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How Rockefeller Drove Bechtel Out Of The Uranium Enrichment Business

Since June 1974, the United States has been incapable of contracting for the forward sale of the enriched uranium required by at least 80 percent of the world's existing nuclear reactors. By that date, U.S. enrichment capacities were fully committed, and new reactors approved for construction had to seek enriched fuel from either Europe or the Soviet Union, whose capacities do not measure up to projected need.

The enriched uranium supply crisis in the U.S. was not the fortuitous result of poor planning, but the intended outcome of a careful plan by the Rockefeller group of New York-based financiers. Specifically, corporate and government action was taken in anticipation of the current capacities short fall; the program design and legislation drawn up to expand enrichment capacities was then subjected to calculated sabotage by Rockefeller group agencies, whose success resulted in the effective elimination of principally the Bechtel Corporation from the enrichment field and an emerging control over the industry by the Rockefeller group's premier oil corporation, Exxon.

In mid-1973, Uranium Enrichment Associates (UEA) composed of Westinghouse, Union Carbide, and the major partner, Bechtel, the world's largest construction company, was created to develop the first private enrichment facility with federal government backing. The Bechtel proposal for a large new gaseous diffusion plant in Dothan, Alabama would have increased the nation's uranium enrichment capability by 33 percent, and would have been made possible by the passage of the Nuclear Fuels Assurance Act of 1975, providing various government guarantees for the venture including governmentcontrolled technology and access to federal stockpiles of enriched uranium in the event of delays which might threaten contract obligations. It was this critical legislation, without which the project was beyond the means or capacity for risk of any private enterprise, that the Rockefeller group "stalled to death," compelling the program's cancellation and leaving the field to Exxon's bogus "alternative" proposal for more modest, inadequate facilities consistent with energy contraction and industrial devolution.

By mid-1973 when Bechtel and its partners formed UEA, the onset of an enriched uranium demand far in excess of U.S. capacities was visible to all informed persons. Concerted efforts to close the gap, however, which Bechtel initiated in December 1974 when it first proposed the Dothan facility, were also visibly at loggerheads with the hegemonic interest in "austerity" inclusive of deindustrialization required by Rockefeller and related powers' dependence on existing world debt-

structures. Assuming even modest rates of industrial growth, the existing U.S. capacity of 17,000,000 Separative Work Units (a measure of capacity to "separate" natural uranium into two streams, of which one has an enriched content of U-235 over U-238), would have to be expanded by three to five large uranium enrichment facilities (9 million SWU each) to meet domestic needs and five to seven additional facilities to meet foreign needs by the year 2000 — or there must be a cutback in nuclear energy and industrial activity in general. The largest enrichment capacity outside the United States is the USSR's approximately 7-8 million SWU. In 1977 the Soviets will enrich uranium for Finland, West Germany, and Italy (outside the Comecon) for a total of 1.44 million SWU. Present contractual commitments will include Austria in 1978, Belgium, and Spain, and by 1979 France, Britain and Sweden. The Soviets are currently offering 3 million SWU a year through 1990, with an already contracted high of 2.80 million for 1983.

The British and French each have a 400,000 SWU plant but it is not expected to be in current operation long. The Eurodif consortium, in which France has a 42 percent interest, Italy 24 percent, Spain, and Belgium each 12 percent, and Iran 10 percent, is currently building a gaseous diffusion plant, planned to have a capacity of 3.1 million SWU starting in 1979, 6.5 million in 1980 and capacity of 10.8 million in 1982. This facility is already at least 90 percent contracted out. Eurodif also has a planned second diffusion plant which would have an estimated capacity of 3 million SWU in 1983, 8.5 million in 1985 and capacity of 10 million after 1985.

Another consortium, URENCO, was established in March 1970. This is a joint venture by the Netherlands, the United Kingdom, and the BRD to build a centrifuge plant, expected to have 1.4 million SWU capacity by 1980 and 10 million by 1985, although increased costs may curtail these great expectations. URENCO, too, is presently sold out at 2 million SWU per year present capacity.

