Commentor No. 584: Mark Wahl

From: Mark Wahl[SMTP:MATHMAN@MARKWAHL.COM]
Sent: Sunday, September 03, 2000 7:04:30 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Do Not Restart Hanford's Fast Flux Reactor
Auto forwarded by a Rule

Dear Collette Brown/Secretary Richardson,

Please accept the following as public comments incorporated into the formaladministrative record and taken into consideration when adopting the finalrecord of decision on the Draft Environmental Impact Statement on theNuclear Infrastructure EIS.

Restarting FFTF is absolutely unacceptable. More waste is a cruel jokeconsidering the stalled progress on the waste already at Hanford. FFTFmaintenance has already gobbled up $100 million in clean_up money anddistracted from desperately needed clean_up. Tank wastes are alreadyseeping towards OUR Columbia River. More wastes must not be added to thosetanks. Clean_up must be the only priority. **584-1** **584-2**

By the way, you have done only an incomplete study and are asking forcomments. You have not told us how you will deal with non_proliferationissues or additional waste from FFTF. Should FFTF be restarted, thatdecision will be illegal under Federal law and will be overturned! Do theright thing, shut down FFTF now and save the future of the Columbia River! **584-3** **584-4** **584-3** **584-5**

Sincerely,
Mark Wahl
Langley, WA
Regards,
Mark Wahl
Director, Mark Wahl Learning Services

Ph: 360_221_8842 Fax: 360_221_6946
416 Fourth Street, Langley, WA 98260
www.markwahl.com

Response to Commentor No. 584

584-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF, and support for Alternative 5, Permanently Deactivate FFTF.

584-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford and protection of the Columbia River. Although beyond the scope of this NI PEIS, ongoing activities to remediate existing contamination at Hanford are high priority to DOE. The Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

The U.S. Congress funds the Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM), and the FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected. If the decision is made to shutdown the FFTF, then cleanup dollars will be needed to deactivate the facility, which could impact the overall Hanford cleanup schedule.

Regarding the migration of contaminants to the Columbia River, the Hanford Site has a comprehensive waste minimization and pollution prevention program in place as summarized in Section 3.4.11.8 that would govern any proposed site activities. More specific to the proposed activities presented in the NI PEIS, FFTF is located approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to the groundwater. Analyses presented in Chapter 4 of the NI PEIS (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4) indicate that there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of the existing Hanford facilities in support of the proposed activities. Also, no water quality impacts would be expected as a result of permanent deactivation of FFTF Section 4.4.1.2.4). Finally, no waste would be added to the Hanford waste tanks as a result of FFTF restart or operation.

Commentor No. 584: Mark Wahl (Cont'd)

Response to Commentor No. 584

584-3: DOE prepared a separate Nuclear Infrastructure Nonproliferation Impact Assessment to provide additional pertinent information to the Secretary of Energy so that he may make an informed decision with respect to the alternatives presented in the NI PEIS. Pursuant to CEQ regulations (40 CFR 1505.1(e)), agencies are encouraged to make ancillary decision documents available to the public before a decision is made. DOE mailed this document to about 730 interested parties on September 8, 2000. The report was made available immediately upon release on the NE web site http://www.nuclear.gov) and in the public reading rooms. DOE has also provided a summary of the Nuclear Infrastructure Nonproliferation Impact Assessment in Appendix Q in the Final NI PEIS.

584-4: Management of wastes that would be generated under implementation of Alternative 1, Restart FFTF, is discussed in Section 4.3 of Volume 1 (e.g., see Section 4.3.1.1.13). Section 4.3.1.1.13 was revised to clarify that, the Hanford waste management infrastructure is analyzed in this PEIS for the management of waste resulting from FFTF restart and operation. This analysis is consistent with policy and DOE Order 435.1, that DOE radioactive waste shall be treated, stored, and in the case of low-level waste, disposed of at the site where the waste is generated, if practical; or at another DOE facility. However, if DOE determines that use of the Hanford waste management infrastructure or other DOE sites is not practical or cost effective, DOE may issue an exemption under DOE Order 435.1 for the use of non-DOE facilities (i.e., commercial facilities) to store, treat, and dispose of such waste generated from the restart and operation of FFTF. In addition, Section 4.3.3.1.13 and 4.4.3.1.13 also address the potential impacts associated with the waste generated from the target fabrication and processing in FMEF and how this waste would be managed at the site.

584-5: See response to comment 584-1. FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

Commentor No. 585: Gerald Magness

From: Gerald Magness[SMTP:GERRY@FIDALGO.NET]
Sent: Sunday, September 03, 2000 11:33:20 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Restart the FFTF
Auto forwarded by a Rule

Please restart the FFTF to make medical isotopes. Cancer runs in our family and we can use allthe help we can get. **585-1**

Sincerely Yours

Gerald W. Magness
16720 104th St NE
Granite Falls, Wa 98252

Response to Commentor No. 585

585-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 586: Ken Walter

From: Ken Walter[SMTP:KWALTER@3_CITIES.COM]
Sent: Monday, September 04, 2000 12:23:41 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF Restart
Auto forwarded by a Rule

I am a former Fluor Hanford employee who worked at FFTF for 10 years. Ican speak from experience about the facility. FFTF should be restarted forproduction of medical isotopes and NASA space craft power isotopes. Thefacility is in excellent condition and has many more years of useful life.It would be a terrible waste of resources and potential benefits to shut itdown. **586-1**

The employees I associated with have excellent safety awareness and takeownership in their work. The two employees who were recently fired forfalsification of records are an exception and do not represent the attitudeand work ethic of the majority.

Ken Walter
Operations Specialist (retired)
8714 Bell
Pasco, WA

Response to Commentor No. 586

586-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 587: Clark Crouch

From: Clark Crouch[SMTP:CECROUCH@OWT.COM]
Sent: Monday, September 04, 2000 12:09:36 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Radiopharmaceuticals from FFTF
Auto forwarded by a Rule

To the PEIS team at DOE...

"Isotopes: An Answer for Cancer"

For once, let's not let politics stand in the way of progress. We've listened long enough to a very vocal minority which has offered yearsof emotional opposition to recommissioning the Fast Flux Text Facility.We need now to listen to the more reasoned and caring voice of themajority and heed the scientific evidence in support of a life_savingmission for the FFTF... the production of radiopharmaceuticals

587-1

We've already invested in the FFTF and we have a tremendous opportunityto turn this legacy of the cold war into a life_saving asset. There isno reason to abandon that investment or to conduct further studies Noequivalent facility exists anywhere else in the United States. No othercity has people with the knowledge and technological depth held by ourscientific community.

587-2

Please stop the studies and the procrastination, turn away from thosefew voices crying "wolf." Commission the FFTF now to produce thoselife_saving radiopharmaceuticals. It is paid for, it is clean, it is safe, and it can be a continuing asset to this community and the nation...a positive image for nuclear energy and the Departmentof Energy.

587-3

For the record, I was employed by the Atomic Energy Commission and itssuccessors from October 1947 until June 1978 and was directly involvedin the administration of the design and construction of the FFTF.

Clark Crouch
1541 Jadwin Avenue, Richland, WA 99352
509_946_1558

Response to Commentor No. 587

587-1: It is DOE policy to encourage public input on matters of regional, national and international importance as part of its commitment to facilitate a public participation process that is open and unbiased.

587-2: DOE notes the commentor's opinion. DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

587-3: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 588: William R. Taylor

From: William R. Taylor
[SMTP:WILLIAMTAYLOR@NECA.COM]
Sent: Monday, September 04, 2000 1:30:41 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Oppose nuclear power in space
Auto forwarded by a Rule

I support the positions of a number of scientists against the use of nuclearfuel or the placement of nuclear weapons in space. **588-1**

Thank you

William R. Taylor, M.D.
http://users.neca.com/williamtaylor

Response to Commentor No. 588

588-1: DOE notes the commentor's opposition to the use of nuclear materials for space missions and the placement of nuclear weapons in space. Through a Memorandum of Understanding with NASA, DOE provides radioisotope power systems, and the plutonium-238 that fuels them, for space missions that require or would be enhanced by their use. These radioisotope power systems have been used for almost 40 years, and have repeatedly demonstrated their performance, safety, and reliability in various NASA space missions. NASA establishes the need and requirements for space missions and undergoes a thorough NEPA evaluation for each launch. None of the missions stated in the NI PEIS are defense- or weapons-related.

Commentor No. 589: Marilyn Dickenson

From: Robert Dickenson[SMTP:FATBOY@GTE.NET]
Sent: Monday, September 04, 2000 11:52:31 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

Please restart FFTF at Richland, WA to produce medical isotopes. There is no reason to importwhen we have the capabilities to produce them ourselves. **589-1**

Marilyn Dickenson
605 S. Buntin St.
Kennewick, WA 99336

Response to Commentor No. 589

589-1: DOE notes the commentor's support for Alternative 1, Restart FFTF

Commentor No. 590: Eileen Gottula

From: Richard Gottula
[SMTP:GOTTULA@TELEVAR.COM]
Sent: Monday, September 04, 2000 1:23:20 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Restart FFTF
Auto forwarded by a Rule

Dear Sirs,
I want to let my voice be heard in support of restarting the FFTF reactor in Washington for use indeveloping medical isotopes for the fight against cancer. This is a valuable resource for peopleof this nation. **590-1**

Eileen Gottula
1603 Amon Dr.
Richland, WA 99352

Response to Commentor No. 590

590-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 591: Brenda and Stan Stave

From: brenda h stave[SMTP:BHSTAVE@TELEVAR.COM]
Sent: Monday, September 04, 2000 1:58:11 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

Please add our names in strong support of FFTF being allowed to resumeoperation producting medical isotopes. Nothing could be more important. **591-1**

Brenda and Stan Stave
165 Edgewood Drive
Richland, WA 99352

Response to Commentor No. 591

591-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 592: John Boland

From: John Boland[SMTP:JOHNBOLAND@EARTHLINK.NET]
Sent: Monday, September 04, 2000 4:15:53 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Re_start of FFTF for Medical Isotope Mission
Auto forwarded by a Rule

Please objectively study the very positive and well researched pro_re_start pleas of the many scientists and cancer victims. The costof re_start and operation of FFTF to produce medical isotopes isminiscule when compared to the cost per life saved. Our plea is absolutely backed up with sound science and engineering. The FFTF is inOUR front yard, not other's backyard. Please reject the ridiculousjunk_sciece and hysteria of the anti_nuclear pro_tagonists. We aretotally comfortable as to the COMPLETE reliability and safety of thereactor, it's minimal and easily handled waste output, and it'scapability of making a huge impact on many types of cancer, AIDS,osteoporosis, and many other diseases, while greatly lowering medicalcosts to the taxpayers in the form of Medicare, Medicaid, and universalhealth costs. **592-1**

Thanks

John Boland
509_582_7608
Fax 586_6139

Response to Commentor No. 592

592-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 593: Jean Beegle

From: JBEEG@aol.com%internet
[SMTP:JBEEG@AOL.COM]
Sent: Monday, September 04, 2000 4:34:39 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

It is very important to restart the program. **593-1**

Jean Beegle
Seattle WA.

Response to Commentor No. 593

593-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 594: Gary L. Troyer

From: Gary and Kris Troyer[SMTP:KANDG@URX.COM]
Sent: Monday, September 04, 2000 6:44:00 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Draft PEIS for FFTF
Auto forwarded by a Rule

I am in favor of restarting the FFTF for our citizens needs in the areas ofmedical isotope research and treatment and the production of energy sourcessuch as Pu238. The Draft PEIS on restart presents no show stoppers, showsthat restart is the quickest solution, and that the economics of scale arepositive. Further, based on current experience, building a new source tooffset the foreign and marginal supply will be frought with delays just as the decision about the FFTF has lingered. In this case, an immediate toolis much better than a promised tool.

It is ironic that the small but vocal anti_FFTF people change their tunewhen a family member suddenly needs dread disease diagnostic and treatmenttools possible through medical isotopes. Such changes to seeking the factsrather than following the anti's emotions makes it obvious that there is aneed for my government to support the basic research leading to generalavailability of such resources.

The availability of new medical tools will directly reduce the cost of medicare treatments and indirectly reduce personal and family sufferingfound with many existing and ineffective methods.

Please consider immediate restart a favorable solution to our country's needs.

Sincerely
Gary L. Troyer

594-1

Response to Commentor No. 594

594-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 595: Frank Trent

From: Fptrent@aol.com%internet
[SMTP:FPTRENT@AOL.COM]
Sent: Monday, September 04, 2000 10:24:03 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

Dear Sirs, I guess its time I put in my thoughts on this reactor, should I say Medical Isotope Center. I do not think its fair to the taxpayers of this country to go to a foreign Goverment to buy a medical devise when we already have a way to do the same thing here. The FFTF can also produce power in the process. **595-1**

I think if a poll qas taken here in the northwest you would find 90% of the people would agree.

Thanks for your time

Frank Trent.

Response to Commentor No. 595

595-1: DOE notes the commentor's support for Alternative 1, Restart FFTF. The commentor should note that the heat generated by FFTF operation will not be used for generation of electricity.

Commentor No. 596: Robert J. Thompson

From: Robert J. Thompson[SMTP:RTHOMP4@GTE.NET]
Sent: Monday, September 04, 2000 8:57:41 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Fast Flux Test Facility
Auto forwarded by a Rule

Please join us in Supporting this great venture. This is a crucial role in healing many sick people. My 7 year old nephew has been suffering from a Brain Stem Tumor for the past two years. Theabsolute grief he and his family has been through is incredible. Research cures people, friends and family. **596-1**

Respectfully:

Robert J. Thompson

Response to Commentor No. 596

596-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 597: Claudia Wetterling

From: The Wetterling's[SMTP:JMWETT@3_CITIES.COM]
Sent: Monday, September 04, 2000 8:14:19 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

Dear Secretary Richardson,

I would like to encourage you to restart the FFTF plant in Richland,Washington to produce medical isotopes. It is absurd that the U.S.needs to import 90% of the medical isotopes currently being used, whenwe have the ability to produce our own with the simple restart of FFTF. To think that cancer patients are dying because there are not enough isotopes to go around is unconcionable. Please consider seriously therestart of this plant and help save American lives. **597-1**

Thank you.

Sincerely,
Claudia Wetterling

Response to Commentor No. 597

597-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 598: Jonas A. Lundberg, Jr.

From: jonasmel@netnet.net%internet
[SMTP:JONASMEL@NETNET.NET]
Sent: Monday, September 04, 2000 10:32:30 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: My Support
Auto forwarded by a Rule

I support the restart of the FFTF Reactor Facility at Hanford to meet the national needs for medical isotopes and other peaceful nuclear materials. **598-1**

The FFTF is the most economical, safe, and environmental friendly method available to meet these needs.

Jonas A. Lundberg Jr.

Response to Commentor No. 598

598-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 599: Frank Trent

From: Fptrent@aol.com%internet
[SMTP:FPTRENT@AOL.COM]
Sent: Monday, September 04, 2000 10:35:19 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

Dear Sirs, I think its about time this goverment started to think about its people more than giving our resources to anothe goverment. The FFTF can and should be restarted to produce electrical power. also, it can be used to produce the Medical Isotope to fight Cancer. We buy this isotope from out of this country. When we can produce it here and put our people to work. This reactor sits on standby, when we could be spending that money in Production. I think you will find most people in the greater northwest will Agree. Think you for your time. **599-1**

Frank Trent
912 Wright ave Richland Wa. 99352.
Fptrent@aol.com

Response to Commentor No. 599

599-1: DOE notes the commentor's support for Alternative 1, Restart FFTF. It should be noted that power production is not one of the missions for which FFTF would be restarted.

Commentor No. 600: Bob Broyles

From: ROBERT BOB BROYLES
[SMTP:BBROYLES@GTE.NET]
Sent: Monday, September 04, 2000 10:48:03 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

PLEASE USE THE FFTF TO MAKE MEDICAL ISOTOPES. MEMBERS OF MY FAMILY HAVE DIED FROM CANCER THAT WOULD HAVE BEENBETTER TREATED IF ISOTOPES WERE AVAILABLE FOR USE. **600-1**

CO_GENERATION OF ELECTRICITY SHOULD ALSO BE CONSIDERED TO HELPOFF_SET COSTS. EVERYONE WINS **600-2**

THANK YOU

BOB BROYLES
KENNEWICK, WA

Response to Commentor No. 600

600-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

600-2: DOE notes the commentor's interest in offsetting costs of operation of FFTF by cogeneration of electric power. FFTF was not designed for the production of electric power, for example it has no turbine generators and actually requires some electric power for operation (see description of FFTF in Volume 1, section 2.3.1.1). The other non-commercial reactors evaluated (see Volume 1, sections 2.3.1.2, 2.3.1.3, and 2.3.1.6) are not designed for the production of electric power either.

Commentor No. 601: Castor Hawkes

From: BeegByte@aol.com%internet
[SMTP:BEEGBYTE@AOL.COM]
Sent: Monday, September 04, 2000 11:25:24 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF RESTART
Auto forwarded by a Rule

To restart FFTF to manufacture isotopes to treat those who desperately need help should be the number one goal. **601-1**

Castor Hawkes

Response to Commentor No. 601

601-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 602: Frank Hammond

From: (a)home[SMTP:FRANKHAMMOND@HOME.COM]
Sent: Tuesday, September 05, 2000 12:42:26 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF Restart at Hanford
Auto forwarded by a Rule

04 September 2000

Secretary of Energy
U S. Department of Energy
19901 Germantown Road
Germantown, MD 20874

Dear Mr. Secretary,

This letter and an associated email sent to the DOE itemize my concerns overthe restart of the FFTF at Hanford. I have been involved, or a closeobserver of the operations at the Hanford Reservation since the Tri_PartyAgreement was signed in 1989. I am an ex_physicist and I understand thetechnical aspects of reactors, nuclear waste, radioisotope production, etc.

In the Tri_Party Agreement DOE agreed, in a legally binding document, toclean up the nuclear waste at Hanford and to fund this cleanup as required.In addition, in 1995 DOE promised (also in a legal document?the HanfordCleanup Agreement) that the FFTF would be shut down and the funds used tokeep this facility in a restart state would be used in the cleanup effort.DOE is now in violation of this agreement as well and proposes to be inpermanent violation by restarting the FFTF. Furthermore, DOE now admits that its current budget and target budgets for the next six years are too low tomeet the Clean_Up Agreement, yet would spend in excess of $400M in therestart of a facility that is not needed.

602-1

Response to Commentor No. 602

602-1: DOE was tasked by Congress in the Atomic Energy Act of 1954, as amended, to "ensure the availability of isotopes for medical, industrial, and research applications, meeting the nuclear material needs of other federal agencies, and undertaking research and development of activities related to development of nuclear power for civilian use." The purpose of this PEIS is to determine the environmental and other impacts to accomplishing this mission from all reasonable existing and new DOE resources. The FFTF at the Hanford Site was one of several existing DOE resources that was assessed for this mission.

DOE notes the commentor's concerns over the restart of FFTF and the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing activities to remediate existing contamination at Hanford are high priority to DOE. The Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. A Tri-Party Agreement change was made to place the milestones for FFTF's permanent deactivation in abeyance until the DOE reaches a decision on whether the facility will be used to meet mission needs. Public meetings were held on this formal milestone change. The proposed activities delineated in the NI PEIS would not have an impact on Hanford cleanup activities.

The U.S. Congress funds Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM). Congress also funds FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

602-2: DOE notes the commentor's opposition to Alternative 1, Restart FFTF, and support for Alternative 5, Permanently Deactivate FFTF. DOE also notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental

The majority of citizens of the State of Washington want the FFTF shut down permanently and want DOE to get on with the cleanup. I recently attended one of the hearings regarding The Programmatic Environmental Impact Statement(PEIS). I have carefully considered the reasons why DOE wants to restartFFTF and based on the evidence available from all sources there are no valid reasons to restart FFTF or to retain it for future use. The major argumentsDOE is using are discussed below. 602-2

NASA has stated (in an official NASA report) that they have no need topurchase Pu_238 for the specific space mission used to justify FFTF restart. 602-3

The FFTF will be used for research and commercial production of radioisotopes. However, DOE is ignoring its own a committee<s recommendations. The Subcommittee for Isotope Research and ProductionPlanning, it its report stated "The FFTF will not be a viable source ofresearch radioisotopes". An adequate supply of research radioisotopes isavailable from Canada and as far as commercial applications are concerned itis questionable that a Government Agency should be in the business ofselling commercial quantities of medical radioisotopes. In addition, there are less expensive alternatives to providing commercial quantities ofradioisotopes by the design of facilities that are specifically build toproduce these isotopes and possibly this type of facility could be built byone or a consortium of companies for that purpose. 602-4

More than 11 years after the original Tri_Party Agreement was signed, themost dangerous wastes (those in the 200 Area) are still in leaking tanks.The Single Shell Tanks are still around and the contents of radioactive andtoxic waste they contain are leaking into the soil. It may already be toolate to avoid the contamination of the Columbia River from the waste thatmay have leaked into the groundwater. All of the other cleanup efforts atHanford are minor in comparison to this task. Yet DOE says they have nosolution at this 602-5

restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

602-3: A May 22, 2000, correspondence from NASA to DOE identified that NASA no longer has a planned requirement for small radioisotope thermoelectric generator (SRTG) power systems. This does not mean that NASA no longer requires DOE to provide the necessary plutonium-238 to support deep space missions. Rather, the suspension of SRTG development efforts was conducted in order to permit reprogramming of funds to support development of a new radioisotope power system based on a Stirling technology generator. This new radioisotope power system, referred to in the subject correspondence, requires 1/3 less plutonium asits fuel source. However, the Stirling technology is developmental and NASA has requested in a September 22, 2000 letter to DOE that the plutonium-238 needed for large RTG may be maintained as a backup. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

602-4: The conclusions presented in the NERAC Subcommittee for Isotope Research and Production Planning Final Report, April 2000 regarding the suitability of FFTF to produce research isotopes in a timely and cost efficient manner were made in the context of the facility producing research isotopes as its sole mission. It would not be cost effective to restart FFTF for the singular purpose of producing small quantities of various research isotopes. However, sustained operation of FFTF for the production of larger quantities of both research and commercial isotopes would be viable if operated in concert with producing plutonium-238 and conducting nuclear energy research and development for civilian applications. As the NERAC report states: "In limited instances, the DOE possesses unique resources, e.g., the high flux of fast neutrons and large irradiation volume in FFTF, that could be utilized for the production of some radioisotopes, but is best suited for commercial interests who might consider its use for isotope production." In recognition of these constraints on its operational feasibility, the NI PEIS only evaluates the

Commentor No. 602: Frank Hammond (Cont'd)

time. I have discussed this situation with twodistinguished (retired) professors of chemical engineering one a formerdepartment chair and the other a former department chair and dean of his engineering school. They claim that this problem can be solved and that DOEhas ignored a solution. I am convinced that DOE does not really want toclean up the Hanford wastes but would rather work on more "exciting"projects such as FFTF restart.

