of the industrial combine that is trying to take over the uranium enrichment plants, with an \$8 billion government guarantee to protect their private investment.

There are many other examples of members of the Commission who came directly from companies in the nuclear power business or who ended up on those companies' payrolls after leaving the AEC.

The University Connections

The University of California has a unique history of close collaboration with the AEC. - Currently UC receives an annual budget of over \$300 million from this agency for atomic research, both civilian and military. Thus it came as no surprise when UC's president Dr. David Saxon publicly stated his faith in the AEC and voiced his opposition to the Nuclear Safeguards Initiative.

To many people it might appear that university scientists would be a reliable source of independent advice on the nuclear power issue, since they are not employed by industry or the AEC; but this can be deceptive. Early in 1975 a distinguished group of scientists received a lot of public attention with a statement calling for full speed ahead on the nuclear power program. ("32 of our nation's leading scientists including 11 Nobel Prize winners" is the way they are referred to in the literature from "Citizens for Jobs & Energy.") Most of the signers (26 out of the 32) identified themselves simply as university people. However, a later investigation revealed some surprising connections: One-third of these professors had previously held high ranking positions within the AEC management; Two-thirds of these professors had close personal ties with big business -- some as consultants to such corporations as G.E. and General Atomic, and many even sitting on the boards of directors of such giant firms as Exxon, IBM, TRW, Owens-Illinois, Detroit Edison, and others.

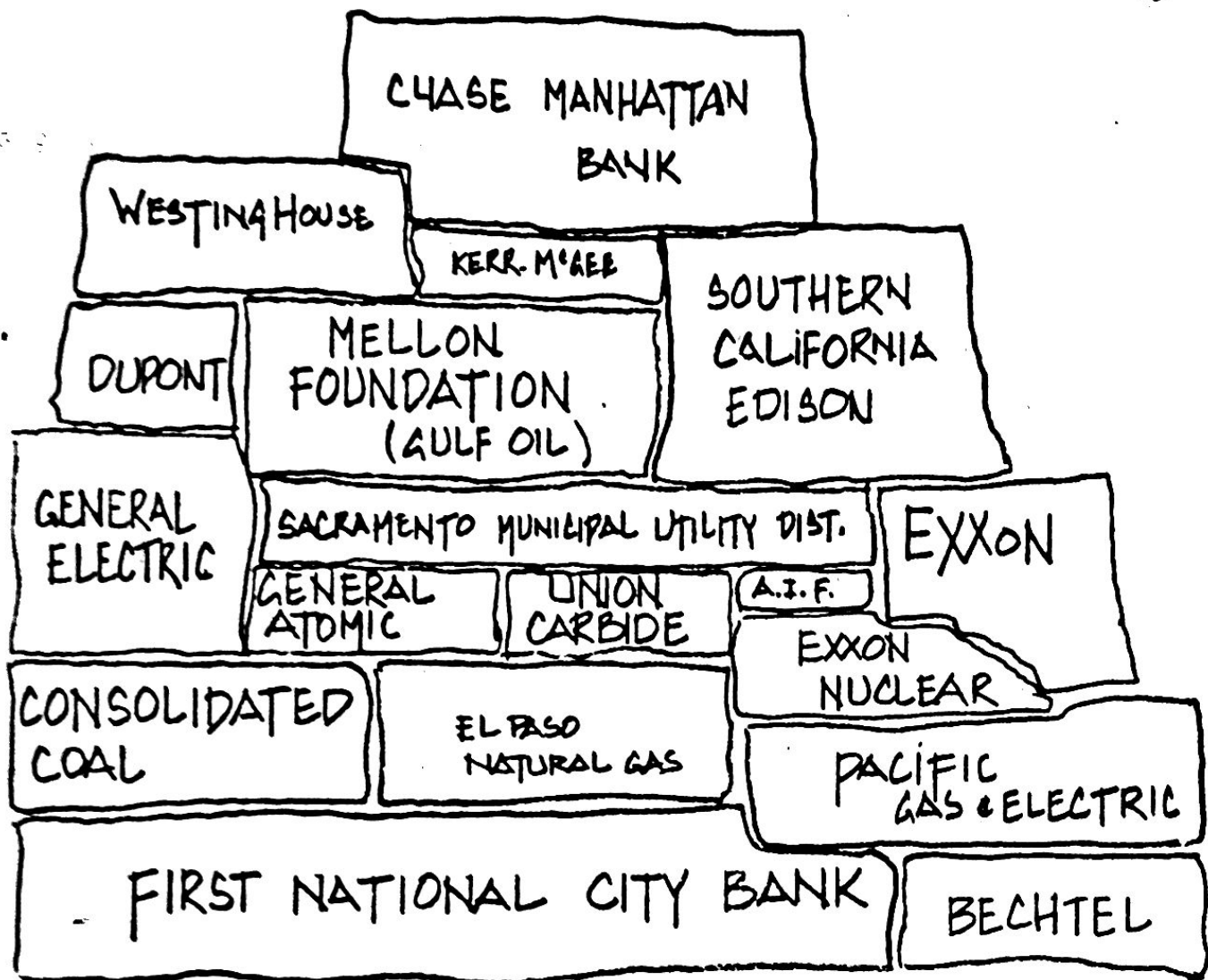
not only nuclear energy, but all forms of energy - from the extraction of the raw materials (coal, oil, uranium) to the processing and distribution of the energy as electricity, fuel, oil, gasoline.

