CITY OF WEST RICHLAND, WEST RICHLAND, WA, COUNCILMAN KENNETH D. DOBBIN
PAGE 1 OF 2

Kenneth D. Dobbin
1843 Blue Heron
West Richland, WA. 99353

May 4, 1996

U. S. Department of Energy
Office of Fissile Materials Disposition
P. O. Box 23786
Washington, D. C. 20026-3786

COMMENTS ON THE STORAGE AND DISPOSITION OF WEAPONS-USABLE FISSILE MATERIALS DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Dear Sir:

I respectfully request that you include the Fast Flux Test Facility (FFTF) as a option to disposition either weapons-grade fissile material or reactor grade plutonium. It is an error to omit the FFTF from the Storage and Disposition of Weapons-Usable Fissile Materials Draft Programmatic Environmental Impact Statement. The Department of Energy (DOE) is reconsidering the use of the FFTF for defense and medical missions and this fuel material will be needed for its operation. The FFTF can be back on line in less than three years and could play a significant role to reduce what the National Academy of Sciences calls a "clear and present danger" associated with the stockpile of these materials. 1/01.02.00

The FFTF will need between 800 kg and one metric ton (MT) per year of fissile plutonium or uranium to fuel the multiple missions it will be asked to perform. It will use a once-through fuel system that converts the plutonium to a spent fuel standard. The FFTF can disposition a significant quantity of the 38 MT of surplus weapons-grade plutonium or use a portion of the 175 MT of surplus highly enriched uranium over the 30 years of life left in this reactor.

Missions being considered for the FFTF include tritium for national security, medical isotopes for cell-directed cancer therapy and treatment of other major diseases, and commercial isotopes for agriculture and industry. Advanced Nuclear and Medical Systems (ANMS) is a consortium of companies that is negotiating with the DOE to operate the FFTF and privately provide these products for our Nation. ANMS has widespread Congressional and professional support for the privatization of the FFTF.

ANMS has proposed an alliance with the Washington Public Power Supply System to jointly burn plutonium in the FFTF and WNP-2. That proposal provides synergism between the two facilities, a higher disposition rate of weapons usable material, and significant cost savings. The proposal would utilize the already constructed Fuels and Materials Examination Facility (FMEF) for plutonium fuel management. 1/01.02.00 cont.

M-168

01 02 00 Comment Number 1

Liquid metal reactors were not included as alternatives for Pu disposition in the PEIS due to longer time and greater cost required to complete their construction. The FFTF, on the other hand, is an existing reactor and could be used for Pu burning. However, the limited capacity of the FFTF would limit the rate at which Pu could be dispositioned and would require a much longer timeframe for disposition than that which could be achieved with the reactor options addressed in the PEIS.

The Department of Energy is in fact considering the FFTF, pursuant to the ROD for the TSR PEIS. The ROD (December 1995, 60 FR 63878) for the TSR PEIS addressed the FFTF for tritium production as follows:

> A private group has recently suggested that it purchase the FFTF from DOE and that DOE then contract with the private group to make tritium at that facility. In the [Tritium Supply and Recycling Final] PEIS, the use of the FFTF was considered and dismissed as a long-term tritium supply option because the amount of tritium that it could produce would only meet a percentage of the steady state tritium requirements, and it was not reasonable to rely on operating the facility far beyond the end of its design life. However, DOE will evaluate the presentation made by the private group to determine whether the operation of the FFTF might be able to play any role in meeting future tritium requirements. If any changes are warranted to this ROD following that review, or further NEPA documentation is required, DOE will take appropriate action.

The Secretary of Energy has requested a review by the JASONS Panel (eminent academic scholars and scientists) as part of the evaluation of tritium production with the FFTF. Should the outcome of this evaluation lead to a DOE proposal to restart the FFTF for tritium production, additional environmental analyses would be performed, as appropriate. If the FFTF were to be restarted, a substantial portion of the surplus Pu that would be used for MOX fuel could be used to fabricate FFTF driver fuel, thereby achieving the Spent Fuel Standard for Pu disposition through irradiation in the FFTF. Further description of the FFTF has been added to Appendix N of the PEIS.

The FFTF, WNP-2, and FMEF can take advantage of reduced security issues associated with all these facilities being located in close proximity on the Hanford Reservation in Washington State. Also, the FFTF and FMEF already have state-of-the-art plutonium security systems. Because Hanford is host to some of this material, it should be considered as one of the disposition locations.

The FFTF also creates a teaming opportunity with Russia. The United States wants Russia to use a once-through fuel system and not recycle. However, Russia wants to use its fast reactors which now are a part of a fuel system that includes recycle. The FFTF could demonstrate how to set up a fast reactor system to burn rather than breed plutonium and convert significant quantities of weapons-usable plutonium to a spent fuel standard without recycle. The US could provide Russia with the technology to extend the life of its BN600 reactor and convert it to a system similar to the FFTF to simultaneously burn the material in both countries.

Converting significant quantities weapons-usable fissile material to a spent fuel standard, providing the US with needed isotopes, and teaming with Russia to persuade them to accept the US stance on a once-through fuel cycle is a win-win for our Nation as well as the world. I strongly urge the DOE to include the FFTF as a viable option in the Programmatic Environmental Impact Statement on the Disposition of Weapons-Usable Fissile Materials.

Sincerely,

Kenneth D. Dobbin

Kenneth D. Dobbin

Councilman, City of West Richland, Washington
Member, American Nuclear Society Eastern Washington Section, Public Information Committee

cc: Senator Slade Gorton
Senator Patty Murray
Congressman Doc Hastings

M-168

The FMEF was a candidate storage facility under the Upgrade Alternative for storage of weapons-usable fissile materials.