

Michigan State University, attended by 110 students and representatives of industries, the Grand Rapids Press carried a report emphasizing the need for mankind to progress and attacking Naderism as a fraud. At a Detroit presentation Feb. 13, 80 people in attendance purchased copies of the USLP exposé, "Stop Ralph Nader, the Nuclear Saboteur," and several utilities representatives began planning joint town meetings with the USLP to further this grass-roots mobilization of the base of the Democratic Party in particular.

In Ohio, the Senate Energy Committee is planning a hearing for FEF testimony on March 4 on the USLP energy memorial now being drafted. The memorial has the sponsorship of the conservative Republican grouping, as well as the Democratic chairman of the House Energy Committee, State Rep. Carney of Youngstown. The bill's sponsors are formulating a resolution condemning Environmental Protection Agency anti-pollution guidelines now being imposed on the state's industry to help pull the coal industry-oriented layers in the state, such as the United Mine Workers, into a pro-energy growth coalition. In addition, a March 10 FEF forum slated in Columbus will be attended by local steel, utilities, Democratic and Republican legislators and possibly members of Ohio's congressional delegation.

In the South, U.S. Labor Party regional executive

Harley Schlanger held a press conference Feb. 16 in Columbia, South Carolina, calling on Sen. Strom Thurmond (R-SC) to pursue his opposition to Carter's nominee to head the Arms Control and Disarmament Agency, Paul Warnke, by a full exposure of Warnke's ties to the Trilateral Commission. Schlanger's conference was covered by the local NBC-TV, the *Spartanburg Herald*, and other press in attendance followed up with a full line of questions on what is the Trilateral Commission, who are its other members, and what are its policies.

At stake in the South's energy fight is, significantly, the Bardwell, S.C. nuclear fuel reprocessing plant, the only one in the country, which is completed but not yet licensed.

In a speech to the American Society of Civil Engineers in Birmingham this week, Tennessee Valley Authority Chairman Aubrey Wagner called on engineers to speak out for a sound energy policy for the U.S.: "It's high time we who are in the best positions to understand the real energy problems of the nation be just as visible and vocal (as the Naderites-ed.)... (The nation must) quit vacillating on nuclear energy." Wagner proposed an end to the sabotaging of nuclear licensing procedures and a strong push behind the breeder reactor program.

Energy And Industrial Policy For The United States

The following is the text of an address by Dr. Morris Levitt, Executive Director of the Fusion Energy Foundation, to the Comstock Club, Sacramento, California; Feb. 14, 1977.

The present threatened energy and water shortfalls in the state of California — a state which has been the paradigm of educational, technological, and agricultural excellence for the country — is symptomatic of a more profound threat to the continued existence of the United States as the world's leading industrial democracy. Despite the clear potential availability of abundant energy and other resources, our nation immediately faces the piece-by-piece dismantling of our industrial and agricultural infrastructure through what is *publicly* admitted by its proponents to be an *artificially imposed* energy shortage. These deliberate policies of deindustrialization furthermore deny the fact that 1976 witnessed confirmation of the feasibility of our needed long-range energy source, fusion power.

In the last several weeks, the following policy statements and proposals have been delivered: In his fireside address to the nation at the height of the natural gas shortages, President Carter declared national energy policy to be "conservation" — cutbacks up to 40 percent, the program of anti-nuclear presidential energy policy director James Schlesinger. Shortly thereafter, the Rockefeller Brothers Fund-sponsored Environmental Agenda Task Force — an umbrella for every major anti-industrial organization — released its hastily assembled document entitled "The Unfinished Agenda" (otherwise

known in perceptive circles as "The Final Solution"), which proposed the phasing out of central station electricity production and an escalating tax on fuels so that a five-fold increase in prices would make solar energy "cost competitive."

To top off such modest proposals, last week Senators Humphrey and Percy announced the formation of the Alliance to Save Energy, presenting the Naderite argument that every unit of energy not consumed as undefined "waste" was equivalent to a new unit of energy produced and consumed. Percy further claimed that nuclear power should be eliminated because it produced more heat than useful energy, neglecting the fact that this is the case for *all* electricity generators at present. People who should know better, such as House Republican Leader Rhodes and AFL-CIO President Meany, incredibly lent their names to this cause, even though the membership of the United Steelworkers Union had just rejected by a two-to-one margin exactly such policies as represented by the candidacy of Ed Sadlowski for USWA president.