The bonds which tie the oil-coal-nuclear industry with banks and utilities have been described in detail in a few books. (See Norman Medvin, The Energy Cartel, Vintage Books 1974; James Ridgeway, The Last Play, New American Library 1973.) The bonds go like this.

Members of the boards of directors of oil companies are also on the boards of directors of banks and utilities. Ten major oil companies have over forty interlocking directorships with major banks. In turn, forty-nine of the largest banks have interlocking directorships with thirty-six of the major utilities. Banks are often the largest stockholders in the utilities and the energy com-

 *** Exxon Nuclear is a subsidiary of Exxon (or Standard Oil of New ***
 *** Jersey, part of the Rockefeller empire), the single largest sup- ***
 *** plier of oil and gas on the North American continent. Exxon has ***
 *** major uranium deposits, is fabricating nuclear fuels, and has ***
 *** assembled the largest block of coal reserves in the nation. It ***
 *** has an interlocking directorship with the Chase Manhattan Bank. ***
 *** The Chase Manhattan and the First National City Bank have dir- ***
 *** ectors who are also directors of G.E. and Westinghouse. Chase ***
 *** Manhattan Bank has 1.3 million shares of common stock and 8000 ***
 *** shares of preferred stock in Southern California Edison. The ***
 *** First National City Bank owns 8.2 percent of one class of pre- ***
 *** ferred stock in Southern California Edison and has an inter- ***
 *** locking directorship with El Paso Natural Gas Company. El Paso ***
 *** has its Employee Savings deposited in the First National City ***
 *** Bank. One of El Paso's biggest customers is Pacific Gas & Elec- ***
 *** tric, accounting for 23.6% of the company's gas revenues. The ***
 *** Mellon Foundation (Gulf Oil) owns one million dollars in bonds ***
 *** and notes and 27,032 shares of Southern California Edison. The ***
 *** Mellon family bank, Mellon National Bank & Trust Co., has inter- ***
 *** locking directorships with Consolidated Coal, G.E., Westinghouse ***
 *** and El Paso Natural Gas. General Atomic is a subsidiary of Gulf ***
 *** and the Mellon Foundation and the Mellon Bank have large invest- ***
 *** ments in Union Carbide. ***

 This data comes from Ridgeway's book. AIF members are underlined.



panies; they also loan large amounts to these enterprises. In return, the utilities place interest free deposits in banks. Oil companies deposit huge employee pension funds in banks, and huge amounts of utility and energy industry profits go to banks in the form of dividends and interest. Thus, the banks want the utilities and industries to be profitable. The industries and utilities depend on the banks. Everything is vice-versa. And they all get together on their boards of directors to decide how it is to be done.

