



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

January 17, 2014

Mr. Steven D. Capps
Vice President
McGuire Nuclear Station
Duke Energy Carolinas, LLC
12700 Hagers Ferry Road
Huntersville, NC 28078

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2: PROPOSED RELIEF
REQUEST NOS. MC-SRP-KC-01 AND MC-SRP-ND-01 (TAC NOS. MF1164,
MF1165, MF1166, AND MF1167)

Dear Mr. Capps:

By letter dated February 27, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13078A009), as supplemented by letter dated October 1, 2013 (ADAMS Accession No. ML13283A014), Duke Energy Carolinas, LLC, the licensee, submitted alternative requests MC-SRP-KC-01 and MC-SRP-ND-01 to the U.S. Nuclear Regulatory Commission (NRC). The licensee's proposed alternatives were to the requirements of the American Society of Mechanical Engineers (ASME) *Code for Operation and Maintenance of Nuclear Power Plants* (ASME OM Code) for the inservice testing (IST) program at McGuire Nuclear Station, Units 1 and 2, for the fourth 10-year interval IST program. Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(a)(3)(i), the licensee requested to use the proposed alternatives in MC-SRP-KC-01 and MC-SRP-ND-01 on the basis that the proposed alternatives provide an acceptable level of quality and safety.

The NRC staff has reviewed the subject request and concludes, as set forth in the enclosed safety evaluation, that alternative requests MC-SRP-KC-01, as submitted in Revision 28 of the licensee's IST Program, and MC-SRP-ND-01, as submitted in Revision 28a of the licensee's IST Program, provide an acceptable level of quality and safety when compared to instrumentation that meets ASME OM Code requirements. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(a)(3)(i) for requests MC-SRP-KC-01 and MC-SRP-ND-01, and the alternatives provide an acceptable level of quality and safety in comparison to the ASME OM Code requirements. Therefore, the NRC staff authorizes alternative requests MC-SRP-KC-01, as submitted in Revision 28 of the licensee's IST Program, and MC-SRP-ND-01, as submitted in Revision 28a of the licensee's IST Program, for the fourth 10-year interval at McGuire Nuclear Station, Units 1 and 2, which begins on March 1, 2014 and is scheduled to end on February 29, 2024.

All other ASME Code, Section XI, requirements, for which relief was not specifically requested and authorized herein by the NRC staff, remain applicable, including the third party review by the Authorized Nuclear In-service Inspector.

S. Capps

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If you have any questions, please contact the Project Manager, Jason Paige at 301-415-5888 or via e-mail at jason.paige@nrc.gov.

Sincerely,



Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-369 and 50-370

Enclosure:
Safety Evaluation

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UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUEST NOS. MC-SRP-KC-01 AND MC-SRP-ND-01

DUKE ENERGY CAROLINAS, LLC

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

1.0 INTRODUCTION

By letter dated February 27, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13078A009), as supplemented by letter dated October 1, 2013 (ADAMS Accession No. ML13283A014), Duke Energy Carolinas, LLC, the licensee, submitted alternative requests MC-SRP-KC-01 and MC-SRP-ND-01 to the U.S. Nuclear Regulatory Commission (NRC). The licensee's proposed alternatives were to the requirements of the American Society of Mechanical Engineers (ASME) *Code for Operation and Maintenance of Nuclear Power Plants* (ASME OM Code) for the inservice testing (IST) program at McGuire Nuclear Station, Units 1 and 2, for the fourth 10-year interval IST program. Specifically, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(a)(3)(i), the licensee requested to use the proposed alternatives in MC-SRP-KC-01 and MC-SRP-ND-01 on the basis that the proposed alternatives provide an acceptable level of quality and safety.

2.0 REGULATORY EVALUATION

10 CFR 50.55a(f), "Inservice Testing Requirements," states, in part, that IST of certain ASME Code Class 1, 2, and 3 components must meet the requirements of the ASME OM Code and applicable addenda.

10 CFR 50.55a(a)(3), states, in part, that alternatives to the requirements in paragraph (f) of 10 CFR 50.55a may be authorized by the NRC if the licensee demonstrates that: (i) the proposed alternative provides 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.

