UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 17, 2016

Mr. Oscar A. Limpias
Vice President-Nuclear and CNO
Nebraska Public Power District
72676 648A Avenue
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - REQUEST FOR RELIEF RI5-02, ALTERNATIVE TO USE BOILING WATER REACTOR VESSEL AND INTERNALS PROJECT GUIDELINES IN LIEU OF SPECIFIC ASME CODE REQUIREMENTS (CAC NO. MF6336)

Dear Mr. Limpias:

By letter dated June 9, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15167A066), as supplemented by letters dated October 21, 2015 (ADAMS Accession No. ML15301A249), and December 21, 2015 (ADAMS Accession No. ML15364A013), Nebraska Public Power District (NPPD, the licensee) submitted Relief Request RI5-02, to the U.S. Nuclear Regulatory Commission (NRC), for the use of alternatives to certain inservice examination requirements in Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), for the fifth 10-year inservice inspection (ISI) program interval at Cooper Nuclear Station (CNS).

Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee requested to use the proposed alternative in RI5-02 on the basis that the alternative provides an acceptable level of quality and safety.

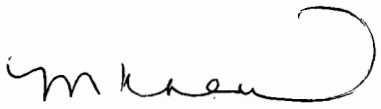
The NRC staff has reviewed the subject relief request and concludes, as set forth in the enclosed safety evaluation (SE), that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the use of Relief Request RI5-02 for the duration of the fifth 10-year ISI interval at CNS, which commences on March 1, 2016.

All other requirements of the ASME Code, Section XI for which an alternative has not been specifically requested remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector. Any ASME Code, Section XI, reactor vessel internals components that are not included in this request for alternative are to continue to be inspected in accordance with the ASME Code, Section XI requirements.

The NRC staff notes that if the licensee intends to take exceptions to, or deviations from, the NRC staff-approved Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection guidelines, the licensee will be required to revise and resubmit this request for alternative. The licensee shall obtain staff approval for such exceptions prior to implementing the revised inspection guidelines for the CNS unit's reactor pressure vessel interior surfaces, attachments, and core support structures.

If you have any questions, please contact Thomas Wengert at 301-415-4037 or via e-mail at Thomas.Wengert@nrc.gov.

Sincerely,



Meena K. Khanna, Chief
Plant Licensing IV-2 and Decommissioning
Transition Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosure:
Safety Evaluation

cc w/encl: Distribution via Listserv

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR RELIEF RI5-02

RELATED TO THE INSERVICE INSPECTION PROGRAM

FOR THE FIFTH 10-YEAR INTERVAL

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated June 9, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15167A066), as supplemented by letters dated October 21, 2015 (ADAMS Accession No. ML15301A249), and December 21, 2015 (ADAMS Accession No. ML15364A013), Nebraska Public Power District (NPPD, the licensee) submitted Relief Request RI5-02 for its fifth 10-year interval inservice inspection (ISI) program plan for the reactor vessel internals (RVI) components* at Cooper Nuclear Station (CNS).

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(1), the licensee proposed to use an alternative to codes and standards requirements on the basis that the alternative would provide an acceptable level of quality and safety. Specifically, the licensee proposed to use the Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidelines as an alternative to certain requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for ISI of reactor pressure vessel interior surfaces, attachments, and core support structures.

2.0 REGULATORY EVALUATION

The ISI of ASME Code Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME Code and applicable edition and addenda as required by 10 CFR 50.55a(g), except where specific relief has been granted by the U.S. Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.55a(g)(6)(i). Pursuant to 10 CFR 50.55a(z), alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC if: (1) the proposed alternatives would provide an acceptable level of quality and safety, or

* In this safety evaluation (SE), the term "RVI components" includes reactor pressure vessel interior surfaces, attachments, and core support structures.

Enclosure

(2) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

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 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 and addenda incorporated by reference in 10 CFR 50.55a(a)(1)(ii), 12 months prior to the start of the 120-month interval, subject to the conditions listed in 10 CFR 50.55a(b)(2).