Arguments for Devolution

The candor of the presentation of these negative growth policies — most closely identified with the programmatic outlook of the Trilateral Commission, the creation of David Rockefeller which has provided no less than 13 top cabinet and sub-cabinet members of the Carter Executive — is due to the presumption by the negative growthers that the public is resigned to their fate because of two related circumstances. One is

physical, the other economic, but they are both alleged to be unalterable, beyond the reach of mortal man. The first is that we are past the peak of depletion of the cheapest, most accessible fossil fuel deposits. When combined with the second factor, exponentially growing equipment costs and debt service plus environmental restrictions and delays, this is supposed to mean that the era of cheap and plentiful energy is gone forever.

If these arguments aren't persuasive enough, there is an everready arsenal of exposés of alleged industrial malpractice and dangers to the public's health — or to endangered species of weeds and grubs — from the fear-mongering about plutonium to the remarkable assertion in California that increased irrigation causes increased water salinity.

Aside from the alleged dangers of plutonium, nuclear power is being choked off by the equally contrived issue of nuclear proliferation associated with Arms Control Agency nominee Paul Warnke. This tactic goes back to the post-war history of nuclear politics, and the non-proliferation policy embodied in the Baruch Plan. Back in the late 1940s, the immediate prospect of broad scale nuclear power was on the horizon. But it was scuttled by the Truman administration's policy that no country outside of the U.S. could come into possession of nuclear facilities, and the mantle of military secrecy was draped over nuclear research into the early Eisenhower period, condemning nuclear power development for years.

The same effort is being mounted now, with the gravest possible consequences for the U.S. Brazil is the critical test of what our policy will be vis-a-vis the Third World. The danger is not of having nuclear facilities in Brazil, but of the drastic measures, both economically and militarily, the Brazilians might be forced into undertaking if they are denied advanced energy technologies.

The intensity of this assault on our industrial institutions reflects not some strange new contagious disease. Trilateral Fever, but an old one — monetarism, the attempt to prop up bankrupt speculative investments by depleting whatever otherwise sound capital holdings may be accessible to the monetarists. Against this insanity, our only reliable strategy is a fierce counter-attack based on the broadest possible dissemination of a scientifically rigorous comprehension of related energy and economic questions.

The actual underlying causes of *apparently* dwindling resources, shortage of capital, and too much production of unusable effluents from industrial and extractive processes are efficiently summarized by the well documented decline in U.S. research and development efforts since the mid to late 1960s. From the somewhat limited perspective of perceived U.S. military needs, this decline has been persuasively documented most recently by Chairman of the Joint Chiefs of Staff General George Brown, and by former Defense Department Research and Engineering Director Dr. Malcolm Currie. Dr. Currie in particular cited the overall *qualitative* improvements in strategic posture to be expected from breakthroughs in areas such as fusion research if basic research were being adequately funded.

Potentials for Development

Consider, for example, what water, energy, and other

resources would now be available if we had expanded, rather than contracted, our research efforts and *applied* them in conjunction with a program of improving industrial efficiency and productivity — not with anti-pollution gimmicks — but by increasing the density of energy throughput. Just as a small sample: massive irrigation projects for the entire North American continent and development of the advanced Thexon desalination process would be providing bountiful water; the introduction of the Jordan steel process would double production of steel as well as producing a good fraction of needed methanol fuel and fertilizer feedstock; energy would be available from developed secondary fossil reserves and a complete fuel cycle fission system would be on line.

The program we must now undertake, to be sure, includes completing these deferred projects, but to succeed in launching the needed effort we must proceed on the most politically and scientifically sound basis. That means understanding the necessity for a crash program of fusion energy development, and grasping the importance of the model which is being provided in germ form by international economic collaboration to which the U.S. is unfortunately not presently a party. The latter is epitomized by West European and Arab oil-for-technology deals; by West European, Japanese, and Comecon technological transfers to Third World areas to develop modern agricultural and associated industrial infrastructures; and by collaborative efforts to fully develop West European nuclear capabilities in present fission systems and future fusion reactors. These preliminary efforts directed toward world development can not succeed without the active participation of the United States, which must itself make full capacity utilization and technological upgrading of its basic industries our top national priority.

That can never be done with hare-brained schemes of reliance on much too diffuse solar energy, covering the western states with tin foil instead of productive mining and agriculture, or with the thermodynamically inefficient and doubly costly coal gasification projects as they are presently conceived, along lines disturbingly reminiscent of projects in vogue in Germany during the 1930s and 1940s. These policies can lead only to the "energy saving" insanity now being enacted in parts of Brazil, in unfortunate contrast with that country's otherwise sound program of nuclear power importation. The drought we are presently experiencing in California and other key agricultural areas may be directly traced to the alteration of energy flows in the atmosphere triggered by two Brazilian projects: the destruction of millions of acres of Amazon forest for primitive agriculture, and the simultaneous cutting of millions of acres of trees to produce charcoal for the steel industry, a practice abandoned for obvious reasons in Europe hundreds of years ago. That is where the logic of "conservation" and use of so-called "renewable resources" leads: to depletion of the biosphere and destruction of the human economy.

