



GARY R. PETERSON
Vice President
McGuire Nuclear Station

Duke Power
MGO1VP / 12700 Hagers Ferry Road
Huntersville, NC 28078-9340

704 875 5333

704 875 4809 fax

grpeters@duke-energy.com

August 12, 2004

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

SUBJECT: McGuire Nuclear Station - Units 1 & 2
Docket No.s 50-369, 50-370
Third Ten-Year Inservice Testing Interval
Inservice Testing Program, Revision 27

Pursuant to the requirements of 10 CFR 50.55a, Duke Energy Corporation is submitting the Inservice Testing Program for the Third Ten-Year Interval at the McGuire Nuclear Station. The third interval began on March 1, 2004 and the attached Program, Revision 27, applies to both units.

Pursuant to 10 CFR 50.55a(a)(3), Duke requests approval to use an alternative to Section XI of the ASME Boiler and Pressure Code. However, the proposed alternative will provide an acceptable level of quality and safety. Section 5.0 contains the new Relief Request, MC-SRP-NS-01, which requests relief from the requirement to perform comprehensive pump tests within 20% of design flow.

Section 8.0 of the revised Inservice Testing Program contains a Summary of Changes and a Detailed Description of Changes associated with Revision 27.

Questions with respect to the attached report should be directed to Norman T. Simms of Regulatory Compliance at 704-875-4685.

Very truly yours,

G.R. Peterson

Attachment

A047

U. S. Nuclear Regulatory Commission
August 12, 2004
Page 2

xc w/att:

W.D. Travers
U.S. Nuclear Regulatory Commission, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

J.J. Shea (Addressee only)
NRC Project Manager (MNS)
U.S. Nuclear Regulatory Commission
One White Flint North, MS 08 H12
11555 Rockville Pike
Rockville, MD 20852-2738

xc wo/att:

J.B. Brady
NRC Senior Resident Inspector
McGuire Nuclear Station

bxc (w/ att):

E.L. Hyland
MasterFile

bxc (w/o att):

D.E. Caldwell
NRIA File/ELL
K.L. Crane
N.T. Simms

ATTACHMENT

DUKE POWER
A Duke Energy Company
526 South Church St.
Charlotte, NC 28202-1904

McGuire Nuclear Station
12700 Hagers Ferry Rd
Huntersville, NC 28078-8985

ASME Inservice Testing Program

Revision 27
March 1, 2004

Commercial Service Dates
Unit 1 (050-00369): July 8, 1981
Unit 2 (050-00370): May 27, 1983

Prepared by:	<u>E.L. April</u>	Date:	<u>6/11/04</u>
Reviewed by:	<u>RATU. Kil</u>	Date:	<u>6/14/04</u>
Approved by:	<u>KL Estus</u>	Date:	<u>6/21/04</u>

McGuire Nuclear Station Table of Contents

<u>SECTION</u>	<u>PAGES</u>
1.0 McGuire Nuclear Station Program Document	1 - 29
2.0 Table Of Abbreviations	1 - 3
3.0 PUMP INSERVICE TESTING PROGRAM	
3.1 Pump Inservice Testing General Data - Unit 1 and Unit 2	1 -11
4.0 VALVE INSERVICE TESTING PROGRAM	
4.1 Valve Inservice Testing General Data - Unit 1 and Unit 2	

	Page	Number
Steam Generator Blowdown Recycle	BB	1 - 2
Auxiliary Feedwater System	CA	1 - 9
Feedwater System	CF	1 - 4
Refueling Water System	FW	1 - 2
Nitrogen System	GN	1 - 2
Containment Personnel Airlock System	IA	1 - 4
Component Cooling System	KC	1 - 8
Diesel Generator Engine Lube Oil System	LD	1 - 1
Miscellaneous Station Instrumentation	MI	1 - 2
Boron Recycle System	NB	1 - 1
Reactor Coolant System	NC	1 - 7
Residual Heat Removal	ND	1 - 4
Ice Condenser Refrigeration System	NF	1 - 2
Safety Injection System	NI	1 - 16
Nuclear Sampling System	NM	1 - 7
Containment Spray	NS	1 - 5
Chemical & Volume Control System	NV	1 - 7
Fire Protection System	RF	1 - 1
Nuclear Service Water System	RN	1 - 15
Containment Ventilation Cooling Water System	RV	1 - 4
Main Steam Supply to Auxiliary Equipment	SA	1 - 1
Main Steam	SM	1 - 3
Main Steam Relief to Atmosphere	SV	1 - 3
Breathing Air System	VB	1 - 1
Control Room HVAC System	VC	1 - 1

**McGuire Nuclear Station
Table of Contents**

<u>SECTION</u>	<u>PAGES</u>
4.0 VALVE INSERVICE TESTING PROGRAM - Continued	
4.1 Valve Inservice Testing General Data - Unit 1 and Unit 2	
Annulus Ventilation System	VE 1 - 2
Instrument Air System	VI 1 - 4
Containment Purge Ventilation System	VP 1 - 2
Containment Air Release & Addition System	VQ 1 - 2
Station Air System	VS 1 - 1
Containment Air Return Exchange and Hydrogen Skimmer System	VX 1 - 2
Liquid Waste Recycle System	WL 1 - 4
Diesel Generator Room Sump Pump System	WN 1 - 1
Groundwater Drainage System	WZ 1 - 1
Chilled Water System	YC 1 - 1
Makeup Demineralized Water System	YM 1 - 1
	<u>PAGES</u>
5.0 RELIEF REQUEST	
5.1 Pumps - Generic Relief Request	1 - 1
5.2 Pumps - Specific Relief Request	1 - 1
5.3 Valves - Generic Relief Request	1 - 1
5.4 Valves - Specific Relief Request	1 - 1
6.0 JUSTIFICATION FOR DEFERRAL	
6.1 Valves - Justification for Deferral	1 - 4
7.0 SUPPLEMENTAL TEST PROGRAM	
7.1 Supplemental Testing Program - Valves	
7.2 Supplemental Testing Program - Pumps	
8.0 CORRESPONDENCE	

**McGUIRE NUCLEAR STATION
ASME OM CODE
In-Service Testing Program Document**

March 2004

REVISION 3

Prepared by: E.L. Hyland

Date: 3/1/04

Reviewed by: W.H. Hill

Date: 3/2/04

Approved by: K.D. Evans

Date: 6/21/04

TABLE OF CONTENTS

1.0	Scope of Document
2.0	References
3.0	Definitions and Terms
4.0	Valve Program
4.1	In-Service Testing (IST) Program
4.2	Valve Testing Program Exemptions and Position Statements
4.3	Check Valve Testing
4.4	Relief Valve Testing
4.5	Leak Rate Testing
4.6	Testing From Remote Locations
4.7	Post-Maintenance and Modification Testing (Retest)
4.8	Fail-Safe Testing of Valves
4.9	Skid-Mounted Valves
4.10	Valve Test Acceptance Criteria
5.0	Pump Program
5.1	In-Service Testing (IST) Program
5.2	Pump Testing Program Exemption and Position Statements
5.3	Vibration Monitoring
5.4	Testing From Remote Locations
5.5	Post-Maintenance and Modification Testing (Retest)
5.6	Skid-Mounted Pumps
5.7	Pump Test Acceptance Criteria
6.0	Relief Requests
6.1	Implementation of Relief Request
6.2	Interim Relief Request
7.0	Justification for Deferrals
7.1	Testing Deferral Justifications (Practicality Determinations)
8.0	Appendices
Appendix A:	IST Program Responsibilities
Appendix B:	10CFR50, Appendix B (Supplemental) Program Guidance Document
Appendix C:	Notification of Program Changes
9.0	Enclosures
Enclosure 9.1:	Revising the Program Document
Enclosure 9.2:	Generic Relief Request Form
Enclosure 9.3:	Justification for Deferral Form
Enclosure 9.4:	Specific Relief Request Form
Enclosure 9.5:	System Piping Classification Correlation

1.0 SCOPE OF DOCUMENT

Technical Specifications require performance of pump and valve testing in accordance with ASME O&M Codes. Failure to meet the requirements of this program are a violation of Technical Specifications and 10CFR 50.55a.

The purpose of this program document is to define the McGuire Nuclear Station (or hereafter referred to as "licensee" or "MNS") In-Service Testing (IST) Program for performing valve and pump testing. This document will also outline the process for additions, changes, and deletions of pumps and valves from the MNS IST program.

1.1 Program Period:

Third Ten-Year Interval (120 month period beginning March 1, 2004);
Unit(s) 1 and 2 Concurrently.

1.2 Applicable ASME Code(s) and Addenda:

ASME OM Code – 1998 Revision through 2000 Addenda

1.3 Program Changes:

The NRC shall be notified of IST program changes; however, component additions and deletions may be submitted and testing implemented or deleted without prior NRC approval. In the instance where a component has been added to the IST program, testing and the appropriate program changes will take place **within 90 days** of revising the program documents unless determined to be impractical.

The content of this program document is based on recommendations stated in NUREG-1482 and is intended for the purpose of maintaining program continuity and documenting additional discussions and positions relative to ASME Code interpretations. Therefore, changes to the IST Program Document will not require prior NRC review and/or approval unless the licensee determines a need to do so.

2.0 REFERENCES

The following documents were used as references in the development of this document:

ASME OM Code 1998 through OMB – 2000; sections ISTA, ISTB, ISTC, Appendix I and Appendix II

NRC Generic Letter 89-04

NRC Generic Letter 96-05

NRC Generic Letter 96-06

10 CFR 50, Appendix B

10 CFR 50.55a

Technical Specifications

Updated Final Safety Analysis Report (UFSAR)

Nuclear System Directive: 408. Testing

Reg. Guide 1.26

NRC Inspection Procedure 73756

NUREG/CP-0123, Proceedings of the NRC/ASME Symposiums on Pump and Valve Testing

NUREG-1482, Guidelines for In-service Testing at Nuclear Power Plants, April 1995

NRC Information Notice 97-90

NRC Information Notice 97-16

3.0 DEFINITIONS and TERMS

Generic Letter 96 – 05	the NRC letter providing on-going requirements in testing MOVs to design basis conditions.
Generic Letter 89-04 -	the NRC letter providing supplemental guidance on developing and enhancing plant IST programs.
ASME OM Code -	the section of ASME Codes and Standards Manual that determines how to perform in-service testing of light water reactor nuclear plant components.
ASME ISTC Code -	the part of ASME OM Codes dealing with the in-service testing of valves.
ASME ISTB Code -	the part of ASME OM Codes dealing with the in-service testing of pumps.
Frequencies -	the interval of time between in-service testing of the components. These intervals are defined in MNS Technical Specifications: <ol style="list-style-type: none">1) Quarterly (3 months) - 115 days maximum2) Cold Shutdown (CSD) - Average Coolant Temperature (T_{avg}) \leq 200°F3) Refueling (RF) - Unit at shutdown for the purpose of replacing or rearranging all or a portion of the fuel assemblies or control rods.
IST Component -	components (valves and pumps) that are required to be tested per ASME OM Codes. Sections 4.1 and 5.1 of this document define the criteria.
Supplemental Components -	components (valves and pumps) tested under of 10CFR50, Appendix B.
App. J Component -	components leak tested for containment integrity under 10CFR50, Appendix J (including Option B).
Active Component -	a component that must perform a mechanical motion during the course of accomplishing a system safety function.
Passive Component -	a component that does not perform a mechanical motion during the course of accomplishing a system safety function.
System Resistance-	the hydraulic resistance to flow in a system
Trending-	a comparison of current data to previous data obtained under similar conditions for the same equipment.
Set Point -	the value for which relief valves are set to relieve pressure.
Leak Test -	testing of valves to verify seat leakage is limited to a specified maximum.
Stroke-Time -	the time interval from valve actuation to the limit switch indication light or OAC point at the end of the actuating cycle.
Limiting Stroke-Time -	the owner specified maximum time allowed for a valve to stroke before becoming immediately inoperable.
Relief Requests -	A request submitted to the NRC requesting relief from the requirements of the Code for testing a particular component or a generic group of components.
Justif. for Deferrals -	A documented explanation of why a valve can only be tested at a cold shutdown or refueling outage frequency as opposed to quarterly.

4.0 VALVE PROGRAM

4.1 In-Service Testing (IST) Program

As required by 10CFR50.55a, valves that are classified in accordance of NRC Regulatory Guide 1.26 as ISI Class A, B, or C, which corresponds to ASME Class 1, 2, or 3 respectively, under the scope of ISTA, are included in the MNS IST Program. The following defines the criteria for inclusion of equipment in the IST Program:

- a) All Category A valves that fall within the Duke ISI Class A, B, or C boundaries.
- b) All Category B and C valves that fall within the Duke ISI Class A, B, or C boundaries and are required to perform a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of the Design Basis Accidents (Design Basis Accidents are defined as those described in Chapter 15 of the UFSAR).
- c) Valves in systems specifically required by Technical Specifications to be tested per ASME OM Codes.

MNS has some valves that are active in certain non-Design Basis Events, are cold shutdown valves not associated with an UFSAR Chapter 15 event, are significant to plant safety, or are of economic importance that are beyond the scope of 10CFR50.55a. Such valves may be tested in the Supplemental, (10CFR50 Appendix B) Program. See Appendix B of this document for a discussion of this program.

The scope of the OM Standards and Code has not been expanded to include all safety-related pumps and valves in the IST program. Until the scope of 10CFR50.55a is changed, the scope of the IST program will continue to be limited to only those components within the applicable ASME Code class 1, 2, or 3 systems unless otherwise determined by the licensee.

4.2 Valve Testing Program Exemptions and Position Statements

Valves tested under jurisdiction of this program will be tested per requirements of ISTC (OMB-2000), at the specified frequencies unless it has been determined to be impractical. This section of the program document provides MNS positions on interpretations, guidance and other options regarding testing alternatives.

- 4.2.1 Category A and A/C valves (containment and pressure isolation valves) will be leak tested in accordance with ISTC - 3600.
- 4.2.2 Valves that stroke in less than 2 seconds are exempted from reference ranges specified in ISTC – 5100 paragraphs and the maximum limiting stroke time shall be 2 seconds as provided in same paragraphs.
- 4.2.3 Stopwatches used to measure stroke times will be calibrated annually.
- 4.2.4 ISTA – 9230 requires the printed (or typed) name and signature of the person or persons responsible for conducting and analyzing the test. At MNS, the initials of the person or persons responsible for conducting and analyzing the test may be used in place of a printed or typed signature in the record of the tests.

4.2 Valve Testing Program Exemptions and Position Statements (continued)

- 4.2.5 It is the licensee's position that valve testing will be deferred if the normal code required test frequency or plant conditions would result in increased personnel risk or damage to plant equipment. Practicality of such deferral shall be determined by the licensee and documented in the "Justification for Deferral" section of the IST Program manual. In such cases, the licensee will not perform any type of destructive testing to determine the period of time at which damage to the equipment or risk to personnel would occur. Exercising valves on a cold shutdown or refueling outage frequency is not a deviation from the code (reference NUREG-1482, Section 2.4.5).

NOTE: For cold shutdowns less than 48 hours, valve testing does not have to be performed. For cold shutdowns expected to exceed 48 hours, valve testing may commence as soon as possible, but no later than 48 hours after reaching cold shutdown. Valve testing will proceed in a normal manner until all testing is complete or the plant is ready to return to power. A completion of all valve testing is not a prerequisite to return to power. Any testing not completed by the end of one cold shutdown will be performed during subsequent cold shutdowns, starting from the last test performed at the previous cold shutdown.

- 4.2.6 Manual valves that meet the scope requirements of ISTA or are credited in the safety analysis as capable of being repositioned to shut down the plant, to maintain the plant in a safe shutdown condition, or to mitigate the consequences of an accident will be tested in accordance with ISTC-3540. However, 10 CRF 50.55a stipulates that the exercising of such valves should not exceed a two year frequency.
- 4.2.7 Valves that are not categorized as ISI Class A, B, or C need not be included in the IST Program. However, according to GL 89-04, Position 11, "The intent of 10 CFR 50 Appendix A, GDC-1, and Appendix B, Criterion XI, is that all components, such as pumps and valves, necessary for safe operation are to be tested to demonstrate that they will perform satisfactorily in service." The licensee may opt to include valves which do not meet these criteria in the IST Program or in the Supplemental Program. In such cases, MNS will not submit Relief Requests or Justification for Deferrals for "Non-Code"- Class valves.
- 4.2.8 **Thermal Relief Valves** that meet the scope requirements of ISTA or are credited in the safety analysis for being capable of relieving pressure due to thermal expansion in code class 1, 2 and 3 piping systems by maintaining the plant in a safe shutdown condition, or in mitigating the consequences of an accident will be included in the IST program. However, testing of such valves will be based on exercising frequencies established by the component type and requirements of Appendix I.
- 4.2.9. **Thermal Expansion Check Valves** A review of piping configurations inside containment which could result in thermal expansion over pressurization was conducted to insure protection had been provided, if necessary. Thermal expansion results when an incompressible fluid trapped between two closed valves inside containment is heated to post accident containment temperatures and expands. Pressure relief is required to prevent failure of the piping between the valves. Relief for containment penetrations is accomplished by the differential pressure across the check valve in it's flow direction and does not necessarily require opening of the inside containment isolation check valve or a bypass check valve around a motor operated inside containment isolation valve. Containment penetrations equipped with Thermal Expansion Check Valves relieve this pressure back to containment. The amount of opening required to relieve possible over pressurization is small enough such that there is not a credible failure of the check valve in the open direction which would prevent this. These valves will not be tested in the open direction, unless there are other requirements to do so. Accordingly such pressure relief is not considered an Active function.

4.2 Valve Testing Program Exemptions and Position Statements (continued)

4.2.9. Thermal Expansion Check Valves - continued

The following valves are designated as thermal expansion check valves which protect penetrations. The active valves are exercise tested in both directions but the passive valves are not exercise tested. All of these thermal expansion check valves are part of the containment penetration boundary and accordingly are Type C leak rate tested. They are listed in Table 6-112 of the UFSAR.

Active Valves

KC 1(2)KC322, 1(2)KC340
NF 1(2)NF229
NI 1(2)NI436
NV 1(2)NV1002
RF 1RF823, 1RF834
YM 1(2)YM116

Passive Valves

FW 1(2)FW5, 1FW67, 2FW63
KC 1(2)KC47, 1(2)KC279, 1(2)KC280
NB 1(2)NB262
NC 1(2)NC57, 1(2)NC259, 1(2)NC261
NM 1(2)NM420, 1(2)NM421
WL 1(2)WL24, 1(2)WL385

The following valves are also designated as thermal expansion check valves, however these valves are not Type C tested. The open function on some of these valves may be tested, however this is not for thermal relief capability. These valves are also listed in Table 6-112 of the UFSAR.

NC 1(2)NC59, 1NC284
NI 1(2)NI12, 1(2)NI15, 1(2)NI60, 1(2)NI82, 1(2)NI124, 1(2)NI125, 1(2)NI126, 1(2)NI156, 1(2)NI157, 1(2)NI171 1(2)NI175, 1(2)NI180, 1(2)NI354
NM 1(2)NM424, 1(2)NM425, 1(2)NM426, 1(2)NM427
NS 1(2)NS13, 1(2)NS16, 1(2)NS30, 1(2)NS33, 1(2)NS41, 1(2)NS46
NV 1(2)NV12, 1(2)NV14, 1(2)NV15, 1(2)NV20, 1(2)NV22, 1(2)NV29, 1(2)NV31, 1(2)NV45, 1(2)NV47, 1(2)NV61, 1(2)NV63, 1(2)NV77, 1(2)NV79, 1(2)NV96, 1(2)NV810, 1(2)NV811, 1(2)NV812, 1(2)NV813, 1(2)NV841, 1(2)NV1008

4.2.10 **Containment Purge Valves (VPs)**, which are passive in the closed direction, will be leak tested per 10 CFR 50, Appendix J but not stroke-timed for IST purposes. Containment Purge valves are "passive" in Modes 1-4. During a postulated fuel handling accident inside the containment, no credit for containment isolation or mixing in the containment is taken. System design assures a safe release path from the containment with the VP system in operation. The radiological consequences of a postulated fuel handling accident are within the exposure guideline values of 10CFR 100.

4.3 Check Valve Testing

Check valves tested under the jurisdiction of this program will be tested per Code requirements at the specified frequencies unless it has been determined to be impractical. This section of the program document is to provide the MNS positions concerning interpretations, guidance and other options and testing alternatives for check valves in the IST program.

- 4.3.1 Full stroke testing of check valves will not necessarily constitute the obturator contacting the back-stop. Where possible, sufficient flow will be passed through the valve to verify design basis accident flow. If full flow is not practical, then the licensee will perform correlation testing, partial stroking, or other alternatives as provided by ISTC-3500. Additionally, the code allows use of indirect evidence (such as system pressure, flow, temperature, or level) or other positive means to verify flow or pressure requirements. These indirect methods will not be subject to the range and accuracy requirements of ISTC-3800. (ref. ISTC-3530).
- 4.3.2 Seismic boundary check valves will be included in the program.
- 4.3.3 Check valves included in the sample disassembly portion of the IST program will be disassembled and inspected under the provisions and guidelines given in ISTC-5221.
- 4.3.4 Where applicable to the MNS IST program, reverse flow testing of check valves will be performed by methods as follows:
- Pump Discharge Check Valves - verified closed by meeting a parallel pump's acceptance criteria while cross-connected.
 - Appendix J Testing -
 - Measure back flow through the valve using an open vent on the backside of the valve or ultrasonic flow measurement techniques;
 - Pressure drop across a pump;
 - Pump wind-milling;
 - Observation of external indication on valve stem.
- 4.3.5 As an alternative to the testing and/or examination requirements of ISTC-3510, ISTC-3520, ISTC-3540, and ISTC-5221, the Licensee has established a condition monitoring program for check valves. Details of that program may be found in the program document (McGuire Check Valve Condition Monitoring Program) available upon request.
- 4.3.6 The licensee recognizes the NRC's endorsement of non-intrusive techniques (N.I.T.) for testing check valves and will randomly apply N.I.T. to the check valve test program. However, the industry's use of N.I.T. equipment is still evolving and in many cases the test equipment is not supplied from the vendor with the same elements of the Q.A. program as with other types of test equipment utilized for testing safety related components (e.g. software qualifications, calculation validity, engineering correlation, etc.). Because of this, validation of such equipment is the responsibility of the licensee. Therefore N.I.T. remains a voluntary option and will be evaluated on a individual application basis.

4.4 Relief Valve Testing

Relief valves tested under the jurisdiction of this program will be tested per code requirements of Appendix I unless it has been determined to be impractical. A relief valve shall be considered for inclusion in the program if it performs a specific function or if it provides overpressure protection for portions of systems that perform a specific function in shutting down a reactor or in mitigating the consequences of an accident.

4.5 Leak Rate Testing

All category A valves will be tested per ISTC-3600, except those valves which function in the course of plant operation in a manner that demonstrates adequate seat leak-tightness. In such cases (e.g., Containment Purge Isolation Valves) proper administrative controls will be implemented and the valves leak tested during refueling outages.

4.5.1 Category A containment isolation valves will be tested per 10CFR50, Appendix J (Option B) which allows testing interval extension beyond the nominal 30 months for those CIVs with acceptable performance. Where Section 4.1 lists "Option B" for frequency, a nominal frequency of RF (refueling) is specified for valves on penetrations that do not qualify for interval extension of their Appendix J leak rate test. Extension of the testing interval is evaluated prior to each refueling outage based on previous work history and acceptable as-found leak rate test results.

Where a valve is identified as a containment isolation valve in the Technical Specification or FSAR and if it is determined to be an "active" valve with respect to this function, it will be exercised to both the closed and open positions. Containment isolation valves that are maintained closed by a manual valve or administratively controlled valve and thermal expansion check valves opposite to the system process flow direction are typically not active.

4.6 Testing from Remote Location

ISTC-3700 requires valves with remote position indication to be tested at least once every 2 years to verify that the valve operation is accurately indicated. Valves that have remote operating switches and/or power supplies will be tested and verified for proper indication from the remote location. Other valve operating parameters (such as timing) may not be performed from the remote location during this testing.

4.7 Post Maintenance and Modification Testing (Retest)

Reference Nuclear System Directive 408 Testing.

4.8 Fail-Safe Testing of Valves

All fail-safe valves will be tested in accordance with ISTC-3560. Valves used only for system control, are typically excluded from testing in the IST program. However, if a control valve must change position to support a safety-related function and it has a fail-safe position, then it will be included in the program and tested to verify the ability to perform that function with power and/or air removed (or simulated power and/or air removal).

4.9 Skid-Mounted Valves

As specified in ISTC-1200, skid-mounted valves will be excluded from the scope of IST test requirements provided they are adequately tested as part of the 'major' component. The licensee however, may opt to include certain components contained on these skids in the IST program for testing and trending purposes. In such cases, any program changes, exceptions, exemptions, or deferrals will not be submitted to the NRC for approval, but may be documented in the program plan. FD, KD, VG and most of the LD system valves have been excluded from the scope of IST test requirements because they are all skid-mounted valves. They are included in the Supplemental Test Program.

4.10 Valve Test Acceptance Criteria

All valve test acceptance criteria (IST-TAC) will be developed in accordance with the provisions specified in ISTC-3300 and ISTC-5100. Where IST-TAC other than that required by code is established for a given valve (e.g., additional N.I.T. diagnostics or GL 96-05 testing), the documentation of that criteria will be at the discretion of the licensee and not required to be part of the test record. IST-TAC should not be confused with the acceptance criteria specified in UFSAR, DBD associated TAC Sheets, or Technical Specifications (such acceptance criteria is often the most limiting values that can not be exceeded). IST-TAC are set to verify operational readiness of the valves and to identify valve degradation before the 'most limiting' acceptance criteria is exceeded. Valve IST-TAC will be evaluated to verify that other acceptance criteria specified (UFSAR, DBD, Tech. Specifications, etc.) will not be exceeded.

Leakage criteria for valves (other than those tested in accordance to 10CFR50, Appendix J, Technical Specifications, or system specific criteria) will be determined based on leakage rates specified by the licensee or using the guidance provided in ISTC3630.

Relief Valve IST-TAC will be established per Appendix I or developed using Licensee calculations as permitted per OM Code.

4.10.1 Valve Stroke-Time Acceptance Criteria:

The following cases present the options available for determining valve operability based on stroke time:

- CASE 1 : The valve strokes within its acceptable stroke time. The valve is considered operable.
- CASE 2 : The valve fails to change position on the first try or exceeds the LIMITING VALUE. This valve shall be immediately declared inoperable.
- CASE 3 : The valve fails to meet the acceptance stroke time, but strokes in less than the LIMITING-VALUE. Per ISTC-5100, the valve shall be either declared inoperable or immediately stroked again to achieve an acceptable stroke time. Per the McGuire valve testing program:
- a. If the valve successfully strokes on the second stroke, the valve is considered operable. The cause of the initial deviation shall be analyzed and the results documented in the test procedure. A third valve stroke may be performed to demonstrate consistent valve operation.
 - b. If the valve does not fall within the acceptable range on the second stroke, then the valve will be analyzed within 96 hours OR declared inoperable (if applicable). An evaluation must be performed to determine the root cause of the failed test. The evaluation may determine that either corrective maintenance must be performed on the valve or the new stroke data is acceptable and new baselines must be established. Such results must be documented in the test procedure.
 - c. In the event the initial stroke and the second test results are inconsistent, but the engineering evaluation shows the new stroke-time is acceptable, a third test may be performed to verify consistent behavior. Documentation of the third test will be optional if it shows no deviation from the second stroke.

4.10.2 Valve Stroke-Time Measurements and Methods:

McGuire normally uses the OAC for stroke-timing. However, valve stroke-times may be measured with a stopwatch. The stopwatch is started when the valve is actuated and it is stopped when the testing coordinator has determined the proper signal is received indicating the valve has completed the full stroke.

4.10.3 Limiting-Value Stroke-Time Acceptance Criteria:

Limiting-Values for stroke-times will be established in accordance with guidance given in Generic Letter 89-04, Position 5. It is the position of the licensee that these values will be determined as follows (with the limitations of Tech. Specs. and Safety Analysis limits being the most limiting):

<u>Valve Type</u>	<u>Limiting Value Calculation</u>
EMO (> 10secs.)	1.3R (up to the nearest 5sec. increment)
EMO (\leq 10secs.)	1.5R (up to the nearest 5sec. increment)
AOV (> 10secs.)	2.0R (up to the nearest 5sec. increment)
AOV (\leq 10secs.)	2.25R (up to the nearest 5sec.increment)

Note: Where 'R' represents the valve reference value at acceptable operation.

5.0 PUMP PROGRAM

5.1 In-Service Testing (IST) Program

As required by 10CFR50.55a certain pumps that are classified in accordance of NRC Regulatory Guide 1.26 as ISI Class A, B, or C, which corresponds to ASME Class 1, 2, or 3 respectively, under the scope of ISTA, are included in the IST Program. The following defines the criteria for inclusion of equipment in the IST Program:

- a) Pumps in systems specifically required by Technical Specifications to be tested per ASME OM Code ISTB.
- b) All pumps that fall within the Duke ISI Class A, B, or C boundaries that are required to perform a specific function in shutting down a reactor to the safe shutdown condition, in maintaining the safe shutdown condition, or in mitigating the consequences of the Design Basis Accidents (Design Basis Accidents are defined as those described in Chapter 15 of the UFSAR).

5.2 Pump Testing Program Exemptions and Position Statements

Pumps tested under the jurisdiction of this program will be tested per code requirements of ISTB at the specified frequencies unless it has been determined to be impractical. The purpose of this section of the program document is to provide MNS positions on interpretations, guidance and other options regarding testing alternatives.

- 5.2.1 ISTA-9230 requires the signature of the person or persons responsible for conducting and analyzing the test. The dated initials of the person or persons responsible for conducting and analyzing the test may be used in place of a signature in the record of the tests.
- 5.2.2 Pumps whose only safety function is predicated on plant shutdown and recovery from a fire per commitments made as a result of 10CFR50, Appendix R are not required to be included in the IST Program. The licensee will test these in accordance with Appendix R requirements.
- 5.2.3 Pumps that are not provided with an emergency source of power will not be required to meet IST requirements. The licensee however, may elect to include these pumps in the IST program for testing purpose only.

5.3 Vibration Monitoring

Pump vibrations monitored under the jurisdiction of this program will be performed per code requirements at the specified frequencies unless it has been determined to be impractical or a specific deviation from code is needed.

5.4 Testing required from Remote Locations (Not Applicable to McGuire Nuclear Station)

5.5 Post Maintenance and Modification Testing (Retest) Reference Nuclear System Directive: 408 Testing.

5.6 Skid-Mounted Pumps

As specified in ISTB-1200, skid-mounted pumps will be excluded from the scope of IST requirements provided they are adequately tested as part of the 'major' component. The licensee however, may opt to include certain components contained on these skids in the IST program for testing and trending purposes. In such cases, any program changes, exceptions, exemptions, or deferrals will not be submitted to the NRC for approval, but may be documented in the program plan.

