HOUSE DENIES DOE'S REQUEST TO CLOSE FFTF REACTOR

Early in 1990, the Department of Energy (DOE) recommended the immediate shutdown of the eight-year old Fast Flux Test Facility (FFTF), a liquid-metal research reactor at the Hanford Nuclear Reservation, in Washington State, due to rapidly escalating operating costs. The House of Representative's Committee on Science, Space, and Technology, Subcommittee on Energy Research and Development convened a hearing on FFTF's viability and future operations on March 7, 1990. Chairman of the Subcommittee, Marilyn Lloyd (D-TN), presided.

According to Kitty Rising, a staff member of the Subcommittee, the House Appropriations Committee denied the DOE's request to close the facility for fiscal year 1990, indicating that the Department's proposal was premature. She says the DOE only examined the issue's economic aspects and did not take into account FFTF's position as the nation's preeminent nuclear research reactor and a leading contributor to international cooperative research efforts. Ms. Rising says that the matter of FFTF's closing will arise again in fiscal year 1991. "The government's budget for FFTF was $100 million, but, as of now, only $47 million has been allocated for fiscal year 1991," she says. "That is not enough to run the reactor for a year." Moreover, indicates Ms. Rising, the DOE has filed an appeal against the House's decision and will continue its efforts to close FFTF.

Witnesses representing various nuclear energy groups testified in support of FFTF's continued existence, citing both the need for the United States to keep pace in nuclear research and the need to produce radioisotopes for nuclear medicine. Aside from FFTF's ability to manufacture radioisotopes, the site was also praised for its leading research into the management and disposal of toxic defense wastes, its international cooperative research functions with Canada and Japan in the area of fusion materials, and its history of successful full-capacity operations. The facility's youth was also cited. According to testimonies, FFTF is the only existing nuclear research plant in the U.S. that is capable of performing effectively into the 21st century.

Speaking on behalf of The Society of Nuclear Medicine and the American College of Nuclear Physicians (SNM/ACNP), Capt. William H. Briner (USPHS, ret.), director of the radiopharmacy and nuclear medicine laboratory, associate professor of radiology, Duke University Medical Center, and Richard P. Spencer, PhD, MD, professor and chairman, department of nuclear medicine, University of Connecticut, warned the Subcommittee about the steady erosion of "American dominance in the discovery and development of radioisotopes for diagnostic and therapeutic application." This alarming demise, they contended, is further aggravated by declining financial support for research, lack of radioisotope production facilities, and vanishing DOE funding. Capt. Briner and Dr. Spencer added that the DOE's funding commitment to nuclear medicine research has been declining for ten years (See *Newsline*, March 1990, p. 13A).

Witnesses in support of FFTF's continued operation unanimously asserted that the facility can help stave off the decline in American nuclear medicine development by virtue of the site's versatility, including its exceptional capability to produce radioisotopes. "The Fast Flux Test Facility is the best reactor for the multitude of missions which...will more than cover its costs," testified Michael K. Korenko, PhD, vice president, engineering and development, Westinghouse Hanford Company, which oversees the operation of the site. "It will provide cost savings and incalculable social benefits to the country." Alan E. Waltar, PhD, manager, reactor support, Westinghouse Hanford Company, speaking for the American Nuclear Society (ANS), agreed. "[FFTF] can...produce a broad spectrum of isotopes...which are urgently needed by ...medical research.....but are not now being produced in the U.S." Dr. Korenko also noted at the hearing that FFTF is the only DOE plant that conforms to rigid Nuclear Regulatory Commission (NRC) construction standards.