Fusion, being the energy technology of greatest potential energy density and total output, represents the basis of the opposite tendency: unlimited expansion and continual redefinition of the resource base, and of qualitative advances in productivity of the global economy. This is so because fusion will make energy

available in a wide variety of forms (heat, radiation, particles, electricity) for processing low grade raw materials and for energizing integrated industrial complexes. The denser the concentration of energy in the ionized gas fuel — the plasma — in which fusion takes place, the greater appear to be the potentialities for creating and controlling the forms of energy production. Not accidentally, the research which will provide workable commercial fusion reactors will also provide the best testing ground for new theories of the basic physical interactions and of the interchangeable forms of matter and energy.

Revolutionary Breakthroughs

Some of the most stunning evidence of the breakthroughs to be expected from basic R and D efforts has so far come from the Soviet Union's intensive efforts in particle-beam fusion research. Last summer, visiting Soviet electron beam scientist Rudakov shocked U.S. researchers by unilaterally declassifying aspects of the complex processes underlying the Soviets' groundbreaking achievement of fusion reactions with high energy electron beams. Most recently, the Italian press has reported a significant advance in Novosibirsk in producing intense, well-focused proton beams. These are the sorts of breakthroughs which have the potentiality to revolutionize productive as well as military technologies.

But we must get fusion reactors on line in a time frame compatible with continued growth using existing resources and technologies, and we must grow and develop to have the productive resources to build the necessary number of fusion reactors.

We are presently funding fusion research at a level of about a quarter of a billion dollars a year. On that basis, the official U.S. government timetable for commercial fusion reactors is the end of the century. Two things must be said about that. Many fusion scientists and administrators think we'll never get fusion on that funding basis because the research and development effort is much too narrow. The last two directors of U.S. fusion research have testified before Congress that with a major national commitment we could have reactors on line by the end of the next decade. That opinion is now shared, on the basis of this year's great progress in fusion research, by the formerly more pessimistic Dr. Edward Teller. The Fusion Energy Foundation has estimated that getting the job done will require expenditures beginning at about the level of the Apollo Project, five billion dollars a year for basic and applied research and engineering.

There are presently 20 to 30 promising reactor designs — we must test them all. There are small experiments of the highest scientific merit starved for funds; there aren't enough plasma physicists. That could be turned around by building and staffing ten National Fundamental Research Centers. Instead of deferring basic engineering work, our high-technology industries must be engaged in design and development now. Developing fusion reactors is not, however, primarily a question of funding, but of the context in which research and development takes place.

Critical Watershed

We are at a critical watershed point. The job can be

done, the ultimate feasibility of fusion has been demonstrated. But the development of a fusion-based economy is in jeopardy precisely because of the accelerating erosion of our skilled manpower and capital goods capacities. This pinpoints what is wrong with the whole conservation mindset. You have to be in the proper shape in the future — by using resources rapidly now — to get fusion off the ground. Imagine if in the name of sharing the benefits of aviation with future generations we now restricted planes to maximum speeds of 50 miles per hour on longer runways. Stretchout does not lead to takeoff! The proper role of our government is to set broad goals, such as fusion, for national development and then provide the means for their realization without over-supervising the process. This is best done in consistency with our Federalist traditions by favoring, through taxation and credit-granting policies, those industries contributing to development of advanced energy resources and to industrial and agricultural productivity. That clearly demands a new monetary system and credit-issuing National Bank whose operations are based on realistic assessments of anticipated growth in production.

Internationally, we must adduce and act in a statesmanlike manner on points of overriding common interest for economic progress with all of the major world sectors, North and South, East and West.

Is this practical? Recall the anti-Sadlowski vote. Look at Oregon, Washington, and Connecticut, where resolutions calling on Congress to legislate a crash program for fusion development and defense of high-technology industries have been introduced by bipartisan groupings in the respective state legislatures. Look at the overwhelming defeat of the anti-nuclear referenda, largely due to strong trade-union mobilization. Look at campuses such as the University of Michigan, where Ralph Nader's "Public Interest" groups are being deprived of further funding. Most importantly, listen to what Western European and Arab countries are saying about cooperation on industrial development, fission, and fusion based on a sound new monetary system. These are our natural allies against trilateral policies of de-industrialization.