Finally Coredif, formed in May 1975 by Eurodif (51 percent), France (29 percent), and Iran (20 percent), will have a 10 million SWU capacity by the mid-1980s and is presently actively marketing.

South Africa, Japan, Brazil, Canada, Australia and other nations are in varying stages of negotiating for, or constructing pilot enrichment facilities.

The Bechtel Project

World dependence on a U.S. energy development policy was directly reflected when the Bechtel Cor-

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poration initiated its uranium enrichment program. The Uranium Enrichment Associates was to be an international commitment to a nuclear energy future, with approximately 66 percent of the financing to come from foreign sources: France 10 percent, Iran 20 percent, Japan 20 percent, W. Germany 11 percent, and others including Italy, Switzerland, Taiwan, Spain, Portugal, and Austria 5 percent. UEA expected to sell two-thirds of its product to foreigners, particularly the major contributors. Bechtel had already proved itself to be one of the most aggressive of the nuclear energy interests. In early 1971 the French CEA had announced that it had chosen Bechtel to conduct initial site selection of the Eurodif plant. (Not coincidentally the Gaullist CEA had earlier decided to work cooperatively with GE's arch rival, Westinghouse, on nuclear reactor construction). By 1972 Bechtel was working on a variety of enrichment programs with Canada's Brinco. In 1973, cooperation began with the Japanese on the conceptual design and marketing design for a 9 million SWU base-line gaseous diffusion and centrifuge plant. In 1973 Bechtel began studies with the Australians for similar enrichment facilities. By 1975, Bechtel was studying the possibilities of constructing enrichment facilities in Zaire and was providing unclassified enrichment data to Iran. In early March, 1975 Bechtel officials met with the Brazilian Minister of Mines and Energy offering them "the entire gamut from the development of the (uranium) mine, ore processing, enrichment, fuel processing, through the design and construction of the nuclear power plants themselves."

The danger of permitting Bechtel to begin the Alabama facility was clear to Rockefeller interests. Office of Management and the Budget's Lynn, who generally backed the program, pointed out in the 1975 hearings on the Nuclear Fuels Assurance Act: "It seems to me reasonable to believe that private firms would be more aggressive than a Government agency or corporation in pursuing foreign customers...." Heading the opposition to the legislation, Congressman Seiberling (D-Ohio) picked up the same theme from the negative perspective in the July floor debate, "...if we start creating a private industry for uranium enrichment, we are just going to create one more lobby, one more pressure group pushing to sell more and more regardless of controls. Because of the commitment of 60 percent of the product of the UEA plant to foreigners, they will be lobbying too, as will their governments...."

Rockefeller interests went after the Bechtel proje going after the enabling legislation, the NFAA, which had been submitted by President Ford June 26, 1975.

Like Westinghouse, which naively accepted John J. McCloy of Chase Manhattan Bank as their counsel, Bechtel chose Sherman and Sterling as their legal advisors. Longstanding lawyers for Citibank, the law firm was hardly pleased with Bechtel's encouraging Brazil and Zaire to use their currency reserves for nuclear energy development rather than debt service, and Sherman and Sterling partner John Bullitt had already been reruited as treasurer to New Directions, an arm of David Rockefeller's Trilateral Commission, which was drafting and lobbying for anti-nuclear energy legislation

U.S. Uranium Enrichment Critical

Uranium enrichment involves separating the two principal isotopes found in uranium in its natural state - U-235 and U-238. By weight, 0.711 percent of natural uranium is U-235. The work done to separate these isotopes to increase the U-235 content in a portion of the material leads to the productive capacity measure, Separative Work Units (SWU), which is not a quantity of material but a measure of the effort required to separate a given quantity of uranium into two streams, one having the higher percentage of uranium-235.

