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GNRO-2015/00068

November 6, 2015

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

**SUBJECT:** Supplemental Letter to Grand Gulf Nuclear Generating Station Letter  
GNRO-2015-00037: Application to Revise the Grand Gulf Nuclear Station  
Unit 1 Technical Specifications to Remove the Inservice Testing Program  
and to Clarify SR Usage Rule Application to Section 5.5 Testing to Provide  
Relief Request in Format Requested by Nuclear Regulatory Commission  
(GG-IST-2015-1)  
Grand Gulf Nuclear Station, Unit 1  
Docket No. 50-416  
License No. NPF-29

**Reference:** GNRO-2015-00037: Application to Revise the Grand Gulf Nuclear Station  
Unit 1 Technical Specifications to Remove the Inservice Testing Program  
and to Clarify SR Usage Rule Application to Section 5.5 Testing

Dear Sir or Madam:

This letter is being submitted to supplement the above referenced letter and to reformat Attachment 2, Description and Assessment of the Proposed Alternative to the ASME Code in accordance with request from the NRC on October 1, 2015. Please accept the attachment in this letter in place of Attachment 2 of Letter GNRO-2015/00037.

Pursuant to 10 CFR 50.55a(z)(2), Entergy Operations Inc. (Entergy) requests an alternative from the inservice testing (IST) requirements of American Society Mechanical Engineering (ASME) OM Code, for the Grand Gulf Nuclear Station (GGNS) Unit 1. Regulatory Issue Summary 2012-10, NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests, indicates that Surveillance Requirements (SRs) 3.0.2 and 3.0.3 cannot be applied to Technical Specification (TS) 5.5 for tests that are not associated with a TS SR. The lack of a tolerance band on the ASME OM Code inservice test frequency restricts operational flexibility. Thus, just as with TS required surveillance testing, some tolerance is needed to allow adjusting OM Code testing intervals to suit the plant conditions and other maintenance and testing activities. The proposed alternative from the frequency specifications of the ASME OM Code is needed due to undue hardship without a compensating increase in the level of quality or safety. The proposed alternative for GGNS Unit 1 is provided in the attachment to this letter.

As requested in Letter GNRO-2015/00037 approval of the proposed amendment is requested. Once approved, the amendment shall be implemented within 90 days.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Mississippi Official.

This letter contains no new commitments. If you have any questions or require additional information, please contact James Nadeau at 601-437-2103.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 6<sup>th</sup> day of November, 2015.

Sincerely,



KJM/ram

Attachment: Description and Assessment of Proposed Alternative to the ASME Code

cc: with Attachment

Mr. John P. Boska, Project Manager  
Plant Licensing Branch I-1  
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cc: without Attachment(s)

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**Attachment to GNRO-2015/00068**

**Description and Assessment of Proposed Alternative to the ASME Code**

**DESCRIPTION AND ASSESSMENT OF THE PROPOSED  
ALTERNATIVE TO THE ASME CODE  
Grand Gulf Relief Request GG-IST-2015-1**

**Request in Accordance with  
10 CFR 50.55a(z)(2)**

**Alternative Provides Acceptable Level of Quality and Safety**

**1.0 ASME CODE COMPONENTS AFFECTED**

All pumps and valves contained within the Inservice Testing Program scope.

**2.0 APPLICABLE CODE EDITION AND ADDENDA**

ASME OM Code-2001 Edition with addenda through and including the ASME Omb Code-2003 Addenda except that for Main Steam Safety Relief Valve testing GGNS implments Mandatory Appendix I, Paragraphs I-3410(a) &(d) of the ASME OM Code-2004 Edition with no addenda."

**3.0 APPLICABLE CODE REQUIREMENTS**

This request applies to the frequency specifications of ASME OM Code. The frequencies for tests given in the ASME OM Code do not include a tolerance band.

Code Paragraph	Description
ISTA-3120(a)	"The frequency for the inservice testing shall be in accordance with the requirements of Section IST."
ISTB-3400	Frequency of Inservice Tests
ISTC-3510	Exercising Test Frequency
ISTC-3540	Manual Valves
ISTC-3630(a)	Frequency
ISTC-3700	Position Verification Testing
ISTC-5221(c)(3)	"At least one valve from each group shall be disassembled and examined at each refueling outage; all valves in a group shall be disassembled and examined at least once every 8 years."
ISTC-5260	Explosively Actuated Valves
Appendix I, I-1320	Test Frequencies, Class 1 Pressure Relief Valves
Appendix I, I-1330	Test Frequency, Class 1 Nonreclosing Pressure Relief Devices
Appendix I, I-1340	Test Frequency, Class 1 Pressure Relief Valves That are Used for Thermal Relief Application
Appendix I, I-1350	Test Frequency, Class 2 and 3 Pressure Relief Valves
Appendix I, I-1360	Test Frequency, Class 2 and 3 Nonreclosing Pressure Relief Devices
Appendix I, I-1370	Test Frequency, Class 2 and 3 Primary Containment Vacuum Relief Valves
Appendix I, I-1380	Test Frequency, Class 2 and 3 Vacuum Relief Valves, Except for Primary Containment Vacuum Relief Valves

Appendix I, I-1390	Test Frequency, Class 2 and 3 Pressure Relief Devices That are Used for Thermal Relief Application
Appendix II, II-4000(a)(1)	Performance Improvement Activities
Appendix II, II-4000(b)(1)(e)	Optimization of Condition-Monitoring Activities

#### 4.0 REASON FOR REQUEST

In RIS 2012-10, "NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests," and EGM 2012-001, "Dispositioning Noncompliance with Administrative Controls Technical Specifications Programmatic Requirements that Extend Test Frequencies and Allow Performance of Missed Tests," the NRC stated that the current TS allowance to apply SR 3.0.2 and SR 3.0.3 to the Inservice Testing Program would no longer be permitted. In response, OMN-20, which provides allowances similar to SR 3.0.2, was approved and is proposed to be used as an alternative to the test periods specified in the OM code. The proposed change substitutes an approved Code Case for existing TS requirements that the NRC has determined are legally, but not technically, unacceptable as a TS allowance.

