Fight Brewing over Reactor Fuel for India

Other nations may see the fuel export decision as a test of United States nonproliferation resolve

The Administration's decision to ship nuclear fuel to India has set the stage for a potentially embarrassing fight with Congress. President Carter has already assured Indian Prime Minister Indira Gandhi that he will approve the shipping license when it reaches his desk, where it has just landed. But chances of a congressional veto are surprisingly strong, leaving Carter with the alternative of backing away from his assurance or seeing the decision overturned.

Whichever way it comes out, the dispute will have a major impact on U.S. nonproliferation policy. India's application for enriched uranium fuel is the first to be decided by the United States since March, when a tough provision of the Nuclear Non-Proliferation Act of 1978 took effect. The provision says the United States can export fuel only to countries that permit international inspection of all their nuclear facilities; this is an effort to deter diversion of plutonium from a civil reactor into a weapons program. India has consistently spurned such agreements, and has also refused to rule out future "peaceful" nuclear explosions.

It was India's reluctance to adhere to safeguards—and its detonation of a nuclear device in 1974—that helped to stimulate a hard-line U.S. position. As a result, other nations are likely to see the eventual export decision as a test of American nonproliferation resolve. Policy-makers in Congress and elsewhere are convinced that ultimate approval would gravely damage U.S. credibility. "If India does not need to satisfy the [full safeguards] requirement, other countries will be quick to seek similar exemptions, with the inevitable erosion of the law's effectiveness," says Victor Gilinsky, a member of the Nuclear Regulatory Commission (NRC). Newspapers in two countries where negotiations have been troublesome, Pakistan and South Africa, have already expressed resentment that Carter has been more lenient toward India than he has been toward them.

The United States adopted its tough nonproliferation stance in the wake of India's 1974 nuclear explosion in Rajasthan.

The NRC's unanimous vote on 16 May against the Indian application has emboldened other critics and put pressure on Congress to veto the President's approval by a two-thirds vote. Representative Clement Zablocki (D-Wis.), chairman of the Committee on Foreign Affairs, and Representative Jonathan Bingham (D-N.Y.), chairman of the subcommittee on international trade, have declared that they will lead the House opposition. Senator John Glenn (D-Ohio), chairman of the subcommittee on nuclear proliferation, told Administration representatives on 22 May that if the President approved the application right away, he would support a veto, and the rest of the Senate would too. Senator Alan Cranston (D-Calif.), the majority whip, has said the same. Glenn added explicitly that a confrontation with Congress would be politically damaging to Carter.

The enriched uranium fuel at issue is intended for two U.S. reactors installed at Tarapur 15 years ago. When India purchased the reactors it was agreed that the United States would supply fuel throughout their lifetime provided that the fuel was not diverted to explosives. While India is believed to have adhered to this agreement, its leaders have repeatedly resisted U.S. attempts to use continued shipments as leverage for extending the safeguards to other facilities. Use of that leverage is called for explicitly by the nonproliferation law.

The State Department offers several reasons why the United States should approve the export without any Indian cooperation. Most important, the Indians claim that any cessation of fuel shipments releases them from an agreement not to reprocess the 200 tons of spent fuel that has accumulated through past shipments. This means that India could have swift access to nearly a ton of plutonium, some of which it could fashion into bombs. State Department officials are worried that India's withdrawal from the agreement on reprocessing would set a damaging precedent for such agreements with other nations. In any event, such a withdrawal would force the United States to make a difficult choice—either to acquiesce or, more likely, to create an additional penalty.

This is where the State Department brings to bear its second argument. Officials there say that general political instabilities in the region—due to the Soviets' invasion of Afghanistan and the continuing tumult in Iran—make it imperative that the United States not alien-

0036-8075/80/0606-1124$00.50/0

ate India. This is purportedly the argument that won Carter's support and prompted his letter to Gandhi. Congressional and other sources assert it is little more than a ruse, and that in private meetings the State Department has been unable to show that a refusal of export fuel to India would poison the country's relations with the United States, or alter its stand on Afghanistan. "State Department officials have admitted there is not a very tight coupling of these issues," says one congressional aide.

Although the State Department arguments could be cited in support of a waiver of the nonproliferation law, the department has claimed that no such waiver is necessary. In this manner, it has attempted to limit the outcry from other nations that might expect similar treatment in the future. The State Department claims instead that the Indian application falls within a 2-year grace period of exemption from the tough new provision of the law. The NRC torpedoed this claim by voting 5 to 0 that the application clearly did not fall within the period of exemption. The NRC cited as its authority previous State Department testimony as to when the exemption could no longer be granted. "The State Department said the emperor had clothes on, when everyone could see that he didn't, including other countries," says a congressional aide who helped write the exemption provision. "The department's justification was one of the weakest pieces of legal work I've ever seen." State Department officials still say their interpretation is correct.

