May 23, 2005

Mr. G. R. Peterson Vice President McGuire Nuclear Station Duke Energy Corporation 12700 Hagers Ferry Road Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 - REQUEST FOR RELIEF RE: INSERVICE INSPECTION REQUESTS FOR RELIEF 04-MN-02, 04-MN-03 AND 04-MN-04 (TAC NOS. MC4514, MC4515, AND MC4516)

Dear Mr. Peterson:

By letter to the Nuclear Regulatory Commission (NRC) dated August 9, 2004, as supplemented by letter dated January 31, 2005, Duke Energy Corporation, the licensee for McGuire Nuclear Station (McGuire), Units 1 and 2, requested an alternative to the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code), Section XI.

The NRC staff has completed its review of the subject requests for relief. As documented in the enclosed Safety Evaluation, the NRC staff concludes that compliance with the Code requirements was impractical. Accordingly, the NRC staff authorizes the use of the stated alternatives pursuant to 10 CFR 50.55a(f)(6)(i) for the third inservice inspection (ISI) interval for McGuire Unit 1 and the second ISI interval for McGuire, Unit 2. All other ASME Code, Section XI requirements for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Sincerely,

/**RA**/

Evangelos C. Marinos, Chief, Section 1 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-369 and 50-370

Enclosure: As stated

cc w/encl: See next page

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McGuire Nuclear Station

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

ASME SECTION XI RR-04-MN-02, 04-MN-03 AND 04-MN-04

DUKE ENERGY CORPORATION

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

1.0 INTRODUCTION

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated August 9, 2004, as supplemented by letter dated January 31, 2005. Duke Energy Corporation, the licensee for McGuire Nuclear Station (McGuire), Units 1 and 2, requested an alternative to the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (Code), Section XI.

2.0 REGULATORY EVALUATION

2.1 Applicable Requirements

The Inservice Inspection (ISI) of ASME Code, Class 1, 2, and 3 components shall be performed in accordance with Section XI, "Rules for ISI of Nuclear Power Plant Components," of the ASME Code and applicable addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). Section 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used when authorized by the NRC, if the licensee demonstrates that (i) the proposed alternatives would 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.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for 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) twelve months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein.

The applicable ASME Code of record for the third 10-year inservice inspection (ISI) interval at McGuire, Unit 1 at the time that the inspections were performed was the 1995 Edition of ASME

Enclosure

Section XI with 1996 addenda, and the Code of record for the second 10-year ISI interval at McGuire, Unit 2 was the 1989 Edition of ASME Section XI with no addenda.

3.0 TECHNICAL EVALUATION

3.1 Systems/Components For Which Relief Is Requested

Relief Request 04-MN-02

Category	ltem	ID No.	Description	Coverage (%)
C-C	C03.30	1CCPUMP-1A- LEG	Charging pump support welded attachment	77.74% surface
R-A	R01.011	1PVI-462C-SE	RV head to upper head injection tube weld	74.62% vol

Relief Request 04-MN-03

Category	Item	ID No.	Description	Coverage (%)
B-F	B05.070	2SGA-INLET- W5SE	Steam Generator (SG) inlet nozzle to safe end	75.00% vol
B-F	B05.070	2SGA-OUTLET- W6SE	SG outlet nozzle to safe end	75.00% vol
B-F	B05.070	2SGD-INLET- W5SE	SG inlet nozzle to safe end	75.00% vol
B-F	B05.070	2SGD-OUTLET- W6SE	SG outlet nozzle to safe end	75.00% vol
B-H	B08.020	2PZR-SKIRT	Pressurizer support skirt attachment to lower head	75.16% vol
B-J	B09.011	2NCW-3673-1	Nozzle pipe-to- elbow	79.01% vol
B-J	B09.011	2NC2FW2-1	Surge line pipe-to-pipe	72.73% vol
B-J	B09.011	2NC2FW2-1	Surge line pipe-to-pipe	81.82% surface
B-J	B09.011	2NC2FW22-6	Elbow to nozzle	61.09% vol
B-J	B09.011	2NC2FW22-9	Pipe to nozzle	61.09% vol
B-J	B09.011	2NC2FW16-6	Elbow to nozzle	59.09% vol
B-J	B09.011	2N12F871	Elbow to pipe	59.09% vol