This great interwoven energy cartel is against the Nuclear Safeguards Initiative. This monopoly is pushing for the rapid expansion of nuclear power. They will control the prices and the distribution of energy. Just as with oil and gas, they can establish high rates and guarantee high profits by creating false crises when their demands for capital are not met. With their vast control over resources, both material and financial, they can eliminate or

subdue competition such as the municipal utilities. They have already used the so-called oil crisis to raise rates and cripple the smaller independent oil refineries and distributors.

When the public asks for some control over what this cartel does to the environment, they squash such moves with threats of unemployment and by manipulating the congress. All the while, of course, they advertise how ecological they are ! When the public tries to learn the basic information about our energy resources in order to try to make sane energy policy, these big businessmen bury it or distort it to their own advantage. When the public asks for some control over safety, as in the Nuclear Safeguards Initiative, the energy monopoly responds with threats of coal pollution and unemployment.

The U.S. does have an energy problem. The bankers and the industrialists of the energy monopoly got us into this mess by putting their profits ahead of our needs for rational energy planning and our needs for employment. Now they are pushing for speedy nuclear energy as the "solution"; and they threaten us with economic disaster if we don't go along with them. The Energy Monopoly is against the Nuclear Safeguards Initiative. This is an important fight for them; and it is an important fight for us.

In California, the AIF-energy monopoly's campaign is being managed by a special group set up to defeat the Nuclear Safeguards Initiative. Deceptively named "Citizens for Jobs & Energy," this group is working through sophisticated public relations experts to sway the voters into supporting the energy monopoly's program.

"Citizens for Jobs & Energy" will run a very expensive campaign against the Safeguards Initiative. (For example, they took a full page ad in the March 1 issue of Newsweek to offer their brand of the truth.) Who is supplying their money ?

Southern California Edison (\$50,000); Pacific Gas & Electric (\$25,000); Westinghouse (\$25,000); Bechtel (\$25,000); General Electric (\$20,000); General Atomic (\$10,000); Standard Oil of California (\$7,000).

And these figures are only as of January first. There is plenty more money where that came from; and you can be sure that if the polls show that the Nuclear Safeguards Initiative has a chance of winning, there will be a tidal wave of propaganda from the energy monopoly trying to defeat it.

WHAT ABOUT JOBS ?

The AIF and "Citizens for Jobs & Energy", speaking for the energy monopoly, tell us that we must have nuclear power to produce more energy and more jobs. They charge that passage of the Nuclear Safeguards Initiative will lead to shortages of energy and massive layoffs.

A standard strategy of big business is to make themselves appear as the protectors of working people and make their critics appear as the enemies of workers. For example, the energy industry has attacked environmentalists in this way. But many people can see through this lie. Leonard Woodcock, president of the United Auto Workers, has said,

"Philosophically, there is no reason to see any conflict between jobs and environmental protection... There is a sometimes delicate relationship between working people and environmentalists. This is partly a legacy of years of environmental blackmail in which the major corporations have tried to hold workers, or at least their jobs, hostage against the application of environmental regulation."

Similarly, there is no reason to see any conflict between jobs and nuclear safeguards. To see this, let's look at some data relating energy use and jobs. During the past few decades, the availability of cheap electrical energy has allowed industry to replace labor with machines. A machine cannot go on strike for higher wages, never complains about working conditions, and is much cheaper provided that electricity is cheap.

This preference for capital investment (machinery) over labor can be seen by looking at the employment record of the most energy intensive industries. Presently, two-thirds of all the energy used by U.S. industry is consumed by five major industrial groups -- primary metals, stone clay and glass, food products, chemicals, and paper products; but these industries employ only one-fourteenth of the total U.S. industrial employment. Furthermore, while total employment increased 41% between 1950 and 1971, total employment within these five groups remained constant. Instead of hiring more people, these energy intensive industries have expanded by increasing their capital investments in electricity consuming machines.