The fourth 10-year IST interval for McGuire Nuclear Station, Units 1 and 2, begins on March 1, 2014 and is scheduled to end on February 29, 2024. The fourth 10-year IST program for McGuire Nuclear Station, Units 1 and 2, was developed to meet the requirements of the 2004 Edition through 2006 Addenda of the ASME OM Code pursuant to 10 CFR 50.55a(f)(4)(ii).

Enclosure

Based on the above, and subject to the NRC's findings with respect to authorizing the proposed alternatives to the ASME OM Code given below, the NRC staff finds that regulatory authority exists for the licensee to request and the NRC staff to authorize the alternatives requested by the licensee.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Alternative Request MC-SRP-KC-01

ISTB-3510(b), "Range," (1) states that "The full-scale range of each analog instrument shall not be greater than three times the reference value."

The applicable ASME OM Code edition and addenda for the fourth 10-year IST interval at McGuire Nuclear Station, Units 1 and 2, is the 2004 Edition through the 2006 Addenda.

The licensee requested to use alternative instrument range requirements for the component cooling water pumps identified in Table 1.

Table 1: Pumps Affected by Alternative Request MC-SRP-KC-01

McGuire Nuclear Station	Pump Number	Description	Code Class	ASME OM Code Category
Unit 1	1KCPU0001	1A1 Component Cooling Water Pump	3	Group A
	1KCPU0002	1A2 Component Cooling Water Pump	3	Group A
	1KCPU0003	1A3 Component Cooling Water Pump	3	Group A
	1KCPU0004	1A4 Component Cooling Water Pump	3	Group A
Unit 2	2KCPU0001	2A1 Component Cooling Water Pump	3	Group A
	2KCPU0002	2A2 Component Cooling Water Pump	3	Group A
	2KCPU0003	2A3 Component Cooling Water Pump	3	Group A
	2KCPU0004	2A4 Component Cooling Water Pump	3	Group A

3.1.1 Reason for Request

The licensee requests an alternative to the ASME OM Code requirements of ISTB-3510(b)(1) for Group A testing of the component cooling water (KC) pumps listed in Table 1.

The licensee states:

The installed process instrumentation for the KC pump suction gauge is a 0-60 pounds per square inch gauge (psig), 0.5 % accuracy. Typical values for the KC suction pressure

during the KC pump testing is 15-20 psig; therefore, the process gauge does not meet the three times criteria. The accuracy of the process gauge (0.5 %) is well below the requirements specified in Table ISTB-3510-1 for pressure instrument accuracy (2 %). The actual reading error at test pressure due to the process instrument accuracy is 2 % ($0.5 * 60/15$). If a 0-45 psig test instrument is used (which meets the three times criteria) and it has an accuracy of 2 %, then the reading error would be 6 % ($2 * 45/15$). When the requirements of OMB-2006, ISTB-3500 and Table ISTB-3510-1 are combined, the actual instrument error introduced into the test is less than the ASME OM Code allowable (2 % vs. 6 %). Using the process instrument for suction pressure data does not degrade the quality of the test and meets the intent of the instrumentation requirements of the ASME OM Code.

3.1.2 Proposed Alternative

The licensee states that as an alternative to the instrument range requirements of the paragraph ISTB-3510(b)(1), the installed process instrumentation will be used to measure component cooling pump suction pressure for the 1A1, 1A2, 1B1, and 1B2 KC (2A1, 2A2, 2B1, and 2B2 KC) pump tests. This alternative is requested only for Group A differential pressure testing of the component cooling water pumps listed in Table 1.

3.1.3 NRC Staff Evaluation

The licensee requests an alternative to the ASME OM Code instrumentation requirements of paragraph ISTB-3510(b)(1) for pressure gauges, which are used to measure suction pressure of the component cooling water pumps. ASME OM Code paragraph ISTB-3510(b)(1) requires that the full-scale range of each instrument be no greater than three times the reference value. The licensee proposes to use the installed process instrumentation which does not meet this requirement.

The installed suction pressure gauges for the component cooling water pumps have a range of 0-60 psig and an accuracy of ± 0.5 %. The typical value for the suction pressure of the component cooling water pumps during testing is 15-20 psig. The NRC staff agrees that the use of 15 psig to calculate a conservative reading error is appropriate for these pumps. Therefore, the effective gauge accuracy of the installed instruments is ± 2 %, which is less than the resulting measurement accuracy of ± 6 % for Group A tests if ASME OM Code requirements were met. This request for alternative applies only to Group A testing of the component cooling water pumps listed in Table 1.