The regulations in 10 CFR 50.55a(g)(4)(iv) state that inservice examination of components and system pressure tests may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in paragraph 10 CFR 50.55a(a), subject to the limitations and modifications listed in 10 CFR 50.55a(b) and subject to Commission approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions or addenda are met.

Based on the above, and subject to the following evaluation, the NRC staff finds that regulatory authority exists for the licensee to request the use of an alternative and the NRC to authorize the proposed alternative.

3.0 TECHNICAL EVALUATION

3.1 ASME Code Components Affected

ASME Code, Section XI, Class 1, Examination Categories B-N-1 and B-N-2, Code Item Numbers B13.10 (Vessel Interior), B13.20 (Interior Attachments within Beltline Region), B13.30 (Interior Attachments Beyond Beltline Region), and B13.40 (Core Support Structure).

3.2 Applicable Code Edition and Addenda

The applicable ASME Code of record for the fifth 10-year ISI interval for CNS is ASME Code, Section XI, 2007 Edition through the 2008 Addenda.

3.3 Examination Requirements for Which an Alternative is Requested

ASME Code, Section XI requires the visual examination (VT) of certain RVI components. These examinations are included in Table IWB-2500-1, Categories B-N-1 and B-N-2, and identified with the following item numbers:

- B13.10 - Examine accessible areas of the RV interior each period using a technique that meets the requirements for a VT-3 examination, as defined in paragraph IWA-2213 of the ASME Code, Section XI.

- B13.20 - Examine interior attachment welds within the beltline region each interval using a technique that meets the requirements for a VT-1 examination, as defined in paragraph IWA-2211 of the ASME Code, Section XI.

- B13.30 - Examine interior attachment welds beyond the beltline region each interval using a technique that meets the requirements for a VT-3 examination, as defined in paragraph IWA-2213 of the ASME Code, Section XI.

- B13.40 - Examine surfaces of the core support structure each interval using a technique that meets the requirements for a VT-3 examination, as defined in paragraph IWA-2213 of the ASME Code, Section XI.

These examinations are performed to assess the structural integrity of the reactor pressure vessel interior surfaces, attachments, and core support structures.

3.4 Licensee's Basis for Requesting an Alternative and Justification for Granting Relief

In its letter dated June 9, 2015, the licensee, in lieu of ASME Section XI, Code requirements, submitted an alternative inspection program per the BWRVIP guidelines for B-N-1 and B-N-2 reactor pressure vessel interior surfaces, attachments, and core support structures at CNS. The licensee stated that implementation of the alternative inspection program will maintain an adequate level of quality and safety of the affected welds and components and avoid duplication of unnecessary inspections, while conserving radiological dose.

In its application dated June 9, 2015, the licensee stated, in part:

> As part of the BWRVIP initiative, the BWR [boiling-water reactor] reactor internals and attachments were subjected to a safety assessment to identify those components that provide a safety function and to determine if long-term actions were necessary to ensure continued safe operation. The safety functions considered are those associated with (1) maintaining a coolable geometry, (2) maintaining control rod insertion times, (3) maintaining reactivity control, (4) assuring core cooling and (5) assuring instrumentation availability. The results of the safety assessment are documented in BWRVIP-06, Revision 1-A, "BWR Vessel and Internals Project Safety Assessment of BWR Reactor Internals" which has been approved by the NRC. As a result of BWRVIP-06, Revision 1-A, component specific BWRVIP guidelines were developed providing appropriate examination and evaluation requirements to address the specific component safety function and potential degradation mechanism.
>
> Along with the component specific guidelines, the BWRVIP has established a reporting protocol for examination results and deviations. The NRC has agreed with the BWRVIP approach in principal and has issued Safety Evaluations for many of these guidelines....

As additional justification, the licensee included in its application a comparison of ASME Code Section XI examination requirements to "BWRVIP examination requirements," which provides specific examples that compare the inspection requirements of ASME Code Section XI Table IWB-2500-1, Item Numbers B13.10, B13.20, B13.30 and B13.40 to the inspection

requirements in the BWRVIP documents. Specific BWRVIP documents are provided as examples. This comparison also includes a discussion of the inspection methods.

The proposed alternative includes examination methods, examination volume, frequency, training, successive and additional examinations, flaw evaluations, and reporting.