602-5 (Cont'd)

FFTF will only add more radioactive waste to that which we already have. Donot restart FFTF. I could say much more and in more depth but this letterwould turn into a book. Thanks for taking the time to read this.

602-6

602-2

Sincerely,

Frank Hammond
109 E. Roanoke Street
Seattle, WA 98102_3224
206_329_2212

Response to Commentor No. 602

use of FFTF when coupled with the other stated missions. While some existing reactors may possess the potential capability or capacity to support research isotope production, as suggested in the NERAC report, it is unlikely that reliable, increased production of these isotopes to support projected needs could be accomplished without impacting the existing missions of these facilities.

DOE's production and sale of radioisotopes fall into two categories, "commercial" and "research," and both types of isotope production are considered under the proposed actions. Commercial radioisotopes are those that are produced in large, bulk quantities and sold to pharmaceutical companies or distributors, or to equipment or sealed source manufacturers. Examples of commercial radioisotopes produced by DOE include strontium-82 and germanium-68 for medical applications, and iridium-192 and californium-252 for industrial applications. DOE only produces commercial isotopes when there is no U.S. private sector capability or when foreign sources do not have the capacity to meet U.S. needs reliably. In contrast, research radioisotopes are typically produced and sold in small quantities in response to specialty orders from researchers preparing experiments in the field of medicine, with small quantities of these radioisotopes also purchased by industrial researchers. Because small-quantity production of research isotopes is not financially attractive to private-sector producers and is generally not undertaken, DOE attempts to provide all research radioisotopes that are requested, subject to production capability, inventory, and financial constraints. As successful application of a specific research isotope is established, the production and sales of that radioisotope may shift from research to commercial status. In recent years, over 95 percent of DOE's sales of radioisotopes by dollar volume were commercial and 5 percent have been for research. Additional discussion of how DOE's isotope program fits into the overall U.S. and foreign isotope production capabilities was incorporated into Section 1.2.1 of Volume 1.

602-5: See response to 602-2. This NI PEIS addresses wastes produced for each alternative, as well as cumulative impacts related to waste production. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision. Discussion of, or resolution of, concerns related to the remediation of existing waste are beyond the scope of this EIS and do not enter into the decision process.

Commentor No. 602: Frank Hammond (Cont'd)

Response to Commentor No. 602

602-6: As identified in Section 4.3.1.1.13 of the NI PEIS, the restart of FFTF would generate about 63 cubic meters of additional radioactive waste (e.g., solid low-level radioactive waste) annually, in addition to nonhazardous wastes. This would account for about 2,205 cubic meters of additional radioactive waste to be generated over the 35-year period of nuclear infrastructure operations and is small in comparison to wastes generated by other Hanford activities. It is DOE's policy that all wastes be managed (i.e., treated, stored and disposal) in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE orders.

The NI PEIS addressed the environmental impacts due to the treatment storage, and disposal of the waste generated by the proposed actions for all alternatives and alternative options. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision.

Commentor No. 603: Paul Bailey

From: paul bailey[SMTP:USAF85@GTE.NET]
Sent: Tuesday, September 05, 2000 12:14:52 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

My sister died a couple of years ago from breast cancer. I don't know ifany isotope from the FFTF could have helped her or not, but I wish it hadbeen there to try.

I've lived all my life in the Tri_Cities with the exception of the 20 yearsI spent in the Air Force. I was here when the government released all theradiation from Hanford. I may even suffer from those releases because I dohave hypothyroidism. But I don't hold anything against the facility. Itdid what it had to at the time with the knowledge it had. **603-1**

I am concerned about the political aspect of all that is surrounding thestart or non_start of the FFTF. I want common sense and economical factorsconsidered upmost, not rhetoric. We need the isotopes. The people hereshould be deciding, not Olympia, not Portland or Salem. **603-2**

Thank you,

Paul Bailey

Response to Commentor No. 603

603-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

603-2: Selection of facilities and site locations for accomplishing expanded civilian nuclear energy research and development and isotope production missions is not a political decision. DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

Commentor No. 604: Nancy Booth

From: Nancy Booth[SMTP:NBOOTH@IJCOMPANY.COM]
Sent: Tuesday, September 05, 2000 10:36:16 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Cc: globalnet@mindspring.com%internet
Subject: PLU_238
Auto forwarded by a Rule

We do not have a need in this country to produce any more PLU_238.Remember, the earth does not belong to you, it is borrowed from futuregenerations. If you make an attempt to manufacture this, you will have alot of supporters rallying against it, and it will not be acceptable orallowed. We will blow this thing wide open. Why don't you take a vote fromevery American citizen on this issue and then go from there. You are notletting the American people decide on what's best for them. And they have the right to know for one thing, as well as decide on whether or not this isfeasible. I live near the Oakridge plant, and believe me they have enoughproblems, without the PLU_238 problem.. **604-1** **604-2**

I, along with several others urge you to drop this matter at this time, andmove further no more. **604-1**

Response to Commentor No. 604

604-1: DOE notes the commentor's opposition to enhancing its existing nuclear facility infrastructure to support production of plutonium-238 for use in future NASA space exploration missions. Through a Memorandum of Understanding with NASA, DOE provides radioisotope power systems, and the plutonium-238 that fuels them, for space missions that require or would be enhanced by their use. In addition, under the National Space Policy issued by the Office of Science and Technology Policy in September 1996, and consistent with DOE's charter under the Atomic Energy Act, DOE is responsible for maintaining the capability to provide the plutonium-238 needed to support these missions. There are approximately 9 kilograms (19.8 pounds) of plutonium-238 in the U.S. inventory available to support future NASA space missions; no viable alternative to using plutonium-238 to support these missions currently exists. Based on NASA guidance to DOE on the potential use of radioisotope power systems for upcoming space missions, it is anticipated that the existing plutonium-238 inventory will be exhausted by approximately 2005. Without an assured domestic supply of plutonium-238, DOE's ability to support future NASA space exploration missions may be lost. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

604-2: DOE notes the commentor's views and opposition to the production of plutonium-238. In compliance with NEPA and CEQ regulations, DOE provided opportunity to the public to comment on the environmental impact analysis of DOE's proposed alternatives for meeting mission requirements. In preparing the Final NI PEIS, DOE carefully considered comments received from the public. DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

Commentor No. 605: Laura J. Anderson

From: Anderson/Widener[SMTP:LEMENO@OWT.COM]
Sent: Monday, September 04, 2000 11:16:24 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Message of support for FFTF
Auto forwarded by a Rule

Last year, in an effort to refine a diagosis of a pre_cancerous breast condition, my physicianrecommended I have a scan originally designed to diagnose heart disease. (This scan's results were curiously found to show evidence not only of women's heart disease, but also highlightingareas of previously unsuspected active breast cancer growth.)

Specifically, I was given 24.8 mCi of Technetium_99m. As the technician was preparing theinjection, I asked about the source of the isotope. I was told it came from the only functioningsource available to clinics in our area....Canada. And that I was lucky that the plant hadn't beenshut down recently, so the Tri_City supply was adequate at that time. And that there had beenmany times, and would be again, when the test I had been urged to have could not be offered dueto the unavailability of the isotope.

As a second generation Hanford worker, I have been concerned about the continued funding notonly of the programs once so critical to our national defense, but also the development of the benefits of the "peaceful atom" touted since my childhood years in Richland. The matchlessFFTF deserves to continue its long history of versatile technical excellence.

Add this to the long list of messages of support for the continued funding and development ofisotope production at Hanford's Fast Flux Test Facility.

Sincerely,
Laura J. Anderson
2100 S. Larch PRSE
Kennewick WA 99337_4268
(509) 582_3368 or (509) 373_4062

Response to Commentor No. 605

605-1

605-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 606: Steve Strickland

From: Steve Strickland
[SMTP:SESTRICKLAND@MEIERINC.COM]
Sent: Tuesday, September 05, 2000 11:10:00 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF!
Auto forwarded by a Rule

A diamond in the rough! _ Please don't squander this facility, with so much of our is isotopesbeing used abroad we can not afford to eliminate this facility. It needs to be brought on_line. **606-1**

Steve Strickland
sestrickland@meierinc.com

Response to Commentor No. 606

606-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 607: Gary Edmonds

From: Edmonds, Gary E(Z99911)
[SMTP:GEDMONDS@APSC.COM]
Sent: Tuesday, September 05, 2000 11:37:37 AM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF Restart
Auto forwarded by a Rule

I support the restart of the FFTF Reactor Facility at Hanford to meet the national needs for medical isotopes and other peaceful nuclear materials. The FFTF is the most economical, safe, and environmental friendly method available to meet these needs. **607-1**

THANKS.....Gary Edmonds

Response to Commentor No. 607

607-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 608: Monica Floyd

From: Monica Floyd[SMTP:IDEVGROUP@MSN.COM]
Sent: Tuesday, September 05, 2000 1:53:24 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Draft PEIS
Auto forwarded by a Rule

As a citizen from Virginia, it is my belief that the FFTP reactor should beutilizedin order to provide us the important services that it was created to do.One of the major purposes for returning this reactor to operation is to makemedical isotopes to support the growth of this strong anti_cancer medicaltechnology and provide better treatment opportunities to cancer patients.How couldone justify not utilizing this reactor, if only for this purpose (we know that FFTPprovides more than medical isotopes)?

The opposition to this effort claims that there is no need for the DOE toexpend these funds. I think that there is a real need to not waste thisfacility,and to promote the general health of the public at the same time. This isthe largest ofDOE's test and irradiation services reactors and the production of isotopesand support tests are unavailable from other reactors.

I thank you your time to hear my view on this matter. It is an importantissue thatcannot be dismissed quickly. I believe the advantages of starting up thesitemore than outweight the disadvantages. Please take this into consideration.

Sincerely,

Monica Floyd
monicafloyd@idevgroup.com

608-1

Response to Commentor No. 608

608-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 609: Costas Spalaris

From: Costas Spalaris[SMTP:CNS7@PACBELL.NET]
Sent: Tuesday, September 05, 2000 3:05:32 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

As a taxpayer I object to stopping the FFTF and discarding a technology which was developed at Taxpayer expense during the "70 under a HIGH priority DOE Program. The proposed use of FFTF for producing isotopes for Nuclear Medicine and other uses in manufacturing operations is a logical development. Lets have DOE do something positive for once !! **609-1**

Costas Spalaris

Response to Commentor No. 609

609-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 610: The Davison's

From: The Davison's
[SMTP:CW&JDAVISON@URX.COM]
Sent: Tuesday, September 05, 2000 3:18:35 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF For ISOTOPES!
Auto forwarded by a Rule

Gentlemen:

As a taxpayer and a long_time resident of Richland, I would strongly urgeyour wise consideration of FFTF for the production of isotopes. Medicalresearch and space exploration warrant the need. Technology is here__PLEASEUS IT! **610-1**

Response to Commentor No. 610

610-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 611: John Zaring

From: ControlTech JZ
[SMTP:CONTROLJZ@EMAIL.MSN.COM]
Sent: Tuesday, September 05, 2000 2:58:22 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF
Auto forwarded by a Rule

DOE: RESTART THE FFTF. Not to utilize the FFTF would be another slap in the face to thetax payers of this country. It is proven facility that needs to be used for medical isotopes andprobably should be used to produce tritium. Our government and DOE has already made ashambles of our needs for the nuclear industry, do not compound it further by ignoring thisvaluable asset. **611-1**

Regards,

John Zaring
Pres. & CEO
Control Tech

Response to Commentor No. 611

611-1: DOE notes the commentor's support for Alternative 1, Restart FFTF, although it should be pointed out that tritium production is not one of the missions for which it would be restarted.

Commentor No. 612: Irene Mark Buitenkant

From: OHM_NONI@att.net%internet
[SMTP:OHM_NONI@ATT.NET]
Sent: Tuesday, September 05, 2000 5:19:23 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: ?Check_Subject
Auto forwarded by a Rule

To: doe
From: Irene Mark Buitenkant
Re: Hanford

It is impossible for an ordinary citizen to stay on top of the exploits of greedy people pushing for profit at any cost

I thought that Hanford was a dead issue that nuclear energy isn't cheap that no one planned on getting rid of its poisons and we could concentrate on the next problem Greedy people count on short memories of uninformed people and pursue every few years fluoridated water spraying for the gypsy moth and whatever else is changing the clean water and air that animals have evolved to need for their health. All these changes contribute to the scourge of cancer. Instead of eliminating these causes of cancer other greedy people ignoring causes make money searching for cures. No Hanford, no. **612-1**

Response to Commentor No. 612

612-1: DOE notes the commentor's opposition to activities at Hanford.

Commentor No. 613: Marshall W. Cook

From: MARSHWAYNE@aol.com%internet
[SMTP:MARSHWAYNE@AOL.COM]
Sent: Tuesday, September 05, 2000 6:10:08 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: FFTF Restart Makes Sense!
Auto forwarded by a Rule

I get tired and distraught by legislation that is based on sentimentality and/or fear mongering. It is time for those in charge to stand up for those things that obviously will be of benefit to our society. The restart of the FFTF certainly falls into the category of items items maligned by the ignorance of mob rule.

The knee_jerk reactions of the antinuclear crowd is reminiscent of such things as race hatred (recent) and witch hunting (ca. 1600) now hopefully overcome. It would seem that it is human to look for and embrace ideas on which to blame our ills, regardless of the truth or logic involved, and the complete absense of proof of responsibility. **613-1**

Consider the facts:

Safety: There has never been a serious harmful event connected with the operation and maintenance of the FFTF __ or any other Fast Flux Reactor. **613-2**

Recall: The philosophy of the FFTF was basically a machine that produces more fuel than it burns. President Carter quashed the building of a prototype facility out of fear that was engendered by advisors he had gathered around him. However, France and Japan have used Our technology to build and operate fast flux reactors that safely and economically have produced power for over a decade. **613-3**

Response to Commentor No. 613

613-1: DOE notes the commentor's views.

613-2: Comment noted.

613-3: DOE notes the commentor's views. Chapter 4 , Volume 1 of the NI PEIS provides an estimate of waste generation and potential human health impacts associated with each of the alternatives proposed for the production of medical, industrial and research isotopes. Any additional wastes generated in support of these missions would be managed in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws, regulations, and appropriate DOE orders.

613-4: DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

613-5: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Now: We do not argue for the obvious long term benefits of power production (whose time will most certainly arrive), but for the solution of an immediate humanitarian cause __ that of producing isotopes for medical purposes.

PLEASE: Do your homework. Try to understand the need for isotopes, observe the outstanding safety record of the FFTF and its ilk (a thousandfold safer than fossil fuel energy production) and recognize the very minimal production of waste material.

613-3 (Cont'd)

WHEN: Are we going to stop making bad decisions based on unfounded hysteria?

613-4

WE NEED THIS REACTOR. WE WANT IT TO OPERATE RIGHT HERE IN OUR BACKYARD. THE PEOPLE OF THIS NATION NEED WHAT IT CAN PRODUCE.

613-5

Sincerely,

Marshall W. Cook, PhD

Commentor No. 614: Ed S. Ruff

From: Edward_S_Ruff@rl.gov%internet
[SMTP:EDWARD_S_RUFF@RL.GOV]
Sent: Tuesday, September 05, 2000 6:53:30 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Cc: Bryan_D_Coles@rl.gov%internet;
W_F_Jr_Bill_Brehm@rl.gov%internet
Subject: Comments on FFTF Restart
Auto forwarded by a Rule

Please see attached paper by Dr. William E. Schenewerk of ParsonsEngineering, Pasadena, Calif. Dr. Schenewerk discusses global population growth and energy demand,atmospheric CO2 levels and global warming.

He cites the need for strong deployment of nuclear power to prevent globalwarming due to greenhouse effect.

In his scenario, breeder reactor technology plays a central role in providing energy for the future.

Hence, Dr. Schenewerk believes that FFTF should be retained to test anddevelope fuels for advanced breeder reactors. **614-1**

<<atomic power bill schenewerk.txt>> <<World Energy Production.xls>>

Thanks,

Ed S. Ruff, Sr. Design Engineer
Fluor Federal Services, Hanford Spent Nuclear Fuel Project
MCO and Fuel Basket Fabrication
PO Box 1050, Mail Stop L6_58
Richland, WA 99352

509_376_2140 Phone
509_372_0638 FAX
edward_s_ruff@rl.gov

Response to Commentor No. 614

614-1: DOE notes the commentor's support for Alternative 1, Restart FFTF. However, the purpose of this NI PEIS is to evaluate the environmental impacts of reasonable alternatives to fulfill the requirements of DOE's missions, which include the production of medical and industrial isotopes, the production of plutonium-238, and nuclear research and development and not the testing and development of fuels for advanced breeder reactors.

Commentor No. 615: Loren Wieland

From: LorenLW@aol.com%internet
[SMTP:LORENLW@AOL.COM]
Sent: Tuesday, September 05, 2000 8:53:28 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: replace plu_238_fueled radioisotope power systems
Auto forwarded by a Rule

Dear Colette E. Brown, U.S. Department of Energy,

I think it has been demonstrated well enough that nuclear energy is a very dangerous toy; let's not make any more of it. My reasons for stopping the development of plu_238 are as follows: **615-1**

1) NASA is not doing enough to develop alternative (solar) power sourcesfor space missions. European Space Agency (ESA) has now developedhigh_efficiency solar cells for deep space missions.

2) The plutonium production/fabrication process for space nuclear powermissions has recently led to several worker contamination accidents. Anexpansion of production will only worsen this problem. **615-2**

3) Expanding the number of launches of nuclear powered space devices fromCape Canaveral on rockets with 10% failure rates will only increase thepossibility of a deadly mishap. **615-1**

4) The massive cost of expanded production of plu_238 can not be justifiedat a time when DoE admits it needs over $300 billion to clean_up existingproblems at DoE facilities. **615-3**

5) The military is promoting the use of nuclear power in space for space_based weapons technology. Using nuclear power for space war will havesevere environmental implications for life on Earth. **615-4**

Thank you,

Loren Wieland, BS MA
19021 Acorn Road, Fort Myers, FL., 33912

Response to Commentor No. 615

615-1: DOE notes the commentor's concern for NASA's use of nuclear materials for space missions and interest in the development of alternative energy sources for space missions, although issues such as NASA research priorities are beyond the scope of this NI PEIS. Through a Memorandum of Understanding with NASA, DOE provides radioisotope power systems, and the plutonium-238 that fuels them, for space missions that require or would be enhanced by their use. These radioisotope power systems have been used for almost 40 years, and have repeatedly demonstrated their performance, safety, and reliability in various NASA space missions. NASA establishes the need and requirements for space missions and undergoes a thorough NEPA evaluation for each launch. None of the missions stated in the NI PEIS are defense- or weapons-related.

615-2: Plutonium-238 processing facilities can be safely operated to support the nuclear infrastructure missions described in Section 1.2 of Volume 1. Sections 4.2-4.6 of Volume 1 provide the results of the evaluation of potential health impacts that would be expected to result from plutonium-238 processing, including normal operations and a spectrum of accidents that included severe accidents. The environmental analysis showed that the radiological and nonradiological risks associated with plutonium-238 processing would be small.

615-3: DOE notes the commentor's opinion and concern about funding available for cleanup at DOE facilities.

615-4: DOE notes the commentor's concern for the use of nuclear power in space-based weapons. None of the missions stated in the NI PEIS are defense- or weapons-related.

Commentor No. 616: Robert J. Rohnet

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

P E I S

Draft PEIS Comment Form

You have all the objective evidence you need. Now is time to do the RIGHT thing. You have the responsibility to provide for the people of the United States a reliable, diverse and cost effective supply of medical isotopes. People are dying. How long must they suffer with cancer when the capability to produce life saving medical isotopes already exists in the U.S. The FFTF has the capacity, versatility and proven capability to full fill all the requirements you need.

I agree that the DOE has performed poorly at the Hanford cleanup mission. The FFTF is the shining star and one of a very few examples of the very best that DOE can do. Don't throw that away. It is built and paid for and restarting it would cost less than any other alternative. 616-1

Do not be swayed by the very vocal but minority group of activists that spread disinformation and generate fear in people who's only fault is not being properly educated on the facts.

You know what the facts are. Please have the moral courage to act upon them. I support restart of the FFTF. I also support providing for the US people. Thank you

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Robert J Rohnet

Organization:

(Home)/Organization Address (circle one): 625 Symphony Loop

City: Richland State: WA Zip Code: 99352

Telephone (optional): 509-371-9505

E-mail (optional):

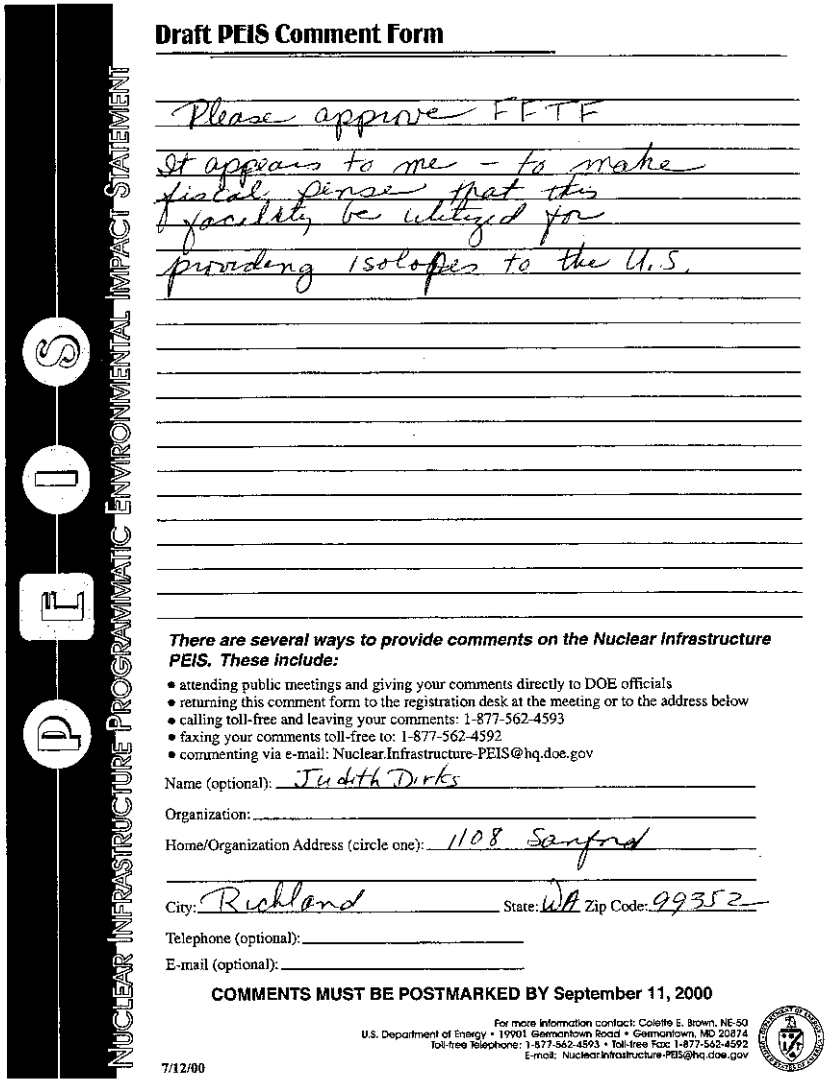
COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 616

616-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

Please approve FFTF
It appears to me - to make
fiscally sense that this
facility be utilized for
providing isotopes to the U.S.