Category	Item	ID No.	Description	Coverage (%)
C-C	C03.030	2CCPUMP-2A- LEG	Charging pump support welded attachment	82.65% surface

Relief Request 04-MN-04

Category	Item	ID No.	Description	Coverage (%)
B-J	B09.011	2ND2F-12	Pipe to valve weld	35.20% vol
B-J	B09.011	2N12FW26-7	Valve to pipe weld	34.96% vol
B-J	B09.011	2N12FW26-16	Valve to pipe weld	34.96% vol
C-F-1	C05.011	2N12FW26-15	Elbow to valve weld	34.96% vol

3.2 Code Requirements

Relief Request 04-MN-02 McGuire, Unit 1

ASME Section XI (1995 Edition, 1996 addenda) Code Category C-C, Item No. C03.30 of Table IWC-2500-1 requires 100 percent surface examination coverage of each welded attachment. Category R-A (Risk-Informed, Class 1), Item No. R01.011, Weld 1PVI-462C-SE requires a full coverage of volumetric examination in accordance with the licensee's Risk-Informed ISI Program and Westinghouse Owner's Group Topical Report, WCAP-14572, Revision 1-NPA.

Relief Request 04-MN-03 McGuire, Unit 2

ASME Section XI (1989 Edition, no addenda) Code requires full examination coverage, volumetric and surface, of ISI components per Category B-F and Category B-J of Table IWB-2500-1. The Code requires 100 percent examination coverage of either volumetric or surface examination per Category B-H of Table IWB-2500-1. The Code requires 100 percent surface examination coverage of ISI components per Category C-C of Table IWC-2500-1. NRC Regulatory Guide 1.147 endorses the use of Section XI Code Case N-460, "Alternative Examination Coverage for Class 1 and Class 2 Welds." This code case allows greater than 90 percent coverage of a weld to meet the "essentially 100 percent" requirement.

Relief Request 04-MN-04 McGuire, Unit 2

ASME Section XI (1989 Edition, no addenda) Code requires full examination coverage of ISI components per Category B-J of Table IWB-2500-1, and Category C-F-1 of Table IWC-2500-1. NRC Regulatory Guide 1.147 endorses the use of Section XI Code Case N-460, "Alternative Examination Coverage for Class 1 and Class 2 Welds." This code case allows greater than 90 percent coverage of a weld to meet the "essentially 100 percent" requirement.

3.3 Licensee's Basis for Requesting Relief

Relief Request 04-MN-02

Category C-C, Item C03.30, Charging Pump Support Welded Attachment

During the liquid penetrant examination of the welds, 100% coverage of the required surface examination area could not be obtained. The examination coverage was limited to 77.74%. The limitations were caused by the geometric configuration of the support legs restricting access for complete examination coverage.

No recordable indications were found during the surface examination of this weld.

Category R-A, Item R01.011, RV Head to Upper Head Injection Tube Weld

During the ultrasonic examination of the weld, the examination coverage was limited to 74.62%. This percentage represents the aggregate coverage from all scans. A 45 degree longitudinal wave axial scan from the pipe side covered 92.31% of the examination volume from one direction. Two opposing circumferential scans using 45 degree shear waves covered 73.85% and a 45 degree longitudinal wave axial scan from the vessel side covered 58.46% of the required volume from one direction. In order to achieve greater than 90% coverage from two beam path directions, axially and circumferentially, the weld would have to be re-designed to allow scanning from both sides which is impractical.

No recordable indications were found during the volumetric examination of this weld.

