

Schlesinger legacy: destruction of America's R&D capability

A year and a half after President Carter declared the "moral equivalent of war" on the energy crisis, the real victim has turned out to be the nation's basic scientific and technological capabilities. While the U.S. continues to have no legislated energy program (the mass of regulatory measures passed in the last days of the frantic 95th Congress is nothing more than a heap of disjointed rules and taxes related to energy use), the Department of Energy's proposed budget for U.S. energy development seeks to drive America below the level of a fourth-rate scientific power in crucial areas of research and development.

No one deserves more credit for this accomplishment than the Secretary of Energy, James Rodney Schlesinger. The extensive damage he was able to inflict on the Atomic Energy Commission, the CIA, and then the Department of Defense during his earlier service as head of each of those agencies has been overshadowed by the purge he has carried out against the best of the government's science cadre, the disastrous anti-energy policy he is imposing on the country by fiat, and his sabotage of every effort by America's allies to help it maintain its until recently unrivaled science and technology strength.

The fiscal year 1980 budget for the Department of Energy, submitted to the Office of Management and Budget by the DOE on Sept. 15, outlines a program based on the two central assumptions of Schlesinger's policy formulations: that the price of energy will reach a cost of \$25 per barrel of oil equivalent by 1985, and that the rate of growth of energy use will *decline* for the next 20 years to zero or even negative by the year 2000.

On this basis, Schlesinger is replacing the tradition of the *Energy Research and Development Administration* (and the Atomic Energy Commission before it) with a jungle of "alternate energy sources" which will only be "competitive" if the price of oil skyrockets.

To its credit, the 95th Congress restored the DOE's proposed cuts in the budget for development of the most advanced power source, thermonuclear fusion, refused to be blackmailed on funding for the fission breeder reactor, and generally tried to maintain the integrity of scientific research and development of progress-oriented technology. But the real fight for a national energy policy will unfold when the 96th Congress convenes in January to consider the Depart-

Fusion program early casualty of "inflation fight"

It has become clear in the first days following President Carter's Oct. 24 announcement of his "anti-inflation" program that this program — already condemned for its crippling impact on U.S. industrial production — will become the pretext for the next ratchet of budget cuts in the Department of Energy fusion program and other high-technology programs.

Two days after the announcement, the DOE fusion office received a memorandum stating that as a result of the hiring freeze, two people will have to leave the division for every new employee to be hired. In addition, ten top-level positions in the division that are currently vacant cannot be filled unless there are additional resignations — a situation expected to severely crimp overall coordination of the nation's fusion effort.

On top of the personnel cutbacks, the fusion office

has been informed that its travel budget has been cut by 50 percent. In addition to restricting on-the-spot supervision of its widely scattered research facilities, the cut has meant that the fusion office was unable to send a representative to the plasma physics meeting of the American Physical Society in Colorado Springs this week. And, according to a fusion office spokesman, it is possible that U.S. participation in Soviet Academician E.P. Velikhov's projected international Tokamak experiment — Unitor — will be hampered because the office will not have funds to send U.S. scientists to attend the discussions on the project being held in Vienna. Thus, the question of maintaining current U.S. leadership in the international fusion effort may hang on the price of plane tickets for U.S. fusion scientists!

ment's FY 1980 budget — the first budget put together "from scratch" by Schlesinger. Schlesinger has indeed declared war — on all possibilities of providing the U.S. and its allies with the technology and scientific manpower to bring the world to the fusion era by the beginning of the 21st century.

The FY 1980 budget proposes the funding for the Stone-Age techniques of solar energy and "biomass" (e.g., firewood) be almost doubled, from \$466 million to \$729 million in 1980. Since it is generally agreed that covering half the country with mirrors for solar electric generation is nonsensical and that there are no dramatic technological breakthroughs on the horizon for solar power, this funding would primarily be for tax credits and other financial incentives to bolster an "industry" that otherwise could never be profitable. Of course the cost to the consumer is prohibitive compared to any existing form of energy production.

"Conservation" is to receive \$451 million, to bring various residential and industrial energy-saving devices to commercialization. In most cases these devices, like the solar and other so-called soft technologies, are economically feasible only after the cost of energy production by saner means spirals out of sight. The actually most efficient forms of energy use, new technologies for combustion, heating and industrial processing, are *not* included in this "conservation" budget.

