August 15, 2008

Mr. David J. Bannister Vice President and CNO Omaha Public Power District Fort Calhoun Station FC-2-4 Post Office Box 550 Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 – RELIEF REQUEST RE: VALVE REPLACEMENT FOR THE SAFETY INJECTION AND REFUELING WATER TANK OUTLET HEADER (TAC NO. MD8722)

Dear Mr. Bannister:

By letter (LIC-08-0066) dated May 15, 2008, and supplemented by letter (LIC-08-0067) dated May 17, 2008, the Omaha Public Power District (OPPD, the licensee) requested relief from certain requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, with regard to valve replacement at Fort Calhoun Station (FCS), Unit 1. OPPD requested relief to Section 50.55a, "Codes and standards," of Title 10 of the *Code of Federal Regulations* (10 CFR) for a Fisher Control valve procured as a replacement for the currently installed level control valve LCV-383-2 of the safety injection and refueling water tank outlet header.

Clarifications on the OPPD request were discussed with Mr. Thomas Matthews and others on May 16 and 18, 2008. On May 18, 2008, the NRC staff provided a verbal authorization of the 10 CFR 50.55a Relief Request. The enclosed safety evaluation documents the basis of the verbal authorization.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's submittal and determined that compliance with the specified requirements of the ASME Code, Section XI, would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Further, the staff finds that the licensee has provided reasonable assurance that the structural integrity of the replacement valve will be maintained for one operating cycle. Pursuant to 10 CFR 50.55a(a)(3)(ii), the staff authorizes the proposed relief request for the installation of replacement valve LCV-383-2 at FCS Unit 1 for the current operating cycle (one only of approximately 18 months), which started on or about June 16, 2008.

D. Bannister

All other ASME Code, Section XI, requirements for which relief has not been specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Sincerely,

/RA/

Jack N. Donohew, Acting Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure: Safety Evaluation

cc w/encls: See next page

D. Bannister

All other ASME Code, Section XI, requirements for which relief has not been specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Sincerely,

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ADAMS Accession No. ML082180334			(*) SE input memo			
OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DCI/CPNB/BC	OGC	NRR/LPL4/BC (A)	NRR/LPL4/PM
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Ft. Calhoun Station, Unit 1

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(7/2/2008)

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

10 CFR 50.55a RELIEF REQUEST

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT 1

DOCKET NOS. STN 50-285

1.0 INTRODUCTION

By letter (LIC-08-0066) dated May 15, 2008, and supplemented by letter (LIC-08-0067) dated May 17, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML081370578 and ML081400663, respectively), the Omaha Public Power District (OPPD, the licensee) requested relief from certain requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, with regard to valve replacement at Fort Calhoun Station (FCS), Unit 1. OPPD requested relief to Section 50.55a, "Codes and standards," of Title 10 of the *Code of Federal Regulations* (10 CFR) for a Fisher Control valve procured as a replacement for the currently installed level control valve LCV-383-2 of the safety injection and refueling water tank (SIRWT) outlet header.

Clarifications on the OPPD request were discussed with Mr. Thomas Matthews and others on May 16 and 18, 2008. On May 18, 2008, the U.S. Nuclear Regulatory Commission (NRC) staff provided a verbal authorization of 10 CFR 50.55a Relief Request. The summary of interactions with the licensee on the verbal authorization related to the OPPD relief request is documented in a memorandum dated June 3, 2008 (ADAMS Accession No. ML081410005).

2.0 REGULATORY EVALUATION

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) must meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection (ISI) of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein.

Pursuant to 10 CFR 50.55a(a)(3), alternatives to requirements may be authorized if the licensee demonstrates that: (i) the proposed alternatives provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Enclosure

The Code of record for the current fourth ISI interval at FCS Unit 1 is the ASME Code, Section XI, 1998 Edition, through 2000 Addenda, for nondestructive examinations (NDE) and repair/replacement, and the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code), 1998 Edition, through 2000 Addenda, for pump and valve testing.

3.0 PROPOSED 10 CFR 50.55a RELIEF REQUEST

3.1 <u>Component(s) Affected</u>

The component affected is the ASME Code Class 2 valve LCV-383-2 in the SIRWT outlet header. The outside diameter of the valve is 23 inches. The valve body is made of cast austenitic stainless steel, American Society for Testing and Materials (ASTM) A-351, CF8M.

3.2 Applicable Code Edition and Addenda

The Code of record for the current fourth ISI interval at FCS Unit 1 is the ASME Code, Section XI, 1998 Edition, through 2000 Addenda, for nondestructive examinations (NDE) and repair/replacement, and the OM Code, 1998 Edition, through 2000 Addenda, for pump and valve testing.

3.3 Applicable Code Requirement

The applicable code requirements are Subsections of IWC-3112(b) and IWC-3112(c) of the ASME Code, Section XI.

IWC-3112(b) requires that "...A component whose [preservice] examinations detects flaws that meet the nondestructive examination standards of NC-2500 and NC-5300 and are documented in Quality Assurance Records (NCA-4134.17) shall be acceptable..."

IWC-3112(c) requires that "...A component whose examination detects flaws other than the flaws of IWC-3112(b) that exceed the standards of Table IWC-3410-1 is corrected by a repair/replacement activity to the extent necessary to meet the acceptance standards prior to placement of the component in service..."

The ASME Code, Section III, NC-2500 provides requirements for the examination and repair of pressure retaining material. NC-5300 provides requirements for the acceptance criteria of the examinations. Specifically, NC-5350 provides acceptance standards for liquid penetrant examinations.

The maximum allowable indication sizes of Paragraph D2.1 of American National Standards Institute (ANSI) B16.34, 2004, Appendix III, "Liquid Penetrant Procedure and Acceptance Standards," are applicable to the replacement valve.

The acceptance criteria for liquid penetrant inspection in the Original Contract 762 Acceptance Criteria from Section 136.5.3(d) of USA Standard (USAS) B31.1, 1967 are applicable to the replacement valve. These acceptance criteria apply to the existing valve, which conforms to original plant construction requirements per OPPD Contract 762 Section H-10, "Control Valves."

3.4 Proposed Alternative

The proposed alternative is related to valve LCV-383-2 in the SIRWT outlet header. The valve is a 20-inch, pressure Class 150, butterfly valve with a pneumatic piston operator. It is maintained normally open as a supply isolation for the low-pressure safety injection, high-pressure safety injection, and containment spray pumps. It closes upon a safety injection recirculation actuation signal to assist the downstream check valve in preventing backflow into the SIRWT.

During a recent Technical Specification surveillance test, the licensee found that valves LCV-383-1 and LCV-383-2 in the SIRWT outlet header developed unacceptable seat leakage. The licensee repaired and retested valve LCV-383-1 successfully, but not valve LCV-383-2. Valve LCV-383-2 needed to be either repaired or replaced. The licensee determined that repair of the installed valve LCV-383-2 was not possible because of the long lead time for obtaining replacement parts to refurbish the current installed valve.

To replace valve LCV-383-2, the licensee purchased a commercial, non-nuclear grade replacement valve because the licensee was not able to procure a nuclear grade, ASME Code-qualified valve in order to meet the scheduled date for restarting FCS Unit 1 from its spring 2008 refueling outage. Because the Fisher Control replacement valve was not nuclear grade, the licensee dedicated the replacement valve in accordance with the ASME/American National Standards Institute (ANSI) B16.34, 2004 criteria, and original construction code. The dedication process requires the valve to meet a series of inspections and tests. Radiography was performed on the valve body and disc in accordance with ASME B16.34, 2004, Appendix I, "Radiography Procedure and Acceptance Standards." The body and disc met all radiography testing acceptance criteria in Appendix I. In addition, the replacement valve was hydrostatically tested to 450 psig (pounds per square inch gauge) per the requirements of Section 7 of ASME B16.34, 2004, and met the acceptance criteria of Section 7.

However, during the dedication process, the replacement valve failed to meet the requirements of IWC-3112(b) of ASME Code, Section XI, and ASME B16.34, 2004 due to surface discontinuities discovered by the liquid penetrant examination. The licensee requested relief from the acceptance criteria of the ASME Code, Section XI, so that the degraded replacement valve can be installed in the SIRWT header.

3.5 Basis for Use the Replacement Valve

In the OPPD letter dated May 15, 2008, the licensee stated that the valve is an acceptable replacement because integrity of the valve body has been demonstrated, through radiography and hydrostatic testing, in accordance with the requirements for ASME B16.34 Class 150 valve for operating conditions (350 degrees Fahrenheit (°F),150 psig).

The licensee also stated that the expected operating condition the valve will experience is significantly less than the rated operating conditions for an ASME B16.34 Class 150 valve. The limiting (emergency/faulted) conditions used in the flaw tolerance analysis are 120 °F and 60 psig. The SIRWT is vented to atmosphere. Thus, the only pressure experienced at the valve is the result of water above the valve location and pressure related to the fluid velocity.

The valve centerline is located at the 974-foot/6-inch elevation and the top of the SIRWT is at the 1004-foot/0-inch elevation (a difference of about 30 feet). This elevation difference was converted to psig, 30 feet = 13 psig at 39.2 °F. Therefore, the limiting condition pressure of 60 psig used in the flaw tolerance analysis is conservative when comparing to an operating pressure of 13 psig.

The licensee noted that check valve, SI-139, is installed downstream of valve LCV-383-2. The effect of the check valve is that LCV-383-2 is isolated from directly experiencing the temperatures associated with reactor coolant system. Thus, the only temperature the valve experiences is the 105 °F maximum operating temperature of the SIRWT. Therefore, 120 °F is a conservative normal operating temperature.

Considering the emergency/faulted conditions (e.g., 60 psig), a minimum wall-thickness calculation results in a minimum required wall thickness to handle the pressure load is 0.124 inches. The actual wall thickness measured during the dedication process was 1.18 inches. Therefore, the licensee concluded that the valve exceeds the required wall thickness for the intended application. In addition, based on the flaw tolerance evaluation, the replacement valve can tolerate a flaw of 5 inches long and 75 percent through-wall deep.

3.6 Duration of Proposed Alternative

The licensee requested that the duration of the proposed relief request is for one operating cycle (of approximately 18 months), which started on or about June 16, 2008.

4.0 STAFF EVALUATION

4.1 Background

The subject valve, LCV-383-2, is a Safety Class 2 component as defined in the Updated Final Safety Analysis Report (UFSAR), Appendix N, "Reclassification of Systems." The applicable standard imposed for the valve's design is ANSI B16.34, "Valves - Flanged, Threaded and Welding End," 2004. From that standard, Appendix I, "Radiography Procedure and Acceptance Standards," and Appendix III, "Liquid Penetrant Procedure and Acceptance Standards," were imposed to make the valve equivalent in quality with respect to the design and inspection requirements from original plant construction for a valve in radioactive service. The procured replacement valve is a (new) commercial grade valve. The valve was inspected by a third-party dedication vendor to ensure it meets the necessary quality requirements. The third-party vendor has a quality assurance program which meets the requirements of 10 CFR 50 Appendix B.

As part of the dedication process for the replacement valve, the licensee's vendor performed a dimensional (including wall thickness) verification, chemical (material) analysis on pressure retaining items, NDE on pressure retaining items, and hydrostatic testing of the body and seat. The replacement valve satisfies all the acceptance criteria except the liquid penetrant examination. As a result, the licensee requested relief from the acceptance criteria of the liquid penetrant of the liquid penetrant examination so that the degraded replacement valve can be installed in the SIRWT outlet header.

4.2 <u>Regulatory Issues</u>

In its original submittal dated May 15, 2008, the licensee requested relief from ASME Code, Section III. The NRC staff indicated to the licensee that 10 CFR 50.55a regulations do not provide provisions for licensees to request relief pursuant to ASME Code, Section III. Licensees may submit an alternative to Section III, but not request relief from that ASME Code section. The regulations in 10 CFR 50.55a do allow relief from the requirements of Section XI. In the OPPD letter dated May 17, 2008, the licensee responded that it requests relief from ASME Section XI, Division I, Subsection IWC-3112(b), which requires that a component whose examination detects flaws that meet the NDE standards of NC-2500 and NC-5300 of the ASME Code, Section III, be acceptable. The licensee indicated that the flaws detected by the liquid penetrant examination did not meet the acceptance criteria of ASME Code, Section III, Subsection NC-2546.3 nor Subsection NC-5352.

During the dedication process, the subject replacement valve was rejected due to surface discontinuities discovered during the liquid penetrant examination. As such, the replacement valve could not meet the requirements of the ASME Code, Section XI, Subsection IWC-3112(c). Therefore, the licensee also requested relief from the requirements of the ASME Code, Section XI, Subsection IWC-3112(c) to accept the valve "as-is" without repairing the surface discontinuities. The NRC staff concludes that the licensee's request for relief from the requirements of the ASME Code, Section XI, Subsection IWC-3112(c) is acceptable.

In the OPPD letter dated May 15, 2008, the licensee requested relief from the ASME Code requirements based on the provision of 10 CFR 50.55a(a)(3)(i) which specifies that "...the proposed alternatives provide an acceptable level of quality and safety..." The NRC staff expressed the view that the provisions of 10 CFR 50.55a(a)(3)(i) were not applicable to the subject valve replacement. Rather, the hardship provisions in paragraph 50.55a(a)(3(ii) appeared more suitable for the subject valve replacement. The licensee agreed and in the OPPD supplemental letter dated May 17, 2008, the licensee revised its submittal to propose an alternative pursuant to the provisions of 10 CFR 50.55a(a)(3)(ii). The licensee stated that compliance with the ASME Code, Section XI, to install an acceptable and gualified replacement valve would result in hardship. The licensee was unable to procure an acceptable and gualified replacement valve for LCV-383-2 which was needed for installation prior to startup from the spring 2008 refueling outage. Replacement of the existing valve is necessary because it exhibited excessive leakage during Technical Specification surveillance testing. Repair of the currently installed valve was not considered possible because of the long lead time for obtaining replacement parts to refurbish the current valve. Based on the results of the flaw tolerance analysis, the minimum wall-thickness calculation, and radiography conducted, the licensee stated that the replacement valve provides a level of quality and safety consistent with the ASME Code requirements. Therefore, the licensee concluded that compliance with the relevant ASME Code requirements would result in hardship without a compensating increase in the level of quality and safety.

4.3 Inspection Issues

In the OPPD letter dated May 17, 2008, the licensee reported that it identified one indication each of 1/2 inch, 1/4 inch, and 3/16 inch in length on the replacement valve. There are eight

3/32-inch-long indications. There are numerous indications 1/16 inch and shorter in length. All indications are located on the inner surface of the valve body and are not in any flange seating surfaces, nor in any valve disc seating surfaces.

The NRC staff notes that ASME Code, Section XI, Code Case N-513-2, "Evaluation Criteria for Temporary Acceptance of Flaws in Moderate Energy Class 2 or 3 Piping Section XI, Division 1," paragraph 1.0(e) specifies frequent periodic inspections of no more than 30-day intervals be conducted to determine flaw growth. Alternatively, if a flaw-growth evaluation is performed, the periodic examination of no more than 90-day intervals be conducted to verify the flaw-growth analysis predictions. The staff notes that the flaw evaluation method described in N-513-2 may not be applicable to the subject valve issue because N-513-2 is applicable to inservice degradation whereas the subject replacement valve has not been placed in service and the detected indications are not service-related. However, the staff expressed the view that periodic examinations similar to the examinations specified in N-513-2 would ensure the integrity of the replacement valve. The staff asked the licensee to discuss (a) additional examinations and associated inspection methods (e.g., visual examination or ultrasonic examination) once the degraded valve is installed, and (b) whether insulation will be removed, if it is covered with insulation, during augmented examination.

In the OPPD letter dated May 17, 2008, the licensee responded that Code Case N-513-2 is not applicable to this valve replacement issue because all indications are on the inner surfaces of the valve and, therefore, not accessible once the valve is installed. The licensee stated that no additional NDE will be performed while the valve is in service. To minimize the radiological dose to Auxiliary Building Operators, operators perform tours through the general area where this valve is located twice a week (Sunday and Wednesday nights). As an enhancement during the term of this relief, guidance for conducting these rounds will require that the operators specifically observe valve LCV-383-2 for leakage. This frequency is adequate based on the minimum wall-thickness calculation. The licensee noted that the valve will not be covered with insulation or any obstruction that would prevent detecting any potential leakage through visual observation. The licensee also noted that the original code of construction, USAS B31.1.0-1967 and ANSI B31.7 1968 Draft, does not require ultrasonic examination to be performed on the valve.

The NRC staff finds that that the enhanced visual inspection is acceptable because of the following considerations. The flaws are fabrication discontinuities, not service-induced defects. The probability of fabrication defects growing to unacceptable depth under low-energy operating conditions is small, especially when the effective period of the subject relief request is only one operating cycle. The radiological dose that is associated with more frequent visual inspections would affect the NDE personnel unnecessarily. The valve is not insulated; therefore, visual examinations can readily detect potential leakage.

The NRC staff requested the licensee to discuss the worst-case scenario for failure of the replacement during service and the probability of such failure. In the OPPD letter dated May 17, 2008, the licensee stated that the worst-case scenario is through-wall crack propagation which would result in a leak from the safety injection system and SIRWT. However, the failure would be considered a leak-before-break scenario (due to the low system pressure at about 60 psig) and would not result in a catastrophic failure. The SIRWT is equipped with two pneumatic bubblers which provide tank level indications on panel AI-30A(B) in the control room. In

addition, the signal is sent to the Emergency Response Facilities computer (the FCS plant process computer) and actuates a SIRWT low-level alarm. The described leak detection capabilities would give operators time to respond to the potential leak and take the appropriate actions.

The licensee stated further that the SIRWT level is monitored with the automatic functions and logged every 3 hours by the reactor operators in the control room. Considering the low system pressure, the leak-before-break scenario, the automatic level monitoring, and operator monitoring, the licensee has a high degree of confidence that the operators would be able to take actions long before the through-wall leak would result in a significant loss of SIRWT level during normal and accident conditions.

The NRC staff notes that the leak-before-break application cannot be used in this scenario because the leak-before-break application requires rigorous analysis to demonstrate that the valve satisfies the specific leak-before-break criteria in NRC Standard Review Plan 3.6.3. In addition, the licensee would need to submit its leak-before-break analysis for NRC review and approval prior to taking credit for it. The licensee has not submitted the leak-before-break analysis for this valve. Nevertheless, the staff finds that the licensee has diverse and redundant monitoring systems to notify the operator of any potential failure (i.e., leakage) of the subject valve such that the operator will have sufficient time to take corrective actions prior to catastrophic failure of the subject replacement valve. The staff finds that the monitoring systems and the enhanced visual inspection will provide adequate monitoring of the structural integrity of the replacement valve during the upcoming operating cycle.

4.4 Operability Tests of the Replacement Valve

The NRC staff asked the licensee to discuss the tests that will be performed to demonstrate valve operability, the testing conditions, and acceptance criteria, after the replacement valve is installed at the plant. In the OPPD letter dated May 17, 2008, the licensee stated that the subject replacement valve will be bolted in place with 20 1-1/8-inch studs. Per the guidelines outlined in FCS configuration change procedures, the licensee will specify all applicable code testing requirements and the code references.

The licensee stated that the valve will be installed and leak checked per USAS B31.1.0-1967. The valve connections will be checked during an inservice leak test, in lieu of a hydrostatic test. This is considered to be acceptable due to the inability of the system to be isolated for a hydrostatic test. The SIRWT is vented to atmosphere and no isolation valve exists between LCV-383-2 and the tank. In addition to the inservice leak check, the valve will be tested to verify the following:

- Valve operator functions properly, with no binding or hesitation or unusual noise
- No visible stem damage (i.e., bent or deformed metal filings caused by rubbing)
- Proper operation of solenoid valve
- Remote position indicator functions properly

- Proper valve stroke time and limit switch operation
- Seat leakage requirements are met

The staff concludes that this testing is acceptable because it meets the requirements of the ASME OM Code to demonstrate the operability of the replacement valve after it has been installed in the SIRWT system.

