

September 25, 2012

MEMORANDUM TO: John D. Kinneman, Director  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

THRU: Robert K. Johnson, Chief **/RA/**  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

FROM: Kevin M. Ramsey, Senior Project Manager **/RA/**  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: SUMMARY OF PUBLIC MEETING TO DISCUSS RENEWAL OF  
NUCLEAR FUEL SERVICES'S LICENSE

On August 30, 2012, a public meeting was conducted in the Unicoi County Courthouse to discuss the recent renewal of the Nuclear Fuel Services's (NFS) license for 25 years. A list of attendees is provided in Enclosure 1. The U.S. Nuclear Regulatory Commission's staff made presentations about the Safety Evaluation Report and the Environmental Assessment. The slides presented are provided in Enclosure 2. In response to recent sinkhole events, the staff discussed the geology under the NFS site also. The additional slides showing the site geology are provided in Enclosure 3.

A number of questions and concerns were raised by members of the public. A summary of the issues discussed is provided in Enclosure 4. In addition, handouts provided by members of the public at the meeting are provided in Enclosures 5 and 6.

Enclosures:  
As stated

Docket No. 70-143  
License No. SNM-124

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**ML12258A184**

<b>OFFICE</b>	NMSS	NMSS	RII/DFFI	NMSS
<b>NAME</b>	KRamsey	LAllen	ABlamey *via phone	RJohnson
<b>DATE</b>	9/17 /12	9/19/12	9/ 25/12	9/25/12

**OFFICIAL RECORD COPY**

## ATTENDEES LIST

### Public Meeting to Discuss NRC Approval of License Renewal for Nuclear Fuel Services

August 30, 2012

<b>Name</b>	<b>Affiliation</b>	<b>Telephone No.</b>
Kevin Ramsey	NRC/NMSS	301-492-3123
Robert Johnson	NRC/NMSS	301-492-3175
John Kinneman	NRC/NMSS	301-492-3132
Huda Akhavannik	NRC/NMSS	301-492-3273
James Park	NRC/FSME	301-415-6935
Diana Diaz-Toro	NRC/FSME	301-415-0930
Galen Smith	NRC/RII	423-735-0544
Mark Chitty	NRC/RII	423-735-0544
Manuel Crespo	NRC/RII	404-997-4733
Alan Blamey	NRC/RII	404-997-4415
Roger Hannah	NRC/RII	404-997-4417
Marissa Bailey	NRC/RII	404-997-4701
Karen McCallie	NRC/RII	404-997-4702
Francis Cameron	NRC Facilitator	240-205-2091
Sarah Lopas	NRC Facilitator	301-415-1147

<b>Name</b>	<b>Affiliation</b>	<b>Telephone No.</b>
Randy Shackelford	Nuclear Fuel Services	
Barbara O'Neal	ECAN	
Mark Braswell	TDEC, Johnson City	
Larry Archer	Citizen	
Trudy Wallack	Citizen	
Desiree Johnson	Citizen	
Park Overall	Citizen	
George Aprahamian	Citizen	
Buzz Davies	Citizen	
Jeff Eidews	Citizen	
D. Nedelman	Cherokee Adventures	
Dara Carney-Nedelman	Cherokee Adventures	
Terry Rehkugler	Local	
Lauri Turpin	NFS	
Kayla Carter	Erwin Record	
Bridget Baird	U.S. Senator Bob Corker	
John Abe Teague	Congressman Phil Roe	
Ken Edwards	Church of the Brethren	
Linda Modica	Sierra Club	
John Day	Unicoi County	
Cassie Nedelman	Cherokee Adventures	
Alvin Hayes	Public	
Karen Brackett	Citizen	
Ken Little		

Name	Affiliation	Telephone No.
Judith McCanless	Public	
Brandy Church	Public	
Carl R. Petzeld		
Michael Franklin		
Glenn Tilson	Erwin Vice-Mayor	
Keeli Parkey	The Erwin Record	
A.J. Rose	WEMB 1420 AM	
Dennis Piater	Public	
Ed Herndon	TEMA	
Anne Harris		

## SUMMARY OF ISSUES DISCUSSED WITH THE PUBLIC

An individual asked how the U.S. Nuclear Regulatory Commission (NRC) intends to proceed with a contract with the National Academy of Sciences (NAS) to update a previous cancer study. The NRC staff stated that the agency is evaluating the options proposed by NAS and the associated costs. A decision should be announced soon. Another individual suggested that NAS should use cancer studies conducted in Germany and France.