Most domestic and foreign commercial nuclear power reactors require slightly enriched uranium — between 2.0 and 4.0 percent: Normal separative work produces only one stream with this percentage of U-235. However, the internal economics of the process are such that the other stream, called the "tails assay," can have its content increased so that it to is more enriched. However, since this involves less efficient separation, a change of the "tails assay" from, for example, 0.2 to 0.375 percent to permit the same separative work unit to produce more enriched uranium would require 44.5 percent more natural uranium input or feed.

Given current ERDA enrichment contracts, the

need for new enrichment plants cannot be delayed significantly by raising the "tails assay" for the indicated increase in output. In fact, present U.S. enrichment capacities are fully committed given even a 0.3 percent "tails assay." While some increased output could be achieved by increasing this to 0.375 percent, this would, as suggested, seriously strain the capacities of the uranium mining industry to provide raw supplies. The seriousness of the present enriched supply shortfall is indicated by the fact that without additional facilities, a "tails assay" of precisely 0.375 percent will be required to meet even the U.S. demand already written into forward contracts by ERDA.

With 1977 world demand at 10 million SWU in 1977, the U.S. will deliver 4.7 million to foreign and 5.3 million to domestic customers. Total SWU in the U.S. will be 15 million with the excess going to the government's enriched uranium stockpile, presently at 21 million SWU and expected to reach approximately 40 million SWU by 1981. ERDA's present policy, as the Rockefellers would have it, is to draw down the stockpile to meet domestic and foreign requirements as demand increases—rather than construct new plant for the 1981-85 period's demand.

and sponsoring violent anti-nuclear plant demonstrations.

While Sherman and Sterling monitored Bechtel, the Rockefellers mounted a campaign against Bechtel in Washington, D.C. On Capitol Hill, Jim Cubie, formerly of Congress Watch and at that time a Chief Lobbyist for New Directions: Gerald Warburg of the banking family and Congressman Bingham's staff (D-NY), Ann Wray of Sen. Cranston's (D-Cal) office with Robert Alvarez of the Environmental Policy Center coordinated the operation. Additional opposition to NFAA was mobilized by the Natural Resources Defense Council, recipient of approximately \$80,000 of direct Rockefeller money in 1975 alone, Scientists Institute for Public Information, and Friends of the Earth, all three recipients of funds from the Rockefeller allied Kaplan Fund which Newsweek in 1967 had identified as a "CIA conduit."

Additionally, Washington Post columnist Tom Braden, an admitted CIA agent, issued a vitriolic attack on Bechtel, targeting them for their involvement in the Alaska pipeline project.

Bechtel appeared to have had little comprehension of the divergent interests of the Wall Street group and the production-development orientation of industrial capital.

Although the NFAA survived Bingham's maneuvering in the House of Representatives by a harrowing 192-193 vote on Aug. 4, 1976, the Senate version was tabled in that chamber at 8:30 P.M. one evening, just prior to the

Senate's adjournment for the election campaign, when Bechtel's supporters were not in attendance. According to Ann Wray, Warburg called a meeting of sympathetic Senate staffers and told them, "It's all up to you." Then, said Wray, "We just stalled the thing to death."

With the NFAA of 1975 defeated, Goodyear and the Williams Company which had become Bechtel's partners left UEA. Shortly thereafter, Bechtel itself, terminated the project. Reliable sources report that ERDA has decided to go ahead with an extension of the Portsmouth, Ohio facility, putting plans for Alabama on an obscure shelf.

Meanwhile Exxon, already a major supplier of oil, coal, and mined uranium, had just completed contracts with ERDA for construction of a nuclear fuel reprocessing plant at Oak Ridge, and have purchased a 2,000 acre site nearby in anticipation of passage of a new NFAA.

Commenting on Cubie's threat to end nuclear reactor construction altogether by making financing of them politically too risky, a senior partner at the Wall Street investment banking firm of Loeb, Rhodes, reports that in the U.S., only one new contract for a nuclear reactor was signed in 1976. In 1973, 36 had been signed. "There is now an effective international moratorium on nuclear energy financing," he added. "There is no question that the environmentalists have been successful."

by Alfred Ross