

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

April 28, 2014

Ms. Barbara O'Neal Ms. Linda Modica Erwin Citizens Awareness Network P. O. Box 1151 Erwin, TN 37650

SUBJECT: RESPONSE TO QUESTIONS PROVIDED TO THE NUCLEAR FUEL SERVICES, INC. NUCLEAR REGULATORY COMMISSION RESIDENT INSPECTOR BY EMAIL ON JANUARY 30, 2014

Dear Ms. O'Neal:

Thank you for your questions and comments. This letter is in response to questions you had during the meeting with Nuclear Regulatory Commission (NRC) Commissioner Ostendorf, Tammy Bloomer, Leonard Wert and Charles Stancil, on January 16, 2014, at the Unicoi County Courthouse Conference Room and your email dated January 30, 2014, to the NRC Nuclear Fuel Services (NFS) Resident Inspector, Charles Stancil. Answers to your questions are in the enclosure to this letter. In addition, your requested copies of NFS Events for 2012 and 2013 are enclosed.

Should you have any additional questions or comments, please contact me at <u>james.hickey@nrc.gov</u> or via telephone at 404-997-4628.

Sincerely,

/RA/

James A. Hickey, Chief Projects Branch 1 Division of Fuel Facility Inspection

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

Enclosures:

- 1. NRC Response to ECAN Concerns
- 2. Events

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☑ PUBLICLY AVAILABLE
☑ NON-PUBLICLY AVAILABLE
ADAMS: ☑ Yes
ACCESSION NUMBER:ML14118A215

SENSITIVE

NON-SENSITIVE

SUNSI REVIEW COMPLETE SFORM 665 ATTACHED

OFFICE	RII:DFFI	RII:DFFI				
SIGNATURE	/RA/	/RA/				
NAME	CRivera	DHartland				
DATE	4/28/2014	4/28/2014	4/ /2014	4/ /2014	4/ /2014	4/ /2014
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DFFI\PROJECTS BRANCH 1\NFS\2014\ECAN COMMUNICATIONS\RESPONSE TO ECAN COMMENTS 2014FINAL.DOCX Letter to Ms. Barbara O'Neal and Ms. Linda Modica from James A. Hickey dated April 28, 2014

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DISTRIBUTION:

R. Johnson, NMSS M. Franovich, NMSS K. Ramsey, NMSS J. Park, FSME J. Weil, OCA R. Hannah, RII J. Ledford, RII J. Hickey,RII D. Hartland,RII

NRC RESPONSE TO ECAN CONCERNS

In your email sent to NRC NFS resident inspector dated January 30, 2014 (ML14118A051), you had asked the NRC several questions that you did not have an opportunity to ask during the January 16, 2014 meeting with NRC Commissioner Ostendorf, Tammy Bloomer, Leonard Wert and Charles Stancil. In this enclosure you will find answers to your questions.

 In your email you asked us to clarify the "low safety significance" disposition of Violation 70-143/2013-03-01, "Failure to comply with NFPA 101 required 1.5 hours emergency lighting system test in accordance with licensee commitments in the License Application. Specifically, how can a violation be more than minor and low safety significance?

Violations can be characterized as minor or Severity Level IV through I in ascending order of significance. NRC Enforcement Policy (ML13228A199) Section 2.2 "Traditional Enforcement" documents how the NRC assesses significance by assigning a severity level to violations. Severity Level designations reflect different degrees of significance depending on the violation. Minor violations are not routinely documented in inspection reports. A "More than Minor" violation is assigned a Severity Level. Section 2.2.2 of the Enforcement Policy provides the definitions of the Severity Levels.

Violation 70-143/2013-003-001 is a Severity Level IV violation which denotes a violation of low or very low safety significance. In this case the violation was more than minor because, if left uncorrected, the lack of adequate testing may not allow the detection and correction of degraded lights and potentially impact safe building evacuation. This violation is considered to be of low safety significance (Severity Level IV) in part due to redundancy in emergency lights and functional testing of the emergency lights was being performed, even though the testing was not in accordance with the requirements.

2. Inspection Reports

In your email you expressed a concern that the Integrated Inspection Report 70-143/2013-002 was entered into the NRC Database (ADAMS) one day after the NRC public meeting on April 29, 2013.

Inspection Manual Chapter (IMC) 0616 "Fuel Cycle Safety and Safeguards Inspection Reports", Section 4.03.f states the following:

"Typically, integrated reports are issued no later than 30 calendar days after inspection completion. For integrated or resident inspection reports, inspection completion is normally defined as the later of the date of the exit issue meeting or last day covered by the inspection report. Resident inspection reports normally cover a calendar quarter inspection."

Management Directive 3.5.3, "NRC Records and Documents Management Program," states that "Generally, documents generated by the NRC appropriate for release are released to the public on the 6th working day after the date of the document."

There is no linkage between inspection report issuance and public meeting occurrence.

3. Event Reports

In your email you asked why there is a five-day lag between when the event is reported and when it appears in the Event Reports?

Event Notifications are posted on the NRC Public Website by the Nuclear Incident Security Response Organization. NRC has internal procedures to ensure the information does not contain security information. In addition, the NRC will receive a notification from the site that the event occurred in accordance with NRC regulations (see 10 CFR 70.50 "Reporting Requirements). Performing the security review after the NRC received a notification can result in a lag between the actual event date and when the event is posted on the website.

4. The Safety Culture Assessment for 2012 has not been made public.

NFS was not required by the 2010 Confirmatory Order (ML103210221) to submit this assessment for NRC review and has not done so. The safety culture assessment for 2012 was an additional action performed by the licensee to determine how the organization was progressing in safety culture. The NRC has screened the safety culture assessment for 2012 to verify there were no items requiring immediate action. Note the NRC routinely reviews documents that are not publically available and also recognize the safety culture assessment for 2012 has not been used by the NRC to evaluate license performance in the area of safety culture.

Recall the email from Alan Blamey in December 2013 (ML13347A884) which also stated the safety culture assessment for 2012 has never been submitted to the NRC.

5. What happened to the Safety Culture Board of Advisors (SCUBA)?

When NFS was acquired by B&W there were several changes to the organization. The board of directors changed and instituted the Nuclear Safety Review Board (NSRB) to replace the SCUBA.

6. NFS Annual Calendars are not being distributed with radiation dose information.

The distribution of NFS annual calendars is not an NRC requirement.

 Nolichucky Dam Sediment Samples- Linda Modica made a statement at the commissioner's meeting that she thought sediment samples for uranium should be taken behind the Nolichucky Dam.

Effluent sampling is conducted in accordance with NRC requirements in 10 CFR 70.59. NFS submits Biannual Effluent Monitoring Reports to the NRC in which documents the Radioactivity in Effluent Liquid and Effluent Air. In addition, NFS collects sediment samples quarterly for gross alpha and beta activity to monitor for long-term buildup of radioactivity from the deposition of liquid discharges and/or surface runoff. The samples are taken in different locations including upstream samples and downstream samples on the Nolichucky River and Martin's Creek. The Tennessee Department of Environment and Conservation Division (TDEC) of Water Pollution Control does not have any regulatory requirement over NFS to collect effluent samples, however on their own initiative does collect effluent samples in the vicinity of the plant. Lastly, the NRC and NFS have been conducting split samples for surface water in 4 different locations upstream and downstream of the facility on the Nolichucky River and the Martin's Creek. The NRC reviews the quarterly independent sampling results and compares the data to the licensee's sampling results during core inspections, the results are documented in NRC Integrated Inspection Reports. To date no significant difference has been identified between the split samples.

You may recall, as a good faith effort TDEC performed sediment sampling at five locations in the Nolichucky River in October of 2012. Two of those sample locations were chosen by ECAN. The results of the samples were communicated in a letter dated January 2, 2013, from TDEC and determined the sediment sample results were well below any regulatory (legal) limit or regulatory guidance levels.

There is no regulatory requirement to perform sediment sampling behind the Nolichucky Dam and after review of the TDEC sediment sampling results there does not appear to be a basis to perform additional sampling.

8. The length of time the Inspector Follow-up items (IFI) 2012-204-01 and 2013-201-01 remained open seems too long.

The IFI is not a violation but a means to ensure the inspector's question is answered. It is generally expected that the IFI will be closed within two years. IMC 0616, "Fuel Cycle Safety and Safeguards Inspection Reports," defines an IFI as a potential safety and safeguards compliance question that is not a violation or a safety/safeguards issue, non-conformance or deviation that requires further inspection because specific licensee action is pending. Normally when an IFI is opened by an inspector, the NRC has the inspector who opened the IFI be involved in its closure. It may be some time before the inspector returns to the facility to close the issue.

9. Response to comment of "serial noncompliance by licensee" received regarding Unresolved Item (URI) 70-143/2013-203-01.

URI 70-143/2013-203-1 - Lack of a detailed justification for why changes do not require a license amendment. NFS "does not appear to conform to 10 CFR 70.72(f) which requires a written evaluation that provides the bases for the determination that the changes do not required prior Commission approval..." "The licensee checklist with comments does not appear to ensure that this is always provided."

This URI was closed in the NRC Inspection Report dated November 14, 2013 (ML 13310A622), and constituted a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the NRC enforcement Policy. The violation was minor because the NRC has not found any examples of using the checklist contributing to an incorrect determination of whether a change needs prior approval by the NRC. A violation of minor significance is normally not subject to enforcement action in accordance with Section IV of the NRC Enforcement Policy.

10. Response to comment received regarding IFI 70-143/2012-204-01 and that the "Licensee always "intends.""

IFI 70-143/2012-204-01- involves the completion of the investigations and corrective actions associated with wet uranium accumulations in the process ventilation system and examination of NDA methods for suitability for wet uranium accumulations in process ventilation systems.

The key element of the IFI is to verify that prior to securing the item relied on for safety (IROFS) and the criticality alarm system, a method of accurately determining the amount of holdup in the system must be performed. The word "intends" in the inspection report for IFI -2012-204-01 communicates actions the licensee was planning for in the ongoing activity at the time of the inspection report. NRC inspectors conducted a follow-up inspection between October 21 and 24, 2013, to assess how the licensee was progressing in resolving the issue. The NRC will continue to track completion of the investigations and corrective actions associated with wet uranium accumulations in the process ventilation system and examination of NDA methods for suitability for wet uranium accumulations in process ventilation systems. The licensee had approved the purchase of an electrostatically cooled High Purity Germanium detector. This item remains open pending NRC verification of the licensee's actions. (See NRC Inspection Report dated November 14, 2013 (ML13310A622).

11. When did the BLEU facility stop production?

The BLEU facility stopped production in May of 2013.

Fuel Cycle Facility	Event Number: 47578
Facility: NUCLEAR FUEL SERVICES INC. RX Type: URANIUM FUEL FABRICATION Comments: HEU CONVERSION & SCRAP RECOVERY NAVAL REACTOR FUEL CYCLE LEU SCRAP RECOVERY Region: 2 City: ERWIN State: TN County: UNICOI License #: SNM-124 Agreement: Y Docket: 07000143 NRC Notified By: RANDY SHACKELFORD HQ OPS Officer: BILL HUFFMAN	Notification Date: 01/09/2012 Notification Time: 14:32 [ET] Event Date: 01/09/2012 Event Time: 11:55 [EST] Last Update Date: 01/09/2012
Emergency Class: NON EMERGENCY 10 CFR Section: PART 70 APP A (c) - OFFSITE NOTIFICATION/NEWS REL	Person (Organization): DAVID AYRES (R2DO) MARISSA BAILEY (NMSS) FUELS OUO GROUP (E-MA)

Event Text

REPORT TO OFFSITE GOVERNMENT AGENCIES AND PRESS RELEASE DUE TO A CHEMICAL SPILL ONSITE

The licensee reported that approximately 300 gallons of nitric acid spilled in the bulk chemical storage outdoor area from a storage tank. The nitric acid spilled into a dike that surrounds the tank. The leak was isolated and it is believed that no acid breached the dike and entered the environment. Due to fumes from the acid, the licensee shut down production activities and evacuated non-essential personnel from nearby buildings. The licensee is currently remediating the spill and evaluating when to permit personnel normal access to the onsite areas that were evacuated. This event did not involve any radiological material and did not meet emergency declaration criteria. There was no offsite impact from this event. Site security was maintained throughout. No injuries have been reported. The cause of the spill is still being investigated.

This event is being reported to the NRC Operations Center as a "Concurrent Report" because the licensee has notified state, county, and local authorities and will be making a press release. The licensee has also notified the NRC Resident Inspector and Region 2 (Pelchat).

Fuel Cycle Facility	Event Number: 47620	
Facility: NUCLEAR FUEL SERVICES INC. RX Type: URANIUM FUEL FABRICATION Comments: HEU CONVERSION & SCRAP RECOVERY NAVAL REACTOR FUEL CYCLE LEU SCRAP RECOVERY Region: 2 City: ERWIN State: TN County: UNICOI License #: SNM-124 Agreement: Y Docket: 07000143 NRC Notified By: RANDY SHACKELFORD HQ OPS Officer: DONALD NORWOOD	Notification Date: 01/24/2012 Notification Time: 10:06 [ET] Event Date: 01/23/2012 Event Time: 10:40 [EST] Last Update Date: 01/24/2012	
Emergency Class: NON EMERGENCY 10 CFR Section: 70.50(b)(3) - MED TREAT INVOLVING CONTAM	Person (Organization): DEBORAH SEYMOUR (R2DO) TIM MCCARTIN (NMSS) FUELS GROUP - Email ()	

Event Text

MEDICAL TREATMENT OF A POTENTIALLY CONTAMINATED INDIVIDUAL AT ONSITE FACILITY

"10 CFR 70.50 (b)(3) requires a twenty-four hour report of an event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

"An individual's fingers were potentially exposed to HF [hydrogen fluoride]. The potential HF exposure was believed to be caused by a pin hole in a glove-box glove. The glove was replaced and other glove-box gloves were inspected. The individual's fingers were rinsed and calcium gluconate cream was applied in the Radiological Control Area (RCA). As a precautionary measure, the individual was sent to the on-site medical area (within the Owner Controlled Area) for review/observation. Minor radioactive contamination, below minimum detectable activity (MDA) for the equipment, was removed from the individual's fingers at the medical area. The radioactive contamination was below radioactive release limits. In addition, at the medical area, the individual's finger was irrigated with water and additional calcium gluconate cream was applied. The individual was monitored and then released by medical personnel. No evidence of HF exposure was observed.

"The licensee is making this report on a voluntary basis due to the ambiguous nature of the regulation [10 CFR 70.50 (b)(3)]. It should be noted that Part 50 guidance as well as internal licensee guidance refers to medical treatment at off-site medical facilities.

"The licensee has notified the NRC Resident Inspector."

Fuel Cycle Facility	Event Number: 49368
Facility: NUCLEAR FUEL SERVICES INC. RX Type: URANIUM FUEL FABRICATION Comments: HEU CONVERSION & SCRAP RECOVERY NAVAL REACTOR FUEL CYCLE LEU SCRAP RECOVERY Region: 2 City: ERWIN State: TN County: UNICOI License #: SNM-124 Agreement: Y Docket: 07000143 NRC Notified By: RANDY SHACKELFORD HQ OPS Officer: HOWIE CROUCH	Notification Date: 09/20/2013 Notification Time: 12:18 [ET] Event Date: 09/20/2013 Event Time: 08:00 [EDT] Last Update Date: 09/20/2013
Emergency Class: NON EMERGENCY 10 CFR Section: 26.719 - FITNESS FOR DUTY	Person (Organization): DEBORAH SEYMOUR (R2DO) KING STABLEIN (NMSS)

Event Text

SUPERVISOR TESTED POSITIVE FOR ALCOHOL ON A FOR CAUSE TEST

A facility supervisor tested positive for alcohol on a for-cause fitness for duty test. The supervisor's access to the facility has been restricted.

The licensee has notified the NRC Resident Inspector.