Briefing

Philippine President Halts Reactor Construction

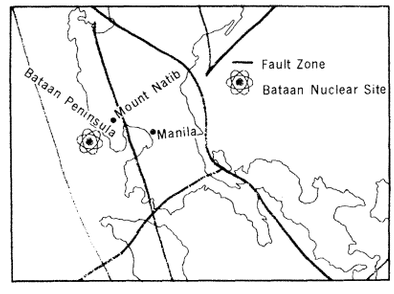
Political fallout from Pennsylvania's Three Mile Island nuclear incident has touched the Philippines. Citing unresolved safety questions, Philippine President Ferdinand Marcos on 14 June halted construction of his nation's controversial first nuclear reactor. Although construction was already stopped because of supply delays, Marcos' decision means that no further progress will occur until a special investigating commission reports in several months. In a sign that the halt was designed in part to placate political opponents, Marcos has named an opposition leader, Lorenzo Tanada, to serve on the commission.

The move caught almost everyone by surprise except the Westinghouse Corporation, which is building the $1.2 billion reactor largely with U.S. government funding arranged through the Export-Import Bank. Westinghouse had been tipped off when Marcos asked 3 weeks earlier for an assessment of the costs to terminate the project entirely. Westinghouse is concerned that Marcos' decision could have an impact on sales in other Asian countries, and told him it would cost roughly an additional $300 million to buy his way out of their contract. Only $150 million has been paid the company so far.

Marcos' action is reported by *Energy Daily* to have resulted in part from a visit the same day by Tanada, who brought with him a 22-page report on Three Mile Island prepared by a former Philippine radio-TV executive who now lives in Pennsylvania. The report apparently stressed the value of technical experts who rushed to Harrisburg and averted a disaster; Marcos is concerned that no such experts would be on tap in his own country should a problem develop.

The concern is only one of many raised both by organized groups within the Philippines and by U.S. environmentalists, who have sought for years to make this a test case for the export of nuclear power. Most of the concerns relate to the fact that the reactor is being built within 14 kilometers of a long-dormant volcano (Mt. Natib) that may or may not be active, and near several of the earthquake fault lines that riddle the Philippine Islands—a site that is "a bit unique," says Westinghouse spokesman Dixon Hoyle. The reactor construction permit calls for the state power agency "to install a volcanic surveillance system . . . to mitigate the effects of volcanic eruptions," according to S. Jacob Scherr, an attorney with the Natural Resources Defense Council who recently visited the Philippines. Also, the International Atomic Energy Agency, in a report currently being analyzed by the U.S. Geological Survey, apparently recommended that the Philippine atomic agency conduct a "reevaluation of safe shutdown [in event of an] earthquake," Scherr says.

These and other concerns have prompted the National Research



Council of the Philippines (NRCP)—similar to the U.S. scientific organization of the same name—to ask that the reactor "be subjected to an intensive interdisciplinary study, particularly from the environmental viewpoint" by the NRCP. Similar resolutions were recently passed by an association of biology teachers, and by the Philippine Movement for Environmental Protection. The groups say they are not interested in stopping the reactor per se, but instead in seeing that concerns about it are openly aired. Open debate is notoriously rare under Marcos' rule, and the government has lately been pilloried by its opponents for trying to stifle the reactor debate.

Even the new investigation by Marcos' special commission may not satisfy the reactor's opponents. Some have protested because its hearings have already begun, with the assistance of a special Westinghouse team flown in several days after the moratorium was announced. Filipino environmentalists say they need more time to prepare, and have yet to gain access to the crucial international atomic agency report.

So far, the U.S. State Department has tried to avoid the environmental dispute, and has confined itself largely to smoothing the financial arrangements and keeping the reactor construction moving along. To do more, department officials say, would violate Filipino national sovereignty. Environmentalists in the United States worry because a State Department official several years ago proudly referred to the project in a memo as the "Filipino Aswan Dam."

Postscripts

Pen registers, electronic devices that record the telephone numbers of outgoing calls when attached to personal lines (*Science*, 17 February 1978). Over the pleas of privacy activists and the dissents of three of its members, a majority of the Supreme Court decided on 20 June that pen registers could be legally attached to telephone lines by law enforcement officers acting without a court order. Essentially, the devices enable police to obtain a copy of the information on telephone bills, as well as a list of locally dialed numbers. The court said that phone subscribers cannot assume that such information is private, or that it will not be freely transmitted to the government, any more than any bank depositor can assume that information about financial transactions will not be similarly transmitted. Recent advances in telephone-switching technology will permit easier use of pen registers.

The new federal standard on occupational exposure to carcinogens, which may affect chemicals commonly used in laboratories (*Science*, 5 January). In a political environment increasingly dominated by concern for regulatory costs, officials at the Occupational Safety and Health Administration (OSHA) are still scratching their heads over possible reductions in their original proposal. The standard, which was due in March, is now expected "before the end of the summer." Meanwhile, a special study of laboratory chemical hazards has begun at the National Academy of Sciences, under the direction of Herbert O. House, a chemist at the Georgia Institute of Technology; Robert Albertie, dean of the school of

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science at the Massachusetts Institute of Technology; and Jerome Berson, a chemist at Yale University. The academy would like to complete its study in time for OSHA's consideration, but says it will take until December to wrap things up.