4.5 <u>Structural Integrity of the Replacement Valve</u>

The NRC staff asked the licensee to demonstrate the structural integrity of the degraded replacement valve to perform its intended function for the upcoming operating cycle. In the OPPD letter dated May 17, 2008, the licensee stated that based on the radiography results, the flaw tolerance calculation, and the minimum wall calculation, the valve has sufficient wall thickness to maintain its structural integrity under normal and accident operating conditions. The flaw tolerance calculation demonstrates that a postulated flaw in the valve body with a depth of 75 percent of the wall thickness and 5 inches long could still be tolerated without a leakage or other structural failure. The assumed 5-inch flaw length is the entire valve length between two flanges. The licensee attributed the high flaw tolerance of the replacement valve body to the low mechanical loadings. The replacement valve is not subjected to any pressure and thermal transients. Therefore, the licensee stated that there will not be any fatigue crack growth.

The licensee stated that the minimum wall calculation showed that the required minimum wall thickness was 0.124 inches. The actual minimum wall thickness measured during the dedication process was 1.18 inches. Thus, the valve has 9 times the required wall thickness. Radiography showed no internal discontinuities. Therefore, the licensee concluded that these three factors provide reasonable assurance that the valve will maintain its integrity during both normal and accident conditions.

The NRC staff expressed concern that the depth of the flaws is not known. The flaw depth can be sized by ultrasonic examination which the licensee did not perform because such examination was not required by the original construction code. Although the replacement valve was examined by radiography, radiography cannot size the depth of the flaw adequately. Without knowing the depth of the flaws, the structural integrity of the valve was in question.

The NRC staff also expressed concerned that, although the licensee performed a flaw tolerance calculation and showed that the valve body can tolerate a postulated flaw of 75 percent through-wall depth and 5 inches in length without catastrophic failure, it is not clear how fast the existing flaws could grow and whether the existing flaws would grow to exceed the limiting 75-percent-deep flaw.

Despite the above noted concerns, the NRC staff finds that the likelihood of a catastrophic valve failure in one cycle of operation is extremely small based on flaw tolerance analysis, the margin on valve wall thickness, and low temperature and pressure operating conditions. Should the valve's pressure integrity fail, it would leak first. Should leaking occur, the licensee has diverse and redundant monitoring alarms and controls to alert the operator to take corrective actions. The operating temperature and pressure are not severe. Under the low loading conditions, the

crack-growth rate will likely not result in the detected flaws exceeding the limiting crack size in one operating cycle. Likewise, although the detected flaws are inner surface connected and will be in contact with coolant, the valve body is made of stainless steel and has resistance to stress corrosion cracking in the low temperature and low pressure condition. Therefore, the staff finds that the licensee has provided reasonable assurance that the structural integrity of the replacement valve will be maintained for one operating cycle.

5.0 <u>CONCLUSION</u>

Based on the above evaluation, the NRC staff has reviewed the licensee's submittal and determined that compliance with the specified requirements of the ASME Code, Section XI, would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The NRC staff finds further that this 10 CFR 50.55a Relief Request will provide reasonable assurance of structural integrity of the replacement valve. Therefore, pursuant to 10 CFR 50.55a(a)(3)(ii), the staff authorizes the use of 10 CFR 50.55a Relief Request for the replacement of level control valve LCV-383-2 in the SIRWT outlet header at FCS Unit 1. The 10 CFR 50.55a Relief Request is authorized for the current operating cycle (one cycle only, of about 18 months), which started on or about June 16, 2008.

All other ASME Code, Section XI requirements for which relief has not been specifically requested and approved in this relief request remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: J. Tsao

Date: August 15, 2008