Relief Request 04-MN-03

Category B-F, Item B05.070, ID No. 2SGA-INLET-W5SE, SG Inlet Nozzle to Safe End; ID No. 2SGA-OUTLET-W6SE, SG outlet Nozzle to Safe End; ID No. 2SGD-INLET-W5SE, SG Inlet Nozzle to Safe End; and ID No. 2SGD-OUTLET-W6SE, SG Outlet Nozzle to Safe End

During the ultrasonic examination of the welds, the examination coverage was limited to 75.00% for all four welds. The percentage of coverage reported represents the aggregate coverage obtained by each scan. A 45 degree scan was performed from the safe end side of the weld achieving 100% coverage from one axial direction, and a 45 degree scan in two opposing circumferential directions achieved 100% coverage. The nozzle configuration allows scanning from only the safe end side of the weld. Obtaining coverage greater than 90% of the weld volume is not possible. In order to achieve more coverage, the nozzles would have to be re-designed to allow scanning from both sides of the weld, which is impractical.

No recordable indications were found during the volumetric examination of this weld.

Category B-H, Item B08.020, ID No. 2PZR-SKIRT, Support Skirt to Lower Head

During the ultrasonic examination of the weld, the examination coverage was limited to 75.16%. The percentage of coverage reported represents the aggregate coverage obtained by each scan. The entire examination volume was covered 100% from at least one axial and one

circumferential direction. Obtaining coverage greater than 90% of the weld volume is not possible because of the geometric limitation.

A recordable indication was found during the volumetric examination of this weld. The recordable indication was determined to be a Geometric Reflector. This weld was determined to be acceptable after an NDE evaluation.

Category B-J, Item B09.011, ID No. 2NCW-3673-1, Inlet Nozzle Pipe to Elbow

During the ultrasonic examination of the weld, the examination coverage was limited to 79.01%. Limitations are caused by cast austenitic weld metal characteristics and single sided access caused by the location of pipe restraints preventing two-beam path direction coverage of the examination volume. The percentage of coverage reported represents the aggregate coverage obtained by each scan. A 45 degree scan was performed from one side of the weld achieving 100% coverage from one axial direction, and a 45 degree scan in two opposing circumferential directions achieved 100% coverage. An additional 4% was achieved from the restraint side of the weld. The proximity of the restraint limits scanning from two opposing axial directions. Therefore, obtaining coverage greater than 90% of the weld volume is not possible.

No recordable indications were found during the volumetric and surface examination of this weld.

Category B-J, Item B09.011, ID No. 2NC2FW2-1, Surge Line Pipe to Pipe

During the ultrasonic examination of the weld, the examination coverage was limited to 72.73%. Limitations are caused by austenitic weld metal characteristics and single sided access due to rigid restraints at the location which prevents scanning of the weld from two opposing sides. The percentage of coverage reported represents the aggregate coverage obtained by each scan. A 60 degree scan was performed from one side of the weld achieving 100% coverage from one axial direction, and a 45 degree scan in two opposing circumferential directions achieved 100% coverage. An additional 4% was achieved from the restraint side of the weld. The proximity of the restraint limits scanning from two opposing axial directions. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible. In order to achieve more coverage, the restraint would have to be removed to allow scanning from both sides of the weld.

During the Liquid Penetrant examination for this same weld the required surface examination area could not be obtained. The examination coverage was limited to 81.82%. The Liquid Penetrant exam limitations were caused by the close proximity of a pipe support that obstructed a portion of the weld and adjacent base metal at two locations.

No recordable indications were found during the volumetric and surface examination of this weld.

Category B-J, Item B09.011, ID No. 2NC2FW22-6, Elbow to Nozzle

During the ultrasonic examination of the weld, the examination coverage was limited to 61.09%. The reported percent of coverage represents the aggregate coverage from all scans performed on the weld. A 60 degree shear wave scan was performed from the elbow side of the weld

achieving 44.3% coverage of the examination volume from one axial direction and a 45 shear wave degree scan in two opposing circumferential directions achieved 100% coverage. A supplemental axial scan from the elbow side using a 60 degree refracted longitudinal wave search unit covered 100% of the weld metal and far side base material. Limitations are caused by austenitic weld metal characteristics and single sided access due to the proximity of the nozzle which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible.