3.5 Licensee's Proposed Alternative Examination

In lieu of the requirements specified in Section XI of the ASME Code, the licensee proposed to examine the CNS RVI components in accordance with BWRVIP guideline requirements. The licensee included only the RVI components that are categorized under the jurisdiction of the ASME Code, Section XI (Code components). The following BWRVIP reports contain the relevant inspection and evaluation (I&E) guidelines for the RVI interior surfaces, attachments, and core support structures. Furthermore, the licensee clarified that not all RVI components listed in the following BWRVIP reports are ASME Code, Section XI components.

- BWRVIP-03, Revision 17, "BWR Reactor Pressure Vessel and Internals Examination Guidelines"
- BWRVIP-18, Revision 1-A, "BWR Core Spray Internals Inspection and Flaw Evaluation Guidelines"
- BWRVIP-25, "BWR Core Plate Inspection and Flaw Evaluation Guidelines"
- BWRVIP-26-A, "BWR Top Guide Inspection and Flaw Evaluation Guidelines"
- BWRVIP-27-A, "BWR Standby Liquid Control System/Core Plate Delta P Inspection and Flaw Evaluation Guidelines"
- BWRVIP-38, "BWR Shroud Support Inspection and Flaw Evaluation Guidelines"
- BWRVIP-41, Revision 3, "BWR Jet Pump Assembly Inspection and Flaw Evaluation Guidelines"
- BWRVIP-47-A, "BWR Lower Plenum Inspection and Flaw Evaluation Guidelines"
- BWRVIP-48-A, "Vessel ID Attachment Weld Inspection and Flaw Evaluation Guidelines"
- BWRVIP-76, Revision 1-A, "BWR Core Shroud Inspection and Flaw Evaluation Guidelines"
- BWRVIP-94NP, Revision 2, "BWR Program Implementation Guide"
- BWRVIP-138, Revision 1-A, "BWR Updated Jet Pump Beam Inspection and Flaw Evaluation Guidelines"

- BWRVIP-100-A, "Updated Assessment of the Fracture Toughness of Irradiated Stainless Steel for BWR Core Shroud"

The licensee further indicated that the BWRVIP has an established reporting protocol for examination results and deviations that are consistent with the requirements of BWRVIP-94NP.

In Table 1 of the Attachment to the submittal dated June 9, 2015, the licensee provided a comparison of the ASME Code, Section XI, examination requirements for B-N-1 and B-N-2 categories of the RVI interior surfaces, attachments, and core support structures with the previously identified BWRVIP I&E guidelines. In the Attachment, the licensee also provided additional information regarding the BWRVIP inspection requirements for welds of the RVI surfaces, attachments, and core support structures and their subcomponents. As an example, in the Attachment to the submittal, the licensee provided additional information regarding the BWRVIP inspection requirements for the following welds (shown as examples) of the reactor pressure vessel interior surfaces, attachments, and core support structures and their subcomponents representing each of the ASME Code, Section XI Item Numbers:

- Core Spray Piping (B13.10)
- Jet Pump (B13.20)
- Core Spray Piping Braces (B13.30)
- Core Shroud Support and Core Support Structure (B13.40)

The licensee stated that these examples demonstrate that the inspection techniques that are recommended by the BWRVIP inspection guidelines are the same as or superior to the inspection techniques mandated by the ASME Code, Section XI ISI program. Additionally, these examples supported the licensee's assertions that the BWRVIP inspection guidelines require more frequent inspections of some RVI components than the corresponding ASME Code, Section XI requirements. Therefore, the licensee concluded that implementation of the BWRVIP I&E guidelines for the CNS RVI surfaces, attachments, and core support structures would provide an acceptable level of quality and safety. Furthermore, in its June 9, 2015, submittal the licensee provided an inspection summary that included inspection methods used on the RVI components, inspection dates, the results of the inspection and corrective actions related to the findings of the inspections of the RVI components at CNS.