Even if the law is ambiguous, and the NRC's decision was thus unpredictable, Carter Administration officials badly misread the political impact of their decision. Congressional sources cite a string of newspaper editorials against the decision as one reason why Congress is inclined to approve a veto. The *Washington Post* called it "further evidence of Carter's backpedalling"; *The New York Times* declared that another fuel shipment "would undermine Mr. Carter's already faltering position"; and the *Wall Street Journal* said "the President's action signals to non-nuclear countries that they can go ahead with a nuclear bomb program with impunity." A congressional aide says "there is a feeling that it's time to stop letting Third World countries blackmail us." The State Department responds that it is time for the United States to stop blackmailing Third World countries, largely because it has not worked, India being a prime example.

One side believes that conciliation is more likely to bring about results, while the other favors a rigid policy of punishment for those who do not adhere to nonproliferation aims. This is a division of opinion that pervades U.S. nonproliferation policy-making, and one which is particularly important in view of a major reassessment of U.S. policy now under way (*see box on the next page*).

President Carter is not obligated to make good immediately on his promise to Indira Gandhi by placing the veto option before the Congress. Senator Glenn has recommended that Carter's final announcement be postponed at least a month, which because of the crowded congressional calendar would force the Congress to consider a veto after the fall elections. Glenn says that in the meantime negotiations with India can continue—although virtually no one in Washington expects Indian leaders to change their minds. A congressional veto of the export approval might be easier to sustain in the fall because by then the region may have become more stabilized through a resolution of the hostage crisis or the withdrawal of Soviet troops. Alternatively, it might be more difficult to sustain because the drama of the NRC's unanimous rejection of the application will have faded. So the result of delay is uncertain. At the very least, however, Carter would buy himself some time to plot strategy and would avoid an immediate embarrassment.

—R. JEFFREY SMITH

Potential Bomb-Builders

The present U.S. nonproliferation policy is driven by a fear that a number of developing nations will join the nuclear club within the next decade, possibly through the diversion of plutonium from an enrichment or reprocessing plant into a weapons program. These nations include the following:

Argentina recently agreed to purchase a nuclear reactor from West Germany and a heavy water production plant from Switzerland, giving the country a complete nuclear fuel cycle and effective independence of outside scrutiny. Argentina reportedly rejected a less expensive offer of the same equipment from Canada, which would have required full international safeguards against illicit plutonium diversion. The reactor uses unenriched uranium as fuel, generating far more plutonium than a conventional light water reactor. "The country is known to be aggressive about keeping its modern weapons options open, and may well become the preeminent nuclear power in Latin America," says a State Department official. Argentina has been cooperating on nuclear research with India.

Brazil, a competing neighbor of Argentina, has agreed to purchase small enrichment and reprocessing plants from West Germany, to accompany two new nuclear reactors. It has an option for the purchase of six more reactors.

Iraq, which operates a small research reactor, obtained so-called "hot cell" technology for the handling of radioactive materials from Italy in 1978. Although the United States did not attempt to intervene, several Congressmen have said recently it would have been appropriate. Soon, Iraq expects to purchase enriched uranium from France. Unconfirmed reports say that Iraq receives financial assistance for its nuclear program from Libya. Iraq also exchanges information on nuclear technology with Brazil. A State Department official says that Iraq possesses considerable leverage in its future requests to European nations for nuclear assistance: "It is hard to ignore the large percentage of oil that flows to these countries from Iraq."

Pakistan is expected to explode a nuclear device within a year. Motivated by competition with India, the Pakistanis several years ago stole plans for a nuclear reprocessing plant from the Urenco consortium (composed of Britain, the Netherlands, and West Germany). They have been thwarted by the U.S. nonproliferation policy in their desire to obtain an enrichment plant from France.

South Korea and **Taiwan** have aggressive nuclear plans. Both have reactors, and Taiwan has a small reprocessing plant.

South Africa, which has an enrichment plant, is rumored to be cooperating in a nuclear program with Israel.—R.J.S.

Officials Debate Nuclear Policy Shift

The shipment of uranium to India, widely viewed as a weakening of U.S. nonproliferation policy, is sparking opposition that could dim any chances for a State Department proposal to soften other key aspects of the policy. In a dispute that parallels the confrontation over Indian fuel, the State Department says the United States needs a gentler approach to breeder reactors and plutonium storage to strengthen its nonproliferation stance; critics say the nation should wield a firmer hand against such concepts, imposing stiff penalities for noncompliance with U.S. orders.

