



Petitioners renew their request that any aspect of this hearing that is held as a public meeting be conducted locally. It should also be conducted in the evening so that working people can attend.

## II. STANDING

As discussed in more detail in their First Hearing Request, Petitioners have representational standing to participate in this license amendment proceeding on behalf of their members, who would be injured by the issuance of the proposed license amendments. *Power Authority of the State of New York* (James A. Fitzpatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22, 52 NRC 266, 293 (2000); *International Uranium (USA) Corp.*, (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 250 (2001).

Petitioners also respectfully submit that it is appropriate to evaluate their standing to raise concerns regarding the entire BLEU Project, rather than to evaluate standing separately for each license amendment application. The proposed BLEU Project must be seen as a whole, because none of the three separate license amendment applications has a life of its own. Each of the three license amendments that NFS has submitted to date relates to a different step in the same process: the blending-down of high-enriched uranium (“HEU”) into low-enriched uranium (“LEU”). Thus, while the third license amendment application seeks authorization only for the operation of the Oxide Conversion Building (“OCB”) and the Effluent Proceeding Building (“EPB”), these operations would not be carried out if NFS failed to receive a permit for operation of the uranyl nitrate storage building (first license amendment application) or the BLEU

Preparation Facility (“BPF”) (second license amendment application). Because the BLEU Project is one integral project, any Petitioner who is found to have standing to challenge any one of the three license amendment applications should be found to have standing to challenge all three.

Therefore, in Section A below, Petitioners rely on and incorporate by reference information and arguments they submitted in their hearing requests on the first and second license amendment applications. Moreover, each of the individuals who have submitted declarations in support of Petitioners’ representational standing has stated that he or she sees the BLEU Project as one undertaking, and authorizes his or her organization(s) to represent his or her interests in the hearing with respect to all three license amendment applications. *See* Exhibits 1 through 8. As discussed in Section B, Petitioners are also submitting new and amended declarations in support of their standing.

**A. Petitioners Continue to Rely on Arguments and Information Submitted in Their First and Second Hearing Requests.**

Petitioners rely on and hereby incorporate by reference the discussion of standing in their First Hearing Request and their reply to NFS’s opposition to their First Hearing Request.<sup>1</sup> Petitioners also continue to rely on the standing declarations submitted in

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<sup>1</sup> *See* Request for Hearing by Oak Ridge Environmental Peace Alliance, Tennessee Environmental Council, State of Franklin Group/Sierra Club, Friends of Nolichucky River Valley at 3-8 (November 27, 2002) (hereinafter “Petitioners’ First Hearing Request”); Reply by Oak Ridge Environmental Peace Alliance, Tennessee Environmental Council, State of Franklin Group/Sierra Club, Friends of Nolichucky River Valley to Applicant’s Answer to Their Hearing Request (January 6, 2003) (hereinafter “Petitioners’ Reply re First Hearing Request”).

support of their First Hearing Request.<sup>2</sup> In addition, Petitioners rely on and incorporate by reference the discussion of standing in their Second Hearing Request and their Reply to NFS regarding their Second Hearing Request.<sup>3</sup>

**B. Petitioners Submit New and Amended Declarations in Support of Their Standing.**

In addition to the previously cited declarations, Petitioners submit the following declarations in support of their representational standing to participate in this proceeding:

Declaration of Kay Blackerby (January 28, 2004) (Sierra Club and FNRV member) (attached as Exhibit 1);

Declaration of Willa D. Early (January 28, 2004) (Sierra Club and FNRV member) (attached as Exhibit 2);

Declaration of Dennis Nedelman (January 22, 2004) (FNRV member) (attached as Exhibit 3);

Second Declaration of Ruth Gutierrez (January 22, 2004) (Sierra Club member) (attached as Exhibit 4);

Second Declaration of Chris Irwin (January 26, 2004) (OREPA member) (attached as Exhibit 5);

Second Declaration of Frances Lamberts (January 21, 2004) (member of Sierra Club, FNRV, and TEC) (attached as Exhibit 6);

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<sup>2</sup> See the following exhibits to Petitioners' First Hearing Request: Declaration of Frances Lamberts (November 25, 2002) (Exhibit 1); Declaration of Ruth Gutierrez (November 22, 2002) (Exhibit 2); Declaration of Trudy L. Wallack (November 25, 2002) (Exhibit 3); Declaration of Park Overall (November 22, 2002) (Exhibit 4); Declaration of Chris Erwin (August 7, 2002) (Exhibit 5). (Mr. Erwin's original declaration was filed with the Secretary on August 8, 2002.)

<sup>3</sup> Second Request for Hearing by Friends Of The Nolichucky River Valley, State Of Franklin Group Of The Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council (February 6, 2003) (hereinafter "Petitioners' Second Hearing Request"); Reply by Friends Of The Nolichucky River Valley, State Of Franklin Group Of The Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council to NFS's Response To Their Second Hearing Request (March 7, 2003).

Second Declaration of Park Overall (January 27, 2004) (member of TEC, OREPA, FNRV, and Sierra Club) (attached as Exhibit 7);

Second Declaration of Trudy Wallack (January 21, 2004) (member of FNRV) (attached as Exhibit 8).

Kay Blackerby, Willa Early, and Dennis Nedelman, are new standing declarants in this proceeding. All three individuals are residents of the town of Erwin. During their regular activities, they pass directly by the NFS facility.<sup>4</sup> Thus, they would be adversely affected by any offsite radiological or chemical releases at the fenceline of the NFS facility.