Darvon, the most popular prescription painkiller in the United States (*Science*, 2 March). Secretary of Health, Education, and Welfare Joseph Califano has delayed for another year a final decision on whether Darvon's use should be strictly limited by the federal government. "I have concluded that we need more research on Darvon to make a reasoned and legally defensible judgment" on more tightly controlling Darvon under the drug abuse laws, says Califano. Research will focus on the propensity of Darvon to cause either physical or psychological dependence, an area where Califano says "we do not now possess sound overall data." In the meantime, he urged doctors and pharmacists "to heed this simple message: Never use Darvon . . . unless there is really no alternative, and then only with care." Doctors should avoid prescribing it, pharmacists should dispense it only with extra warnings, and patients should not ask for it, Califano says.

Skylab (*Science*, 18 May). The satellite is still up in the air as of this writing (and now expected to come down in July), but residents of Basidpur, Pakistan, became excited on 11 June when an object fell nearby that appeared at first to be part of the satellite. Bearing the numbers 10-95 and 14-47-84, the contraption resembled a flying saucer with two foam bags and nylon ropes; Pakistani scientists apparently decided it was part of a different satellite. The understandably embarrassed nation that sent it into space has not yet owned up.

The Middle East study center at the University of Southern California (*Science*, 9 March). The center, which became embroiled in charges of Arab influence, has been completely restructured by the university's board of trustees. Financial arrangements with the initial Arab donors have been dropped, and a former Arabian American Oil Company executive is no longer assured of obtaining the post of director. An academic advisory group and a board of outside visitors will oversee the center's operations and the new director search. Meanwhile, a similar center at the University of Texas has resisted the appointment of Abraham Marcus, a Jewish doctoral candidate at Columbia University, as one of its Arab historians. Members of the history department at Texas, who are pushing for the appointment, claim that Marcus is being denied the post because the center fears it would endanger their funding from Arab nations. The director of the center says that other considerations figure in their resistance.

J. Anthony Morris, a scientist who persistently criticized the federal vaccine program from within the Bureau of Biologics at the Food and Drug Administration (*Science*, 30 July 1976). Resolving a long-standing fight between Morris and the FDA, an FDA administrative law judge on 13 June upheld the decision of Morris' superiors to fire him from the agency in 1975 for insubordination and inefficiency. Morris had claimed his firing was in retaliation for various grievances he lodged against the agency, and also for his opposition to the swine flu immunization program. In this latest round, the judge declared that "Dr. Morris' allegation of retaliation for filing a grievance is based solely on circumstantial evidence and post hoc reasoning" and that the penalty of firing "is not in itself overly severe in light of the charges" sustained in earlier administrative proceedings. Morris also claimed his firing was prompted by negative peer reviews from an advisory group that depended heavily on the Bureau of Biologics for grants and contracts (members of the group had received $11 million in federal money between 1972 and 1976). The judge concluded that he was "unable to find that the Panel's criticisms of Dr. Morris' work were not in good faith."

Antibiotics in animal feeds (*Science*, 29 April 1977). At the time this was going to press, the Food and Drug Administration (FDA) was placing the finishing touches on an order banning the use of diethylstilbestrol (DES) in animal feed to promote weight gain. DES is thought to pose an increased cancer risk for consumers of beef; its ban has been sought by FDA since 1972, and personally by FDA Commissioner Donald Kennedy since he took office. Kennedy left office on 30 June, and the ban was his last act.

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contribution to the bank is not due until fiscal 1981. That will be too late to rescue many of the fledgling solar industries that jumped into the market early and are now on the verge of bankruptcy, Epstein said. His chief disappointment, however, was that the bank's funds will come from Carter's proposed Energy Security Trust Fund, which will be financed by revenues collected through the windfall tax on oil profits. The latter has run into strong congressional opposition, and some doubt that it will clear the Senate Finance Committee, whose chairman, Russell Long (D-La.), has earned a reputation over the years as a defender of the oil industry against unwanted tax proposals.

The President's strategists feel they have made a clever decision in linking a popular item in Congress with an unpopular one. Domestic policy adviser Stuart Eizenstat said at a White House briefing that the solar plan "will make the windfall tax a more attractive thing to support." Asked whether the defeat of the tax would also kill the solar bank, Eizenstat said, "We'll cross that bridge when we come to it." He expected the tax to pass. Schlesinger chimed in, with a smile: "Any examiniation of congressional behavior over the last few years does not reveal a reluctance to fund solar energy projects." If Congress provides the money before fiscal 1981, Eizenstat said, the solar bank will begin operating sooner. A solar bank bill (HR 605), drafted by Representative Stephen Neal (D-N.C.), has been approved by one subcommittee of the House banking committee and now awaits the review of the housing subcommittee, due to be completed by 3 August.

Schlesinger described the federal government's role as that of a catalyst. The effort, he said, "is not akin to a man on the moon type project." which was done entirely with federal muscle. The success of Carter's plan depends very much on the degree of enthusiasm shown by state governments, private industry, and individual consumers. DOE will not push for rapid commercialization of solar technologies unless they have proved to be competitive in the marketplace. For example, Schlesinger said, the government is not about to make massive purchases of photovoltaic electric cells for its own use, because the DOE believes the technology is not yet commercially marketable. He would prefer to wait until the cost per peak watt has fallen from the present level of around $10 to $2. Buying photovoltaic cells now, Schlesinger told reporters, would risk "freez-