dence to Roger Anderson's theory," said Frank Parker, chairman of a National Research Council panel studying WIPP and a professor at Vanderbilt University.

In addition to the salt beds, DOE found the state an attractive location for the repository because its citizens are more accustomed to nuclear issues than those of other states, given New Mexico's history of nuclear weapons development at Los Alamos. "DOE found a state that was much more used to radwaste," said Timothy Glidden, who is the Republican counsel for the House Interior and Insular Affairs Committee and a resident of New Mexico.

Deputy News Editors Named

Two newly established positions in the News Department will be filled by Colin Norman and Roger Lewin. Norman has been appointed deputy editor for News and Comment. Lewin will serve as deputy editor for Research News.—B.J.C.

But New Mexico has remained uncomfortable about the proposed dump primarily because there were several attempts to change the purpose of WIPP during the Carter Administration. In 1979 an interagency task force recommended that dump sites storing transuranic waste should be licensed because, it said, the long-term hazards are comparable to those of high-level waste. Carter took this recommendation further and proposed that WIPP diverge from its original purpose and accept 1000 commercial spent fuel assemblies in addition to transuranic waste and high-level waste from the defense program. This would have given the Nuclear Regulatory Commission some licensing authority over WIPP. A complicated turf battle ensued involving the White House, DOE, and the chairman of the House Armed Services Committee, Melvin Price (D–Ill.). Price wanted WIPP free of any licensing oversight by an agency outside his committee's jurisdiction and was successful in convincing his congressional colleagues to restrict the project to defense wastes. Incensed at this turn of events, Carter then canceled the project in February 1980, but Congress restored $20 million to the WIPP budget to keep the project alive.

Meanwhile, New Mexico was alarmed at the possibility that if WIPP accepted commercial spent fuel, it could become the nation's warehouse for high-level waste. The state then proceeded to seek the power to veto the project at any stage, but DOE dug in its heels and took the position that national security interests superseded the state's rights. The department said it would go so far as to consult with the state about any changes or problems concerning the repository. But federal legislation passed in 1979 provided for a "consultation and cooperation agreement" that watered down New Mexico's rights even more. "None of us knew what the agreement meant," said George S. Goldstein, New Mexico's secretary of health and the environment.

New Mexico's troubles continued. According to the 1979 law, DOE was to sign the consulation and cooperation pact with New Mexico by the end of September 1980. But the federal and state governments debated the terms of the agreement for more than a year. New Mexico insisted on a pact that would be enforceable by law and subject to judicial review, but the DOE did not want to make it legally binding.

On 14 May 1981, New Mexico sued DOE, alleging that the department had "refused to agree to a legally enforceable document to resolve these issues." Less than 2 months later, the DOE and the state reached a compromise agreement and consented to stay the lawsuit, pending review at a later date of each party's compliance.

Before the lawsuit, "it was obvious we were not getting the timely, accurate information about WIPP that we felt Congress intended," Bingaman said. Since the lawsuit was filed, "communications have improved substantially," he said.

But the discovery of the brine pocket could test the strength of the latest federal-state agreement. "The critical test of the site is coming up," Goldstein said. "I've asked them [DOE officials] what are the thresholds of acceptability? Is it that brine is beneath the site? Beneath the site and 200 feet away? I asked the question rhetorically, but if there's ever been a critical time to answer it it's now." That sense of urgency is increased somewhat because this is an election year for gubernatorial and U.S. Senate seats, and WIPP could become a campaign issue.

New Mexico officials are trying to sort out the scientific issues for themselves. In 1979, the state requested that an independent scientific panel be established at

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A Plan to Give an Apple to Every U.S. School

Because Steven Jobs, president and founder of Apple Computer Corporation, happened to sit next to Representative Fortney H. (Pete) Stark (D–Calif.) on a flight from California to Washington last month, one of the largest corporate donations ever made to precollege education may soon take place. During the long journey, Jobs and Stark hatched a scheme that could result in the gift of an Apple computer system to every elementary and secondary school in the United States. The total donation would be valued at $200 million to $300 million at retail prices.

In return, Apple would be able to write off a substantial fraction of the cost of the computers against taxes. It would also, of course, score a major publicity coup and ensure that a whole generation of future consumers is introduced to computers in general and Apples in particular.

The key to all of this is a bill introduced by Stark on 23 February, which rapidly became known as the Apple Bill. (Its official title is the Technology Education Act of 1982.) In essence, it would permit Apple and any other company that donates scientific equipment to schools to deduct the full cost of the equipment from its pretax income. Gifts to schools would thus be treated, for tax purposes, the same as gifts to colleges and universities. In addition, the bill would raise the maximum allowable charitable contribution from 10 percent to 30 percent of a corporation's income. Both provisions would last for only 1 year after the act is passed.

Although the financial impact of the bill has not yet been calculated in detail, congressional staff members have estimated that it would permit Apple to take a deduction of about $75 million. This would represent the cost of manufacturing the computers, but not the cost of training manuals, servicing, and so on. (If Apple pays at the maximum corporate tax rate of 46 percent, this would result in a tax saving of about $35 million.)