4.0 NRC STAFF EVALUATION

The NRC staff reviewed the information provided by the licensee in its submittal dated June 9, 2015, as supplemented by letters dated October 21, 2015, and December 21, 2015, regarding its proposed alternatives to the ASME Code, Section XI ISI requirements and the technical bases for the licensee's proposed alternatives. The staff reviewed the status of each of the referenced BWRVIP guidance documents to provide effective aging management and found the application of all of the referenced BWRVIP reports to be acceptable, provided that the conditions associated with each BWRVIP report are implemented. The following paragraphs address the NRC staff's requests for additional information (RAIs), the licensee's responses, and the staff's evaluation of the licensee's responses to the RAIs.

In the June 9, 2015, submittal, the licensee included a report of the previous inspections of the RVI components at CNS. The NRC staff reviewed the inspection report and, by an e-mail dated September 16, 2015 (ADAMS Accession No. ML15259A579), issued RAI-1 (a), (b), and (c).

In RAI-1 (a) and (b), the licensee was requested to identify whether the following type of welds were inspected thus far, at CNS: (a) furnace sensitized stainless steel vessel attachment welds and, (b) vessel attachment welds made with nickel base alloy 182 welding electrodes, and if these welds were inspected in the past, to provide a number of welds that were identified with cracks and the corrective actions taken.

Because welds made with nickel base alloy 182 welding electrodes are more susceptible to intergranular stress corrosion cracking (IGSCC) than stainless steel welds, the licensee was requested to confirm whether any of the alloy 182 welds of the RVI components (both ASME Section XI welds and/or non-ASME Section XI welds) were inspected at CNS, and if they were inspected, to provide a brief summary of the inspection results.

In RAI-1 (c), the licensee was requested to confirm whether core shroud welds were ever repaired.

In its response by letter dated October 21, 2015, the licensee stated that for RAI-1 (a) previous inspections performed on the furnace sensitized stainless steel vessel attachment welds revealed no indications. For RAI-1 (b), the licensee stated that previous inspections performed on the attachment welds made with nickel base alloy 182 welding electrodes revealed no indications. The licensee included the following welds in this category: (1) core spray brackets; (2) surveillance capsule brackets; (3) steam dryer support lugs; and, (4) guide rod brackets.

Since no cracks were identified, the NRC staff concluded that reasonable assurance is provided regarding the effectiveness of the current aging management program for these welds. In addition, routine inspections of these welds in the future would identify any active aging degradation in a timely manner, to ensure that proper corrective actions are taken by the licensee. The staff considers that the RAI-1 (a) and (b) were adequately addressed and therefore, finds the licensee's responses to be acceptable and this issue is closed.

In addressing RAI-1 (c), the licensee stated that no repair was performed on the core shroud component at CNS. However, a review of the results of the previous inspections that were included in the June 9, 2015, submittal, indicated that cracking was observed in core shroud welds H1 through H7. Subsequent inspections of these welds revealed that the existing cracks did not grow. The licensee has implemented the relevant I&E guidelines for the core shroud components, which are addressed in the NRC staff-approved BWRVIP-76 report. The staff reviewed the information provided by the licensee, and the subsequent inspection criteria addressed in BWRVIP-76. Based on its review, the staff concludes that aging degradation in the core shroud is effectively monitored by the licensee because: (1) the inspection frequency addressed in BWRVIP-76 is more conservative than the ASME Code, Section XI; (2) frequent subsequent inspections as recommended by BWRVIP-76 guidelines will identify any aging effects in a timely manner; and, (3) the licensee, as part of its license renewal commitment, will continue to inspect the core shroud component during the period of extended operation. Therefore, the staff concludes that if any new crack were to occur, proper corrective action can be implemented by the licensee in a timely manner. The staff finds this response to be acceptable and this issue is closed.

The NRC staff noted that, as part of its strategy to mitigate IGSCC in the RVI components, the licensee has implemented on-line noble metal chemical addition (OLNC) at CNS. If OLNC is not effective, existing cracks due to IGSCC would grow and this aging effect would be identified during subsequent inspections. To assess the effectiveness of the OLNC at the CNS, the staff issued RAI-2.