Schlesinger and his deputy secretary, John O'Leary, have had little luck in selling their Nazi-originated synthetic coal programs to the energy

industry. Undaunted, the FY 1980 budget proposes to spend \$418 million in tax dollars on a program that by 1985, after spending close to \$3 billion, will bring the U.S. up to the technology developed in Hitler's German autarky more than 40 years ago. The only significant improvement this multibillion dollar program will provide over the Nazi original will be pollution control devices on the plants that manufacture synthetic gas and liquid fuels from coal.

The purge of U.S. science and technology

Schlesinger realized almost two years ago that in order to transform U.S. energy policy from research and development led by the best scientists and engineers to wood chips, windmills, and synthetic fuels, he would have to eliminate all opposition from within what would become the new Department of Energy. Harassment, pressure, and demoralization are accomplishing this with maniacal precision.

The first top scientific administrator to be demoralized into resigning was Robert Hirsch, the dynamic leader of the U.S. fusion effort. After months of rumor-mongering and White House meetings to determine how much the budget for fusion would be cut, meetings that Hirsch was prevented from attending, it was made clear to him personally that there was *no* future for fusion in the new Administration. Hirsch departed.

Then a couple of months after the Administration made clear its position that under no conditions would it commit the U.S. to the construction of a breeder reactor for the next generation of nuclear technology, the DOE lost Stanley Ahrends, who had been the Director of Reactor Development under the DOE's predecessor, the Energy Research and Development Administration.

While on a trip to Moscow to continue important scientific cooperation between the U.S. and USSR, William Jackson was removed as head of the magnetohydrodynamics program, which has been the most fruitful area in U.S.-Soviet joint research.

This month, C.W. Cunningham, seeing the handwriting on the wall, resigned from his post as head of the Office of Nuclear Energy. Nelson Sievering, deputy assistant secretary for international affairs, responsible for international nuclear development, has likewise left the DOE.

These resignations and changes represent much more than simply the loss of talented individuals. They indicate the deep demoralization within the Department of the people who are vital to organizing and carrying out a high-technology energy policy. The point is the same as in the case of teams of scientists in the field who are carrying out the actual research: pulling apart the groups of scientists and administrators who have worked together for years will have an effect that cannot be reversed after a certain point. Replacing these men with rabid environmentalists brings that point dangerously near.

The other side of Schlesinger's attack on U.S.

What about Schlesinger's travel budget?

Reports that the travel budget for officials of the U.S. fusion program has been cut 50 percent have prompted speculation concerning the cost of Energy Secretary James Schlesinger's lavish trip to Peking. Particulars of Schlesinger's plans were withheld by the top DOE officialdom.

One school suspects that Schlesinger may be attempting to exceed, or improperly circumvent, travel spending restrictions on his Peking junket, and feels an investigation is in order.

Another expresses fears that the cost of the Schlesinger jaunt has exhausted the DOE's travel budget, and is responsible for leaving other DOE officials Washington-bound until the FY 1980 budget goes into effect.

A third, more optimistic school of thought, however, believes that Schlesinger — a supporter of the anti-inflation program — will adhere to the 50 percent spending guidelines, and that his tickets to China are only one-way.

science and technology is the funding projected for the nuclear energy technologies that must be developed for the future. This policy has been made explicit by Schlesinger and his men in the Department. According to the *Journal of Commerce* of Feb. 2, 1978, Deputy Secretary O'Leary declared that the "energy problem is not one that is going to be solved by research and development . . . no new technology spawned by the government has resulted in significant new energy supplies . . . after decades and spending billions, nuclear energy only provides 1 percent of the nation's energy needs." And, O'Leary continued, "We have misread the potential of fusion."

On May 18, at a breakfast meeting with reporters in Washington, O'Leary was asked about the need to increase the fusion budget. He replied, "I can't see how we can spend the current amount of money on fusion." Later that month, he asked John Deutch, the Director of the Office of Energy Research, to review the effect of cutting \$100 million out of the magnetic fusion program for 1980. According to Schlesinger himself, in response to a reporter's question on June 5, "Fusion will be developed late in the 21st century."