5.7 Pump Test Acceptance Criteria

All pump test acceptance criteria (IST-TAC) will be developed in accordance with the provisions specified in ISTB. The applicable acceptance criteria will be developed when the pump is known to be performing in a satisfactory manner. Where IST-TAC other than that required by code is established for a given pump (i.e., pump curves), the documentation of that criteria will be at the discretion of the licensee and may not be part of the test record.

'IST-TAC' may not be the same acceptance criteria specified in DBDs, DBD associated TAC Sheets, Technical Specifications, or UFSAR. IST-TAC are set to verify operational readiness of the pumps and to identify pump degradation before the 'most limiting' acceptance criteria are exceeded. Pump IST-TAC will be evaluated to verify that other acceptance criteria specified (DBDs, DBD TAC Sheets, Tech. Specs., or UFSAR) will not be exceeded.

6.0 RELIEF REQUESTS

The purpose of a Relief Request is to submit a request for NRC review and approval of alternative testing to those requirements of the Code that cannot be followed. If the testing on the component can not be performed due to plant configuration, plant safety, equipment limitations, type, or hazards to personnel, relief from the code will be requested. Submitted relief requests will:

- 1) Give an alternative method that ensures an acceptable level of quality and safety.
- 2) Explain the hardship with meeting the code requirement.
- 3) Provide a schedule or alternative test frequency (or duration for interim Relief Request).

At the end of each 'Ten Year Interval', all Relief Request will be reviewed for next interval applicability. In cases where a "Specific Relief" was previously submitted to the NRC and approval granted, but the conditions and provisions do not change (i.e. no code change or modification to equipment or system) to eliminate the relief, the relief will continue to be applicable the next interval. Relief Requests will not be written for any non-Code Class components that are included in the IST Program at the licensee's discretion.

6.1 Implementing Relief Requests:

When a Relief Requests is submitted for those requirements which have been determined to be clearly impractical, the licensee may implement the proposed alternative testing while the NRC is reviewing the Relief Request, provided the alternative does not compromise the level of safety provided by the code testing requirement (reference from NUREG-1482, section 2.5).

6.2 Interim Relief Requests:

When a Relief Request is required on an interim basis, the licensee will submit the relief for review, but as with section 6.1, may implement the relief while the NRC is reviewing the request. Updates to schedules or impacts to modification implementation of the component with interim relief will be communicated to the NRC as the program is updated. Interim Relief Requests shall be withdrawn when the licensee no longer requires them.

7.0 JUSTIFICATIONS FOR DEFERRALS:

Justification for Deferrals (JFDs) will be written when a component can not be tested at the specified code frequency. This could be due to an impracticality of testing the component at power or due to plant safety concerns introduced by the testing configuration. The basis for determining the impracticality of testing at power and expanding the component's testing frequency to a Cold Shutdown or Refueling Outage frequency is documented in the Justification for Deferral.

In-Service Testing to be performed at Cold Shutdown shall:

- a) be performed during each cold shutdown when the planned length is of sufficient duration to establish the necessary test conditions and to perform the test, and
- b) be performed as to not impact the timely completion of the shutdown related activities and subsequent return to operation. For shutdowns when the planned length is not of sufficient duration to complete all tests, testing will start within 48 hours of reaching cold shutdown conditions, or
- c) be performed at the next available cold shutdown consistent with the above criteria if an opportunity to test the valve is not available. Completion of the IST is not a prerequisite to return to operation.

Any testing required to be performed during a refueling outage shall be completed prior to plant operation. Components tested during start-up will not delay start-up if the site Technical Specifications allow start-up with the component out of service or inoperable. Retest and corrective actions shall be performed at the first available opportunity.

7.1 Testing Deferral Justifications:

- 7.1.1 Purpose: The purpose of the Justification for Deferral form is to document the reason a pump or valve can only be tested at cold shutdown or at refueling outage.

Valid reasons could be plant configuration for testing which would jeopardize the safety of plant operation, access to the component which would be against ALARA, access to the component due to the environmental conditions endangering personnel safety, plant configuration for testing would require the plant to be in a mode not suitable for power production, or testing renders systems inoperable for extended periods of time. It is not the intent of IST to cause unwarranted plant shutdowns or to unnecessarily challenge other safety systems.

Note: The Justification of Deferral Form is found in Enclosure 9.3.

8.0 APPENDICES

Appendix A: IST PROGRAM RESPONSIBILITIES

1.0 SITE IST ENGINEER

The IST Engineer position will be filled by a qualified individual knowledgeable of plant system operation. He/she ensures the site is in compliance by its performance testing and trending methods. The IST Engineer will accomplish this by maintaining consistency among the System Engineers and overall program management.

The IST Engineer may publish an overall summary (as an annual summary), on the current status of the site performance monitoring of the valves and pumps tested under the requirements of the IST or 10CFR50, Appendix B program.

The IST Engineer will be responsible for:

- notifying Regulatory Compliance of any changes to the Valve and Pump Testing Program described in this document, including changes to the data sheet information,
- updating and maintaining the IST Database,
- ensure all IST-TAC is accurate and not in conflict with other specified TAC,
- coordinating and implementing the program update and renewal per 10CFR50 every 10 years.

2.0 Three-Site IST Coordinator

The Three-Site IST Coordinator will be an individual responsible for overall corporate IST program management. He/she ensures corporate strategies for the IST Program align with industry and regulatory standards. This individual is knowledgeable of each site's IST programs including program administration and will be responsible for ensuring each site is in compliance with the applicable ASME Codes and IST guidelines (ISTA, ISTB, ISTD, NRC Generic Letters, and NUREG-1482 etc.).

The Three-Site IST Coordinator is the technical consultant on any Code-related issues that require interpretation or involve Operability determinations (at the discretion of the IST Engineer and site management). The Three-Site IST Coordinator will provide support for internal and external IST program audits.

The Three-Site IST Coordinator is the Single Point of Contact on any issues that involve site-site interaction. The Three-Site IST Coordinator is responsible for ensuring consistency where practical.

The Three-Site IST Coordinator will represent Duke Power's interest for Code development.

Appendix A: IST PROGRAM RESPONSIBILITIES (Continued)

2.0 Three-Site IST Coordinator - Continued

The Three-Site IST Coordinator is responsible for assisting with review and updating the IST program per 10CFR50 each 10-year interval. He/she will assist the sites in preparing, submitting, and reviewing interim revisions to the IST program. The Three-Site IST Coordinator will assist the site IST Engineer in developing position statements, Relief Requests, and Justification for Deferrals. He/she will perform periodic reviews of site Relief Requests and/or Justification for Deferrals for consistency and compliance.

The Three-Site IST Coordinator will see that progress addressing technical issues will be made by the IST Working Group (ISTWG). This includes defining appropriate tasks, tracking action items, conducting periodic meetings, interface with the appropriate BEST contacts, and maintaining overall group focus.

3.0 SITE ENGINEERING (MCE)

Site Engineering is responsible for the components within their systems which are in the program. If the status of a component changes, Site Engineering is responsible for initiating the required changes to the program (see Appendix C).

Site Engineering is responsible for the following:

- ensuring the accuracy of IST dataset information,
- defining test acceptance criteria (TAC),
- ensuring code testing requirements are met,
- documenting reasons for scope or code deviation,
- providing tech. assistance for developing test procedures,
- complete valve and pump data sheets for program revisions,
- notifying the IST Engineer of maintenance that could affect the baseline data for any IST component,
- overall administration of the relief valve testing program (Appendix I),
- administrating the check valve sample disassembly program, provide input when evaluating specific component issues (why failed test, baseline changed, etc.).

4.0 OPERATIONS TEST GROUP (OTG)

This group is responsible for the following:

- input data into procedure and IST Administrator,
- performing tests,
- accurately recording and notifying Site Engineering of any testing problems,
- initiating a PIP when a test is failed or a problem is encountered,
- documenting test discrepancies on the procedure.

5.0 OPERATIONS PROCEDURE GROUP

This group is responsible for the following:

- updating and maintaining all IST procedures,
- verifying all technical changes with the IST Engineer.

Appendix B:

McGUIRE NUCLEAR STATION 10CFR50, Appendix B, Supplemental Program Guidance Document

1.0 SCOPE

The Appendix B Program establishes requirements for test programs that monitor plant structures, systems, and components. The Appendix B program assures testing shall be performed in accordance with approved written test procedures that incorporate the requirements and acceptance limits contained in applicable design documents. This program shall include the following:

- Periodic test during plant operation of structures, systems, and components.
- Trending of test parameters at owner specified frequencies.

Test procedures shall include provisions for assuring that all prerequisites and acceptance criteria for the given test have been met. In addition, adequate test instrumentation shall be used and testing performed under suitable environmental conditions (as per 10 CFR 50, App B).

Test frequencies will be as specified in the ASME OM Code unless otherwise documented in Section 6.0, "APPENDIX B PROGRAM POSITIONS/EXCEPTIONS."

Deviations from 'guidelines' will be documented in Section 6.0, "APPENDIX B PROGRAM POSITIONS/EXCEPTIONS."

2.0 PUMP AND VALVE TEST SELECTION CRITERIA

The pumps and valves in this program shall be limited to those pumps and valves not covered in the scope of ASME OM Code.

3.0 PROGRAM ELEMENTS

Pump and Valve Selection - This task involves identifying all components that fall within the scope of 10 CFR Part 50, Appendix B scope.

Testing Support - Develop acceptance criteria, necessary test procedures, and establish the correct frequencies for performing operational tests.

Demonstrate Operability - Perform base-line testing (if applicable) of components to ensure functionality of the component and to obtain data for future surveillance activities.

Documentation and Trending -

- Establish documentation and trending system for all Appendix B components.
- Establish monitoring system for periodic surveillance testing and performance parameters.
- Establish feedback mechanism to ensure that results and failures influence the frequency and extent of future testing.

Appendix B: 10CFR50, Program Guidance Document - Continued

4.0 PROGRAM ORGANIZATION AND RESPONSIBILITIES

Three-Site IST Coordinator - This is the individual responsible for the following:

- General direction for program elements.
- Program oversight and liaison.
- Assistance in site program implementation.
- Industry, regulatory, and corporate interface.
- Assist stations in resolving generic issues.
- Provide lead, coordinate and/or interface with other groups to ensure consistent implementation.

Site IST/Engineering Contact - This is the site engineering support responsible for the following:

- Pump and Valve Selection.
- Categorizing for analysis and testing.
- Resolution of operability concerns.
- Station modifications which affect components in the Appendix B program.
- Operability testing of components.
- Maintaining Appendix B engineering documents in an auditable format and condition.
- Maintain working procedures, guidelines, and other documents.
- Final review and trending of component test data and acceptance criteria.
- Implement test program changes in response to any corporate and industry direction.

Appendix B: 10CFR50, Program Guidance Document - Continued

5.0 DEFINITIONS

active: a valve that must perform a mechanical motion during the course of accomplishing a system safety function.

passive: a valve that does not perform a mechanical motion during the course of accomplishing system safety function.

safety-related: required to mitigate the consequences of an accident, shutdown, or maintain shutdown of the reactor.

component: an item in a nuclear power plant such as a vessel, pump, valve, or piping system.

cold shutdown: (see plant technical specifications).

engineering evaluation: an evaluation of indications that exceed allowable acceptance standards to determine if the margins required by the design specifications and construction code are maintained.

exercising (of a valve): the demonstration based on direct or indirect visual or other positive indication that the moving parts function satisfactorily.

full-stroke time: that time interval from initiation of the actuation signal to the end of the actuation cycle.

test: a procedure to obtain information (through measurement or observation) to determine the operational readiness of a component or system while under controlled conditions.

hot standby: (see plant technical specifications).

operational readiness: the ability of a component or system to perform its intended function when required.

owner: the organization legally responsible for the operation, maintenance, safety, and power generation of the nuclear power plant.

normal plant operating conditions: the operating conditions during reactor startup, operation at power, hot standby, and reactor shutdown conditions. (Note: test conditions are excluded).

obturator: valve closure member (disk, gate, plug, ball, etc.)

reference values: one or more values of test parameters measured or determined when the equipment is known to be operating acceptably.

Appendix B: 10CFR50, Program Guidance Document - Continued

6.0 APPENDIX B PROGRAM POSITIONS/EXCEPTIONS

- 6.1 The MNS 10CFR50, Appendix B Program may be administered using the ASME IST Code as guidance for testing and trending.
- 6.2 Relief Requests and Justification for Deferrals will not be submitted for Appendix B components.
- 6.3 Per McGuire's GL 89-04 response, 10 CFR 50, Appendix B manual valves are only stroked at a refueling frequency.
- 6.4 Deviations from standard test practices will be allowed only if substantiated in writing per the methods outlined in approved site directives and procedures.

Appendix C: NOTIFICATION OF PROGRAM CHANGES

The System Engineer shall initiate program changes as changes are made to the respective system, DBDs, or active/passive valve calculations. Notification of external customers (e.g. Regulatory Compliance Group) of such changes to the program will occur by issuing the appropriate administrative mechanism (i.e. PIP, Minor Modification Request, etc.).

To ensure Code compliance for the MNS Pump and Valve Testing Program, the IST Engineer should be notified of any of the following changes:

- changing the active/passive status of a component,
- changing the leakage requirements of the component,
- changing the piping classification of the component (Duke Class and ISI Class),
- something changes with how the component may be tested,
- a commitment is made or changed for testing or operation of a component,
- taking credit for a new function, flow path, etc.,
- a modification to the component is planned which can/will significantly affect the components baseline TAC.

9.0 ENCLOSURES:

Enclosure 9.1 (RESERVED FOR "REVISING THE PROGRAM DOCUMENT")

- Revision 1 (4/27/01): Changed thermal expansion check valve "1(2)NI165" to "1(2)NI-171" in section 4.2.9 to be consistent with the other Loop A check valve 1(2)NI60 which is listed for overpressure protection from thermal expansion of penetration 1(2)M-352. (Reference PIP M-00-1870 CA#2).
Revised the format under section 4.3.7.
Pages 1, 8, 9 and 24 revised.
- Revision 2 (8/1/01): Added ASME OM Code - 1995, Subsections ISTC and Appendix II to Applicable Codes
Added 1995 Code and Information Notice 97-16 to Non-Mandatory References
Revised description of containment penetration thermal expansion check valve opening requirements and reclassified that as a non-active function in section 4.2.9.
Added section 4.3.8 to describe Check Valve Condition Monitoring Program
Revised description of non-intrusive testing in section 4.3.9.
Revised description of section 4.9 Skid Mounted Valves to incorporate adoption of position by ASME Omb-1977
Deleted header 4.10.4 for future revision "Engineering Evaluations"
Deleted header 5.3 for future revision "Miniflow and Full Flow Pump Testing"
Revised description of section 5.6 Skid Mounted Pumps to incorporate adoption of position by ASME Omb-1977
Deleted header for future revision "Pump Hydraulic Acceptance Criteria"
Deleted Enclosure 9.7 "Summary of IST Program Submittal Changes"
- Revision 3 (3/1/04): Updated all several references to OM Code – 1998 (including Omb-2000 Addenda).
Added ISTA references to several sections.
Updated program period to third ten-year interval,
Revised section 4.3.5 which describes the Check Valve Condition Monitoring Program.
Revised description of section 4.9 Skid Mounted Valves to incorporate adoption of position by ASME Omb-2000.
Revised description of section 5.6 Skid Mounted Pumps to incorporate adoption of position by ASME Omb-2000.
Revised list of thermal expansion check valves in section 4.2.9 to separate active and passive classification,
Revised section 4.6.1 to include discussion of 10CFR50 Appendix J Option B,
Revised sections of 4.3 that exempted reverse flow testing for applicable check valves.
Updated Appendix A to reflect recent organization changes.

Generic Relief Request

Item Number:

Component Number (s):

Flow Diagram (s):

Function (s):

ISI Class/Duke Class:

Code Category:

Test Requirement (s):

Basis for Relief:

Code Alternative:

Justification for Deferral

Item Number:

Component Number (s):

Flow Diagram (s):

Code Category:

ASME Class:

Function (s):

Test Requirement:

Basis for Deferral:

Test Alternative & Frequency:

Specific Relief Request

Item Number:

Component Number (s):

Flow Diagram (s):

Function:

ASME Class:

Code Category:

Test Requirement:

Basis for Relief:

Alternate Testing:

Enclosure 9.5

System Piping Classification Correlation

<u>Duke System Piping Classification</u>	<u>(1) Safety Related</u>	<u>NRC Quality Group</u>	<u>Duke QA Condition</u>	<u>ANSI Safety Class</u>	<u>Code Des. Criteria (6)</u>	<u>Seismic Pressure Boundary Integrity</u>	<u>Seismic Category</u>	<u>Normally Contains Radioactive Material</u>
A	YES	A	1	1	Class 1, ASME Sect. III	YES	SC-1	YES
B	YES	B	1	2	Class 2, ASME Sect. III	YES	SC-1	YES
C	YES	C	1	3	Class 3, ASME Sect. III	YES	SC-1	YES
E	NO	D(3)	2(4)	NNS(2)	ANSI B31.1.0	NO	N/A	YES
F	YES	-	(4)	NNS(2)	ANSI B31.1.0	YES	SC-1	NO
G	NO	-	-(4)	-	ANSI B31.1.0	NO	N/A	NO
H	NO	-	-(4)	-	Duke Power Spec.	NO	N/A	NO
H (HVAC)	YES	-	-(6)	-	Duke Power Spec	YES	SC-1	NO

NOTES:

- (1) Safety Related as used herein is in accordance with 10CFR50 Appendix A General Design Criteria for Nuclear Power Plants and is applicable to function only; i.e., structures, systems, and components required to function such that the facility can be operated without undue risk to the health and safety of the public are safety related.
- (2) NNS = Non-Nuclear Safety
- (3) Class E piping is equivalent to NRC Quality Group D; i.e., the system is designed to normally carry a radioactive fluid; however, is considered NNS as a component failure would not result in a calculated potential exposure in excess of the limits established by 10 CFR PART 20.
- (4) Class E, G, and H piping systems may also be assigned QA Condition 3 and/or 4 to denote additional requirements for fire protection of safety related components and/ or seismic structural integrity (except pressure boundary) to preclude adverse interactions with safety related structures, systems and components, respectively; refer to Duke Nuclear Guide 1.29.
- (5) Code and Standards Applicability: Duke Power establishes an "effective code date" in accordance with 10CFR50, par. 50.55a for McGuire Nuclear Station. Due to the numerous code and standards references applicable to each station, no attempt is made to specifically identify these references as they are amended, superseded, or substituted. Duke reviews and complies with all or portions of the latest versions of the above Codes and Standards unless materials and/ or design commitments have progressed to a stage that it is not practical to make a change. When only portions of addenda to Codes and Standards are utilized, the appropriate engineering review of the entire agenda assures that the overall intent of the Code Standard is still maintained.
- (6) HVAC Duct Systems may be constructed of either sheet metal or piping materials depending upon the design function and requirements. Non-Safety Related HVAC may be assigned QA Condition 4, SC-11 Support Restraints to preclude adverse interactions with safety related structures, systems, and components. Refer to Duke Nuclear Guide 1.29.
- (7) Seismic Category II hangers may be use on Class E, G, or H piping systems when pressure boundary integrity is not required. See Duke Guide 1.29.

TABLE OF ABBREVIATIONS

<u>Duke System Valve Class</u>	<u>Code Design Criteria</u>	<u>Designed for Seismic Loading</u>	<u>ANS Safety Class</u>
A	Class 1, ASME Section III, 1971	Yes	1
B	Class 2, ASME Section III, 1971	Yes	2
C	Class 3, ASME Section III, 1971	Yes	3
D	Class 2, ASME Section III, 1971	No	2
E	ANSI B31.1.0 (1967)	No	NNS
F	ANSI B31.1.0 (1967)	Yes	NNS
G	ANSI B31.1.0 (1967)	No	--
H	Duke Power Company Specification	No	--

NNS=Non-Nuclear Safety

Numbering Sequence for Relief Request and Justification For Deferral

Examples:

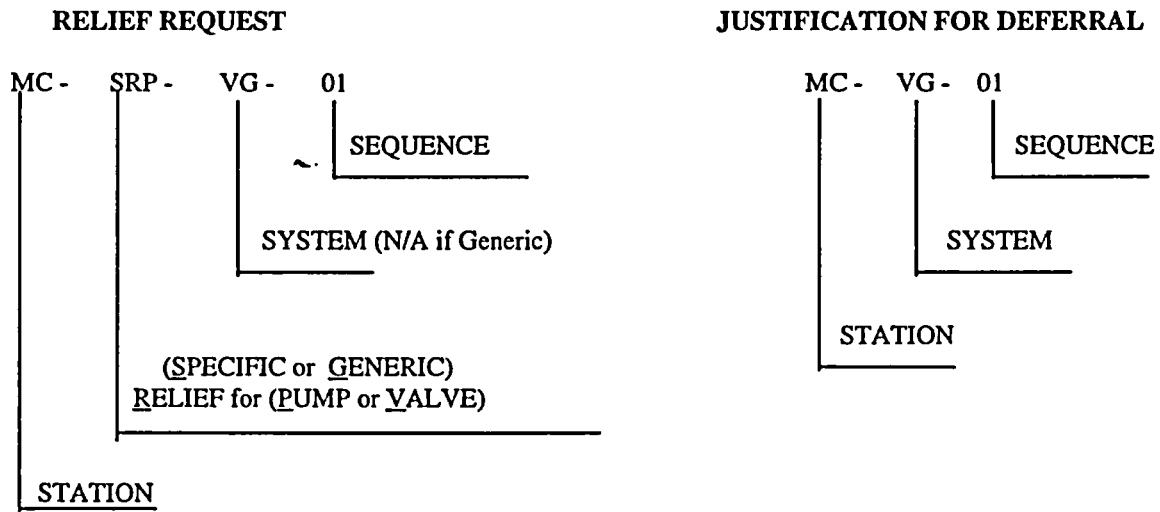


TABLE OF ABBREVIATIONS

PUMP TYPE	Description
CT	Centrifugal
VLS	Vertical Line Shaft

VALVE TYPE	Description
BF	Butterfly
CK	Check
DP	Diaphragm
GA	Gate
GL	Globe
LC	Lift Check
PR	Press Regulated
RV	Relief
ST	Stop Check
SV	Solenoid
SW	Swing Check
VB	Vacuum Breaker
WC	Wafer Check
3W	Threeway

ACTUATOR DESIGN	Description
AO	Air Operated
MA	Manual
ML	Motor Limitorque
MR	Motor Rotork
SA	Self Actuated
SO	Solenoid

**ISTB PUMP
CATEGORIES**

Description

Group A
Group B

Operated normally or for refueling operations
Standby normally or operated for testing only

**ISTC VALVE
CATEGORIES**

Description

Category A
Category B
Category C

Leakage is Critical
Leakage is NOT Critical
Self Actuating (Checks, Reliefs, Etc.,)

DUKE POWER
McGUIRE NUCLEAR STATION

Pump Inservice Testing Program

SECTION 3.0

Revision 27
March 1, 2004

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
CA - Auxiliary Feedwater								
1CAPU0001	Motor Driven Auxiliary Feedwater Pump 1A	MC-1592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1CAPU0002	Motor Driven Auxiliary Feedwater Pump 1B	MC-1592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1CAPU0003	Turbine Driven Auxiliary Feedwater Pump #1	MC-1592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2CAPU0001	Motor Driven Auxiliary Feedwater Pump 2A	MC-2592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2CAPU0002	Motor Driven Auxiliary Feedwater Pump 2B	MC-2592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2CAPU0003	Turbine Driven Auxiliary Feedwater Pump #2	MC-2592-1.1	B	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
KC - Component Cooling								
1KCPU0001	Component Cooling Water Pump 1A1	MC-1573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1KCPU0002	Component Cooling Water Pump 1A2	MC-1573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1KCPU0003	Component Cooling Water Pump 1B1	MC-1573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1KCPU0004	Component Cooling Water Pump 1B2	MC-1573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2KCPU0001	Component Cooling Water Pump 2A1	MC-2573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2KCPU0002	Component Cooling Water Pump 2A2	MC-2573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2KCPU0003	Component Cooling Water Pump 2B1	MC-2573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2KCPU0004	Component Cooling Water Pump 2B2	MC-2573-1.0	A	CT	3	Flow/Differential Pressure Test	Q	MC-SRP-KC-01
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
ND-Residual Heat Removal and Low Head Safety Injection								
1NDPU0001	Residual Heat Removal Pump 1A	MC-1561-1.0	A	VLS	2	Flow/Differential Pressure Test	Q	MC-SRP-ND-01
						Vibration Test	Q	MC-GRP-01,MC-SRP-ND-01
						Comprehensive Test	2Y	None
1NDPU0002	Residual Heat Removal Pump 1B	MC-1561-1.0	A	VLS	2	Flow/Differential Pressure Test	Q	MC-SRP-ND-01
						Vibration Test	Q	MC-GRP-01,MC-SRP-ND-01
						Comprehensive Test	2Y	None
2NDPU0001	Residual Heat Removal Pump 2A	MC-2561-1.0	A	VLS	2	Flow/Differential Pressure Test	Q	MC-SRP-ND-01
						Vibration Test	Q	MC-GRP-01,MC-SRP-ND-01
						Comprehensive Test	2Y	None
2NDPU0002	Residual Heat Removal Pump 2B	MC-2561-1.0	A	VLS	2	Flow/Differential Pressure Test	Q	MC-SRP-ND-01
						Vibration Test	Q	MC-GRP-01,MC-SRP-ND-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
NI-Medium Head Safety Injection								
1NIPU0009	Safety Injection Pump 1A	MC-1562-3.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1NIPU0010	Safety Injection Pump 1B	MC-1562-3.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NIPU0009	Safety Injection Pump 2A	MC-2562-3.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NIPU0010	Safety Injection Pump 2B	MC-2562-3.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
NS - Containment Spray								
1NSPU0001	Containment Spray Pump 1A	MC-1563-1.0	B	VLS	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	MC-SRP-NS-01
1NSPU0002	Containment Spray Pump 1B	MC-1563-1.0	B	VLS	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	MC-SRP-NS-01
2NSPU0001	Containment Spray Pump 2A	MC-2563-1.0	B	VLS	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	MC-SRP-NS-01
2NSPU0002	Containment Spray Pump 2B	MC-2563-1.0	B	VLS	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	MC-SRP-NS-01

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
NV - Chemical & Volume Control								
1NVPU0015	Centrifugal Charging Pump 1A	MC-1554-1.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1NVPU0016	Centrifugal Charging Pump 1B	MC-1554-1.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1NVPU0027	Boric Acid Transfer Pump 1A	MC-1554-5.0	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1NVPU0028	Boric Acid Transfer Pump 1B	MC-1554-5.0	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NVPU0015	Centrifugal Charging Pump 2A	MC-2554-1.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NVPU0016	Centrifugal Charging Pump 2B	MC-2554-1.0	A	CT	2	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NVPU0027	Boric Acid Transfer Pump 2A	MC-2554-5.0	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2NVPU0028	Boric Acid Transfer Pump 2B	MC-2554-5.0	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
RN - Nuclear Service Water								
1RNPU0003	Nuclear Service Water Pump 1A	MC-1574-1.1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1RNPU0004	Nuclear Service Water Pump 1B	MC-1574-1.1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2RNPU0003	Nuclear Service Water Pump 2A	MC-2574-1.1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
2RNPU0004	Nuclear Service Water Pump 2B	MC-2574-1.1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
WN - Diesel Generator Room Sump Pump								
1WNPU0094	Diesel Generator Sump Pump 1A2	MC-1609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
1WNPU0095	Diesel Generator Sump Pump 1B2	MC-1609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
1WNPU0096	Diesel Generator Sump Pump 1A3	MC-1609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
1WNPU0097	Diesel Generator Sump Pump 1B3	MC-1609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
2WNPU0094	Diesel Generator Sump Pump 2A2	MC-2609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
2WNPU0095	Diesel Generator Sump Pump 2B2	MC-2609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
2WNPU0096	Diesel Generator Sump Pump 2A3	MC-2609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None
2WNPU0097	Diesel Generator Sump Pump 2B3	MC-2609-7.0	B	VLS	3	Flow/Differential Pressure Test	2Y	None
						Vibration Test	2Y	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
WZ - Groundwater Monitoring and Sump								
1WZPU0001	Groundwater Drainage Sump A Pump A	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1WZPU0002	Groundwater Drainage Sump A Pump B	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1WZPU0003	Groundwater Drainage Sump B Pump A	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1WZPU0004	Groundwater Drainage Sump B Pump B	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1WZPU0005	Groundwater Drainage Sump C Pump A	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
1WZPU0006	Groundwater Drainage Sump C Pump B	MC-1581-1.0	A	VLS	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
YC - Control Area Chilled Water								
OYCPU001	Control Area Chilled Water Pump Train A	MC-1618-1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None
OYCPU002	Control Area Chilled Water Pump Train B	MC-1618-1	A	CT	3	Flow/Differential Pressure Test	Q	None
						Vibration Test	Q	MC-GRP-01
						Comprehensive Test	2Y	None

DUKE POWER
McGUIRE NUCLEAR STATION

Valve Inservice Testing Program

SECTION 4.0

Revision 27
March 1, 2004

MCGUIRE NUCLEAR STATION

BB - STEAM GENERATOR BLOWDOWN RECYCLE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1BB-1B	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-1B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-1B - Position Indicator (Open and Closed)	Tested once every two years
1BB-2B	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-2B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-2B - Position Indicator (Open and Closed)	Tested once every two years
1BB-3B	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-3B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-3B - Position Indicator (Open and Closed)	Tested once every two years
1BB-4B	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-4B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-4B - Position Indicator (Open and Closed)	Tested once every two years
1BB-5A	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-5A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-5A - Position Indicator (Open and Closed)	Tested once every two years
1BB-6A	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-6A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-6A - Position Indicator (Open and Closed)	Tested once every two years
1BB-7A	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-7A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-7A - Position Indicator (Open and Closed)	Tested once every two years
1BB-8A	MCFD-1580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	1BB-8A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1BB-8A - Position Indicator (Open and Closed)	Tested once every two years
2BB-1B	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-1B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-1B - Position Indicator (Open and Closed)	Tested once every two years
2BB-2B	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-2B - Stroke Time (Opn to Cls)	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

