THE BIG CITY ATOM

Public Assurances of Safety and a Huge Insurance Policy

By JAMES E. McDONALD

A NEW chapter in the long story of the People v. the Atom is now being written in the proceedings of hearings at widely scattered cities around the country, hearings set up to consider license applications for large nuclear power reactors on sites close to population centers. Those who have been concerned over the past belittling of dangers from weapons-test fallout by the AEC may now do well to transfer some of their attention to increasingly optimistic attitudes of the AEC toward dangers inherent in locating nuclear reactors in or near urban areas.

In California, an area of relatively high fossil-fuel (coal, oil, gas) costs, license application hearings are now at various stages of completion for large reactors near Bodega Bay, San Onofre, and Malibu, with more coming soon. AEC applications for about a half-dozen reactors have been filed for the Los Angeles basin alone, and plans are afoot for many others in other parts of the country. One of the most astonishing of all applications was recently made to the AEC by the Consolidated Edison Company of New York, asking permission to construct a 750 megawatt plant on the East River near the very heart of greater New York City. By Consolidated's own statistics, five million persons are within five miles of that site during workaday hours. Although none of these is yet fully approved by the AEC, all the initial planning has been done with AEC encouragement as part of a new drive to tame the atom.

More than a few persons are beginning to wonder how safe such site selection may be. One almost unequivocal measure of inherent hazards in bringing these huge fission-product cauldrons up to the edge of, or even well inside of, large population centers, is the 500 million dollars of insurance underwritten by AEC and offered to each utility company willing to cooperate in building a large power reactor. In contrast to many other hazard arguments and considerations which quickly become lost in present-day uncertainties of nuclear engineering, the very existence of this huge insurance back-up and the indispensable role it has played in persuading the utilities companies to take a chance on the atom stands as the strongest argument endangered citizens can muster in site-approval hearings.

In the first decade after World War II, early optimism about the atomic energy revolution gave way to discouragement in the face of countless technical difficulties that bogged down practical reactor development. The 1955 Geneva Conference marked a distinct turning-point on the technical side, with profitable exchange of information in both directions across the Iron Curtain, leading to an upsurge in reactor development activity all over the world. If the technical problems of physics and engineering had been the only problem in developing a civilian nuclear reactor program, big power reactors would have been built in many areas of high fossil-fuel costs several years ago. However, the 1955 decision to push reactor development was accompanied by studies that pointed towards alarming radioactive hazard implications.

Of particular significance in the history of the half-billion dollar underwriting insurance plan was a multi-authored Brookhaven Laboratory report on "Theoretical Possibilities and Consequences of Major Accidents in Large Nuclear Power Plants" (AEC WASH - 740). It considered the possibility of three progressively serious accidental releases of reactor-core fission products from a plant of 500 megawatts thermal capacity, which corresponds to about 175 megawatts of electrical capacity, to use the more common mode of rating. (Compare such electrical ratings as those of Bodega Bay's 325 megawatt reactor, to be followed by a buildup to total site capacity near 1500 megawatts, or San Onofre's 400 megawatt plant scheduled to be more than tripled in thermal

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capacity, or the first reactor proposed for Corral Beach near Malibu, rated at 500 megawatts. In pondering the Brookhaven report's present-day implications, particularly for Los Angeles or New York City, one should carefully note that all three fission-release models assumed the reactor to be "30 miles from a large city."

The least dangerous accidental release of fission products hypothesized led to no deaths but implied damages estimated to run to some hundreds of thousands of dollars. The intermediate case, involving venting of only the volatile fission products accumulated in the reactor after six months of operation, yielded a maximum of 900 persons killed (under conditions of temperature inversion with fission products carried on particles of maximum lung penetration size—about a micron), and damage suits put at a total of 400 million dollars. The worst of the three model accidents, pessimistically entailing release into the atmosphere of 50 per cent of *all* core fission products, led to an estimated maximum of 3,400 persons lethally exposed, 43,000 persons suffering radiation injury short of death, and a total indemnity bill for the hypothesized accident running to *seven billion dollars*. This assessment, it must be stressed, was not made by opponents of atomic power, but by a group with a strong general interest in peaceful uses of the atom.

The Brookhaven report emphasized that the probability of the more severe accidents was "very low"; but the citizens who are now asked to run these risks by accepting much larger reactors than the one envisaged in the model and located much closer to their homes than the model's 30-mile range should reflect on the end-result of that and other related studies. The Brookhaven report was released for publication in March, 1957. In September, 1957, Congress passed Public Law 85-256, which still stands today as the citizen's best yardstick of possible reactor-accident hazards. That yardstick is the 500 million dollar indemnity backup that the federal government decided to provide owners of each privately owned nuclear power reactor in order to cover damage costs in event of any single reactor accident. Even if accident probability is and was regarded as "low," it was not and still is not regarded as "negligible," inasmuch as all efforts failed to persuade large insurance-company pools to provide indemnity insurance in the amounts considered necessary at rates the utilities were willing to pay. The most the utilities are willing and able to do is pay for an initial 60 million dollars of coverage for each reactor, the policy being underwritten by one of the multi-company pools set up for that special purpose. The remainder of the total coverage the AEC believes the risks demand is provided by the endangered taxpayer himself! For this half billion in coverage the utility pays the AEC a trifling service charge of thirty dollars per year per megawatt thermal capacity—a fee barely enough to cover AEC bookkeeping costs.

The Hollow Claims of Safety

In the six years that have elapsed since passage of Public Law 85-256, reactor containment has gone through much evolution and improvement—an argument utility company representatives are now constantly pleading in licensing hearings. Yet this most quantitative of all measures of potential hazard levels remains just where it was in 1957. Indeed, recent revisions of the insurance plan will extend tax-paid coverage to accidents involving transportation of high-level radioactive wastes from reactors to nuclear reprocessing plants, a more recently recognized source of potential danger to the hapless citizen. That there remain quite enough unknowns in the area of reactor safeguards to warrant retention of the half-billion indemnity backup can be amply seen by studying AEC Commissioner L. J. Haworth's statement on the AEC Nuclear Safety Program inserted into the April, 1963, hearings of the Joint Committee on Atomic Energy (Part 2, pages 831-839). The large number of critically important accident factors which are still only *proposed* for future study by the AEC renders quite hollow current utility-company claims of reactor safety. As a good example of how even one of the best friends of the civilian reactor program feels about bringing reactors too close to cities too soon, one should read Congressman Chet Holifield's remarks in the Joint Committee on Atomic Energy hearings of April, 1962, on "Indemnity and Reactor Safety." (See especially pages 56-57.) Despite all these good grounds for caution, top-level policy is suddenly pushing big reactors deep into metropolitan population centers. The citizen will do well to start doing his homework on reactors to learn how they work and sometimes run amok.

When citizens' groups appear at reactor-site hearings in defense of their nuclear safety, they should not fail to appeal to the hazards-yardstick that remains implicit in Public Law 85-256 and that is still regarded as necessary

HEARINGS PENDING ON SOUTHERN CALIFORNIA'S TWO REACTORS

Two reactors are planned in Southern California to generate electricity on a commercial basis.

The Department of Water and Power of the City of Los Angeles has obtained preliminary approval from the AEC for an ocean-front plant near the exclusive Malibu residential area. Further AEC hearings on the utility's construction permit are pending, but as a sovereign agency, the DWP is subject neither to county ordinances nor to regulation by the State Public Utilities Commission.

Southern California Edison Company and San Diego Gas and Electric Company have made application to the Public Utilities Commission and the AEC to build their San Onofre Generating Plant on the Camp Pendleton marine base owned by the federal government. Over Marine Corps protests, but with the Navy Department's approval, Congress passed and the President signed a bill permitting the companies to lease ninety acres of land from the government for fifty years. But State Public Utlities Commissioner William Bennett raised an eyebrow at what he termed the proponents' "hearsay" evidence, refused to immediately grant the important certificate of public convenience and necessity, and adjourned the hearings. Meanwhile the PUC staff is looking for another site, away from populated areas. Further hearings will be held.

despite the best containment shells and vapor-suppression schemes that hard-pressed nuclear engineers have proposed since the law was passed. Although many relevant economic questions can be raised about the wisdom of building large power reactors on any but an experimental basis at present, the arguments against the urban-area reactor which the unprotected citizen should pursue most thoroughly are the hazards arguments. If it has taken a guaranteed half-billion dollars in AEC indemnity funds (along with other purely economic incentives such as fuel-use waivers, research and development payments, and a recent large cut in basic AEC nuclear fuel prices) to induce utilities to risk entering the atomic energy field, the downwind citizen has good reason to ask searching questions about his safety and about who is, or isn't, looking out for it as the atom comes to town.