Table 2 contains details related to the component cooling water pump instrumentation as provided by the licensee, the ASME OM Code requirements, and notes pertaining to the NRC staff's evaluation. The use of the existing gauges is supported by NUREG-1482, Revision 2, Paragraph 5.5.1, when the combination of range and accuracy yields a reading at least equivalent to the reading achieved from instruments that meet the ASME OM Code requirements. The component cooling water pumps' suction pressure gauges yield readings at least equivalent to the readings achieved from instruments that meet ASME OM Code requirements for Group A tests as required in ISTB-3510(b)(1). Therefore, the NRC staff finds that the licensee's proposed alternative provides an acceptable level of quality and safety because the installed instrumentation provides a measurement accuracy that exceeds the

resulting measurement accuracy of $\pm 6\%$ for Group A tests if ASME OM Code requirements were met.

Table 2: Pump and Gauge Information for Alternative Request MC-SRP-KC-01

Items	Component Cooling Water Pumps: Suction	Remark
Pump No.	1A1, 1A2, 1B1, 1B2, 2A1, 2A2, 2B1, 2B2	
Type of Inservice Test	Group A Test	
Suction Pressure Gauge(s) Range (psig)	0-60	
Suction Reference Value Range (psig)	15-20	
Three times the Reference Value	$(3 \times 15) = 45$ psig	Note 1
Effective Gauge Accuracy of Installed Instrument	$(\pm 0.5\%)$ of $(60/15)$ $= \pm 2\%$	
Actual Accuracy of Instruments that Meet ASME OM Code Requirements for Group A Testing	$(\pm 2\%) \times (45/15)$ $= \pm 6\%$	
Acceptable Alternative to the ASME OM Code Requirement for Group A Testing	Yes	
Note 1: Actual reference value range is between 15 and 20 psig; 15 psig is used for conservative results.		

Based on the information provided by the licensee, the calculations contained in Table 2, and the capability of the licensee's installed instrumentation to provide accuracy levels that exceed the resulting measurement accuracy of $\pm 6\%$ for Group A tests if ASME OM Code requirements were met, the NRC staff finds that the licensee's proposed alternative provides an acceptable level of quality and safety for Group A testing of the component cooling water pumps specified in Table 1.

3.2 Licensee's Alternative Request MC-SRP-ND-01

ISTB-3510(b), "Range," (1) states that "The full-scale range of each analog instrument shall not be greater than three times the reference value."

The applicable ASME OM Code edition and addenda for the fourth 10-year IST interval at McGuire Nuclear Station, Units 1 and 2, is the 2004 Edition through the 2006 Addenda.

The licensee requested to use alternative instrument range requirements for the residual heat removal (RHR) pumps identified in Table 3. The licensee's designation code for RHR pumps is ND.

Table 3: Pumps Affected by Alternative Request MC-SRP-ND-01

McGuire Nuclear Station	Pump Number	Description	Code Class	ASME OM Code Category
Unit 1	1NDPU0001	1A RHR Pump	3	Group A
	1NDPU0002	1B RHR Pump	3	Group A
Unit 2	2NDPU0001	2A RHR Pump	3	Group A
	2NDPU0002	2B RHR Pump	3	Group A

3.2.1 Reason for Request

The licensee requests an alternative to the ASME OM Code requirements of ISTB-3510(b)(1) for the RHR pumps listed in Table 3. The original submission was unclear on whether the licensee was requesting alternative from the ASME OM Code requirements of paragraph ISTB-3510(b)(1) for both Group A and comprehensive testing or Group A testing only. The licensee's IST Program, Revision 28, Section 3.0, "Pump Inservice Testing Program," Table ND, "Residual Heat Removal," includes alternative request MC-SRP-ND-01 for Group A testing only. The licensee's IST Program, Revision 28, alternative request MC-SRP-ND-01 contained a title for "Group A / Comprehensive Tests," which conflicted with the alternative requests listed in Section 3.0 of the licensee's submittal. By letter dated August 19, 2013 (ADAMS Accession No. ML13225A296), the NRC staff issued request for additional information (RAI) MC-SRP-ND-01-1 to clarify whether the licensee was requesting an alternative for comprehensive testing, Group A testing, or both.