The State Department proposal, drafted by Gerard C. Smith, the special ambassador for nonproliferation, is being debated by an interagency presidential review committee chaired by the Secretary of State (*Science*, 2 May, p.478).* The committee's deliberations are in limbo while the new Secretary, Edmund Muskie, becomes acquainted with the issues, but once that happens the committee will probably send a series of options to the President. At present, representatives from the National Security Council, the Council on Environmental Quality, and the Domestic Policy staff are arrayed against all others in their opposition to the policy shift. Two key legislators, Representative Jonathan Bingham (D-N.Y.) and Senator John Glenn (D-Ohio), have both sent critiques of the proposal to Smith's staff. The Natural Resources Defense Council has also forwarded its criticism.

At the center of the dispute between these groups are proposals by Smith that the United States withdraw opposition to breeder reactor research and development and to an international system of storing plutonium, a by-product of civilian nuclear programs that can be used to make bombs. Present Administration policy calls for the United States to discourage breeder programs by exercising its control over much of the world's uranium supply. But several important U.S. allies—primarily France and Japan—have signaled their intention to move ahead on breeder R & D with or without U.S. sanction.

U.S. control over the uranium fuel supplies of France and other European allies is actually quite limited, but Japan depends on continuous American authorization to accumulate its breeder fuel supply. Applications for fuel have, in the past, been granted to Japan on a case-by-case basis, but they have never been denied. "We give them a fight every time and then we give in," admits an Administration official. The policy shift is thus designed to spare Japan the embarrassment of continually coming to the United States for an okay; this would be accomplished through blanket approval of fuel shipments needed for breeder R & D in any nation until 1990.

The policy would apply only to R & D plans that are already set. Thus it would not permit start-up of similar plans by other, presumably smaller, nations. Some countries of the Third World find the breeder attractive because it offers energy independence; presumably these nations would complain that the U.S. policy is unfairly discriminatory. Foreshadowing the U.S. proposal, American delegates to the recent International Nuclear Fuel Cycle Evaluation (INFCE) conference argued that breeders are feasible only in developed countries with high electrical demand, but the delegates had little success in getting their views across.

A top U.S. nonproliferation negotiator is unconcerned by the objections these countries might raise: "Nonproliferation is inherently discriminatory to developing nations," he says. But another claims that Third World opposition could be obstructive, and that as a result, the policy should not be openly announced. "You don't say that developing countries will never get plutonium; you just keep ad-hoc-ing, claiming this is not the right time, and so on," the U.S. policy-maker recently told a Washington gathering.

Despite the potential drawbacks in the Third World, State Department officials say the proposal will earn the United States good will with developed countries whose cooperation is needed on other nonproliferation goals. "Right now we concentrate so much on being evenhanded and consistent in our policy of denial that we have discriminated against our friends," says one official. Another says, "We want to introduce a note of practicality and predictability into the U.S. policy."

This is also the goal behind Smith's proposal that the United States agree to supply enriched uranium to reactor operators in foreign countries for the duration of a reactor's lifetime. Contracts are now granted for less than 5 years at a time, primarily to maintain leverage over the reactor's operation and the host country's behavior. But a State Department official says that "our present unilateral actions to interfere with fuel contracts during renewal are disruptive and tend to drive countries toward the acquisition of fuel cycle independence." The official suggests the United States could, in exchange for the contracts, extract assurances that a recipient country would not engage in independent uranium enrichment, from which plutonium might be easily diverted.

Smith's final proposal—that the United States support an international storage and reprocessing system—is clearly the most controversial. Present U.S. policy is to support storage of unreprocessed (uranium) fuel at independent sites. State Department officials claim that an international storage system would prevent the stockpiling of plutonium by the nations that push ahead with the breeder. Access to the stored fuel might be conditioned on pledges not to recycle the fuel in conventional reactors, one of the primary U.S. nonproliferation goals.

Critics worry it will encourage plutonium trade by absolving individual nations of responsibility for storage and reprocessing. The INFCE report, for example, notes that "centralized facilities . . . would alleviate the concerns of countries with small nuclear programs in which suitable sites might not exist." Another critic says that "the most worrisome nations will not agree to any meaningful rules governing access, and as a result they'll develop their own storage and reprocessing facility."

Still unknown is the role to be played by Secretary Muskie in resolving this dispute. Despite more immediate distractions, Muskie—like his predecessor—has taken a personal interest in the policy review and intends to chair the review committee's next meeting. But whether this will enhance or diminish the likelihood of a major policy shift is not immediately clear.—R. JEFFREY SMITH

*The committee includes the assistant secretaries of Energy and Defense, and representatives of the Office of Science and Technology Policy, the Arms Control and Disarmament Agency, the National Security Council, the Office of Management and Budget, the Domestic Policy Staff, and the Council on Environmental Quality.

0036-8075/80/0606-1126$00.50/0