No recordable indications were found during the volumetric and surface examination of this weld.

Category B-J, Item B09.011, ID No. 2NC2FW22-9, Pipe to Nozzle

During the ultrasonic examination of the weld, the examination coverage was limited to 61.09%. The reported percent of coverage represents the aggregate coverage from all scans performed on the weld. A 60 degree shear wave scan was performed from the elbow side of the weld achieving 44.3% coverage of the examination volume from one axial direction and a 45 degree shear wave scan in two opposing circumferential directions achieved 100% coverage of the weld base material. A supplemental axial scan from the elbow side using a 60 degree refracted longitudinal wave search unit covered 100% of the weld metal and far side base material. Limitations are caused by austenitic weld metal characteristics and single sided access due to the proximity of the nozzle which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible.

No recordable indications were found during the volumetric and surface examination of this weld.

Category B-J, Item B09.011, ID No. 2NC2FW16-6, Elbow to Nozzle

During the ultrasonic examination of the weld, the examination coverage was limited to 59.09%. The reported percent of coverage represents the aggregate coverage from all scans performed on the weld. A 60 degree shear wave scan was performed from the elbow side of the weld achieving 36.36% coverage of the examination volume from one axial direction and a 45 degree shear wave scan in two opposing circumferential directions achieved 100% coverage of the weld and base material. A supplemental axial scan from the elbow side using a 60 degree refracted longitudinal wave search unit covered 100% of the weld metal and far side base material. Limitations are caused by austenitic weld metal characteristics and single sided access due to the proximity of the nozzle which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible.

No recordable indications were found during the volumetric and surface examination of this weld.

Category B-J, Item B09.011, ID No. 2N12F871, Elbow to Pipe

During the ultrasonic examination of the weld, the examination coverage was limited to 59.09%. The reported percent of coverage represents the aggregate coverage from all scans performed on the weld. A 60 degree shear wave scan was performed from the elbow side of the weld achieving 36.36% coverage of the examination volume from one axial direction and a 45 degree shear wave scan in two opposing circumferential directions achieved 100% coverage of the weld and base material. A supplemental axial scan from the elbow side using 60 degree refracted longitudinal wave search unit covered 100% of the weld metal and far side base material. Limitations are caused by austenitic weld metal characteristics and single sided access due to the elbow configuration and the proximity of an adjacent weld which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible.

No recordable indications were found during the volumetric and surface examination of this weld

Category C-C, Item C03.30, 2CCPUMP-2A-LEG, Pump Support Attachment

During the Liquid Penetrant examination of the weld, 100% coverage of the required surface examination area could not be obtained. The examination coverage was limited to 82.65%. The limitations were caused by the geometric configuration of the support legs restricting access for complete examination coverage.

No recordable indications were found during the surface examination of this weld.

Relief Request 04-MN-04

Category B-J, Item B09.011, ID No. 2ND2F-12, Pipe to Valve

During the ultrasonic examination of the weld, the examination coverage was limited to 35.20%. Limitations are caused by austenitic weld metal characteristics and single sided access caused by the valve configuration which prevents scanning of the weld from two opposing sides. The percent coverage reported represents the aggregate coverage from all shear wave scans performed on the weld and base material. A 45 degree shear wave axial scan was used to scan from the pipe side of the weld covering 40.8% of the examination volume. Two opposing 45 degree shear wave circumferential scans were performed on the pipe side of the weld covering 50% of the examination volume.

No recordable indications were found during the volumetric and surface examinations of this weld.

Category B-J, Item B09.011, ID No. 2N12FW26-7, Valve to Pipe

During the ultrasonic examination of the weld, 100% coverage of the required scan and coverage examination volume could not be obtained. The examination coverage was limited to 34.96%. Limitations are caused by austenitic weld metal characteristics and single sided

access caused by the valve configuration which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible. The percent coverage reported represents the aggregate coverage from all shear wave scans performed on the weld and base material. A 45 degree shear wave axial scan was used to scan from the pipe side of the weld covering 39.84% of the examination volume. Two opposing 45 degree shear wave circumferential scans were performed on the pipe side of the weld covering 50% of the examination volume.

