

DOCKET NO.: 70-143

LICENSEE: NUCLEAR FUEL SERVICES, INC.

SUBJECT: SAFETY EVALUATION REPORT: APPROVAL OF CHANGES TO LICENSE SNM-124, CHAPTER 7, FIRE SAFETY (TECHNICAL ASSIGNMENT CONTROL NUMBER L33345)

BACKGROUND

By letter dated September 9, 2014, Nuclear Fuel Services, Inc. (NFS) requested a revision to Chapter 7 of their license application (SNM-124) to clarify the role of the authority having jurisdiction (AHJ) for their fire protection program. Previously, the role of the NFS AHJ was limited to “resolving any National Fire Protection Association (NFPA) code conflicts.” In their September 9, 2014, submittal, the licensee proposed modified language to more clearly define the role of the NFS AHJ as being responsible for the resolution of any NFPA code conflicts by evaluating whether the provisions of NFPA codes/standards are being met and, if not being met, the approval of alternate methods that demonstrate equivalency to the specific NFPA code/standard found to be in conflict. Also, the licensee added language stating that if an NFPA Code/Standard cannot be met and an alternate method that provides an equivalent level of safety cannot be identified (i.e., performance-based design and/or documented analysis), a formal request to approve that exemption (deviation) from the NFPA code/standard shall be submitted to the NRC for review and approval prior to its implementation. Furthermore, the licensee added additional language stating that all AHJ-approved equivalency justifications shall be retained for review by the NRC.

DISCUSSION

NFPA codes/standards universally define the term “AHJ” as the organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure. The explanatory portions of NFPA codes/standards state that the term “AHJ” is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the AHJ may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the AHJ. In many circumstances, the property owner or his or her designated agent assumes the role of the AHJ.

NFPA codes/standards universally define the term “equivalency” to allow for the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety as alternatives to those prescribed in the code/standard, provided technical documentation is submitted to the AHJ to demonstrate equivalency, and the system, method, or device is approved for the intended purpose. The specific requirements of an NFPA code/standard are to be permitted to be modified by the AHJ to allow alternative arrangements

that will secure as nearly as practical the level of fire protection intended by this document. In no case shall a modification afford less fire protection than that which, in the judgment of the AHJ, would be provided by compliance with the corresponding provisions contained in an NFPA code/standard. Alternative fire protection methods accepted by the AHJ shall be considered as conforming to an NFPA code/standard.

To further clarify the term "AHJ" and the process for deviations from NFPA codes/standards for NRC fuel cycle licensees, the NRC staff provided guidance in Section 7.4.3.2.2 of NUREG-1520, Rev. 1, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility." When a licensee states that its design "meets an NFPA code/standard" or "meets the intent of an NFPA code/standard" and does not identify any deviations from such codes, the NRC expects that the design conforms to the codes and is subject to inspection against the NFPA code of record. A licensee may apply the equivalency concept in meeting the provisions of the NFPA codes or standards. Recent editions of the NFPA codes require submittal of technical documentation to the "AHJ" to demonstrate equivalency of an alternative system, method, or device. The NRC does not require review and approval of equivalency evaluations before their implementation during construction. However, the licensee should document these evaluations and make them available for NRC inspection. The AHJ referenced in NFPA codes/standards ultimately refers to the NRC Director of the Office of Nuclear Material Safety and Safeguards (or designee).

ENVIRONMENTAL REVIEW

A proposed action is excluded from an environmental review under Title 10 of the *Code of Federal Regulations* (10 CFR) 51.22(c)(11) if it is procedural in nature and satisfies the following requirements:

- i. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- ii. There is no significant increase in the individual or cumulative occupational radiation exposure.
- iii. There is no significant construction impact.
- iv. There is no significant increase in the potential for or no consequences from radiological accidents.

Changing the commitments in Chapter 7 meets the requirements listed above. No significant change in effluents is expected because the proposed action makes no changes to the processes which generate effluents. No significant change in exposures is expected because worker exposures will continue to be monitored, and the exposures will continue to be evaluated by the existing program. There is no construction associated with the action and no change to operating equipment which would increase the potential for or consequences from an accident.

The NRC staff determined that the proposed action does not adversely impact public health and safety or the environment, and is categorically excluded from the requirement to prepare a site-

specific Environmental Assessment (EA). Therefore, in accordance with 10 CFR 51.22(c)(11), neither an EA nor an Environmental Impact Statement is warranted for this action.

CONCLUSION

The NRC staff reviewed the licensee's proposed modification with respect to NFPA codes/standards and the guidance provided in NUREG-1520, Rev. 2. The amendment request by the licensee on the role of the NFS AHJ for their fire protection program, equivalency process, and deviation process, is consistent with NFPA codes/standards and the guidance provided in NUREG-1520, Rev. 2. The proposed modification maintains the effectiveness of NRC commitments, makes no changes to the NRC-approved safety bases, and is not in conflict with any existing license conditions. The NRC staff finds the amendment acceptable.

PRINCIPAL CONTRIBUTORS

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