By letter dated October 1, 2013, the licensee provided its response to RAI MC-SRP-ND-01-1, and stated that the alternative request was for Group A testing only, and revised alternative request MC-SRP-ND-01 to remove the language associated with comprehensive testing. Revised alternative request MC-SRP-ND-01 is included in the licensee's IST Program, Revision 28a. Therefore, this alternative is requested for Group A testing of RHR pumps listed in Table 3.

The licensee states:

Range requirements will be waived for the tests. The purpose of the quarterly test is to verify Technical Specification requirements are met and to obtain vibration data for trending. The instrumentation used for the quarterly RHR pump test will meet accuracy requirements for assuring RHR pump operability per Technical Specifications.

3.2.2 Proposed Alternative

The licensee's original submission of alternative request MC-SRP-ND-01 was revised in an October 1, 2013, response to RAI MC-SRP-ND-01-1 and RAI MC-SRP-ND-01-2. Details on the original submission, NRC staff RAIs, licensee response, and the NRC staff's evaluation are

provided in Section 3.2.3 of this safety evaluation. The licensee's revised alternative request states that the following alternate testing will be applied for the fourth 10-year inservice testing interval for the RHR pumps listed in Table 3:

The RHR pumps will be tested according to the following program, which is consistent with NRC Generic Letter 89-04.

These pumps have process instrumentation installed such that there are two suction pressure gauges (0-60 psig and 0-600 psig), and one discharge pressure gauge (0-1000 psig). Each has 0.5 % accuracy. This is done to provide accurate pressure indication in either the recirculation or the heat removal condition of operation. As such, there are times when the 3 times the reference range requirements cannot be met.

Group A Test

The RHR pumps will be tested quarterly to verify Technical Specifications are met. The test measures differential pressure data. The differential pressure will be trended.

The instrumentation range requirements of OMB-2006, ISTB-3500 will be waived. Since the instrumentation used to measure suction and discharge pressure is more accurate than ASME OM Code requirements (0.5 % vs. 2 %), using the process instrument for this test will yield results within the overall accuracy requirements of the ASME OM Code and will meet applicable accuracy requirements for the determination of operability per Technical Specifications.

Typical values for ND discharge pressures are in the 220-270 psig range. Therefore, the process range for discharge pressure gauge (0-1000 psig) will not meet the three times criteria. The accuracy of these process instruments (0.5 %) is better than the requirements specified in Table ISTB-3510-1 for instrument accuracy (2 %). The actual reading error at test pressure due to the process instrument is 2.3% ($0.5\% * 1000/220$) for discharge pressure at the low end of this range. If a 0-660 psig gauge was used with 2% accuracy, the reading error would be 6% ($2\% * 660/220$).

Typical values for ND suction pressure in mini-flow are 46-81 psig. The lower range (0-60 psig) suction gauge is used for values within its range. The higher range (0-600 psig) suction gauge is used for pressure values exceeding the lower range values. Therefore, the process range for the higher range suction pressure gauge (0-600 psig) will not meet the three times criteria. The accuracy of these process instruments (0.5 %) is better than the requirements specified in Table ISTB-3510-1 for instrument accuracy (2 %). The actual reading error at test pressure due to the process instrument is 5% ($0.5\% * 600/60$) for suction pressure at the low end of this range. If a 0-180 psig gauge was used with 2 % accuracy, the reading error would be 6 % ($2\% * 180/60$).

Using the process instruments for suction and discharge pressure as described above does not degrade the quality of the test and meets the intent of the instrumentation requirements of the ASME OM Code.

3.2.3 NRC Staff Evaluation

The licensee requests an alternative from the ASME OM Code instrumentation requirements of paragraph ISTB- 3510(b)(1) for pressure gauges which are used to measure suction and discharge pressure of the RHR pumps. ASME OM Code paragraph ISTB-3510(b)(1) requires that the full-scale range of each instrument be no greater than three times the reference value. The licensee proposes to use instrumentation which does not meet this requirement.

