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June 9, 2010
GO2-10-078

10 CFR 50.55a

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

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397 REQUEST FOR RELIEF FROM ASME OM CODE TEST INTERVAL FOR A CLASS 2 PRESSURE RELIEF VALVE**

Dear Sir or Madam:

In accordance with 10 CFR 50.55a, "Codes and Standards," Energy Northwest hereby requests NRC approval of proposed Relief Request RV-06 to extend the test interval for a certain Class 2 pressure relief valve on a one-time basis until the restart after refueling outage R20, which is currently scheduled for June 2011.

Energy Northwest requests approval of the proposed request by July 8, 2010 to permit continued plant operation until R20. The Code of Record for the current 10-year inservice testing (IST) interval is American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 2001 Edition and the 2002 and 2003 Addenda.

The proposed relief request is provided as an attachment to this letter. It contains three precedents.

There are no commitments contained in this letter.

If you have further questions, please contact D.W. Gregoire at (509) 377-8616.

Respectfully,

W.S. Oxenford
Vice President, Nuclear Generation and Chief Nuclear Officer

Attachment: 10 CFR 50.55a Relief Request Number RV-06

cc: NRC RIV Regional Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
R.N. Sherman – BPA/1399
W.A. Horin – Winston & Strawn

A047
NRR

10 CFR 50.55a Relief Request Number RV-06

Proposed Alternative
in Accordance with 10CFR 50.55a(a)(3)(ii)

Hardship or Unusual Difficulty without Compensating
Increase in Level of Quality or Safety

ASME Code Components Affected

Affected Valves	Class	Cat.	Function	System(s)
CSP-RV-52	2	C	¾" by 1" Relief Valve for Tank CSP-TK-51	Containment Supply and Purge

Applicable Code Edition and Addenda

For the current 10-year inservice testing (IST) interval, American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 2001 Edition and the 2002 and 2003 Addenda.

Applicable Code Requirement

ASME OM Subsection ISTC, Paragraph ISTC-5240, "Safety and Relief Valves," requires safety and relief valves to meet the inservice test requirements of Mandatory Appendix I, "Inservice Testing of Pressure Relief Devices in Light-Water Reactor Nuclear Power Plants." With respect to Columbia Generating Station (CGS), Section I-1350(a) requires Class 2 and 3 pressure relief valves to be tested every 10 years, with a minimum of 20% of the valves from each valve group tested within any 48-month interval. CSP-RV-52 is the only relief valve within its respective valve group and, therefore, must be tested every 48 months.

Reason for Request

During an internal review to verify compliance of testing frequencies for ASME Class 2 and 3 safety relief valves, a scheduling discrepancy was discovered. The scheduling for CSP-RV-52 was incorrectly scheduled 48 months after installation instead of 48 months after testing. As a result, the subject valve is required to be tested on or before July 11, 2010, 9 months prior to the next refueling outage (R20). Energy Northwest documented the scheduling discrepancy in the corrective action program and performed an extent of condition review that revealed no other relief valve in a similar condition.

In accordance with 10 CFR 50.55a(a)(3)(ii), Energy Northwest requests relief from the applicable ASME OM Code requirements for CSP-RV-52 until the restart from the CGS refueling outage R20, which is currently scheduled to begin in April 2011. The 48-month test interval would be extended by approximately 11 months. NUREG-1482,

Rev. 1, Section 2.5, "Relief Requests and Proposed Alternatives," states that nuclear power plant licensees may also propose alternatives to ASME Code requirements if compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The NRC staff has interpreted "hardship" to mean a high degree of difficulty or an adverse impact on plant operation, as illustrated by examples, including:

- Replacing equipment or in-line components
- Creating significant hazards to plant personnel

CSP-RV-52 provides overpressure protection for CSP-TK-1, the backup air tank within the nitrogen pressure system for operation of the 3 inboard reactor building to wetwell vacuum breakers. Removal and testing of CSP-RV-52 results in 3 inboard vacuum breakers failing open when nitrogen is removed from the valves. This testing is normally performed when CGS is shut down in a mode in which the vacuum breakers are not required to be operable (Mode 4 or 5). At power, the plant would be reliant upon a single valve, the outboard vacuum breakers next to each failed open inboard vacuum breaker, for containment isolation which is considered to be an unnecessary risk to plant personnel and to the health and safety of the public. Additionally, this action would place the plant in a 72-hour action statement for 3 open vacuum breakers (LCO 3.6.1.6 Condition A), a time frame that would challenge completing the testing while at power. Based on this, the testing of CSP-RV-52 at power would present an adverse impact on plant operation and may require a plant shutdown to perform the testing.

Proposed Alternative and Basis for Use

Energy Northwest proposes to extend the 48-month test interval for CSP-RV-52 by approximately 11 months to allow for testing during the next scheduled refueling outage.

Due to failure of the seat tightness test, CSP-RV-52 was replaced on June 16, 2007 with a different manufacturer and model of valve (Crosby OMNI 900 Model 9511817D series). As a result of the change, CSP-RV-52 was moved to a new valve group of which it is the single member. Although there is a limited history of its use, the valve has had no further issues. CGS has similar Crosby OMNI 900 Series valves (Model 9511882A) in use (RHR-RV-25A/B/C). These valves are used in a water application, have been tested since October 2004, and have been installed since May 2005 with no issues. Additionally, Crosby OMNI 900 Series types of relief valves are used in various applications throughout the industry. A review of the Equipment Performance and Information Exchange (EPIX) database has not indicated a history of chronic failure with this series of valves.

Based on the review of the plant and industry experience, Energy Northwest has concluded that the proposed alternative provides reasonable assurance of operational readiness for CSP-RV-52 until it is tested during the next refueling outage. Therefore, in accordance with 10 CFR 50.55(a)(3)(ii), this testing interval extension until CGS R20

is requested on the basis that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Duration of Proposed Alternative

The proposed alternative is requested until the restart after R20, currently scheduled for June 2011. The duration of this extension is approximately 11 months.

Precedents

In Reference 1, the NRC authorized a one-time extension for Class 2 and 3 pressure relief valves by approximately 6 months for Salem Generating Station, Unit 2.

In Reference 2, the NRC authorized a one-time extension for a Class 3 pressure relief valve by approximately 7 months for Hope Creek Generating Station.

In Reference 3, the NRC authorized a one-time extension for two Class 2 pressure relief valves by approximately 7 months for Hope Creek Generating Station.

References

1. NRC Safety Evaluation dated March 5, 2009 (TAC No. ME0784), Salem Generating Station, Unit 2, Docket No. 50-311 (ML090850066)

2. NRC Safety Evaluation dated March 10, 2010 (TAC No. ME2158), Hope Creek Generating Station, Docket No 50-354 (ML100331816)

3. NRC Safety Evaluation dated March 10, 2010 (TAC No. ME3322), Hope Creek Generating Station, Docket No 50-354 (ML100610024)