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CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

21G-16-0038  
GOV-01-55-04  
ACF-16-0023  
January 18, 2016

Mr. Kevin Ramsey, Senior Project Manager  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety, Safeguards,  
and Environmental Review  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Two White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

- REFERENCES:
- 1) NRC Generic Letter 2015-01, Treatment of Natural Phenomena Hazards in Fuel Cycle Facilities, dated June 22, 2015
  - 2) Letter from Richard J. Freudenberger to the NRC, Reply to NRC Generic Letter 2015-01, Treatment of Natural Phenomena Hazards in Fuel Cycle Facilities (21G-15-0177), dated October 2, 2015

SUBJECT: **Response to Request for Additional Information Concerning NFS' Evaluation of Spills/Breaches and their Causes**

As discussed during the telephone call conducted on November 6, 2015, Nuclear Fuel Services, Inc. (NFS) does not specifically evaluate spills and breaches of systems with a focus on the cause being a seismic event. The methodology used is to assume material is spilled or piping/tanks are breached and then evaluating the consequence. If the result shows that the event is of low consequence, no further analysis is performed and the actual cause of the spill/breach is not considered relevant. If the event is determined to be of intermediate or high consequence, then the event is analyzed further and appropriate barriers or Items Relied on for Safety (IROFS) are defined to reduce the risk of the spill/breach based on the possible causes identified by the analysts involved in the assessment.

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Information contained in the attached examples includes sensitive information and is marked as "Official Use Only" in accordance with 5 U.S.C. 552, and is not suitable for public release.

NFS is submitting several examples of spills/breaches that have been evaluated in non-classified areas of the facility. The examples show that regardless of how the material spilled or systems breached, the resulting consequence remained low. Therefore, the mechanism that resulted in the spill/breach was not evaluated since any mechanism would not produce an event of intermediate or high consequence. Similar evaluations covering classified areas of the plant can be provided during your planned site visit.

If you have any questions on the information contained in or attached to this letter, please contact me at (423) 743-1705, Mr. Nick Brown, Nuclear Criticality Safety Manager, at (423) 735-5519 or Mr. Andy Sabisch, Licensing and ISA Manager, at (423) 735-5030. Please reference our unique document identification number (21G-16-0038) in any correspondence concerning this letter.

Sincerely,

**NUCLEAR FUEL SERVICES, INC.**



Richard J. Freudenberger  
Safety and Safeguards Director

ATS/pdj

Attachment 1: Affidavit – Trade Secrets or Commercial Information

Attachment 2: Examples of Spills/Breaches Evaluations for NFS

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Attachment 1

AFFIDAVIT

TRADE SECRETS OR COMMERCIAL INFORMATION

(2 pages to follow)

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**AFFIDAVIT  
TRADE SECRETS OR COMMERCIAL INFORMATION**

I, Richard J. Freudenberger, representing the Safety and Safeguards Department at Nuclear Fuel Services, Inc. (NFS), to the best of my knowledge and beliefs, make the following representation:

- A. The following document which Nuclear Fuel Services, Inc. (NFS) wishes to have withheld from public disclosure is the Attachment 2 to NFS letter (21G-16-0038), dated January 18, 2016:

**Examples of Spills/Breaches Evaluations for NFS**

- B. The information contained in the document cited in A above has been held in confidence by Nuclear Fuel Services, Inc. (NFS), or its Contractor, in that it contains trade secrets or commercial information as specified in Title 10, Code of Federal Regulations, Part 2.390(a). The basis for requesting that this document(s) be withheld from public disclosure is explicitly marked on the cover page to each of the aforementioned documents and/or the top of each affected page in accordance with 10 CFR 2.390(b)(i)(B).
- C. The information contained in the document cited in A above is the intellectual property of Nuclear Fuel Services, Inc. (NFS), or its Contractor, and as such is customarily held in confidence by Nuclear Fuel Services, Inc. (NFS). As such, Nuclear Fuel Services, Inc. (NFS) has customarily submitted privileged and confidential information of this type to the Nuclear Regulatory Commission (NRC) and to its predecessor, the Atomic Energy Commission (AEC), in confidence.
- D. The information contained in the document cited in A above has not been made available to public sources by Nuclear Fuel Services, Inc. (NFS), nor has Nuclear Fuel Services, Inc. (NFS) authorized that it be made available. In accordance with Nuclear Fuel Services, Inc. (NFS) policies governing the protection and control of information, proprietary information contained herein has been made available, on a limited basis, to others outside NFS only as required and under suitable agreement providing for nondisclosure and limited use of the information.
- E. The public disclosure of the information contained in the document cited in A above is likely to cause substantial economic harm to the competitive advantage held by Nuclear Fuel Services, Inc. (NFS), or its Contractor. The basis for withholding said information is that it contains distinguishing aspects of a process, methodology, or component(s), the exclusive use of which provides a competitive advantage for NFS or its Contractor in product optimization or marketability.

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Attachment 2

Examples of Spills/Breaches Evaluations for NFS

27 Pages to Follow

<p><b>OFFICIAL USE ONLY</b></p> <p>May be exempt from public release under the Freedom of Information Act (5 U.S.C. 552)</p> <p>Exemption number <u>7</u></p> <p>Nuclear Regulatory Commission review required before public release.</p> <p><u>R. Shackelford</u> /NFS, Inc.</p> <p>Name and organization of person making determination</p> <p>Date of Determination <u>1/15/2016</u></p>
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