

Nuclear Proliferation: Stepping Back

Apparently responding in part to American election-year politics, the governments of the United States and France are announcing new initiatives to curb the spread of nuclear materials and technology. President Ford is expected soon to release officially the details of a new anti-proliferation program, whose outline has already been leaked to the press. And the French High Commission on External Nuclear Policy, headed by President Valéry Giscard d'Estaing, has for the first time indicated that France might yield to American pressure to bring nuclear exports under international scrutiny.

Until the last few months, international negotiations on slowing the spread of nuclear fuels and fuel reprocessing plants have been conducted without much fanfare. A half-dozen meetings of the exporting countries have produced no earth-shaking declarations, and as the United States grew more reluctant to sell its technology abroad, developing countries turned toward Europe (SN: 1/24/76, p. 59). France agreed to sell a fuel reprocessing plant to Pakistan and two reactors to South Africa. West Germany entered a long-term agreement with Brazil to build a reprocessing plant that could eventually make Brazil a major supplier of atomic fuel. The concern, of course, is that reprocessing plants can produce plutonium for use in making atomic weapons.

Though the 94th Congress argued long and heatedly over various pieces of legislation that might slow international nuclear trade, only one passed—the so-called Symington amendment to the Foreign Assistance Act. Sponsored by Sen. Stuart Symington (D-Mo.), the amendment provided for cutting off U.S. foreign aid to any country that imported a reprocessing plant without the proper safeguards or that refused to put its nuclear establishment under the auspices of the United Nations International Atomic Energy Agency (IAEA). Secretary of State Henry Kissinger reportedly has used the threat of such sanctions to discourage developing countries from entering agreements with other exporting countries.

As the American elections approached, however, the whole issue of atomic power desirability became more visible. Seven states—Washington, Oregon, Colorado, Arizona, Ohio, Missouri and Montana—have antinuclear referendums on the November ballot, with polls showing strong support for the initiatives in at least the first three of those states. Then presidential candidate Jimmy Carter called for a ban on the sale of nuclear reprocessing plants, including those already negotiated by France and Germany (SN: 10/2/76, p. 215). Within a week of Carter's remarks

in San Diego, a new administration program on nonproliferation had been approved by President Ford and leaked to selected members of the press.

The program reportedly calls for a three-year international moratorium on the export of reprocessing plants, a halt in previous administration efforts to turn over American reprocessing technology to private industry (SN: 7/5/76, p. 6), and a tightening of the 30 existing U.S. agreements with other countries to cooperate in developing nuclear power. The program is based on the findings of an interagency task force headed by ERDA Deputy Administrator Robert W. Fri, which has been reviewing nuclear policy since July. Nations that cooperate in a more restrictive nuclear program would receive in return a guaranteed supply of atomic fuel from the United States.

France has apparently responded to the mounting pressure by offering, for the first time, to cooperate with other nuclear exporting countries in preventing the spread of technology that could be used to produce atomic weapons, and to consider the establishment of multinational nuclear power installations. The statement, however, is vague, calling only for avoidance of "commercial competition that encourages the proliferation of nuclear weapons," and promising that French nuclear export policy "will reinforce the appropriate rules and guarantees." Calling off the previous agreement with Pakistan is specifically not included.

Despite the vagueness, the French announcement does signal a major shift in nuclear policy. France has never even signed the Nonproliferation Treaty of 1968, which calls for a ban on the international transfer of nuclear weapons. U.S. officials contacted by SCIENCE NEWS said the announcement stems from a recent reassessment by the French of the possible effects of nuclear proliferation, but none would speculate how much the move was in response to American pressure.

Coincidental with the retrenchment on reprocessing plants came an announcement that the French breeder reactor Phénix, considered by some to be the most advanced in the world, had been shut down indefinitely because of a leak inside the heat exchange system. No estimate of the extent of damage was yet available, but authorities say the internal leak presents no danger.

Both the French and Germans have argued that negotiations leading to their sales in Pakistan and Brazil were well advanced before the concern over proliferation of sensitive nuclear technology became a major issue. While Germany has not yet reacted to the French statement,

some officials believe that the German philosophy on proliferation is already fairly close to that expressed by French and American leaders, and that as talks on the subject continue, the Germans will agree to restrict exports.

In a related development, the Soviet Union has also made a recent shift in nuclear policy. Early this month, foreign minister Andrei A. Gromyko made an unexpected proposal that may open the way to on-site inspection of underground nuclear explosions. The Soviet Union agreed earlier this year to the principle of on-site inspection of explosions used for peaceful excavation, but allowing such inspection of suspected weapons blasts has been a bone of contention since the early 1960s. In the proposal, submitted to the United Nations, Gromyko again called for a total ban on all underground weapons tests. □

Toxic substances act: Now it's law

President Ford signed this week the long-awaited toxic substances bill, which gives the federal government a chance to screen potentially harmful chemicals before they are marketed (SN: 7/3/76, p. 7).

Under the new law, companies must notify the Environmental Protection Agency 90 days before they plan to manufacture a new chemical or an older chemical for a new use. The law applies to all substances except foods, drugs, cosmetics and pesticides.

The manufacturers must also report the results of safety tests that the EPA will prescribe. On the basis of those results, the administrator of EPA could prohibit or limit manufacture, if the chemical appears to be hazardous or if there is inadequate information about health or environmental effects. Further tests would then be specified by EPA.

The Toxic Substances Control Act also sets up an interagency committee to list chemicals already in use that should be tested. The legislation specifically bans, for two years, manufacture of polychlorinated biphenyls. Reproductive failures, gastric disorders, skin lesions and tumors in laboratory tests with mammals have been caused by PCB's.

During the last five years Congress has written various toxic chemical control bills. Only this year, however, were the House and Senate bills similar enough, and concern over toxic chemicals great enough, for a compromise committee to meet. The committee successfully resolved more than 40 major differences