BB - STEAM GENERATOR BLOWDOWN RECYCLE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2BB-2B - Position Indicator (Open and Closed)	Tested once every two years
2BB-3B	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-3B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-3B - Position Indicator (Open and Closed)	Tested once every two years
2BB-4B	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-4B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-4B - Position Indicator (Open and Closed)	Tested once every two years
2BB-5A	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-5A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-5A - Position Indicator (Open and Closed)	Tested once every two years
2BB-6A	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-6A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-6A - Position Indicator (Open and Closed)	Tested once every two years
2BB-7A	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-7A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-7A - Position Indicator (Open and Closed)	Tested once every two years
2BB-8A	MCFD-2580-01.00	AO	Category B	GA	Yes	2		MC-BB-01	2BB-8A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2BB-8A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CA-7AC	MCFD-1592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	1CA-7AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CA-7AC - Position Indicator (Open and Closed)	Tested once every two years
1CA-8	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-8 - Full Stroke (Both)	Condition Monitoring
1CA-9B	MCFD-1592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	1CA-9B - Position Indicator (Open and Closed)	Tested once every two years
									1CA-9B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1CA-10	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-10 - Full Stroke (Both)	Condition Monitoring
1CA-11A	MCFD-1592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	1CA-11A - Position Indicator (Open and Closed)	Tested once every two years
									1CA-11A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1CA-12	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-12 - Full Stroke (Both)	Condition Monitoring
1CA-15A	MCFD-1592-01.01	MR	Category B	GA	Yes	3			1CA-15A - Position Indicator (Open and Closed)	Tested once every two years
									1CA-15A - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-18B	MCFD-1592-01.01	MR	Category B	GA	Yes	3			1CA-18B - Position Indicator (Open and Closed)	Tested once every two years
									1CA-18B - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-22	MCFD-1592-01.01	SA	Category C	3W	Yes	3			1CA-22 - Full Stroke (Open)	Tested once quarterly
									1CA-22 - Full Stroke (Closed)	Tested once quarterly
1CA-26	MCFD-1592-01.01	SA	Category C	3W	Yes	3			1CA-26 - Full Stroke (Open)	Tested once quarterly
									1CA-26 - Full Stroke (Closed)	Tested once quarterly
1CA-31	MCFD-1592-01.01	SA	Category C	3W	Yes	3			1CA-31 - Full Stroke (Open)	Tested once quarterly
									1CA-31 - Full Stroke (Closed)	Tested once quarterly
1CA-36AB	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-36AB - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1CA-36AB - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-37	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-37 - Full Stroke (Both)	Condition Monitoring
1CA-38B	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-38B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-38B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-38B - Position Indicator (Open and Closed)	Tested once every two years
1CA-40B	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-40B - Position Indicator (Open and Closed)	Tested once every two years
									1CA-40B - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-41	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-41 - Full Stroke (Both)	Condition Monitoring
1CA-42B	MCFD-1592-01.00	MR	Category B	GA	Yes	2	MC-SRV-CA-01		1CA-42B - Stroke Time (Open to Closed)	Per Relief Request
									1CA-42B - Stroke Time (Closed to Open)	Per Relief Request
									1CA-42B - Position Indicator (Open and Closed)	Tested once every two years
1CA-44B	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-44B - Position Indicator (Open and Closed)	Tested once every two years
									1CA-44B - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-45	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-45 - Full Stroke (Both)	Condition Monitoring
1CA-46B	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-46B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-46B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-46B - Position Indicator (Open and Closed)	Tested once every two years
1CA-48AB	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-48AB - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
									1CA-48AB - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-49	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-49 - Full Stroke (Both)	Condition Monitoring
1CA-50B	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-50B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-50B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-50B - Position Indicator (Open and Closed)	Tested once every two years
1CA-52AB	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-52AB - Position Indicator (Open and Closed)	Tested once every two years
									1CA-52AB - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-53	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-53 - Full Stroke (Both)	Condition Monitoring
1CA-54AC	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-54AC - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-54AC - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-54AC - Position Indicator (Open and Closed)	Tested once every two years
1CA-56A	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-56A - Position Indicator (Open and Closed)	Tested once every two years
									1CA-56A - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-57	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-57 - Full Stroke (Both)	Condition Monitoring
1CA-58A	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-58A - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-58A - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-58A - Position Indicator (Open and Closed)	Tested once every two years
1CA-60A	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-60A - Position	Tested once every

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	two years
									1CA-60A - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-61	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-61 - Full Stroke (Both)	Condition Monitoring
1CA-62A	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-62A - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-62A - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-62A - Position Indicator (Open and Closed)	Tested once every two years
1CA-64AB	MCFD-1592-01.00	AO	Category B	GA	Yes	3			1CA-64AB - Position Indicator (Open and Closed)	Tested once every two years
									1CA-64AB - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-65	MCFD-1592-01.00	SA	Category C	SW	Yes	2			1CA-65 - Full Stroke (Both)	Condition Monitoring
1CA-66AC	MCFD-1592-01.00	MR	Category B	GA	Yes	2			1CA-66AC - Stroke Time (Open to Closed)	Tested once quarterly
									1CA-66AC - Stroke Time (Closed to Open)	Tested once quarterly
									1CA-66AC - Position Indicator (Open and Closed)	Tested once every two years
1CA-86A	MCFD-1592-01.01	MR	Category B	GA	Yes	3			1CA-86A - Position Indicator (Open and Closed)	Tested once every two years
									1CA-86A - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-116B	MCFD-1592-01.01	MR	Category B	GA	Yes	3			1CA-116B - Position Indicator (Open and Closed)	Tested once every two years
									1CA-116B - Stroke Time (Cls to Opn)	Tested once quarterly
1CA-128	MCFD-1592-01.01	SA	Category C	RV	Yes	3			1CA-128 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1CA-165	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-165 - Full Stroke (Both)	Condition Monitoring
1CA-166	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-166 - Full	Condition Monitoring

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Stroke (Both)	
1CA-167	MCFD-1592-01.01	SA	Category C	RV	Yes	3			1CA-167 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1CA-168	MCFD-1592-01.01	SA	Category C	RV	Yes	3			1CA-168 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1CA-232	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-232 - Full Stroke (Both)	Condition Monitoring
1CA-235	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-235 - Full Stroke (Both)	Condition Monitoring
1CA-238	MCFD-1592-01.01	SA	Category C	SW	Yes	3			1CA-238 - Full Stroke (Both)	Condition Monitoring
2CA-7A	MCFD-2592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	2CA-7A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CA-7A - Position Indicator (Open and Closed)	Tested once every two years
2CA-8	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-8 - Full Stroke (Both)	Condition Monitoring
2CA-9B	MCFD-2592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	2CA-9B - Position Indicator (Open and Closed)	Tested once every two years
									2CA-9B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2CA-10	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-10 - Full Stroke (Both)	Condition Monitoring
2CA-11A	MCFD-2592-01.01	MR	Category B	GA	Yes	3		MC-CA-04	2CA-11A - Position Indicator (Open and Closed)	Tested once every two years
									2CA-11A - Stroke Time (Opn to Cls)	Tested at cold shutdown
2CA-12	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-12 - Full Stroke (Both)	Condition Monitoring
2CA-15A	MCFD-2592-01.01	MR	Category B	GA	Yes	3			2CA-15A - Position Indicator (Open and Closed)	Tested once every two years
									2CA-15A - Stroke Time (Cls to Opn)	Tested once quarterly
2CA-18B	MCFD-2592-01.01	MR	Category B	GA	Yes	3			2CA-18B - Position Indicator (Open and Closed)	Tested once every two years
									2CA-18B - Stroke Time (Cls to Opn)	Tested once quarterly
2CA-22	MCFD-2592-01.01	SA	Category C	3W	Yes	3			2CA-22 - Full Stroke (Open)	Tested once quarterly

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2CA-22 - Full Stroke (Closed)	Tested once quarterly
2CA-26	MCFD-2592-01.01	SA	Category C	3W	Yes	3			2CA-26 - Full Stroke (Open)	Tested once quarterly
									2CA-26 - Full Stroke (Closed)	Tested once quarterly
2CA-31	MCFD-2592-01.01	SA	Category C	3W	Yes	3			2CA-31 - Full Stroke (Open)	Tested once quarterly
									2CA-31 - Full Stroke (Closed)	Tested once quarterly
2CA-36AB	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-36AB - Position Indicator (Open and Closed)	Tested once every two years
									2CA-36AB - Stroke Time (Cls to Opn)	Tested once quarterly
2CA-37	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-37 - Full Stroke (Both)	Condition Monitoring
2CA-38B	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-38B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-38B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-38B - Position Indicator (Open and Closed)	Tested once every two years
2CA-40B	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-40B - Position Indicator (Open and Closed)	Tested once every two years
									2CA-40B - Stroke Time (Cls to Opn)	Tested once quarterly
2CA-41	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-41 - Full Stroke (Both)	Condition Monitoring
2CA-42B	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-42B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-42B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-42B - Position Indicator (Open and Closed)	Tested once every two years
2CA-44B	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-44B - Position Indicator (Open and Closed)	Tested once every two years
									2CA-44B - Stroke Time (Cls to Opn)	Tested once quarterly

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2CA-45	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-45 - Full Stroke (Both)	Condition Monitoring
2CA-46B	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-46B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-46B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-46B - Position Indicator (Open and Closed)	Tested once every two years
2CA-48AB	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-48AB - Position Indicator (Open and Closed)	Tested once every two years
									2CA-48AB - Stroke Time (Cls to Opn)	Tested once quarterly
2CA-49	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-49 - Full Stroke (Both)	Condition Monitoring
2CA-50B	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-50B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-50B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-50B - Position Indicator (Open and Closed)	Tested once every two years
2CA-52AB	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-52AB - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-52AB - Position Indicator (Open and Closed)	Tested once every two years
2CA-53	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-53 - Full Stroke (Both)	Condition Monitoring
2CA-54AC	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-54AC - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-54AC - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-54AC - Position Indicator (Open and Closed)	Tested once every two years
2CA-56A	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-56A - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-56A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
2CA-57	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-57 - Full Stroke (Both)	Condition Monitoring
2CA-58A	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-58A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-58A - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-58A - Position Indicator (Open and Closed)	Tested once every two years
2CA-60A	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-60A - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-60A - Position Indicator (Open and Closed)	Tested once every two years
2CA-61	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-61 - Full Stroke (Both)	Condition Monitoring
2CA-62A	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-62A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-62A - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-62A - Position Indicator (Open and Closed)	Tested once every two years
2CA-64AB	MCFD-2592-01.00	AO	Category B	GA	Yes	3			2CA-64AB - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-64AB - Position Indicator (Open and Closed)	Tested once every two years
2CA-65	MCFD-2592-01.00	SA	Category C	SW	Yes	2			2CA-65 - Full Stroke (Both)	Condition Monitoring
2CA-66AC	MCFD-2592-01.00	MR	Category B	GA	Yes	2			2CA-66AC - Stroke Time (Open to Closed)	Tested once quarterly
									2CA-66AC - Stroke Time (Closed to Open)	Tested once quarterly
									2CA-66AC - Position Indicator (Open and Closed)	Tested once every two years
2CA-86A	MCFD-2592-01.01	MR	Category B	GA	Yes	3			2CA-86A - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-86A - Position	Tested once every

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	two years
2CA-116B	MCFD-2592-01.01	MR	Category B	GA	Yes	3			2CA-116B - Stroke Time (Cls to Opn)	Tested once quarterly
									2CA-116B - Position Indicator (Open and Closed)	Tested once every two years
2CA-128	MCFD-2592-01.01	SA	Category C	RV	Yes	3			2CA-128 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2CA-165	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-165 - Full Stroke (Both)	Condition Monitoring
2CA-166	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-166 - Full Stroke (Both)	Condition Monitoring
2CA-167	MCFD-2592-01.01	SA	Category C	RV	Yes	3			2CA-167 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2CA-168	MCFD-2592-01.01	SA	Category C	RV	Yes	3			2CA-168 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2CA-232	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-232 - Full Stroke (Both)	Condition Monitoring
2CA-235	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-235 - Full Stroke (Both)	Condition Monitoring
2CA-238	MCFD-2592-01.01	SA	Category C	SW	Yes	3			2CA-238 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CF-17AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	1CF-17AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-17AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-20AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	1CF-20AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-20AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-23AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	1CF-23AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-23AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-26AB	MCFD-1591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	1CF-26AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-26AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-28AB	MCFD-1591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	1CF-28AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-28AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-30AB	MCFD-1591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	1CF-30AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-30AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-32AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	1CF-32AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-32AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-35AB	MCFD-1591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	1CF-35AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-35AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-104AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	1CF-104AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-104AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-105AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	1CF-105AB - Stroke Time (Opn to Cls)	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1CF-105AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-106AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	1CF-106AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-106AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-107AB	MCFD-1591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	1CF-107AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-107AB - Position Indicator (Open and Closed)	Tested once every two years
1CF-118	MCFD-1591-01.01	SA	Category C	SW	Yes	2			1CF-118 - Full Stroke (Both)	Condition Monitoring
1CF-119	MCFD-1591-01.01	SA	Category C	SW	Yes	2			1CF-119 - Full Stroke (Both)	Condition Monitoring
1CF-120	MCFD-1591-01.01	SA	Category C	SW	Yes	2			1CF-120 - Full Stroke (Both)	Condition Monitoring
1CF-121	MCFD-1591-01.01	SA	Category C	SW	Yes	2			1CF-121 - Full Stroke (Both)	Condition Monitoring
1CF-126B	MCFD-1591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	1CF-126B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-126B - Position Indicator (Open and Closed)	Tested once every two years
1CF-127B	MCFD-1591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	1CF-127B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-127B - Position Indicator (Open and Closed)	Tested once every two years
1CF-128B	MCFD-1591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	1CF-128B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-128B - Position Indicator (Open and Closed)	Tested once every two years
1CF-129B	MCFD-1591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	1CF-129B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1CF-129B - Position Indicator (Open and Closed)	Tested once every two years
2CF-17AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	2CF-17AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-17AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-20AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	2CF-20AB - Stroke	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Time (Opn to Cls)	
									2CF-20AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-23AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-02	2CF-23AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-23AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-26AB	MCFD-2591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	2CF-26AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-26AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-28AB	MCFD-2591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	2CF-28AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-28AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-30AB	MCFD-2591-01.01	AO	Category B	GL	Yes	2		MC-CF-01	2CF-30AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-30AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-32AB	MCFD-2591-01.01	AO	Category B	GA	Yes	NA		MC-CF-02	2CF-32AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-32AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-35AB	MCFD-2591-01.01	AO	Category B	GA	Yes	2		MC-CF-01	2CF-35AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-35AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-104AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	2CF-104AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-104AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-105AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	2CF-105AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-105AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-106AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	2CF-106AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-106AB - Position	Tested once every two

MCGUIRE NUCLEAR STATION

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
2CF-107AB	MCFD-2591-01.01	AO	Category B	GL	Yes	NA		MC-CF-04	2CF-107AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-107AB - Position Indicator (Open and Closed)	Tested once every two years
2CF-118	MCFD-2591-01.01	SA	Category C	SW	Yes	2			2CF-118 - Full Stroke (Both)	Condition Monitoring
2CF-119	MCFD-2591-01.01	SA	Category C	SW	Yes	2			2CF-119 - Full Stroke (Both)	Condition Monitoring
2CF-120	MCFD-2591-01.01	SA	Category C	SW	Yes	2			2CF-120 - Full Stroke (Both)	Condition Monitoring
2CF-121	MCFD-2591-01.01	SA	Category C	SW	Yes	2			2CF-121 - Full Stroke (Both)	Condition Monitoring
2CF-126B	MCFD-2591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	2CF-126B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-126B - Position Indicator (Open and Closed)	Tested once every two years
2CF-127B	MCFD-2591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	2CF-127B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-127B - Position Indicator (Open and Closed)	Tested once every two years
2CF-128B	MCFD-2591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	2CF-128B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-128B - Position Indicator (Open and Closed)	Tested once every two years
2CF-129B	MCFD-2591-01.01	MR	Category B	GA	Yes	2		MC-CF-03	2CF-129B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2CF-129B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

FW - REFUELING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1FW-1A	MCFD-1571-01.00	MR	Category B	GA	Yes	2			1FW-1A - Stroke Time (Opn to Cls)	Tested once quarterly
									1FW-1A - Position Indicator (Open and Closed)	Tested once every two years
1FW-4	MCFD-1571-01.00	MA	Category A	GA	No	2			1FW-4 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1FW-5	MCFD-1571-01.00	SA	Category A	SW	No	2			1FW-5 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1FW-11	MCFD-1571-01.00	MA	Category A	DP	No	2			1FW-11 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1FW-13	MCFD-1571-01.00	MA	Category A	DP	No	2			1FW-13 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1FW-27A	MCFD-1571-01.00	MR	Category B	GA	Yes	2		MC-FW-01	1FW-27A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1FW-27A - Position Indicator (Open and Closed)	Tested once every two years
1FW-28	MCFD-1571-01.00	SA	Category C	SW	Yes	2			1FW-28 - Full Stroke (Both)	Condition Monitoring
1FW-32B	MCFD-1571-01.00	MR	Category B	GA	Yes	2			1FW-32B - Stroke Time (Opn to Cls)	Tested once quarterly
									1FW-32B - Position Indicator (Open and Closed)	Tested once every two years
1FW-33A	MCFD-1571-01.00	MR	Category B	GL	Yes	2			1FW-33A - Stroke Time (Opn to Cls)	Tested once quarterly
									1FW-33A - Position Indicator (Open and Closed)	Tested once every two years
1FW-49B	MCFD-1571-01.00	MR	Category B	GL	Yes	2			1FW-49B - Stroke Time (Opn to Cls)	Tested once quarterly
									1FW-49B - Position Indicator (Open and Closed)	Tested once every two years
1FW-52	MCFD-1571-01.00	SA	Category C	SW	Yes	NA			1FW-52 - Full Stroke (Both)	Condition Monitoring
1FW-67	MCFD-1571-01.00	SA	Category A	SW	No	2			1FW-67 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1FW-74	MCFD-1571-01.00	SA	Category C	SW	Yes	3			1FW-74 - Full Stroke (Both)	Condition Monitoring
2FW-1A	MCFD-2571-01.00	MR	Category B	GA	Yes	2			2FW-1A - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

FW - REFUELING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
									2FW-1A - Position Indicator (Open and Closed)	Tested once every two years
2FW-4	MCFD-2571-01.00	MA	Category A	GA	No	2			2FW-4 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2FW-5	MCFD-2571-01.00	SA	Category A	SW	No	2			2FW-5 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2FW-11	MCFD-2571-01.00	MA	Category A	DP	No	2			2FW-11 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2FW-13	MCFD-2571-01.00	MA	Category A	DP	No	2			2FW-13 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2FW-27A	MCFD-2571-01.00	MR	Category B	GA	Yes	2		MC-FW-01	2FW-27A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2FW-27A - Position Indicator (Open and Closed)	Tested once every two years
2FW-28	MCFD-2571-01.00	SA	Category C	SW	Yes	2			2FW-28 - Full Stroke (Both)	Condition Monitoring
2FW-32B	MCFD-2571-01.00	MR	Category B	GA	Yes	2			2FW-32B - Stroke Time (Opn to Cls)	Tested once quarterly
									2FW-32B - Position Indicator (Open and Closed)	Tested once every two years
2FW-33A	MCFD-2571-01.00	MR	Category B	GL	Yes	2			2FW-33A - Stroke Time (Opn to Cls)	Tested once quarterly
									2FW-33A - Position Indicator (Open and Closed)	Tested once every two years
2FW-49B	MCFD-2571-01.00	MR	Category B	GL	Yes	2			2FW-49B - Stroke Time (Opn to Cls)	Tested once quarterly
									2FW-49B - Position Indicator (Open and Closed)	Tested once every two years
2FW-52	MCFD-2571-01.00	SA	Category C	SW	Yes	NA			2FW-52 - Full Stroke (Both)	Condition Monitoring
2FW-63	MCFD-2571-01.00	SA	Category A	SW	No	2			2FW-63 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2FW-74	MCFD-2571-01.00	SA	Category C	SW	Yes	3			2FW-74 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

GN - NITROGEN SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1GN-173	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-173 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-173 - Full Stroke (Both)	Condition Monitoring
1GN-174	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-174 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-174 - Full Stroke (Both)	Condition Monitoring
1GN-177	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-177 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-177 - Full Stroke (Both)	Condition Monitoring
1GN-178	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-178 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-178 - Full Stroke (Both)	Condition Monitoring
1GN-185	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-185 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-185 - Full Stroke (Both)	Condition Monitoring
1GN-186	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-186 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-186 - Full Stroke (Both)	Condition Monitoring
1GN-190	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-190 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-190 - Full Stroke (Both)	Condition Monitoring
1GN-191	MCFD-1602-01.02	SA	Category AC	CK	Yes	2			1GN-191 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									1GN-191 - Full Stroke (Both)	Condition Monitoring
2GN-173	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-173 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-173 - Full Stroke (Both)	Condition Monitoring
2GN-174	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-174 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-174 - Full Stroke (Both)	Condition Monitoring
2GN-177	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-177- Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-177 - Full Stroke (Both)	Condition Monitoring
2GN-178	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-178 Leak Test Section XI (Accident Dir)	Tested every refueling outage

MCGUIRE NUCLEAR STATION

GN - NITROGEN SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2GN-178 - Full Stroke (Both)	Condition Monitoring
2GN-185	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-185 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-185 - Full Stroke (Both)	Condition Monitoring
2GN-186	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-186 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-186 - Full Stroke (Both)	Condition Monitoring
2GN-190	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-190 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-190 - Full Stroke (Both)	Condition Monitoring
2GN-191	MCFD-2602-01.00	SA	Category AC	CK	Yes	2			2GN-191 Leak Test Section XI (Accident Dir)	Tested every refueling outage
									2GN-191 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

IAE - CONTAINMENT PERSONNEL AIR LOCK SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1IAESV5080	MCID-1499-IA.01-01	SO	Category A	GL	Yes	2			1IAESV5080 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1IAESV5080 - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
									1IAESV5080 - Position Indicator (Open and Closed)	Tested once every two years
1IAESV5160	MC -1499-01.05 MCID-1499-IA.01-01	SO	Category A	GL	Yes	2			1IAESV5160 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1IAESV5160 - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
									1IAESV5160 - Position Indicator (Open and Closed)	Tested once every two years
1IAECV5260	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5260 - Leak Test - Section XI	Every 6 months, See Tech Spec
									1IAECV5260 - Full Stroke (Both)	Condition Monitoring
1IAECV5270	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5270 - Full Stroke (Both)	Condition Monitoring
									1IAECV5270 - Leak Test - Section XI	Every 6 months, See Tech Spec
1IAECV5280	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5280 - Leak Test - Section XI	Every 6 months, See Tech Spec
									1IAECV5280 - Full Stroke (Both)	Condition Monitoring
1IAECV5290	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5290 - Full Stroke (Both)	Condition Monitoring
									1IAECV5290 - Leak Test - Section XI	Every 6 months, See Tech Spec
1IAECV5300	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5300 - Full Stroke (Both)	Condition Monitoring
									1IAECV5300 - Leak Test - Section XI	Every 6 months, See Tech Spec
1IAECV5310	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5310 - Full Stroke (Both)	Condition Monitoring
									1IAECV5310 - Leak Test - Section XI	Every 6 months, See Tech Spec
1IAECV5320	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5320 - Full Stroke (Both)	Condition Monitoring
									1IAECV5320 - Leak Test - Section XI	Every 6 months, See Tech Spec

MCGUIRE NUCLEAR STATION

IAE - CONTAINMENT PERSONNEL AIR LOCK SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1IAECV5330	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5330 - Full Stroke (Both)	Condition Monitoring
									1IAECV5330 - Leak Test - Section XI	Every 6 months, See Tech Spec
1IAECV5340	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5340 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									1IAECV5340 - Full Stroke (Both)	Condition Monitoring
1IAECV5350	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5350 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									1IAECV5350 - Full Stroke (Both)	Condition Monitoring
1IAECV5360	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5360 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									1IAECV5360 - Full Stroke (Both)	Condition Monitoring
1IAECV5370	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5370 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									1IAECV5370 - Full Stroke (Both)	Condition Monitoring
1IAECV5380	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5380 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									1IAECV5380 - Full Stroke (Both)	Condition Monitoring
1IAECV5390	MCID-1499-IA.01-01	SA	Category AC	CK	Yes	2			1IAECV5390 - Full Stroke (Both)	Condition Monitoring
									1IAECV5390 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
2IAESV5080	MCID-2499-IA.01-01	SO	Category A	GL	Yes	2			2IAESV5080 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IAESV5080 - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
									2IAESV5080 - Position Indicator (Open and Closed)	Tested once every two years
2IAESV5160	MCID-2499-IA.01-01	SO	Category A	GL	Yes	2			2IAESV5160 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IAESV5160 - Leak	Tested every refueling

MCGUIRE NUCLEAR STATION

IAE - CONTAINMENT PERSONNEL AIR LOCK SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Test - Appendix J (Accident Dir)	outage
									2IAESV5160 - Position Indicator (Open and Closed)	Tested once every two years
2IAECV5260	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5260 - Full Stroke (Both)	Condition Monitoring
									2IAECV5260 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5270	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5270 - Full Stroke (Both)	Condition Monitoring
									2IAECV5270 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5280	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5280 - Full Stroke (Both)	Condition Monitoring
									2IAECV5280 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5290	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5290 - Full Stroke (Both)	Condition Monitoring
									2IAECV5290 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5300	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5300 - Full Stroke (Both)	Condition Monitoring
									2IAECV5300 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5310	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5310 - Full Stroke (Both)	Condition Monitoring
									2IAECV5310 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5320	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5320 - Full Stroke (Both)	Condition Monitoring
									2IAECV5320 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5330	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5330 - Full Stroke (Both)	Condition Monitoring
									2IAECV5330 - Leak Test - Section XI	Every 6 months, See Tech Spec
2IAECV5340	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5340 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5340 - Full Stroke (Both)	Condition Monitoring
2IAECV5350	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5350 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5350 - Full	Condition Monitoring

MCGUIRE NUCLEAR STATION

IAE - CONTAINMENT PERSONNEL AIR LOCK SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Stroke (Both)	
2IAECV5360	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5360 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5360 - Full Stroke (Both)	Condition Monitoring
2IAECV5370	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5370 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5370 - Full Stroke (Both)	Condition Monitoring
2IAECV5380	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5380 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5380 - Full Stroke (Both)	Condition Monitoring
2IAECV5390	MCID-2499-IA.01-01	SA	Category AC	CK	Yes	2			2IAECV5390 - Leak Test - Appendix J (Accident Dir)	Every 6 months, See Tech Spec
									2IAECV5390 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC-1A	MCFD-1573-01.00	MR	Category B	BF	Yes	3			1KC-1A - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-1A - Position Indicator (Open and Closed)	Tested once every two years
1KC-2B	MCFD-1573-01.00	MR	Category B	BF	Yes	3			1KC-2B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-2B - Position Indicator (Open and Closed)	Tested once every two years
1KC-3A	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-3A - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-3A - Position Indicator (Open and Closed)	Tested once every two years
1KC-5	MCFD-1573-01.00	SA	Category C	SW	Yes	3			1KC-5 - Full Stroke (Both)	Condition Monitoring
1KC-8	MCFD-1573-01.00	SA	Category C	SW	Yes	3			1KC-8 - Full Stroke (Both)	Condition Monitoring
1KC-11	MCFD-1573-01.00	SA	Category C	SW	Yes	3			1KC-11 - Full Stroke (Both)	Condition Monitoring
1KC-14	MCFD-1573-01.00	SA	Category C	SW	Yes	3			1KC-14 - Full Stroke (Both)	Condition Monitoring
1KC-18B	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-18B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-18B - Position Indicator (Open and Closed)	Tested once every two years
1KC-47	MCFD-1573-04.00	SA	Category A	SW	No	2			1KC-47 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1KC-50A	MCFD-1573-01.00	MR	Category B	BF	Yes	3			1KC-50A - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-50A - Position Indicator (Open and Closed)	Tested once every two years
1KC-51A	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-51A - Stroke Time (Cls to Opn)	Tested once quarterly
									1KC-51A - Position Indicator (Open and Closed)	Tested once every two years
1KC-53B	MCFD-1573-01.00	MR	Category B	BF	Yes	3			1KC-53B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-53B - Position Indicator (Open and Closed)	Tested once every two years
1KC-54B	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-54B - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Cls to Opn)	
									1KC-54B - Position Indicator (Open and Closed)	Tested once every two years
1KC-56A	MCFD-1573-01.01	MR	Category B	BF	Yes	3			1KC-56A - Stroke Time (Cls to Opn)	Tested once quarterly
									1KC-56A - Position Indicator (Open and Closed)	Tested once every two years
1KC-57A	MCFD-1573-01.01	AO	Category B	BF	Yes	3			1KC-57A - Stroke Time (Cls to Opn)	Tested once quarterly
									1KC-57A - Position Indicator (Open and Closed)	Tested once every two years
1KC-81B	MCFD-1573-01.01	MR	Category B	BF	Yes	3			1KC-81B - Stroke Time (Cls to Opn)	Tested once quarterly
									1KC-81B - Position Indicator (Open and Closed)	Tested once every two years
1KC-82B	MCFD-1573-01.01	AO	Category B	BF	Yes	3			1KC-82B - Stroke Time (Cls to Opn)	Tested once quarterly
									1KC-82B - Position Indicator (Open and Closed)	Tested once every two years
1KC-123	MCFD-1573-01.01	SA	Category C	VB	Yes	3			1KC-123 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1KC-228B	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-228B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-228B - Position Indicator (Open and Closed)	Tested once every two years
1KC-230A	MCFD-1573-01.00	MR	Category B	GA	Yes	3			1KC-230A - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-230A - Position Indicator (Open and Closed)	Tested once every two years
1KC-279	MCFD-1573-03.01	SA	Category A	SW	No	2			1KC-279 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1KC-280	MCFD-1573-03.01	SA	Category A	LC	No	2			1KC-280 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1KC-305B	MCFD-1573-03.01	MR	Category B	GA	Yes	2			1KC-305B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-305B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC-315B	MCFD-1573-03.01	MR	Category B	GA	Yes	2			1KC-315B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-315B - Position Indicator (Open and Closed)	Tested once every two years
1KC-320A	MCFD-1573-03.01	AO	Category A	DP	Yes	2		MC-KC-04	1KC-320A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-320A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-320A - Position Indicator (Open and Closed)	Tested once every two years
1KC-322	MCFD-1573-03.01	SA	Category AC	SW	Yes	2			1KC-322 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-322 - Full Stroke (Both)	Condition Monitoring
1KC-332B	MCFD-1573-03.01	AO	Category A	DP	Yes	2		MC-KC-03	1KC-332B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-332B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-332B - Position Indicator (Open and Closed)	Tested once every two years
1KC-333A	MCFD-1573-03.01	AO	Category A	DP	Yes	2		MC-KC-03	1KC-333A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-333A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-333A - Position Indicator (Open and Closed)	Tested once every two years
1KC-338B	MCFD-1573-03.01	MR	Category A	BF	Yes	2		MC-KC-02	1KC-338B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-338B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-338B - Position Indicator (Open and Closed)	Tested once every two years
1KC-340	MCFD-1573-03.01	SA	Category AC	SW	Yes	2			1KC-340 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-340 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC-424B	MCFD-1573-03.01	MR	Category A	BF	Yes	2		MC-KC-01	1KC-424B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-424B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-424B - Position Indicator (Open and Closed)	Tested once every two years
1KC-425A	MCFD-1573-03.01	MR	Category A	BF	Yes	2		MC-KC-01	1KC-425A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1KC-425A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-425A - Position Indicator (Open and Closed)	Tested once every two years
1KC-429B	MCFD-1573-04.00	MR	Category A	GL	Yes	2			1KC-429B - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-429B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-429B - Position Indicator (Open and Closed)	Tested once every two years
1KC-430A	MCFD-1573-04.00	MR	Category A	GL	Yes	2			1KC-430A - Stroke Time (Opn to Cls)	Tested once quarterly
									1KC-430A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1KC-430A - Position Indicator (Open and Closed)	Tested once every two years
1KC-972	MCFD-1573-01.01	SA	Category C	RV	Yes	3			1KC-972 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2KC-1A	MCFD-2573-01.00	MR	Category B	BF	Yes	3			2KC-1A - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-1A - Position Indicator (Open and Closed)	Tested once every two years
2KC-2B	MCFD-2573-01.00	MR	Category B	BF	Yes	3			2KC-2B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-2B - Position Indicator (Open and Closed)	Tested once every two years
2KC-3A	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-3A - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-3A - Position	Tested once every two

