UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

COMMISSIONER

June 12, 2014

Erwin Citizens Awareness Network
P.O. Box 1151
Erwin, TN 37650

Ms. Park Overall
P.O. BOX 1151
Erwin, TN 37650

Dear Ms. Modica, Mr. Davies, and Ms Overall:

Thank you all for taking the time to meet with me and the other Nuclear Regulatory Commission representatives during our visit to Tennessee in early April. We appreciated the opportunity to discuss so many important issues with you and to learn more about your concerns. We found the meeting to be very valuable and educational and hope that you also found it to be beneficial.

As we promised, enclosed are responses to several questions you raised during the meeting. I hope you find these responses informative and useful. We are also enclosing a copy of the Arkansas Nuclear One inspection report (Crane Failure), NFS Hazardous Waste Permit issued by the Tennessee Department of Environment and Conservation, and the 2010 NRC Confirmatory Order that was issued to NFS.

Finally, as discussed during our meeting, the NRC will plan to hold future NRC public meetings at the Erwin City Hall and continue doing so on an annual basis. Hopefully, this change in venue will encourage a more forthcoming and meaningful dialogue between NRC staff and the citizens of Unicoi County. As we continue to strive to improve continuously our public communications and transparency, I encourage you to let us know if you have suggestions as to how to improve the effectiveness of our public meetings.

It was a pleasure visiting Unicoi County and meeting with all of you. Thank you again for your interest in these very important public health issues. Should you have any additional questions or comments, please let me know or feel free to contact James Hickey via email at james.hickey@nrc.gov or via telephone at 404-997-4628.

Sincerely,

William D. Magwood, IV
Commissioner

Enclosures:
Response to Questions from ECAN
Arkansas Nuclear One inspection report
Nuclear Fuel Services' Hazardous Waste Permit
2010 NRC Confirmatory Order to Nuclear Fuel Services

Designate as original
Kevin Ramsey
12/10/14

NRC Response to ECAN Concerns

Enclosure 1

During the April 3rd meeting, you asked a number of questions for which responses are provided below:

1. Does NFS have a Quality Assurance Program which meets the requirements of 10 CFR Part 50 Appendix B?

   NFS has always been required to implement a quality assurance (QA) program, however, the requirements of 10 CFR part 50 Appendix B do not apply to NFS. 10 CFR part 50 is designed to provide requirements for nuclear power plants.

   A facility such as NFS must follow the QA requirements specified for NRC licensees in 10 CFR 70.62(d), "Management Measures." Management measures are those functions performed by the licensee that are applied to items relied on for safety (known as "IROFS") to ensure that IROFS items are available and reliable to perform their functions when needed. Management measures include: (1) Configuration Management, (2) Maintenance, (3) Training and Qualifications, (4) Procedures, (5) Audits and Assessments, (6) Incident Investigations, (7) Records Management, and (8) Other QA Elements. The regulation also requires each applicant or licensee to establish management measures to ensure compliance with the performance requirements of 10 CFR 70.61, "Performance Requirements". NFS is required to establish and maintain elements of a quality assurance program that ensure the reliability of IROFS. These requirements include the key attributes of a QA program appropriate for a fuel facility.

   While NFS is not required to meet the American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA-1) Standard as adopted in Appendix B, NFS maintains a quality assurance program that is similar to NQA-1.

2. If excess of 200 acres is required for the siting of UF_6 facilities, such as NFS, per Federal Code 651, how was NFS allowed to be sited where it is?

   NRC does not impose a generic 200 acre requirement on any of its licensees and is not aware of a need to impose such a requirement. We attempted to review the code you cited, but, unfortunately, we were not able to find any reference to a Federal Code 651. However, there is a guidiance document known as United States Enrichment Corporation 651, Uranium Hexafluoride, a Manual of Good Handling Practices guidance document. This document is not applicable to NFS and does not make reference to a 200 acre requirement. If there is another reference you can provide, please let us know and we will investigate further.

3. Why has there never been an environmental impact statement (EIS) developed for NFS?

   The role of EISs in NRC's regulatory activities is to inform licensing decisions before they are made by the agency. If NFS were to apply for a new facility license today, NRC would be required to conduct an EIS. However, operations at NFS were first licensed in 1957. The National Environmental Protection Act (NEPA) was not signed into law until

1970, and NRC's implementation of NEPA as reflected by 10 CFR part 51 were not issued until 1984. There is no legal requirement that requires agencies to perform EISs retroactively and doing so is not our practice.

However, when NRC received an application to allow NFS to continue operating, NRC was required to perform a NEPA review, but--consistent with our established practice for considering the continued operation of a facility like NFS--prepared a less detailed document, i.e., an environmental assessment (EA). Such an assessment is performed to identify whether there an EIS is warranted. The results of NRC's review did not establish the need to conduct an EIS.

4. Is the NRC aware of the subsurface plutonium plume emanating from NFS? What is the NRC going to do about it?

   The NRC is not aware of a plutonium groundwater plume. As discussed in section 4.5.2 of the [1]NFS License Renewal EA, there are two groundwater plumes emanating from NFS, one is a uranium plume and the other is an organic solvent plume. Cleanup efforts for these plumes are being conducted under the oversight of the EPA and TDEC. TDEC has determined that treatment programs have greatly reduced the size of the groundwater plumes.

5. Why was the NFS license renewed given the existence of sinkholes in the local area?

   As discussed in Chapter 3 of the NFS License Renewal EA, the geology upon which the NFS site is constructed (the "Rome Formation") is less susceptible to sinkholes than the areas at the edge of the Rome Formation--which is where sinkholes in the local area have formed. It is our assessment that sinkholes do not pose a significant threat to the site.

   As the NRC considered the license renewal application for NFS, the consequences of accidents caused by natural phenomena were considered in the EA. The sinkhole events constituted new information, but the NRC staff concluded that the consequences from a sinkhole event would not be worse than the consequences from earthquakes, floods, and other natural phenomena that were already evaluated.

6. Does NFS have a current Hazardous Waste Permit?

   Yes, and it is renewed periodically by the state. A copy of the current Tennessee Department of Environment and Conservation Hazardous Waste Permit issued to NFS is enclosed.

7. Why does the NRC-approved license allow pyrophoric material at NFS?

   In its license application, NFS described the types, quantities, and forms of licensed material to be permitted at this site in accordance with 10 CFR 70.22(a)(2) and (4). With the exception of pyrophoric forms of uranium and plutonium, the information described is identical to the material and authorized uses of the material in the previous license (1999).

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[1] NFS License Renewal Environmental Assessment (ML112560265)

Chapter 7 of the [2]Safety Evaluation Report for the NFS license renewal application contains the staff's evaluation and approval of the request to remove the restrictions. The staff concluded that NFS has established adequate change control requirements consistent with 10 CFR 70.72 to address the fire hazards associated with handling uranium in pyrophoric forms. Therefore, the restriction on pyrophoric forms of uranium is no longer needed and it was not included in the renewed NFS license.

[2] License Renewal Safety Evaluation Report (ML102780085)