As for the energy business itself, it is probably the most capital intensive sector of the nation's economy. From the data

published by Fortune magazine on the country's top 500 corporations in 1975 we find the following: the top 15 oil (energy) companies tie up a staggering 21% of all the capital but provide a mere 4.5% of all the jobs. (If compared to all U.S. business, not just the top 500, the oil companies' share of total capital is lowered somewhat but their share of total jobs is reduced much more.) Thus, expansion in the energy producing and energy consuming sectors provides many fewer jobs than expansion in most other areas of the economy.

Surprisingly, it is found that some of the alternatives to nuclear power open up many more new job opportunities. Consider energy conservation programs - not the kind of conservation that forces people to be cold in winter, but the kind that avoids unnecessary waste, that asks for a rational production of goods designed to meet human needs rather than corporate profit needs. The technology does exist now to produce low energy-consuming automobiles, well insulated houses, cheap and efficient public transportation, large scale recycling, and many commodities that won't wear out so quickly (light bulbs, electric appliances, auto parts and tires, to name just a few.)

Not only do these conservation measures create new jobs directly but they free us from the enormous capital hunger of nuclear power plants. The one billion dollars spent now to build one nuclear power plant could create many more jobs if spent in construction work aimed at making buildings, both residential and commercial, more efficient in their use of heat energy. Also, the release of capital tied up in nuclear power will create more jobs through increased consumer spending: for example, it takes \$23,000 of consumer spending to create one job in energy production, as compared to only \$10,000 required to create one job in clothing manufacture.*

With so many opportunities for new jobs, more jobs, socially useful jobs, it is painful to see some of the big labor union leaders taking sides with the energy monopoly. George Meany and others of the

* These last statistics come from a sophisticated "input-output analysis" carried out in 1971. A more dramatic, although less accurate, measure is given by comparing statistics given by Fortune magazine in 1975 for the ratio of "Sales per Employee" in various industries. For Petroleum refining it is \$235,339, while for Apparel it is \$21,971. An even more astounding statistic is the profit per employee: in 1974 Exxon took \$23,600 in profit for every employee to whom they paid wages or salary !



AFL-CIO hierarchy have joined with the nuclear power industry and the AIF to oppose the Nuclear Safeguards Initiative. Apparently, they have bought the industry's line that speedy nuclear power is necessary to preserve jobs. (Clearly, if nuclear power plant construction were halted and nothing else was done with the money saved, then some jobs would be lost. But that is a shortsighted and foolish view, as we have outlined above, since there are many alternatives with even greater job potential.)

In the past few decades, as we have consumed more and more energy, unemployment has steadily risen. Some people still think that the current inflation/recession is due to the energy crisis, but this is only what the energy monopoly wants us to think. Depressions have occurred before, they are deeply rooted in the economic system. In addition, the billions spent in Vietnam and the astronomical sums continually spent on the Pentagon have contributed greatly to inflation and creating unemployment. This was shown by the Public Interest Research Group in Michigan (PIRGIM), a group of economists who compared the number of jobs produced by spending money on the Pentagon with the number of jobs produced in other enterprises which benefit the public. It is simply that we can employ more people, with a given amount of money, to build houses, hospitals and buses than they can to make bombs and missiles. Again we see the contrast between investing in "energy intensive" or "labor intensive" enterprises. The first may create more profits for business, but the second creates more jobs for people.

What was true in the past is true now. Supporting the goals of oil companies, banks and nuclear industries will not mean more jobs, but fewer jobs overall. Basically, employment levels are a matter of social policy. Other countries with strong union and

labor politics do not tolerate unemployment. In Sweden, a jobless rate of only 3% nearly cost the Social Democrat Party - in power for 41 years - the 1973 election. Moreover, Sweden, with a standard of living comparable to that in the U.S., uses only half as much energy per person. The solution to our unemployment problem, and to our energy problem as well, lies not in following the path laid out by the energy monopoly, but rather in taking new political and economic directions for ourselves.