617-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Judith Dirks

Organization:

Home/Organization Address (circle one): 1108 Sanford

City: Richland State: WA Zip Code: 99352

Telephone (optional):

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

617-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 618: Glen Davis

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

We need FFTF, Please restart it!
Shutting it ~~down~~ down is a very unwise use of time, funds and recources.
Please recognize its value and use it!

618-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Glen Davis
Organization: Fluor Hanford
(Home) Organization Address (circle one): 146 Riverwood St
City: Richland State: WA Zip Code: 99352
Telephone (optional): (509) 627-6571
E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 618

618-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 619: Benton County Board of County Commissioners (Max E. Benitz, Jr., Chairman; Leo Bowman; Claude Oliver)

Board of County Commissioners
BENTON COUNTY
P.O. Box 190 • Prosser, WA 99350-0190
Phone (509) 786-5600 or (509) 736-3080
Fax (509) 786-5625

Leo Bowman
DISTRICT 1
Max Benitz, Jr.
DISTRICT 2
Claude L. Oliver
DISTRICT 3

31 August 2000

Colette E. Brown, Document Manager
Office of Space and Defense Power Systems (NE-50)
Office of Nuclear Energy, Science, and Technology
United States Department of Energy
19901 Germantown Road
Germantown, Maryland 20874

Re: Support for restart of the Fast Flux Test Facility

Dear Ms. Brown,

Benton County would like to restate its long-standing support for the restart and continued operation of the Department of Energy's Fast Flux Test Facility (FFTF) at the Hanford Site.

With the multi-billion dollar facility, its support and service infrastructure, a uniquely-skilled labor force, and community support already in place, restart of the FFTF is the only reasonable and prudent use of taxpayer dollars in pursuit of the missions stated by the DOE in the draft *Nuclear Infrastructure Programmatic Environmental Impact Statement* of July 2000.

Construction costs for a new facility comparable to the FFTF would be prohibitive, and such an alternative is not even under consideration. Therefore, only operation of the FFTF can provide the DOE and the Nation with the broadest range of research, development, and production capabilities, including but not limited to:

- Medical and industrial isotope production;
- Plutonium^{238} isotope production for NASA civilian space missions (US Pu^{238} supplies are currently purchased from Russia);
- Fuels, assemblies, and flux research for civilian nuclear energy applications;
- Advanced reactor, materials, and waste transmutation research and development;
- Commercial light water reactor lifetime extension research.

Operation of the Fast Flux Test Facility could provide 500-1000 family-wage jobs for the Tri-Cities area in the immediate term, with greater potential opportunities in the future. This high-level employment boost would be beneficial to the economic stability of our community as other Hanford-related employment continues to decline. Furthermore, potential support and spin-off industries would lend favorably to the long-term viability and diversification of our region's economy.

Contrary to the fears of underinformed detractors, renewed operation of the FFTF *would not*.....

- generate any new quantities of high-level waste;
- support any military or weapons production programs;
- detract from or divert funding from existing Hanford Site remediation programs – the budgets and appropriations are completely separate.

619-1

Response to Commentor No. 619

619-1: DOE notes the commentors' support for Alternative 1, Restart FFTF and opposition to the remaining action alternatives.

Commentor No. 619: Benton County Board of County Commissioners (Max E. Benitz, Jr., Chairman; Leo Bowman; Claude Oliver) (Cont'd)

Based on the facility's availability, capacity for multi-product missions, demonstrated technology, cost effectiveness, minimal environmental impact, and excellent safety record, it is clear that restart of the FFTF is the only logical choice for the DOE to meet its stated objectives.

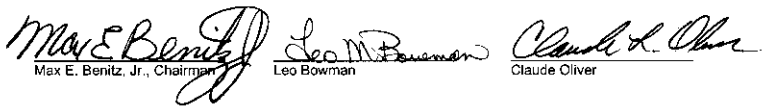
The Fast Flux Test Facility and its necessary support infrastructure are already in place and have a safe, efficient, and effective operating record (1980-1992). Restart costs for this facility are minimal when compared to construction of a new facility. Moreover, alternatives calling for construction of new "accelerator" facilities, or the use of other existing facilities will not avail the DOE of the full range of research and production capabilities afforded by the FFTF. It is pointless and imprudent to mothball or decommission such an underutilized national asset and investment of pubilc capital when so many community, scientific, and industrial benefits can be derived from its use.

We believe that when the DOE carefully weighs its alternatives, restart of the FFTF will be the obvious choice for meeting the Department's research, development, and production objectives in the 21st Century. Thank you for the opportunity to comment on this matter.

619-1 (Cont'd)

Sincerely,

BOARD OF COMMISSIONERS,
BENTON COUNTY, WASHINGTON



Max E. Benitz, Jr., Chairman | Leo Bowman | Claude Oliver

cc: US Senator, Slade Gorton (WA)
US Senator, Patty Murray (WA)
US Representative, Doc Hastings (WA – Fourth District)
Governor of Washington, Gary Locke
Gerald Pollet, Heart of America Northwest
Tri-Cities Economic Development Council

Response to Commentor No. 619

Commentor No. 620: Robert G. Stagman

Robert G. Stagman, M.D.
7401 92nd Place Southeast
Mercer Island, Washington 98040
Phone 206-232-4867
E-mail zevdog@zipcon.com

September 1, 2000

Ms. Colette Brown
U.S. Department of Energy
19901 Germantown Road
Germantown, Maryland 20874

Dear Ms. Brown:

Plans to restart the Fast Flux Test Facility at Hanford, Washington for the production of tritium to enhance the destructive power of nuclear bombs have disastrous implications and are, frankly, insane, for the following reasons: **620-1**

1) The radioactive contamination at Hanford, now documented in ground water heading for the Columbia River, is an ecologic nightmare with profound health implications for countless citizens of the Pacific Northwest. As a head and neck cancer surgeon having treated many radiation induced cancers and myself a survivor of a radiation induced thyroid tumor I can assure you that the public health implications of this contamination are potentially catastrophic, and to inflict this risk on our citizenry is unconscionable. **620-2**

2) Restarting the FFTF will add enormously to the radioactive load at Hanford due both to the end products and the incoming load. The urgent necessity is to decontaminate Hanford as quickly as possible, not increase the contamination. **620-3**

3) Costs of keeping the FFTF at the ready plus its operation will inevitably lead to a depletion of desperately needed clean-up funds. The first priority at Hanford, using all available funds, must be clean-up. Diversion of funds to produce more radioactive waste is outrageous. **620-4**

4) Committing the FFTF to a mission for which it was not designed is widely recognized to pose unacceptable risks of a meltdown with devastating release of radioactive material. **620-5**

5) More tritium is not needed by our military. Continuing disarmament agreements and recycling existing tritium will provide more than sufficient material for over 30 years. In addition, higher killing power for our bombs is hardly necessary. **620-1**

6) Production of medical radioisotopes can hardly justify the continuing deterioration of perhaps the most contaminated site on the planet. These isotopes are readily available from other sources. **620-6**

I urge you to come down hard on the side of shutting down the FFTF and keeping intact the milestones for cleaning up and closing down Hanford. **620-7**

Thank you for your help in this vitally important issue for the people of the Pacific Northwest. **620-2**

Sincerely,

Robert Stagman, M.D.

Response to Commentor No. 620

620-1: DOE notes the commentor's views. However, the purpose of the NI PEIS is to evaluate the environmental impacts of a range of reasonable alternatives to maintaining and enhancing DOE's existing nuclear facility infrastructure to support production of isotopes for medical, research, and industrial uses; production of plutonium-238 for use in future NASA space exploration missions; and U.S. nuclear research and development needs for civilian application. No component of the proposed action is for the purpose of producing tritium, nor is it for the purpose of supporting any other defense or weapons-related mission.

620-2: DOE notes the commentor's concerns regarding the migration of contaminants to the Columbia River. FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

620-3: FFTF restart would not impact the schedule or available funding for existing cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram funds designated for Hanford cleanup, regardless of the alternative(s) selected. The NI PEIS addressed the environmental impacts due to the treatment, storage, and disposal of the waste generated by the proposed actions for all alternatives and alternative options. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision. The waste generated from any of the proposed alternatives in the NI PEIS will be managed (i.e., treated, stored and disposed) in a

Commentor No. 620: Robert G. Stagman (Cont'd)

Response to Commentor No. 620

safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE Orders. As discussed in Section 4.3.1.1.13 of the PEIS, the waste generated as a result of FFTF operations is very small compared to wastes generated by other Hanford activities.

620-4: See response to 620-2. The U.S. Congress funds the Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM), and the FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

620-5: FFTF can be safely operated to support the nuclear infrastructure missions described in Section 1.2 of Volume 1. Section 4.3 of Volume 1 provides the results of the evaluation of potential health impacts that would be expected to result from implementation of Alternative 1, including normal operations and a spectrum of accidents that included severe accidents. The environmental analysis showed that radiological and nonradiological risks associated with restarting FFTF would be small.

620-6: The United States currently purchases approximately 90 percent of its medical radioisotopes from foreign producers, most notably Canada. However, Canada only supplies a limited number of economically attractive commercial isotopes (primarily molybdenum-99), and it does not supply research isotopes or the diverse array of medical and industrial isotopes considered in the NI PEIS. As such, reliance on Canadian sources of isotopes to satisfy projected U.S. isotope needs would not meet DOE's mission requirements.

Although other manufacturers produce medical isotopes, DOE remains the key provider for a large number of isotopes that are used in relatively small quantities by individual researchers at universities and hospitals. Section 1.2.1 of Volume 1 has been revised to clarify DOE's isotope production role and other producers' capabilities to fulfill U.S. isotope needs.

Potential environmental, health, and safety impacts associated with the proposed action are relatively low, and are discussed in detail in Chapter 4 of Volume 1 and associated appendixes in the Final NI PEIS.

620-7: DOE notes the commentor's support for Alternative 5, Permanently Deactivate FFTF.

Commentor No. 621: Charlie Bryan

September 1, 2000

Ms. Colette E. Brown
NE-50-Office of Nuclear Science, Energy and Technology
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874
Attn: NE PEIS

Dear Ms. Brown:
I am writing to urge the restart of the FFTF reactor in Richland Washington for the purpose of generating medical isotopes. 621-1
I have lived in the Richland area for about 50 years and have not suffered any adverse effects from the Hanford Energy works. I am concerned about the cleanup efforts staying on track. 621-2
I am convinced that the FFTF reactor will generate a minimal amount of waste, but please make plans for its disposal prior to startup. 621-3
Thank you for your time and attention.

Charlie Bryan

Charlie Bryan
220 Goethals Drive
Richland, WA 99352

Response to Commentor No. 621

621-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

621-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

621-3: Management of wastes that would be generated under implementation of Alternative 1, Restart FFTF, is discussed in Section 4.3 of Volume 1 (e.g., see Section 4.3.1.1.13). Section 4.3.1.1.13 was revised to clarify that, the Hanford waste management infrastructure is analyzed in this NI PEIS for the management of waste resulting from FFTF restart and operation. This analysis is consistent with policy and DOE Order 435.1, that DOE radioactive waste shall be treated, stored, and in the case of low-level waste, disposed of at the site where the waste is generated, if practical; or at another DOE facility. However, if DOE determines that use of the Hanford waste management infrastructure or other DOE sites is not practical or cost effective, DOE may issue an exemption under DOE Order 435.1 for the use of non-DOE facilities (i.e., commercial facilities) to store, treat, and dispose of such waste generated from the restart and operation of FFTF. In addition, Section 4.3.3.1.13 and 4.4.3.1.13 also address the potential impacts associated with the waste generated from the target fabrication and processing in FMEF and how this waste would be managed at the site.

Commentor No. 622: Grant County Board of County Commissioners (Deborah Moore, Chairman; Leroy Allison; Tim Snead)

GRANT COUNTY
OFFICE OF
BOARD OF COUNTY COMMISSIONERS
POST OFFICE BOX 37
EPHRATA, WASHINGTON 98823
(509) 754-2011

August 31, 2000

Colette E. Brown, Document Manager
Office of Space and Defense Power Systems (NE-50)
Office of Nuclear Energy, Science, and Technology
United States Department of Energy
19901 Germantown Road
Germantown, Maryland 20874

RE: Support for restart of the Fast Flux Test Facility

Dear Ms. Brown:

Grant County would like to make clear its unwavering support for restart of the Department of Energy's Fast Flux Test Facility (FFTF) at the Hanford Site.

With the multi-billion dollar facility and support infrastructure already in place, restart of the FFTF is the only reasonable, fair, and prudent use of taxpayer dollars in pursuit of the missions stated by the DOE in the draft Nuclear Infrastructure Programmatic Environmental Impact Statement of July 2000.

Based on the facility's availability, capacity for multi-product missions, demonstrated technology, cost effectiveness, minimal environmental impact, existing infrastructure and skilled labor force, and excellent safety record, it is clear that restart of the FFTF is the only logical choice for the DOE to meet its stated objectives.

There is overwhelming support in Grant County and throughout the Mid-Columbia region for the reuse of this incomparable national asset. We are excited about both the economic benefits restart could bring to our area, and about the contributions our community can make toward meeting national and global needs in isotope research and production.

We believe that when the DOE carefully weighs its alternatives, restart of the FFTF will be the obvious choice for meeting the Department's research, development, and production objectives in the 21st Century. Thank you for the opportunity to comment on this matter.

Sincerely,

Deborah Moore, Chairman

Leroy Q. Allison

Tim Snead

DKM/pg

TIM SNEAD
DISTRICT 1
10999 STRATFORD RD
MOSES LAKE, WA 98837
PHONE 765 9548

DEBORAH MOORE
DISTRICT 3
1805 DODSON RD. N
YOSES LAKE, WA 98837
PHONE 787 3169

LEROY ALLISON
DISTRICT 2
20268 RD. 1 SE
WARDEN, WA 98857
PHONE 349 2513

622-1

Response to Commentor No. 622

622-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 623: Duane K. Holsten

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

I lost my father 23 years ago to bone cancer which had metastasized from prostate cancer. He was 66 years old at the time and in good health otherwise. His father had also suffered from prostate cancer a generation earlier.

If isotope therapy had been available to my father when the prostate cancer was first detected, he would have been alive today to enjoy his retirement with my mother. Instead, our family has a hole that can never be filled. All we can do is refresh our memory of him by recounting family traditions. But, we can also hope that other families, including my progeny, are spared these devastating events by taking advantage of technology.

Because of this medical history and concern for my health in the future, I have even stronger impetus to suggest that the FFTF is the answer to cost-effective medical isotope production for the U.S. I have worked at the FFTF as an engineer from its construction days. I am proud of the facility and the integrity and knowledge of the people that operate and maintain it. I recognize that the DOE will be barraged with unfounded and ill-informed objections to its operation. I must trust the Secretary to finally base his FFTF restart decision on technical and fiscal merits and ignore the ignorant rhetoric.

I strongly support the use of the FFTF for isotope production and other needs for which it is uniquely qualified.

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Mr. Duane K. Holsten
Organization:
1751 Bismark Street
Richland, WA 99352

Home/Organization Address (circle one):

City: State: Zip Code:

Telephone (optional): 509 946 1928

E-mail (optional): holsten@televar.com

COMMENTS MUST BE POSTMARKED BY September 11, 2000

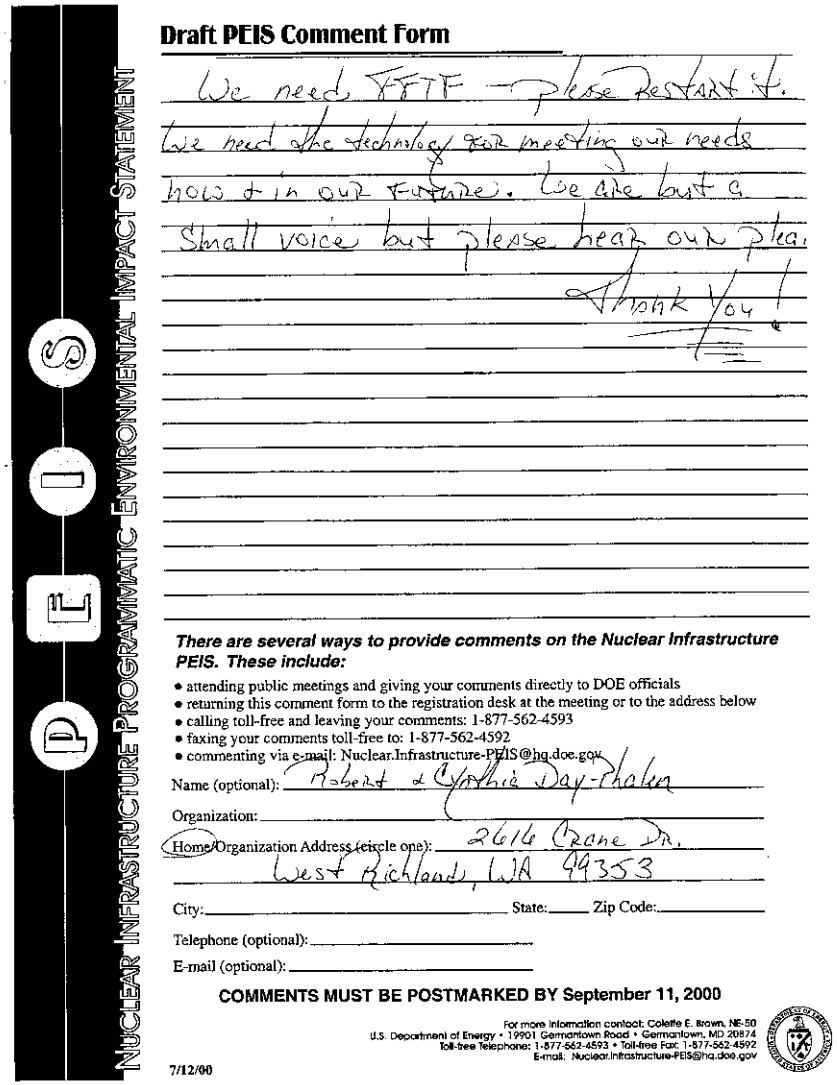
For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

623-1

Response to Commentor No. 623

623-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

We need FFTF - please Restart it.
We need the technology for meeting our needs
now & in our future. We are but a
small voice but please hear our plea.

Thank You

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

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- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Robert & Cynthia Day-Phalen

Organization:

Home/Organization Address (circle one): 2616 Crane Dr.
West Richland, WA 99353

City: State: Zip Code:

Telephone (optional):

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

624-1

624-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 625: Frieda S. Walworth

2466 Kingfisher Ln.
Kelso WA 98626
Sept. 1, 2000

Colette Brown
Office of Space and Defense Power Systems (NE-50)
U.S. Department of Energy
19901 Germantown Road
Germantown, Maryland 20874

Dear Ms Brown,

I am still enraged after all these years that the Department of Energy has neither cleaned up Hanford of radioactive waste nor shut down FFTF, so that no more nuclear waste will be endangering the Columbia River and all of us here in Washington and Oregon. 625-1

The Hanford Public Interest Network of seven organizations has revealed the USDOE Hanford officials have covered up Plutonium releases twice in three years. We must get that reactor shut down for all time. I understand that if needed, there are cheaper + safer ways to obtain this dangerous material. 625-2

Plus this quote from the Subcommittee of Research and Planning - "The FFTF will not be a viable source of ~~research~~ radioisotopes." 625-3

PLEASE SHUT IT DOWN!" 625-2

Sincerely,

Frieda S. Walworth

Response to Commentor No. 625

625-1: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

DOE did not cover up release information on the two referenced events (assumed to be PFP event and the year 2000 wildfires at Hanford). The very low levels involved took several days to quantify. DOE reported information as it became available.

625-2: DOE notes the commentor's support for Alternative 5, Permanently Deactivate FFTF.

625-3: The conclusions presented in the NERAC Subcommittee for Isotope Research and Production Planning Final Report, April 2000 regarding the suitability of FFTF to produce research isotopes in a timely and cost efficient manner were made in the context of the facility producing research isotopes as its sole mission. It would not be cost effective to restart FFTF for the singular purpose of producing small quantities of various research isotopes. However, sustained operation of FFTF for the production of larger quantities of both research and commercial isotopes would be viable if operated in concert with producing plutonium-238 and conducting nuclear energy research and development for civilian applications. As the NERAC report states: "In limited instances, the DOE possesses unique resources, e.g., the high flux of fast neutrons and large irradiation volume in FFTF, that could be utilized for the production

of some radioisotopes, but is best suited for commercial interests who might consider its use for isotope production." In recognition of these constraints on its operational feasibility, the NI PEIS only evaluates the use of FFTF when coupled with the other missions. While some existing reactors may possess the potential capability or capacity to support research isotope production, as suggested in the NERAC report, it is unlikely that reliable, increased production of these isotopes to support projected needs could be accomplished without impacting the existing missions of these facilities.

The United States currently purchases approximately 90 percent of its medical radioisotopes from foreign producers, most notably Canada. However, Canada only supplies a limited number of economically attractive commercial isotopes (primarily molybdenum-99), and it does not supply research isotopes or the diverse array of medical and industrial isotopes considered in the NI PEIS. As such, reliance on Canadian sources of isotopes to satisfy projected U.S. isotope needs would not meet DOE's mission requirements. Section 1.2.1 of Volume 1 has been revised to clarify DOE's isotope production role and other producers' capabilities to fulfill U.S. isotope needs.

DOE could purchase plutonium-238 from Russia; however, for supply reliability reasons and concern of nuclear nonproliferation, DOE's preference is to establish a domestic plutonium-238 production capability. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

Commentor No. 626: Fred Miller

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

The draft PEIS is woefully inadequate. It ignores numerous issues and key information. It ignores nuclear proliferation issues entirely. It ignores the possibility of a shipboard fire involving plutonium release into a port city, which could render that city uninhabitable. It ignores the possibility of using Pu-238 from DoD sources, such as RTGs from warheads dismantled under the START treaty. It ignores an assessment of the need for Pu-238 or of the suitability of FFTF to produce medical isotopes. It ignores the lack of a suitable geologic repository for spent fuel and DOE's failure to create such a repository by its own deadline. This makes the "temporary" storage facility a permanent repository, de facto. It ignores Hanford's, and DOE's, history of covering up problems, lying to the public, misappropriating cleanup and safety funds and persecuting whistleblowers. In effect this history makes all safety and environmental and cost estimates unreliable. It ignores the cost of, and risks associated with, the ultimate decommissioning of the reactor, except in the case of not reopening the reactor. It ignores the effect of competition for cleanup dollars and cleanup resources when FFTF is operating and when it is being cleaned up. It is consistently biased in favor of restarting FFTF. It is consistently biased in favor of production, it is absurdly optimistic about DOE performance.

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and FMEF

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Fred Miller

Organization: Peace Action of WA

Home/Organization Address (circle one): 5828 Roosevelt Way NE

City: Seattle State: WA Zip Code: 98105

Telephone (optional): 206 527-8050

E-mail (optional): 206 527-9985

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 626

626-1: The NI PEIS is adequate. This NI PEIS has been prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and the related CEQ and DOE implementation regulations (40 CFR Parts 1500 through 1508 and 10 CFR Part 1021), respectively. DOE prepared a separate Nuclear Infrastructure Nonproliferation Impact Assessment to provide additional pertinent information to the Secretary of Energy so that he may make an informed decision with respect to the alternatives presented in the NI PEIS. Pursuant to CEQ regulations (40 CFR 1505.1.e)), agencies are encouraged to make ancillary decision documents available to the public before a decision is made. DOE mailed this document to about 730 interested parties on September 8, 2000. The report was made available immediately upon release on the NE web site http://www.nuclear.gov) and in the public reading rooms. DOE has also provided a summary of the Nuclear Infrastructure Nonproliferation Impact Assessment in Appendix Q in the Final NI PEIS.

626-2: Alternative 1 does postulate that DOE might decide at some point to import mixed oxide fuel from Europe to fuel FFTF. At this time, however DOE has not proposed to import this fuel through any specific port. If DOE ultimately decides to import fuel from Europe, it would perform a separate NEPA analysis to select a port. This review would address all relevant potential impacts of overseas and inland water transportation, shipboard fires, package handling, land transportation, as well as safeguards and security associated with the import of SNR-300 mixed oxide fuel through a variety of specific candidate ports on the east and west coasts. It would consider all public comments, including local resolutions, concerning the desirability of bringing mixed oxide fuel into the proposed alternative ports.

In the event that DOE decides to enhance its nuclear infrastructure, it would not expose any population to high, unacceptable risks under any alternative. Any transportation activities that would be conducted by DOE would comply with U.S. Nuclear Regulatory Commission and U.S. Department of Transportation regulations. Associated transatlantic shipment would comply with International Atomic Energy Agency requirements. In Section J.6.2, DOE reviewed the potential maximum impacts from the marine transportation of mixed oxide fuel from Europe to a representative military port, Charleston, South Carolina, and overland transportation to Hanford. Also in that section, a bounding analysis demonstrates that the maximum potential radiological risks to the

surrounding public from mixed oxide fuel shipments would be extremely small (e.g., less than 1 chance in a trillion for a latent cancer fatality per shipment from severe accidents at docks and in channels and less than 1 chance in 50 billion for a latent cancer fatality per shipment from overland highway accidents).

DOE has sought independent analysis of trends in the use of medical isotopes, and of its continuing role in this sector, consistent with its mandates under the Atomic Energy Act. In doing so, it established two expert bodies, the Expert Panel and the NERAC. In 1998, the Expert Panel, which convened to forecast future demand for medical isotopes, estimated that the expected growth rate of medical isotope use during the next 20 years would range from 7 to 14 percent per year for therapeutic applications, and 7 to 16 percent per year for diagnostic applications. These findings were later reviewed and endorsed by NERAC, established in 1999 to provide DOE with expert, objective advice regarding the future form of its isotope research and production activities. DOE has adopted these growth projections as a planning tool for evaluating the potential capability of the existing nuclear facility infrastructure to meet programmatic requirements. In the period since the initial estimates were made, the actual rate of growth of medical isotope use is consistent with the Expert Panel findings. Section 1.2.1 was revised to incorporate this information and to clarify DOE's role in fulfilling the U.S. research and commercial isotope production needs.

The conclusions presented in the NERAC Subcommittee for Isotope Research and Production Planning Final Report, April 2000 regarding the suitability of FFTF to produce research isotopes in a timely and cost efficient manner were made in the context of the facility producing research isotopes as its sole mission. It would not be cost effective to restart FFTF for the singular purpose of producing small quantities of various research isotopes. However, sustained operation of FFTF for the production of larger quantities of both research and commercial isotopes would be viable if operated in concert with producing plutonium-238 and conducting nuclear energy research and development for civilian applications. As the NERAC report states: "In limited instances, the DOE possesses unique resources, e.g., the high flux of fast neutrons and large irradiation volume in FFTF, that could be utilized for the production of some radioisotopes, but is best suited for commercial interests who

Commentor No. 626: Fred Miller (Cont'd)

Response to Commentor No. 626

might consider its use for isotope production." In recognition of these constraints on its operational feasibility, the NI PEIS only evaluates the use of FFTF when coupled with the other stated missions. While some existing reactors may possess the potential capability or capacity to support research isotope production, as suggested in the NERAC report, it is unlikely that reliable, increased production of these isotopes to support projected needs could be accomplished without impacting the existing missions of these facilities.

DOE has taken the Expert Panel and NERAC report recommendations under consideration in developing the range of alternatives evaluated in the NI PEIS. These reports were made available to the public at the NI PEIS public information centers and on the Internet at www.nuclear.gov.

626-3: Small plutonium-238 fueled radioisotope thermoelectric generations (RTGs) are used to power electronic systems on some strategic weapons. Some of the strategic weapons have become surplus due to strategic arms reductions. Although the exact configuration of these RTGs is classified, the amount of plutonium-238 in each unit is relatively small and the assay of the plutonium-238 is unacceptable (too low) for use in RTGs advanced radioisotope power systems, or radioisotope heater units for NASA spacecraft. Therefore, it is not a viable source for consideration in the NI PEIS.

626-4: A May 22, 2000, correspondence from NASA to DOE identified that NASA no longer has a planned requirement for small radioisotope thermoelectric generator (SRTG) power systems. This does not mean that NASA no longer requires DOE to provide the necessary plutonium-238 to support deep space missions. Rather, the suspension of SRTG development efforts was conducted in order to permit reprogramming of funds to support development of a new radioisotope power system based on a Stirling technology generator. This new radioisotope power system, referred to in the subject correspondence, requires 1/3 less plutonium as its fuel source. However, the Stirling technology is developmental and NASA has requested in a September 22, 2000, letter to DOE that the plutonium-238 needed for large RTG may be maintained as a backup. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

Commentor No. 626: Fred Miller (Cont'd)

Response to Commentor No. 626

The conclusions presented in the NERAC Subcommittee for Isotope Research and Production Planning Final Report, April 2000 regarding the suitability of FFTF to produce research isotopes in a timely and cost efficient manner were made in the context of the facility producing research isotopes as its sole mission. It would not be cost effective to restart FFTF for the singular purpose of producing small quantities of various research isotopes. However, sustained operation of FFTF for the production of larger quantities of both research and commercial isotopes would be viable if operated in concert with producing plutonium-238 and conducting nuclear energy research and development for civilian applications. As the NERAC report states: "In limited instances, the DOE possesses unique resources, e.g., the high flux of fast neutrons and large irradiation volume in FFTF, that could be utilized for the production of some radioisotopes, but is best suited for commercial interests who might consider its use for isotope production." In recognition of these constraints on its operational feasibility, the NI PEIS only evaluates the use of FFTF when coupled with the other missions. While some existing reactors may possess the potential capability or capacity to support research isotope production, as suggested in the NERAC report, it is unlikely that reliable, increased production of these isotopes to support projected needs could be accomplished without impacting the existing missions of these facilities.

626-5: The NI PEIS assumes, for the purposes of analysis, that Yucca Mountain Nevada, would be the final disposal site for DOE's high-level radioactive waste and spent nuclear fuel. As directed by the U.S. Congress through the Nuclear Waste Policy Act, as amended, Yucca Mountain is the only candidate site currently being characterized as a potential geologic repository for high-level radioactive waste and spent nuclear fuel. DOE has prepared a separate EIS, "Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Radioactive Waste at Yucca Mountain, Nye County, Nevada" (DOE/EIS-0250D, July 1999), which analyzes the environmental impacts from construction, operation and monitoring, related transportation, and eventual closure of a potential geological repository. Spent nuclear fuel would be stored above ground in an interim storage facility at Hanford until the availability of a geologic repository.

626-6: Comment noted.

Commentor No. 626: Fred Miller (Cont'd)

Response to Commentor No. 626

626-7: Decommissioning FFTF, including associated costs and cleanup, is not within the scope of the NI PEIS. Before decommission activities were undertaken, DOE would prepare the appropriate environmental reviews to address the associated environmental impacts. Cost assessments would also be prepared.

DOE remains committed to cleaning up the Hanford Site independent of ultimate decision on FFTF. The amounts of wastes associated with decommissioning FFTF would be small. The schedule for cleaning up these other wastes would not be affected if FFTF were restarted.

Deactivation of FFTF is not part of implementing Alternative 1, restart FFTF. Deactivation of FFTF is part of implementing Alternatives 2, 3, 4, and 5 and including the cost of FFTF deactivation in the implementation costs for these alternatives is appropriate. The Cost Report was structured to identify the implementation costs of the various alternatives so the Secretary of Energy would have this information along with other data for consideration.

626-8: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

The U.S. Congress funds the Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM), and the FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

Commentor No. 626: Fred Miller (Cont'd)

Response to Commentor No. 626

626-9: DOE has analyzed each environmental resource area in a consistent manner across all the alternatives to allow for a fair comparison among the various alternatives. DOE made every effort to obtain, analyze, and disclose all required information to make a decision on expanding nuclear infrastructure.

Section 2.7.3 of Volume 1 discusses the relative mission effectiveness of Alternatives 1, 2, 3, and 4 in achieving the goals of the three missions evaluated in this NI PEIS (i.e., medical and industrial isotope production, plutonium-238 production for space missions, and nuclear energy research and development for civilian applications). However, mission effectiveness is only one factor in DOE's decision. Other factors include environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives. All of the alternatives will be considered prior to issuance of the Record of Decision.

Commentor No. 627: James W. and LaVina Hagan

September 1, 2000

Ms. Colette Brown
DOE Office of Space & Defense Power Systems, NE-50
19901 Germantown Road
Germantown, MD 20874-1290

Subject: Draft Programmatic Environmental Impact Statement for Accomplishing Expanded Civilian Nuclear Energy Research and Development and Isotope Production Missions in the United States, Including the Role of the Fast Flux Test Facility, DOE/EIS-0310D, dated July 2000

Dear Ms. Brown:

DOE is to be commended for recognizing its responsibility to the people of the United States for an adequate supply of medical and industrial radioisotopes and for its comprehensive look at the various alternatives for meeting that responsibility.

We believe Alternative 1, Restart of FFTF, is the best and only assured alternative in meeting this responsibility. **627-1**

We are disturbed by the apparent weight given to vocal groups here in the Northwest who use only rhetoric rather than scientific logic in their arguments. We find little value in exaggerated comments given only to confuse and frighten those unfamiliar with nuclear technologies. We would hope that DOE would sort through such rhetoric, do the right thing in meeting its responsibility and not just listen to who makes the most noise. **627-2**

I spent my career in the nuclear industry with a number of those years coordinating safety research to show that a fast reactor like FFTF could be operated without undue risk. It was my personal goal to be part of a national initiative that would ensure that this country had an adequate energy supply through the breeder program without the disturbing reliance we see today upon foreign oil and the environmental impacts of fossil fuel power plants. We've seen that initiative wane away through the lack of forthright government leadership, coupled with an uninformed and confused public. **627-1**

Let us not lose this opportunity to take the right initiative for an assured supply of medical, industrial and space power radioisotopes through full FFTF utilization.

Very truly yours,

James W. & LaVina Hagan

James W. & LaVina Hagan
2171 Crestview
Richland, WA 99352

Response to Commentor No. 627

627-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

627-2: It is DOE policy to encourage public input on matters of regional, national and international importance as part of its commitment to facilitate a public participation process that is open and unbiased. DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

Commentor No. 629: Kathryn Roberg

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

I attended the public hearing - Richland - May 31 - AM AGAINST START-up of FFTF! I am highly disturbed about the "push" for restart FFTF -

My reasons:

Lack of adequate verifiable cases of ACTUAL Cancer cures from use of radioisotope therapy. Does this warrant a restart of a Nuclear "hot" reactor!

629-1

629-2

Nasa has informed US DOE on May 22, 2000 that "Nasa headquarters no longer has identifiable planned requirement for Small Radioisotopic Thermoelectric Generator (SRG) power systems." How can a Nuclear Reactor have a justifiable start-up?

629-3

Hanford has a horrendous clean up to do before anything else starts up! How can the DOE justify adding to the already over-flow stock pile of nuclear waste!

We are destroying this world! What a SIN!

629-4

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Kathryn Roberg

Organization:

(Home/Organization Address (circle one): 722 W. Alder St.

City: Walla Walla State: Wa Zip Code: 99362

Telephone (optional):

E-mail (optional): Kroberg@hscis.net

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 629

629-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

629-2: DOE notes the commentor's views regarding the potential use of FFTF for enhancing DOE's existing nuclear facility infrastructure. In ongoing clinical testing, therapeutic radioisotopes have proven effective in treating cancers and other illnesses while minimizing adverse side effects, making their use an attractive alternative to traditional chemotherapy and radiation treatments.

629-3: The May 22, 2000, correspondence from NASA to DOE identifies that NASA no longer has a planned requirement for small radioisotope thermoelectric generator (SRTG) power systems. This does not mean that NASA no longer requires DOE to provide the necessary plutonium-238 to support deep space missions. Rather, the suspension of SRTG development efforts was conducted in order to permit reprogramming of funds to support development of a new radioisotope power system based on a Stirling technology generator. This new radioisotope power system, referred to in the subject correspondence, requires 1/3 less plutonium as its fuel source. However, the Stirling technology is developmental and NASA has requested in a September 22, 2000 letter to DOE that the plutonium-238 needed for large RTG may be maintained as a backup. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

629-4: DOE notes the commentor's opposition to Alternative 1, Restart FFTF, and concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

Commentor No. 630: Roy W. Brown CORAR

CORAR

Council on Radionuclides and Radiopharmaceuticals, Inc.

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Moraga, CA 94556-1551
(925) 283-1850
Fax: (925) 283-1850
E-mail: corar@silcon.com

Henry H. Kramer, Ph.D., FACNP
Executive Director

August 31, 2000

Ms. Colette Brown
PEIS Document Manager
Office of Nuclear Energy, Science and Technology
U. S. Department of Energy, NE-50
19901 Germantown Road
Germantown, MD 20874-1290

Subject: DRAFT Programmatic EIS …. Including the Role of the Fast Flux Test Facility

Dear Ms. Brown:

On behalf of the Council on Radionuclides and Radiopharmaceuticals (CORAR), we are pleased to provide our comments on the above subject. CORAR is a North American trade association composed of representatives from the major manufacturers and distributors of radiopharmaceuticals, radioactive sources, and research radionuclides used in all 50 States of the United States for therapeutic and diagnostic applications, and for environmental, industrial and biomedical research and quality control.

CORAR appreciates the substantial work that the DOE has put into developing this notice. The EIS covers the many issues concerned with the operation of the FFTF. However, one key component, that is not part of the EIS, is the fiscal viability of the FFTF after the FFTF has been restarted. It is stated in a number of places in the EIS that one mission of the FFTF is to produce radionuclides for commercial and research use. At the same time in the EIS, justification for the FFTF to produce these radionuclides is based on a 1997 Frost & Sullivan market study entitled "FFTF Medical Isotopes - Market Study (2001-2020)". Based on current commercial and research usage of radionuclides, the assumptions and market projections presented in this market study were extremely optimistic and are no longer valid. Consequently, any business plan that includes revenue to the FFTF from the sale of commercial and research radionuclides based on the very optimistic assumptions and projections of the 1997 Frost and Sullivan market study will not be achievable. **630-1**

CORAR strongly recommends that the DOE obtain an updated market research study prior to developing any FFTF business plan that intends to include any revenues to the FFTF from the sale of commercial and research radionuclides.

Respectfully yours,

Roy W. Brown
Chairman, CORAR

Response to Commentor No. 630

630-1: DOE notes the commentor's concerns. DOE has sought independent analysis of trends in the use of medical isotopes, and of its continuing role in this sector, consistent with its mandates under the Atomic Energy Act. In doing so, it established two expert bodies, the Expert Panel and the NERAC. In 1998, the Expert Panel, which convened to forecast future demand for medical isotopes, estimated that the expected growth rate of medical isotope use during the next 20 years would range from 7 to 14 percent per year for therapeutic applications, and 7 to 16 percent per year for diagnostic applications. These findings were later reviewed and endorsed by NERAC, established in 1999 to provide DOE with expert, objective advice regarding the future form of its isotope research and production activities. DOE has adopted these growth projections as a planning tool for evaluating the potential capability of the existing nuclear facility infrastructure to meet programmatic requirements. In the period since the initial estimates were made, the actual growth of medical isotope use has tracked at levels consistent with the Expert Panel findings Section 1.2.1 of Volume 1 was revised to incorporate this information and to clarify DOE's role in fulfilling the U.S. research and commercial isotope production needs.

Commentor No. 631: Yvonne Ho Hsieh

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

We need FFTF to fight cancer so please restart it!

631-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Yvonne Ho Hsieh

Organization:

(Home/Organization Address (circle one): 7738 Xavier Ct.

City: Westminster State: CO Zip Code: 80030

Telephone (optional): 303-427-2885

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 631

631-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 632: Anonymous

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Public Hearing Evaluation Form

Please place a check mark in the box next to the public hearing attended:

- ☐ **August 22, 2000**
  American Museum of Science and Energy
  300 South Tulane Avenue
  Oak Ridge, Tennessee 37830
- ☐ **August 25, 2000**
  Westcoast Idaho Falls Hotel
  475 River Parkway
  Idaho Falls, Idaho 83402
- ☐ **August 28, 2000**
  Hood River Inn
  1108 E. Marina Way
  Hood River, Oregon 97031
- ☐ **August 29, 2000**
  Oregon Museum of Science and Industry
  1945 SE Water Avenue
  Portland, Oregon 97214
- ☐ **August 30, 2000**
  Washington State Convention and Trade Center
  800 Convention Place
  Seattle, Washington 98101
- ☐ **August 31, 2000**
  Best Western Tower Inn and Conference Center
  1515 George Washington Way
  Richland, Washington 99352
- ☒ **September 6, 2000**
  Crystal Gateway Marriott
  1700 Jefferson Davis Highway
  Arlington, Virginia 22202

Please circle the appropriate number:

	Very Good				Poor
Your Level of Knowledge about the PEIS **before** the Hearing	5	(4)	3	2	1
Your Level of Knowledge about the PEIS **after** the Hearing	(5)	4	3	2	1
Time and Date of Hearing	(5)	4	3	2	1
Location of Hearing	(5)	4	3	2	1
Registration Process	(5)	4	3	2	1
Clarity of Displays and Handouts	(5)	4	3	2	1
Clarity of Presentations	(5)	4	3	2	1
Relevancy of Issues and Concerns Addressed	(5)	4	3	2	1
Opportunities for Discussion	(5)	4	3	2	1
DOE Officials' Willingness to Listen	(5)	4	3	2	1
Knowledge/Responses from Staff Attending	(5)	4	3	2	1

How could the public hearing format and materials be improved? I would prefer that questioners identify themselves.

Was the public hearing helpful to you? Yes, it provided a broader perspective of medical isotope users interest. South Carolina's preference for an accelerator based upon AFI.

Please continue on the other side if you run out of space. Please return your completed evaluation form to the registration desk or mail or fax to the address below.

THANK YOU – YOUR FEEDBACK IS IMPORTANT TO US

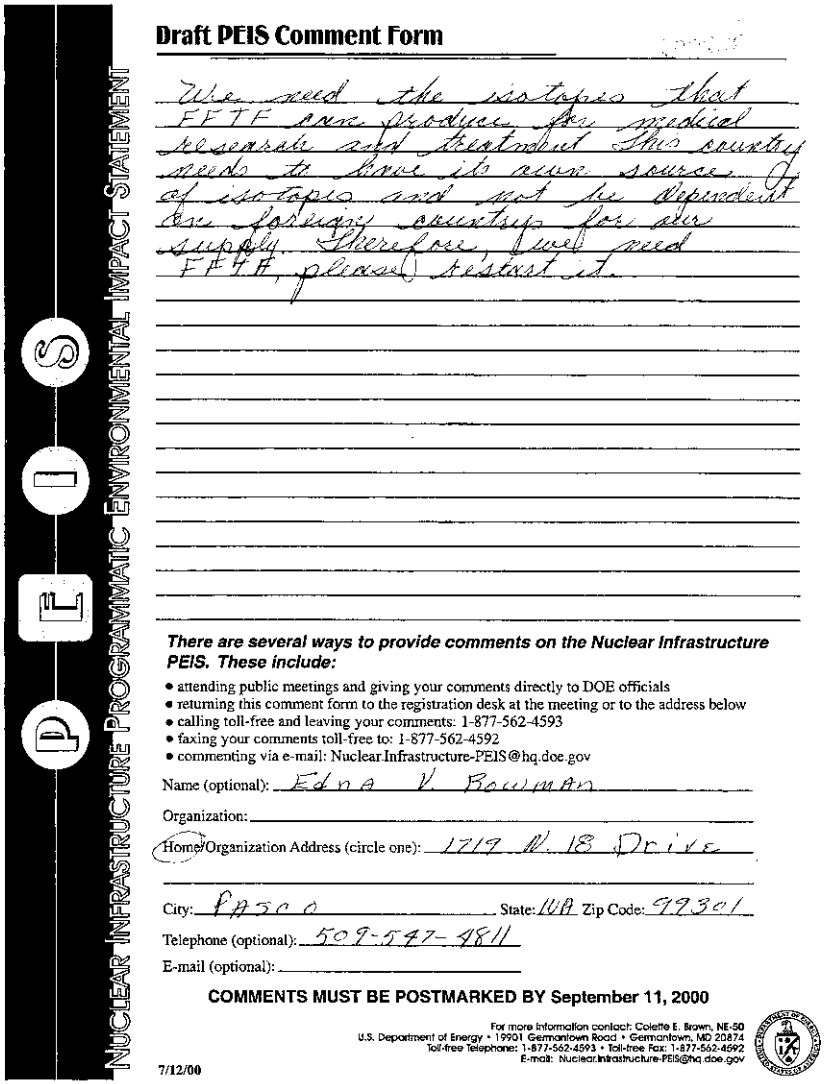
For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/27/00

632-1

Response to Commentor No. 632

632-1: DOE notes the commentor's interest in Alternative 3, Construct New Accelerator(s).



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

We need the isotopes that FFTF can produce for medical research and treatment. This country needs to have its own source of isotopes and not be dependent on foreign countries for our supply. Therefore, I we need FFTF, please restart it.

633-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Edna V. Bowman

Organization:

Home/Organization Address (circle one): 1719 N. 18 Drive

City: Pasco State: WA Zip Code: 99301

Telephone (optional): 509-547-4811

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

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Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

633-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 634: Jerome Delvin, Washington State Representative

FAST FLUX FACILITY ENVIORNMENTAL IMPACT STATEMENT HEARINGS
AUGUST 31, 2000
BEST WESTWERN TOWER INN
RICHLAND, WASHINGTON

COMMENTS BY: REPRESENTATIVE JEROME DELVIN

- I strongly urge the Department of Energy (DOE) to adopt alternative 1 of the Draft Programmatic Environmental Impact Statement (EIS) which would reactivate the Fast Flux Test Facility (FFTF) and use it to produce medical and industrial isotopes, support space fuel needs and assist with nuclear research.

- The draft ERIS prepared by DOE has identified a clear need for additional reactor capacity, capacity that can be readily provided by the FFTF. Use of the FFTF will create the greatest and most efficient use of current resources for our national research and medical isotope needs. The present cost of building a comparable facility would exceed $2.5 billion. We are currently expending between $35 - 40 million annually to maintain the FFTF facility. Taxpayers would be best served by putting this facility to work for both the federal government and for the economy of Central Washington. **634-1**

- With the need for medical isotopes projected to increase dramatically America finds itself increasingly dependent on overseas facilities to meet its needs. Radioactive isotopes are frequently used to treat cancer and it is important that we develop a domestic facility for the production of these isotopes. Identified uses of the FFTF noted on the EIS would produce 1,000 high paying jobs and would likely translate into many more jobs providing a healthy boost to the local economy.

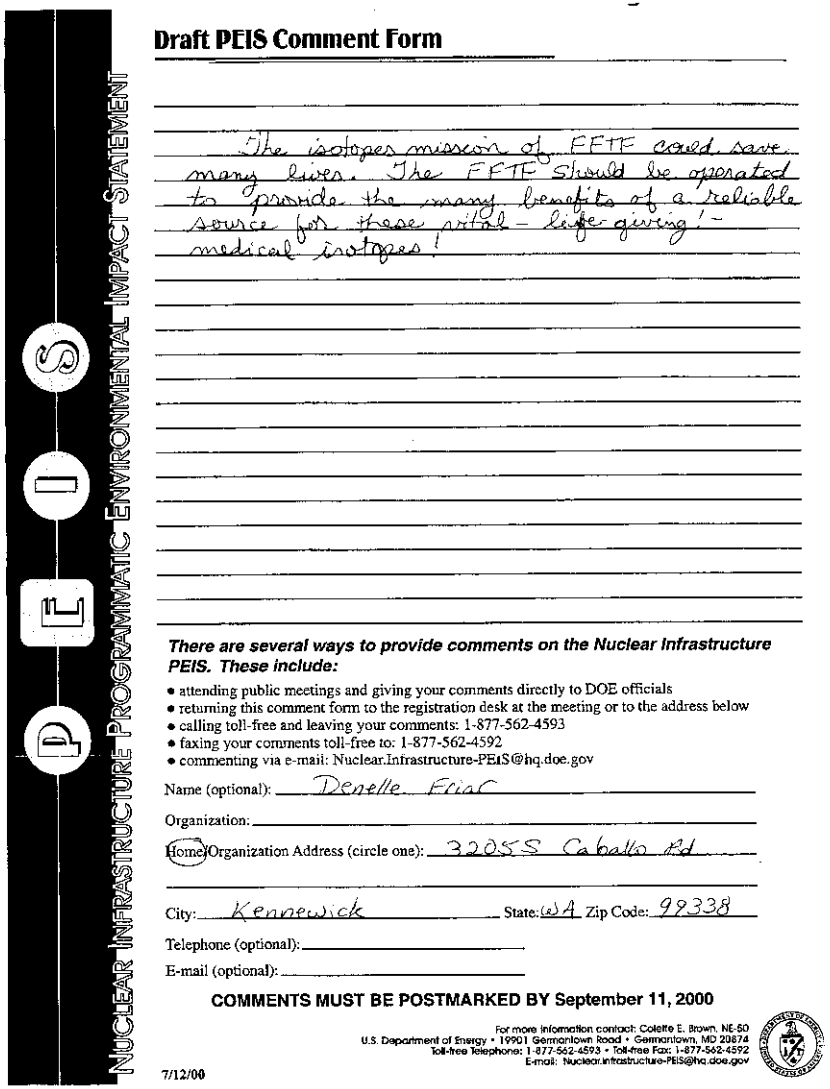
- In recent comments to the Spokane Chamber of Commerce executives of Hollister-Stier Laboratories, the area's chief biotech lab, noted that the Inland Northwest has the ingredients to spawn a world-class biotechnology industry. The Tri-City's convenient location to Puget Sound biotech companies, University of Washington research facilities, and the growing biotech presence of Spokane will allow isotope production here to spur a technology park environment that can spur further industrial development and help close economic development gaps between Eastern Washington and the Puget Sound region. **634-2**

Response to Commentor No. 634

634-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

634-2: It is possible that restarting FFTF for the stated missions could result in an influx of new business. The socioeconomic impacts of each alternative were evaluated in the PEIS. DOE acknowledges that some secondary impact is reasonably foreseeable, but the nature and extent of such economic growth is speculative at this time.

Commentor No. 635: Denelle Friar



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

The isotopes mission of FFTF could save many lives. The FFTF should be operated to provide the many benefits of a reliable source for these vital – life-giving! – medical isotopes!

635-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Denelle Friar

Organization:

(Home)/Organization Address (circle one): 32055 Caballo Rd

City: Kennewick State: WA Zip Code: 99338

Telephone (optional):

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 11, 2000

For more information contact: Colette E. Brown, NE-50
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Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 635

635-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 636: Marjorie Worthington

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

Thank you for providing one more opportunity for citizen input in this process. Having attended DOE budget hearings over a period of several years, having sent letter after letter to the Office of the DOE protesting FFTF, with no apparent response to any of the concerns raised, I find myself shocked and saddened at finding that nothing has changed the DOE's agenda, to restart the FFTF reactor. **636-1**

Reasons given for the 40 million cost per year of maintaining the FFTF on standby have varied, but whatever the reasons cited (and I have strong objections to the validity of any one of them), the effect has been TO PRE-EMPT concerted efforts to CLEAN UP TOXIC WASTE THAT IS LEAKING INTO GROUNDWATER THAT DRAINS INTO THE COLUMBIA RIVER **636-3**

Why is the Tri Party Agreement being ignored? Why are the citizens of this area - those most affected by the mess of toxic waste - not being listened to? Why should a government agency with no direct constituency to answer to continue to assert (unelected) power that denies the right of citizens in this area the right to live in a safe environment? None of the projects proposed by DOE, however couched in lofty terms purporting to be in the public interest **636-1**

is worth ignoring the rule we learned in kindergarten — CLEAN UP YOUR OWN MESS! **636-2**

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Marjorie Worthington

Organization:

Home/Organization Address (circle one): (Home) 1347 Clovercrest Street

City: Enumclaw State: WA Zip Code: 98022

Telephone (optional):

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

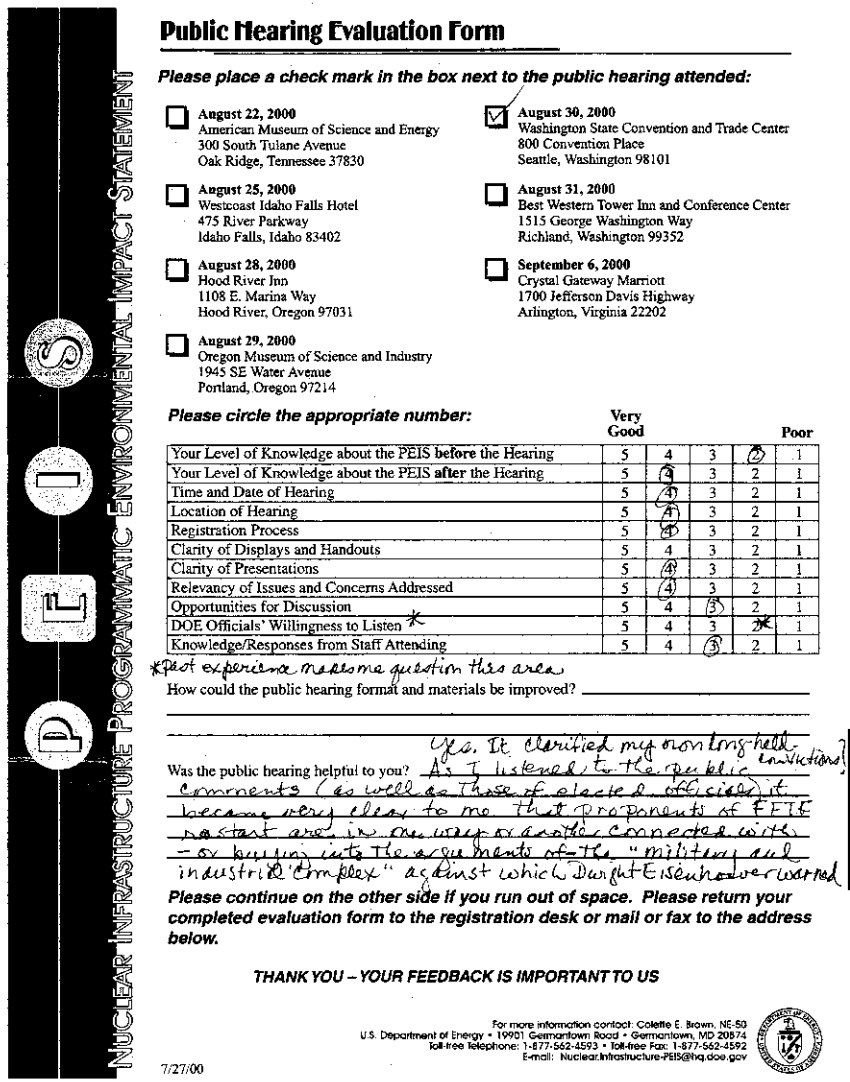
Response to Commentor No. 636

636-1: The purpose of this NI PEIS is to evaluate the environmental impacts of reasonable alternatives to fulfill the requirements of the DOE missions, which include the production of medical and industrial isotopes, the production of plutonium-238 for NASA space missions, and nuclear research and development. As evaluated under Alternative 1 in this NI PEIS, FFTF would be restarted to accomplish these nondefense-related missions. Other unrelated nuclear energy and defense-related considerations are beyond the scope of this NI PEIS. In compliance with NEPA and CEQ regulations, DOE provided opportunity to the public to comment on the scope of the NI PEIS and the environmental impact analysis of DOE's proposed alternatives. DOE gave equal consideration to all comments. In preparing the Final NI PEIS, DOE carefully considered comments received from the public. DOE's Record of Decision for the NI PEIS will be based on a number of factors including environmental impacts, public input, costs, nonproliferation impacts, schedules, technical assurance, and other policy and programmatic objectives.

636-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected. DOE is fully committed to honoring this agreement.

636-3: DOE notes the commentor's opposition to Alternative 1, Restart FFTF, and concerns regarding the existing cleanup mission at Hanford. A Tri Party Agreement change was made to place the milestones for FFTF's permanent deactivation in abeyance until the DOE reaches a decision on whether the facility will be used to meet mission needs. Prior Public meetings were held on this formal milestone change.

The U.S. Congress funds the Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM), and the FFTF through the Office of Nuclear Energy, Science and Technology (NE).



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Public Hearing Evaluation Form

Please place a check mark in the box next to the public hearing attended:

- ☐ **August 22, 2000**
  American Museum of Science and Energy
  300 South Tulane Avenue
  Oak Ridge, Tennessee 37830
- ☑ **August 30, 2000**
  Washington State Convention and Trade Center
  800 Convention Place
  Seattle, Washington 98101
- ☐ **August 25, 2000**
  Westcoast Idaho Falls Hotel
  475 River Parkway
  Idaho Falls, Idaho 83402
- ☐ **August 31, 2000**
  Best Western Tower Inn and Conference Center
  1515 George Washington Way
  Richland, Washington 99352
- ☐ **August 28, 2000**
  Hood River Inn
  1108 E. Marina Way
  Hood River, Oregon 97031
- ☐ **September 6, 2000**
  Crystal Gateway Marriott
  1700 Jefferson Davis Highway
  Arlington, Virginia 22202
- ☐ **August 29, 2000**
  Oregon Museum of Science and Industry
  1945 SE Water Avenue
  Portland, Oregon 97214

Please circle the appropriate number:

	Very Good				Poor
Your Level of Knowledge about the PEIS **before** the Hearing	5	4	3	(2)	1
Your Level of Knowledge about the PEIS **after** the Hearing	5	(4)	3	2	1
Time and Date of Hearing	5	(4)	3	2	1
Location of Hearing	5	(4)	3	2	1
Registration Process	5	(4)	3	2	1
Clarity of Displays and Handouts	5	4	3	2	1
Clarity of Presentations	5	(4)	3	2	1
Relevancy of Issues and Concerns Addressed	5	(4)	3	2	1
Opportunities for Discussion	5	4	(3)	2	1
DOE Officials' Willingness to Listen *	5	4	3	(2)*	1
Knowledge/Responses from Staff Attending	5	4	(3)	2	1

*past experience makes me question this area

How could the public hearing format and materials be improved? _____

Was the public hearing helpful to you? Yes. It clarified my own long-held convictions! As I listened to the public comments (as well as those of elected officials) it became very clear to me that proponents of FEIS no start are in one way or another connected with - or buying into the arguments of the "military and industrial complex" against which Dwight Eisenhower warned

Please continue on the other side if you run out of space. Please return your completed evaluation form to the registration desk or mail or fax to the address below.

THANK YOU – YOUR FEEDBACK IS IMPORTANT TO US

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/27/00

636-1

The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

Commentor No. 636: Marjorie Worthington (Cont'd)

40 years ago, and it is this element that has delayed what must be our primary concern as responsible citizens (and occupants of this fragile planet): Clean up your own mess!

636-1 (Cont'd)

636-2

Response to Commentor No. 636

Commentor No. 637: J. Perre

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Pow[illegible]
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

[illegible]

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because:

IT OFFERS THE ATENTIAL BENEFIT TO A FEW PEOPLE WHILE CREATING THE POTENTIAL THREAT TO MANY PEOPLE.

637-1

Name J Perre

Address Po Box 232

City, state Rhododendron OR Zip 97049

Response to Commentor No. 637

637-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

Commentor No. 638: Gloria L. Loughry

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

0874+1207

AND Believe me, I VOTE !!!

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **638-1**

The Nuclear industry/sciences cannot handle the full cycle of involvement with a product/process which is KNOWN to be a major hazard to people on this planet. It is NOT a science we need to pursue at this time! There are so many alternative energy sources out there that would be delivering "like gangbusters" if we would focus on them like you people do on a this known poison source!! There should be NO RESURRECTION nor USE OF SAID FACILITIES of the suicide-wish industry/science of nuclear energy use — not it nor its many hydra-headed offspring! You cannot treat it full cycle (creation→disposal) so you cannot begin to consider playing with a rattlesnake! NO! **638-2**

Name Gloria L. Loughry

Address P.O. Box 1595

City, state Woodland WA Zip 98674-1500

Response to Commentor No. 638

638-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

638-2: The commentor's opposition to nuclear energy is noted. The mission of the DOE includes: the nation's nuclear weapons capability; Federal power marketing; energy regulatory and information functions; civilian nuclear waste responsibilities; strategic and naval petroleum reserves; environmental cleanup of weapons production and related facilities; and both civilian and defense research and development (R&D). DOE R&D encompasses the areas of energy resources, science, national security, and environmental quality. Within the area of energy resources R&D, DOE funds conservation, fossil energy, nuclear energy, and renewable energy (e.g., solar, wind, etc.). During the current and previous Federal Government fiscal years, DOE funding of conservation and renewable energy has been three to five times the nuclear energy R&D.

The missions to be addressed in this PEIS, which include the production of medical and industrial isotopes, the production of plutonium-238, and nuclear research and development can currently only be met using nuclear reactor or accelerator technologies.

Commentor No. 639: Richard Johnson

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

3874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 639-1

It seems to me this business is potentially very hazardous and should therefore be abandoned. 639-2

R.J.

Name Richard Johnson
Address 91731 Smith Lake Rd
City, state Warrenton Or Zip 97146

Response to Commentor No. 639

639-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

639-2: The environmental impacts associated with restart of the FFTF during normal operations and from postulated accidents are presented in Section 4.3 of the NI PEIS. The impacts to humans and also to the biosphere air, water, and land) are shown to be small. No fatalities among workers or in the general public would be expected over the full 35-year operational period.

Commentor No. 640: Henry Mansfield

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

0874/1233

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **640-1**

I am opposed to the basic "missions" of the D.O.E. - I don't want to support production of rocket fuel, medical isotopes or more research! The D.O.E. hasn't even finished cleaning up their mess at Hanford and they want to upstart a portion of it? Cleaning up Hanford should be your #1 mission!! Thank-you. **640-2** **640-3**

Name Henry Mansfield
Address 1904 SE. Pine St.
City, state Portland, OR Zip 97214

Response to Commentor No. 640

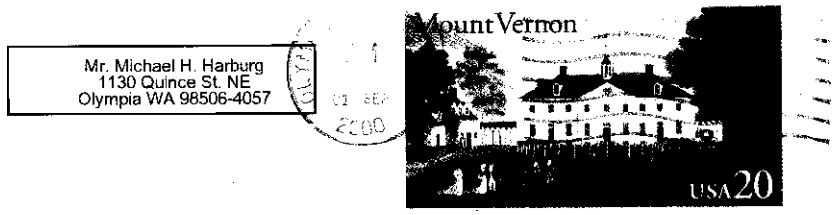
640-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

640-2: DOE notes the commentor's views. However, it should be noted that the production of rocket fuel is not in the scope of the NI PEIS. The production of plutonium-238 for use as a fuel in radioisotope power systems that provide on-board electrical service for NASA spacecraft used for deep space exploration is one of the needs addressed in the Final NI PEIS.

640-3: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

The U.S. Congress funds the Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM), and the FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

Commentor No. 641: Michael H. Harburg



Ms. Colette Brown
US Dept of Energy
Office of Space & Defense Sys. NE 50
19901 Germantown Rd.
Germantown MD 20874

374/1299

Aug 30, 2000

Dear Ms. Brown,

I oppose the restart of the Fast Flux Test Facility Reactor. **641-1**

This Nuclear Weapons program has not hurt a single enemy (thank Goodness) but has caused cancer & disease in 1,000s of Americans. I have a friend who die of M.S because she grew up near Hanford. Stop the Reactor please **641-2**

Sincerely, [signature] **641-1**

Response to Commentor No. 641

641-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

641-2: As described in Section 1.2 of Volume 1, the nuclear infrastructure missions are unrelated to the national defense. Neither nuclear weapons nor components for nuclear weapons would be produced under the nuclear infrastructure alternatives (Section 2.5 of Volume 1). Sections 4.3 through 4.6 of Volume 1 provides the results of the evaluation of potential health impacts that would be expected to result from implementation of a range of reasonable alternatives, including normal operations and a spectrum of accidents that included severe accidents. The environmental analysis showed that radiological and nonradiological risks associated with each of these alternatives would be small.

Commentor No. 642: John E. Madsen

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **642-1**

you havn't cleaned up the old radioactive **642-2**

WASTE. We have no long term storage for this **642-3**

STUFF, the place you want to ship it (yucca mtn) **642-3**

has problems. Why not STOP the madness and **642-4**

greed and give this up? **642-4**

Name Dr John E Madsen

Address 9134 sw 43rd

City, state portland or Zip 97219

Response to Commentor No. 642

642-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

642-2: Restoration of the Hanford Site and waste management activities are the primary missions at Hanford.

Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

642-3: As stated in section 4.3.1.1.4 of the NI PEIS, "the spent [FFTF] nuclear fuel would be packaged in acceptable containers and shipped to a geologic repository for ultimate disposal." The NI PEIS assumes, for the purposes of analysis, that Yucca Mountain, Nevada, would be the final disposal site for DOE's high-level radioactive waste and spent nuclear fuel. As directed by the U.S. Congress through the Nuclear Waste Policy Act, as amended, Yucca Mountain is designated, and is currently being characterized, as the candidate site for constructing a geologic repository for disposal of high-level radioactive waste and spent nuclear fuel. DOE has prepared a separate EIS, "Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County Nevada" (DOE/EIS-0250D, July 1999), which analyzes the environmental impacts from construction, operation and monitoring, related transportation, and eventual closure of a potential geological repository.

642-4: DOE notes the commentor's views. Consistent with its mandates under the Atomic Energy Act, DOE seeks to maintain and enhance its infrastructure for the purposes of addressing three primary needs: 1) to support the need for increased domestic production of isotopes for medical, research, and industrial uses, as initially identified by a panel of experts in the medical field and reaffirmed by the Nuclear Energy Research Advisory Committee; 2) to support future NASA space exploration missions by re-establishing a domestic capability to produce plutonium-238, a fuel source that is required for deep space missions and

Commentor No. 642: John E. Madsen (Cont'd)

Response to Commentor No. 642

which the U.S. has no long-term, assured supply; and 3) to support civilian nuclear research and development needs in order to maintain the clean, safe, and reliable use of nuclear power as a viable component of the United States' energy portfolio. Section 1.2 of Volume 1 was revised to clarify the purpose and need of the proposed action.

Commentor No. 643: James G. Barrett

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Mr. James G. Barrett
7610 SE Holgate Blvd
Portland, OR 97206-3362

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

20874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 643-1

Note: I would like to have attended the 8/29/00 meeting at OMSI, but the notice (and this card) did not arrive, by mail, until 9/1/00. 643-2

Name James G. Barrett

Address 7610 S.E. Holgate

City, state Portland, OR Zip 97206

Response to Commentor No. 643

643-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

643-2: DOE notes the commentor's desire to have attended the Portland, Oregon public hearing and late receipt of notice of the hearing. However the commentor was not on the NI PEIS mailing list and was not mailed a NI PEIS public hearing notice from DOE. The preprinted comment card and apparently the late public hearing notice were supplied to the commentor by Hanford Watch. DOE provided notice of scheduled public hearings in accordance with the requirements of CEQ and DOE regulations (i.e., 40 CFR Parts 1503.1 and 1506.6 and 10 CFR Part 1021.313, respectively). This included announcement of the hearings in the Federal Register as well as in the local media. In addition, copies of the Draft NI PEIS and/or the Summary (including the public hearing schedule) were sent to each individual or group listed to receive it at the address on record. In addition to the hearings, the public also had the opportunity to comment on the Draft NI PEIS through the U.S. mail, e-mail, a toll-free fax number, and a toll-free phone number. In preparing the Final NI PEIS, DOE carefully considered comments received from the public, regardless of how or where they were received.

Commentor No. 644: Diana L. Janini

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
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19901 Germantown Road
Germantown, Maryland 20874-1290

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Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because:

644-1

of the problems that it

644-2

created in the past that

" have not " been cleaned

644-3

up yet. Restarting it will only

add more problems to our

Environment.

Name DIANA L. JANINI

Address 8604 NE 111TH Ave

City, state VANC. WA. Zip 98662

Response to Commentor No. 644

644-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

644-2: DOE notes the commentor's opposition to Alternative 1, Restart FFTF, and concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

The FFTF has not contributed to any air, ground, or water contamination on the Hanford Site.

644-3: The environmental impacts associated with restart and operation of the FFTF during normal operations and from postulated accidents are presented in Section 4.3 of the NI PEIS. The impacts to humans and to the biosphere (air, water, and land) are shown to be small, and all generated wastes can be effectively managed to minimize environmental impacts.

Commentor No. 645: Jason Halbert

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

76

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 645-1

There is no defense of space-based nukes (NMD). There is little defense of earth-based nukes. I urge you to abandon all plans for continuing the nuclear power and weapons program and especially the Fast Flux reactor. 645-2

Name Jason Halbert J. Halbert

Address PO Box 453

City, state Charlottesville VA Zip 22902

Response to Commentor No. 645

645-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

645-2: DOE notes the commentor's opposition to nuclear weapons and the use of nuclear energy. Through a Memorandum of Understanding with NASA, DOE provides radioisotope power systems, and the plutonium-238 that fuels them, for space missions that require or would be enhanced by their use. These radioisotope power systems have been used for almost 40 years, and have repeatedly demonstrated their performance, safety, and reliability in various NASA space missions. NASA establishes the need and requirements for space missions and undergoes a thorough NEPA evaluation for each launch. The DOE missions to be addressed in this PEIS, which include the production of medical and industrial isotopes, the production of plutonium-238, and civilian nuclear energy research and development, can currently only be met using nuclear reactor or accelerator technologies. None of the DOE missions stated in the NI PEIS are defense- or weapons-related.

Commentor No. 646: Duncan Baruch

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

08874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **646-1**

The leaking, highly-toxic waste spreading from Hanford Nuclear Reservation into our lives is unacceptable, as is the failure to clean up waste. Adding yet more waste from restarting the FFTF cannot be justified. **646-2** **646-3**

Name Duncan Baruch

Address 4502 S.W. Pasadena St

City, state Portland, OR Zip 97219

Response to Commentor No. 646

646-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

646-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

646-3: As identified in Section 4.3.1.1.13 of the NI PEIS, the restart of FFTF would generate about 63 cubic meters of additional radioactive waste (e.g., solid low-level radioactive waste) annually, in addition to nonhazardous wastes. This would account for about 2,205 cubic meters of additional radioactive waste to be generated over the 35-year period of nuclear infrastructure operations and is small in comparison to wastes generated by other Hanford activities. It is DOE's policy that all wastes be managed (i.e., treated, stored and disposal) in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE orders.

The NI PEIS addressed the environmental impacts due to the treatment storage, and disposal of the waste generated by the proposed actions for all alternatives and alternative options. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision.

Commentor No. 647: P. Doyle

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

20874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 647-1

It is dangerous for the land, People, animals and Fish who live within 1000 miles of Hanford and for thier ancestors 647-2

Name P. Doyle

Address 902 SE Franklin

City, state Portland OR Zip 97202

Response to Commentor No. 647

647-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

647-2: The health and environmental concerns expressed in this comment are noted. The environmental impacts associated with operation of the FFTF and support facilities at Hanford during normal operations and from postulated accidents are presented and discussed in Section 4.3 of the NI PEIS. All short- and long-term impacts to human health, land use, and ecological resources would be small in the immediate area of the Hanford site and negligible at all distant locations.

Commentor No. 648: William E. Morton

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power System
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19901 Germantown Road
Germantown, Maryland 20874-1290

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Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **648-1**

The Hanford groundwater is already thoroughly contaminated with radioisotopes + other toxins, endangering the Columbia River + all its downstream users. Restarting FFTF will only add to that contamination + risk. **648-2**

Name Wm E Morton MD

Address 755 SW 84 Ave

City, state Portland, OR Zip 97225

Response to Commentor No. 648

648-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

648-2: DOE notes the commentor's concern regarding the existing cleanup mission at Hanford and the risk of contamination to the Columbia River. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

No food or water restrictions are currently in place outside the Hanford Reservation as a result of Hanford activities.

Commentor No. 649: Monica Maynard

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

3874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because:

it offends and threatens my EXISTENCE !!

649-1

Name MONICA MAYNARD
Address 8503 SE 9th Ave
City, state PORTLAND, OR Zip 97282

Response to Commentor No. 649

649-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

Commentor No. 650: Michael Eury

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

20874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **650-1**

IT WOULD VIOLATE THE 1995 HANFORD CLEAN-UP AGREEMENT. THE DOE SHOULD BE CLEANING UP HANFORD AND KEEPING IT CLOSED, NOT RE-OPENING IT. **650-2**

Name MICHAEL EURY

Address 1500 NE 15th AVE., #551

City, state PORTLAND, OREGON Zip 97232

Response to Commentor No. 650

650-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

650-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

A Tri-Party Agreement change was made to place the milestones for FFTF's permanent deactivation in abeyance until the DOE reaches a decision on whether the facility will be used to meet mission needs. Public meetings were held on this formal milestone change. The alternatives delineated in the NI PEIS would not have an impact on Hanford cleanup activities because of the differing funding sources.

Commentor No. 651: Anne Sunrise

Hanford Watch
2285 SE Cypress
Portland, Oregon 97214

Ms. Colette Brown
U.S. Department of Energy
Office of Space and Defense Power Systems
NE-50
19901 Germantown Road
Germantown, Maryland 20874-1290

20874+1207

Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: **651-1**

Hanford already is overloaded. We need/want NO MORE WASTE that will further contaminate the region and the Columbia River. I/We want our children, grandchildren & great grand-children, etc. to have a healthy & safe future! **651-2**

Name Anne Sunrise, RN, BSN, BA

Address 115 X St. SW #8

City, state Tumwater, WA. Zip 98501

Response to Commentor No. 651

651-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

651-2: The restart of FFTF or any of the other proposed alternative facilities would not impact the schedule or available funding for existing cleanup activities. The NI PEIS addressed the environmental impacts due to the treatment, storage, and disposal of the waste generated by the proposed actions for all alternatives and alternative options. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision. The waste generated from any of the proposed alternatives in the NI PEIS will be managed (i.e., treated, stored and disposed) in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE orders.

FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

Commentor No. 652: David Berger

Hanford Watch
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Portland, Oregon 97214

Ms. Colette Brown
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Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 652-1

(1) I believe the money should be spent on cleaning up Hanford. 652-2

(2) The reactor is not needed, As there are Alternatives for MEDICAL isotope GENERATION 652-3

Name DAVID BERGER

Address 9275 SW 8th DRive

City, state PORTLAND, OR Zip 97219

Response to Commentor No. 652

652-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

652-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing activities to remediate existing contamination at Hanford are high priority to DOE. The Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement. The stated missions delineated in the NI PEIS would not have an impact on Hanford cleanup activities.

The U.S. Congress funds Hanford cleanup through the Office of the Assistant Secretary for Environmental Management (EM). Congress also funds FFTF through the Office of Nuclear Energy, Science and Technology (NE). The nuclear infrastructure missions described in Section 1.2 of Volume 1 would also be funded by NE, which has no funding connection to Hanford cleanup activities. As stated in Section N 3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

652-3: See response to 652-1. Although a few radioisotopes can be produced by separating them from existing stockpiles of transuranic materials or other long-lived radioisotopes, the two primary means for producing radioisotopes are through the use of nuclear reactors or particle accelerators. DOE has evaluated as alternatives in the NI PEIS the use of a new research reactor or a new accelerator for medical isotopes production.

Commentor No. 653: Marjorie Kundiger, Bill Josephson

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Public comment on Nuclear Infrastructure Draft Programmatic Environmental Impact Statement (NI PEIS)

I am opposed to restart of the Fast Flux Test Facility reactor because: 653-1

(1) I live in St Helens which is on the river. People here fish, swim and boat in the river. Radioactive wastes are leaking into the river. Do not add to the poorly managed situation with no good solutions. 653-2

Name MARJORIE KUNDIGER - BILL JOSEPHSON

Address 62418 Axel Rd

City, state St Helens OR Zip 97051

Response to Commentor No. 653

653-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

653-2: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement.

FFTF is approximately 4.5 miles from the Columbia River. There are no discharges to the river from FFTF and no radioactive or hazardous discharges to groundwater. As indicated in analyses presented in Chapter 4 of Volume 1 (e.g., Sections 4.3.1.1.4, 4.3.3.1.4, 4.4.3.1.4, 4.5.3.2.4, and 4.6.3.2.4), there would be no discernible impacts to groundwater or surface water quality at Hanford from operation of Hanford facilities that would support the nuclear infrastructure missions described in Section 1.2 of Volume 1.

It is DOE's policy that all wastes be managed (i.e., treated, stored, and disposed) in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE orders. No food or water restrictions are currently in place outside the Hanford Reservation as a result of Hanford activities.

Commentor No. 991: Marc Garland

My name is Marc Garland and I live in Washington, DC.

I've recently been doing research in reactor production of medical isotopes at the University of Maryland, particularly studying the production capabilities of the High Flux Isotope Reactor at Oak Ridge and the Fast Flux Test Facility at Hanford. My analysis of the capabilities of these reactors leads to the conclusion that both should be important components of the Department of Energy's isotope production strategy. Other reactor alternatives being considered by DOE are not truly alternatives at all; they are inferior options. 991-1

There are several reasons why FFTF and HFIR provide superior capabilities relative to conventional water-cooled nuclear reactors. The primary advantage these reactors possess is their neutron flux. As seen in this graph of neutron energy versus neutron flux, the FFTF and HFIR flux spectra have significant epithermal, fast, and high energy components. This is not the case for conventional thermal reactors which have essentially zero flux in these regions. This is significant because many medically important isotopes have large production cross sections in the epithermal region. For these isotopes it should be noted that FFTF's flux can be tailored to match the absorption resonances of the target isotopes in the epithermal region to dramatically increase production. Further, the fast and high energy neutrons allow the production of certain isotopes via reactions that can not occur in conventional water-cooled reactors. For example, Cu-67 can be produced with a very high specific activity by taking advantage of energetic neutrons. Cu-67 is typically produced by the absorption of a neutron by Cu-66. However, that reaction produces Cu-67 that is contaminated by many other isotopes of copper which results in a low specific activity since Cu-67 can't be chemically separated from its other isotopes. In FFTF and HFIR, a Zn-67 target can absorb a neutron and eject a proton to become Cu-67 which can then be chemically separated from the zinc target to produce a very high specific activity product. As seen in this graph of reaction probabilities, the neutron-proton reaction requires an energetic neutron and essentially does not occur at all in conventional water-cooled reactors. Another advantage related to flux is the overall substantial flux level. Both reactors have much higher total fluxes than conventional water-cooled reactors which provides the ability to produce high specific activity isotopes in neutron capture reactions. 991-2

A second advantage, at least as far as FFTF is concerned, is the available target volume. FFTF's substantial volume enables the production of substantial quantities of medical isotopes; a capability that will not otherwise be available to meet future projected demand for medical isotopes.

A third advantage has to do with the fact that these reactors exist. It is much easier to assess the production capabilities and associated costs of a reactor with an operating and production history than for a reactor that has only been scratched out on the back of a napkin. The cost of construction of a new, unique reactor such as a 50 or 100 MW TRIGA reactor and estimates of its production capabilities and associated cost are very speculative. Relying on such an alternative (and again, such a reactor is not really an adequate alternative) introduces significant risk in cost, schedule, capabilities, and even the possibility that it would never be completed as has been the case with previously planned production facilities. 991-3

I would also like to address the interpretations of the report issued by the Nuclear Energy Research Advisory Committee on isotope production. Some critics have said that the report concludes that FFTF is not needed for isotope production. That is false. The report only addresses production of research isotopes, concluding that FFTF is not needed for that purpose, but should be considered for the production of clinical quantities of isotopes. Without trying to cast aspersions on the authors of that report since I have a tremendous amount of respect for them, I believe that report was flawed in several respects. One respect arises from the fact that none of the people on the subcommittee have a background in reactor production of isotopes. The negative consequences of that were dramatically illustrated by the report's completely incorrect analysis of production of I-131. It concluded that production of I-131 by fissioning U-235 (as is done at the Maple reactors in Canada) results in a higher specific activity than production by neutron absorption by Te-130. My calculations show that Te-130 absorption produces a much higher specific activity than can be achieved through fission production and Nordion's product literature confirms that. I also disagree with the reports conclusion that FFTF is not a viable source of research isotopes. As I have said previously, there are certain isotopes that only FFTF and HFIR could produce. Further, the business model presented by the director of the Pacific Northwest National Laboratory to NERAC last summer 991-4

Response to Commentor No. 991

991-1: DOE considered a wide range of reactor alternatives for the NI PEIS, which are presented in Chapter 2 of Volume 1. Section 2.5 presents those reactor alternatives that are analyzed in the PEIS, while Section 2.6 presents those considered and dismissed. All reactor alternatives considered in the document were carefully developed, fully analyzed, and are considered true alternatives. These alternatives are not considered inferior when compared to one another or to other non-reactor alternatives.

991-2: DOE recognizes the high energy neutron flux spectrum of the FFTF and HFIR reactors as compared to the neutron flux energy spectrum of other nuclear reactor designs and the desirability of this higher energy flux in producing certain radioisotopes. In addition, DOE is aware of the available irradiation volumes for each alternative analyzed in the EIS. The high energy accelerator alternative could also theoretically provide a high energy neutron flux for radioisotope production but the current design and size of the accelerator evaluated in the NI PEIS does not support this. The operational status of FFTF and HFIR, along with their relatively higher energy flux spectrum and large irradiation volumes, will be considered in the DOE decision making process.

991-3: DOE notes the commentor's opposition to Alternative 4, Construct New Research Reactor. A separate Cost Report was prepared to provide additional pertinent information to the Secretary of Energy so that he may make an informed decision with respect to the alternatives presented in the NI PEIS. DOE believes cost uncertainties are addressed sufficiently in this report to support the decision-making process.

991-4: DOE notes the commentor's views. The Nuclear Energy Research Advisory Committee (NERAC) was established in 1999 to provide DOE with expert, objective advice regarding the future form of its isotope research and production activities. The members of the NERAC Subcommittee for Isotope Research & Production Planning were selected based upon their expertise and experience in the production, processing, distribution, and application of stable and radioactive isotopes in the biological and physical sciences, and in medicine. The members included basic and clinical scientists, administrators, and users of isotopes from academia, industry, and the federal government, with several possessing a background in reactor production of isotopes.

Commentor No. 991: Marc Garland (Cont'd)

provided for the supply of isotopes to researchers at low cost. There is no evidence that the subcommittee's report considered that business model; indeed, there is no evidence that the subcommittee performed any analysis of costs of the alternatives.

991-4 (Cont'd)

In conclusion, the Department of Energy must take advantage of FFTF and HFIR to be able to supply researchers with the broad range of isotopes that will be required to develop the most effective therapeutic radiopharmaceuticals and to provide the capacity to offer those treatments to the entire patient population following FDA approval. The volume of FFTF is required for those purposes and the availability of HFIR to produce research quantities of short-lived isotopes during FFTF routine shutdowns is necessary to assure uninterrupted supplies for researchers.

991-5

Thank you for the opportunity to provide input for this important decision.

Response to Commentor No. 991

The conclusions presented in the NERAC Subcommittee for Isotope Research and Production Planning Final Report, April 2000 regarding the suitability of FFTF to produce research isotopes in a timely and cost efficient manner were made in the context of the facility producing research isotopes as its sole mission. It would not be cost effective to restart FFTF for the singular purpose of producing small quantities of various research isotopes. However, sustained operation of FFTF for the production of larger quantities of both research and commercial isotopes would be viable if operated in concert with producing plutonium-238 and conducting nuclear energy research and development for civilian applications. As the NERAC report states: "In limited instances, the DOE possesses unique resources, e.g., the high flux of fast neutrons and large irradiation volume in FFTF, that could be utilized for the production of some radioisotopes, but is best suited for commercial interests who might consider its use for isotope production." In recognition of these constraints on its operational feasibility, the NI PEIS only evaluates the use of FFTF when coupled with the other stated missions. While some existing reactors may possess the potential capability or capacity to support research isotope production, as suggested in the NERAC report, it is unlikely that reliable, increased production of these isotopes to support projected needs could be accomplished without impacting the existing missions of these facilities. As stated in the Final Report, the Subcommittee had reviewed the FFTF business plan and intended to submit their observations and suggestions in a separate document. The discussion of Iodine-131 production referred to by the commentor is not presented in the Final Report.

991-5: DOE notes the commentor's support for Alternative 1, Restart FFTF, with the use of HFIR to supplement FFTF during routine shutdown.

Commentor No. 991: Marc Garland (Cont'd)

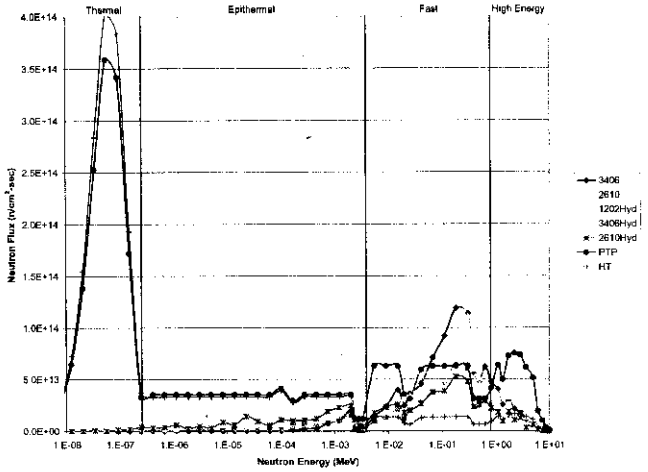

Figure 4 FFTF and HFIR Flux Spectra Comparison

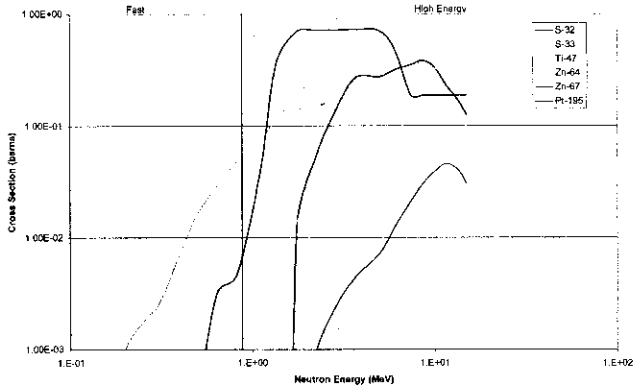

Figure 11 P-32, P-33, Sc-47, Cu-64, Cu-67, Pt-195m Production Cross Sections

Response to Commentor No. 991

Commentor No. 992: Ernest S. Chaput Economic Development Partnership

ECONOMIC DEVELOPMENT PARTNERSHIP
Serving Aiken & Edgefield Counties

Fred E. Humes
Director

Statement for the Record
DRAFT Programmatic Environmental Impact Statement
Expanded Civilian Nuclear Energy Research and Development
September 6, 2000

My name is Ernest S. Chaput and I represent the Economic Development Partnership of Aiken and Edgefield counties, South Carolina. We appreciate the opportunity to provide comments on this significant strategic document that will govern the future course of important Department of Energy (DOE) nuclear infrastructure programs.

For the past three years the Partnership has aggressively pursued the promise of current research in new nuclear medicine procedures. We have been equally concerned about the disruptions and missed opportunities caused by a medical isotope supply situation characterized as inadequate, unreliable and too costly. Our involvement first began by proposing that a private-sector isotope production capability be established as part of DOE's earlier proposed Accelerator Production of Tritium facility. DOE did not select the APT concept as the nation's next tritium source; however we have continued to monitor the status of nuclear medicine research, promote the promise of new nuclear medicine procedures and support the need for new isotope production capability.

