



**Schneider, Keith, "Defects in Nuclear Arms Industry Minimized in Early Reagan Years",  
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## **Defects in Nuclear Arms Industry Minimized in Early Reagan Years**

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**By KEITH SCHNEIDER, Special to the New York Times**

**WASHINGTON, Nov. 6—** In the first months of the Reagan Administration, the Energy Department disregarded warnings that the nuclear weapon industry was beset by flaws in management and safety, and rejected recommendations to overhaul safety programs at the weapon plants, according to Government reports and interviews with current and former officials.

Administration officials now acknowledge that health and safety problems are severe, and have closed important weapon plants. A stricter safety regimen is being imposed by Energy Secretary John S. Herrington, who moved only after receiving a report early in his tenure in 1985 that spoke in stark terms of a safety crisis in the nuclear weapon industry.

President Reagan's top national security officials have recently sought to place much of the blame for safety problems in the weapon industry on previous administrations. "These problems developed over a long period of time," Lieut. Gen. Colin L. Powell, the national security adviser, said last month. "We did not make the necessary investment during the '50's and '60's to upgrade these aging facilities." Significant Safety Implications



But the documents and interviews show that important policy decisions on weapon production made early in the Reagan Administration had significant implications for the industry's safety and its ability to perform.

"We were aware the system was old," Earl E. Gjelde, former chief operating officer at the Energy Department under Donald P. Hodel, said in an interview last week. Mr. Hodel was Energy Secretary from December 1982 to January 1985, when he became Interior Secretary. Mr. Gjelde is currently Undersecretary of the Interior.

"The reports said a crisis was coming," Mr. Gjelde said. "But nobody said a crisis was coming next year. It is obviously of a greater magnitude than we thought."

Still, many Energy Department officials agree that some problems could have been avoided and others would be less serious had the Administration heeded recommendations made in 1981 in a series of reports, including a 14-volume study by a committee of engineers and nuclear scientists. 'Insufficient Attention'

"The agency did not address the central problem we identified," said John W. Crawford Jr., the former Principal Deputy Assistant Secretary for Nuclear Energy who was chairman of the \$1 million study. Mr. Crawford is now a private consultant to the nuclear industry. "You can't run a complex nuclear program with administrators and lawyers."

Mr. Herrington's program to hire more technical experts, increase the budget for safety programs and enhance the authority and independence of inspectors is virtually identical to recommendations made by the Crawford committee.

Mr. Herrington's plan marks a reversal of the approach adopted by Dr. James B. Edwards, President Reagan's first Energy Secretary. Dr. Edwards considered the committee's conclusions on safety inaccurate, according to his top deputies. They said Dr. Edwards disregarded the report's findings and similar conclusions by the General Accounting Office, the investigative arm of Congress, because the Energy Department's regional managers said the problems were not substantial.

Dr. Edwards, who is president of the Medical University of South Carolina in Charleston, did not respond to requests for an interview. Budget for Safety Cut Under Edwards

In the 22 months he ran the Energy Department, Dr. Edwards presided over a 25 percent reduction in the budget and staff for safety programs at the department's Washington headquarters.

Dr. Edwards, said former officials, was driven by several goals. The first was Mr. Reagan's desire to cut the Federal budget while building the nation's defenses without increasing taxes. The second was to abolish the Energy Department. In legislation introduced in the Senate in 1982 and almost immediately rejected, the Administration proposed to have the Commerce Department take over ownership and management of the weapon program.

"The main goal was fulfilling national security needs," said Stephen L. Jones, the former chief of staff to Dr. Edwards. "The budget increased for nuclear weapons. How much the environmental and safety budget increased in that time, I can't say."

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"Every penny that went to safety programs was a penny taken from manufacturing nuclear warheads," Mr. Vaughan added. "And what this Administration was all about was making warheads."

Former Reagan Administration budget experts insisted that the decision to cut the funds and staff of headquarters safety programs was made by Dr. Edwards and other Energy Department executives.

