



10 CFR 50.55a

LR-N19-0007
January 31, 2019

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Hope Creek Generating Station
Renewed Facility Operating License No. NPF-57
NRC Docket No. 50-354

Subject: Relief Request to Use American Society of Mechanical Engineers (ASME) Code Case OMN-17, Alternative Rules for Testing ASME Class 1 Pressure Relief/Safety Valves for the Fourth 10-Year Inservice Test Interval

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (z)(1), PSEG Nuclear, LLC (PSEG) hereby requests NRC approval of the following request for the fourth 10-year interval inservice testing program.

- PSEG Alternative Request VR-03 – Main Steam Safety Relief Valve (SRV) Testing Frequency

The approved alternative permits the Hope Creek SRVs to be tested in accordance with code case OMN-17.

The details of the 10 CFR 50.55a request are provided in Attachment 1. PSEG requests approval of this request by October 15, 2019 in support of the Fall 2019 Hope Creek Refueling Outage (R22).

There are no regulatory commitments contained in this letter. If you have any questions or require additional information, please contact Mr. Lee Marabella at (856) 339-1208.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul R. Duke, Jr.", written in a cursive style.

Paul R. Duke, Jr.
Manager, Licensing

Attachment 1: 10 CFR 50.55a Request VR-03

- C Regional Administrator - NRC Region I
 Project Manager - Hope Creek, USNRC
 NRC Senior Resident Inspector - Hope Creek
 P. Mulligan, Chief, NJBNE
 Tom MacEwen, Hope Creek Commitment Coordinator
 Lee Marabella, Corporate Commitment Coordinator

LR-N19-0007

Attachment 1

10 CFR 50.55a Request VR-03

**10 CFR 50.55a Request VR-03
Main Steam Safety Relief Valves
Proposed Alternative in Accordance with 10CFR50.55a(z)(1)
--Alternative Provides Acceptable Level of Quality and Safety--**

1. ASME Code Components Affected:

Main Steam and Automatic Depressurization System (ADS) Valves:
1SNPSV-F013A, B, C, D, E (Class 1, Category C)
1ABPSV-F013F, G, H, J, K, L, M, P, R (Class 1, Category C)

These valves have a safety function in the open position to provide overpressure protection for the main steam header and the reactor vessel. Additionally, valves 1SNPSV-F013A-E also serve an emergency core cooling system (ECCS) function in the ADS to depressurize the reactor vessel in the event of a small break loss-of-coolant accident (LOCA) coincident with a failure of the high pressure coolant injection (HPCI) system.

2. Applicable Code Edition and Addenda:

ASME OM Code 2012 Edition, no Addenda

3. Applicable Code Requirement:

Paragraph I-3310 of Mandatory Appendix I specifies the periodic testing requirements of ASME Class 1 main steam pressure relief valves with auxiliary actuating devices. The Code required periodic testing for these valves includes, in part: seat tightness determination; set pressure determination; determination of electrical characteristics and pressure integrity of solenoid valve(s); determination of pressure integrity and stroke capability of air actuator; and determination of operation and electrical characteristics of position indicators.

The frequency of the required testing is specified in paragraph I-1320(a), which requires that these main steam relief valves be periodically tested at least once every five years, with a minimum of 20% of the valves tested within any 24 months, where the 20% shall be previously untested valves, if they exist.

4. Reason for Request:

The ASME OM Committee developed Code Case OMN-17, Alternative Rules for Testing ASME Class 1 Pressure Relief/Safety Valves, which is published in the 2012 Edition of the OM Code. Regulatory Guide (RG) 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," Revision 2, Table 1 identifies Code Case OMN-17 as an acceptable Code Case for implementation in the in-service testing program. However, the inquiry and reply within Code Case OMN-17 indicates that its applicability to the OM Code is to the 2001 Edition through the 2006 Addenda of Appendix I, Section I-1320. ISTA-3130(b) requires Code Cases to be applicable to the Edition and addenda specified in the test plan, which would be the 2012 Edition. Therefore, NRC authorization is needed to use Code Case OMN-17 for testing of the subject relief valves.

**10 CFR 50.55a Request VR-03
Main Steam Safety Relief Valves
(Continued)**

5. Proposed Alternative and Basis for Use:

As an alternative to the Code required five-year test interval per Appendix I, paragraph I-1320(a), PSEG proposes that the subject Class 1 pressure relief valves be tested at least once every 72 months with a minimum of 20% of the valves tested within any 24-month interval. This 20% would consist of valves that have not been tested during the current three-cycle interval, if they exist. The test interval for any individual valve would not exceed 72 months, except that a 6-month grace period is allowed to coincide with refueling outages to accommodate extended shutdown periods. Prior to placing these valves in service, the valves shall be disassembled and inspected after as-found set-pressure testing to verify that parts are free of defects resulting from time-related degradation or service-induced wear. As-left set-pressure testing shall be performed following maintenance and prior to returning the valve to service. Each valve shall have been disassembled and inspected at least once during the 72-month test interval. Disassembly and inspections performed prior to the implementation of this alternative may be used.

Relief from ISTA-3130(b) is requested to implement Code Case OMN-17, since inquiry and reply within the Code Case indicates that its applicability is to the 2001 Edition through the 2006 Addenda of Appendix I. ISTA-3130(b) requires Code Cases to be applicable to the Edition and addenda specified in the test plan. The ASME OM Code that applies to the Hope Creek test plan is the 2012 Edition with no Addenda. A review of the 2012 Edition of the OM Code and Code Case OMN-17 confirmed that there are no changes that would affect use of this Code Case relative to the applicable Code section referenced within the Code Case when comparing Appendix I of the 2001 Edition through the 2006 Addenda to Appendix I of the 2012 Edition.

The proposed alternative of increasing the test interval for the subject Class 1 pressure relief valves from five years to 72 months would continue to provide an acceptable level of quality and safety. This proposed alternative meets the requirements stated in Code Case OMN-17, which is approved for use in RG 1.192, Revision 2. The proposed alternative will continue to provide assurance of the valves' operational readiness and provides an acceptable level of quality and safety pursuant to 10 CFR 50.55a(z)(1).

6. Duration of Proposed Alternative:

The proposed alternative identified will be utilized during the fourth IST interval, which began December 21, 2017, and will conclude on December 20, 2026¹.

¹ Hope Creek extended the 3rd interval one year such that the 4th interval now begins on December 21, 2017 (Reference letter LR-N17-0127, dated August 17, 2017)

**10 CFR 50.55a Request VR-03
Main Steam Safety Relief Valves
(Continued)**

7. Precedents:

The Nuclear Regulatory Commission (NRC) approved a similar request (request VRR-RBS-2017-1) as described in the safety evaluation provided with the May 24, 2017 letter to Entergy Operations, Inc., Subject: River Bend Station, Unit 1 - Alternative Requests PRR-RBS-2017-1, PRR-RBS-2017-2, and VRR-RBS-2017-1 from the Requirements of the ASME Code for the Inservice Testing for the Fourth 10-Year Interval (CAC NOS. MF9368, MF9369, and MF9370), (Accession No ML17138A144).

8. References:

None