An accurate and reliable forecast of market demand for individual isotopes is essential to assessing the adequacy of current and proposed medical isotope production capabilities. We recently contracted with a nationally renowned firm with specific expertise in the pharmaceutical industry to conduct a medical isotope market forecast for the period 2007/2008. The demand forecast assessment is currently in progress, and we will use its results, together with other data, to determine the extent that new isotope production capacity might be commercially feasible.

Our independent evaluations to date and assessments of other available data are consistent with, and further documents, the widely held beliefs that new nuclear medicine procedures:

- offer the potential for diagnostic and treatment procedures where none exist today , and
- increase treatment efficacy, reduce undesirable side effects, reduce costs, and increase patient quality of life.

Unfortunately, in many instances, this promise is being thwarted because (1) the right isotope needed for medical efficacy is not available, or (2) if the right isotope is available its supply is sufficiently unreliable or too expensive to discourage a 7 to 10 year commitment to conduct research and clinical trials. We have identified instances of new

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Response to Commentor No. 992

Commentor No. 992: Ernest S. Chaput (Cont'd) Economic Development Partnership

radiopharmaceuticals being abandoned in the latter stages of clinical trials because cost-effective isotopes are not available to support a clinical market. These are not new findings - similar statements have been made by many individuals in the profession and by respected peer review groups.

Therefore, I come today to provide comment and suggestions on those portions of the subject Draft Programmatic Impact Statement (DPEIS) that will affect the supply of medical isotopes for both research and clinical uses. In summary, our comments are four-fold:

- There are additional needs for both reactor-produced and accelerator-produced isotopes. In all instances, reliability of supply must be increased and less costly production cycles must be established. **992-1**
- DOE has the opportunity to utilize many existing DOE and other facilities to optimally allocate its limited budgetary resources in support of its total nuclear infrastructure mission, including isotope production, production of Plutonium 238 for space missions and nuclear energy R&D for civilian applications. The Fast Flux Test Facility (FFTF) should not be restarted because it: (1) is not part of a cost-effective program strategy, (2) can only support a portion of the mission need and (3) its budget requirements will adversely impact all other parts of DOE's nuclear energy mission, including production of medical isotopes. **992-2** **992-3**
- DOE should take advantage of the activities and facilities associated with the proposed Advanced Accelerator Applications program by designing and integrating their state-of-the-art capabilities into the medical isotope production and other nuclear energy programs. **992-4**
- The Draft PEIS document contains several significant inaccuracies and structural deficiencies that must be corrected prior to issuance of the Final PEIS. Analysis and conclusions contained therein must be examined and modified accordingly. **992-5**

Specific comments, conclusions and recommendations follow.

Production of Medical Isotopes

To date we have identified 60 nuclear medicine procedures active in FDA clinical trials using nineteen different isotopes. Two-thirds of the proposed procedures are therapeutic and one-third are diagnostic. This data supports the general belief that future growth in nuclear medicine will be in therapeutic applications; resulting in the need for a somewhat different suite of isotopes which are available in large quantities. Some of the proposed procedures (especially diagnostic procedures) use isotopes that are readily available and generally affordable, such as Mo-99/Tc-99, F-18 and I-131. However, many procedures, most notably therapeutic, use isotopes that are not currently available in large quantities **992-1**

2

Response to Commentor No. 992

992-1: DOE notes the commentor's views. For the purposes of analyses in the NI PEIS, a representative set of isotopes was selected on the basis of the recommendations of the Expert Panel, medical market forecasts, reviews of medical literature, and more than 100 types of ongoing clinical trials that use radioisotopes for the treatment of cancer and other diseases. These isotopes are listed in Table 1-1, along with a brief description of their medical and/or industrial applications. Unlike Table C-1, which lists representative isotopes that could be produced at FFTF, the isotopes listed in Table 1-1 include both reactor- and accelerator- produced isotopes. Isotopes in Table C-1 were used to evaluate the health impacts that would result from implementation of the alternatives described in Section 2.5 of Volume 1. The absence of any specific isotope from the Table 1-1 should not be interpreted to mean that it would not be considered for production under the proposed action. Rather, these isotopes are a representative sample of possible isotopes which could be produced, and DOE expects that the actual isotopes and specific amounts produced as a result of the proposed action would vary from year to year in response to the focus of clinical research and the specific market needs occurring at that time.

992-2: DOE has set forth a number of alternatives, including the use of existing DOE facilities, in the NI PEIS that evaluate the use of a wide range of DOE and private (CLWR) facilities in order to accomplish its stated mission requirements. The relative costs of these alternatives were considered in a separate Cost Report.

992-3: DOE notes the commentor's opposition to Alternative 1, Restart FFTF.

992-4: As discussed in Section 2.8 of Volume 1, DOE plans to work over the next two years to establish a conceptual design for an Advanced Accelerator Applications facility.

992-5: This NI PEIS has been prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and the related CEQ and DOE implementation regulations (40 CFR 1500 through 1508 and 10 CFR 1021, respectively). DOE has made every effort to obtain and evaluate all of the information it needs to make a decision on expanding civilian nuclear energy research and development and isotope production missions in the United States.

Commentor No. 992: Ernest S. Chaput (Cont'd) Economic Development Partnership

and usually have high cost. Lack of availability and high cost is impacting progress in pre-clinical trial research and formal clinical trial programs. In some instances, availability and cost issues have resulted in abandonment of development efforts, with additional efforts likely to be abandoned in the future.

In addition to procedures in clinical trial, researchers have identified many other isotopes as necessary to their pre-clinical trial discovery and basic development efforts. Based upon literature reviews and personal contacts, we estimate that approximately twenty additional isotopes are important for or actively used in pre-clinical trial activities.

When both clinical trial and pre-clinical trial activities are considered, our data indicates that substantial quantities at low cost are needed for about forty different isotopes. Some of the isotopes are available from commercial sources and some are being produced "in-house," but the majority will, at least initially, look to DOE as an isotope supplier. In general terms, one-third of the forty isotopes are uniquely produced in accelerators (to include cyclotrons), one-forth are unique to reactors, twenty percent can be produced in both reactors and accelerators and about ten percent are recovered from fission products.

In this regard, your DPEIS is significantly deficient and misleading. Appendix C, page C-3 includes Table C-1 Representative Candidate Medical Isotopes. Table C-1 is described as "medical isotopes that are evaluated in this programmatic environmental impact statement," and "representative considering current and future . . demand . ." DOE's Nuclear Energy Research Advisory Committee (NURAC), Subcommittee for Isotope Research and Production Planning (April, 2000) and the DOE funded Expert Panel: Forecast Future Demand for Medical Isotopes (September, 1998) have identified a total of 26 medical isotopes as being important for the development, testing and production of new nuclear medicine procedures. (The NURAC Subcommittee has endorsed the recommendations of the Expert Panel report). This is an important baseline because both of these reviews included personages with world renown reputations in nuclear medicine research and the commercial radiopharmaceutical industry. Therefore it is disappointing that DOE did not include almost one-half (12 of 26) of the specific isotopes identified by these recognized experts in Table C-1. Furthermore, it is especially troublesome that all of the missing isotopes are not suited for reactor-based production, but rather require use of cyclotrons, accelerators or separation from existing stocks of fission products or fissile materials. We believe that these omissions result in a significant distortion in the demand for medical isotopes and calls into question the credibility of the entire body of medical isotope-related analysis in this DPEIS. Table C-1 and related analysis must be revised to include the isotopes recommended by DOE's own expert advisors as well as other isotopes that are being actively used in medical research, including clinical trials.

992-1 (Cont'd)

The final PEIS should also be restructured to include a new and separate alternative to construct and operate a small accelerator to meet only medical isotope and nuclear energy R&D needs, excluding the Plutonium 238 mission. The DPEIS currently includes only one alternative for new accelerators, totaling $1.1 Billion for construction of the irradiation source. In this alternative, accelerator size and cost are dictated solely by

992-6

3

Response to Commentor No. 992

992-6: Section 2.5.4 of Volume 1 of the Draft NI PEIS discussed that the Record of Decision can select any alternative or combination of alternatives or elements of alternatives. The low-energy accelerator for the production of medical and industrial isotopes in combination with Alternative 2 for the production of plutonium-238 was used as an example in the discussion. It is not unrealistic to assume that the Record of Decision would consider the low-energy accelerator for the production of medical and industrial isotopes if the No Action Alternative with the procurement of Russian plutonium-238, or Alternative 5 in combination with the procurement of Russian plutonium-238 element from the No Action Alternative, or Alternative 2 was selected.

Some DOE facilities were considered and dismissed as reasonable alternatives because surplus capacity at these was not available on a continuous basis. For example medical isotopes will be produced at the Los Alamos Neutron Science Center Linear Accelerator Isotope Production Facility. The Isotope Production Facility will be run as a parasitic load when the accelerator is in operation for other missions. It would not be cost effective to run the accelerator for only the medical isotope mission. The Sandia Annular Core Research Reactor is operated on a campaign basis by the primary user of the facility. While there may be periods during the year when this reactor could be available for the production of isotopes, these periods are not available consistently throughout the year and therefore this reactor could not support the production of a constant and reliable supply of medical and industrial isotopes.

Commentor No. 992: Ernest S. Chaput (Cont'd) Economic Development Partnership

production requirement for the Plutonium 238 mission. Data internal to the DPEIS states that an accelerator sized to meet only medical isotope needs will cost $35 Million. DOE has several options for meeting the Pu 238 mission, but has only one option for providing additional accelerator-based isotope production – that being construction of a small new accelerator. It is unrealistic to expect that the currently identified option would be used for production of medical isotopes if Pu 238 production were to be met by a reactor or procurement option. The final PEIS should include a separate option for DOE to construct and operate a small accelerator for isotope production independent of programmatic decisions for production of Pu 238 for the space mission.

We further recommend that DOE fully fund its existing accelerator and reactor-based medical isotope production facilities. Existing accelerators should be provided additional operating funds so that they are available throughout the year. DOE should also either complete funding for the Sandia Annular Core Research Reactor (ACRR) privatization effort or reassume its operation as a DOE operated facility. These are all low-cost steps which can increase, in the short run, the availability of medical isotopes.

We also strongly recommend that DOE take advantage of the potential for production of medical isotopes in the new accelerator facilities proposed by Congress as part of the Advanced Accelerator Applications (AAA) program. The AAA concept offers the potential for cost-sharing a large capable accelerator complex which should result in the lowest cost and fastest means of achieving new medical isotope production capacity.

992-6 (Cont'd)

Optimally Allocate Available Resources

DOE is currently facing severe budget shortfalls and this situation will not improve in the near future. Therefore, it is important for DOE to allocate its nuclear energy R&D and isotope production funding in the most cost-effective manner. Allocating $314 Million for the restart of the FFTF facility is not a cost-effective use of scarce DOE and taxpayer funds.

Analysis of the data included in the DPEIS indicates that DOE has many options for meeting the defined nuclear energy mission and that options are available for meeting all missions for considerable less than the $385 Million associated with FFTF restart. For example, the following scenario will meet all missions, with total construction costs being less than $100 Million and annual operating costs of less than $50 Million.

- Use commercial light water reactors for production of Pu 238
- Construct a small accelerator to produce medical isotopes
- Fully fund and use available DOE and other reactors to produce medical isotopes (including ATR, HFIR, ACRR and non-DOE facilities such as MURR).
- Use the unique capabilities of ATR to conduct nuclear fuels and advanced reactor development activities

992-7

4

Response to Commentor No. 992

992-7: DOE notes the commentor's concern and his proposed preferred alternative consisting of elements from Alternative 2 (Use Only Existing Operational Facilities) and Alternative 3 (Construct New Accelerator(s)). As indicated in the NI PEIS, the Record of Decision can select implementation of elements from one or more alternative evaluated in the NI PEIS.

Commentor No. 992: Ernest S. Chaput (Cont'd) Economic Development Partnership

In addition to lowest cost, this scenario will result in less environmental impact than FFTF restart. Facilities and capabilities associated with the proposed Advanced Accelerator Applications program will serve to further enhance mission performance in a cost-effective manner. **992-4**

Other factors that argue against the restart of FFTF include: **992-8**

- Restart of FFTF, by itself, will not meet all DOE mission requirements. Specifically, FFTF cannot meet the increased need for medical isotopes unique to accelerator production.
- ATR is more suited to development and testing of thermal reactor fuel than FFTF
- The cost estimate for FFTF restart must be viewed with considerable skepticism. As compared to the cost estimates for other alternatives, there is essentially no project description or estimate detail and justification in the DPEIS. Is the estimate based on detailed design and has it been subjected to external independent review? We also note that modifications to nuclear facilities have demonstrated the highest potential for cost overruns and schedule slippage **992-9**
- Restarting the FFTF reactor will present an unaffordable financial commitment to DOE's nuclear energy programs, resulting in further degradation and losses in the non-FFTF infrastructure – especially programs and facilities essential to the production and separation of medical isotopes

It is also noted that the April, 2000 NURAC Subcommittee report recommended that FFTF not be considered as a viable long-term source of research isotopes. **992-1**

Integrate the Advanced Accelerator Applications Program into the Nuclear Energy Program

Integration of the facilities and capabilities associated with the proposed Advanced Accelerator Applications program into DOE's nuclear energy activities can significantly enhance mission performance in a cost-effective manner. In addition to legislative mandates for APT backup technology, transmutation of spent nuclear fuel and waste, material science and other advanced accelerator applications, AAA facilities can also support production of medical isotopes, many nuclear energy R&D requirements and, depending on accelerator size, production of Pu 238. **992-4**

A major potential facility mission is its use as an irradiation source for the large-scale commercial production of medical isotopes, such as proposed for the APT project. Such a private-public partnership would further DOE's privatization objectives, minimize facility construction and operating costs and provide revenues back to DOE. By cost sharing with other internal DOE programs and with external public and private organizations, DOE has the unique opportunity to obtain and operate a multi-faceted and highly capable state-of-the-art research and production facility in the most cost-effective manner.

5

Response to Commentor No. 992

992-8: The ability of each alternative to meet mission objectives is one of the factors that will be evaluated by DOE in its decision making process. Each radioisotope production technology, including FFTF and accelerators has unique advantages and disadvantages relative to their specific designs. The development and testing of thermal reactor fuel, which would be more suitable for the ATR, is only one factor in the assessment of each alternative.

992-9: DOE notes the commentor's view. DOE has confidence in the FFTF restart cost estimate. Restart of FFTF will result in a significant increase in the domestic infrastructure available to support the production of medical isotopes.

Correction of DPEIS Structural Deficiencies and Inaccuracies

This section summarizes the structural deficiencies and data inaccuracies included in the DPEIS that must be corrected before issuance of the final PEIS.

1. The programmatic justification for production of medical isotopes (Table C-1) must be corrected to include all isotopes (1) recommended by DOE's NURAC advisory committee and (2) those involved in active medical research, including clinical trials. If DOE chooses to not include these isotopes in the final PEIS, the rationale for that decision should be included therein. **992-1**

2. A separate alternative be established for construction and operation of a small accelerator for production of medical isotopes. Absent a new alternative, cost and impacts of meeting individual missions are not easily ascertained and the management decision process is not consistent with DPEIS alternatives. **992-6**

3. The cost of FFTF deactivation must be included in all programmatic alternatives considered in the final PEIS, or in no alternative. FFTF deactivation will occur at some point in time, whether the facility is restarted or not. To only include it in the non-FFTF restart alternatives is to provide an unwarranted and erroneous reduction in the total cost of the FFTF restart option. **992-10**

4. The cost estimate for a large accelerator associated with production of Pu 238 should be reexamined in light of engineering development advances and design activities which have occurred since the referenced 1997 APT Conceptual Design Report. APT preliminary design is now over fifty percent complete. Project cost estimates have been examined by three Congressional review teams and DOE's Independent Cost Evaluation (ICE) team. The most recent review was completed this summer. All reviews support the project estimate and contingency allowance. Accordingly, inclusion of $457 Million in excess contingency in the Alternative 3 cost estimate is not supported and should be removed from the cost estimate. Table S-4 in the "Cost Report for Alternatives" document should be revised accordingly. In a similar vein, we recommend that the estimating basis for FFTF restart be reexamined to assure that the proper level of contingency is included. **992-11**

5. Programs and Facilities associated with the proposed Advanced Accelerator Applications program should be included in the final PEIS. This initiative has a significant potential for providing solutions to nuclear energy mission needs, and its inclusion will enhance the likelihood that the final PEIS will be consistent with DOE management options. **992-4**

Thank you for the opportunity to provide comments on your Draft Programmatic Environmental Impact Statement.

6

992-10: The cost of deactivating FFTF is presented separately in the cost tables of the Cost Report and can be considered separately and subtracted from the combined estimated costs. Deactivation of existing facilities (FFTF, ATR, and HFIR) is not part of the proposed action addressed by the NI PEIS and was therefore not included in the Cost Report. As described in Section 2.5 of the NI PEIS, FFTF would be deactivated if other facilities were utilized for the production of isotopes. Deactivation of FFTF costs were therefore estimated for the Cost Report and included in the combined estimated costs of Alternatives 2, 3, 4, and 5. DOE has provided the summary of the Cost Report in Appendix P in the Final NI PEIS.

992-11: DOE acknowledges that development of the Accelerator Production of Tritium (APT) described in Conceptual Design Report LA-UR-97-1329 April 15, 1997), has progressed. However, with two exceptions, the estimated cost and contingency allowances assigned to system components of the APT were accepted for the high-energy accelerator system considered in Alternative 3 of the NI-PEIS Cost Report. The exceptions, as noted on page A-2 of the Cost Report, were the contingencies used for the target/blanket system and the accelerator system itself. The inclusion of additional contingency factors in the Cost Report reflects the difference between the two accelerator's spallation targets, uranium for the production of plutonium-238 (NI PEIS) and tungsten for the production of tritium (APT). In any event, the target blanket systems for these accelerators have not been tested under full scale production conditions. Although not identified in the Cost Report, the estimated FFTF restart costs (Alternative 1) from Hanford included contingency factors.

Commentor No. 993: Thomas A. Coleman Framatome Cogema Fuels

+8322932 FCF F-676 T-022 P-002/003 SEP 06 '00 09:55

FRAMATOME COGEMA FUELS

September 5, 2000
GR00-114.doc

Ms. Colette Brown, Document Manager
Office of Space and Defense Power Systems (NE-50)
Office of Nuclear Energy, Science and Technology
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874

Attention: NI PEIS

Re: Draft Programmatic Environmental Impact Statement for Accomplishing Expanded Civilian Nuclear Energy Research and Development and Isotope Production Missions in the United States, Including the Role of the Fast Flux Test Facility

Dear Ms. Brown:

We appreciate the opportunity to comment on the subject document. As we have previously stated in writing, we fully support making the U.S. self-sufficient in supplying a critical element of the nation's deep-space program by establishing a domestic capability to produce Plutonium-238 (Pu-238). We also endorse planning for the increased demand for medical and industrial isotopes to support scientific research and activities associated with the development of nuclear power for civilian use. 993-1

In our review of the subject document, however, we feel that inadequate consideration has been given to the use of commercial light water reactors (CLWRs), possibly because of a lack of familiarity with their design and operation. This concern is particularly borne out in the discussion of Alternative 2 – Use Only Existing Operational Facilities. We cite page S-18 as an example. 993-2

> "Modification of CLWRs to enable online insertion and retrieval of targets for the medical and industrial isotope production missions was evaluated and dismissed as a reasonable alternative. This decision was made because the required facility modifications would be significant and would include penetrations into the reactor vessel and, potentially, the containment vessel. Additional facility modifications would be required to enable loading of the targets into a shielded cask for transport to a processing facility. Performing these modifications would require an

FRAMATOME TECHNOLOGIES

Framatome Cogema Fuels
3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935
Telephone: 804-832-3000 Fax: 804-832-3653

Response to Commentor No. 993

993-1: DOE notes the commentor's support for the nuclear infrastructure missions described in Section 1.2 of Volume 1.

993-2: While the commentor is correct in stating that existing Westinghouse pressurized water reactors have a moveable incore flux mapping system that could be used to produce medical radioisotopes, other operational considerations would limit the usefulness of this method. During the fuel cycle, technical specifications require a minimum frequency for incore flux mapping to ensure that axial and radial power peaking factor limits are not exceeded. These periodic (i.e., usually on a monthly frequency) incore flux mapping operations would require that any medical isotope targets in the thimble tubes be removed and replaced by the flux detectors. For radioisotopes requiring a longer incore irradiation time, each removal and replacement process would require repetitive handling of radioisotopes with commensurate shielding and worker doses. In addition, the incore flux detector is a small cylinder that moves axially within the thimble tube. To produce the desired quantities of medical and industrial radioisotopes, much longer target rods would need to be inserted into the thimble tubes. The presence of these long neutron absorbing radioisotope producing targets in the fuel assembly center thimble tubes would affect the power and neutron flux distribution within reactor core fuel assemblies since a strong neutron absorber would be placed into a normally empty thimble tube. The utility would need to calculate revised peaking factors to demonstrate that technical specification peaking limits are not exceeded. Such peaking factors would be affected by the specific target material for radioisotope production, location in the core, and the time dependent production of radioisotopes with its commensurate change in neutron absorption during a core cycle. Short half-life radioisotopes require on site processing to separate the desired radioisotope from the target material and other radioisotopes that may have been produced during incore irradiation. Commercial light water reactors do not possess this separation capability. The handling of radioactive targets after removal from the bottom of the reactor vessel would involve a system that shields the targets, loads them into an appropriate shielded container and transports the container outside containment. This would require design modifications to the compartment below the reactor vessel and frequent access by utility staff to this relatively high radiation area during operation. The commentor is correct in identifying an error on EIS page B-14 regarding standard fuel cycle length. This error has been corrected in the final PEIS. A typical CLWR fuel cycle length of 18 months is correctly identified in PEIS Volume 1, Section 2.3.1.4.

Commentor No. 993: Thomas A. Coleman (Cont'd) Framatome Cogema Fuels

extended refueling outage (with a resulting loss of power generation revenue to the CLWR owner) and could potentially extend subsequent maintenance or refueling outages to inspect, test and maintain the insertion and retrieval system, reactor vessel penetrations, and potential containment vessel penetrations. In the event that CLWRs are used for medical isotope production, the selection of isotopes to be produced would be limited to those with relatively long half-lives because there are no CLWR sites with facilities for processing irradiated targets."