The bill was introduced with two other cosponsors, Don Edwards and George Miller, both California Democrats. Within a week, however, it had

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picked up 30 other supporters spanning the entire political spectrum. It has also been endorsed by California Governor Jerry Brown and a clutch of education organizations.

—Colin Norman

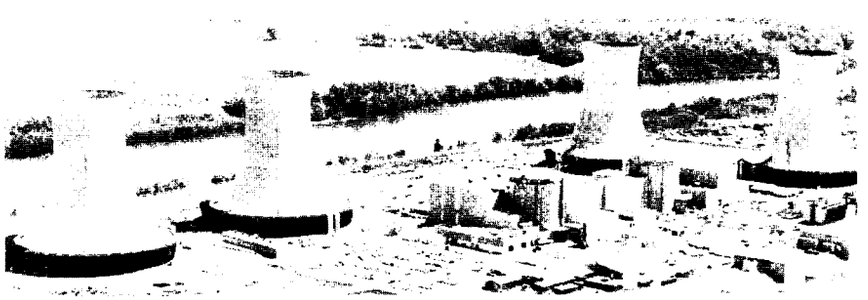
Potassium Iodide and Nuclear Accidents

In March 1979, while the reactor at Three Mile Island was in a critical condition, the Food and Drug Administration (FDA) arranged for an emergency shipment of 250,000 bottles of potassium iodide (KI) solution to be administered to the local population if the reactor began emitting dangerous levels of radioactive iodine. Levels never did get high enough to warrant concern, but since then people have been worrying about whether or not potassium iodide should be distributed to people who live near nuclear reactors.

Radioactive iodine is only one of many radionuclides that could pose a threat to public health in a reactor accident, but since an effective antidote for it exists, the preponderant scientific opinion—judging from recent hearings in the House—is that KI should be made available to people who live near reactors. KI works by saturating the thyroid gland and thus blocking its uptake of most radioactive iodine. Tennessee has become the first state to actually distribute the stuff: at the end of last year, public health officials notified residents at 6000 homes around the Tennessee Valley Authority's Sequoyah nuclear plant that KI was available; 60 percent of the households now have bottles of KI tablets.

The federal government still has not arrived at a coherent policy about KI. The FDA is soon to issue guidelines recommending that KI be available for administration to populations likely to be exposed to radioactive iodine at levels that would result in a radiation dose to the thyroid of more than 25 rems. The Federal Emergency Management Administration is getting $350,000 in fiscal 1983 to buy up enough KI for 3.5 million doses. But the Nuclear Regulatory Commission thinks the utility of distributing the substance to the general population is "questionable" and "may give the general public a false belief that they are protected from the total radiation effects. . . ." A program of KI distribution also, of course, could cause some alarm among an uninformed population.

At the hearing, physicist and Nobel laureate Rosalyn S. Yalow got into a spirited debate with the rest of the panel over what is known about the dangers of radioactive iodine. Yalow claimed that clinically significant thyroid disease was unlikely to result from exposure under 500 rads. She said that from her 20 years of experience—from 1948 to 1968—using radioactive iodine diagnostically there was no increase in the thyroid cancer rate. She also claimed that adverse side effects from KI were more common than generally believed and said that if 25,000 Pennsylvania residents had gotten it after the TMI accident there would have been 15 deaths or serious illnesses. Anyway, she said, the likelihood of a reactor accident in which significant amounts of radioactive iodine were vented was about the same as the likelihood of Skylab falling on Washington, D.C.



Distribution of KI was considered during Three Mile Island crisis.

The four other panelists disagreed. Physicist Frank Von Hippel of Princeton University challenged Yalow's data and said she hadn't published anything to back up her statements. Sidney Wolfe of Ralph Nader's Health Research Group accused Yalow of being "reckless" and recommended that KI be distributed to everyone living within 10 miles of a power reactor.

If the lineup at the hearing is any indication, it would appear that the main opponents of general distribution of KI are also the strongest nuclear power enthusiasts. But everyone appeared to agree that more studies are needed. Although much is known about x-ray radiation, very little epidemiological work has been done on radioactive iodine. The government is planning to do something about it, said John O. Villforth, director of FDA's Bureau of Radiological Health, with an epidemiological study of young adults and children who received diagnostic radioactive iodine.***—Constance Holden***

NSA Asks to Review Papers Before Publication

The National Security Agency (NSA) has sent letters to about 100 U.S. scientists asking them to let the agency see their research papers in cryptology before the papers are published. The NSA's prepublication review system was set up on the recommendation of the Public Cryptography Study Group, a group consisting of representatives from industry, universities, and the Defense Department. The group was established in response to former NSA director Bobby Inman's call for a dialog on the possible national security problems that might arise if scientists freely publish all their cryptology research (*Science*, 20 February 1981, p. 797).

The NSA letter, dated 10 February and signed by NSA director Lieutenant General Lincoln Faurer, states that the agency has already reviewed about 25 cryptology papers and that it has completed each of these reviews within 30 days. None of the papers raised national security concerns.

Asked what the response has been to the NSA letter, Lieutenant Colonel David Tisdale, who is mentioned in the letter as the person to call with questions, said, "There have been no responses as yet." Asked whether anyone has called him about the letter, Tisdale told *Science*, "You're the first."***—Gina Kolata***