Discharge Pressure Gauge Evaluation

The installed discharge pressure gauges for the RHR pumps have a range of 0-1000 psig and an accuracy of $\pm 0.5\%$. The typical values for the discharge pressure of the RHR pumps during testing range from 220-270 psig. In the original submission of alternative request MC-SRP-ND-01, contained in Revision 28 of the licensee's IST Program, the licensee stated that the instrumentation used to measure suction and discharge pressure is more accurate than ASME OM Code requirements (0.5 % vs. 2 %) using the process instrument for this test will yield results within the overall accuracy requirements of the ASME OM Code. In RAI MC-SRP-ND-01-1, the NRC staff noted that this statement was correct for the accuracy requirements of Group A tests in Table ISTB-3510-1, but incorrect for comprehensive tests since Table ISTB-3510-1 requires an accuracy of 0.5 % for these tests.

In an October 1, 2013 response to RAI MC-SRP-ND-01-1, the licensee revised alternative request MC-SRP-ND-01 to remove the applicability to comprehensive tests. Therefore, alternative request MC-SRP-ND-01 applies only to Group A testing of the RHR pumps listed in Table 3. As discussed above, revised alternative request MC-SRP-ND-01 is included in the licensee's IST Program, Revision 28a. Table 4 contains details related to RHR pump discharge instrumentation as provided by the licensee, the ASME OM Code requirements, and notes pertaining to the NRC staff's evaluation. Table 4 shows that the effective gauge accuracy of the installed RHR pump discharge instrumentation is 2.3 %, which is less than the resulting measurement accuracy of $\pm 6\%$ for Group A tests if ASME OM Code requirements were met. Therefore, the NRC staff finds that, for measurement of RHR pump discharge pressure, the installed instrumentation provides an acceptable level of quality and safety when compared to instrumentation that meets ASME OM Code requirements.

Table 4: Discharge Pressure Analysis for Alternative Request MC-SRP-ND-01

Items	Residual Heat Removal Pumps: Discharge	Remark
Pump No.	1A, 1B, and 2A, 2B	
Type of Inservice Test	Group A Test	
Discharge Pressure Gauge(s) Range (psig)	0-1000	
Discharge Reference Value Range (psig)	220-270	
Three Times the Reference Value	$(3 \times 220) = 660$ psig	Note 1
Effective Gauge Accuracy of Installed Instrument	$(\pm 0.5 \%)$ of $(1000/220)$ $= \pm 2.3 \%$	
Actual Accuracy of Instruments that Meet ASME OM Code Requirements for Group A Testing	$(\pm 2 \%) \times (660/220)$ $= \pm 6 \%$	
Acceptable Alternative to the ASME OM Code Requirement	Yes	
Note 1: Actual reference value range is between 220 and 270 psig; 220 psig is used for conservative results.		

Suction Pressure Gauge Evaluation

Two suction pressure gauges are installed to measure RHR pump suction pressure, a low range gauge and a high range gauge. The low range gauge has a range of 0-60 psig, while the high range gauge has a range of 0-600 psig. The licensee states that typical values for ND suction pressure in mini-flow are 48-81 psig.

In the licensee's IST Program, Revision 28, the licensee did not address the possibility that pressures below 60 psig could be measured with the high range gauge, which could result in a test with greater measurement uncertainty than the resulting measurement accuracy of $\pm 6 \%$ for Group A tests if ASME OM Code requirements are met. The NRC staff noted in RAI MC-SRP-ND-01-2 that if the 0-600 psig gauge were used to measure a 48 psig suction pressure, the reading error would be greater than the resulting measurement accuracy of $\pm 6 \%$ for Group A tests if ASME OM Code requirements were met. The NRC staff also requested justification that test procedures and instrumentation are implemented sufficiently to ensure that an acceptable level of accuracy is achieved in the proposed tests. In an October 1, 2013 response to RAI MC-SRP-ND-01-2, the licensee stated that the 0-60 psig gauge would be used for pressures within its range, and that the 0-600 psig suction gauge would be used for pressure values exceeding the pressures in the range of the 0-60 psig suction gauge. The licensee also

revised alternative request MC-SRP-ND-01 to specifically state that “the lower range (0-60 psig) suction gauge is used for values with its range.” Revised alternative request MC-SRP-ND-01 is contained in the licensee’s IST Program, Revision 28a. The NRC staff determined that the licensee’s response to the RAI is acceptable, since it precludes the use of the 0-600 psig gauge for measurement of pressures in the range of the 60 psig gauge.