No recordable indications were found during the volumetric and surface examinations of this weld.

Category B-J, Item B09.011, ID No. 2N12FW26-16, Valve to Pipe

During the ultrasonic examination of the weld, the examination coverage was limited to 34.96%. Limitations are caused by austenitic weld metal characteristics and single sided access caused by the valve configuration which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible. The percent coverage reported represents the aggregate coverage from all shear wave scans performed on the weld and base material. A 45 degree shear wave axial scan was used to scan from the pipe side of the weld covering 39.84% of the examination volume. Two opposing 45 degree shear wave circumferential scans were performed on the pipe side of the weld covering 50% of the examination volume.

No recordable indications were found during the volumetric and surface examinations of this weld.

Category C-F-1, Item C05.011, 2N12FW26-15, Elbow to Valve

During the ultrasonic examination of the weld, the examination coverage was limited to 34.96%. Limitations are caused by austenitic weld metal characteristics and single sided access caused by the valve configuration which prevents scanning of the weld from two opposing sides. Obtaining coverage greater than 90% of the weld volume as defined in Code Case N-460 is not possible. The percent coverage reported represents the aggregate coverage from all shear wave scans performed on the weld and base material. A 45 degree shear wave axial scan was used to scan from the pipe side of the weld covering 39.84% of the examination volume. Two opposing 45 degree shear wave circumferential scans were performed on the pipe side of the weld covering 50% of the examination volume.

No recordable indications were found during the volumetric and surface examinations of this weld.

3.5 NRC Staff Evaluation

McGuire, Units 1 and 2 were designed and constructed prior to the development of many of the ASME Section XI requirements. In many cases, component configurations and interference cause limitations to ISI inspections. As a result, Code-required volumetric or surface examinations of the subject Class 1 and Class 2 welds were limited to less than 100 percent.

The NRC staff noted that the licensee does not claim credit for coverage of the far side of austenitic welds during examinations of austenitic welds. The characteristics of austenitic weld metal attenuate and distort the sound beam when shear waves pass through the weld. Refracted longitudinal waves provide better penetration but cannot be used beyond the first sound path leg. The licensee uses a combination of shear waves and longitudinal waves to examine single sided austenitic welds. The procedures, personnel and equipment have been qualified through the Performance Demonstration Initiative (PDI). However, although longitudinal wave search units were used in the qualification and cracks were detected through the weld metal, PDI does not provide a qualification for single sided examinations of austenitic welds.

Further evaluation is discussed under specific Code items as shown below.

3.5.1 Item R01.011 (Category R-A) Welds

Weld 1PVI-462C-SE is a Category R-A weld which requires 100 percent coverage of volumetric examination in accordance with the licensee's Risk-Informed ISI Program and Westinghouse Owner's Group Topical Report, WCAP-14572, Revision 1-NPA. Volumetric coverage was limited to 74.62 percent due to geometric restraint. The configuration is such that it limits scanning from the vessel side. To examine these welds as required by the Code, the welds would have to be redesigned and modified which would result in a considerable burden on the licensee.

In a request for additional information (RAI) to the licensee, the NRC staff asked if a surface examination was considered to supplement the volumetric coverage. In response to the RAI, the licensee stated that the likely failure mechanisms at this weld location are thermal fatigue or Primary Water Stress Corrosion Cracking, which would cause a crack to initiate only from the inside surface. A surface examination would add no value. The NRC staff also asked if a similar weld could be selected in order to achieve more coverage. The licensee stated in its response that all four of the lines have the same configuration. There would be no coverage gained from substituting the welds. The licensee further stated that during the second interval, all four of the RV Head to Upper Head Injection Tube Welds received a volumetric and surface examination and found to be acceptable. The then achieved volumetric coverage was 89.13 percent and surface coverage was greater than 90 percent.