Then at an Aug. 14 press conference it was made public that the Large Torus fusion device at the Princeton Plasma Physics Laboratory had achieved a first — an ignition temperature above 60 million degrees. The achievement was, by all scientific standards, a world-historical event in fusion research. Yet the Department of Energy fought behind the scenes to conceal, then downplay the news, even after it was forced to hold the press conference announcing the Princeton breakthrough. This journal documented, hour by hour, how Schlesinger and his aides tried to suppress the Princeton results (in our Aug. 29-Sept. 4 issue, Vol. V, No. 33). Typical was Schlesinger's explanation on nation-wide television that "we did not want to hype up" the fusion results, and the report in the Aug. 20 *Pittsburgh Press* that Schlesinger was "sizzling" that the results were made public.

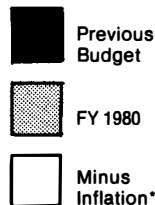
More recently, according to the Oct. 19 *Baltimore Sun*, John Deutch declared that it could be 20 to 30 years before we know if a fusion system will be economical. Moreover, he said in the same interview, conventional nuclear energy and breeder reactors are too dangerous to be deployed on a large scale in the future.

In keeping with this line of reasoning, the proposed funding for FY 1980 for magnetic fusion is \$365 million, a mere \$27 million above the previous year's level and not even enough to keep up with inflation. The nuclear budget is projected at \$1,007 million, exactly the same as the FY 1979 funding level. The DOE budget proposal includes no budget line for the Clinch River Breeder Reactor, and a \$12 million cut in the magnetohydrodynamics funding.

The final blow to the Office of Energy Technology, which is what remains of the ERDA research and development capability, is the operation of the bogus

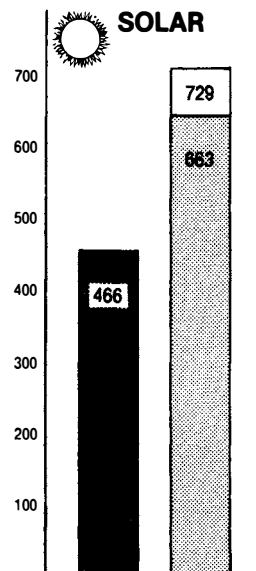
Schlesinger's energy budget for 1980

Millions of \$

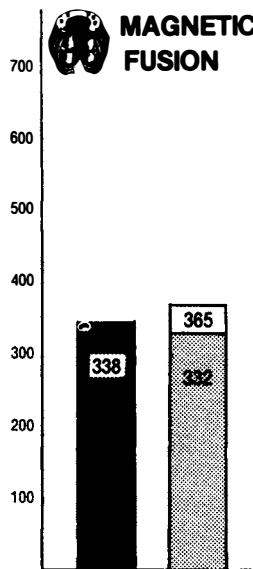


* based on a conservative estimate of 8 percent inflation per year

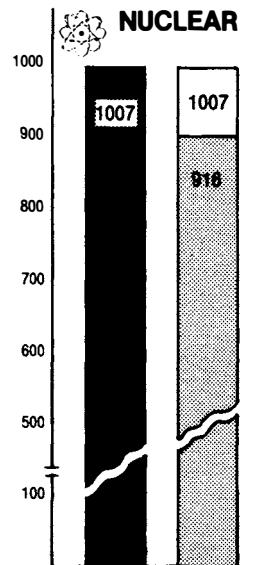
SOLAR



MAGNETIC FUSION



NUCLEAR



Office of Energy Research. Although formally he has practically no defined responsibilities, the Office's director John Deutch has gradually been given the power of life-and-death policy decisions over the programs which make up the Department's high-technology research component.

Not even included in the original organizational structure of the Department of Energy, the office of Energy "Research" has usurped responsibility from the Department divisions which have the technical expertise to actually formulate policy, and is being used as an internal "goon squad" against these divisions,

which are accused of being too "constituency-oriented."

For example, the Office of Energy Research was given oversight to develop Administration policy on nuclear waste. Released last week, the Inter-Agency report proposes *no* program for this vital concern of the nuclear industry. Over the past month, Deutch has taken over the responsibility for formulating DOE domestic and international nuclear policy from the Office of Policy and Evaluation.