The Environmental Assessment ("EA") for the proposed BLEU Project, prepared by the NRC Staff in June of 2002, conceded the possibility for such offsite releases from all aspects of the operation.<sup>5</sup> With respect to the BLEU preparation facility, the EA states that:

Primary hazards associated with the operation of the BLEU Preparation facility involve: spill of chemical and or radioactive material in the building, leak in a storage tank of supply piping, release of gaseous and particulate effluents (chemical and/or radioactive materials) due to a malfunction of the process off gas treatment system, and upset in the control of process parameters leading to undesirable reactions and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub>, nitric acid vapors. The loss of control of the process may include release of radioactive materials and nuclear

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<sup>4</sup> For instance, Kay Blackerby passes within a half mile of the plant each day when she travels to and from work on Jackson Love Highway. Blackerby Declaration, par. 2. Willa Early lives within one mile of the NFS plant. In addition, a few times a week, she drives to Johnson City, passing directly by the plant. Early Declaration, par. 2. Dennis Nedelman runs a white-water rafting business on the Nolichucky River. In his whitewater rafting business, he often passes within a quarter mile of the plant, and directly by the outfall pipe. Nedelman Declaration, par. 2.

<sup>5</sup> Environmental Assessment for Proposed License Amendments to Special Nuclear Material License No. SNM-124 Regarding Downblending and Oxide Conversion of Surplus High-Enriched Uranium.

criticality. The potential accidents for the BPF are summarized in Table 1 of Ref. 2.<sup>6</sup> *These accidents can potentially impact worker safety, public health and safety, and the environment.*

EA at 5-8 (emphasis added).

The EA also states that operations at the BPF and the BLEU Complex will involve storage of chemicals:

Operations at the BPF (Figure 2.1) and BLEU Complex (Figure 2.2) will include the storage of processing materials in tanks. The BPF will include nine storage tanks to be used for various combustible liquids, sodium carbonate, process waste, and uranyl nitrate solutions (Ref. 8). The BLEU Complex will utilize tanks for storage of low-enriched UN solution in the UNB (24 tanks). Twelve additional tanks will be used for storing process chemicals and wastes (Ref. 8). The main chemicals to be used and stored in the BLEU Complex are: low-enriched UN solution, natural UN, anhydrous ammonia, aqueous ammonia (23 percent solution), nitric acid (50 percent solution), nitric acid (7 percent solution), liquid nitrogen, sodium hydroxide (50 percent solution), liquified petroleum gas (propane) and diesel fuel (Ref. 8).<sup>7</sup>

EA at 5-9.

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<sup>6</sup> "Reference 2" is NFS's Supplemental Environmental Report. Letter from B. Marie Moore, NFS, to Director, Office of Nuclear Material Safety and Safeguards, re: Supplemental Environmental Report for Licensing Actions to Support the BLEU Project (November 9, 2001)

Table 1 is found at page 2-6. It identifies three types of accidents that can occur in the BPF: nuclear criticality, liquid radiological release of uranyl nitrate, and a major fire causing an airborne radiological release. The table states that while the probability of a nuclear criticality accident is "highly unlikely," the consequences are "high." It also states that the both the probability and consequences of accidents involving liquid radiological release and a major fire causing an airborne radiological release are low. The table does not provide a quantitative explanation of what is meant by the qualitative terms "high," "highly unlikely," or "low."

<sup>7</sup> Reference 8 is a March 15, 2002, response by NFS to a Request for Additional Information by the NRC Staff. Letter from B. Marie Moore, NFS, to Director, Office of Nuclear Material Safety and Safeguards, NRC, re: NFS Responses to NRC's Request for Additional Information to Support an Environmental Report for the BLEU Project.

“Primary hazards” associated with the operation of these storage tanks involve the following:

spill of chemical and or radioactive material in a building, leak in a storage tank or supply piping, and upset in the control of process parameters leading to undesirable reactions, release of gaseous and particulate effluents (chemical and/or radioactive materials) due to fire, and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub>, nitric acid vapors. The loss of control of processing linked to storage tanks may include release of radioactive materials and nuclear criticality. The potential accidents for the facilities of the BLEU Project are summarized in Tables 1 and 2 of Ref. 2.<sup>8</sup> *These accidents can potentially impact worker safety, public health and safety, and the environment.*

EA at 5-9 (emphasis added).

The EA also describes the operation of the OCB and EPB as hazardous:

Operations planned to be performed in the BLEU complex area (Figure 2.2) include processing the LEU solution into uranium dioxide powder in the OCB, and treatment of the liquid effluent stream from the OCB in the EPB. NFS plans to convert the LEU solution to uranium dioxide powder in the OCB using the Framatome ANP Inc. process which has been previously approved under NRC License SNM-1227 (Ref. 8). The main chemicals to be used and stored in the BLEU Complex are: low-enriched UN solution, anhydrous ammonia, aqueous ammonia (23 percent solution), nitric acid (50 percent solution), nitric acid (7 percent solution), liquid nitrogen, sodium hydroxide (50 percent solution), liquefied petroleum gas (propane), and diesel fuel (Ref. 5).

Primary hazards associated with the operation of the BLEU Complex facilities involve: spill of chemical and or radioactive material in a building, leak in a storage tank or supply piping, release of gaseous and particulate effluents

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<sup>8</sup> Table 1 of “Reference 2” is discussed above in note 6.

Table 2 of Ref. 2 is found at page 2-6. It identifies four types of accidents that can occur in the BLEU Complex: nuclear criticality, a major fire causing an airborne radiological release, liquid radiological release, and anhydrous ammonia leak. The table states that while the probability of a nuclear criticality accident or an anhydrous ammonia leak is “highly unlikely,” the consequences are “high.” It also states that the both the probability and consequences of accidents involving a major fire or a liquid radiological release are low. Like Table 1, Table 2 does not provide a quantitative explanation of what is meant by the qualitative terms “high,” “highly unlikely,” or “low.”