In RAI-2, the licensee was requested to provide information regarding whether it continues to implement the addition of the hydrogen water chemistry (HWC) and/or HWC+ noble metal chemical addition (NMCA) in the reactor vessel at CNS. In addition, the licensee was requested to provide details on the methods for determining the effectiveness of HWC/NMCA by using the latest measured values of the following parameters:

(a) Electro Chemical Potential - applicable to HWC or HWC+NMCA,
(b) Hydrogen/oxygen molar ratio - applicable if HWC+NMCA method is implemented, and
(c) Catalyst loading (platinum) - applicable to HWC+ NMCA

In its response dated October 21, 2015, the licensee provided the plant-specific values for parameters (a) and (b), and the NRC staff subsequently verified that these values are in compliance with the NRC staff-approved report, "BWRVIP-62NP-A: BWR Vessel Internals Project, Technical Basis for Inspection Relief for BWR Internal Components with Hydrogen Injection" (ADAMS Accession No. ML11137A193).

The NRC staff's position is that a review of the previous inspection results would provide the necessary information related to the effectiveness of the OLNC. If OLNC is not effective, existing cracks due to IGSCC would grow and this aging effect would be identified during subsequent inspections. The staff expects the licensee to continue to comply with subsequent inspections of the ASME Code, Section XI RVI components per the applicable BWRVIP I&E guidelines. Routine inspections that are recommended by the BWRVIP reports will enable the licensee to monitor the effectiveness of the OLNC implementation. The staff will be reviewing the efficacy of the platinum role in combating IGSCC in BWR units that implement the OLNC application. The ASME Code, Section XI re-inspection intervals are less conservative than the intervals stipulated in the BWRVIP I&E guidelines. Therefore, the staff concludes that if the cracks were to occur due to a reduction in platinum coverage under the OLNC, they will be identified during the subsequent inspections. Frequent re-inspections that will be performed using the BWRVIP guidelines will be more effective in identifying the cracks than the ASME Code, Section XI inspection requirements. Based on its review, the staff finds the licensee's response to be acceptable and this issue is closed.

BWR licensees are expected to perform plant-specific leakage assessments in the core spray, jet pump and core shroud systems in accordance with BWRVIP reports related to jet pump, core spray, and core shroud. The ability to cool the core during postulated loss-of-coolant accidents depends upon the leakage assessment of the aforementioned RVI components. Accordingly, the NRC staff issued the following RAI-3:

> Confirm whether a plant-specific leakage assessment was performed, as required by BWRVIP-18, BWRVIP-41, and BWRVIP-76 for the internals at CNS that accounts for the leakage from all internals that impact the ability to cool the

core and maintain peak clad temperature (PCT) within allowed limits during postulated loss of coolant accidents. Provide a summary of all internal components included in the leakage assessment along with a summary of the following for each component:

(a) the number and length of all cracks detected in past examinations for the component
(b) the number and length of all cracks evaluated in the leakage assessment
(c) the calculated leak rate from each crack evaluated in the leakage assessment.

The NRC staff also requested the licensee to "confirm whether a plant-specific integrated leakage assessment (if any) associated with the aforementioned RVI components was performed at CNS."

In its response dated October 21, 2015, the licensee stated that a plant-specific leakage assessment was performed for the core spray piping because cracks were identified in this piping at CNS. The current core spray leakage is below the acceptance criteria for the allowed leakage assessment until the next re-inspection (i.e., 24 month cycle). The licensee stated that, for the projected leakage in the jet pump assembly, the leakage is bounded by the allowed leakage assessment until the next re-inspection (i.e., 24 month cycle). The licensee further stated that no through wall cracks were identified in the core shroud welds, and, therefore, consistent with Section 2.2.1 in BWRVIP-76, Revision 1, a leakage assessment in the core shroud component is not required.

In its letter dated December 21, 2015, the licensee provided an integrated leakage assessment over the 24-month cycle, taking into account postulated leakage through cracking in core spray and the jet pump assemblies.

A plant-specific integrated leakage assessment over one 24-month cycle at CNS indicated the following: (1) leakage through core spray is conservatively calculated to be bounded by the allowable limit, (2) leakage through jet pump is bounded by the allowable limit, and (3) integrated leakage that takes into account postulated combined leakage in core spray, jet pump and core shroud is bounded by the allowable limit established in the loss-of-coolant accident analysis. In addition, the projected increase in PCT is below the 10 CFR 50.46(b) regulatory limit.