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
2KC-5	MCFD-2573-01.00	SA	Category C	SW	Yes	3			2KC-5 - Full Stroke (Both)	Condition Monitoring
2KC-8	MCFD-2573-01.00	SA	Category C	SW	Yes	3			2KC-8 - Full Stroke (Both)	Condition Monitoring
2KC-11	MCFD-2573-01.00	SA	Category C	SW	Yes	3			2KC-11 - Full Stroke (Both)	Condition Monitoring
2KC-14	MCFD-2573-01.00	SA	Category C	SW	Yes	3			2KC-14 - Full Stroke (Both)	Condition Monitoring
2KC-18B	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-18B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-18B - Position Indicator (Open and Closed)	Tested once every two years
2KC-47	MCFD-2573-04.00	SA	Category A	LC	No	2			2KC-47 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2KC-50A	MCFD-2573-01.00	MR	Category B	BF	Yes	3			2KC-50A - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-50A - Position Indicator (Open and Closed)	Tested once every two years
2KC-51A	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-51A - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-51A - Position Indicator (Open and Closed)	Tested once every two years
2KC-53B	MCFD-2573-01.00	MR	Category B	BF	Yes	3			2KC-53B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-53B - Position Indicator (Open and Closed)	Tested once every two years
2KC-54B	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-54B - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-54B - Position Indicator (Open and Closed)	Tested once every two years
2KC-56A	MCFD-2573-01.01	MR	Category B	BF	Yes	3			2KC-56A - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-56A - Position Indicator (Open and Closed)	Tested once every two years
2KC-57A	MCFD-2573-01.01	AO	Category B	BF	Yes	3			2KC-57A - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-57A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
2KC-81B	MCFD-2573-01.01	ML	Category B	BF	Yes	3			2KC-81B - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-81B - Position Indicator (Open and Closed)	Tested once every two years
2KC-82B	MCFD-2573-01.01	AO	Category B	BF	Yes	3			2KC-82B - Stroke Time (Cls to Opn)	Tested once quarterly
									2KC-82B - Position Indicator (Open and Closed)	Tested once every two years
2KC-123	MCFD-2573-01.01	SA	Category C	VB	Yes	3			2KC-123 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2KC-228B	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-228B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-228B - Position Indicator (Open and Closed)	Tested once every two years
2KC-230A	MCFD-2573-01.00	MR	Category B	GA	Yes	3			2KC-230A - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-230A - Position Indicator (Open and Closed)	Tested once every two years
2KC-279	MCFD-2573-03.01	SA	Category A	SW	No	2			2KC-279 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2KC-280	MCFD-2573-03.01	SA	Category A	LC	No	2			2KC-280 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2KC-305B	MCFD-2573-03.01	MR	Category B	GA	Yes	2			2KC-305B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-305B - Position Indicator (Open and Closed)	Tested once every two years
2KC-315B	MCFD-2573-03.01	MR	Category B	GA	Yes	2			2KC-315B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-315B - Position Indicator (Open and Closed)	Tested once every two years
2KC-320A	MCFD-2573-03.01	AO	Category A	DP	Yes	2		MC-KC-04	2KC-320A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-320A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-320A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Activ.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2KC-322	MCFD-2573-03.01	SA	Category AC	SW	Yes	2			2KC-322 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-322 - Full Stroke (Both)	Condition Monitoring
2KC-332B	MCFD-2573-03.01	AO	Category A	DP	Yes	2		MC-KC-03	2KC-332B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-332B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-332B - Position Indicator (Open and Closed)	Tested once every two years
2KC-333A	MCFD-2573-03.01	AO	Category A	DP	Yes	2		MC-KC-03	2KC-333A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-333A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-333A - Position Indicator (Open and Closed)	Tested once every two years
2KC-338B	MCFD-2573-03.01	ML	Category A	BF	Yes	2		MC-KC-02	2KC-338B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-338B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-338B - Position Indicator (Open and Closed)	Tested once every two years
2KC-340	MCFD-2573-03.01	SA	Category AC	SW	Yes	2			2KC-340 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-340 - Full Stroke (Both)	Condition Monitoring
2KC-424B	MCFD-2573-03.01	ML	Category A	BF	Yes	2		MC-KC-01	2KC-424B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-424B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-424B - Position Indicator (Open and Closed)	Tested once every two years
2KC-425A	MCFD-2573-03.01	ML	Category A	BF	Yes	2		MC-KC-01	2KC-425A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2KC-425A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Activ.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2KC-425A - Position Indicator (Open and Closed)	Tested once every two years
2KC-429B	MCFD-2573-04.00	MR	Category A	GL	Yes	2			2KC-429B - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-429B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-429B - Position Indicator (Open and Closed)	Tested once every two years
2KC-430A	MCFD-2573-04.00	MR	Category A	GL	Yes	2			2KC-430A - Stroke Time (Opn to Cls)	Tested once quarterly
									2KC-430A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2KC-430A - Position Indicator (Open and Closed)	Tested once every two years
2KC-972	MCFD-2573-01.01	SA	Category C	RV	Yes	3			2KC-972 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule

MCGUIRE NUCLEAR STATION

LD - DIESEL GENERATOR ENGINE LUB OIL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1LD-108A	MCFD-1609-02.00	MR	Category B	GA	Yes	3			1LD-108A - Stroke Time (Cls to Opn)	Tested once quarterly
									1LD-108A - Position Indicator (Open and Closed)	Tested once every two years
1LD-113B	MCFD-1609-02.01	MR	Category B	GA	Yes	3			1LD-113B - Stroke Time (Cls to Opn)	Tested once quarterly
									1LD-113B - Position Indicator (Open and Closed)	Tested once every two years
2LD-108A	MCFD-2609-02.00	MR	Category B	GA	Yes	3			2LD-108A - Stroke Time (Cls to Opn)	Tested once quarterly
									2LD-108A - Position Indicator (Open and Closed)	Tested once every two years
2LD-113B	MCFD-2609-02.01	MR	Category B	GA	Yes	3			2LD-113B - Stroke Time (Cls to Opn)	Tested once quarterly
									2LD-113B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

MI - MISCELLANEOUS STATION INSTRUMENTATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1MISV5580	MC -1499-MI.07	SO	Category A	GL	Yes	2			1MISV5580 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5580 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1MISV5580 - Position Indicator (Open and Closed)	Tested once every two years
1MISV5581	MC -1499-MI.07	SO	Category A	GL	Yes	2			1MISV5581 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5581 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1MISV5581 - Position Indicator (Open and Closed)	Tested once every two years
1MISV5582	MC -1499-MI.07	SO	Category A	GL	Yes	2			1MISV5582 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5582 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1MISV5582 - Position Indicator (Open and Closed)	Tested once every two years
1MISV5583	MC -1499-MI.07	SO	Category A	GL	Yes	2			1MISV5583 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5583 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1MISV5583 - Position Indicator (Open and Closed)	Tested once every two years
2MISV5580	MCID-2499-MI.07	SO	Category A	GL	Yes	2			2MISV5580 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5580 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2MISV5580 - Position Indicator (Open and Closed)	Tested once every two years
2MISV5581	MCID-2499-MI.07	SO	Category A	GL	Yes	2			2MISV5581 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5581 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2MISV5581 - Position Indicator (Open and Closed)	Tested once every two years
2MISV5582	MCID-2499-MI.07	SO	Category A	GL	Yes	2			2MISV5582 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5582 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

MI - MISCELLANEOUS STATION INSTRUMENTATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2MISV5582 - Position Indicator (Open and Closed)	Tested once every two years
2MISV5583	MCID-2499-MI.07	SO	Category A	GL	Yes	2			2MISV5583 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5583 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2MISV5583 - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NB - BORON RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NB-103	MCFD-1556-01.01	SA	Category C	SW	Yes	3			1NB-103 - Full Stroke (Both)	Condition Monitoring
1NB-260B	MCFD-1556-03.00	MR	Category A	GL	No	2			1NB-260B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NB-262	MCFD-1556-03.00	SA	Category A	LC	No	2			1NB-262 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NB-262 - Full Stroke (Both)	Condition Monitoring
2NB-260B	MCFD-2556-03.00	MR	Category A	GL	No	2			2NB-260B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NB-262	MCFD-2556-03.00	SA	Category A	LC	No	2			2NB-262 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NB-262 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NC-1	MCFD-1553-02.00	SA	Category C	RV	Yes	1			1NC-1 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NC-2	MCFD-1553-02.00	SA	Category C	RV	Yes	1			1NC-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NC-3	MCFD-1553-02.00	SA	Category C	RV	Yes	1			1NC-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NC-31B	MCFD-1553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	1NC-31B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-31B - Position Indicator (Open and Closed)	Tested once every two years
									1NC-31B - Stroke Time (Closed to Open)	Tested once quarterly
1NC-32B	MCFD-1553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	1NC-32B - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-32B - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									1NC-32B - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
									1NC-32B - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
									1NC-32B - Position Indicator (Open and Closed)	Tested once every two years
1NC-33A	MCFD-1553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	1NC-33A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-33A - Position Indicator (Open and Closed)	Tested once every two years
									1NC-33A - Stroke Time (Closed to Open)	Tested once quarterly
1NC-34A	MCFD-1553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	1NC-34A - Position Indicator (Open and Closed)	Tested once every two years
									1NC-34A - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-34A - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									1NC-34A - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NC-34A - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
1NC-35B	MCFD-1553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	1NC-35B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-35B - Position Indicator (Open and Closed)	Tested once every two years
									1NC-35B - Stroke Time (Closed to Open)	Tested once quarterly
1NC-36B	MCFD-1553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	1NC-36B - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-36B - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									1NC-36B - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
									1NC-36B - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
									1NC-36B - Position Indicator (Open and Closed)	Tested once every two years
1NC-53B	MCFD-1553-02.01	MR	Category A	GL	Yes	2			1NC-53B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-53B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NC-53B - Position Indicator (Open and Closed)	Tested once every two years
1NC-54A	MCFD-1553-02.01	MR	Category A	GL	Yes	2			1NC-54A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-54A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NC-54A - Position Indicator (Open and Closed)	Tested once every two years
1NC-56B	MCFD-1553-02.01	MR	Category A	GA	Yes	2			1NC-56B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NC-56B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NC-56B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
1NC-57	MCFD-1553-02.01	SA	Category A	SW	No	2			1NC-57 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NC-57 - Full Stroke (Both)	Condition Monitoring
1NC-59	MCFD-1553-02.01	SA	Category C	SW	Yes	2			1NC-59 - Full Stroke (Both)	Condition Monitoring
1NC-141	MCFD-1553-04.00	MA	Category A	DP	No	2			1NC-141 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-142	MCFD-1553-04.00	MA	Category A	DP	No	2			1NC-142 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-195B	MCFD-1553-04.00	MR	Category A	GL	No	2			1NC-195B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-196A	MCFD-1553-04.00	MR	Category A	GL	No	2			1NC-196A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-259	MCFD-1553-04.00	SA	Category A	SW	No	2			1NC-259 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-261	MCFD-1553-04.00	SA	Category A	SW	No	2			1NC-261 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NC-272AC	MCFD-1553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	1NC-272AC Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-272AC - Position Indicator (Open and Closed)	Tested once every two years
									1NC-272AC Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
1NC-273AC	MCFD-1553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	1NC-273AC Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-273AC - Position Indicator (Open and Closed)	Tested once every two years
									1NC-273AC Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
1NC-274B	MCFD-1553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	1NC-274B Fast Acting Stroke Time (Closed to	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Open)	
									1NC-274B - Position Indicator (Open and Closed)	Tested once every two years
									1NC-274B Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
1NC-275B	MCFD-1553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	1NC-275B Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC-275B - Position Indicator (Open and Closed)	Tested once every two years
									1NC-275B Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
1NC-284	MCFD-1553-02.01	SA	Category C	SW	Yes	NA			1NC-284 - Full Stroke (Both)	Condition Monitoring
2NC-1	MCFD-2553-02.00	SA	Category C	RV	Yes	1			2NC-1 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NC-2	MCFD-2553-02.00	SA	Category C	RV	Yes	1			2NC-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NC-3	MCFD-2553-02.00	SA	Category C	RV	Yes	1			2NC-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NC-31B	MCFD-2553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	2NC-31B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NC-31B - Position Indicator (Open and Closed)	Tested once every two years
									2NC-31B - Stroke Time (Closed to Open)	Tested once quarterly
2NC-32B	MCFD-2553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	2NC-32B - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-32B - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									2NC-32B - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC-32B - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
									2NC-32B - Position Indicator (Open and Closed)	Tested once every two years
2NC-33A	MCFD-2553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	2NC-33A - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
									2NC-33A - Position Indicator (Open and Closed)	Tested once every two years
									2NC-33A - Stroke Time (Closed to Open)	Tested once quarterly
2NC-34A	MCFD-2553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	2NC-34A - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-34A - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									2NC-34A - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC-34A - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
									2NC-34A - Position Indicator (Open and Closed)	Tested once every two years
2NC-35B	MCFD-2553-02.00	MR	Category B	GA	Yes	1		MC-NC-06	2NC-35B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NC-35B - Position Indicator (Open and Closed)	Tested once every two years
									2NC-35B - Stroke Time (Closed to Open)	Tested once quarterly
2NC-36B	MCFD-2553-02.00	AO	Category B	GL	Yes	1		MC-NC-01	2NC-36B - Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-36B - Fast Acting Stroke Time (Closed to Open)	CSD, hot tested prior to LTOP
									2NC-36B - Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC-36B - Fast Acting Stroke Time (Open to Closed)	CSD, hot tested prior to LTOP
									2NC-36B - Position Indicator (Open and Closed)	Tested once every two years
2NC-53B	MCFD-2553-02.01	ML	Category A	GL	Yes	2			2NC-53B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NC-53B - Leak Test - Appendix J (Accident)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Dir)	
									2NC-53B - Position Indicator (Open and Closed)	Tested once every two years
2NC-54A	MCFD-2553-02.01	MR	Category A	GL	Yes	2			2NC-54A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NC-54A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NC-54A - Position Indicator (Open and Closed)	Tested once every two years
2NC-56B	MCFD-2553-02.01	AO	Category A	DP	Yes	2			2NC-56B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NC-56B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NC-56B - Position Indicator (Open and Closed)	Tested once every two years
2NC-57	MCFD-2553-02.01	SA	Category A	SW	No	2			2NC-57 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NC-57 - Full Stroke (Both)	Condition Monitoring
2NC-59	MCFD-2553-02.01	SA	Category C	SW	Yes	2			2NC-59 - Full Stroke (Both)	Condition Monitoring
2NC-141	MCFD-2553-04.00	MA	Category A	DP	No	2			2NC-141 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-142	MCFD-2553-04.00	MA	Category A	DP	No	2			2NC-142 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-195B	MCFD-2553-04.00	ML	Category A	GL	No	2			2NC-195B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-196A	MCFD-2553-04.00	ML	Category A	GL	No	2			2NC-196A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-259	MCFD-2553-04.00	SA	Category A	SW	No	2			2NC-259 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-261	MCFD-2553-04.00	SA	Category A	SW	No	2			2NC-261 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NC-272AC	MCFD-2553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	2NC-272AC Fast Acting Stroke Time (Closed to	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Open)	
									2NC-272AC - Position Indicator (Open and Closed)	Tested once every two years
									2NC-272AC Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
2NC-273AC	MCFD-2553-02.01	SO	Category B	GL	Yes	1		MC-NC-02	2NC-273AC Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-273AC - Position Indicator (Open and Closed)	Tested once every two years
									2NC-273AC Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
2NC-274B	MCFD-2553-02.00	SO	Category B	GL	Yes	1		MC-NC-02	2NC-274B Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-274B - Position Indicator (Open and Closed)	Tested once every two years
									2NC-274B Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown
2NC-275B	MCFD-2553-02.00	SO	Category B	GL	Yes	1		MC-NC-02	2NC-275B Fast Acting Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC-275B - Position Indicator (Open and Closed)	Tested once every two years
									2NC-275B Fast Acting Stroke Time (Open to Closed)	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

ND - RESIDUAL HEAT REMOVAL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1ND-1B	MCFD-1561-01.00	MR	Category A	GA	Yes	1		MC-ND-01	1ND-1B - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1ND-1B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND-1B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND-1B - Position Indicator (Open and Closed)	Tested once every two years
1ND-2AC	MCFD-1561-01.00	MR	Category A	GA	Yes	1		MC-ND-01	1ND-2AC - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1ND-2AC - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND-2AC - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND-2AC - Position Indicator (Open and Closed)	Tested once every two years
1ND-3	MCFD-1561-01.00	SA	Category C	RV	Yes	2			1ND-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1ND-4B	MCFD-1561-01.00	MR	Category B	GA	Yes	2		MC-ND-07	1ND-4B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1ND-4B - Position Indicator (Open and Closed)	Tested once every two years
									1ND-4B - Stroke Time (Closed to Open)	Tested at cold shutdown
1ND-8	MCFD-1561-01.00	SA	Category C	SW	Yes	2			1ND-8 - Full Stroke (Both)	Condition Monitoring
1ND-14	MCFD-1561-01.00	AO	Category B	BF	Yes	2			1ND-14 - Stroke Time (Cls to Opn)	Tested once quarterly
									1ND-14 - Position Indicator (Open and Closed)	Tested once every two years
1ND-15B	MCFD-1561-01.00	MR	Category B	GA	Yes	2		MC-ND-03	1ND-15B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND-15B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND-15B - Position Indicator (Open and Closed)	Tested once every two years
1ND-19A	MCFD-1561-01.00	MR	Category B	GA	Yes	2		MC-ND-07	1ND-19A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1ND-19A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

ND - RESIDUAL HEAT REMOVAL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
1ND-23	MCFD-1561-01.00	SA	Category C	SW	Yes	2			1ND-23 - Full Stroke (Both)	Condition Monitoring
1ND-29	MCFD-1561-01.00	AO	Category B	BF	Yes	2			1ND-29 - Stroke Time (Cls to Opn)	Tested once quarterly
									1ND-29 - Position Indicator (Open and Closed)	Tested once every two years
1ND-30A	MCFD-1561-01.00	MR	Category B	GA	Yes	2		MC-ND-03	1ND-30A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND-30A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND-30A - Position Indicator (Open and Closed)	Tested once every two years
1ND-56	MCFD-1561-01.00	SA	Category C	RV	Yes	2			1ND-56 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1ND-58A	MCFD-1561-01.00	MR	Category B	GA	Yes	2		MC-ND-02	1ND-58A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1ND-58A - Position Indicator (Open and Closed)	Tested once every two years
									1ND-58A - Stroke Time (Open to Closed)	Tested at cold shutdown
1ND-61	MCFD-1561-01.00	SA	Category C	RV	Yes	2			1ND-61 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1ND-64	MCFD-1561-01.00	SA	Category C	RV	Yes	2			1ND-64 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1ND-67B	MCFD-1561-01.00	MR	Category B	GL	Yes	2			1ND-67B - Stroke Time (Closed to Open)	Tested once quarterly
									1ND-67B - Position Indicator (Open and Closed)	Tested once every two years
									1ND-67B - Stroke Time (Open to Closed)	Tested once quarterly
1ND-68A	MCFD-1561-01.00	MR	Category B	GL	Yes	2			1ND-68A - Stroke Time (Open to Closed)	Tested once quarterly
									1ND-68A - Stroke Time (Closed to Open)	Tested once quarterly
									1ND-68A - Position Indicator (Open and Closed)	Tested once every two years
1ND-70	MCFD-1561-01.00	SA	Category C	SW	Yes	2			1ND-70 - Full Stroke (Both)	Condition Monitoring
1ND-71	MCFD-1561-01.00	SA	Category C	SW	Yes	2			1ND-71 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

ND - RESIDUAL HEAT REMOVAL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2ND-1B	MCFD-2561-01.00	MR	Category A	GA	Yes	1		MC-ND-01	2ND-1B - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2ND-1B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND-1B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND-1B - Position Indicator (Open and Closed)	Tested once every two years
2ND-2AC	MCFD-2561-01.00	MR	Category A	GA	Yes	1		MC-ND-01	2ND-2AC - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2ND-2AC - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND-2AC - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND-2AC - Position Indicator (Open and Closed)	Tested once every two years
2ND-3	MCFD-2561-01.00	SA	Category C	RV	Yes	2			2ND-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2ND-4B	MCFD-2561-01.00	MR	Category B	GA	Yes	2		MC-ND-07	2ND-4B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2ND-4B - Position Indicator (Open and Closed)	Tested once every two years
									2ND-4B - Stroke Time (Closed to Open)	Tested at cold shutdown
2ND-8	MCFD-2561-01.00	SA	Category C	SW	Yes	2			2ND-8 - Full Stroke (Both)	Condition Monitoring
2ND-14	MCFD-2561-01.00	AO	Category B	BF	Yes	2			2ND-14 - Stroke Time (Cls to Opn)	Tested once quarterly
									2ND-14 - Position Indicator (Open and Closed)	Tested once every two years
2ND-15B	MCFD-2561-01.00	MR	Category B	GA	Yes	2		MC-ND-03	2ND-15B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND-15B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND-15B - Position Indicator (Open and Closed)	Tested once every two years
2ND-19A	MCFD-2561-01.00	MR	Category B	GA	Yes	2		MC-ND-07	2ND-19A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2ND-19A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

ND - RESIDUAL HEAT REMOVAL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
2ND-23	MCFD-2561-01.00	SA	Category C	SW	Yes	2			2ND-23 - Full Stroke (Both)	Condition Monitoring
2ND-29	MCFD-2561-01.00	AO	Category B	BF	Yes	2			2ND-29 - Stroke Time (Cls to Opn)	Tested once quarterly
									2ND-29 - Position Indicator (Open and Closed)	Tested once every two years
2ND-30A	MCFD-2561-01.00	MR	Category B	GA	Yes	2		MC-ND-03	2ND-30A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND-30A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND-30A - Position Indicator (Open and Closed)	Tested once every two years
2ND-56	MCFD-2561-01.00	SA	Category C	RV	Yes	2			2ND-56 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2ND-58A	MCFD-2561-01.00	MR	Category B	GA	Yes	2		MC-ND-02	2ND-58A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2ND-58A - Position Indicator (Open and Closed)	Tested once every two years
									2ND-58A - Stroke Time (Open to Closed)	Tested at cold shutdown
2ND-61	MCFD-2561-01.00	SA	Category C	RV	Yes	2			2ND-61 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2ND-64	MCFD-2561-01.00	SA	Category C	RV	Yes	2			2ND-64 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2ND-67B	MCFD-2561-01.00	MR	Category B	GL	Yes	2			2ND-67B - Stroke Time (Open to Closed)	Tested once quarterly
									2ND-67B - Stroke Time (Closed to Open)	Tested once quarterly
									2ND-67B - Position Indicator (Open and Closed)	Tested once every two years
2ND-68A	MCFD-2561-01.00	MR	Category B	GL	Yes	2			2ND-68A - Stroke Time (Open to Closed)	Tested once quarterly
									2ND-68A - Stroke Time (Closed to Open)	Tested once quarterly
									2ND-68A - Position Indicator (Open and Closed)	Tested once every two years
2ND-70	MCFD-2561-01.00	SA	Category C	SW	Yes	2			2ND-70 - Full Stroke (Both)	Condition Monitoring
2ND-71	MCFD-2561-01.00	SA	Category C	SW	Yes	2			2ND-71 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NF - ICE CONDENSER REFRIGERATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NF-228A	MCFD-1558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	1NF-228A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NF-228A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NF-228A - Position Indicator (Open and Closed)	Tested once every two years
1NF-229	MCFD-1558-04.00	SA	Category AC	SW	Yes	2			1NF-229 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NF-229 - Full Stroke (Both)	Condition Monitoring
1NF-233B	MCFD-1558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	1NF-233B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NF-233B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1NF-233B - Position Indicator (Open and Closed)	Tested once every two years
1NF-234A	MCFD-1558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	1NF-234A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NF-234A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NF-234A - Position Indicator (Open and Closed)	Tested once every two years
2NF-228A	MCFD-2558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	2NF-228A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NF-228A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NF-228A - Position Indicator (Open and Closed)	Tested once every two years
2NF-229	MCFD-2558-04.00	SA	Category AC	SW	Yes	2			2NF-229 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NF-229 - Full Stroke (Both)	Condition Monitoring
2NF-233B	MCFD-2558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	2NF-233B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NF-233B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

NF - ICE CONDENSER REFRIGERATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NF-233B - Position Indicator (Open and Closed)	Tested once every two years
2NF-234A	MCFD-2558-04.00	AO	Category A	DP	Yes	2		MC-NF-02	2NF-234A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NF-234A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NF-234A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Activ.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI-9A	MCFD-1562-01.00	MR	Category B	GA	Yes	2		MC-NI-01	1NI-9A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-9A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-9A - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI-10B	MCFD-1562-01.00	MR	Category B	GA	Yes	2		MC-NI-01	1NI-10B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-10B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI-10B - Stroke Time (Cls to Opn)	Tested at cold shutdown
1NI-12	MCFD-1562-01.00	SA	Category C	SW	Yes	2			1NI-12 - Full Stroke (Both)	Condition Monitoring
1NI-15	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-15 - Full Stroke (Both)	Condition Monitoring
1NI-17	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-15 - Full Stroke (Both)	Condition Monitoring
1NI-19	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-19 - Full Stroke (Both)	Condition Monitoring
1NI-21	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-21 - Full Stroke (Both)	Condition Monitoring
1NI-47A	MCFD-1562-02.00	MR	Category A	GL	Yes	2			1NI-47A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-47A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-47A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NI-48	MCFD-1562-02.00	SA	Category AC	LC	Yes	2			1NI-48 - Full Stroke (Both)	Condition Monitoring
									1NI-48 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NI-52	MCFD-1562-02.00	SA	Category C	RV	Yes	2			1NI-52 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-59	MCFD-1562-02.00	SA	Category AC	SW	Yes	1			1NI-59 - Full Stroke (Both)	Condition Monitoring
									1NI-59 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-60	MCFD-1562-02.00	SA	Category AC	SW	Yes	1			1NI-60 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NI-60 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-63	MCFD-1562-02.00	SA	Category C	RV	Yes	2			1NI-63 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-70	MCFD-1562-02.00	SA	Category AC	SW	Yes	1			1NI-70 - Full Stroke (Both)	Condition Monitoring
									1NI-70 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-71	MCFD-1562-02.00	SA	Category AC	SW	Yes	1			1NI-71 - Full Stroke (Both)	Condition Monitoring
									1NI-71 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-74	MCFD-1562-02.01	SA	Category C	RV	Yes	2			1NI-74 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-81	MCFD-1562-02.01	SA	Category AC	SW	Yes	1			1NI-81 - Full Stroke (Both)	Condition Monitoring
									1NI-81 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-82	MCFD-1562-02.01	SA	Category AC	SW	Yes	1			1NI-82 - Full Stroke (Both)	Condition Monitoring
									1NI-82 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-86	MCFD-1562-02.01	SA	Category C	RV	Yes	2			1NI-86 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-93	MCFD-1562-02.01	SA	Category AC	SW	Yes	1			1NI-93 - Full Stroke (Both)	Condition Monitoring
									1NI-93 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-94	MCFD-1562-02.01	SA	Category AC	SW	Yes	1			1NI-94 - Full Stroke (Both)	Condition Monitoring
									1NI-94 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-95A	MCFD-1562-02.01	MR	Category A	GL	Yes	2			1NI-95A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-95A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-95A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI-96B	MCFD-1562-02.01	MR	Category A	GL	Yes	2			1NI-96B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-96B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-96B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NI-100B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-02	1NI-100B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-100B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NI-101	MCFD-1562-03.00	SA	Category C	SW	Yes	2			1NI-101 - Full Stroke (Both)	Condition Monitoring
1NI-102	MCFD-1562-03.00	SA	Category C	RV	Yes	2			1NI-102 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-103A	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-06	1NI-103A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-103A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NI-114	MCFD-1562-03.00	SA	Category C	LC	Yes	2			1NI-114 - Full Stroke (Both)	Condition Monitoring
1NI-115B	MCFD-1562-03.00	MR	Category B	GL	Yes	2		MC-NI-03	1NI-115B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-115B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NI-116	MCFD-1562-03.00	SA	Category C	SW	Yes	2			1NI-116 - Full Stroke (Both)	Condition Monitoring
1NI-118A	MCFD-1562-03.00	MR	Category B	GA	Yes	2			1NI-118A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-118A - Stroke Time (Opn to Cls)	Tested once quarterly
1NI-119	MCFD-1562-03.00	SA	Category C	RV	Yes	2			1NI-119 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-120B	MCFD-1562-03.00	MR	Category A	GL	Yes	2			1NI-120B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-120B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-120B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NI-121A	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-04	1NI-121A - Position	Tested once every two