Deutch also headed the Ad Hoc Experts Group on Fusion, the Foster Committee, whose report has been used to call for a slowing down of the highly successful fusion Tokamak program.

Over the past two years an extraordinary number of offers for joint international advanced research in energy development have been made to the U.S. by the governments of Japan and the Soviet Union. Using military classification, economic threats, and personal intimidation, Schlesinger has almost succeeded in sabotaging this potential cooperation, and is instead currently visiting the People's Republic of China.

Under the pretext of joint development of Chinese oil reserves, Schlesinger is an active player in National Security Advisor Brzezinski's "China card" geopolitics. The sincerity of his concern for future U.S. fossil fuel supplies is obvious from his personal sabotage of joint U.S.-Mexico

Algerian liquid natural gas imports, and of cooperation in Soviet Siberian resource exploitation. No one in the energy industry has been fooled by this international shell game.

The delicate negotiations between the U.S. and Soviet Union for a second SALT agreement were temporarily destabilized when Schlesinger insinuated himself into the White House meeting where the fate of the sale of American oil technology to the USSR was to be decided. Secretary Schlesinger cast the deciding vote which prevented the sale of the equipment which could help assure the U.S. adequate oil supplies in the future.

In 1972, President Nixon negotiated the historic scientific and energy cooperation agreements with the Soviet Union, to improve diplomatic relations and to produce commercial, advanced technology for energy production and use. Since Schlesinger has been in the Carter Administration, every offer for upgraded joint collaboration from the Soviets has been rebuffed.

At this point the overall cooperation agreements themselves are in dire straits. Because many of the specific agreements were finalized in 1974, their five year statute will expire in June 1979. Scientists in the DOE who recognize the importance of the joint work, both for international diplomacy and because the U.S. is lagging behind in many of the high-technology areas, are dismayed by the lack of U.S. interest in renewing the agreements. If nothing is done within the next few months, they will simply expire.

In periodic trips to the U.S. over the past two years, Soviet fusion scientists Nikolai Basov and E.P.

Velikhov have made offers in research which would address the frontiers of both theoretic and experimental work in fusion development. In November 1977, Basov unofficially offered expanded collaboration in laser fusion at a conference at the University of Miami. When asked his response to the Basov offer, at a press conference, Schlesinger replied, "No, a flat no." Schlesinger claimed that since all laser fusion was classified — a simple lie — no joint work could go on.

In the spring of 1978, Academician Velikhov made an offer, initially to U.S. scientists, to build a joint, post-energy-breakeven Tokamak fusion reactor. The proposal was later expanded to invite participation from Western Europe and Japan. It is now under vigorous discussion in the International Atomic Energy Agency in Vienna, and the U.S. is the only participating country which has not unequivocally committed funding and manpower to this project.

The irony here is that the Unitor, as the test reactor has been named, will be on line at least four years before the comparable U.S. Tokamak reactor, and will make mincemeat out of Schlesinger and Deutch's protestations that fusion is not possible until well into the 21st century. Despite the excitement in the fusion community, the DOE Office of Fusion Energy, and the umbrella Office of Energy Technology, U.S. action on the Velikhov proposal is being squelched from the top.

Threatening our allies

On May 4, 1978, Japanese Prime Minister Takeo Fukuda addressed the Foreign Policy Association and Japan Society in New York and revealed that the Japanese would be willing to invest \$.5 billion in an international fusion effort. Fukuda remarked that this would help alleviate Japan's U.S. balance of payments problem.

On Sept. 1, a U.S. delegation led by John Deutch presented the Japanese with the response to Prime Minister Fukuda's offer — before any agreement by the U.S. for fusion cooperation, the Japanese would have to support a synthetic coal program to the tune of \$170 million. Though the meeting produced a "letter of understanding," including the "understanding" that the Japanese consider joint fusion work the priority in these agreements, nothing positive has happened since the offer was made.

According to the Japanese, last week the Vice-Minister of the Japanese Ministry of International Trade and Industry (MITI) was in Washington, D.C. and met with Schlesinger. He told the energy czar that the Japanese proposal for joint fusion research stood as the Prime Minister had proposed it four months ago. According to a MITI representative, Schlesinger replied by insisting that the highest priority for U.S.-Japanese cooperation is . . . coal liquefaction.

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