Pursuant to 10 CFR 50.55a, "Codes and standards," paragraph (z)(2), relief is requested from the frequency specifications of the ASME OM Code. The basis of the relief request is that the Code requirement presents an undue hardship without a compensating increase in the level of quality or safety.

ASME OM Code Section IST establishes the inservice test frequency for all components within the scope of the Code. The frequencies (e.g., quarterly) have always been interpreted as "nominal" frequencies (generally as defined in Table 3.2 of NUREG 1482, Revision 1), and Owners applied the surveillance extension time period (i.e., grace period) contained in the plant Technical Specifications (TS) Surveillance Requirements (SRs). The TS allow for a less than or equal to 25% extension of the surveillance test interval to accommodate plant conditions that may not be suitable for conducting the surveillance (TS 3.0.2). However, Regulatory Issue Summary 2012-10, NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests, states that SR 3.0.2 and 3.0.3 cannot be applied to TS 5.5 for tests that are not associated with a TS SR.

The lack of a tolerance band on the ASME OM Code inservice test frequency restricts operational flexibility. There may be times when a surveillance test could be required (i.e., its frequency could expire), but plant conditions are not risk conducive or the testing may not even be possible until sometime after a plant condition or associated Limited Condition Operation (LCO) is within its applicability.

The NRC recognized this potential issue in the TS by allowing a frequency tolerance as described in TS 3.0.2. The lack of a similar tolerance applied to OM Code testing places an unusual hardship on the plant to adequately schedule work tasks without operational flexibility.

Thus, just as with TS required surveillance testing, some tolerance is needed to allow adjusting OM Code testing intervals to better align with the plant conditions and other maintenance and testing activities. Providing a tolerance band assures operational flexibility for scheduling surveillance tests to minimize conflicts between the need to complete the surveillance and plant conditions.

## 5.0 PROPOSED ALTERNATIVE AND BASIS FOR USE

The proposed alternative is OMN-20, "Inservice Test Frequency," which addresses testing periods for pumps and valves specified in ASME OM Section IST, 2009 Edition through OMa-2011 Addenda, and all earlier editions and addenda of ASME OM Code. This request is being made in accordance with 10 CFR 50.55a(a)(z)(2) and is considered an alternative that provides an acceptable level of quality and safety for the following reasons:

- 1) For IST testing periods up to and including 2 years, Code Case OMN-20 provides an allowance to extend the IST testing periods by up to 25%. The period extension is to facilitate test scheduling and considers plant operating conditions that may not be suitable for performance of the required testing (e.g., performance of the test would cause an unacceptable increase in the plant risk profile due to transient conditions or other ongoing surveillance, test or maintenance activities). Period extensions are not intended to be used repeatedly merely as an operational convenience to extend test intervals beyond those specified. The test period extension and the statements regarding the appropriate use of the period extension are equivalent to the existing TS SR 3.0.2 allowance and the statements regarding its use in the SR 3.0.2 Bases. Use of the SR 3.0.2 period extension has been a practice in the nuclear industry for many decades and there is no evidence that the period extensions affect component reliability.
- 2) For IST testing periods of greater than 2 years, OMN-20 allows an extension of up to 6 months. The ASME OM Committee determined that such an extension is appropriate. The 6-month extension will have a minimal impact on component reliability considering that the most probable result of performing any inservice test is satisfactory verification of the test acceptance criteria. As such, pumps and valves will continue to be adequately assessed for operational readiness when tested in accordance with the requirements specified in 10 CFR 50.55a(f) with the frequency extensions allowed by Code Case OMN-20.
- 3) As stated in EGM 2012-001, if an Inservice Test is not performed within its frequency, SR 3.0.3 will not be applied. The effect of a missed Inservice Test on the Operability of TS equipment will be assessed under the licensee's Operability Determination Program.

## 6.0 DURATION OF PROPOSED ALTERNATIVE

The proposed alternative is requested to be permanent, effective through the term of the license, or until Code Case OMN-20 is incorporated into a future revision of Regulatory Guide 1.192, whichever occurs first.

7.0 PRECEDENTS

The NRC approved the use of OMN-20 for Quad Cities on February 14, 2013 (NRC ADAMS Accession Number ML13042A348).

8.0 REFERENCES

- ASME OM Code-2001 Edition with addenda through and including the ASME OMB Code-2003 Addenda except that for Main Steam Safety Relief Valve testing GGNS implements Mandatory Appendix I, Paragraphs I-3410(a) &(d) of the ASME OM Code-2004 Edition with no addenda."
- GGNS Technical Specification 3.0.2
- GGNS Technical Specification 5.5.6 Inservice Testing Program
- Regulatory Issue Summary 2012-10, NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests