

BWXT NUCLEAR OPERATIONS GROUP, INC.  
AMENEDMENT 27

SAFETY EVALUATION REPORT

BACKGROUND

By letter dated June 27, 2017, BWXT Nuclear Operations Group, Inc. – Lynchburg (BWXT-NOG-L) requested a revision to Chapter 7 of their license application (SNM-42) to designate the Department Manager of Environment Safety, Health and Safeguards as the Authority Having Jurisdiction (AHJ) for the Fire Protection Program. Previously, the role of an AHJ for BWXT was not defined in the license application. The licensee states in the revised license application that when deviations to National Fire Protection Association (NFPA) codes achieve an equivalent level of safety, the AHJ can approve these deviations. The licensee will perform equivalency determinations and maintain the records of the evaluations on site for U.S. Nuclear Regulatory Commission (NRC) review. Deviations where an equivalent level of safety cannot be achieved will be submitted to the NRC for review and approval. When deviations must be submitted to the NRC, the NRC will act as the AHJ.

DISCUSSION

An AHJ is defined by NFPA 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.

The 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 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.

The licensee has committed to performing equivalency evaluations, as described by NFPA, when determining if a deviation from the code achieves an equivalent level of safety. This meets the acceptance criteria in Section 7.4.3.2.2 of NUREG-1520, Rev. 2, “Standard Review Plan for Fuel Cycle Facilities License Applications.” As stated in the guidance, when the applicant or licensee states that its design “meets the NFPA code(s)” or “meets the intent of the NFPA codes” 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.

Nothing in the NFPA codes or standards is intended to prevent the use of methods, systems, or devices of equivalent or superior quality, strength, fire resistance, durability, and safety as alternatives to those prescribed by the codes or standards, provided that technical documentation demonstrates equivalency. 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. The licensee should document these evaluations and make them available for NRC inspection. However, the NRC must review and inspect any code deviations (i.e., where an equivalent level of safety cannot be achieved) relative to their effect on nuclear safety.

#### CONCLUSION

The NRC staff reviewed the licensee's proposed modification to the license application regarding the role of the AHJ for the site against the regulatory requirements and the guidance provided in NUREG-1520, Rev. 2. The proposed change maintains an equivalent level of safety and makes no change to the NRC-approved safety bases. The staff finds the amendment request to be consistent with the guidance provided in NUREG-1520, Rev. 2 and determines that the amendment is acceptable.

#### PRINCIPAL CONTRIBUTOR

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