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Activ.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
									1NI-121A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI-121A - Stroke Time (Cls to Opn)	Tested at cold shutdown
1NI-124	MCFD-1562-03.00	SA	Category AC	LC	Yes	1			1NI-124 - Full Stroke (Both)	Condition Monitoring
									1NI-124 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-125	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-125 - Full Stroke (Both)	Condition Monitoring
									1NI-125 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-126	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-126 - Full Stroke (Both)	Condition Monitoring
									1NI-126 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-128	MCFD-1562-03.00	SA	Category AC	LC	Yes	1			1NI-128 - Full Stroke (Both)	Condition Monitoring
									1NI-128 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-129	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-129 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-129 - Full Stroke (Both)	Condition Monitoring
1NI-134	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-134 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-134 - Full Stroke (Both)	Condition Monitoring
1NI-135B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-25	1NI-135B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NI-135B - Position Indicator (Open and Closed)	Tested once every two years
1NI-136B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-20	1NI-136B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-136B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-136B - Stroke Time	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	
1NI-143	MCFD-1562-03.00	SA	Category C	LC	Yes	2			1NI-143 - Full Stroke (Both)	Condition Monitoring
1NI-144B	MCFD-1562-03.00	MR	Category B	GL	Yes	2			1NI-144B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-144B - Position Indicator (Open and Closed)	Tested once every two years
1NI-147A	MCFD-1562-03.00	MR	Category B	GL	Yes	2		MC-NI-03	1NI-147A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NI-147A - Position Indicator (Open and Closed)	Tested once every two years
1NI-148	MCFD-1562-03.00	SA	Category C	SW	Yes	2			1NI-148 - Full Stroke (Both)	Condition Monitoring
1NI-150B	MCFD-1562-03.00	MR	Category B	GA	Yes	2			1NI-150B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NI-150B - Position Indicator (Open and Closed)	Tested once every two years
1NI-151	MCFD-1562-03.00	SA	Category C	RV	Yes	2			1NI-151 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-152B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-04	1NI-152B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-152B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-152B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI-156	MCFD-1562-03.00	SA	Category AC	LC	Yes	1			1NI-156 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-156 - Full Stroke (Both)	Condition Monitoring
1NI-157	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-157 - Full Stroke (Both)	Condition Monitoring
									1NI-157 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
1NI-159	MCFD-1562-03.00	SA	Category AC	LC	Yes	1			1NI-159 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-159 - Full Stroke (Both)	Condition Monitoring
1NI-160	MCFD-1562-03.00	SA	Category AC	SW	Yes	1			1NI-160 - Leak Test - Section XI (Accident Dir)	Per Tech Spec

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NI-160 - Full Stroke (Both)	Condition Monitoring
1NI-161	MCFD-1562-03.01	SA	Category C	RV	Yes	2			1NI-161 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NI-162A	MCFD-1562-03.01	MR	Category B	GA	Yes	2		MC-NI-05	1NI-162A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NI-162A - Position Indicator (Open and Closed)	Tested once every two years
1NI-165	MCFD-1562-03.01	SA	Category AC	LC	Yes	1			1NI-165 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-165 - Full Stroke (Both)	Condition Monitoring
1NI-167	MCFD-1562-03.01	SA	Category AC	LC	Yes	1			1NI-167 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-167 - Full Stroke (Both)	Condition Monitoring
1NI-169	MCFD-1562-03.01	SA	Category AC	LC	Yes	1			1NI-169 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-169 - Full Stroke (Both)	Condition Monitoring
1NI-171	MCFD-1562-03.01	SA	Category AC	LC	Yes	1			1NI-171 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-171 - Full Stroke (Both)	Condition Monitoring
1NI-173A	MCFD-1562-03.01	MR	Category B	GA	Yes	2		MC-N-07	1NI-173A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NI-173A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-173A - Stroke Time (Closed to Open)	Tested at cold shutdown
1NI-175	MCFD-1562-03.01	SA	Category AC	SW	Yes	1			1NI-175 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-175 - Full Stroke (Both)	Condition Monitoring
1NI-176	MCFD-1562-03.01	SA	Category AC	SW	Yes	1			1NI-176 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-176 - Full Stroke (Both)	Condition Monitoring
1NI-178B	MCFD-1562-03.01	MR	Category B	GA	Yes	2		MC-N-07	1NI-178B - Stroke Time	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
									1NI-178B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-178B - Stroke Time (Closed to Open)	Tested at cold shutdown
1NI-180	MCFD-1562-03.01	SA	Category AC	SW	Yes	1			1NI-180 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-180 - Full Stroke (Both)	Condition Monitoring
1NI-181	MCFD-1562-03.01	SA	Category AC	SW	Yes	1			1NI-181 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									1NI-181 - Full Stroke (Both)	Condition Monitoring
1NI-183B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-09	1NI-183B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-183B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-183B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI-184B	MCFD-1562-03.01	MR	Category B	GA	Yes	2		MC-NI-10	1NI-184B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-184B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-184B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI-185A	MCFD-1562-03.01	MR	Category B	GA	Yes	2		MC-NI-10	1NI-185A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-185A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-185A - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI-332A	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-11	1NI-332A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-332A - Position Indicator (Open and Closed)	Tested once every two years
1NI-333B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-11	1NI-333B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NI-333B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI-334B	MCFD-1562-03.00	MR	Category B	GA	Yes	2		MC-NI-08	1NI-334B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NI-334B - Position Indicator (Open and Closed)	Tested once every two years
1NI-347	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-347 - Full Stroke (Both)	Condition Monitoring
1NI-348	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-348 - Full Stroke (Both)	Condition Monitoring
1NI-349	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-349 - Full Stroke (Both)	Condition Monitoring
1NI-354	MCFD-1562-01.00	SA	Category C	LC	Yes	1			1NI-354 - Full Stroke (Both)	Condition Monitoring
1NI-430A	MCFD-1562-02.00	ML	Category B	GL	Yes	2			1NI-430A - Stroke Time (Cls to Opn)	Tested once quarterly
									1NI-430A - Position Indicator (Open and Closed)	Tested once every two years
									1NI-430A - Stroke Time (Open to Closed)	Tested once quarterly
1NI-431B	MCFD-1562-02.00	ML	Category B	GL	Yes	2			1NI-431B - Stroke Time (Cls to Opn)	Tested once quarterly
									1NI-431B - Position Indicator (Open and Closed)	Tested once every two years
									1NI-431B - Stroke Time (Open to Closed)	Tested once quarterly
1NI-436	MCFD-1562-02.01	SA	Category AC	SW	Yes	2			1NI-436 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NI-436 - Full Stroke (Both)	Condition Monitoring
2NI-9A	MCFD-2562-01.00	MR	Category B	GA	Yes	2		MC-NI-01	2NI-9A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-9A - Position Indicator (Open and Closed)	Tested once every two years
									2NI-9A - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-10B	MCFD-2562-01.00	MR	Category B	GA	Yes	2		MC-NI-01	2NI-10B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-10B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-10B - Stroke Time (Open to Closed)	Tested at cold shutdown

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NI-12	MCFD-2562-01.00	SA	Category C	SW	Yes	2			2NI-12 - Full Stroke (Both)	Condition Monitoring
2NI-15	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-15 - Full Stroke (Both)	Condition Monitoring
2NI-17	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-17 - Full Stroke (Both)	Condition Monitoring
2NI-19	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-19 - Full Stroke (Both)	Condition Monitoring
2NI-21	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-21 - Full Stroke (Both)	Condition Monitoring
2NI-47A	MCFD-2562-02.00	MR	Category A	GL	Yes	2			2NI-47A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NI-47A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NI-47A - Position Indicator (Open and Closed)	Tested once every two years
2NI-48	MCFD-2562-02.00	SA	Category AC	LC	Yes	2			2NI-48 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NI-48 - Full Stroke (Both)	Condition Monitoring
2NI-52	MCFD-2562-02.00	SA	Category C	RV	Yes	2			2NI-52 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-59	MCFD-2562-02.00	SA	Category AC	SW	Yes	1			2NI-59 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-59 - Full Stroke (Both)	Condition Monitoring
2NI-60	MCFD-2562-02.00	SA	Category AC	SW	Yes	1			2NI-60 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-60 - Full Stroke (Both)	Condition Monitoring
2NI-63	MCFD-2562-02.00	SA	Category C	RV	Yes	2			2NI-63 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-70	MCFD-2562-02.00	SA	Category AC	SW	Yes	1			2NI-70 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-70 - Full Stroke (Both)	Condition Monitoring
2NI-71	MCFD-2562-02.00	SA	Category AC	SW	Yes	1			2NI-71 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-71 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NI-74	MCFD-2562-02.01	SA	Category C	RV	Yes	2			2NI-74 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-81	MCFD-2562-02.01	SA	Category AC	SW	Yes	1			2NI-81 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-81 - Full Stroke (Both)	Condition Monitoring
2NI-82	MCFD-2562-02.01	SA	Category AC	SW	Yes	1			2NI-82 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-82 - Full Stroke (Both)	Condition Monitoring
2NI-86	MCFD-2562-02.01	SA	Category C	RV	Yes	2			2NI-86 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-93	MCFD-2562-02.01	SA	Category AC	SW	Yes	1			2NI-93 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-93 - Full Stroke (Both)	Condition Monitoring
2NI-94	MCFD-2562-02.01	SA	Category AC	SW	Yes	1			2NI-94 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-94 - Full Stroke (Both)	Condition Monitoring
2NI-95A	MCFD-2562-02.01	MR	Category A	GL	Yes	2			2NI-95A - Stroke Time (Opn to CIs)	Tested once quarterly
									2NI-95A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2NI-95A - Position Indicator (Open and Closed)	Tested once every two years
2NI-96B	MCFD-2562-02.01	MR	Category A	GL	Yes	2			2NI-96B - Stroke Time (Opn to CIs)	Tested once quarterly
									2NI-96B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NI-96B - Position Indicator (Open and Closed)	Tested once every two years
2NI-100B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-02	2NI-100B - Stroke Time (Opn to CIs)	Tested at cold shutdown
									2NI-100B - Position Indicator (Open and Closed)	Tested once every two years
2NI-101	MCFD-2562-03.00	SA	Category C	SW	Yes	2			2NI-101 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NI-102	MCFD-2562-03.00	SA	Category C	RV	Yes	2			2NI-102 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-103A	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-06	2NI-103A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-103A - Position Indicator (Open and Closed)	Tested once every two years
2NI-114	MCFD-2562-03.00	SA	Category C	LC	Yes	2			2NI-114 - Full Stroke (Both)	Condition Monitoring
2NI-115B	MCFD-2562-03.00	MR	Category B	GL	Yes	2		MC-NI-03	2NI-115B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-115B - Position Indicator (Open and Closed)	Tested once every two years
2NI-116	MCFD-2562-03.00	SA	Category C	SW	Yes	2			2NI-116 - Full Stroke (Both)	Condition Monitoring
2NI-118A	MCFD-2562-03.00	MR	Category B	GA	Yes	2			2NI-118A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NI-118A - Position Indicator (Open and Closed)	Tested once every two years
2NI-119	MCFD-2562-03.00	SA	Category C	RV	Yes	2			2NI-119 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-120B	MCFD-2562-03.00	MR	Category A	GL	Yes	2			2NI-120B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NI-120B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NI-120B - Position Indicator (Open and Closed)	Tested once every two years
2NI-121A	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-04	2NI-121A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-121A - Position Indicator (Open and Closed)	Tested once every two years
									2NI-121A - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-124	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-124 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-124 - Full Stroke (Both)	Condition Monitoring
2NI-125	MCFD-2562-03.00	SA	Category AC	SW	Yes	1			2NI-125 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-125 - Full Stroke	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Both)	
2NI-126	MCFD-2562-03.00	SA	Category AC	SW	Yes	1			2NI-126 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-126 - Full Stroke (Both)	Condition Monitoring
2NI-128	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-128 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-128 - Full Stroke (Both)	Condition Monitoring
2NI-129	MCFD-2562-03.00	SA	Category AC	SW	Yes	1			2NI-129 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-129 - Full Stroke (Both)	Condition Monitoring
2NI-134	MCFD-2562-03.00	SA	Category AC	SW	Yes	1			2NI-134 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-134 - Full Stroke (Both)	Condition Monitoring
2NI-135B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-25	2NI-135B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-135B - Position Indicator (Open and Closed)	Tested once every two years
2NI-136B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-20	2NI-136B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-136B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-136B - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-143	MCFD-2562-03.00	SA	Category C	LC	Yes	2			2NI-143 - Full Stroke (Both)	Condition Monitoring
2NI-144B	MCFD-2562-03.00	MR	Category B	GL	Yes	2			2NI-144B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NI-144B - Position Indicator (Open and Closed)	Tested once every two years
2NI-147A	MCFD-2562-03.00	MR	Category B	GL	Yes	2		MC-NI-03	2NI-147A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-147A - Position Indicator (Open and Closed)	Tested once every two years
2NI-148	MCFD-2562-03.00	SA	Category C	SW	Yes	2			2NI-148 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NI-150B	MCFD-2562-03.00	MR	Category B	GA	Yes	2			2NI-150B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NI-150B - Position Indicator (Open and Closed)	Tested once every two years
2NI-151	MCFD-2562-03.00	SA	Category C	RV	Yes	2			2NI-151 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-152B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-04	2NI-152B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-152B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-152B - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-156	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-156 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-156 - Full Stroke (Both)	Condition Monitoring
2NI-157	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-157 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-157 - Full Stroke (Both)	Condition Monitoring
2NI-159	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-159 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-159 - Full Stroke (Both)	Condition Monitoring
2NI-160	MCFD-2562-03.00	SA	Category AC	LC	Yes	1			2NI-160 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-160 - Full Stroke (Both)	Condition Monitoring
2NI-161	MCFD-2562-03.01	SA	Category C	RV	Yes	2			2NI-161 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NI-162A	MCFD-2562-03.01	MR	Category B	GA	Yes	2		MC-NI-05	2NI-162A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-162A - Position Indicator (Open and Closed)	Tested once every two years
2NI-165	MCFD-2562-03.01	SA	Category AC	LC	Yes	1			2NI-165 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-165 - Full Stroke (Both)	Condition Monitoring
2NI-167	MCFD-2562-03.01	SA	Category AC	LC	Yes	1			2NI-167 - Leak Test -	Per Tech Spec

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Section XI (Accident Dir)	
									2NI-167 - Full Stroke (Both)	Condition Monitoring
2NI-169	MCFD-2562-03.01	SA	Category AC	LC	Yes	1			2NI-169 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-169 - Full Stroke (Both)	Condition Monitoring
2NI-171	MCFD-2562-03.01	SA	Category AC	LC	Yes	1			2NI-171 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-171 - Full Stroke (Both)	Condition Monitoring
2NI-173A	MCFD-2562-03.01	MR	Category B	GA	Yes	2		MC-N-07	2NI-173A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-173A - Position Indicator (Open and Closed)	Tested once every two years
									2NI-173A - Stroke Time (Closed to Open)	Tested at cold shutdown
2NI-175	MCFD-2562-03.01	SA	Category AC	SW	Yes	1			2NI-175 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-175 - Full Stroke (Both)	Condition Monitoring
2NI-176	MCFD-2562-03.01	SA	Category AC	SW	Yes	1			2NI-176 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-176 - Full Stroke (Both)	Condition Monitoring
2NI-178B	MCFD-2562-03.01	MR	Category B	GA	Yes	2		MC-N-07	2NI-178B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-178B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-178B - Stroke Time (Closed to Open)	Tested at cold shutdown
2NI-180	MCFD-2562-03.01	SA	Category AC	SW	Yes	1			2NI-180 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-180 - Full Stroke (Both)	Condition Monitoring
2NI-181	MCFD-2562-03.01	SA	Category AC	SW	Yes	1			2NI-181 - Leak Test - Section XI (Accident Dir)	Per Tech Spec
									2NI-181 - Full Stroke	Condition Monitoring

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Both)	
2NI-183B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-09	2NI-183B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-183B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-183B - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-184B	MCFD-2562-03.01	MR	Category B	GA	Yes	2		MC-NI-10	2NI-184B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-184B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-184B - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-185A	MCFD-2562-03.01	MR	Category B	GA	Yes	2		MC-NI-10	2NI-185A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-185A - Position Indicator (Open and Closed)	Tested once every two years
									2NI-185A - Stroke Time (Open to Closed)	Tested at cold shutdown
2NI-332A	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-11	2NI-332A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-332A - Position Indicator (Open and Closed)	Tested once every two years
2NI-333B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-11	2NI-333B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NI-333B - Position Indicator (Open and Closed)	Tested once every two years
2NI-334B	MCFD-2562-03.00	MR	Category B	GA	Yes	2		MC-NI-08	2NI-334B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NI-334B - Position Indicator (Open and Closed)	Tested once every two years
2NI-347	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-347 - Full Stroke (Both)	Condition Monitoring
2NI-348	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-348 - Full Stroke (Both)	Condition Monitoring
2NI-349	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-349 - Full Stroke (Both)	Condition Monitoring
2NI-354	MCFD-2562-01.00	SA	Category C	LC	Yes	1			2NI-354 - Full Stroke (Both)	Condition Monitoring
2NI-430A	MCFD-2562-02.00	ML	Category B	GL	Yes	2			2NI-430A - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Cls to Opn)	
									2NI-430A - Position Indicator (Open and Closed)	Tested once every two years
									2NI-430A - Stroke Time (Open to Closed)	Tested once quarterly
2NI-431B	MCFD-2562-02.00	ML	Category B	GL	Yes	2			2NI-431B - Stroke Time (Cls to Opn)	Tested once quarterly
									2NI-431B - Position Indicator (Open and Closed)	Tested once every two years
									2NI-431B - Stroke Time (Open to Closed)	Tested once quarterly
2NI-436	MCFD-2562-02.01	SA	Category AC	SW	Yes	2			2NI-436 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NI-436 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NM-3AC	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-3AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-3AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-3AC - Position Indicator (Open and Closed)	Tested once every two years
1NM-6AC	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-6AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-6AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-6AC - Position Indicator (Open and Closed)	Tested once every two years
1NM-7B	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-7B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-7B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-7B - Position Indicator (Open and Closed)	Tested once every two years
1NM-22AC	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-22AC - Position Indicator (Open and Closed)	Tested once every two years
									1NM-22AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-22AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NM-25AC	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-25AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-25AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-25AC - Position Indicator (Open and Closed)	Tested once every two years
1NM-26B	MCFD-1572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	1NM-26B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NM-26B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-26B - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
1NM-69	MCFD-1572-01.01	SA	Category A	RV	No	2			1NM-69 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
1NM-72B	MCFD-1572-01.01	MR	Category A	GL	Yes	2			1NM-72B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-72B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-72B - Position Indicator (Open and Closed)	Tested once every two years
1NM-75B	MCFD-1572-01.01	MR	Category A	GL	Yes	2			1NM-75B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-75B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-75B - Position Indicator (Open and Closed)	Tested once every two years
1NM-78B	MCFD-1572-01.01	MR	Category A	GL	Yes	2			1NM-78B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-78B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-78B - Position Indicator (Open and Closed)	Tested once every two years
1NM-81B	MCFD-1572-01.01	MR	Category A	GL	Yes	2			1NM-81B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-81B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-81B - Position Indicator (Open and Closed)	Tested once every two years
1NM-82A	MCFD-1572-01.01	MR	Category A	GL	Yes	2			1NM-82A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-82A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NM-82A - Position Indicator (Open and Closed)	Tested once every two years
1NM-187A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-187A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-187A - Position	Tested once every two

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
1NM-190A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-190A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-190A - Position Indicator (Open and Closed)	Tested once every two years
1NM-191B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-191B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-191B - Position Indicator (Open and Closed)	Tested once every two years
1NM-197B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-197B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-197B - Position Indicator (Open and Closed)	Tested once every two years
1NM-200B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-200B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-200B - Position Indicator (Open and Closed)	Tested once every two years
1NM-201A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-201A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-201A - Position Indicator (Open and Closed)	Tested once every two years
1NM-207A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-207A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-207A - Position Indicator (Open and Closed)	Tested once every two years
1NM-210A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-210A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-210A - Position Indicator (Open and Closed)	Tested once every two years
1NM-211B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-211B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-211B - Position Indicator (Open and Closed)	Tested once every two years
1NM-217B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-217B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-217B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NM-220B	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-220B - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-220B - Position Indicator (Open and Closed)	Tested once every two years
1NM-221A	MCFD-1572-03.00	MR	Category B	GL	Yes	2			1NM-221A - Stroke Time (Opn to Cls)	Tested once quarterly
									1NM-221A - Position Indicator (Open and Closed)	Tested once every two years
1NM-420	MCFD-1572-01.00	SA	Category A	LC	No	2			1NM-420 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NM-421	MCFD-1572-01.00	SA	Category A	CK	No	2			1NM-421 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NM-3AC	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-3AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-3AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-3AC - Position Indicator (Open and Closed)	Tested once every two years
2NM-6AC	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-6AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-6AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-6AC - Position Indicator (Open and Closed)	Tested once every two years
2NM-7B	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-7B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-7B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-7B - Position Indicator (Open and Closed)	Tested once every two years
2NM-22AC	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-22AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-22AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-22AC - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
2NM-25AC	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-25AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-25AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-25AC - Position Indicator (Open and Closed)	Tested once every two years
2NM-26B	MCFD-2572-01.00	MR	Category A	GL	Yes	2		MC-NM-02	2NM-26B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NM-26B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-26B - Position Indicator (Open and Closed)	Tested once every two years
2NM-69	MCFD-2572-01.01	SA	Category A	RV	No	2			2NM-69 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2NM-72B	MCFD-2572-01.01	MR	Category A	GL	Yes	2			2NM-72B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-72B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-72B - Position Indicator (Open and Closed)	Tested once every two years
2NM-75B	MCFD-2572-01.01	MR	Category A	GL	Yes	2			2NM-75B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-75B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-75B - Position Indicator (Open and Closed)	Tested once every two years
2NM-78B	MCFD-2572-01.01	MR	Category A	GL	Yes	2			2NM-78B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-78B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-78B - Position Indicator (Open and Closed)	Tested once every two years
2NM-81B	MCFD-2572-01.01	MR	Category A	GL	Yes	2			2NM-81B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-81B - Leak Test -	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Appendix J (Accident Dir)	
									2NM-81B - Position Indicator (Open and Closed)	Tested once every two years
2NM-82A	MCFD-2572-01.01	MR	Category A	GL	Yes	2			2NM-82A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-82A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NM-82A - Position Indicator (Open and Closed)	Tested once every two years
2NM-187A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-187A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-187A - Position Indicator (Open and Closed)	Tested once every two years
2NM-190A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-190A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-190A - Position Indicator (Open and Closed)	Tested once every two years
2NM-191B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-191B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-191B - Position Indicator (Open and Closed)	Tested once every two years
2NM-197B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-197B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-197B - Position Indicator (Open and Closed)	Tested once every two years
2NM-200B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-200B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-200B - Position Indicator (Open and Closed)	Tested once every two years
2NM-201A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-201A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-201A - Position Indicator (Open and Closed)	Tested once every two years
2NM-207A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-207A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-207A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
2NM-210A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-210A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-210A - Position Indicator (Open and Closed)	Tested once every two years
2NM-211B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-211B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-211B - Position Indicator (Open and Closed)	Tested once every two years
2NM-217B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-217B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-217B - Position Indicator (Open and Closed)	Tested once every two years
2NM-220B	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-220B - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-220B - Position Indicator (Open and Closed)	Tested once every two years
2NM-221A	MCFD-2572-03.00	MR	Category B	GL	Yes	2			2NM-221A - Stroke Time (Opn to Cls)	Tested once quarterly
									2NM-221A - Position Indicator (Open and Closed)	Tested once every two years
2NM-420	MCFD-2572-01.00	SA	Category A	LC	No	2			2NM-420 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NM-421	MCFD-2572-01.00	SA	Category A	LC	No	2			2NM-421 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NS-1B	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-06	1NS-1B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NS-1B - Position Indicator (Open and Closed)	Tested once every two years
1NS-2	MCFD-1563-01.00	SA	Category C	RV	Yes	2			1NS-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NS-3B	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-05	1NS-3B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NS-3B - Position Indicator (Open and Closed)	Tested once every two years
1NS-4	MCFD-1563-01.00	SA	Category C	SW	Yes	2			1NS-4 - Full Stroke (Both)	Condition Monitoring
1NS-12B	MCFD-1563-01.00	MR	Category B	GA	Yes	2			1NS-12B - Stroke Time (Cls to Opn)	Tested once quarterly
									1NS-12B - Position Indicator (Open and Closed)	Tested once every two years
									1NS-12B - Stroke Time (Open to Closed)	Tested once quarterly
1NS-13	MCFD-1563-01.00	SA	Category C	SW	Yes	2	MC-SRV-NS-01		1NS-13 - Full Stroke (Both)	Condition Monitoring
1NS-15B	MCFD-1563-01.00	MR	Category B	GA	Yes	2			1NS-15B - Stroke Time (Cls to Opn)	Tested once quarterly
									1NS-15B - Position Indicator (Open and Closed)	Tested once every two years
									1NS-15B - Stroke Time (Open to Closed)	Tested once quarterly
1NS-16	MCFD-1563-01.00	SA	Category C	SW	Yes	2	MC-SRV-NS-01		1NS-16 - Full Stroke (Both)	Condition Monitoring
1NS-18A	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-06	1NS-18A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NS-18A - Position Indicator (Open and Closed)	Tested once every two years
1NS-19	MCFD-1563-01.00	SA	Category C	RV	Yes	2			1NS-19 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NS-20A	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-05	1NS-20A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1NS-20A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NS-21	MCFD-1563-01.00	SA	Category C	SW	Yes	2			1ns-21 - Full Stroke (Both)	Condition Monitoring
1NS-29A	MCFD-1563-01.00	MR	Category B	GA	Yes	2			1NS-29A - Stroke Time (Cls to Opn)	Tested once quarterly
									1NS-29A - Position Indicator (Open and Closed)	Tested once every two years
									1NS-29A - Stroke Time (Open to Closed)	Tested once quarterly
1NS-30	MCFD-1563-01.00	SA	Category C	SW	Yes	2	MC-SRV-NS-01		1NS-30 - Full Stroke (Both)	Condition Monitoring
1NS-32A	MCFD-1563-01.00	MR	Category B	GA	Yes	2			1NS-32A - Stroke Time (Cls to Opn)	Tested once quarterly
									1NS-32A - Position Indicator (Open and Closed)	Tested once every two years
									1NS-32A - Stroke Time (Open to Closed)	Tested once quarterly
1NS-33	MCFD-1563-01.00	SA	Category C	SW	Yes	2	MC-SRV-NS-01		1NS-33 - Full Stroke (Both)	Condition Monitoring
1NS-38B	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-01	1NS-38B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									1NS-38B - Position Indicator (Open and Closed)	Tested once every two years
									1NS-38B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NS-41	MCFD-1563-01.00	SA	Category C	SW	Yes	2	MC-SRV-NS-01		1NS-41 - Full Stroke (Both)	Condition Monitoring
1NS-43A	MCFD-1563-01.00	MR	Category B	GA	Yes	2		MC-NS-01	1NS-43A - Position Indicator (Open and Closed)	Tested once every two years
									1NS-43A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NS-43A - Stroke Time (Cls to Opn)	Tested at cold shutdown
1NS-46	MCFD-1563-01.00	SA	Category C	CK	Yes	2	MC-SRV-NS-01		1NS-46 - Full Stroke (Both)	Condition Monitoring
1NS-140	MCFD-1563-01.00	SA	Category AC	WC	Yes	2			1NS-140 - Full Stroke (Both)	Condition Monitoring
1NS-141	MCFD-1563-01.00	SA	Category AC	WC	Yes	2			1NS-141 - Full Stroke (Both)	Condition Monitoring
1NS-161	MCFD-1563-01.00	SA	Category C	CK	Yes	2			1NS-161- Leak Test	Tested every

MCGUIRE NUCLEAR STATION

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									- Section XI	refueling outage
									1NS-161 - Full Stroke (Both)	Condition Monitoring
1NS-163	MCFD-1563-01.00	SA	Category C	CK	Yes	2			1NS-163 - Leak Test - Section XI	Tested every refueling outage
									1NS-163 - Full Stroke (Both)	Condition Monitoring
1NSSV5550	MCFD-1563-01.00	SO	Category A	SV	Yes	2			1NSSV5550 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NSSV5550 Fast Acting Stroke Time (Open to Closed)	Tested once quarterly
									1NSSV5550 - Position Indicator (Open and Closed)	Tested once every two years
1NSSV5551	MCFD-1563-01.00	SO	Category A	SV	Yes	2			1NSSV5551 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1NSSV5551 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1NSSV5551 - Position Indicator (Open and Closed)	Tested once every two years
2NS-1B	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-06	2NS-1B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NS-1B - Position Indicator (Open and Closed)	Tested once every two years
2NS-2	MCFD-2563-01.00	SA	Category C	RV	Yes	2			2NS-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NS-3B	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-05	2NS-3B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NS-3B - Position Indicator (Open and Closed)	Tested once every two years
2NS-4	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-4 - Full Stroke (Both)	Condition Monitoring
2NS-12B	MCFD-2563-01.00	MR	Category B	GA	Yes	2			2NS-12B - Stroke Time (Cls to Opn)	Tested once quarterly
									2NS-12B - Position Indicator (Open and Closed)	Tested once every two years
									2NS-12B - Stroke Time (Open to Closed)	Tested once quarterly