The NRC staff accepts this response because the licensee's postulated leakage assessment of the core spray, jet pump and shroud systems is consistent with that of the criteria addressed in the BWRVIP-18, BWRVIP-41, and, BWRVIP-76, respectively. In addition, the licensee has complied with the PCT criteria addressed in 10 CFR 50.46(b). Based on its review, the staff finds that the licensee has adequately addressed the issue related to the plant-specific leakage assessment for CNS. Therefore, the staff considers this issue to be closed.

The BWRVIP I&E guidelines require more frequent inspections than the ASME Code, Section XI criteria for RVI components that are susceptible to aging degradation mechanisms. Therefore, subsequent inspections of the RVI components per the relevant BWRVIP I&E guidelines will provide adequate assurance that any emerging aging effects will be identified in a timely manner. In addition, frequent inspections in accordance with these guidelines will enable

the licensee to effectively monitor existing aging degradation in reactor pressure vessel interior surfaces, attachments, and core support structures.

Consistent with the determination that was made in the NRC staff's SEs that approved each of the cited BWRVIP I&E requirements, the licensee's proposed alternative will identify aging degradation of the RVI components in a timely manner. Therefore, the staff concludes that the implementation of the I&E requirements specified in the licensee's proposed alternative will ensure that the integrity of the RVI components will be maintained with an acceptable level of quality and safety.

In the event the licensee wishes to take exceptions to, or deviations from, the NRC staff-approved BWRVIP inspection guidelines authorized as a proposed alternative, the licensee must revise and resubmit its request for authorization to use the proposed alternative under 10 CFR 50.55a.

The NRC staff acknowledges that the BWRVIP Executive Committee periodically revises the BWRVIP guidelines to include enhancements in inspection techniques and flaw evaluation methodologies. While the licensee may choose to implement enhancements described in a revised version of a BWRVIP inspection guideline, the licensee must continue to also meet the requirements of the version of the BWRVIP inspection guideline that forms the safety basis for the staff-authorized proposed alternative to the requirements of 10 CFR 50.55a. The licensee may, of course, also choose to return to complying with the inspection requirements of the ASME Code of Record for CNS.

5.0 CONCLUSION

The NRC staff has reviewed the subject relief request and concludes, as set forth above, that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(z)(1). Therefore, the NRC staff authorizes the use of Relief Request RI5-02 for the duration of the fifth 10-year ISI interval at CNS, which commences on March 1, 2016.

All other requirements of ASME Code, Section XI for which an alternative has not been specifically requested and approved remain applicable, including third party review by the Authorized Nuclear Inservice Inspector. Any ASME Code, Section XI, RVI components that are not included in this request for alternative will continue to be inspected in accordance with the ASME Code, Section XI requirements. The I&E guidelines addressed in the relevant BWRVIP reports should be implemented for the non-ASME Code, Section XI, RVI components at CNS.

The NRC staff notes that if the licensee intends to take exceptions to, or deviations from, the NRC staff-approved BWRVIP inspection guidelines, the licensee is required to revise and resubmit this request for alternative. The licensee shall obtain staff approval for such exceptions prior to implementing the revised inspection guidelines for the CNS unit's reactor pressure vessel interior surfaces, attachments, and core support structures.

Principal Contributor: G. Cheruvenki

Date: February 17, 2016

The NRC staff notes that if the licensee intends to take exceptions to, or deviations from, the NRC staff-approved Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection guidelines, the licensee will be required to revise and resubmit this request for alternative. The licensee shall obtain staff approval for such exceptions prior to implementing the revised inspection guidelines for the CNS unit's reactor pressure vessel interior surfaces, attachments, and core support structures.

If you have any questions, please contact Thomas Wengert at 301-415-4037 or via e-mail at Thomas.Wengert@nrc.gov.

Sincerely,

/RA/

Meena K. Khanna, Chief
Plant Licensing IV-2 and Decommissioning
Transition Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosure:
Safety Evaluation

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