(chemical and/or radioactive materials) due a malfunction of the process off gas treatment system, and upset in the control of process parameters leading to undesirable reactions and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub>, nitric acid vapors. The loss of control of the process may include release of radioactive materials and nuclear criticality. The potential accidents for the facilities of the BLEU Complex are summarized in Table 2 of Ref. 2.<sup>9</sup> *These accidents can potentially impact worker safety, public health and safety, and the environment.*

EA at 5-10.

Thus, the EA demonstrates that operation of the proposed BLEU Project, including the OCB and the EPB and associated storage tanks, and the BPF, poses a risk of offsite radiological and chemical releases with the potential to harm public health and safety and the environment. Tables 1 and 2 of NFS's Supplemental Environmental Report also identify accident types whose offsite consequences may be "high." *Id.* at 2-6. While NFS does not define the term "high," or what it means by "highly unlikely," it is clear that operation of the proposed BLEU Project has the potential to cause great harm.

One of the accident types deemed by NFS to have a "highly unlikely" probability but "high" consequences is a nuclear criticality accident. *See* NFS Supplemental Environmental Report, Tables 1 and 2. Accidental nuclear criticality can cause offsite radiation releases, as happened on September 30, 1999, at the Tokai-Mura facility in Japan. *See* Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, *NRC Review of the Tokai-*

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<sup>9</sup> Table 2 of Reference 2, NFS's Supplemental Environmental Report, states while the probability of a nuclear criticality accident is "highly unlikely," the consequences are "high." It also states that the probability and consequences of accidents involving liquid radiological release and a major fire causing an airborne radiological release are low.

*Mura Criticality Accident* (April 2000).<sup>10</sup> The Tokai accident occurred during processing of medium enriched uranium (18.8 percent enrichment).

As a result of the accident, two workers died from radiation exposure. (One death was noted in the NRC report, and the other death occurred on April 27, 2000). Over 400 people, including local residents, workers, and firefighters, were exposed to radiation. *Id.* and Figure 7. All people within a radius of 350 meters of the plant were evacuated. *Id.* at 2. Beyond that radius, about 310,000 people living within 10 kilometers of the plant were asked to stay indoors. *Id.* and Figure 2. Economic damages were estimate at over \$93 million. *Id.* at 2.

Although the NRC report concludes that offsite radiation exposures were insignificant, *id.*, Figure 7 shows that that the 400-plus offsite individuals who were exposed to radiation received doses in excess of NRC standards for public exposures. *See* 10 C.F.R. §§ 20.1301, 20.1302. Moreover, exposures would have been greater if the accident had not been brought under control. In addition, the consequences would have been greater if the accident had involved HEU, which is 90% enriched. While the NRC concluded that such a criticality accident would be “unlikely” to happen in the United States, it did not rule out the accident as incredible. *Id.* at 11.

Even for accidents whose likelihood and consequences NFS deems to be “low”, NFS does not argue they are so low as to pose no health threat at all. An injury need not be great in order to confer standing. A “minor exposure to radiation, even one within regulatory limits, is sufficient to state an injury in fact” for standing purposes. *Duke*

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<sup>10</sup> A copy of the report can be found on the NRC’s website at: [www.nrc.gov/reading-rm/doc-collections/commission/secys/2000/secy20000-0085/attachment1.pdf](http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2000/secy20000-0085/attachment1.pdf).

*Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001), citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 247-48 (1996).<sup>11</sup>

Petitioners have also submitted amended declarations by individuals who submitted declarations in support of Petitioners' standing to contest NFS's first license amendment application, and which were relied on by Petitioners in both their first and second hearing requests.<sup>12</sup> These declarations, by Ruth Gutierrez, Chris Irwin, Frances Lamberts, Park Overall, and Trudy Wallack, re-affirm the statements these individual made in their first declarations, and clarify that they seek representation by their respective organizations in all three license amendment proceedings.

### III. PETITIONERS' AREAS OF CONCERN

Pursuant to 10 C.F.R. § 2.1205(e), Petitioners submit the following areas of concern that they seek to litigate. As required by § 1205(e), Petitioners have described their concerns "in detail," *i.e.*, with "the minimal information needed to ensure the intervenor desires to litigate issues germane to the licensing proceeding." *See* Statement of Considerations to 10 C.F.R. Part 2, Subpart L, 54 Fed. Reg. 8,269, 8,272 (February 28, 1989); *Sequoyah Fuels Corporation* (Source Materials License No. Sub-1010), LBP-94, 40 NRC 314, 316, *affirmed* 40 NRC 64 (1994). *See also Babcock & Wilcox Company*

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<sup>11</sup> *But see Babcock & Wilcox* (Appollo, Pennsylvania Fuel Fabrication Facility), LBP-93-4, 37 NRC 72, 87 (1993) (denying standing where offsite airborne or effluent releases were "only a fraction of regulatory limits.")

<sup>12</sup> *See* Petitioners' First Hearing Request at 3-7, Second Hearing Request at 2.

(Pennsylvania Nuclear Services Operations, Parks Township, Pennsylvania), LBP-94-12, 39 NRC 215, 217 (1994).<sup>13</sup>

**A. Concerns Regarding Compliance With National Environmental Policy Act (“NEPA”)**

The EA issued by the Staff in June of 2003 is not sufficient to support the issuance of the third license amendment for the proposed BLEU Complex, for the following reasons:

1. The NRC Staff has not prepared a complete environmental analysis for the third license amendment application. The EA states that:

This EA does not serve as approval for the three proposed activities; rather it assesses the environmental impacts of the actions. As each amendment application is submitted, the NRC staff will do a safety evaluation, which will be the basis for the approval or denial of the requests. As part of the safety evaluation, the NRC will perform an environmental review. If the review indicates that this EA effectively assesses the environmental effects of the proposed action, then no further assessment will be performed. However, if the environmental review indicates that this EA does not fully evaluate the environmental effects, another EA [or environmental impact statement (EIS)] will be prepared in accordance with NEPA.