MCGUIRE NUCLEAR STATION

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NS-13	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-13 - Full Stroke (Both)	Condition Monitoring
2NS-15B	MCFD-2563-01.00	MR	Category B	GA	Yes	2			2NS-15B - Stroke Time (Cls to Opn)	Tested once quarterly
									2NS-15B - Position Indicator (Open and Closed)	Tested once every two years
									2NS-15B - Stroke Time (Open to Closed)	Tested once quarterly
2NS-16	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-16 - Full Stroke (Both)	Condition Monitoring
2NS-18A	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-06	2NS-18A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NS-18A - Position Indicator (Open and Closed)	Tested once every two years
2NS-19	MCFD-2563-01.00	SA	Category C	RV	Yes	2			2NS-19 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NS-20A	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-05	2NS-20A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NS-20A - Position Indicator (Open and Closed)	Tested once every two years
2NS-21	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-21 - Full Stroke (Both)	Condition Monitoring
2NS-29A	MCFD-2563-01.00	MR	Category B	GA	Yes	2			2NS-29A - Stroke Time (Cls to Opn)	Tested once quarterly
									2NS-29A - Position Indicator (Open and Closed)	Tested once every two years
									2NS-29A - Stroke Time (Open to Closed)	Tested once quarterly
2NS-30	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-30 - Full Stroke (Both)	Condition Monitoring
2NS-32A	MCFD-2563-01.00	MR	Category B	GA	Yes	2			2NS-32A - Stroke Time (Cls to Opn)	Tested once quarterly
									2NS-32A - Position Indicator (Open and Closed)	Tested once every two years
									2NS-32A - Stroke Time (Open to Closed)	Tested once quarterly
2NS-33	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-33 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NS-38B	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-01	2NS-38B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NS-38B - Position Indicator (Open and Closed)	Tested once every two years
									2NS-38B - Stroke Time (Open to Closed)	Tested at cold shutdown
2NS-41	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-41 - Full Stroke (Both)	Condition Monitoring
2NS-43A	MCFD-2563-01.00	MR	Category B	GA	Yes	2		MC-NS-01	2NS-43A - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NS-43A - Position Indicator (Open and Closed)	Tested once every two years
									2NS-43A - Stroke Time (Open to Closed)	Tested at cold shutdown
2NS-46	MCFD-2563-01.00	SA	Category C	SW	Yes	2			2NS-46 - Full Stroke (Both)	Condition Monitoring
2NS-161	MCFD-2563-01.00	SA	Category AC	CK	Yes	2			2NS-161 - Leak Test - Section XI	Tested every refueling outage
									2NS-161 - Full Stroke (Both)	Condition Monitoring
2NS-163	MCFD-2563-01.00	SA	Category AC	CK	Yes	2			2NS-163 - Leak Test - Section XI	Tested every refueling outage
									2NS-163 - Full Stroke (Both)	Condition Monitoring
2NSSV5550	MCFD-2563-01.00	SO	Category A		Yes	2			2NSSV5550 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2NSSV5550 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NSSV5550 - Position Indicator (Open and Closed)	Tested once every two years
2NSSV5551	MCFD-2563-01.00	SO	Category A		Yes	2			2NSSV5551 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2NSSV5551 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NSSV5551 - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV-6	MCFD-1554-01.02	SA	Category C	RV	Yes	2			1NV-6 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NV-7B	MCFD-1554-01.02	MR	Category B	GL	Yes	2		MC-NV-02	1NV-7B - Position Indicator (Open and Closed)	Tested once every two years
									1NV-7B - Stroke Time (Opn to CIs)	Tested at cold shutdown
1NV-29	MCFD-1554-01.00	SA	Category C	LC	Yes	2			1NV-29 - Full Stroke (Both)	Condition Monitoring
1NV-31	MCFD-1554-01.00	SA	Category C	LC	Yes	1			1NV-31 - Full Stroke (Both)	Condition Monitoring
1NV-35A	MCFD-1554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	1NV-35A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-35A - Stroke Time (Opn to CIs)	Tested at cold shutdown
1NV-45	MCFD-1554-01.00	SA	Category C	LC	Yes	2			1NV-45 - Full Stroke (Both)	Condition Monitoring
1NV-47	MCFD-1554-01.00	SA	Category C	LC	Yes	1			1NV-47 - Full Stroke (Both)	Condition Monitoring
1NV-61	MCFD-1554-01.01	SA	Category C	LC	Yes	2			1NV-61 - Full Stroke (Both)	Condition Monitoring
1NV-63	MCFD-1554-01.01	SA	Category C	LC	Yes	1			1NV-63 - Full Stroke (Both)	Condition Monitoring
1NV-77	MCFD-1554-01.01	SA	Category C	LC	Yes	2			1NV-77 - Full Stroke (Both)	Condition Monitoring
1NV-79	MCFD-1554-01.01	SA	Category C	LC	Yes	1			1NV-79 - Full Stroke (Both)	Condition Monitoring
1NV-93	MCFD-1554-01.01	SA	Category C	RV	Yes	2			1NV-93 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NV-94AC	MCFD-1554-01.01	MR	Category B	GA	Yes	2		MC-NV-01	1NV-94AC - Position Indicator (Open and Closed)	Tested once every two years
									1NV-94AC - Stroke Time (Opn to CIs)	Tested at cold shutdown
1NV-95B	MCFD-1554-01.01	MR	Category B	GA	Yes	2		MC-NV-01	1NV-95B - Position Indicator (Open and Closed)	Tested once every two years
									1NV-95B - Stroke Time (Opn to CIs)	Tested at cold shutdown
1NV-141A	MCFD-1554-02.00	MR	Category B	GA	Yes	2		MC-NV-04	1NV-141A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-141A - Stroke Time (Opn to CIs)	Tested at cold shutdown
1NV-142B	MCFD-1554-02.00	MR	Category B	GA	Yes	2		MC-NV-04	1NV-142B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
									1NV-142B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-143	MCFD-1554-02.00	SA	Category C	SW	Yes	2			1NV-143 - Full Stroke (Both)	Condition Monitoring
1NV-150B	MCFD-1554-02.01	MR	Category B	GL	Yes	2		MC-NV-08	1NV-150B - Position Indicator (Open and Closed)	Tested once every two years
									1NV-150B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-151A	MCFD-1554-02.01	MR	Category B	GL	Yes	2		MC-NV-08	1NV-151A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-151A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-170	MCFD-1554-02.00	SA	Category C	RV	Yes	2			1NV-170 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NV-218	MCFD-1554-03.00	SA	Category C	SW	Yes	2			1NV-218 - Full Stroke (Both)	Condition Monitoring
1NV-221A	MCFD-1554-03.01	MR	Category B	GA	Yes	2		MC-NV-06	1NV-221A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV-221A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV-221A - Position Indicator (Open and Closed)	Tested once every two years
1NV-222B	MCFD-1554-03.01	MR	Category B	GA	Yes	2		MC-NV-06	1NV-222B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV-222B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV-222B - Position Indicator (Open and Closed)	Tested once every two years
1NV-223	MCFD-1554-03.01	SA	Category C	SW	Yes	2			1NV-223 - Full Stroke (Both)	Condition Monitoring
1NV-225	MCFD-1554-03.01	SA	Category C	SW	Yes	2			1NV-225 - Full Stroke (Both)	Condition Monitoring
1NV-227	MCFD-1554-03.01	SA	Category C	LC	Yes	2			1NV-227 - Full Stroke (Both)	Condition Monitoring
1NV-229	MCFD-1554-03.01	SA	Category C	RV	Yes	2			1NV-229 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1NV-231	MCFD-1554-03.01	SA	Category C	SW	Yes	2			1NV-231 - Full Stroke (Both)	Condition Monitoring
1NV-233	MCFD-1554-03.01	SA	Category C	LC	Yes	2			1NV-233 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV-244A	MCFD-1554-03.00	MR	Category B	GA	Yes	2		MC-NV-05	1NV-244A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-244A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-245B	MCFD-1554-03.00	MR	Category B	GA	Yes	2		MC-NV-05	1NV-245B - Position Indicator (Open and Closed)	Tested once every two years
									1NV-245B - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-263	MCFD-1554-03.01	SA	Category C	LC	Yes	2			1NV-263 - Full Stroke (Both)	Condition Monitoring
1NV-264	MCFD-1554-03.01	SA	Category C	SW	Yes	2			1NV-264 - Full Stroke (Both)	Condition Monitoring
1NV-265B	MCFD-1554-03.01	MR	Category B	GL	Yes	2		MC-NV-09	1NV-265B - Position Indicator (Open and Closed)	Tested once every two years
									1NV-265B - Stroke Time (Cls to Opn)	Tested at cold shutdown
1NV-383	MCFD-1554-05.00	SA	Category C	LC	Yes	3			1NV-383 - Full Stroke (Both)	Condition Monitoring
1NV-386	MCFD-1554-05.00	SA	Category C	LC	Yes	3			1NV-386 - Full Stroke (Both)	Condition Monitoring
1NV-457A	MCFD-1554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	1NV-457A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-457A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-458A	MCFD-1554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	1NV-458A - Position Indicator (Open and Closed)	Tested once every two years
									1NV-458A - Stroke Time (Opn to Cls)	Tested at cold shutdown
1NV-810	MCFD-1554-01.00	SA	Category C	LC	Yes	1			1NV-810 - Full Stroke (Both)	Condition Monitoring
1NV-811	MCFD-1554-01.00	SA	Category C	LC	Yes	1			1NV-811 - Full Stroke (Both)	Condition Monitoring
1NV-812	MCFD-1554-01.01	SA	Category C	LC	Yes	1			1NV-812 - Full Stroke (Both)	Condition Monitoring
1NV-813	MCFD-1554-01.01	SA	Category C	LC	Yes	1			1NV-813 - Full Stroke (Both)	Condition Monitoring
1NV-849AC	MCFD-1554-01.03	MR	Category A	GL	Yes	2			1NV-849AC - Position Indicator (Open and Closed)	Tested once every two years
									1NV-849AC - Stroke Time (Opn to Cls)	Tested once quarterly

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NV-849AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1NV-1002	MCFD-1554-01.03	SA	Category AC	LC	Yes	2			1NV-1002 - Full Stroke (Both)	Condition Monitoring
									1NV-1002 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2NV-6	MCFD-2554-01.02	SA	Category C	RV	Yes	2			2NV-6 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NV-7B	MCFD-2554-01.02	MR	Category B	GL	Yes	2		MC-NV-02	2NV-7B - Position Indicator (Open and Closed)	Tested once every two years
									2NV-7B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-29	MCFD-2554-01.00	SA	Category C	LC	Yes	2			2NV-29 - Full Stroke (Both)	Condition Monitoring
2NV-31	MCFD-2554-01.00	SA	Category C	LC	Yes	1			2NV-31 - Full Stroke (Both)	Condition Monitoring
2NV-35A	MCFD-2554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	2NV-35A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NV-35A - Position Indicator (Open and Closed)	Tested once every two years
2NV-45	MCFD-2554-01.00	SA	Category C	LC	Yes	2			2NV-45 - Full Stroke (Both)	Condition Monitoring
2NV-47	MCFD-2554-01.00	SA	Category C	LC	Yes	1			2NV-47 - Full Stroke (Both)	Condition Monitoring
2NV-61	MCFD-2554-01.01	SA	Category C	LC	Yes	2			2NV-61 - Full Stroke (Both)	Condition Monitoring
2NV-63	MCFD-2554-01.01	SA	Category C	LC	Yes	1			2NV-63 - Full Stroke (Both)	Condition Monitoring
2NV-77	MCFD-2554-01.01	SA	Category C	LC	Yes	2			2NV-77 - Full Stroke (Both)	Condition Monitoring
2NV-79	MCFD-2554-01.01	SA	Category C	LC	Yes	1			2NV-79 - Full Stroke (Both)	Condition Monitoring
2NV-93	MCFD-2554-01.01	SA	Category C	RV	Yes	2			2NV-93 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NV-94AC	MCFD-2554-01.01	MR	Category B	GA	Yes	2		MC-NV-01	2NV-94AC - Position Indicator (Open and Closed)	Tested once every two years
									2NV-94AC - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-95B	MCFD-2554-01.01	MR	Category B	GA	Yes	2		MC-NV-01	2NV-95B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NV-95B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-141A	MCFD-2554-02.00	MR	Category B	GA	Yes	2		MC-NV-04	2NV-141A - Position Indicator (Open and Closed)	Tested once every two years
									2NV-141A - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-142B	MCFD-2554-02.00	MR	Category B	GA	Yes	2		MC-NV-04	2NV-142B - Position Indicator (Open and Closed)	Tested once every two years
									2NV-142B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-143	MCFD-2554-02.00	SA	Category C	SW	Yes	2			2NV-143 - Full Stroke (Both)	Condition Monitoring
2NV-150B	MCFD-2554-02.01	ML	Category B	GL	Yes	2		MC-NV-08	2NV-150B - Position Indicator (Open and Closed)	Tested once every two years
									2NV-150B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-151A	MCFD-2554-02.01	MR	Category B	GL	Yes	2		MC-NV-08	2NV-151A - Position Indicator (Open and Closed)	Tested once every two years
									2NV-151A - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-170	MCFD-2554-02.00	SA	Category C	RV	Yes	2			2NV-170 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NV-218	MCFD-2554-03.00	SA	Category C	SW	Yes	2			2NV-218 - Full Stroke (Both)	Condition Monitoring
2NV-221A	MCFD-2554-03.01	MR	Category B	GA	Yes	2		MC-NV-06	2NV-221A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV-221A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NV-221A - Position Indicator (Open and Closed)	Tested once every two years
2NV-222B	MCFD-2554-03.01	MR	Category B	GA	Yes	2		MC-NV-06	2NV-222B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV-222B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NV-222B - Position Indicator (Open and Closed)	Tested once every two years
2NV-223	MCFD-2554-03.01	SA	Category C	SW	Yes	2			2NV-223 - Full Stroke (Both)	Condition Monitoring
2NV-225	MCFD-2554-03.01	SA	Category C	SW	Yes	2			2NV-225 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NV-227	MCFD-2554-03.01	SA	Category C	LC	Yes	2			2NV-227 - Full Stroke (Both)	Condition Monitoring
2NV-229	MCFD-2554-03.01	SA	Category C	RV	Yes	2			2NV-229 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2NV-231	MCFD-2554-03.01	SA	Category C	SW	Yes	2			2NV-231 - Full Stroke (Both)	Condition Monitoring
2NV-233	MCFD-2554-03.01	SA	Category C	LC	Yes	2			2NV-233 - Full Stroke (Both)	Condition Monitoring
2NV-244A	MCFD-2554-03.00	MR	Category B	GA	Yes	2		MC-NV-05	2NV-244A - Position Indicator (Open and Closed)	Tested once every two years
									2NV-244A - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-245B	MCFD-2554-03.00	MR	Category B	GA	Yes	2		MC-NV-05	2NV-245B - Position Indicator (Open and Closed)	Tested once every two years
									2NV-245B - Stroke Time (Opn to Cls)	Tested at cold shutdown
2NV-263	MCFD-2554-03.01	SA	Category C	LC	Yes	2			2NV-263 - Full Stroke (Both)	Condition Monitoring
2NV-264	MCFD-2554-03.01	SA	Category C	SW	Yes	2			2NV-264 - Full Stroke (Both)	Condition Monitoring
2NV-265B	MCFD-2554-03.01	MR	Category B	GL	Yes	2		MC-NV-09	2NV-265B - Stroke Time (Cls to Opn)	Tested at cold shutdown
									2NV-265B - Position Indicator (Open and Closed)	Tested once every two years
2NV-383	MCFD-2554-05.00	SA	Category C	LC	Yes	3			2NV-383 - Full Stroke (Both)	Condition Monitoring
2NV-386	MCFD-2554-05.00	SA	Category C	LC	Yes	3			2NV-386 - Full Stroke (Both)	Condition Monitoring
2NV-457A	MCFD-2554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	2NV-457A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NV-457A - Position Indicator (Open and Closed)	Tested once every two years
2NV-458A	MCFD-2554-01.02	AO	Category B	GA	Yes	2		MC-NV-19	2NV-458A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2NV-458A - Position Indicator (Open and Closed)	Tested once every two years
2NV-810	MCFD-2554-01.00	SA	Category C	LC	Yes	1			2NV-810 - Full Stroke (Both)	Condition Monitoring
2NV-811	MCFD-2554-01.00	SA	Category C	LC	Yes	1			2NV-811 - Full Stroke (Both)	Condition Monitoring
2NV-812	MCFD-2554-01.01	SA	Category C	LC	Yes	1			2NV-812 - Full Stroke	Condition Monitoring

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Both)	
2NV-813	MCFD-2554-01.01	SA	Category C	LC	Yes	1			2NV-813 - Full Stroke (Both)	Condition Monitoring
2NV-849AC	MCFD-2554-01.03	MR	Category A	GL	Yes	2			2NV-849AC - Stroke Time (Opn to Cls)	Tested once quarterly
									2NV-849AC - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NV-849AC - Position Indicator (Open and Closed)	Tested once every two years
2NV-1002	MCFD-2554-01.03	SA	Category AC	LC	Yes	2			2NV-1002 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2NV-1002 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

RF - FIRE PROTECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1RF-821A	MCFD-1599-02.02	AO	Category A	DP	Yes	2		MC-RF-02	1RF-821A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RF-821A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RF-821A - Position Indicator (Open and Closed)	Tested once every two years
1RF-823	MCFD-1599-02.02	SA	Category AC	CK	Yes	2			1RF-823 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RF-823 - Full Stroke (Both)	Condition Monitoring
1RF-832A	MCFD-1599-02.02	AO	Category A	DP	Yes	2		MC-RF-02	1RF-832A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RF-832A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RF-832A - Position Indicator (Open and Closed)	Tested once every two years
1RF-834	MCFD-1599-02.02	SA	Category AC	SW	Yes	2			1RF-834 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RF-834 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
0RN-2B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-2B - Stroke Time (Opn to Cls)	Tested once quarterly
									0RN-2B - Position Indicator (Open and Closed)	Tested once every two years
0RN-3A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-3A - Position Indicator (Open and Closed)	Tested once every two years
									0RN-3A - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-4AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-4AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-4AC - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-5B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-5B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-5B - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-7A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-7A - Position Indicator (Open and Closed)	Tested once every two years
									0RN-7A - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-9B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-9B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-9B - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-10AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-10AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-10AC - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-11B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-11B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-11B - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-12AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-12AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-12AC - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-13A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-13A - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
									0RN-13A - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-14A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-14A - Position Indicator (Open and Closed)	Tested once every two years
									0RN-14A - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-15B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-15B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-15B - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-147AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-147AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-147AC - Stroke Time (Open to Closed)	Tested once quarterly
									0RN-147AC - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-148AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-148AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-148AC - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-149A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-149A - Position Indicator (Open and Closed)	Tested once every two years
									0RN-149A - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-150A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-150A - Position Indicator (Open and Closed)	Tested once every two years
									0RN-150A - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-151B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-151B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-151B - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-152B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-152B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-152B - Stroke Time (Cls to Opn)	Tested once quarterly
0RN-283AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-283AC - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
									0RN-283AC - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-284B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-284B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-284B - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-301AC	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-301AC - Position Indicator (Open and Closed)	Tested once every two years
									0RN-301AC - Stroke Time (Opn to Cls)	Tested once quarterly
0RN-302B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			0RN-302B - Position Indicator (Open and Closed)	Tested once every two years
									0RN-302B - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-16A	MCFD-1574-01.01	ML	Category B	BF	Yes	3			1RN-16A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-16A - Stroke Time (Cls to Opn)	Tested once quarterly
1RN-18B	MCFD-1574-01.01	ML	Category B	BF	Yes	3			1RN-18B - Position Indicator (Open and Closed)	Tested once every two years
									1RN-18B - Stroke Time (Cls to Opn)	Tested once quarterly
1RN-21A	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-21A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-21A - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-22A	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-22A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-22A - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-25B	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-25B - Position Indicator (Open and Closed)	Tested once every two years
									1RN-25B - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-26B	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-26B - Position Indicator (Open and Closed)	Tested once every two years
									1RN-26B - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
1RN-28	MCFD-1574-01.01	SA	Category C	SW	Yes	3			1RN-28 - Full Stroke (Both)	Condition Monitoring
1RN-30	MCFD-1574-01.01	SA	Category C	SW	Yes	3			1RN-30 - Full Stroke (Both)	Condition Monitoring
1RN-40A	MCFD-1574-01.01	MR	Category B	BF	Yes	3			1RN-40A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-40A - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-41B	MCFD-1574-01.01	MR	Category B	BF	Yes	3			1RN-41B - Position Indicator (Open and Closed)	Tested once every two years
									1RN-41B - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-42A	MCFD-1574-04.00	MR	Category B	BF	Yes	3			1RN-42A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-42A - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-43A	MCFD-1574-01.01	MR	Category B	BF	Yes	3			1RN-43A - Position Indicator (Open and Closed)	Tested once every two years
									1RN-43A - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-63B	MCFD-1574-01.00	MR	Category B	BF	Yes	3			1RN-63B - Position Indicator (Open and Closed)	Tested once every two years
									1RN-63B - Stroke Time (Opn to Cls)	Tested once quarterly
1RN-64A	MCFD-1574-01.00	MR	Category B	BF	Yes	3			1RN-64A - Stroke Time (Opn to Cls)	Tested once quarterly
									1RN-64A - Position Indicator (Open and Closed)	Tested once every two years
1RN-68A	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-68A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-68A - Position Indicator (Open and Closed)	Tested once every two years
1RN-69A	MCFD-1574-02.00	MR	Category B	GA	Yes	3			1RN-69A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-69A - Position Indicator (Open and Closed)	Tested once every two years
1RN-70A	MCFD-1574-02.00	MR	Category B	BF	Yes	3			1RN-70A - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Cls to Opn)	
									1RN-70A - Position Indicator (Open and Closed)	Tested once every two years
1RN-86A	MCFD-1574-02.00	ML	Category B	BF	Yes	3			1RN-86A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-86A - Position Indicator (Open and Closed)	Tested once every two years
1RN-89A	MCFD-1574-02.00	AO	Category B	BF	Yes	3			1RN-89A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-89A - Position Indicator (Open and Closed)	Tested once every two years
1RN-103A	MCFD-1574-02.01	AO	Category B	DP	Yes	3			1RN-103A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-103A - Position Indicator (Open and Closed)	Tested once every two years
1RN-112A	MCFD-1574-02.00	AO	Category B	DP	Yes	3			1RN-112A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-112A - Position Indicator (Open and Closed)	Tested once every two years
1RN-114A	MCFD-1574-02.01	AO	Category B	DP	Yes	3			1RN-114A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-114A - Position Indicator (Open and Closed)	Tested once every two years
1RN-117A	MCFD-1574-02.00	AO	Category B	DP	Yes	3			1RN-117A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-117A - Position Indicator (Open and Closed)	Tested once every two years
1RN-126A	MCFD-1574-02.01	AO	Category B	DP	Yes	3			1RN-126A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-126A - Position Indicator (Open and Closed)	Tested once every two years
1RN-130A	MCFD-1574-02.01	AO	Category B	DP	Yes	3			1RN-130A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-130A - Position Indicator (Open and Closed)	Tested once every two years
1RN-134A	MCFD-1574-02.01	ML	Category B	BF	Yes	3			1RN-134A - Stroke	Tested once quarterly

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Time (Cls to Opn)	
									1RN-134A - Position Indicator (Open and Closed)	Tested once every two years
1RN-137A	MCFD-1574-02.01	ML	Category B	BF	Yes	3			1RN-137A - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-137A - Position Indicator (Open and Closed)	Tested once every two years
1RN-140A	MCFD-1574-02.00	AO	Category B	DP	Yes	3			1RN-140A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-140A - Position Indicator (Open and Closed)	Tested once every two years
1RN-161B	MCFD-1574-01.01	AO	Category B	DP	Yes	3			1RN-161B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-161B - Position Indicator (Open and Closed)	Tested once every two years
1RN-162B	MCFD-1574-03.00	MR	Category B	GA	Yes	3			1RN-162B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-162B - Position Indicator (Open and Closed)	Tested once every two years
1RN-166A	MCFD-1574-02.00	AO	Category B	DP	Yes	3			1RN-166A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-166A - Position Indicator (Open and Closed)	Tested once every two years
1RN-170B	MCFD-1574-03.00	AO	Category B	DP	Yes	3			1RN-170B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-170B - Position Indicator (Open and Closed)	Tested once every two years
1RN-171B	MCFD-1574-03.00	MR	Category B	BF	Yes	3			1RN-171B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-171B - Position Indicator (Open and Closed)	Tested once every two years
1RN-187B	MCFD-1574-03.00	ML	Category B	BF	Yes	3			1RN-187B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-187B - Position Indicator (Open and	Tested once every two years

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	
1RN-190B	MCFD-1574-03.00	AO	Category B	BF	Yes	3			1RN-190B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-190B - Position Indicator (Open and Closed)	Tested once every two years
1RN-204B	MCFD-1574-03.01	AO	Category B	DP	Yes	3			1RN-204B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-204B - Position Indicator (Open and Closed)	Tested once every two years
1RN-213B	MCFD-1574-03.00	AO	Category B	DP	Yes	3			1RN-213B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-213B - Position Indicator (Open and Closed)	Tested once every two years
1RN-215B	MCFD-1574-03.01	AO	Category B	DP	Yes	3			1RN-215B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-215B - Position Indicator (Open and Closed)	Tested once every two years
1RN-218B	MCFD-1574-03.00	AO	Category B	DP	Yes	3			1RN-218B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-218B - Position Indicator (Open and Closed)	Tested once every two years
1RN-227B	MCFD-1574-03.01	AO	Category B	DP	Yes	3			1RN-227B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-227B - Position Indicator (Open and Closed)	Tested once every two years
1RN-231B	MCFD-1574-03.01	AO	Category B	DP	Yes	3			1RN-231B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-231B - Position Indicator (Open and Closed)	Tested once every two years
1RN-235B	MCFD-1574-03.01	ML	Category B	BF	Yes	3			1RN-235B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-235B - Position Indicator (Open and Closed)	Tested once every two years
1RN-238B	MCFD-1574-03.01	ML	Category B	BF	Yes	3			1RN-238B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-238B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
1RN-240B	MCFD-1574-03.00	AO	Category B	DP	Yes	3			1RN-240B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									1RN-240B - Position Indicator (Open and Closed)	Tested once every two years
1RN-252B	MCFD-1574-04.00	AO	Category A	DP	Yes	2		MC-RN-01	1RN-252B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RN-252B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RN-252B - Position Indicator (Open and Closed)	Tested once every two years
1RN-253A	MCFD-1574-04.00	MR	Category A	DP	Yes	2		MC-RN-01	1RN-253A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RN-253A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RN-253A - Position Indicator (Open and Closed)	Tested once every two years
1RN-276A	MCFD-1574-04.00	MR	Category A	DP	Yes	2		MC-RN-02	1RN-276A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RN-276A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RN-276A - Position Indicator (Open and Closed)	Tested once every two years
1RN-277B	MCFD-1574-04.00	AO	Category A	DP	Yes	2		MC-RN-02	1RN-277B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RN-277B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RN-277B - Position Indicator (Open and Closed)	Tested once every two years
1RN-279B	MCFD-1574-01.00	MR	Category B	BF	Yes	3			1RN-279B - Stroke Time (Opn to Cls)	Tested once quarterly
									1RN-279B - Position Indicator (Open and Closed)	Tested once every two years
1RN-296A	MCFD-1574-01.00	ML	Category B	BF	Yes	3			1RN-296A - Stroke Time (Cls to Opn)	Tested once quarterly

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1RN-296A - Position Indicator (Open and Closed)	Tested once every two years
1RN-297B	MCFD-1574-01.00	ML	Category B	BF	Yes	3			1RN-297B - Stroke Time (Cls to Opn)	Tested once quarterly
									1RN-297B - Position Indicator (Open and Closed)	Tested once every two years
1RN-299A	MCFD-1574-01.00	MR	Category B	BF	Yes	3			1RN-299A - Stroke Time (Opn to Cls)	Tested once quarterly
									1RN-299A - Position Indicator (Open and Closed)	Tested once every two years
2RN-16A	MCFD-2574-01.01	ML	Category B	BF	Yes	3			2RN-16A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-16A - Position Indicator (Open and Closed)	Tested once every two years
2RN-18B	MCFD-2574-01.01	ML	Category B	BF	Yes	3			2RN-18B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-18B - Position Indicator (Open and Closed)	Tested once every two years
2RN-21A	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-21A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-21A - Position Indicator (Open and Closed)	Tested once every two years
2RN-22A	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-22A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-22A - Position Indicator (Open and Closed)	Tested once every two years
2RN-25B	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-25B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-25B - Position Indicator (Open and Closed)	Tested once every two years
2RN-26B	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-26B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-26B - Position Indicator (Open and Closed)	Tested once every two years
2RN-28	MCFD-2574-01.01	SA	Category C	SW	Yes	3			2RN-28 - Full Stroke (Both)	Condition Monitoring
2RN-30	MCFD-2574-01.01	SA	Category C	SW	Yes	3			2RN-30 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2RN-40A	MCFD-2574-01.01	MR	Category B	BF	Yes	3			2RN-40A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-40A - Position Indicator (Open and Closed)	Tested once every two years
2RN-41B	MCFD-2574-01.01	MR	Category B	BF	Yes	3			2RN-41B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-41B - Position Indicator (Open and Closed)	Tested once every two years
2RN-42A	MCFD-2574-04.00	MR	Category B	BF	Yes	3			2RN-42A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-42A - Position Indicator (Open and Closed)	Tested once every two years
2RN-43A	MCFD-2574-01.01	MR	Category B	BF	Yes	3			2RN-43A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-43A - Position Indicator (Open and Closed)	Tested once every two years
2RN-63B	MCFD-2574-04.00	MR	Category B	BF	Yes	3			2RN-63B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-63B - Position Indicator (Open and Closed)	Tested once every two years
2RN-64A	MCFD-2574-04.00	MR	Category B	BF	Yes	3			2RN-64A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-64A - Position Indicator (Open and Closed)	Tested once every two years
2RN-68A	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-68A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-68A - Position Indicator (Open and Closed)	Tested once every two years
2RN-69A	MCFD-2574-02.00	MR	Category B	GA	Yes	3			2RN-69A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-69A - Position Indicator (Open and Closed)	Tested once every two years
2RN-70A	MCFD-2574-02.00	MR	Category B	BF	Yes	3			2RN-70A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-70A - Position Indicator (Open and Closed)	Tested once every two years
2RN-86A	MCFD-2574-02.00	ML	Category B	BF	Yes	3			2RN-86A - Stroke Time (Cls to Opn)	Tested once quarterly

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2RN-86A - Position Indicator (Open and Closed)	Tested once every two years
2RN-89A	MCFD-2574-02.00	AO	Category B	BF	Yes	3			2RN-89A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-89A - Position Indicator (Open and Closed)	Tested once every two years
2RN-103A	MCFD-2574-02.01	AO	Category B	DP	Yes	3			2RN-103A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-103A - Position Indicator (Open and Closed)	Tested once every two years
2RN-112A	MCFD-2574-02.00	AO	Category B	DP	Yes	3			2RN-112A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-112A - Position Indicator (Open and Closed)	Tested once every two years
2RN-114A	MCFD-2574-02.01	AO	Category B	DP	Yes	3			2RN-114A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-114A - Position Indicator (Open and Closed)	Tested once every two years
2RN-117A	MCFD-2574-02.00	AO	Category B	DP	Yes	3			2RN-117A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-117A - Position Indicator (Open and Closed)	Tested once every two years
2RN-126A	MCFD-2574-02.01	AO	Category B	DP	Yes	3			2RN-126A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-126A - Position Indicator (Open and Closed)	Tested once every two years
2RN-130A	MCFD-2574-02.01	AO	Category B	DP	Yes	3			2RN-130A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-130A - Position Indicator (Open and Closed)	Tested once every two years
2RN-134A	MCFD-2574-02.01	ML	Category B	BF	Yes	3			2RN-134A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-134A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2RN-137A	MCFD-2574-02.01	ML	Category B	BF	Yes	3			2RN-137A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-137A - Position Indicator (Open and Closed)	Tested once every two years
2RN-140A	MCFD-2574-02.00	AO	Category B	DP	Yes	3			2RN-140A - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-140A - Position Indicator (Open and Closed)	Tested once every two years
2RN-161B	MCFD-2574-01.01	AO	Category B	DP	Yes	3			2RN-161B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-161B - Position Indicator (Open and Closed)	Tested once every two years
2RN-162B	MCFD-2574-03.00	MR	Category B	GA	Yes	3			2RN-162B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-162B - Position Indicator (Open and Closed)	Tested once every two years
2RN-166A	MCFD-2574-02.00	AO	Category B	DP	Yes	3			2RN-166A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-166A - Position Indicator (Open and Closed)	Tested once every two years
2RN-170B	MCFD-2574-03.00	AO	Category B	DP	Yes	3			2RN-170B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-170B - Position Indicator (Open and Closed)	Tested once every two years
2RN-171B	MCFD-2574-03.00	MR	Category B	BF	Yes	3			2RN-171B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-171B - Position Indicator (Open and Closed)	Tested once every two years
2RN-187B	MCFD-2574-03.00	ML	Category B	BF	Yes	3			2RN-187B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-187B - Position Indicator (Open and Closed)	Tested once every two years
2RN-190B	MCFD-2574-03.00	AO	Category B	BF	Yes	3			2RN-190B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-190B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2RN-204B	MCFD-2574-03.01	AO	Category B	DP	Yes	3			2RN-204B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-204B - Position Indicator (Open and Closed)	Tested once every two years
2RN-213B	MCFD-2574-03.00	AO	Category B	DP	Yes	3			2RN-213B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-213B - Position Indicator (Open and Closed)	Tested once every two years
2RN-215B	MCFD-2574-03.01	AO	Category B	DP	Yes	3			2RN-215B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-215B - Position Indicator (Open and Closed)	Tested once every two years
2RN-218B	MCFD-2574-03.00	AO	Category B	DP	Yes	3			2RN-218B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-218B - Position Indicator (Open and Closed)	Tested once every two years
2RN-227B	MCFD-2574-03.01	AO	Category B	DP	Yes	3			2RN-227B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-227B - Position Indicator (Open and Closed)	Tested once every two years
2RN-231B	MCFD-2574-03.01	AO	Category B	DP	Yes	3			2RN-231B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-231B - Position Indicator (Open and Closed)	Tested once every two years
2RN-235B	MCFD-2574-03.01	ML	Category B	BF	Yes	3			2RN-235B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-235B - Position Indicator (Open and Closed)	Tested once every two years
2RN-238B	MCFD-2574-03.01	ML	Category B	BF	Yes	3			2RN-238B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-238B - Position Indicator (Open and Closed)	Tested once every two years
2RN-240B	MCFD-2574-03.00	AO	Category B	DP	Yes	3			2RN-240B - Fast Acting Stroke Time (Cls to Open)	Tested once quarterly
									2RN-240B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
2RN-252B	MCFD-2574-04.00	AO	Category A	DP	Yes	2		MC-RN-01	2RN-252B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RN-252B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RN-252B - Position Indicator (Open and Closed)	Tested once every two years
2RN-253A	MCFD-2574-04.00	MR	Category A	DP	Yes	2		MC-RN-01	2RN-253A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RN-253A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2RN-253A - Position Indicator (Open and Closed)	Tested once every two years
2RN-276A	MCFD-2574-04.00	MR	Category A	DP	Yes	2		MC-RN-02	2RN-276A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RN-276A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2RN-276A - Position Indicator (Open and Closed)	Tested once every two years
2RN-277B	MCFD-2574-04.00	AO	Category A	DP	Yes	2		MC-RN-02	2RN-277B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RN-277B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RN-277B - Position Indicator (Open and Closed)	Tested once every two years
2RN-279B	MCFD-1574-01.00	MR	Category B	BF	Yes	3			2RN-279B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-279B - Position Indicator (Open and Closed)	Tested once every two years
2RN-296A	MCFD-2574-01.01	ML	Category B	BF	Yes	3			2RN-296A - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-296A - Position Indicator (Open and Closed)	Tested once every two years
2RN-297B	MCFD-2574-03.00	ML	Category B	BF	Yes	3			2RN-297B - Stroke Time (Cls to Opn)	Tested once quarterly
									2RN-297B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
2RN-299A	MCFD-1574-01.00	MR	Category B	BF	Yes	3			2RN-299A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RN-299A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