The NRC staff concludes based on its evaluation that, due to component configuration and design the requirements of the code are impractical. The licensee conducted the examination to the fullest extent practical. The examination should have detected any significant degradation, if present, and provide reasonable assurance of structural integrity of the welds.

3.5.2 Item C03.030 (Category C-C) Welds

ASME Section XI, 1989 Edition, and 1995 Edition through 1996 addenda, Code Category C-C, Item No. C03.30 of Table IWC-2500-1 requires 100 percent surface coverage of each welded attachment. The licensee achieved from 77.74 percent to 82.65 percent of surface coverage for these welds. The limitations were caused by the geometric configuration of the support legs

restricting access for complete examination coverage. To examine these welds as required by the Code, the welds would have to be redesigned and modified which would result in a considerable burden on the licensee.

In an RAI to the licensee, the NRC staff asked if a volumetric examination, such as ultrasonic testing, was considered to supplement the surface coverage. In response to the RAI, the licensee stated that the accessibility problem limiting the surface examination would also prevent the performance of a volumetric examination.

The NRC staff concludes based on its evaluation that, due to component configuration and design the requirements of the code are impractical. The licensee conducted the examination to the fullest extent practical, and obtained from 77.74 percent to 82.65 percent of surface coverage of the subject welds. The examination should have detected any significant degradation, if present, and provide reasonable assurance of structural integrity of the welds.

3.5.3 <u>Item Nos. B05.070 (Category B-F), B09.011 (Category B-J), and C05.011 (Category C-F-1) Welds</u>

For these items, ASME Section XI, 1989 Edition of the Code requires surface and volumetric examination of the welds. The licensee achieved from 34.96 percent to 79.01 percent of required volumetric coverage for these welds. The licensee achieved an essential 100 percent surface coverage for these weld except for Weld 2NC2FW2-1 which 82.65 percent of surface coverage was achieved. For each of the welds examined, physical limitations due to geometric configuration of the welded areas restricted coverage of the welds and made it impractical to achieve 100 percent of the total examination volume and surface (of Weld 2NC2FW2-1) required by the Code. The licensee provided detailed information regarding the specific limitation for each item. To examine these welds as required by the Code, the welds would have to be redesigned and modified which would result in a considerable burden on the licensee. It should be noted that the volumetric examination was performed through 100 percent of the Code weld volume by a scan from the far side. However, the PDI Appendix VIII procedure used is not qualified for the detection of flaws on the far side of single sided access examinations on austenitic stainless steel welds. The techniques employed for the examination provide for a best effort examination.

The NRC staff concludes that, based on its evaluation, the licensee conducted the examinations of the subject welds to the extent practical. The licensee obtained volumetric coverage from approximately 34.96 percent to 79.01 percent of these welds and completed 100 percent of the Code-required surface examinations, except for Weld 2NC2FW2-1 where only 82.65 percent of the required area was examined. These examinations should have detected any significant degradation, if present, and provide reasonable assurance of structural integrity of the welds.

4.0 CONCLUSION

The NRC staff has reviewed the information provided and concludes that the welds would have needed modification resulting in a significant burden without a compensating increase in quality and safety for the subject components. As a result, the NRC staff has determined that

compliance with the Code volumetric coverage requirements was impractical. The licensee conducted the examinations to the extent practical. Further, reasonable assurance of the structural integrity of the subject components were provided by the actual examinations performed. Therefore, Relief Request 04-MN-02 is granted pursuant to 10 CFR 50.55a(f)(6)(i) for the third 10-year ISI interval at McGuire Unit 1 under the 1995 Edition of ASME Section XI with 1996 addenda and Relief Requests 04-MN-03 and 04-MN-04 are granted pursuant to 10 CFR 50.55a(f)(6)(i) for the second 10-year ISI interval at McGuire, Unit 2 under the 1989 Edition of ASME Section XI with no addenda. The NRC staff further concludes that granting the relief will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility. All other requirements of the ASME Code, Section XI that relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: B. Fu

Date: May 23, 2005