EA at 1-1. The NRC has not yet conducted its safety review for the third license amendment application, and therefore it has not yet fully evaluated the environmental effects of operating the BPF. *See also Nuclear Fuel Services, Inc.* (Erwin, Tennessee),

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<sup>13</sup> In its Memorandum and Order of November 19, 2003, the Presiding Officer suggested that parties should limit the concerns stated in their hearing requests to the safety and environmental issues raised by the particular license amendment application in question. In keeping with that order, the Petitioners have focused their environmental concerns on the impacts of the operation of the OCB and EPB, which are the principal subject of the third license amendment application. However, Petitioners wish to note that some of their concerns relate to the overall impacts of the BLEU Project.

CLI-03-03, 57 NRC 239, 247 (2003) (noting that the Staff “expects to conduct additional, more extensive reviews, and to issue a ‘separate, independent environmental assessment’ or EIS on those amendments”).

2. The operation of the proposed OCB and EPB involves activities with potentially significant environmental impacts, which have not previously been evaluated in an EA or Environmental Impact Statement (“EIS”). Therefore, pursuant to NEPA, 42 U.S.C. § 4332, the NRC must prepare an EIS.

a. Potentially significant impacts

It is plain from the EA that the downblending of HEU is an inherently dangerous process, involve the use of large quantities of toxic and radiological material in a manner that has the potential to cause spills, fires and explosions. As discussed above at pages 5-8, the EA concedes that operation of the BLEU Complex, including the OCB, the EPB, and associated storage tanks, poses significant hazards to human health and the environment. Therefore, the NRC should be required to prepare an EIS that addresses these impacts in detail, and also discusses the costs and benefits of alternatives and mitigative measures.

The Staff apparently believes that the impacts of the proposed BPF are not significant, based on NFS’s proposed use of safety controls. EA at 5-10. This is not a valid rationale for avoiding the preparation of an EIS. A NEPA analysis must go further than evaluating compliance with safety regulations, however, to examine the risks of

operating the facility *in spite of* regulatory compliance. *Limerick Ecology Action v. NRC*, 869 F.2d 719, 741 (3<sup>rd</sup> Cir. 1989).<sup>14</sup>

The Staff also appears to believe that an EIS is unnecessary because it has “additional confidence that oxide conversion can be operated safely at the BLEU Complex,” because “the planned Framatome ANP Inc. process has been previously approved by NRC under License SNM-1227.” EA at 5-10. But the NRC does not state that any previous NEPA analysis has been done regarding the risks posed by this process, let alone identify a specific EIS on which it relies. The fact that the Framatome ANP process has been approved by NRC in the past does not excuse NRC from NEPA compliance in this case.

The Staff also claims that the concentration and solidification process to be used at the EBP is “a common industrial process.” *Id.* Again, this is not an excuse for noncompliance with NEPA. The relevant question is whether the process poses a significant environmental risk, not whether it is commonly used.

b. NFS history of environmental contamination

The NRC Staff appears to base its Finding of No Significant Impact on the assumption that NFS will comply with its permit. However, over the course of its operating history, NFS has had a long history of exceeding permit limitations with

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<sup>14</sup> Even if NFS has reduced the probability of accidents to acceptably low levels through the use of various control measures, this does not excuse the NRC from preparing an EIS. The environmental impacts that must be considered in an EIS include “reasonably foreseeable” impacts which have “catastrophic consequences, even if their probability of occurrence is low.” 40 C.F.R. § 1502.22(b)(1). Only if the probability of accidents is so low as to be “remote and speculative” can the NRC avoid the obligation to prepare an EIS. *Limerick Ecology Action v. NRC*, 869 F.2d at 745, citing *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978).

respect to the emission of effluent to the environment, with the result that soil and groundwater on the Erwin site are contaminated. *See* Section 3.9 of the EA. The EA also raises the concern that contaminated groundwater may migrate offsite.<sup>15</sup> EA at 5-2. In addition, NFS has reported and/or been cited on numerous occasions for violations of its permit, some of which resulted in spills and/or exposure of workers to contamination. These incidents demonstrate a serious risk that NFS will continue to pollute the environment, causing significant adverse impacts to the health and welfare of workers, the public, and the general environment. NFS is also responsible for significant environmental contamination elsewhere: in 2001, cleanup costs at the former nuclear fuel processing plant in West Valley, New York, were estimated at \$4.5 billion.<sup>16</sup> Accordingly, any expanded operation by NFS should be the subject of an EIS.

3. The EA contains estimates of airborne and liquid effluent releases for uranium, thorium, plutonium, americium, neptunium, actinium, cesium, technetium, and strontium. *See, e.g.*, Tables 5.1 and 5.2. These estimates are not reliable, because they are not based on information about the specific sources of feed material that will be used in the downblending process at the proposed BLEU Project. This feed material may be contaminated with plutonium and fission products, to varying degrees. It is not possible to make a reliable estimate of radiological effluent releases without knowing the radiological composition of the feed material.

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<sup>15</sup> NFS has been sued by a neighboring landowner for offsite groundwater contamination. *See Impact Plastics Incorporated, Preston Tool and Mold Inc. and General M. O'Connor v. NFS Inc.* (No. 2:02CV148). The case is now pending in Federal District Court for the Eastern District of Tennessee in Greenville.