RV - CONTAINMENT VENTILATION COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1RV-32A	MCFD-1604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	1RV-32A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RV-32A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RV-32A - Position Indicator (Open and Closed)	Tested once every two years
1RV-33B	MCFD-1604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	1RV-33B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RV-33B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RV-33B - Position Indicator (Open and Closed)	Tested once every two years
1RV-76A	MCFD-1604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	1RV-76A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RV-76A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RV-76A - Position Indicator (Open and Closed)	Tested once every two years
1RV-77B	MCFD-1604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	1RV-77B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1RV-77B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RV-77B - Position Indicator (Open and Closed)	Tested once every two years
1RV-79A	MCFD-1604-03.00	AO	Category A	DP	Yes	2			1RV-79A - Stroke Time (Opn to Cls)	Tested once quarterly
									1RV-79A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RV-79A - Position Indicator (Open and Closed)	Tested once every two years
1RV-80B	MCFD-1604-03.00	AO	Category A	DP	Yes	2			1RV-80B - Stroke Time (Opn to Cls)	Tested once quarterly
									1RV-80B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RV-80B - Position	Tested once every two

MCGUIRE NUCLEAR STATION

RV - CONTAINMENT VENTILATION COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
1RV-101A	MCFD-1604-03.00	AO	Category A	DP	Yes	2			1RV-101A - Stroke Time (Opn to Cls)	Tested once quarterly
									1RV-101A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1RV-101A - Position Indicator (Open and Closed)	Tested once every two years
1RV-102B	MCFD-1604-03.00	AO	Category A	DP	Yes	2			1RV-102B - Stroke Time (Opn to Cls)	Tested once quarterly
									1RV-102B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1RV-102B - Position Indicator (Open and Closed)	Tested once every two years
1RV-445	MCFD-1604-03.00	SA	Category A	RV	No	2			1RV-445 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
1RV-446	MCFD-1604-03.00	SA	Category A	RV	No	2			1RV-446 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2RV-32A	MCFD-2604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	2RV-32A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RV-32A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RV-32A - Position Indicator (Open and Closed)	Tested once every two years
2RV-33B	MCFD-2604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	2RV-33B - Position Indicator (Open and Closed)	Tested once every two years
									2RV-33B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RV-33B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2RV-76A	MCFD-2604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	2RV-76A - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RV-76A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2RV-76A - Position	Tested once every two

MCGUIRE NUCLEAR STATION

RV - CONTAINMENT VENTILATION COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open and Closed)	years
2RV-77B	MCFD-2604-03.00	MR	Category A	BF	Yes	2		MC-RV-01	2RV-77B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2RV-77B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RV-77B - Position Indicator (Open and Closed)	Tested once every two years
2RV-79A	MCFD-2604-03.00	AO	Category A	DP	Yes	2			2RV-79A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RV-79A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RV-79A - Position Indicator (Open and Closed)	Tested once every two years
2RV-80B	MCFD-2604-03.00	AO	Category A	DP	Yes	2			2RV-80B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RV-80B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2RV-80B - Position Indicator (Open and Closed)	Tested once every two years
2RV-101A	MCFD-2604-03.00	AO	Category A	DP	Yes	2			2RV-101A - Stroke Time (Opn to Cls)	Tested once quarterly
									2RV-101A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2RV-101A - Position Indicator (Open and Closed)	Tested once every two years
2RV-102B	MCFD-2604-03.00	AO	Category A	DP	Yes	2			2RV-102B - Stroke Time (Opn to Cls)	Tested once quarterly
									2RV-102B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2RV-102B - Position Indicator (Open and Closed)	Tested once every two years
2RV-445	MCFD-2604-03.00	SA	Category A	RV	No	2			2RV-445 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2RV-446	MCFD-2604-03.00	SA	Category A	RV	No	2			2RV-446 - Leak Test -	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

RV - CONTAINMENT VENTILATION COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Appendix J (Reverse Dir)	

MCGUIRE NUCLEAR STATION

SA - MAIN STEAM SUPPLY TO AUXILIARY EQUIPMENT

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SA-1	MCFD-1593-01.02	MA	Category B	GA	Yes	2			1SA-1 - Full Stroke (Closed)	Tested every refueling outage
1SA-2	MCFD-1593-01.02	MA	Category B	GA	Yes	2			1SA-2 - Full Stroke (Closed)	Tested every refueling outage
1SA-5	MCFD-1593-01.02	SA	Category C	ST	Yes	2			1SA-5 - Full Stroke (Both)	Condition Monitoring
1SA-6	MCFD-1593-01.02	SA	Category C	ST	Yes	2			1SA-6 - Full Stroke (Both)	Condition Monitoring
1SA-48ABC	MCFD-1593-01.02	AO	Category B	GA	Yes	2			1SA-48ABC - Stroke Time (Cls to Opn)	Tested once quarterly
									1SA-48ABC - Position Indicator (Open and Closed)	Tested once every two years
1SA-49AB	MCFD-1593-01.02	AO	Category B	GA	Yes	2			1SA-49AB - Stroke Time (Cls to Opn)	Tested once quarterly
									1SA-49AB - Position Indicator (Open and Closed)	Tested once every two years
1SA-77	MCFD-1593-01.02	MA	Category B	GA	Yes	2			1SA-77 - Full Stroke (Closed)	Tested every refueling outage
1SA-78	MCFD-1593-01.02	MA	Category B	GA	Yes	2			1SA-78 - Full Stroke (Closed)	Tested every refueling outage
2SA-1	MCFD-2593-01.02	MA	Category B	GA	Yes	2			2SA-1 - Full Stroke (Closed)	Tested every refueling outage
2SA-2	MCFD-2593-01.02	MA	Category B	GA	Yes	2			2SA-2 - Full Stroke (Closed)	Tested every refueling outage
2SA-5	MCFD-2593-01.02	SA	Category C	ST	Yes	2			2SA-5 - Full Stroke (Both)	Condition Monitoring
2SA-6	MCFD-2593-01.02	SA	Category C	ST	Yes	2			2SA-6 - Full Stroke (Both)	Condition Monitoring
2SA-48ABC	MCFD-2593-01.02	AO	Category B	GA	Yes	2			2SA-48ABC - Stroke Time (Cls to Opn)	Tested once quarterly
									2SA-48ABC - Position Indicator (Open and Closed)	Tested once every two years
2SA-49AB	MCFD-2593-01.02	AO	Category B	GA	Yes	2			2SA-49AB - Stroke Time (Cls to Opn)	Tested once quarterly
									2SA-49AB - Position Indicator (Open and Closed)	Tested once every two years
2SA-77	MCFD-2593-01.02	MA	Category B	GA	Yes	2			2SA-77 - Full Stroke (Closed)	Tested every refueling outage
2SA-78	MCFD-2593-01.02	MA	Category B	GA	Yes	2			2SA-78 - Full Stroke (Closed)	Tested every refueling outage

MCGUIRE NUCLEAR STATION

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SM-1AB	MCFD-1593-01.03 MCFD-1605-01.13	AO	Category B	GL	Yes	2		MC-SM-01	1SM-1AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1SM-1AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-3AB	MCFD-1593-01.03	AO	Category B	GL	Yes	2		MC-SM-01	1SM-3AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1SM-3AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-5AB	MCFD-1593-01.00 MCFD-1605-01.13	AO	Category B	GL	Yes	2		MC-SM-01	1SM-5AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1SM-5AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-7AB	MCFD-1593-01.00 MCFD-1605-01.13	AO	Category B	GL	Yes	2		MC-SM-01	1SM-7AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1SM-7AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-9AB	MCFD-1593-01.03	AO	Category B	GA	Yes	2			1SM-9AB - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1SM-9AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-10AB	MCFD-1593-01.03	AO	Category B	GA	Yes	2			1SM-10AB - Stroke Time (Opn to Cls)	Tested once quarterly
									1SM-10AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-11AB	MCFD-1593-01.00	AO	Category B	GA	Yes	2			1SM-11AB - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1SM-11AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-12AB	MCFD-1593-01.00	AO	Category B	GA	Yes	2			1SM-12AB - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1SM-12AB - Position Indicator (Open and Closed)	Tested once every two years
1SM-83	MCFD-1593-01.00	AO	Category B	GL	Yes	2			1SM-83 Fail to Safe -	Tested once quarterly

MCGUIRE NUCLEAR STATION

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Not Timed (Closed)	
									1SM-83 - Position Indicator (Open and Closed)	Tested once every two years
1SM-89	MCFD-1593-01.00	AO	Category B	GL	Yes	2			1SM-89 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									1SM-89 - Position Indicator (Open and Closed)	Tested once every two years
1SM-95	MCFD-1593-01.03	AO	Category B	GL	Yes	2			1SM-95 - Position Indicator (Open and Closed)	Tested once every two years
									1SM-95 Fail to Safe - Not Timed (Closed)	Tested once quarterly
1SM-101	MCFD-1593-01.03	AO	Category B	GL	Yes	2			1SM-101 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									1SM-101 - Position Indicator (Open and Closed)	Tested once every two years
2SM-1AB	MCFD-2593-01.03	AO	Category B	GL	Yes	2		MC-SM-01	2SM-1AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2SM-1AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-3AB	MCFD-2593-01.03	AO	Category B	GL	Yes	2		MC-SM-01	2SM-3AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2SM-3AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-5AB	MCFD-2593-01.00	AO	Category B	GL	Yes	2		MC-SM-01	2SM-5AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2SM-5AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-7AB	MCFD-2593-01.00	AO	Category B	GL	Yes	2		MC-SM-01	2SM-7AB - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2SM-7AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-9AB	MCFD-2593-01.03	AO	Category B	GA	Yes	2			2SM-9AB - Stroke Time (Opn to Cls)	Tested once quarterly
									2SM-9AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-10AB	MCFD-2593-01.03	AO	Category B	GA	Yes	2			2SM-10AB - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly

MCGUIRE NUCLEAR STATION

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2SM-10AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-11AB	MCFD-2593-01.00	AO	Category B	GA	Yes	2			2SM-11AB - Stroke Time (Opn to Cls)	Tested once quarterly
									2SM-11AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-12AB	MCFD-2593-01.00	AO	Category B	GA	Yes	2			2SM-12AB - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2SM-12AB - Position Indicator (Open and Closed)	Tested once every two years
2SM-83	MCFD-2593-01.00	AO	Category B	GA	Yes	2			2SM-83 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									2SM-83 - Position Indicator (Open and Closed)	Tested once every two years
2SM-89	MCFD-2593-01.00	AO	Category B	GL	Yes	2			2SM-89 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									2SM-89 - Position Indicator (Open and Closed)	Tested once every two years
2SM-95	MCFD-2593-01.03	AO	Category B	GA	Yes	2			2SM-95 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									2SM-95 - Position Indicator (Open and Closed)	Tested once every two years
2SM-101	MCFD-2593-01.03	AO	Category B	GA	Yes	2			2SM-101 Fail to Safe - Not Timed (Closed)	Tested once quarterly
									2SM-101 - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

SV - MAIN STEAM VENT TO ATMOSPHERE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SV-1AB	MCFD-1593-01.03	AO	Category B	RV	Yes	2			1SV-1AB - Stroke Time (Opn to Cls)	Tested once quarterly
									1SV-1AB - Position Indicator (Open and Closed)	Tested once every two years
1SV-2	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-3	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-4	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-4 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-5	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-5 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-6	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-6 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-7ABC	MCFD-1593-01.03	AO	Category B	RV	Yes	2			1SV-7ABC - Stroke Time (Opn to Cls)	Tested once quarterly
									1SV-7ABC - Position Indicator (Open and Closed)	Tested once every two years
1SV-8	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-8 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-9	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-9 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-10	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-10 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-11	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-11 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-12	MCFD-1593-01.03	SA	Category C	RV	Yes	2			1SV-12 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-13AB	MCFD-1593-01.00	AO	Category B	RV	Yes	2			1SV-13AB - Stroke Time (Opn to Cls)	Tested once quarterly
									1SV-13AB - Position Indicator (Open and Closed)	Tested once every two years
1SV-14	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-14 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-15	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-15 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-16	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-16 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-17	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-17 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-18	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-18 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-19AB	MCFD-1593-01.00	AO	Category B	RV	Yes	2			1SV-19AB - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

SV - MAIN STEAM VENT TO ATMOSPHERE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
									1SV-19AB - Position Indicator (Open and Closed)	Tested once every two years
1SV-20	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-20 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-21	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-21 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-22	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-22 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-23	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-23 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
1SV-24	MCFD-1593-01.00	SA	Category C	RV	Yes	2			1SV-24 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-1AB	MCFD-2593-01.03	AO	Category B	RV	Yes	2			2SV-1AB - Stroke Time (Opn to Cls)	Tested once quarterly
									2SV-1AB - Position Indicator (Open and Closed)	Tested once every two years
2SV-2	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-2 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-3	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-3 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-4	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-4 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-5	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-5 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-6	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-6 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-7ABC	MCFD-2593-01.03	AO	Category B	RV	Yes	2			2SV-7ABC - Stroke Time (Opn to Cls)	Tested once quarterly
									2SV-7ABC - Position Indicator (Open and Closed)	Tested once every two years
2SV-8	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-8 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-9	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-9 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-10	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-10 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-11	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-11 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-12	MCFD-2593-01.03	SA	Category C	RV	Yes	2			2SV-12 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-13AB	MCFD-2593-01.00	AO	Category B	RV	Yes	2			2SV-13AB - Stroke Time (Opn to Cls)	Tested once quarterly

MCGUIRE NUCLEAR STATION

SV - MAIN STEAM VENT TO ATMOSPHERE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2SV-13AB - Position Indicator (Open and Closed)	Tested once every two years
2SV-14	MCFD-2593-01.00	SA	Category C	RV	Yes	3			2SV-14 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-15	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-15 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-16	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-16 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-17	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-17 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-18	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-18 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-19AB	MCFD-2593-01.00	AO	Category B	RV	Yes	2			2SV-19AB - Stroke Time (Opn to Cls)	Tested once quarterly
									2SV-19AB - Position Indicator (Open and Closed)	Tested once every two years
2SV-20	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-20 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-21	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-21 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-22	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-22 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-23	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-23 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule
2SV-24	MCFD-2593-01.00	SA	Category C	RV	Yes	2			2SV-24 - Relief Valve Test (Cls to Opn)	Test relief valve per Appendix I schedule

MCGUIRE NUCLEAR STATION

VB - BREATHING AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VB-49B	MCFD-1605-03.01	MR	Category A	GL	Yes	2			1VB-49B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VB-49B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VB-49B - Position Indicator (Open and Closed)	Tested once every two years
1VB-50	MCFD-1605-03.01	SA	Category AC	SW	Yes	2			1VB-50 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VB-50 - Full Stroke (Both)	Condition Monitoring
2VB-49B	MCFD-2605-03.01	MR	Category A	GL	Yes	2			2VB-49B - Stroke Time (Opn to Cls)	Tested once quarterly
									2VB-49B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VB-49B - Position Indicator (Open and Closed)	Tested once every two years
2VB-50	MCFD-2605-03.01	SA	Category AC	WC	Yes	2			2VB-50 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VB-50 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

VC - CONTROL AREA HVAC SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VC-1A	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-1A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-1A - Position Indicator (Open and Closed)	Tested once every two years
1VC-2A	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-2A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-2A - Position Indicator (Open and Closed)	Tested once every two years
1VC-3B	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-3B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-3B - Position Indicator (Open and Closed)	Tested once every two years
1VC-4B	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-4B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-4B - Position Indicator (Open and Closed)	Tested once every two years
1VC-9A	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-9A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-9A - Position Indicator (Open and Closed)	Tested once every two years
1VC-10A	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-10A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-10A - Position Indicator (Open and Closed)	Tested once every two years
1VC-11B	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-11B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-11B - Position Indicator (Open and Closed)	Tested once every two years
1VC-12B	MC -1578-01.00	MR	Category B	BF	Yes	NA			1VC-12B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VC-12B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

VE - ANNULUS VENTILATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VE-5A	MC -1564-01.00	MR	Category A	GA	Yes	2			1VE-5A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VE-5A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VE-5A - Position Indicator (Open and Closed)	Tested once every two years
1VE-6B	MC -1564-01.00	MR	Category A	GA	Yes	2			1VE-6B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VE-6B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VE-6B - Position Indicator (Open and Closed)	Tested once every two years
1VE-8A	MC -1564-01.00	MR	Category B	GA	Yes	2			1VE-8A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VE-8A - Position Indicator (Open and Closed)	Tested once every two years
1VE-10A	MC -1564-01.00	MR	Category A	DP	Yes	2			1VE-10A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VE-10A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VE-10A - Position Indicator (Open and Closed)	Tested once every two years
1VE-11	MC -1564-01.00	SA	Category A	SW	No	2			1VE-11 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2VE-5A	MC -2564-01.00	MR	Category A	GA	Yes	2			2VE-5A - Stroke Time (Opn to Cls)	Tested once quarterly
									2VE-5A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VE-5A - Position Indicator (Open and Closed)	Tested once every two years
2VE-6B	MC -2564-01.00	MR	Category A	GA	Yes	2			2VE-6B - Stroke Time (Opn to Cls)	Tested once quarterly
									2VE-6B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VE-6B - Position Indicator (Open and Closed)	Tested once every two years
2VE-8A	MC -2564-01.00	MR	Category B	GA	Yes	2			2VE-8A - Stroke Time (Opn to Cls)	Tested once quarterly
									2VE-8A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

VE - ANNULUS VENTILATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2VE-10A	MC -2564-01.00	MR	Category A	DP	Yes	2			2VE-10A - Stroke Time (Opn to Cls)	Tested once quarterly
									2VE-10A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VE-10A - Position Indicator (Open and Closed)	Tested once every two years
2VE-11	MC -2564-01.00	SA	Category A	CK	No	2			2VE-11 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VI-40	MCFD-1605-01.03	SA	Category AC	SW	Yes	2			1VI-40 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-40 - Full Stroke (Both)	Condition Monitoring
1VI-124	MCFD-1605-01.02	SA	Category AC	SW	Yes	2			1VI-124 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-124 - Full Stroke (Both)	Condition Monitoring
1VI-129B	MCFD-1605-01.17	MR	Category A	GL	Yes	2		MC-VI-04	1VI-129B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1VI-129B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-129B - Position Indicator (Open and Closed)	Tested once every two years
1VI-148B	MCFD-1605-01.14	MR	Category A	GL	Yes	2			1VI-148B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VI-148B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-148B - Position Indicator (Open and Closed)	Tested once every two years
1VI-149	MCFD-1605-01.02	SA	Category AC	SW	Yes	2			1VI-149 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-149 - Full Stroke (Both)	Condition Monitoring
1VI-150B	MCFD-1605-01.14	MR	Category A	GL	Yes	2		MC-VI-04	1VI-150B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1VI-150B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-150B - Position Indicator (Open and Closed)	Tested once every two years
1VI-160B	MCFD-1605-01.17	MR	Category A	GL	Yes	2		MC-VI-04	1VI-160B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									1VI-160B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-160B - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VI-161	MCFD-1605-01.03	SA	Category AC	SW	Yes	2			1VI-161 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-161 - Full Stroke (Both)	Condition Monitoring
1VI-362A	MCFD-1605-01.02	MR	Category A	GL	Yes	2			1VI-362A - Stroke Time (Opn to Cls)	Tested once quarterly
									1VI-362A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VI-362A - Position Indicator (Open and Closed)	Tested once every two years
1VI-368	MCFD-1605-01.03	SA	Category C	SW	Yes	NA			1VI-368 - Full Stroke (Both)	Condition Monitoring
1VI-372	MCFD-1605-01.03	SA	Category C	SW	Yes	NA			1VI-372 - Full Stroke (Both)	Condition Monitoring
1VI-373	MCFD-1605-01.03	SA	Category C	SW	Yes	NA			1VI-373 - Full Stroke (Both)	Condition Monitoring
1VI-374	MCFD-1605-01.03	SA	Category C	SW	Yes	NA			1VI-374 - Full Stroke (Both)	Condition Monitoring
1VI-1906	MCFD-1605-01.13	SA	Category AC	CK	Yes	2			1VI-1906 - Leak Test - Section XI (Accident Dir)	Tested every refueling outage
									1VI-1906 - Full Stroke (Both)	Condition Monitoring
1VI-1907	MCFD-1605-01.13	SA	Category AC	CK	Yes	2			1VI-1907 - Leak Test - Section XI (Accident Dir)	Tested every refueling outage
									1VI-1907 - Full Stroke (Both)	Condition Monitoring
1VI-1914	MCFD-1605-01.13	SA	Category AC	CK	Yes	2			1VI-1914 - Leak Test - Section XI (Accident Dir)	Tested every refueling outage
									1VI-1914 - Full Stroke (Both)	Condition Monitoring
1VI-1915	MCFD-1605-01.13	SA	Category AC	CK	Yes	2			1VI-1915 - Leak Test - Section XI (Accident Dir)	Tested every refueling outage
									1VI-1915 - Full Stroke (Both)	Condition Monitoring
2VI-40	MCFD-2605-01.03	SA	Category AC	CK	Yes	2			2VI-40 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-40 - Full Stroke (Both)	Condition Monitoring
2VI-124	MCFD-2605-01.02	SA	Category AC	SW	Yes	2			2VI-124 - Leak Test -	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Appendix J (Accident Dir)	
									2VI-124 - Full Stroke (Both)	Condition Monitoring
2VI-129B	MCFD-2605-01.03	MR	Category A	GL	Yes	2		MC-VI-04	2VI-129B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2VI-129B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-129B - Position Indicator (Open and Closed)	Tested once every two years
2VI-148B	MCFD-2605-01.02	MR	Category A	GL	Yes	2			2VI-148B - Stroke Time (Opn to Cls)	Tested once quarterly
									2VI-148B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-148B - Position Indicator (Open and Closed)	Tested once every two years
2VI-149	MCFD-2605-01.02	SA	Category AC	SW	Yes	2			2VI-149 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-149 - Full Stroke (Both)	Condition Monitoring
2VI-150B	MCFD-2605-01.02	MR	Category A	GL	Yes	2		MC-VI-04	2VI-150B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2VI-150B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-150B - Position Indicator (Open and Closed)	Tested once every two years
2VI-160B	MCFD-2605-01.03	MR	Category A	GL	Yes	2		MC-VI-04	2VI-160B - Stroke Time (Opn to Cls)	Tested at cold shutdown
									2VI-160B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-160B - Position Indicator (Open and Closed)	Tested once every two years
2VI-161	MCFD-2605-01.03	SA	Category AC	SW	Yes	2			2VI-161 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-161 - Full Stroke (Both)	Condition Monitoring
2VI-362A	MCFD-2605-01.02	ML	Category A	GL	Yes	2			2VI-362A - Stroke Time	Tested once quarterly

MCGUIRE NUCLEAR STATION

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Opn to Cls)	
									2VI-362A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VI-362A - Position Indicator (Open and Closed)	Tested once every two years
2VI-368	MCFD-2605-01.03	SA	Category C	SW	Yes	NA			2VI-368 - Full Stroke (Both)	Condition Monitoring
2VI-372	MCFD-2605-01.03	SA	Category C	SW	Yes	NA			2VI-372 - Full Stroke (Both)	Condition Monitoring
2VI-373	MCFD-2605-01.03	SA	Category C	SW	Yes	NA			2VI-373 - Full Stroke (Both)	Condition Monitoring
2VI-374	MCFD-2605-01.03	SA	Category C	SW	Yes	NA			2VI-374 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

VP - CONTAINMENT PURGE VENTILATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VP-1B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-1B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-2A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-2A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-3B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-3B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-4A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-4A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-6B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-6B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-7A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-7A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-8B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-8B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-9A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-9A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-10A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-10A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-11B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-11B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-12A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-12A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-13B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-13B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-15A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-15A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-16B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-16B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-17A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-17A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-18B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-18B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
1VP-19A	MC -1576-01.00	AO	Category A	BF	No	2			1VP-19A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
1VP-20B	MC -1576-01.00	AO	Category A	BF	No	2			1VP-20B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-1B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-1B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-2A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-2A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-3B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-3B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-4A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-4A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-6B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-6B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage

MCGUIRE NUCLEAR STATION

VP - CONTAINMENT PURGE VENTILATION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2VP-7A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-7A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-8B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-8B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-9A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-9A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-10A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-10A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-11B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-11B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-12A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-12A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-13B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-13B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-15A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-15A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-16B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-16B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-17A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-17A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-18B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-18B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage
2VP-19A	MC -2576-01.00	AO	Category A	BF	No	2			2VP-19A - Leak Test - Appendix J (Reverse Dir)	Tested every refueling outage
2VP-20B	MC -2576-01.00	AO	Category A	BF	No	2			2VP-20B - Leak Test - Appendix J (Accident Dir)	Tested every refueling outage

MCGUIRE NUCLEAR STATION

VQ - CONTAINMENT AIR RELEASE AND ADDITION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VQ-1A	MCFD-1585-01.00	AO	Category A	DP	Yes	2			1VQ-1A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VQ-1A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1VQ-1A - Position Indicator (Open and Closed)	Tested once every two years
1VQ-2B	MCFD-1585-01.00	AO	Category A	DP	Yes	2			1VQ-2B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VQ-2B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VQ-2B - Position Indicator (Open and Closed)	Tested once every two years
1VQ-5B	MCFD-1585-01.00	AO	Category A	DP	Yes	2			1VQ-5B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VQ-5B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VQ-5B - Position Indicator (Open and Closed)	Tested once every two years
1VQ-6A	MCFD-1585-01.00	AO	Category A	DP	Yes	2			1VQ-6A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VQ-6A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1VQ-6A - Position Indicator (Open and Closed)	Tested once every two years
2VQ-1A	MCFD-2585-01.00	AO	Category A	DP	Yes	2			2VQ-1A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VQ-1A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2VQ-1A - Position Indicator (Open and Closed)	Tested once every two years
2VQ-2B	MCFD-2585-01.00	AO	Category A	DP	Yes	2			2VQ-2B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VQ-2B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VQ-2B - Position Indicator (Open and Closed)	Tested once every two years
2VQ-5B	MCFD-2585-01.00	AO	Category A	DP	Yes	2			2VQ-5B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VQ-5B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

VQ - CONTAINMENT AIR RELEASE AND ADDITION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2VQ-5B - Position Indicator (Open and Closed)	Tested once every two years
2VQ-6A	MCFD-2585-01.00	AO	Category A	DP	Yes	2			2VQ-6A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VQ-6A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2VQ-6A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

VS - STATION AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VS-12B	MCFD-1605-02.02	MR	Category A	GL	Yes	2			1VS-12B - Stroke Time (Opn to Cls)	Tested once quarterly
									1VS-12B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VS-12B - Position Indicator (Open and Closed)	Tested once every two years
1VS-13	MCFD-1605-02.02	SA	Category AC	SW	Yes	2			1VS-13 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VS-13 - Full Stroke (Both)	Condition Monitoring
2VS-12B	MCFD-2605-02.02	MR	Category A	GL	Yes	2			2VS-12B - Stroke Time (Opn to Cls)	Tested once quarterly
									2VS-12B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VS-12B - Position Indicator (Open and Closed)	Tested once every two years
2VS-13	MCFD-2605-02.02	SA	Category AC	SW	Yes	2			2VS-13 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2VS-13 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