BALLOT-BOX REVOLUTION

The Political Awakening of Mexican-Americans in Texas

by RONNIE DUGGER

TEXAS Mexicans are awakening to the realization that democracy provides them with a political machete, the vote, and authorizes them to use it to cut down their oppressors. That they are oppressed—in housing, jobs, pay, medical care, and education, and by social attitudes —statistics confirm. Their leaders call them "the sleeping giant," and although so far the giant's stirrings have done little more than topple the City Council in a dusty little spinach-canning town in southwest Texas named Crystal City, politicians have taken notice all the way from California to Washington, D.C.

Since 1960, when Mexicans of the American Southwest voted for Kennedy in overwhelming proportions, Latin-American political *jefes* have been declaring that Mexican-Americans have arrived in the American Establishment. In Texas, however, this claim lost substance in 1962. The Texas convention of a new political organization, the Political Association of Spanish-speaking Organizations (PASO), endorsed the milquetoast, segregationist governor, Price Daniel, for re-election, only to see him run third behind a Lyndon Johnson opportunist, John Connally, and an unabashed liberal, Don Yarborough (who is not related to the state's senior senator, except through their common political coloration). The Mexican leaders who had plunked for Daniel, reportedly after he had assured them of 100 motorcycle-cop jobs for Texas-Mexicans, looked pretty silly when the governor failed to place. They had forsaken liberal principle to ride on the mainstream of power, only to find themselves stranded in a backwater.

After this humiliation, PASO's leaders, the equable state president, County Commissioner Albert Peña of San Antonio, and PASO's fierce executive secretary, Albert Fuentes of San Antonio, looked around for a way to get their sleeping giant going again. They found, in Crystal City, a prod stick lying in the open, as it were, in front of the statue of Popeye on the town square, needing only to be picked up. And once again they made a liaison with power, this time the Teamsters.

Crystal City lies fifty miles from the Mexican border. Of the 10,000 people in Crystal City, about 7,500, or three out of four, are Mexican, yet in the past Anglos ran the town;* one administration had been in control for the last three decades. Many of the Mexicans in Crystal City are migrant farm workers, part of the 100,000 or so Texans who travel throughout the country following the crops. A few of the local Mexicans own stores, but the great majority are common workers, farmhands and packers. They live in a quarter which, according to Rep. Jake Johnson of San Antonio, looks like "a slum in Puerto Rico with a bunch of second-hand cars."

The Teamsters Aid a Poll Tax Drive

So far, so what? This situation does not differ from many in the American Southwest. There was, in Crystal City, this crucial difference: several hundred workers of the California Packing Company (Del Monte) plant in the town belong to a Teamsters union local and therefore have union protection against political firings. Here were hard core troops for an ethnic and economic revolution at the polls. Their business agent is Juan Cornejo, a tough, stocky Texas Mexican with broad Indian cheekbones. The Teamsters helped finance a poll tax drive among the town's Texas-Mexicans, and when the poll tax registers were closed last Jan. 31, *Mexicanos* had 1,139 of the votes, and Anglos only 542. The town's smug Anglo leadership woke up to discover that the Mexicans who washed their dishes, cut their grass, picked their carrots, and canned their spinach had 68 percent of the paid-up political power.

From this time forward, the Crystal City story reads as a prophetic episode in American politics. Members of an oppressed ethnic minority had been rallied into converting a local majority into a deliverable political impact. They were determined to deliver that impact. Crystal City became a story laden with lessons, not only for

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* *Anglo* is a term used in the Southwest to describe the non-Spanish-speaking population.