<sup>16</sup> GAO-01-314, Nuclear Waste: Agreement Among Agencies Responsible for the West Valley Site is Critically Needed (May 2001).

## B. Safety Concerns

1. NFS has not demonstrated that it has made adequate arrangements to fund the decommissioning of the OCB and EPB at the end of the facility's life, and thus has not demonstrated compliance with 10 C.F.R. § 70.23(a)(5) or § 70.25. Consideration of the adequacy of financial assurance for decommissioning should take into account NFS's liability for cleaning up existing contamination on the NFS site, and also at West Valley, New York. The NRC should not license an expanded operation at the Erwin site until it has reasonable assurance that NFS has adequate resources to clean up *both* existing contamination and any additional contamination that may occur as a result of operation of the BPF.

2. NFS has not demonstrated that it can and will comply with 10 C.F.R. §§ 70.23(a)(2), (3), or (4) in operating the OCB and EPB. These provisions require that the application must show that:

- (2) The applicant is qualified by reason of training and experience to use the material for the purpose requested in accordance with the regulations in this chapter;
- (3) The applicant's proposed equipment and facilities are adequate to protect health and minimize danger to life or property;
- (4) The applicant's proposed procedures to protect health and to minimize danger to life or property are adequate.

As discussed above in Section II, NFS has a long history of contaminating the soil and groundwater at the NFS site, and is also alleged to have caused offsite contamination.

NFS has also been cited on numerous occasions for violations of its permit, including

violations that resulted in spills or contamination of workers.<sup>17</sup> Taken together, these incidents reflect a pervasive pattern of inadequacies in management, procedures, and equipment that undermine NFS's ability to comply with NRC safety regulations.

3. NFS has not demonstrated that it has the qualifications, commitment, and corporate integrity to follow important safety, security and safeguards procedures and make complete and accurate reports to the NRC. Recently, the NRC's Office of Investigations issued a report in which it identified an apparent violation involving the transfer of LEU solution without conducting required verifications and reviews prior to and/or during the transfer. Letter from Douglas M. Collins, Director, Division of Fuel Facilities Inspection, NRC, to Kerry Schutt, President, NFS, re: NRC Office of Investigations Report No. 202003-024 (NRC Inspection Report No. 70-143/2002-011) (January 16, 2004). Obviously, processing of HEU is an activity with the highest security sensitivity, because of the attractiveness of HEU to thieves who would use it to produce illegal nuclear weapons. While the OI exonerated NFS of willful misconduct, this incident raises questions about whether NFS has a negligent or careless approach to keeping track of radiological material, which would disqualify it from receiving this license amendment.

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<sup>17</sup> See, e.g., NRC Inspection Report 2002-205 (September 9, 2002) (failure to follow procedure resulted in inadvertent discharge of fissile solution; conduct of process operations involving critical masses of fissile material) NRC Inspection Report 2001-09 (February 8, 2002) (failure to detect, report or control worker contamination); EA-99-218 (October 19, 1999) (NFS cited for failure to conduct searches in accordance with physical protection plan, failure to follow procedures for special nuclear material, and failure to control and account for SNM in assigned locations); EA-96-213 (EA cited for inadequate configuration control and management system).

#### IV. CONCLUSION

For the foregoing reasons, petitioners have demonstrated that they have standing to participate in this proceeding. Moreover, they have presented a set of admissible areas of concern.

Respectfully submitted,



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Dated: February 2, 2004

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of )

Nuclear Fuel Services, Inc. )

(Materials License SNM-124) )

) Docket No. 70-143  
)  
)

**DECLARATION OF KAY BLACKERBY**

Under penalty of perjury I, Kay Blackerby, declare that:

1. My name is Kay Blackerby. I live at 2055 Chestoa Pike in Erwin, Tennessee.
2. My home lies within 3 miles of the Nuclear Fuels Services ("NFS") Erwin plant. In addition, every day I travel on Jackson Love Highway from my home to and from work in Washington County, and therefore pass within a half mile of the plant.
3. I am aware that on October 23, 2003, NFS filed the third in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), that would allow NFS to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. NFS filed its first license amendment request on February 28, 2002, and its second license amendment request on October 11, 2002. The three license amendments comprise what is known as the "BLEU Project." I am also aware that in June of 2002, the NRC Staff prepared an Environmental Assessment ("EA") for the proposed BLEU Project: Environmental Assessment for Proposed License Amendments to Special Nuclear Material License No. SNM-124 Regarding Downblending and Oxide Conversion of Surplus High-Enriched Uranium, Nuclear Fuel Services, Inc., Erwin, Tennessee Plant, Docket No. 70-143.
4. As shown by the EA, the operation of the BLEU project facilities involves a number of potential accidents, including "spill of chemical and or radioactive material in a building, leak in a storage tank or supply piping, release of gaseous and particulate effluents (chemical and/or radioactive materials) due to a malfunction of the process off gas treatment system, and upset in the control of process parameters leading to undesirable reactions and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub> and nitric acid vapors." EA at 5-10. The NRC also states that "the loss of control of the process may include release of radioactive materials and nuclear criticality." *Id.* According to the NRC, these accidents "can potentially impact worker safety, public health and safety, and the environment." *Id.*
5. For these reasons, I am concerned that the proposed operation of the BLEU Project poses a hazard to my health and safety, and to the quality of the environment in which I

live.

6. I am a member of State of Franklin Group of the Sierra Club (hereinafter "Sierra Club"). I am also a member of the Friends of the Nolichucky River Valley ("FNRV").

7. I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have authorized the Sierra Club and FNRV to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project, by participating in the NRC proceedings with respect to all three license amendments sought by NFS.