A former employee of Nuclear Fuel Services (NFS) raised a number of issues including the following:

- He tried to get a local cancer study performed, but NRC pushed for a national study.
- He believes the public is not informed as to what nuclear fuel is.
- He took samples in many places which came back high.
- He asked where the waste is going.
- He stated that nine members of a family living across the street from the site have died from cancer.
- He discussed import and export of material.
- He believes there are no controls or security at NFS's warehouse in the Industrial Park.
- He knows of waste buried at the NFS site.

The NRC staff was not able to address all of the issues, but explained that most of the solid waste shipped from the site goes to burial sites in Utah and Nevada. Note: Some of these issues have been addressed by NRC previously. Further discussion can be found on the Frequently Asked Question Web site located at <http://www.nrc.gov/materials/fuel-cycle-fac/fuel-fab/nfs-fags.html>.

An individual expressed concerns about contamination in the groundwater. Note: The details of the individual's concerns were not addressed at the public meeting. The NRC staff intends to respond to the individual by separate correspondence.

An individual provided written comments to the NRC staff at the meeting. A copy of the comments is provided in Enclosure 5. The NRC staff intends to provide a written response to the individual. The following information was provided at the meeting:

- With regard to documents that NFS could not locate while inspectors were at the site, the documents concerned the design of certain buildings. The inspectors allowed NFS time to locate the documents and plan to review them during the next inspection.
- With regard to enforcement of commitments in the license application, Condition S-1 of the NFS license states that NFS must operate in accordance with the commitments in its application. If NFS fails to comply, it will be cited for violating Condition S-1 of its license.

An individual asked how often and who tests the flow rate of the river. He discussed a gauge that can measure high water flow in the river. The NRC staff explained that it does not test the flow rate because it does not rely on dilution to protect the public. If a member of the public consumed water for a year at the concentrations specified in NRC regulations, the person would not exceed the public dose limits.

An individual stated that there is no statement about pyrophoric forms of uranium in the Safety Evaluation Report (SER). The NRC staff noted that Chapter 7 of the SER explains why the staff agreed to remove the restriction on pyrophoric forms of uranium from the license.

An individual asked if the process upset involving uranium fines in the bowl cleaning station was caused by the pyrophoric hazard. The NRC staff said no. The fines in that event were a uranium-aluminum alloy which does not have the same pyrophoric properties as uranium metal. NFS normally dissolves large chunks of uranium-aluminum alloy. It is known that the chemical reaction releases hazardous gas and heat. When the uranium-aluminum fines were dissolved, the greater surface area caused much more gas and heat to be generated. That is what caused the process upset at the bowl cleaning station.

An individual asked why license renewal is not a tool to address performance problems. The NRC staff explained that the licensing process considers the license application, including the past compliance history. However, the inspection process addresses current performance problems and corrective actions.

An individual stated that she has concerns with the NRC policy allowing facilities to be licensed for 40 years.

An individual stated that waiting until 2016 to implement changes for natural phenomena is not acceptable. In addition, the individual was concerned that water coolant towers may not be able to withstand cold temperatures.

Note: The NRC staff believes that references to 2016 concern the schedule for nuclear reactors to address action items resulting from the reactor accidents in Japan. This schedule is not applicable to non-reactor facilities like NFS. The NRC is evaluating whether actions are needed at non-reactor facilities.

An individual discussed feeling the 2011 earthquake at his house. He noted the two recent sinkhole events also.

An individual asked how funds for decommissioning are assured. The NRC staff explained that government agencies have committed to fund most of the work. Bonds have been established for the rest of the funding. The agencies are different offices in the U.S. Department of Energy. The NRC staff obtained letters of intent from the agencies.

An individual expressed concerns with the response from Congressman Phil Roe and stated that she is aware of four faults that nobody knows about. In addition, she has concerns with the disposal of spent fuel and with plutonium contamination.

An individual stated that she believes a license for 25 years is not reasonable. She does not understand why the NRC expects NFS to perform better. In addition, she asked how we define "significant." The NRC staff explained that the Council on Environmental Quality defines "significant" in its regulations (40 CFR 1500). It includes both context (when and where) and intensity (how much).

The NRC staff presented slides showing the geology at the site (see Enclosure 3). There was an extensive discussion of the recent sinkholes in the area.

A second individual provided written comments to the NRC staff at the meeting. A copy of the comments is provided in Attachment 6. The NRC staff intends to provide a written response to the individual. In response to concerns about the recent sinkhole events, the NRC staff explained that its evaluation of safety programs at NFS included the ability to evaluate and address new and unexpected events. NFS is required to evaluate new information like the recent sinkhole events, and determine what updates and improvements are needed in its safety programs. NRC inspectors are monitoring the results of these efforts.

An individual discussed the karst topography in the area and believes the risk of sinkholes at the NFS site is low.

An individual stated that his mother has cancer, and NRC is in a position to police the use of radioactive material.