

Today, there are 17 graphite reactors, known as RBMK-1000, and the Soviets have plans for a 1,500-megawatt version.

From a safety standpoint, the Chernobyl reactor is a "nightmarish problem," according to Robert Bernaro, director of boiling water reactor licensing at the Nuclear Regulatory Commission. The engineering difficulties are inherent in the use of the graphite as a moderator, among other things. U.S. reactors have what is called a negative coefficient, which means that when the coolant temperature goes up, the reactor shuts down. In the graphite reactor, if the coolant temperature goes up, the reactivity goes up, which requires the Soviets to have a variety of special emergency measures to ensure that the graphite doesn't ignite.

Bernaro, who was also quoted by Diamond, commented on the question of safety: "I'm unwilling to hinge the acceptability or unacceptability of U.S. reactors on what the Russians do or do not do. If we can learn something from what the Russians have done or have not done, fine. . . . But in the meanwhile, I think that our primary attention ought to be on our own reactors."

That the New York Times's Diamond crafted his article solely to make the anti-nuclear case is amply demonstrated by the accompanying full-page ad for Ralph Nader's "Public Citizen" group in the May 19 *New York Times*. The ad, signed by Robert Pollard and Daniel Ford of the Union of Concerned Scientists, is a fund-raising piece with the message that the Russians and Americans are the same when it comes to "covering up nuclear dangers." Using Diamond's line, the ad warns: "The Chernobyl nuclear plant, contrary to earlier reports, did have a containment building. Indeed, the design used by the Russians bears a striking resemblance to the long-suspect design used by General Electric." The ad includes a map of locations of the 39 GE plants in question. "Check the map to see how close you live to a GE nuclear plant," the ad warns ominously.

To all but the most credulous, the ad is a cruel joke. In the first place, Pollard and Ford have been thoroughly discredited in the scientific community because of their history of lying about nuclear power. Interestingly, Bernaro noted that although he invited the Union of Concerned Scientists to attend task force meetings discussing core melt accidents,

## General Electric replies to the New York Times

*The following is excerpted from a statement issued by General Electric on May 20.*

The ad sponsored by Public Citizen in yesterday's *New York Times* is an effort by that antinuclear organization to raise funds by rehashing and exploiting items which were raised and then resolved eight years ago. The ad tried to make a connection between 15-year-old memos which were reviewed by Congress in 1978 and the Chernobyl accident through an invalid comparison between the GE and the Chernobyl containment design. . . .

The first issue of containment integrity was raised as a public concern in 1978 when internal Nuclear Regulatory Commission memos obtained under the Freedom of Information Act appeared to question the capability of this type of design. A great deal of public attention was raised, including public hearings before a House subcommittee where the Nuclear Regulatory Commission and nuclear industry spokesmen were called upon to address the challenges being raised by public interest groups. . . .

The original internal NRC memos were authored in 1971 and 1972. Since that time the integrity of the three styles or configurations of U.S. pressure suppression sys-

tems have indeed been extensively reviewed and approved through the normal regulatory process. . . .

In support of this review, a great deal of pressure suppression testing, including full scale segment tests, was performed for each configuration. . . . The structure designed to withstand one of the postulated events did exactly what it was supposed to do. In fact, integrity of the containment remained intact throughout a number of tests. Thus, GE believes the issue of U.S. NRC regulatory acceptance of pressure suppression type reactor containment designs is closed.

**Lack of Similarity Between GE and Chernobyl Designs** The second issue deals with the comparison between GE and the Chernobyl #4 reactors. . . . GE reactor containments are similar to Chernobyl only in that both have large pools to quench steam released from process pipe breaks. The GE reactor and all important piping are inside the strong containment structure, whereas the Chernobyl core and part of its piping appears to be outside the containment boundary in an industrial-type building. . . .

In the United States, a primary containment structure completely surrounds the reactor including both the inlet and outlet piping. Thus, in a GE pressure suppression type containment, all coolant lost in an accident within this structure is vented to and condensed in the suppression pool. In the Russian design, the reactor, its outlet piping and the steam separators are located outside the containment boundary. . . . Thus, there is no means of containment or pressure suppression for substantial steam release from the reactor core or outlet piping. . . .