  
Kay Blackerby

Date: 1-28-04

UNITED STATES OF AMERICA  
 U.S. NUCLEAR REGULATORY COMMISSION  
 BEFORE THE SECRETARY

In the matter of )  
 Nuclear Fuel Services, Inc. ) Docket No. 70-143  
 (Materials License SNM-124) )

**DECLARATION OF WILLA D. EARLY**

Under penalty of perjury I, Willa D. Early, declare that:

1. My name is Willa D. Early. I live at 510 Washington Street in Erwin, Tennessee.
2. My home lies within 1 of a mile of the Nuclear Fuels Services ("NFS") Erwin plant. In addition, a few times a week, I drive to Johnson City, and pass directly by the plant.
3. I am aware that on October 23, 2003, NFS filed the third in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), that would allow NFS to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. NFS filed its first license amendment request on February 28, 2002, and its second license amendment request on October 11, 2002. The three license amendments comprise what is known as the "BLEU Project." I am also aware that in June of 2002, the NRC Staff prepared an Environmental Assessment ("EA") for the proposed BLEU Project: Environmental Assessment for Proposed License Amendments to Special Nuclear Material License No. SNM-124 Regarding Downblending and Oxide Conversion of Surplus High-Enriched Uranium, Nuclear Fuel Services, Inc., Erwin, Tennessee Plant, Docket No. 70-143.
4. As shown by the EA, the operation of the BLEU project facilities involves a number of potential accidents, including "spill of chemical and or radioactive material in a building, leak in a storage tank or supply piping, release of gaseous and particulate effluents (chemical and/or radioactive materials) due to a malfunction of the process off gas treatment system, and upset in the control of process parameters leading to undesirable reactions and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub> and nitric acid vapors." EA at 5-10. The NRC also states that "the loss of control of the process may include release of radioactive materials and nuclear criticality." *Id.* According to the NRC, these accidents "can potentially impact worker safety, public health and safety, and the environment." *Id.*
5. For these reasons, I am concerned that the proposed operation of the BLEU Project poses a hazard to my health and safety, and to the quality of the environment in which I live. I am also concerned because of the high incidence of cancer in my neighborhood. On my street, which is about a half mile long, I have counted 16 people who have had cancer since the plant began operating about 40 years ago. Thirteen of them died, two are still ill, and I am a survivor. I am afraid that this high incidence of cancer is caused by emissions from the NFS plant, and that cancers will increase if NFS is allowed to expand its operation.
6. I am a member of State of Franklin Group of the Sierra Club (hereinafter "Sierra Club"). I am also a member of the Friends of the Nolichucky River Valley ("FNRV").
7. I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have authorized the Sierra Club and FNRV to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project, by participating in the NRC proceedings with respect to all three license amendments

2

sought by NFS.

Willa Early  
Willa Early

Date: 1-28-04

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of )

Nuclear Fuel Services, Inc. )

(Materials License SNM-124) )

) Docket No. 70-143  
)  
)  
)

**DECLARATION OF DENNIS NEDELMAN**

Under penalty of perjury I, Dennis Nedelman, declare that:

1. My name is Dennis Nedelman. I live at 2000 Jonesborough Road in Erwin, Tennessee. I also run a white-water rafting business Cherokee Adventures, which is based in my home. I also have a restaurant in Erwin, River's Edge, at 2004 Jonesborough Road. My home and my business lie within three miles of the Erwin plant.

2. The NFS plant is a quarter of a mile from the Nolichucky River. There is also a pipe that releases liquid effluent from the plant into the Nolichucky River. In my whitewater rafting business, I often pass within a quarter mile of the plant, and directly by the outfall pipe.

3. I am aware that on October 23, 2003, NFS filed the third in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), that would allow NFS to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. NFS filed its first license amendment request on February 28, 2002, and its second license amendment request on October 11, 2002. The three license amendments comprise what is known as the "BLEU Project." I am also aware that in June of 2002, the NRC Staff prepared an Environmental Assessment ("EA") for the proposed BLEU Project: Environmental Assessment for Proposed License Amendments to Special Nuclear Material License No. SNM-124 Regarding Downblending and Oxide Conversion of Surplus High-Enriched Uranium, Nuclear Fuel Services, Inc., Erwin, Tennessee Plant, Docket No. 70-143.

4. As shown by the EA, the operation of the BLEU project facilities involves a number of potential accidents, including "spill of chemical and or radioactive material in a building, leak in a storage tank or supply piping, release of gaseous and particulate effluents (chemical and/or radioactive materials) due to a malfunction of the process off gas treatment system, and upset in the control of process parameters leading to undesirable reactions and release of hazardous or explosive compounds such as hydrogen, hydrogen peroxide, ammonia, NO<sub>x</sub> and nitric acid vapors." EA at 5-10. The

NRC also states that "the loss of control of the process may include release of radioactive materials and nuclear criticality." *Id.* According to the NRC, these accidents "can potentially impact worker safety, public health and safety, and the environment." *Id.*

5. For these reasons, I am concerned that the proposed operation of the BLEU Project poses a hazard to my health and safety, and to the quality of the environment in which I live.

6. I am a member of the Friends of the Nolichucky River Valley ("FNRV").

7. I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have authorized the FNRV to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project, by participating in the NRC proceedings with respect to all three license amendments sought by NFS.

  
Dennis Nedelman

Date: 1-22-2004



me in a hearing regarding NFS's third license amendment application for the BLEU Project.

5. Finally, I wish to emphasize that I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have asked the Sierra Club to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project.

