plant based on its topography and rock conditions."

However, the Burns and Roe disclaimer says that questions about the site "have been fully and thoroughly resolved." It says, for example, that the site has been accepted by "other participants" in the project, "such as the Tennessee Valley Authority (which selected the site in 1972) as well as the Nuclear Regulatory Commission (based on its initial reviews of TVA data)."

The Burns and Roe disclaimer also argued that many of the management problems that plagued the breeder project in 1973 have been resolved (for example the rivalry between the regulatory and research staffs has been resolved by the division of AEC into ERDA and a regulatory body, the Nuclear Regulatory Commission). However, it also seems that many of the other problems identified in the 1973 memorandum have continued and possibly worsened.

On the question of the utilities' interest in the breeder, for example, the utilities have held their financial participation to the original limit of \$250 million—while the Clinch River project's cost has escalated yearly, to a project total of \$2.3 billion. Also true to the pattern established in 1973, it is the government, not the utilities, that has the deepest stake in the breeder, as evidenced by the fact that the AEC, and now ERDA, has absorbed these enormous cost increases.

Also, as forecast by the memorandum, delays and cost overruns on the FFTF have become something of a scandal, and now, after 9 years, construction of the test facility at Hanford has not been finished. Furthermore, the value of test results from FFTF to the Clinch River project is being more widely questioned than ever.

Finally, the delays in construction of the Clinch River reactor which was originally intended to reach criticality in 1979, have undermined the original philosophy and rationale for the project. Previous concern about diminished uranium supplies, for example, has decreased as utilities have slowed their orders for first-generation enriched uranium-fueled reactors. And greatly heightened concern about the ease with which plutonium can be diverted for weapons use has made the AEC's plans for the "plutonium economy" based on the Clinch River breeder less popular.

What the Burns and Roe memorandum shows about the attitudes of the AEC and others toward the breeder proj-

ect in 1973 is aptly characterized today by nuclear engineer David Rose of the Massachusetts Institute of Technology. Rose, who would like to see more attention paid to other types of projects—alternative breeder designs, or solar, geothermal, or fusion research—avoids taking a stand on the merits of the Clinch River project itself. However, he says, the attitudes of many of its supporters "remind me of a dinosaur in the back garden, who says, "Feed me." And you feed him, and he grows, and grows, and says, "Feed me. Otherwise I will die and stink."

President Carter apparently is willing to let the Clinch River dinosaur die of fiscal starvation. But Congress may yet insist that it be allowed to grow.

—DEBORAH SHAPLEY

APPOINTMENTS

Morris L. Norfleet, vice president for research and development, Morehead State University, to president at the university.... Elmer Washington, dean, College of Arts and Sciences, Chicago State University, to vice president of research and development at the university. . . . Ian W. Mathison, professor of pharmaceutical chemistry, University of Tennessee, to dean, School of Pharmacy, Ferris State College. . . . Tom S. Miva, chairman of pharmacology, Purdue University, to dean, School of Pharmacy, University of North Carolina, Chapel Hill. . . . Paul S. Salter, professor of geography, University of Florida, to dean, College of Arts and Sciences, University of Alaska, Fairbanks. . . . Leonard S. Lerman, professor of molecular biology, Vanderbilt University, to chairman of biological sciences, State University of New York, Albany. . . . Robert H. Waldman, former chief, infectious and immunologic diseases, University of Florida College of Medicine, to chairman, medicine department, West Virginia University School of Medicine.... Margaret Styles, dean, College of Nursing, Wayne State University, to dean, School of Nursing, University of California, San Francisco. . . . Calvin E. James, professor of communitycollege education, Northern Arizona State University, to dean, School of Applied Sciences and Technology at the university. . . . Roderick Macdonald, Jr., chief of ophthalmology, Medical College of Virginia Hospital, to dean, School of Medicine, University of South Carolina. . . . James W. Smudski, professor of pharmacology, University of Pittsburgh, to dean, Dental School, University of Detroit. . . . F. Karl Willenbrock, director, Institute for Applied Technology, National Bureau of Standards, to dean, School of Engineering and Applied Science, Southern Methodist University. . . . Kenneth Wing, chairman of agricultural and resource economics, University of Maine, Orono, to dean, College of Life Sciences and Agriculture at the university. . . . Thomas J. De-Marco, professor of periodontics and pharmacology, Case Western Reserve University, to dean, School of Dentistry at the university. . . . M. Alton Hodges, acting dean, School of Allied Health Sciences, University of Texas, Houston, to dean of the school. . . . Ralph Kaslick, professor of periodontics and oral medicine, Fairleigh Dickinson University, to dean, School of Dentistry at the university. . . . Alban Wheeler, chairman of sociology, Morehead State University, to dean, School of Social Sciences at the university. . . . Robert E. Burridge, professor of engineering, University of New Brunswick, to dean of engineering at the university. . . . Eugene D. Furth, associate chairman of medicine, Albany Medical College, to chairman of medicine, East Carolina University. . . . Charles M. Leslie, professor of anthropology, New York University, to chairman of anthropology, University of Delaware. . . . John A. Ryan, chief, environmental sciences branch, McDonnell Douglas Astronautics Company, to chairman of earth sciences, California State University, Fullerton. . . . Michael Taylor, associate professor of psychiatry, State University of New York, Stony Brook, to chairman of psychiatry, University of Health Sciences, Chicago Medical School. . . . Edward A. Smuckler, professor of pathology, University of Washington, to chairman of pathology, University of California, San Francisco. . . . Richard J. Sauer, associate professor of entomology, Michigan State University, to chairman of entomology, Kansas State University. . . . Paul Szaassociate professor niszlo. microbiology, University of Texas, to chairman, biological sciences division at the university.... Gerald H. Cross, assistant professor and wildlife specialist. Virginia Polytechnic Institute, to head, fisheries and wildlife sciences department, School of Forestry and Wildlife Resources at the university. . . . Walter F. Freiberger, professor of applied mathematics, Brown University, to chairman, applied mathematics division at the university.

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