There is plenty of important work to be done in this country: building better medical care facilities, constructing decent housing for everyone, planning comfortable and efficient mass transportation, taking care of our children and our elderly. It is unbelievable that unemployment exists! We call for jobs in these constructive areas and we call upon unions to organize workers in these sectors. No one should have to accept the destructive, meaningless and exploitative jobs the companies dole out in their search for greater control and profits.

We support the use of energy in liberating people from monotonous and physically exhausting work. However, when we are not in control of these resources, energy is used primarily for other purposes. It is wasted, manipulated for profit, used to create meaningless and destructive devices; it is used to destroy our environment. If we, all of us, take control of the energy, we can insure employment and provide work in areas meaningful to human survival and growth.



SUMMING UP ...

In this pamphlet we have exposed the scare tactics and threats put forward by the energy monopoly in their campaign to defeat the Nuclear Safeguards Initiative - Proposition 15 on the June ballot.

We see the energy problem, the escalating costs, the safety hazards, the shortage of jobs and the pollution of our environment as all part of the general mess that the energy monopoly has created in its relentless drive for corporate profits.

We support the Initiative for two reasons:

1. It provides some needed safeguards upon any nuclear operations and may help avoid some real disasters.
2. It is an important first step in the direction of having the people take some control over the system of energy production and distribution in this country.

This second item does not appear explicitly on the ballot this year but it is a subject due for much further discussion.

... AND LOOKING AHEAD

A great many people in this country are fed up with the way the energy monopoly has been managing things:

they create phoney shortages to raise prices;
 they rip off the world's resources and create pollution;
 they reap enormous profits even in a business recession;
 they provide few jobs and tie up large amounts of capital;
 they conceal or distort the truth about energy operations.

The government is powerless; the regulatory agencies in Washington protect the industry more than they protect us; and the anti-trust laws are a farce.

Even some establishment politicians have started talking about the idea of nationalizing the country's energy industry. We advocate that such a change must also be fully democratic in structure to make sure that it will be the majority of people who really benefit.

For a bad example, consider Amtrak. The government took over the railroad passenger service from the businessmen who had milked

out all the profits and left a decrepit mess. Then they set up a bureaucracy, unresponsive to the public, which treats its workers and customers with as little regard as does any large corporation.

It would be presumptuous of us to try laying out a detailed plan at this time but we can indicate some general principles that we think should be the basis for democratic nationalization of the U.S. energy industry.

The kind of democratic nationalization that we advocate would mean that the industry belongs to the American people and is under their control. Profits would no longer go to the few who now own the corporations; any excess of income over expenses would be used to serve the public, by expanding and improving the industry where most needed. Decisions on energy policy would be made by a body elected democratically and accountable to the public; they would be representatives of the industry's workers and consumers, not bankers, millionaires and the managers of other large corporations.

Some features that we anticipate of a democratically nationalized energy industry would be:

- A. Open Information. Full and truthful information would be given to the public about all matters - energy reserves, costs, safety questions, and all aspects of the policy choices to be considered.
- B. Rational Planning. Under democratic control, long range plans can be drawn up to meet the country's needs with a minimum of waste, duplication of facilities and "surprise" shortages.
- C. Maximum Benefits from Technology. Released from the profit-motivated control of corporate management, science and technology could expand to create and develop the many alternative energy possibilities that are now neglected by the industry.
- D. Health and Environmental Protection. Full recognition of the health hazards faced by workers in the industry and of the environmental hazards that affect us all would come from democratic control. Solving these problems would have a top priority.
- E. Employment. As we, the people, gain control over where capital is to be invested for energy production and distribution, we gain control over the creation of jobs. We gain control over the type of jobs, the working conditions, and we increase the possibility that the jobs will be socially useful and rewarding to the worker.

This is a big order. Democratic nationalization of the energy industry will need a lot of careful planning and it will need a hard political fight to make it a reality. The present monopoly owners will not readily surrender their power over us. But it seems that the time is at hand when enough people in this country see what is at stake and are ready to take on this task.

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We will provide, upon request, a detailed list of references for
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