Many of the existing pressurized water reactors in the United States include systems that could be used to support short-term irradiation of medical isotopes. Specifically, the moveable flux mapping system in Westinghouse units could deliver a medical-isotope target to the reactor core and retrieve the target after an appropriate length of irradiation. Penetrations into the reactor vessel and the fundamental system to perform these operations already exist at many nuclear reactors. Further, an extended refueling outage would not be required and the shipment of the irradiated targets from a commercial LWR would be no more of an issue than similar shipments from other facilities.

993-2 (Cont'd)

Another example of an incorrect statement can be found on page B-14 that states that "fuel assemblies . . . are rotated at about 180 day intervals . . ." Standard fuel cycles for most operating CLWRs extend from 18 to 24 months at which intervals fuel-shuffle patterns are executed. Such erroneous statements indicate a need for further study of the CLWR option.

this is stated correctly elsewhere in the report.

Framatome has discussed the production of medical and industrial isotopes and Pu-238 with several utilities. Florida Power Corporation remains interested in the Pu-238 effort, while Entergy has expressed an interest in studying the production of medical and industrial isotopes. Using these existing facilities should be the least expensive means of producing these isotopes because the cost of operations of these units is currently absorbed through sales of electrical output. We strongly urge that DOE perform an appropriate cost-benefit analysis for using CLWRs, if not as the main source of isotope production, at least as a backup.

993-3

we have not completed our review of the Cost Report for Alternative ~~Received~~ Presented in the Draft PEIS (Just received several days ago)

993-4

Very truly yours,

TA Coleman by JDC

Thomas A. Coleman
Vice President
Government Relations

TAC:jfd

Response to Commentor No. 993

993-3: DOE notes that there are nuclear power utilities that are interested in studying the production of medical and industrial isotopes and plutonium 238 in their operating reactors. Options 4, 5, and 6 of Alternative 2, Use Only Existing Operational Facilities, will be given equal consideration among the other alternatives and options during DOE's decision process. A summary of Mission effectiveness for Alternatives 1 through 4 is provided in Section 2.7.3 of Volume 1.

993-4: DOE notes the commentor's view on using CLWRs as an irradiation source for the production of medical and industrial isotopes and plutonium-238.

The CLWR is considered a reasonable alternative for the plutonium-238 production mission. As indicated in Volume 1, Section 2.6.1, CLWRs were considered and dismissed as a reasonable alternative for the production on medical isotopes. DOE prepared a separate Cost Report to provide additional pertinent information to the Secretary of Energy so that he may make an informed decision with respect to the alternatives presented in the NI PEIS. Estimated costs for the range of reasonable alternatives evaluated in the NI PEIS are presented in the Cost Report, and are summarized in Volume 2, Appendix P, of the Final NI PEIS.

Commentor No. 994: Raphael S. Daniels

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

I would like to see the question of longer term storage of Np-237 at SRS be addressed since it figured in several options.

994-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Raphael S Daniels

Organization: DNFSB

Home/Organization Address (circle one): DNFSB

625 Indiana Ave, NW, Suite 700

City: Washington State: DC Zip Code: 20004

Telephone (optional): 202-694-7116

E-mail (optional): RAYD@DNFSB.GOV

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 994

994-1: The management of neptunium-237 at SRS (including stabilization and storage) was fully analyzed in the final environmental impact statement, "Interim Management of Nuclear Materials" (DOE/EIS-0220, October 20, 1995), and further discussed in subsequent Records of Decision, the last of which was published in the Federal Register of Friday, November 14, 1997 (page 61099). If DOE decides not to retain this neptunium-237 inventory for possible future plutonium-238 production, then the material management strategies discussed in these documents would be implemented.

Commentor No. 995: Darlene Coyne

SEP-06-2000 WED 10:01 AM MARKEL BHC FAX NO. 509 735 1440 P. 01

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

NUCLEAR INFRASTRUCTURE EIS

We support the restart of the FFTF Reactor Facility at Hanford to meet the national needs for medical isotopes and other peaceful nuclear materials. The FFTF is the most economical, safe, and environmental friendly method available to meet these needs.

Very truly yours,

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Darlene Coyne

Organization: Coyne Construction

Home/Organization Address (circle one): 1120 S. Bellevue

City: Kennewick State: WA Zip Code: 99338

Telephone (optional):

E-mail (optional):

COMMENTS MUST BE POSTMARKED BY September 18, 2000

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U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

995-1

Response to Commentor No. 995

995-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 996: Anonymous

NI PEIS Toll_Free Telephone

9/5/00

Anonymous

Hi. I am calling in regards to Colette Brown's message and information given out to me onrequest. This is regarding the current issues of your nuclear waste carelessness. I would just liketo say that you shouldn't start that reactor until it's safe for operations. Thank you.

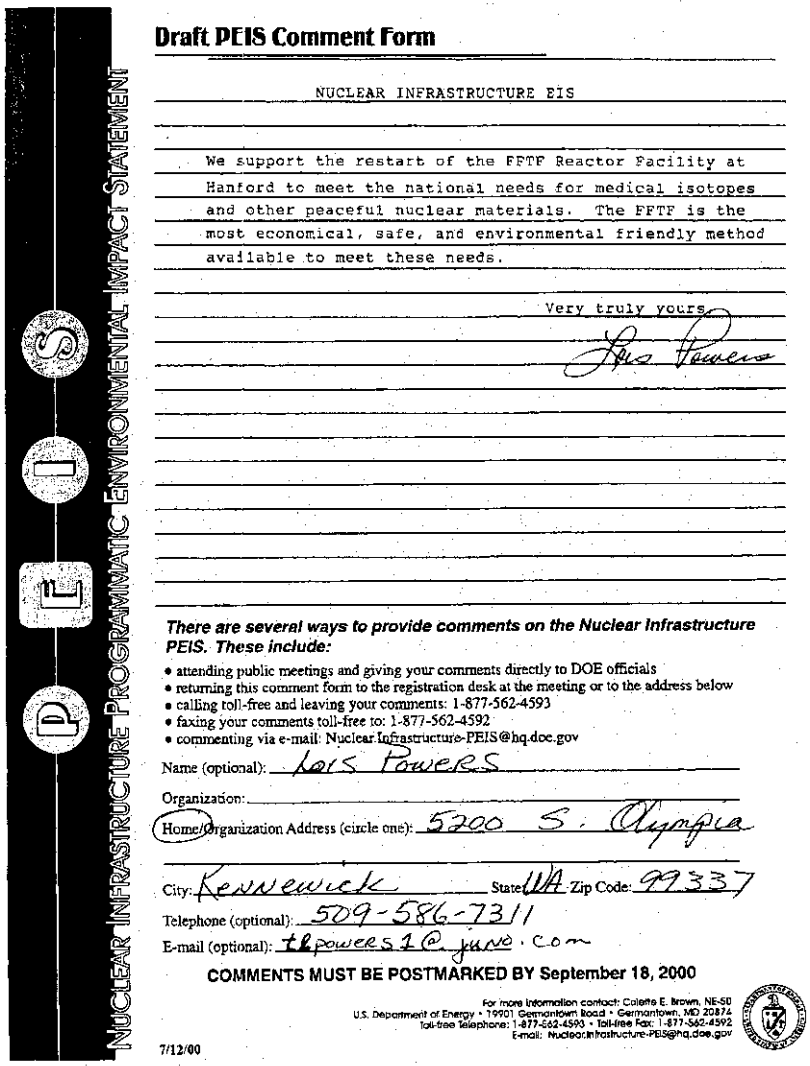
996-1

996-2

Response to Commentor No. 996

996-1: DOE notes the commentor's concern regarding radioactive waste management. The NI PEIS addressed the environmental impacts due to the treatment, storage, and disposal of the waste generated by the proposed actions for all alternatives and alternative options. Waste minimization programs at each of the proposed sites are also addressed. These programs will be implemented for the alternative selected in the Record of Decision. The waste generated from any of the proposed alternatives in the NI PEIS will be managed (i.e., treated, stored and disposed) in a safe and environmentally protective manner and in compliance with all applicable Federal and state laws and regulations and applicable DOE orders.

996-2: FFTF can be safely operated to support the nuclear infrastructure missions described in Section 1.2 of Volume 1. Section 4.3 of Volume 1 provides the results of the evaluation of potential health impacts that would be expected to result from implementation of Alternative 1, including normal operations and a spectrum of accidents that included severe accidents. The environmental analysis showed that radiological and nonradiological risks associated with restarting FFTF would be small.



NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

NUCLEAR INFRASTRUCTURE EIS

We support the restart of the FFTF Reactor Facility at Hanford to meet the national needs for medical isotopes and other peaceful nuclear materials. The FFTF is the most economical, safe, and environmental friendly method available to meet these needs.

Very truly yours,

Lois Powers

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): Lois Powers

Organization:

Home/Organization Address (circle one): 5200 S. Olympia

City: Kennewick State: WA Zip Code: 99337

Telephone (optional): 509-586-7311

E-mail (optional): tlpowers1@juno.com

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

SEP-06-2000 WED 10:02 AM MARKEL BHG FAX NO. 509 735 1440 P. 01/02

997-1

997-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 998: Jack Henneberry

SEP-06-2000 WED 10:09 AM MARKEL BHG FAX NO. 509 735 1440 P. 01

NUCLEAR INFRASTRUCTURE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Draft PEIS Comment Form

NUCLEAR INFRASTRUCTURE EIS

We support the restart of the FFTF Reactor Facility at Hanford to meet the national needs for medical isotopes and other peaceful nuclear materials. The FFTF is the most economical, safe, and environmental friendly method available to meet these needs.

Very truly yours,

Jack Henneberry

998-1

There are several ways to provide comments on the Nuclear Infrastructure PEIS. These include:

- attending public meetings and giving your comments directly to DOE officials
- returning this comment form to the registration desk at the meeting or to the address below
- calling toll-free and leaving your comments: 1-877-562-4593
- faxing your comments toll-free to: 1-877-562-4592
- commenting via e-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

Name (optional): JACK HENNEBERRY

Organization:

(Home)/Organization Address (circle one): 7909 W. GRAND Ronde AVE.

City: KENNEWICK State: Wa Zip Code: 99336

Telephone (optional):

E-mail (optional): jhenne1022@aol.com

COMMENTS MUST BE POSTMARKED BY September 18, 2000

For more information contact: Colette E. Brown, NE-50
U.S. Department of Energy • 19901 Germantown Road • Germantown, MD 20874
Toll-free Telephone: 1-877-562-4593 • Toll-free Fax: 1-877-562-4592
E-mail: Nuclear.Infrastructure-PEIS@hq.doe.gov

7/12/00

Response to Commentor No. 998

998-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 999: Angel Kelly

NI PEIS Toll_Free Telephone

9/6/00

Angel Kelly
503_231_4114

I am calling because I am looking at the summary of the PEIS. It seems like there are so manyunanswered questions, and in particular, with regard to accidents and cleanup and stuff. It justdoesn't seem very clear to me. I am not in favor of this project moving forward. I believe I am in favor of Alternative 5. **999-1** **999-2**

I am not in favor of new development of nuclear research and nuclear energy in the northwest orany part of the country. **999-3**

I think that DOE should prioritize cleanup and containment of leaking waste as their number onepriority. I think they have an obligation to do that before they start anything else. Thank you. **999-4**

Response to Commentor No. 999

999-1: The commentor's concern about the clarity of the accident and waste cleanup presentations in the NI PEIS is noted. The impacts from postulated accidents in facilities associated with nuclear infrastructure operations are presented in Volume 1, Chapter 4, "Environmental Consequences." Detailed discussions and calculational methodologies are given in Volume 2, Appendix I, "Evaluation of Human Health Effects from Facility Accidents." The management of wastes generated as the result of nuclear infrastructure operations is also discussed in Chapter 4, along with potential impacts to the environment.

999-2: DOE notes the commentor's support for Alternative 5, Permanently Deactivate FFTF.

999-3: DOE notes the commentor's views. Information on the need for nuclear energy research and development is provided in Section 1.2.3 of Volume 1.

999-4: DOE notes the commentor's concerns regarding the existing cleanup mission at Hanford. Although beyond the scope of this NI PEIS, ongoing Hanford cleanup activities are high priority to DOE. Hanford Site environmental restoration activities are conducted in accordance with the Tri-Party Agreement (i.e., Washington State Department of Ecology, U.S. Environmental Protection Agency, and the U.S. Department of Energy). This agreement specifies milestones and schedules for restoration of all parts of the Hanford Site. DOE is fully committed to honoring this agreement. As stated in Section N.3.2, implementation of the nuclear infrastructure alternatives would not divert or reprogram budgeted funds designated for Hanford cleanup, regardless of the alternative(s) selected.

Commentor No. 1000: Anonymous

NI PEIS Toll_Free Telephone

9/6/00

Anonymous

This message is in care of Colette Brown. Just calling as a concerned citizen of the state of Washington. The nuclear reactor here should not be restarted for obvious reasons, such as public safety. **1000-1**

There was plutonium released into the air after the recent fire. There has already been people downwind of Hanford getting cancer, and the Columbia River already has nuclear waste in it. **1000-2**

We don't feel that it is a very good idea to restart this nuclear reactor. In fact, it is crazy because we know medical isotopes, that is what they are called, will not cure cancer. They may help cure cancer in some way, but Hanford is not a good place to make them. There are other capacities besides a nuclear facility that are safer to make it, which should be the first priority, and there is not as much of a need as NASA expressed in the letter openly stating they don't need isotopes as they did before. Please do not restart this. **1000-1** **1000-3**

There will be a lot of people calling as well. I wish you would take their concerns into consideration. Your job first is safety and second to make money. Actually it should be about 20th on your list, but I am sure that it what it is second. **1000-4** **1000-5**

Do not restart the FFTF nuclear reactor. **1000-1**

Response to Commentor No. 1000

1000-1: DOE notes the commentor's opposition to Alternative 1, Restart FFTF. Included in the NI PEIS are the results of analyses that show that the risks associated with operating the FFTF are very small.

1000-2: With regard to the Hanford wildfire of 2000, the DOE Richland Operations Office, the State of Washington Department of Health, and U.S. Environmental Protection Agency performed environmental monitoring on and around the Site to assess potential radiological impacts. The wildfire did not cause a release of radioactive materials from any Hanford facilities but did result in resuspension of radioactive materials which were already in the environment. The very low levels of radioactive materials that were resuspended were slightly above natural background levels and required several days of analysis to quantify. Information on this event has been made available to the public and can be accessed at http://www.Hanford.gov/envmon/indes.html. This site also provides a link to information on the independent offsite air monitoring that was conducted by the U.S. Environmental Protection Agency.

As discussed in Section 3.4.9.3 of Volume 1, the question of whether residents in the Hanford area are subject to elevated cancer rates is unresolved. Existing studies and data suggest that cancer mortality rates in counties adjacent to the Hanford Site are not elevated. Prevailing winds at the Hanford Site blow toward Grant County, Washington from the south (14.2 percent of the time) and south-southwest (11.5 percent of the time) directions. Hence, Grant County would be expected to bear a major burden of wind borne contamination from the Hanford Site. However, if an excess cancer mortality risk is present in Grant County, it was too small to be identified at the county-level of resolution in the survey and available National Cancer Institute data discussed in Section 3.4.9.3. Epidemiological studies in Benton and Franklin counties provided no conclusive evidence of elevated congenital defects in the two counties.

As discussed in Section 4.3 of Volume 1, implementation of the alternatives described in Section 2.5 would not be expected to have a significant impact on the Columbia River. There are no radiological liquid effluent pathways to the Columbia River from FFTF.

1000-3: DOE notes the commentor's opposition to restarting FFTF for enhancing its existing nuclear facility infrastructure. In ongoing clinical testing,

therapeutic radioisotopes have proven effective in treating cancers and other illnesses while minimizing adverse side effects, making their use an attractive alternative to traditional chemotherapy and radiation treatments. Although a few radioisotopes can be produced by separating them from existing stockpiles of transuranic materials or other long-lived radioisotopes, the two primary means for producing radioisotopes is through the use of nuclear reactors or particle accelerators.

Through a Memorandum of Understanding with NASA, DOE provides radioisotope power systems, and the plutonium-238 that fuels them, for space missions that require or would be enhanced by their use. In addition, under the National Space Policy issued by the Office of Science and Technology Policy in September 1996, and consistent with DOE's charter under the Atomic Energy Act, DOE is responsible for maintaining the capability to provide the plutonium-238 needed to support these missions. There are approximately 9 kilograms (19.8 pounds) of plutonium-238 in the U.S. inventory available to support future NASA space missions. Although research to identify other potential fuel sources to support these space exploration missions has been conducted, no viable alternative to using plutonium-238 has been established. Based on NASA guidance to DOE on the potential use of radioisotope power systems for upcoming space missions, it is anticipated that the existing plutonium-238 inventory will be exhausted by approximately 2005. Without an assured domestic supply of plutonium-238, DOE's ability to support future NASA space exploration missions may be lost.

A May 22, 2000, correspondence from NASA to DOE identified that NASA no longer has a planned requirement for small radioisotope thermoelectric generator (SRTG) power systems. This does not mean that NASA no longer requires DOE to provide the necessary plutonium-238 to support deep space missions. Rather, the suspension of SRTG development efforts was conducted in order to permit reprogramming of funds to support development of a new radioisotope power system based on a Stirling technology generator. This new radioisotope power system, referred to in the subject correspondence, requires 1/3 less plutonium as its fuel source. However, the Stirling technology is developmental and NASA has requested in a September 22, 2000, letter to DOE that the plutonium-238 needed for large RTG may be maintained as a backup. Section 1.2.2 of Volume 1 was revised to further clarify the purpose and

Commentor No. 1000: Anonymous (Cont'd)

Response to Commentor No. 1000

need for reestablishing a domestic plutonium-238 production capability to support NASA space exploration missions.

1000-4: In compliance with NEPA and CEQ regulations, DOE provided opportunity to the public to comment on the scope of the NI PEIS and the environmental impact analysis of DOE's proposed alternatives. DOE gave equal consideration to all comments. In preparing the Final NI PEIS, DOE carefully considered comments received from the public.

1000-5: The health and safety of workers and the public is a priority of the nuclear infrastructure program, regardless of which approach is chosen. Operation of the facilities would comply with applicable Federal, State, and local laws and regulations governing radiological and hazardous chemical releases.

Commentor No. 1001: Frank Reckendorf Reckendorf & Associates

09/08/2000 10:03 503-399-9421 RECKENDORF&ASSOC. PAGE 01

RECKENDORF & ASSOCIATES

950 Market St. NE
Salem, OR 97301-1130
email: reckan@open[illegible]
(503) 364-6881
Fax: (503) 399-9421

September 9, 2000

U.S. Department of Energy
19901 Germantown Road
Germantown Road, MD
20874
(FAX) 1(877) 562-4593

Dear Sir:

I am concerned with the shutdown of the Fast Flux Test Facility, since it still has twenty years of remaining design life. This leaves us 90% dependent on foreign sources of isotopes that could be produced by FFTF.

We need FFTF. Please restart this reactor.

Sincerely,

Frank Reckendorf

1001-1

Response to Commentor No. 1001

1001-1: DOE notes the commentor's support for Alternative 1, Restart FFTF. It should be noted that FFTF would operate for 35 years under Alternative 1.

Commentor No. 1002: Ken Stowell

From: Ken Stowell[SMTP:KSTOWELL@BENTONREA.COM]
Sent: Thursday, September 07, 2000 11:36:15 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Fast Flux Test Facility
Auto forwarded by a Rule

Hello!

I just wanted to share my thoughts on the restart of FFTF. I FULLY support the restart of FFTF.As an employee of Hanford, I know the Hanford Project is currently in cleanup mode. ISTRONGLY feel the Hanford area needs a mission once again. We NEED a mission here tokeep our many talented people here, working to better our future. Hanford and the surroundingcommunity has already lost many, many talented people since the mission of production days. Inthe not so distant past, Hanford and it's workers have developed countless revolutionary products and ideas that have benefited the private sector as well as the Government. It would be a sin toabandon all that has been accomplished as a result of the Hanford Project. **1002-1**

I don't want to sound like I am praising nuclear weapons and such, but what I am commending isall the team work, projects, ideas, that were results of the Hanford Project. So much wasaccomplished by many very talented people that were united by the Hanford area. FFTF is "themission" that will keep it all together. FFTF is very capable of doing almost any task that it will be assigned. It is the mission to keep the great people we have, working together, bettering ourfuture for many years to come. **1002-2**

Thanks for allowing me to provide feedback on this very important issue. **1002-1**

Ken Stowell
P.O. Box 70
Mabton, WA. 98935
kstowell@bentonrea.com
kb7csp@wa7v.#sewa.wa.usa.noam

Response to Commentor No. 1002

1002-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

1002-2: DOE notes the commentor's support for using the FFTF for the enhancement of its nuclear facility infrastructure.

Commentor No. 1003: Elizabeth Marie Heaston

From: Liz Heaston[SMTP:LLLHEASTON@HOTMAIL.COM]
Sent: Wednesday, September 06, 2000 5:25:14 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Restart FFTF!!
Auto forwarded by a Rule

Dear Secretary Richardson:

Over 1500 people die of cancer each day. The Fast Flux Test Facility is our nation's newest, most versatile reactor capable of producing large quantities of high quality medical isotopes for treating cancer, arthritis and other diseases.

We already face isotope shortages for research and treatment. Human clinical trials for breast cancer were cancelled due to a unavailability of Cu_67. Last year, the Seattle area faced shortages for the isotope "seed" treatment for prostate cancer.

The FFTF is desperately needed to produce isotopes for the treatment of bone pain associated with cancer. If you have ever witnessed a family member or a friend with terminal cancer with excrutiating bone pain, you know what a God_send pain relief from medical isotopes are. This type of isotope cannot be produced in an accelerator__it must be produced in a reactor. **1003-1**

Restarting the FFTF will save lives and enable us to utilize cutting_edge technologies for the 21st century.

I implore you to make the right decision for the citizens of our nation. RESTART the FFTF!!! The life you save may be that of a family member, a friend, or your own.

Elizabeth Marie Heaston
3010 22nd Ave. #13
Forest Grove OR, 97116

Response to Commentor No. 1003

1003-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.

Commentor No. 1004: Alan Wang

From: Alan Wang
[SMTP:ALAN W@STAVELEYNDT.COM]
Sent: Wednesday, September 06, 2000 7:05:01 PM
To: INFRASTRUCTURE_PEIS, NUCLEAR
Subject: Please restart FFTF for medical isotopes
Auto forwarded by a Rule

Please restart FFTF for medical isotopes **1004-1**

Response to Commentor No. 1004

1004-1: DOE notes the commentor's support for Alternative 1, Restart FFTF.