The situation finally comes down to the *subjective* factor. The future now depends above all on our courage or lack of it. Will we be intimidated by the lower species of zero-growthers who love the clam and louse-wort better than man, or will we move them out of the way in order for humanity to move ahead? Will we have the courage to forcefully assert what can be done or will we give in to small men like Ralph Nader and Jerry Brown? — men whose philosophies would have placed them in the reactionary opposition to humanity's highest achievements in the Renaissance, Tudor and Commonwealth England, and in our own American Revolutionary commitment to the Idea of Progress. Such men betray not only the American Constitutional commitment to the continual betterment of the lives of our people, but betray the thousands of years of history of the philosophical struggle to master comprehension of the infinite perfectibility of the physical universe and the human mind. Man is not a dumb beast, as feudal reaction or Parson Malthus would have it, limited to fixed modes of behavior

and technology. He is the highest expression of the fundamental tendency of self-development of the physical universe and the biosphere which accounts for our species' origins and qualitative advances.

Whether this all had meaning, whether this heritage is transmitted to future generations, now depends entirely on whether we have the courage to provide the needed leadership.

California Industrialist Hits Delays In Developing New Sources Of Natural Gas

Following are excerpts from a speech by Joseph R. Rensch, president of the Pacific Lighting Corporation, titled "Politics and Energy Brinkmanship." The speech was delivered Jan. 17 to the Comstock Club in Sacramento.

I appreciate the opportunity to appear before you. I have taken the title "Politics and Energy Brinkmanship" hoping to convey in those four words the key issue in what I believe to be the most serious problem facing the state of California at this time — the coming crisis in our energy supplies.

The cutting edge of the energy crisis is the sharp decline in the supplies of natural gas from our existing sources in the continental United States...At worst, we face a severe energy depression — much more punishing than the Great Depression of the 1930s. The decisions that are made as precious time runs out in the days and months ahead will dictate just how bad that impact will be.

A great many of the decisions that must be made in resolving our energy dilemma rest in the hands of governmental agencies and those in political office. There is a dangerous game of energy brinkmanship going on in the political arena, and California is playing this game to the hilt....

Conservation must be given top priority. Unfortunately, there is a widespread misunderstanding that conservation alone will totally or largely resolve the problem...Nuclear power is an important source of energy and must be developed on a much broader scale than it has up until now. But there are only three new plants which could be operating within the next five years. The first nuclear power plant in California was put into service in 1963. Today, after 14 years, nuclear power still provides less than 2 per cent of the state's stationary energy supply...Many positive conservation steps can and must be taken. A "no-growth" policy is not one them, however. The problem with "zero-growth" is that it does not provide for the inescapable increase in our labor force. There are 13 million young men and women, now living in this country who will be entering our labor force within the next ten years. This represents almost a 15 per cent increase in our nation's labor force and jobs are going to be needed for these people. A "zero-growth" policy in the face of that would guarantee a severe unemployment situation.

Unfortunately, what I am talking about today is the prospect of "negative growth." This is much more serious than talk of "zero-growth," bad as that is. "Negative growth," or a significant reduction in jobs,

can and will result from the energy shortage I am describing today. The immediate question on gas supplies is pivotal.

There has been a serious decline in gas supplies in southern California and if no new supplies are brought in by late 1980, that part of the state faces economic chaos...By 1980, southern California gas supplies will be less than half what they were in 1970....

...By 1979 as the situation worsens, gas will no longer be available for many other customers such as the larger hospitals and government facilities.

Then, in the early 1980s, without new gas supplies, we will be forced to turn off the very small businesses and industries which have no alternate fuel capability — and, finally, the residential customers. A conservative estimate of the initial unemployment impact which will occur if we start turning off these many thousands of businesses and industries without alternate fuel capability is a loss of 700,000 southern California jobs....

And for all practical purposes there are no realistic energy alternatives (to natural gas —ed.) for the small residential consumers...The gas distributors saw this problem coming many years ago. In 1969, Pacific Lighting proceeded to develop its own projects to supply its subsidiary Southern California Gas Company from new sources. These proposed projects include gas from coal gasification in New Mexico and, in partnership with Pacific Gas and Electric Company, liquefied natural gas (LNG) from South Alaska and from Indonesia. PG and E and Pacific Lighting have also been working closely together for many years to assure California's participation in the large gas reserves on the North Slope of Alaska.

Extensive delays have kept these projects from coming into being by now. Gas from the North Slope and coal gasification are not expected now until 1983. As a comparison between two countries faced with a similar problem, we contracted for our supplies of natural gas in Indonesia over three years ago, against some very tough competition from Japanese buyers. We entered into a contract for our share in September, 1973; the Japanese signed up for their gas about three months later. But that is where the parallel stops. The Japanese proceeded to build their facilities — with their government supporting rather than impeding their efforts — and as a result, the first deliveries of LNG to Japan will start this year. We, on the other hand, are still struggling through governmental processing striving to get this large supply of new gas in by the critical year of 1980.

As a matter of fact, only the two LNG projects can bring gas to California by 1980. It will take three years to