  
Ruth Gutierrez

Date: 1/22/04

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

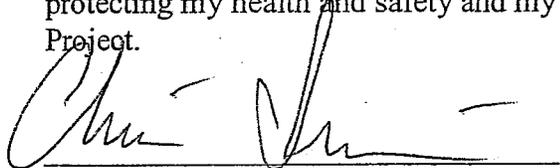
In the matter of )  
 )  
Nuclear Fuel Services, Inc. ) Docket No. 70-143  
 )  
(Materials License SNM-124) )  
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**SECOND DECLARATION OF CHRIS IRWIN**

Under penalty of perjury I, Chris Irwin, declare that:

1. My name is Chris Irwin. I live at 2131 Riverside Drive in Knoxville, Tennessee.
2. I am aware that on February 28, 2002, Nuclear Fuel Services ("NFS") filed the first in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), for the proposed "BLEU Project." Under the BLEU project, NFS would be allowed to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. On October 11, 2002, NFS submitted a second license application related to the BLEU project. On October 23, 2003, NFS submitted a third license amendment application related to the BLEU Project.
3. I am a member of the Oak Ridge Environmental Peace Alliance ("OREPA"). On August 7, 2002, I signed a declaration authorizing OREPA to represent my interests in a hearing before the NRC regarding NFS's first license amendment application. My declaration was submitted in support of the Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council (November 27, 2002). On February 6, 2003, OREPA and other groups requested a hearing on NFS's second license amendment application, in the Second Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council. With my authorization, OREPA relied on my August 7, 2002, declaration in support of its standing to request a hearing on the second license amendment application.
4. I continue to have the same relationship to the Nolichucky River as was described in my declaration of August 7, 2002. I also continue to have the same concerns about the potential adverse effects of the proposed BLEU project on my health and safety and the quality of my environment. Therefore, I hereby authorize OREPA to represent me in a hearing regarding NFS's third license amendment application for the BLEU Project.

5. Finally, I wish to emphasize that I see the BLEU Project as one undertaking, not three separate activities. Therefore, I have asked OREPA to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project.



Chris Irwin

Date: Jan 26 2004

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of )  
)  
)

Nuclear Fuel Services, Inc. )

Docket No. 70-143

(Materials License SNM-124) )  
)

**SECOND DECLARATION OF FRANCES LAMBERTS**

Under penalty of perjury I, Frances Lamberts, declare that:

1. My name is Frances Lamberts. I live at 113 Ridge Lane in Jonesborough, Tennessee.

2. I am aware that on February 28, 2002, Nuclear Fuel Services ("NFS") filed the first in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), for the proposed "BLEU Project." Under the BLEU project, NFS would be allowed to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. On October 11, 2002, NFS submitted a second license application related to the BLEU project. On October 23, 2003, NFS submitted a third license amendment application related to the BLEU Project.

3. I am a member of the State of Franklin Group of the Sierra Club (hereinafter "Sierra Club"), and serve on the executive committee. I am also a member of the Friends of the Nolichucky River ("FNRV") and the Tennessee Environmental Council ("TEC").

4. On November 25, 2002, I signed a declaration authorizing the Sierra Club, FNRV, and TEC to represent my interests in a hearing before the NRC regarding NFS's first license amendment application. My declaration was submitted in support of the Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council (November 27, 2002). On February 6, 2003, the Sierra Club, FNRV, and TEC, together with Oak Ridge Environmental Peace Alliance, requested a hearing on NFS's second license amendment application. The pleading was entitled Second Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council. With my authorization, they relied on my November 25, 2002, declaration in support of their standing to request a hearing on the second license amendment application.

5. I continue to have the same concerns that were expressed in my declaration of November 25, 2002. Therefore, I hereby authorize the Sierra Club, FNRV and TEC to represent me in a hearing regarding NFS's third license amendment application for the BLEU Project.

6. Finally, I wish to emphasize that I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have asked the Sierra Club, FNRV, and TEC to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project.

Frances Lamberts  
Frances Lamberts

Date: 1/21/04

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of	)	
	)	
Nuclear Fuel Services, Inc.	)	Docket No. 70-143
	)	
(Materials License SNM-124)	)	
	)	

**SECOND DECLARATION OF PARK OVERALL**

Under penalty of perjury I, Park Overall, declare that:

1. My name is Park Overall. My principal residence is 33150 Drill Road, in Agua Dulce, California.
2. I have a fifteen-acre farm in Tennessee, at 1374 Ripley Island Road in the town of Afton. I reside at my Tennessee residence during part of each year, sometimes for as long as two months.
3. My farm lies on the banks of the Nolichucky River. The Nuclear Fuel Services ("NFS") Erwin plant lies about 30 river miles upstream.
4. I am aware that on February 28, 2002, Nuclear Fuel Services ("NFS") filed the first in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), for the proposed "BLEU Project." Under the BLEU project, NFS would be allowed to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. On October 11, 2002, NFS submitted a second license application related to the BLEU project. On October 23, 2003, NFS submitted a third license amendment application related to the BLEU Project.
3. I am a member of the Tennessee Environmental Council ("TEC"), Oak Ridge Environmental Peace Alliance ("OREPA"), and Friends of the Nolichucky River ("FNRV") and the State of Franklin Chapter of the Sierra Club.
4. On November 22, 2002, I signed a declaration authorizing the TEC, OREPA, and FNRV, to represent my interests in a hearing before the NRC regarding NFS's first license amendment application. My declaration was submitted in support of the Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council (November 27, 2002). On February 6, 2003, TEC, OREPA, and FNRV, and

TEC, together with the State of Franklin Group of the Sierra Club, requested a hearing on NFS's second license amendment application, in the Second Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council. With my authorization, they relied on my November 22, 2002, declaration in support of their standing to request a hearing on the second license amendment application.