Table 5 contains details related to RHR pump suction instrumentation as provided by the licensee, the ASME OM Code requirements, and calculations to support the NRC staff’s evaluation. Table 5 shows that when measuring a 60 psig pressure on the 0-600 psig gauge, the effective accuracy of the installed RHR pump suction instrumentation is 5 %, which is less than the resulting measurement accuracy of $\pm 6 \%$ for Group A tests if ASME OM Code requirements are met. Therefore, the NRC staff finds that for measurement of RHR pump suction pressure, the installed instrumentation provides an acceptable level of quality and safety when compared to instrumentation that meets ASME OM Code requirements.

Table 5: Suction Pressure Analysis for Alternative Request MC-SRP-ND-01

Items	Residual Heat Removal Pumps: Discharge	Remark
Pump No.	1A, 1B, and 2A, 2B	
Type of Inservice Test	Group A Test	
Suction Pressure Gauge - High Range	0-600 psig	
Suction Pressure Gauge – Low Range	0-60 psig	
Suction Reference Value Range	48-61 psig	
Three times the Reference Value	$(3 \times 60) = 180$ psig	Note 1
Effective Gauge Accuracy of Installed Instrumentation	$(\pm 0.5 \%)$ of $(600/60)$ $= \pm 5 \%$	
Actual Accuracy of Instruments that Meet ASME OM Code Requirements for Group A Testing	$(\pm 2 \%) \times (600/200)$ $= \pm 6 \%$	
Acceptable Alternative to the ASME OM Code Requirement	Yes	
Note 1: Actual reference value range is between 48 and 61 psig; pressures within the range of the 0-60 psig gauge are measured with low range pressure gauge. A 60 psig reading on the high range pressure gauge is used for conservative results.		

The NRC staff notes that NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants," Revision 2, Paragraph 5.5.1 supports the use of the existing gauges when the combination of range and accuracy yields a reading at least equivalent to the reading achieved from instruments that meet the ASME OM Code requirements.

Based on the information provided by the licensee, the calculations in Tables 4 and 5 above, the licensee's commitment to use the low range suction pressure gauge for all pressures within its range, and the capability of the licensee's installed instrumentation to provide accuracy levels that exceed the resulting measurement accuracy of $\pm 6\%$ for Group A tests if ASME OM Code requirements are met, the NRC staff finds that the licensee's proposed alternative provides an acceptable level of quality and safety for Group A testing of the component cooling water pumps specified in Table 3.

4.0 CONCLUSION

As set forth above, the NRC staff determines that alternative requests MC-SRP-KC-01, as submitted in Revision 28 of the licensee's IST Program, and MC-SRP-ND-01, as submitted in Revision 28a of the licensee's IST Program, provide an acceptable level of quality and safety when compared to instrumentation that meets ASME OM Code requirements. Accordingly, the NRC staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(a)(3)(i) for requests MC-SRP-KC-01 and MC-SRP-ND-01, and the alternatives provide an acceptable level of quality and safety in comparison to the ASME OM Code requirements. Therefore, the NRC staff authorizes alternative requests MC-SRP-KC-01, as submitted in Revision 28 of the licensee's IST Program, and MC-SRP-ND-01, as submitted in Revision 28a of the licensee's IST Program, for the fourth 10-year interval at McGuire Nuclear Station, Units 1 and 2, which begins on March 1, 2014 and is scheduled to end on February 29, 2024.

All other ASME Code, Section XI, requirements for which relief was not specifically requested and authorized herein by the NRC staff remain applicable, including the third party review by the Authorized Nuclear In-service Inspector.

Principal Contributor: J. Carneal, NRR

Date: January 17, 2014

S. Capps

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If you have any questions, please contact the Project Manager, Jason Paige at 301-415-5888 or via e-mail at jason.paige@nrc.gov.

Sincerely,
/RA/

Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-369 and 50-370

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Safety Evaluation

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