Westinghouse Sues NRC

Frustrated by federal indecision, the Westinghouse Corporation has sued the Nuclear Regulatory Commission (NRC) in an attempt to gain a license for the export of nuclear reactor components to the Philippines. The suit, filed on 6 August, asks the NRC either to approve the Westinghouse application or to place the matter directly before President Carter, as provided for by regulations.

Westinghouse is seeking the export license so it can continue construction of a controversial $1.2 billion reactor at the foot of a long-dormant volcano near Manila. Environmentalists here and in the Philippines are pressuring the NRC to withhold the license pending resolution of safety issues related to the volcano, Mt. Natib, and to nearby geologic fault lines.

Construction of the reactor has been halted pending the conclusion of hearings on the safety issues ordered by Philippine President Ferdinand Marcos in June (*Science*, 6 July). But Westinghouse believes that by the time its suit is settled, the hearings will be over and construction will have resumed. Westinghouse has apparently taken its confidence from the refusal of the tribunal conducting the hearings to grant a delay so that opponents of the reactor have time to prepare their case more carefully. Members of the tribunal have been under strong pressure to conclude the proceedings swiftly so that 2100 laid-off workers can be rehired.

Recently, a leader of the political opposition, Lorenzo Tanada, visited the United States to ask scientists to testify and prepare analyses of the reactor's safety. After meeting with Tanada, Frank von Hippel, president of the Federation of American Scientists and a physicist at Princeton University, wrote to the Philippine tribunal to suggest an additional hiatus of 6 months so that "independent scientists" could conduct a review of the safety data. He also suggested that the NRC and the United States Geological Survey could render formal assistance.

Thus far, the USGS has offered only informal advice to the State Department about the soundness of the reactor design and construction. According to John Reinemund, chief of the USGS international geology office, the agency's review generally affirmed the concerns raised in a 1978 report on the Philippines reactor by the International Atomic Energy Agency (IAEA). "We put a little more emphasis on the volcanic and seismic problems," he says.

The IAEA report, considered a classified document until several weeks ago, describes the reactor site as "unique to the nuclear industry insofar as the risks associated with eruption of nearby volcanoes." It called the eruption of Mt. Natib, although dormant for 67,000 years, a "credible event," both on its slopes and from the crater. "This requires consideration of excessive ash fall, glowing avalanche, gas accumulation, and laharic [mudflow] slides" in the reactor's design. "One possible solution to mitigate against a radioactive release in the event of an eruption of Mt. Natib is the removal of the fuel to an off-site storage location upon advance warning by a surveillance system," the report says.

The IAEA also notes that the risk of a major earthquake near the reactor site may be greater than estimated by the Philippine nuclear power agency. The reactor must be able to accommodate a quake measuring as high as 8 on the Richter scale occurring within 50 to 70 kilometers, the agency says. Also, a random shallow earthquake could occur directly below the site, in which the reactor would have to withstand an acceleration of up to 0.75g.

The Philippine Atomic Energy Commission disputes several of these estimates, and says it is taking all appropriate steps to safeguard the reactor in the event of an eruption or an earthquake. Whether the NRC will reach the same conclusion is uncertain. Even if Westinghouse is granted the export license in response to its lawsuit, two other license applications (for export of the nuclear steam supply system and the fuel rods) must also be approved. An official at the State Department predicts the entire affair will not be resolved for months.—R. JEFFREY SMITH

war. In the 1960's and early 1970's, many scientists saw the links as of sufficient value to participate in exchanges despite Soviet policies and actions to which they objected. Over the last two decades, the exchanges proceeded remarkably unaffected by ups and downs in Soviet-U.S. relations.

The advent of détente in the early 1970's created expectations among scientists here and in the Soviet Union of a generally freer interchange in the scientific sphere, for example, of a relaxation of travel restrictions on the Soviet side. At the start of the decade, the opening of Jewish emigration to Israel on a major scale had been interpreted by some as a significant sign of liberalization. The disappointments of détente seem to have sharpened the attitudes of American scientists on human rights and scientific freedom issues.

Scientists under pressure in the Soviet Union fall into two categories, dissidents and "refuseniks," although many belong to both categories. The dissidents in general have sought to secure the rights of Soviet citizens provided under Soviet law and international agreements but denied in practice. The second group is made up of scientists and engineers who have tried to join the Jewish emigration and have been turned down, thus refuseniks. Orlov is numbered among the dissidents who have indicated they wish to stay in the Soviet Union. Shcharansky took up dissident activities after he was refused permission to emigrate and was fired from his job.

Both men were identified with groups that sought to monitor Soviet implementation of the human rights provisions of the Helsinki accords. The severity of Orlov's treatment is attributed by informed observers in particular to the attempts by his group to intercede in behalf of religious groups and people of non-Russian nationalities who have run afoul of Soviet authorities. In the official view, such contacts are viewed as having the potential for generating organized political activity and, conceivably, political opposition. Any hint of such activity in the Soviet Union invariably brings heavy reprisals.

In the Soviet Union scientists are in general a privileged group enjoying higher pay and better housing than other workers and receiving other concessions such as job rights and access to foreign publications. Because of their status and the investment by the state in their education, scientists are viewed as having a special obligation to society so that criticism from scientists or, in the case of

0036-8075/79/0831-0876$00.50/0