#### Who Made the Choice To Eliminate Staff?

"There is no possibility that somebody above the agency level consciously chose to eliminate that staff because they thought they were an impediment to the arms buildup," said Frederick N. Khedouri, who was Associate Director for Natural Resources, Energy and Science at the Office of Management and Budget from 1981 to 1985.

"It might be that somebody in the department chose to reduce the safety and health staff, which in retrospect turned out to be a foolish economy measure," said Mr. Khedouri, now an investment banker with Bear Stearns and Company in Washington.

Never in the history of the nuclear-weapon production industry, which dates to the start of the Manhattan Project in 1942, has the United States been unable to produce materials to maintain its nuclear arsenal.

Of the 17 principal weapon plants and laboratories scattered throughout 12 states, two have been shut and two others have been partly closed in recent weeks after disclosures of management turmoil, accidents, equipment failures, procedural errors, contamination incidents and other mishaps. The disclosures by the Energy Department came as part of a new emphasis on safety instituted by Mr. Herrington.

Moreover, the opening of a nuclear waste repository in New Mexico, scheduled for last month, has been postponed indefinitely because of engineering, scientific and safety inadequacies.

The Energy Department is unable to say when it will have the entire production system operating again. But Mr. Herrington has said he hopes to restart a reactor next January at the Savannah

River Plant near Aiken, S.C., that produces tritium, a radioactive gas essential to warheads.  
Severity of Problems Was Clearly Described

The severity of the problems at the nuclear weapon plants was clearly described in a series of reports that began arriving at the Energy Department in March 1981. The first and most authoritative of the studies was the 14-volume Crawford committee report, which was commissioned by the Energy Department in October 1979, seven months after the nuclear accident at the Three Mile Island power plant in Pennsylvania. That incident alerted Government officials to weaknesses in the operation of nuclear reactors.

The study, prepared by a 26-member staff of experts and overseen by a five-member panel of Energy Department officials, is still considered by many to be the most thorough analysis of nuclear reactor safety at Energy Department sites. The committee concluded that numerous "significant deficiencies" existed in the operation and management of the Government's reactors.

Mr. Crawford and the other committee members said in the report that although they "found no evidence that the reactors reviewed were being operated in an unsafe manner, the number and type of deficiencies noted give cause for a number of concerns."

The Crawford committee report found that reactor operators and supervisors were poorly trained and that the "level of knowledge" and "level of professionalism" about operating nuclear reactors throughout the weapon industry was "inadequate." The committee criticized the record keeping at the Energy Department's reactor sites, saying that reports about operations, maintenance, accidents and unusual incidents at the reactors were "poorly written," and in many instances were "misleading, incomplete and sometimes incorrect."

The committee also found that the Energy Department was relying "too heavily" on its contractors to assure safety. It urged Dr. Edwards to upgrade the expertise of inspectors, hire more nuclear specialists and establish a new independent environment, safety and health division that had the authority to "discharge its responsibility for reactor safety." 'Lack of Attention To Safety Aspects'

"Paramount among these concerns," the committee report said, "is the lack of adequate attention by D.O.E. headquarters organization to the nuclear safety aspects of its reactors. An important contributing factor is the lack of sufficient numbers of highly competent technical people in headquarters."

"In our report we said the responsibility for safety begins with the Secretary of Energy," Mr. Crawford said in interview last week. "He can delegate his functions, but under the law that created the Department of Energy in 1977, he cannot delegate his responsibility."

The warnings and recommendations were amplified and repeated in August 1981, in the first of a series of studies on the Energy Department's safety programs by the General Accounting Office, the investigative arm of Congress. The investigators found numerous instances in which unsafe operations at weapon plants imperiled workers, the public and the environment.

The accounting office said that one way to solve the problem was to break up the close relationships that had developed between the Energy Department's regional field managers and the corporate contractors who ran the weapon plants. Forming an independent safety division that had the same authority and prestige as divisions that produced weapons was one important step that needed to be taken, the accounting office said.

In addition, the accounting office said that unless this change in the structure of safety programs was undertaken, efforts by headquarters staff to improve safety would continue to be hindered by field managers who were primarily interested in the same goals as contractors, producing nuclear materials and weapons. Similar conclusions have been reached by other investigators, including those on Mr. Herrington's staff.

