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***

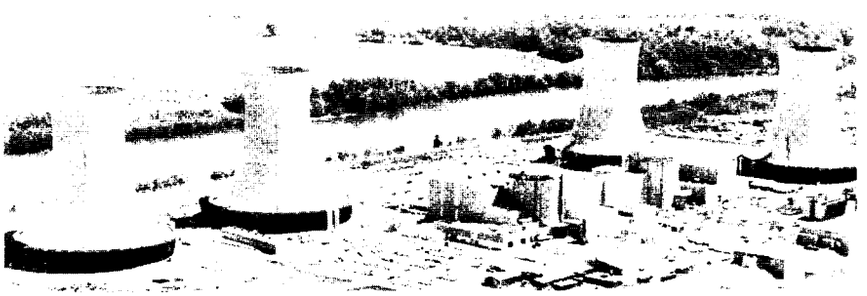
## Potassium Iodide and Nuclear Accidents

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***