5. I continue to have the same concerns that were expressed in my declaration of November 22, 2002. Therefore, I hereby authorize TEC, OREPA, and FNRV and Sierra Club to represent me in a hearing regarding NFS's third license amendment application for the BLEU Project.

6. Finally, I wish to emphasize that I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have asked TEC, OREPA, and FNRV and Sierra to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project.

  
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Park Overall

Date: 1/27/04

UNITED STATES OF AMERICA  
U.S. NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of )

Nuclear Fuel Services, Inc. )

(Materials License SNM-124) )

) Docket No. 70-143  
)  
)  
)

**SECOND DECLARATION OF TRUDY WALLACK**

Under penalty of perjury I, Trudy Wallack, declare that:

1. My name is Trudy Wallack. I live with my partner, David Wallack, at 2210 West Allen's Bridge Road, Greeneville, Tennessee.
2. Our property lies on the banks of the Nolichucky River, about 20-25 miles downstream of the NFS-Erwin facility.
3. I am aware that on February 28, 2002, Nuclear Fuel Services ("NFS") filed the first in a series of related license amendment applications to the U.S. Nuclear Regulatory Commission ("NRC"), for the proposed "BLEU Project." Under the BLEU project, NFS would be allowed to downblend high-enriched uranium ("HEU") at its plant in Erwin, Tennessee. On October 11, 2002, NFS submitted a second license application related to the BLEU project. On October 23, 2003, NFS submitted a third license amendment application related to the BLEU Project.
4. I am a member of the Friends of the Nolichuck River Valley ("FNRV"). On November 25, 2002, I signed a declaration authorizing FNRV to represent my interests in a hearing before the NRC regarding NFS's first license amendment application. My declaration was submitted in support of the Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council (November 27, 2002). On February 6, 2003, FNRV and other groups requested a hearing on NFS's second license amendment application, in the Second Request for Hearing by Friends of the Nolichucky River Valley, State of Franklin Group of the Sierra Club, Oak Ridge Environmental Peace Alliance, and Tennessee Environmental Council. With my authorization, FNRV relied on my November 25, 2002, declaration in support of its standing.

5. I continue to have the same relationship to the Nolichucky River as was described in my declaration of November 25, 2002. I also continue to have the same concerns about the potential adverse effects of the proposed BLEU project on my health and safety and the quality of my environment. Therefore, I hereby authorize FNRV to represent me in a hearing regarding NFS's third license amendment application for the BLEU Project.

6. Finally, I wish to emphasize that I see the BLEU Project as one undertaking. While NFS has submitted three separate license amendment applications, each is related to the others. Therefore, I have asked FNRV to represent my interests in protecting my health and safety and my environment with respect to the entire BLEU Project.



Trudy Wallack

Date: 1/21/04

## CERTIFICATE OF SERVICE

I certify that on February 2, 2004, copies of THIRD REQUEST BY STATE OF FRANKLIN GROUP OF THE SIERRA CLUB, FRIENDS OF THE NOLICHUCKY RIVER VALLEY, OAK RIDGE ENVIRONMENTAL PEACE ALLIANCE, AND TENNESSEE ENVIRONMENTAL COUNCIL REGARDING NUCLEAR FUEL SERVICES' PROPOSED BLUE PROJECT were served on the following by first-class mail, e-mail, and/or FAX as designated below:

<p>Alan S. Rosenthal, Presiding Officer Atomic Safety and Licensing Board Mail Stop T-3 F23 U.S. Nuclear Regulatory Commission Washington, D.C. 20555 By e-mail to: <a href="mailto:rosnthl@aol.com">rosnthl@aol.com</a> <a href="mailto:Sam4@nrc.gov">Sam4@nrc.gov</a> FAX: 301/415-5599</p>	<p>Office of Appellate Adjudication U.S. Nuclear Regulatory Commission Washington, D.C. 20555</p>
<p>Richard F. Cole, Administrative Judge Atomic Safety and Licensing Board Mail Stop T-3 F23 U.S. Nuclear Regulatory Commission Washington, D.C. 20555 By e-mail to: <a href="mailto:rfl@nrc.gov">rfl@nrc.gov</a> FAX: 301/415-5599</p>	<p>Daryl Shapiro, Esq. Sean Barnett, Esq. Shaw Pittman, LLP 2300 N Street N.W. Washington, D.C. 20037 By e-mail to: <a href="mailto:Daryl.Shapiro@shawpittman.com">Daryl.Shapiro@shawpittman.com</a> FAX: 202/663-8007</p>
<p>Rules and Adjudications Branch Office of the Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555 By e-mail to: <a href="mailto:hearingdocket@nrc.gov">hearingdocket@nrc.gov</a></p>	<p>C. Todd Chapman, Esq. King, King and Chapman, PLLC 125 South Main Street Greeneville, TN 37743 By e-mail to: <a href="mailto:chapman@xtn.net">chapman@xtn.net</a> FAX: 423/639-3629</p>

<p>Neil J. Newman, Esq. Nuclear Fuel Services 1205 Banner Hill Road Erwin, TN 37650-9718</p>	<p>Kathy Helms-Hughes P.O. Box 2394 For Defiance, AZ 86504 <a href="mailto:khelms@frontiernet.net">khelms@frontiernet.net</a></p>
<p>Marian Zobler, Esq. Office of General Counsel U.S. Nuclear Regulatory Commission Washington, D.C. 20555 By e-mail to: <a href="mailto:mlz@nrc.gov">mlz@nrc.gov</a> FAX: 301/415-3275</p>	<p>Louis Zeller Blue Ridge Environmental Defense League P.O. Box 88 Glendale Springs, NC 28629 By e-mail to: <a href="mailto:BREDL@skybest.com">BREDL@skybest.com</a> FAX: 336/982-2954</p>



Diane Curran