The Crawford committee report was widely distributed among senior Energy Department officials in 1981. In May 1981 the Acting Undersecretary of Energy, Raymond G. Romatowski, and five other top officials completed a plan to respond to its recommendations. Of the 20 proposals, none has been completed, the Energy Department said last week, and most others were not begun until well after Mr. Herrington assumed control of the department in 1985. The Crawford Report 'Addressed and Studied'

"The Crawford report was addressed and studied," said Mr. Jones, Dr. Edwards's chief of staff. "The Crawford report recommended that the Energy Department get more involved with contractors. The judgment was that because of the chances for industry to do a better job than the Government, it was decided to keep the private sector as it was and the Energy Department would provide oversight."

In the Reagan Administration, spending on nuclear weapon development and production grew from \$4.9 billion in fiscal 1982 to \$8.1 billion this fiscal year, which began last month and ends next September.

From 1981, when Dr. Edwards was appointed Energy Secretary, to December 1982, when he stepped down, the budget for environmental, safety and health programs managed at headquarters dropped from \$62 million to \$42 million and the number of safety experts at the headquarters staff dropped from 162 to 128.

Over the next two years, Mr. Hodel, who succeeded Dr. Edwards as Energy Secretary, continued to cut the budget and staff of the environmental, safety and health groups in Washington. By September 1985, when new programs to improve safety and health programs in the weapon industry were announced by Mr. Herrington, 99 environment, health and safety specialists remained on the headquarters staff here and the groups' budget was \$38 million.

This year, the Energy Department will spend \$91 million on safety programs managed by the headquarters staff, and Mr. Herrington said he hopes to increase the staff of qualified technical experts, which now numbers 177, to more than 200.

Mr. Gjeldre and other former aides to Mr. Hodel at the Energy Department insisted that despite the cuts, environment, health and safety programs were given high priority in Mr. Reagan's first

term. They said the Administration spent \$700 million on the Waste Isolation Pilot Plant, the nation's first permanent nuclear waste repository located beneath the desert near Carlsbad, N.M. Lack of Oversight Contributes to Problems

More than \$1 billion has been spent since 1982 to upgrade old weapon production factories in Washington State, Colorado, South Carolina, Idaho and other states to make them safer and to produce less pollution.

But in recent months, the Energy Department and Congress have noted that the lack of oversight and inspections by technically qualified experts has contributed to important problems that developed in most of the projects.

For instance, a new production facility completed in the Reagan Administration does not operate at all. The \$240 million plutonium processing plant at the Rocky Flats Plant near Boulder, Colo., designed to replace old processing buildings, opened for a month in 1982 and was closed after a new technology to process plutonium failed. It could take \$600 million to fix the problem, the Energy Department said.

Soon after becoming Energy Secretary, Mr. Herrington said in an interview last month, he became sufficiently concerned about safety at the weapon plants that he commissioned a study of the department's environment, safety and health programs. The 10-page report, completed in April 1985, was written by Dr. James S. Kane, a member of the Crawford committee who is a special assistant to the president of the University of California.

In the report, Dr. Kane said the department's environmental, safety and health programs were "a disgrace" and in a state of "chaos." The office that ran the program, he wrote, "is widely perceived as having no clout and of being ignored by senior management unless a crisis develops. Morale is low, and as successive reports recommending action are followed by no action, it sinks further. In spite of dedicated efforts by many of its staff, it has become a toothless watchdog guarding the safety and environmental integrity of one of the potentially most hazardous undertakings in the world."

"The whole point of having a safety staff in Washington is to have oversight over the contractors," Dr. Kane said in an interview late last month. "We found that the level of excellence in technical understanding was much less in Washington than among the contractors. A regulator has to be smarter than those he regulates. Otherwise you're just counting beans."

Photo of Dr. James B. Edwards (pg. B12) (NYT); graphs showing the staffs and funds at Dept. of Energy headquarters (pg. B12) (source: Dept. of Energy) (NYT)