Sharon Atkin, manager of isotope production for Westinghouse Hanford Company, testified that "because of its core configuration and specific physics parameters, FFTF offers unique capabilities for isotope production." Conceding that FFTF is relatively new in the production of medical isotopes, she affirmed that they "have already provided several isotopes...for studies in areas such as cancer treatment and infant cardiology." Ms. Atkin identified 40 important isotopes, most of which she declared can only be produced in high quality and quantity at FFTF. "Some isotopes cannot be made anywhere but in the fast flux of FFTF with the required purity and specific activity," affirmed Theodore Stern, executive vice president, energy and utility systems group, Westinghouse Electric

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News Briefs

EPA Extends NESHAP Comment Period

The Environmental Protection Agency (EPA) has postponed the effective date of its new standards regarding emissions of hazardous air pollutants until mid-July. The EPA announced it is still examining certain portions of the regulations and will need the added time to digest public comments and complete deliberations on the issue.

Initially set to take effect on March 15, the rule specifies a maximum annual limit of 10 mrem (effective dose equivalent) for airborne radionuclide emissions emanating from facilities licensed by the Nuclear Regulatory Commission (NRC). The NRC already has its own airborne radionuclide emission standards for its licensees and opposes the EPA's efforts to assert authority in the area.

According to The Society of Nuclear Medicine (SNM) and The American College of Nuclear Physicians (ACNP), complications in reporting emissions data will arise since the NRC defines radioactive release on an activity per volume basis, while the EPA measures by exposure. "It's a question of apples and oranges," says one SNM/ACNP member. "NRC regulations are tailor-made to each type of nuclear facility, while the EPA proposes an impractical, broad brush method of compliance to standards."

A comment letter submitted to the EPA by SNM/ACNP complained that dual regulations would be "redundant . . . and inconsistent" and would prompt "considerable effort and expense. . . to satisfy the different data sets and compilations. . required by the two regulators." Furthermore, the SNM/ACNP comment asserted that the "NRC has been protecting the public. . . . for over 30 years" and urges that "the EPA withdraw from regulating these [NRC-licensed] facilities in favor of the NRC." ■

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Corporation. "The diagnostics and treatments made possible by those isotopes will be lost."

But William H. Young, DOE's assistant secretary for nuclear energy, argued that "there has not been a significant market for radioisotopes that can only be produced in a fast reactor environment." While Mr. Young acknowledged that FFTF can effectively produce certain isotopes, such as gadolinium-153, "We believe that existing Department reactors and accelerators can meet radioisotope market needs for the foreseeable future." Assistant Secretary Young further indicated that the efficient production of a wide variety of isotopes at FFTF would require additional capital expenditure of $25 million. "Production of medical and industrial isotopes at FFTF cannot be economically justified."

Although the DOE asserted that the government can no longer afford to continue operating FFTF, advocates of the site vouched that industry and medicine could not afford to continue *without* it. Citing data on radiopharmaceuticals from the Market Intelligence Research Company, Mr. Stern explained, "Medical uses of isotopes will increase by 10%–15% per year for the next several years, resulting in a foreseeable demand in 1995 equal to 20 times today's requirements." Ms. Atkin projects radiopharmaceutical corporate revenue to jump from a current level of $250 million to more than $3 billion in the late nineties. She says that there is a "potential to save thousands of lives and billions of dollars through earlier detection and treatment of disease."

While nuclear medicine research in Western Europe, Canada, and Japan enjoys a continuous, reliable flow of radioisotopes, similar research in the U.S. suffers from intermittent, irregular supplies, according to testimony. Witnesses complained that the U.S. is increasingly dependent on foreign sources for the availability of the most common radioisotopes used in nuclear medicine procedures, like technetium-99m, xenon-131, and iodine-123. "Unless we utilize FFTF, we will be totally dependent on foreign suppliers," warned Mr. Stern. Adding to the chorus of dire warnings, Ms. Atkin admonished, "With its aging infrastructure of reactors and accelerators [this nation] is quickly becoming unable to develop and commercialize the cures of tomorrow."

Ms. Atkin pointed out to the Subcommittee that the recent development of combining monoclonal antibodies with radioisotopes in diagnosing and effectively treating heart disease and brain disorders makes the problem of production even more urgent.

Dr. Korenko punctuated his testimony by asking, "Does it make sense to shut down FFTF and then ask Congress for one to three billion dollars to build another test reactor at the turn of the century?"

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