VX - CONTAINMENT AIR RETURN EXCH & HYD SKIMMER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VX-1A	MC -1557-01.00	ML	Category B	BF	Yes	2			1VX-1A - Stroke Time (Cls to Opn)	Tested once quarterly
									1VX-1A - Position Indicator (Open and Closed)	Tested once every two years
1VX-2B	MC -1557-01.00	ML	Category B	BF	Yes	2			1VX-2B - Stroke Time (Cls to Opn)	Tested once quarterly
									1VX-2B - Position Indicator (Open and Closed)	Tested once every two years
1VX-30	MC -1557-01.00	SA	Category A	SW	No	2			1VX-30 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1VX-31A	MC -1557-01.00	AO	Category A	DP	Yes	2			1VX-31A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VX-31A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1VX-31A - Position Indicator (Open and Closed)	Tested once every two years
1VX-33B	MC -1557-01.00	AO	Category A	DP	Yes	2			1VX-33B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1VX-33B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1VX-33B - Position Indicator (Open and Closed)	Tested once every two years
1VX-34	MC -1557-01.00	MA	Category A	DP	No	2			1VX-34 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1VX-40	MC -1557-01.00	MA	Category A	DP	No	2			1VX-40 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2VX-1A	MC -2557-01.00	ML	Category B	BF	Yes	2			2VX-1A - Stroke Time (Cls to Opn)	Tested once quarterly
									2VX-1A - Position Indicator (Open and Closed)	Tested once every two years
2VX-2B	MC -2557-01.00	ML	Category B	BF	Yes	2			2VX-2B - Stroke Time (Cls to Opn)	Tested once quarterly
									2VX-2B - Position Indicator (Open and Closed)	Tested once every two years
2VX-30	MC -2557-01.00	SA	Category A	CK	No	2			2VX-30 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2VX-31A	MC -2557-01.00	AO	Category A	DP	Yes	2			2VX-31A - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VX-31A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

VX - CONTAINMENT AIR RETURN EXCH & HYD SKIMMER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2VX-31A - Position Indicator (Open and Closed)	Tested once every two years
2VX-33B	MC -2557-01.00	AO	Category A	DP	Yes	2			2VX-33B - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2VX-33B - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2VX-33B - Position Indicator (Open and Closed)	Tested once every two years
2VX-34	MC -2557-01.00	MA	Category A	DP	No	2			2VX-34 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
2VX-40	MC -2557-01.00	MA	Category A	DP	No	2			2VX-40 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WL-1B	MCFD-1565-01.01	MR	Category A	DP	Yes	2			1WL-1B - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-1B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-1B - Position Indicator (Open and Closed)	Tested once every two years
1WL-2A	MCFD-1565-01.01	MR	Category A	DP	Yes	2			1WL-2A - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-2A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-2A - Position Indicator (Open and Closed)	Tested once every two years
1WL-24	MCFD-1565-01.01	SA	Category A	SW	No	2			1WL-24 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1WL-39A	MCFD-1565-01.01	MR	Category A	GL	Yes	2			1WL-39A - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-39A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1WL-39A - Position Indicator (Open and Closed)	Tested once every two years
1WL-41B	MCFD-1565-01.01	MR	Category A	GL	Yes	2			1WL-41B - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-41B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-41B - Position Indicator (Open and Closed)	Tested once every two years
1WL-64A	MCFD-1565-01.00	MR	Category A	DP	Yes	2			1WL-64A - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-64A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									1WL-64A - Position Indicator (Open and Closed)	Tested once every two years
1WL-65B	MCFD-1565-01.00	MR	Category A	DP	Yes	2			1WL-65B - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-65B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-65B - Position Indicator (Open and Closed)	Tested once every two years
1WL-264	MCFD-1565-01.00	SA	Category A	RV	No	2			1WL-264 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WL-321A	MCFD-1565-07.00	MR	Category A	BF	Yes	2			1WL-321A - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-321A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-321A - Position Indicator (Open and Closed)	Tested once every two years
1WL-322B	MCFD-1565-07.00	MR	Category A	BF	Yes	2			1WL-322B - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-322B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-322B - Position Indicator (Open and Closed)	Tested once every two years
1WL-385	MCFD-1565-07.00	SA	Category A	SW	No	2			1WL-385 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
1WL-1301B	MCFD-1565-01.00	MR	Category A	GL	Yes	2			1WL-1301B - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-1301B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1WL-1301B - Position Indicator (Open and Closed)	Tested once every two years
1WL-1302A	MCFD-1565-01.00	MR	Category A	GL	Yes	2			1WL-1302A - Position Indicator (Open and Closed)	Tested once every two years
									1WL-1302A - Stroke Time (Opn to Cls)	Tested once quarterly
									1WL-1302A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2WL-1B	MCFD-2565-01.01	MR	Category A	DP	Yes	2			2WL-1B - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-1B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-1B - Position Indicator (Open and Closed)	Tested once every two years
2WL-2A	MCFD-2565-01.01	MR	Category A	DP	Yes	2			2WL-2A - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-2A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-2A - Position Indicator (Open and Closed)	Tested once every two years
2WL-24	MCFD-2565-01.01	SA	Category A	SW	No	2			2WL-24 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2WL-39A	MCFD-2565-01.01	MR	Category A	DP	Yes	2			2WL-39A - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-39A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2WL-39A - Position Indicator (Open and Closed)	Tested once every two years
2WL-41B	MCFD-2565-01.01	MR	Category A	DP	Yes	2			2WL-41B - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-41B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-41B - Position Indicator (Open and Closed)	Tested once every two years
2WL-64A	MCFD-2565-01.00	MR	Category A	DP	Yes	2			2WL-64A - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-64A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2WL-64A - Position Indicator (Open and Closed)	Tested once every two years
2WL-65B	MCFD-2565-01.00	MR	Category A	DP	Yes	2			2WL-65B - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-65B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-65B - Position Indicator (Open and Closed)	Tested once every two years
2WL-264	MCFD-2565-01.00	SA	Category A	RV	No	2			2WL-264 - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
2WL-321A	MCFD-2565-07.00	MR	Category A	BF	Yes	2			2WL-321A - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-321A - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-321A - Position Indicator (Open and Closed)	Tested once every two years
2WL-322B	MCFD-2565-07.00	MR	Category A	BF	Yes	2			2WL-322B - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-322B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-322B - Position Indicator (Open and Closed)	Tested once every two years
2WL-385	MCFD-2565-07.00	SA	Category A	SW	No	2			2WL-385 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B

MCGUIRE NUCLEAR STATION

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2WL-1301B	MCFD-2565-01.00	MR	Category A	GL	Yes	2			2WL-1301B - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-1301B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2WL-1301B - Position Indicator (Open and Closed)	Tested once every two years
2WL-1302A	MCFD-2565-01.00	MR	Category A	GL	Yes	2			2WL-1302A - Stroke Time (Opn to Cls)	Tested once quarterly
									2WL-1302A - Leak Test - Appendix J (Reverse Dir)	10CFR50, App J, Opt B
									2WL-1302A - Position Indicator (Open and Closed)	Tested once every two years

MCGUIRE NUCLEAR STATION

WN - DIESEL GENERATOR ROOM SUMP PUMP SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WN-3	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-3 - Full Stroke (Both)	Condition Monitoring
1WN-5	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-5 - Full Stroke (Both)	Condition Monitoring
1WN-7	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-7 - Full Stroke (Both)	Condition Monitoring
1WN-11	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-11 - Full Stroke (Both)	Condition Monitoring
1WN-13	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-13 - Full Stroke (Both)	Condition Monitoring
1WN-15	MCFD-1609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		1WN-15 - Full Stroke (Both)	Condition Monitoring
2WN-3	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-3 - Full Stroke (Both)	Condition Monitoring
2WN-5	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-5 - Full Stroke (Both)	Condition Monitoring
2WN-7	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-7 - Full Stroke (Both)	Condition Monitoring
2WN-11	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-11 - Full Stroke (Both)	Condition Monitoring
2WN-13	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-13 - Full Stroke (Both)	Condition Monitoring
2WN-15	MCFD-2609-07.00	SA	Category C	SW	Yes	3	MC-SRV-WN-01		2WN-15 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

WZ - GROUNDWATER DRAINAGE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WZ-1	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-1 - Full Stroke (Both)	Condition Monitoring
1WZ-3	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-3 - Full Stroke (Both)	Condition Monitoring
1WZ-5	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-5 - Full Stroke (Both)	Condition Monitoring
1WZ-7	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-7 - Full Stroke (Both)	Condition Monitoring
1WZ-9	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-9 - Full Stroke (Both)	Condition Monitoring
1WZ-11	MCFD-1581-01.00	SA	Category C	SW	Yes	3			1WZ-11 - Full Stroke (Both)	Condition Monitoring

MCGUIRE NUCLEAR STATION

YC - CHILLED WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1YC-2A	MCFD-1618-01.00	MR	Category B	GL	Yes	3			1YC-2A - Stroke Time (Opn to Cls)	Tested once quarterly
									1YC-2A - Position Indicator (Open and Closed)	Tested once every two years
1YC-13	MCFD-1618-01.00	SA	Category C	CK	Yes	3			1YC-13 - Full Stroke (Both)	Condition Monitoring
1YC-14	MCFD-1618-01.00	SA	Category C	CK	Yes	3			1YC-14 - Full Stroke (Both)	Condition Monitoring
1YC-54	MCFD-1618-01.00	AO	Category B	GA	Yes	3			1YC-54 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-76	MCFD-1618-01.00	AO	Category B	GA	Yes	3			1YC-76 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-83B	MCFD-1618-01.00	MR	Category B	GL	Yes	3			1YC-83B - Stroke Time (Opn to Cls)	Tested once quarterly
									1YC-83B - Position Indicator (Open and Closed)	Tested once every two years
1YC-94	MCFD-1618-01.00	SA	Category C	CK	Yes	3			1YC-94 - Full Stroke (Both)	Condition Monitoring
1YC-95	MCFD-1618-01.00	SA	Category C	CK	Yes	3			1YC-95 - Full Stroke (Both)	Condition Monitoring
1YC-113	MCFD-1618-01.00	AO	Category B	GA	Yes	3			1YC-113 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-135	MCFD-1618-01.00	AO	Category B	GA	Yes	3			1YC-135 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-148	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-148 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-162	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-162 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-176	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-176 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-190	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-190 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-204	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-204 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-218	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-218 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-232	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-232 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-246	MCFD-1618-02.00	AO	Category B	CV	Yes	3			1YC-246 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-347	MCFD-1618-04.00	AO	Category B	GA	Yes	3			1YC-347 Fail to Safe - Not Timed (Open)	Tested once quarterly
1YC-357	MCFD-1618-04.00	AO	Category B	GA	Yes	3			1YC-357 Fail to Safe - Not Timed (Open)	Tested once quarterly

MCGUIRE NUCLEAR STATION

YM - MAKEUP DEMINERALIZER WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1YM-115B	MCFD-1601-02.04	MR	Category A	GL	Yes	2			1YM-115B - Stroke Time (Opn to Cls)	Tested once quarterly
									1YM-115B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1YM-115B - Position Indicator (Open and Closed)	Tested once every two years
1YM-116	MCFD-1601-02.04	SA	Category AC	LC	Yes	2			1YM-116 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									1YM-116 - Full Stroke (Both)	Condition Monitoring
2YM-115B	MCFD-1601-02.04	MR	Category A	GL	Yes	2			2YM-115B - Stroke Time (Opn to Cls)	Tested once quarterly
									2YM-115B - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2YM-115B - Position Indicator (Open and Closed)	Tested once every two years
2YM-116	MCFD-1601-02.04	SA	Category AC	LC	Yes	2			2YM-116 - Leak Test - Appendix J (Accident Dir)	10CFR50, App J, Opt B
									2YM-116 - Full Stroke (Both)	Condition Monitoring

DUKE POWER
McGUIRE NUCLEAR STATION

RELIEF REQUEST

Section 5.0

Revision 27
March 1, 2004

5.1 PUMP GENERIC RELIEF REQUESTS

Relief Request	Applicability	Status
MC-GRP-01	All Pumps in Program	REVISED - Revision 27

Generic Relief Request

RELIEF REQUEST: MC-GRP-01

PUMPS: All pumps in the Inservice Test Program

TEST REQUIREMENTS: OMB-2000 Section ISTB-5000 (Tables 5100-1, 5200-1, 5300-1, and 5300-2 specifies the allowable range for acceptable operation of vibration measurements.

BASIS FOR RELIEF: Experience has shown that smooth operating pumps ($V_r \leq 0.075$ in/sec) often fall in the alert range of vibration measurement when compared to the acceptance criteria given in ISTB-5000 tables. The Code does not include provisions for a fixed band acceptance criteria for these pumps. The Alternative Testing provided below applies to all pumps in the Testing Program by establishing a threshold of vibration of ≤ 0.075 in/sec. In addition to this, OMB-2000 ISTB does not specifically address certain types of positive displacement pumps. Since McGuire has internal gear positive displacement pumps, the Alternate Testing below will be used for these pumps.

ALTERNATE TESTING: In addition to the vibration specified in OMB-2000 ISTB Tables 5100-1, 5200-1, 5300-1, and 5300-2, the following ranges shall be used.

	Acceptable Range	Alert Range	Required Action Range
For all pumps when $V_r \leq 0.075$ in/sec	0 to 0.19 in/sec	$> 0.19 \leq 0.45$ in/sec	> 0.45 in/sec
For centrifugal, vertical line shaft and positive displacement pumps except reciprocating when $V_r > 0.075$ in/sec	$\leq 2.5 * V_r$	$> 2.5 * V_r$ to $6 * V_r$ or > 0.325 to 0.70 in/sec	$> 6 * V_r$ or > 0.70 in/sec
For reciprocating pumps, when $V_r > 0.075$ in/sec	$\leq 2.5 * V_r$	$> 2.5 * V_r$ to $6 * V_r$	$> 6 * V_r$

5.2 PUMP SPECIFIC RELIEF REQUESTS

Relief Request	Applicability	Status
MC-SRP-CA-01	Auxiliary Feedwater Pumps -Deleted Revision 26	
MC-SRP-FD-01	Diesel Generator Fuel Oil Pumps	DELETED-Revision 27
MC-SRP-KC-01	Component Cooling Pumps	Revised-Revision 27
MC-SRP-ND-01	Residual Heat Removal Pumps	Revised-Revision 27
MC-SRP-NI-01	Safety Injection Pumps	DELETED-Revision 27
MC-SPR-NS-01	Containment Spray Pumps	Added-Revision 27
MC-SRP-NV-01	Chemical & Volume Control Pumps	DELETED-Revision 27
MC-SRP-RN-01	Nuclear Service Water Pumps - Deleted-Revision 22	

Specific Relief Request

RELIEF REQUEST: MC-SRP-CA-01

PUMPS:
1CAPU0001, 1A CA Pump
1CAPU0002, 1B CA Pump
1CAPU0003, Unit 1 Turbine Driven CA Pump
2CAPU0001, 2A CA Pump
2CAPU0002, 2B CA Pump
2CAPU0003, Unit 2 Turbine Driven CA Pump

DELETED BY REVISION 26
08/01/02

Specific Relief Request

RELIEF REQUEST: MC-SRP-FD-01

PUMPS:
1FDPU0054, 1A D/G Fuel Oil Transfer Pump
1FDPU0055, 1B D/G Fuel Oil Transfer Pump
2FDPU0054, 2A D/G Fuel Oil Transfer Pump
2FDPU0055, 2B D/G Fuel Oil Transfer Pump

**DELETED - REVISION 27
03/01/04**

Specific Relief Request

RELIEF REQUEST: MC-SRP-KC-01

PUMPS: 1KCPU0001, 1A1 Component Cooling Water Pump
1KCPU0002, 1A2 Component Cooling Water Pump
1KCPU0003, 1B1 Component Cooling Water Pump
1KCPU0004, 1B2 Component Cooling Water Pump
2KCPU0001, 2A1 Component Cooling Water Pump
2KCPU0002, 2A2 Component Cooling Water Pump
2KCPU0003, 2B1 Component Cooling Water Pump
2KCPU0004, 2B2 Component Cooling Water Pump

TEST REQUIREMENT: OMB-2000, ISTB-3500 requires that the full scale range of the instrument shall be three times the reference value or less.

BASIS FOR RELIEF: The installed process instrumentation for the KC pump suction gauge is a 0-60 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-3500-1 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-2000, ISTB-3500 and Table ISTB-3500-1 are combined, the actual instrument error introduced into the test is less than the 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 code; just not the specify range requirements of OMB-2000, ISTB-3500.

ALTERNATE TESTING: The installed process instrumentation will be used to measure KC suction pressure for the 1A1, 1A2, 1B1, and 1B2KC (2A1, 2A2, 2B1, and 2B2KC) pump tests.

Specific Relief Request

RELIEF REQUEST: MC-SRP-ND-01

PUMPS: 1NDPU0001, 1A Residual Heat Removal Pump
1NDPU0002, 1B Residual Heat Removal Pump
2NDPU0001, 2A Residual Heat Removal Pump
2NDPU0002, 2B Residual Heat Removal Pump

TEST REQUIREMENT: OMB-2000, ISTB-3500 specifies the range of each instrument shall be three times the reference value or less.

BASIS FOR RELIEF: Range requirements will be waived for the tests. The purpose of the quarterly test is to verify Tech Spec requirements are met and to obtain vibration data for trending. The instrumentation used for the quarterly Residual Heat Removal Pump test will meet accuracy requirements for assuring Residual Heat Removal Pump operability per Technical Specifications.

ALTERNATE TESTING: The Residual Heat Removal Pumps will be tested according to the following program, which is consistent with 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 a 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/Comprehensive Test

The Residual Heat Removal Pumps will be tested quarterly to verify Technical Specifications are met. The test measures differential pressure and velocity vibration data. The differential pressure and velocity vibration data will be trended. The instrument used to measure vibrations will meet the requirements specified in relief request MC-GRP-01.

Specific Relief Request

RELIEF REQUEST: MC-SRP-ND-01 (Continued)

The test loop used in the test has a flow measuring orifice installed, however, the system resistance cannot be adjusted with the associated throttling valve without invalidating the Residual Heat Removal system flow balance (a Tech Spec balance of flow to all 4 cold legs.) Therefore, flow through this loop will be recorded for information only.

The instrumentation range requirements of OMB-2000, ISTB-3500 will be waived. Since the instrumentation used to measure suction and discharge pressure is more accurate than code requirements (0.5% vs. 2%) using the process instrument for this test will yield results within the overall accuracy requirements of the code and will meet applicable accuracy requirements for the determination of operability per Technical Specifications. Typical values for ND suction pressure in mini-flow are 48-81 psig, and discharge pressures are in the 230-260 psig range. Therefore, the process range for discharge pressure (0-1000 psig) will not meet the three times criteria; the appropriate suction pressure loop can be used, which is within the three times requirement. The accuracy of these process instruments (0.5%) is well below the requirements specified in Table ISTB-3500-11 for instrument accuracy (2%). The actual reading error at test pressure due to the process instrument is 2.2 % ($0.5 * 1000/230$) for discharge pressure at the low end of this range (ND pump procedures specify that instrumentation must meet the three times criteria). If a 0-690 psig gauge was used with 2% accuracy, the reading error would be 6% ($2 * 690/230$). When the requirements of OMB-2000 and ISTB-3500 are combined, the actual instrument error introduced into the test is less than the code allowable (2.2 % vs. 6 % at the low (conservative) end). Using the process instruments for suction and discharge pressure data does not degrade the quality of the test and meets the intent of the instrumentation requirements of the code.

Specific Relief Request

RELIEF REQUEST: MC-SRP-NI-01

PUMPS: 1NIPU0009, 1A Safety Injection Pump
1NIPU0010, 1B Safety Injection Pump
2NIPU0009, 2A Safety Injection Pump
2NIPU0010, 2B Safety Injection Pump

**DELETED - REVISION 27
03/01/04**

Specific Relief Request

RELIEF REQUEST: MC-SRP-NS-01

PUMPS (Group B): 1NSPU0001, 1A Containment Spray Pump
1NSPU0002, 1B Containment Spray Pump
2NSPU0001, 2A Containment Spray Pump
2NSPU0002, 2B Containment Spray Pump

TEST REQUIREMENT: ASME OM Code, Section ISTB-3300 (e)(1) requires reference values be established within $\pm 20\%$ of design flow rate for the comprehensive pump test.

BASIS FOR RELIEF: McGuire's Containment Spray (NS) Pumps testing is limited by the 4 inch test line which will pass no more than 1200 gpm or approximately 35% of design flow. The design flow for an NS pump is approximately 3200-3400 gpm. The Code required eighty percent (80%) of this value would mean the system would have to achieve approximately 2560 - 2720 gpm. These pumps have previously been tested at 1,000 gpm through the 4 inch test line. The Licensee clearly understands that design flow is important for pumps with characteristic head-flow curves that are flat or gently sloping in the low flow region (little change in developed head with increasing flow). In the low flow region, increasing internal flows (typically due to degradation) are difficult if not impossible to detect. Pumps with the "flat" curves at low flows should be tested at near design conditions to determine if increasing internal recirculation flows have degraded pump performance to the point where design requirements cannot be met. However, the Containment Spray (NS) pump head curves at McGuire are not flat or gently sloping for low flow conditions. They are well-sloped from shutoff to well beyond the flow at which the pumps are currently tested quarterly (Reference Figure 1, NS Pump Curve). For higher flows just beyond this region, the slope diminishes and actually levels out between 2000 and 2750 gpm and deflect again to a more developed slope closer to and beyond the design flow. For this reason, the 80% design flow requirement would not be expected to give any better indication of the pump condition than does the current quarterly test at approximately 1100 - 1200 gpm. In fact, the curves at 80% of design flow could potentially mask pump degradation where the curve is flat.

In addition, in order to modify the current loop test loop for testing at a higher flow rate, would require the Licensee to "dike" the spray nozzles from each of the spray headers with plugs and direct the

BASIS FOR RELIEF (Cont.): flow back to the containment sump.

Also, extensive piping (8 inch) would have to be installed to provide a crossover loop to accommodate the higher flows. A dam would have to be constructed around the containment sump to simulate water levels in containment which would be expected during an accident and therefore providing the necessary suction from the sumps. This would not be a practicable modification for the frequency and duration of the test. The spray headers are inaccessible without a significant amount of scaffolding. Even if the nozzles were accessible, the plugging of spray nozzles, running the full flow test and returning the system to its operable configuration present substantial challenges in terms of complexity of the temporary modifications, labor intensive nature of the modifications, controls, and post modification testing needed to ensure the system is returned to the original configuration.

ALTERNATE TESTING: The Containment Spray Pumps will be tested according to the following program:

Group B Test

The Group B test will be performed on the Containment Spray Pumps quarterly as required in ISTB-3400. However, as permitted in section ISTB-5210(b)(2) a bypass test loop will be used for this testing; the bypass loop is designed to meet the pump manufacturer's operating specifications (e.g., flow rate, time limitations) for minimum flow operation.

Comprehensive Pump Test

As an alternative to testing within 20% of the design flow, the reference values will be established at approximately 35% of the design flow. The existing flow configuration will be used for all testing (Reference Figure 2, NS Pump Testing Flow Schematic). The Licensee recognizes that limited water volume results in a rapid temperature rise in the test loop due to heat loads added by the running pump. Therefore, care will be taken to ensure that the pump run time is limited and the flow rate is maintained within an optimal range. If the measured parameters are outside the normal operating ranges or are determined by analysis to be trending toward an unacceptable degraded state, appropriate actions required by ISTB-6200 will be taken. In addition, all additional parameters and conditions will be monitored and documented as per ISTB-6400. In addition to the testing described above, the Containment Spray (NS) Pumps will be included in the Licensee's Predictive Maintenance Program. Additional monitoring will include advanced vibration monitoring techniques

ALT. TESTING (Cont.): and diagnostic analysis (beyond that required by ISTB) along with the latest industry techniques in oil sampling and analysis.

Using the provisions of this relief request as an alternative to the specific requirements of ISTB 3300(e)(1) which have been identified to be impractical, will provide an acceptable and adequate indication of pump performance. Therefore, pursuant to 10 CFR 50.55a(f)(6)(i) the Licensee request relief from the specific ISTB Code requirements referenced in this relief request.

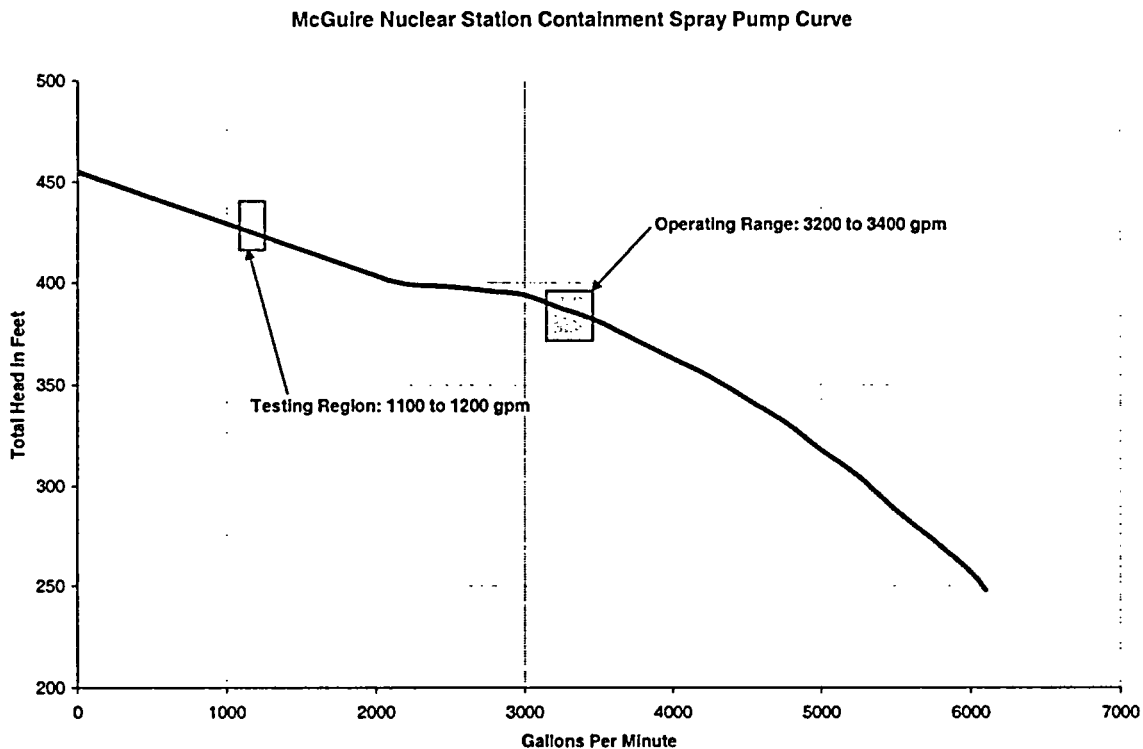
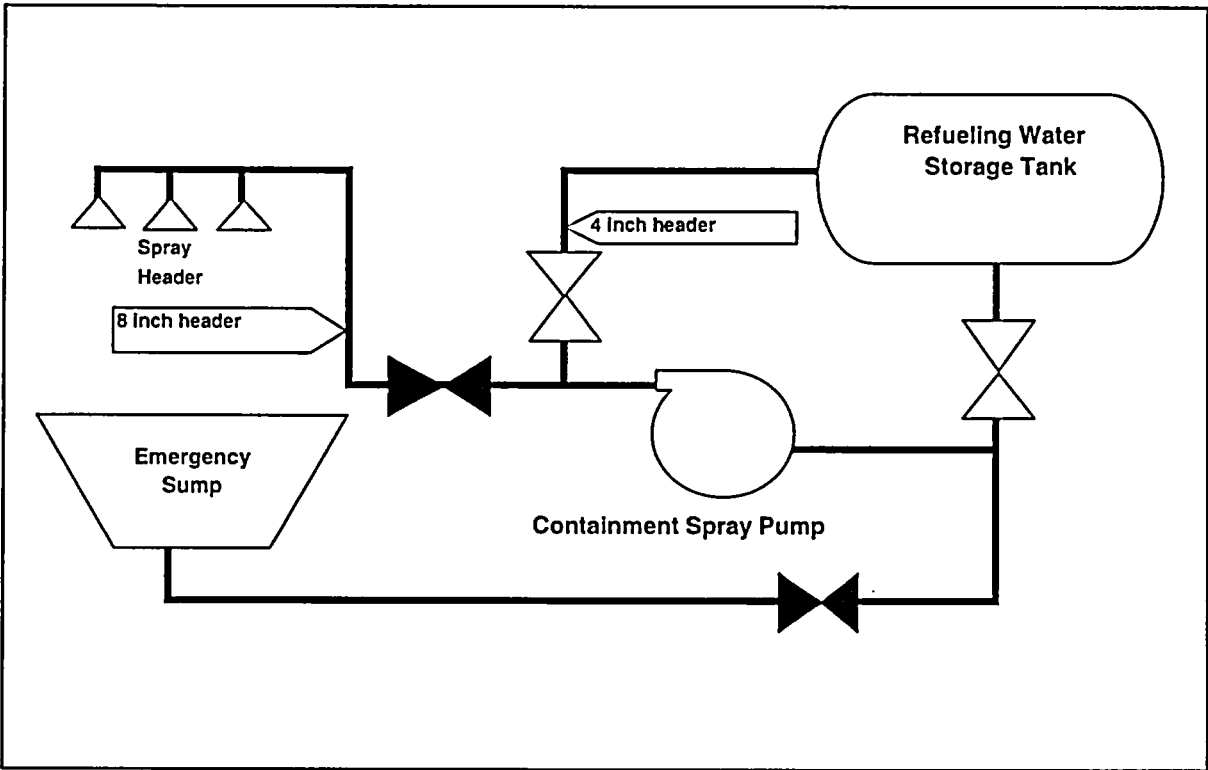


Figure 1

Figure 2



Specific Relief Request

RELIEF REQUEST: MC-SRP-NV-01

PUMPS: 1NVPU0015, 1A Centrifugal Charging Pump
1NVPU0016, 1B Centrifugal Charging Pump
2NVPU0015, 2A Centrifugal Charging Pump
2NVPU0016, 2B Centrifugal Charging Pump

**DELETED - REVISION 27
03/01/04**

Specific Relief Request

RELIEF REQUEST: MC-SRP-RN-01

PUMPS: 1RNPU0003, 1A Nuclear Service Water Pump
1RNPU0004, 1B Nuclear Service Water Pump
2RNPU0003, 2A Nuclear Service Water Pump
2RNPU0004, 2B Nuclear Service Water Pump

Unit 1 - Deleted by Revision 22

Unit 2 - Deleted by Revision 17

5.3 VALVE GENERIC RELIEF REQUESTS

Relief Request	Applicability	Status
MC-GRV-01	DELETED-Revision 27	DELETED-Revision 27
MC-GRV-02	DELETED-Revision 27	DELETED-Revision 27
MC-GRV-03	DELETED-Revision 27	DELETED-Revision 27
MC-GRV-04	DELETED-Revision 27	DELETED-Revision 27

Generic Relief Request

Item Number: MC-GRV-01

Component Number (s): **All safety and relief valves tested under ambient conditions
using a test medium at ambient conditions.**

**DELETED BY REVISION 27
03/01/04**

Generic Relief Request

Item Number: MC-GRV-02

Component Number (s): All safety and relief valves tested at other than ambient conditions.

**DELETED BY REVISION 27
03/01/04**

Generic Relief Request

Item Number: MC-GRV-03

Component Number (s): **All safety and relief valves tested under ambient conditions
using a test medium at ambient conditions.**

**DELETED BY REVISION 27
03/01/04**

Generic Relief Request

Item Number: MC-GRV-04

Component Number (s): All check valves in the IST Program

**DELETED BY REVISION 27
03/01/04**

DUKE POWER

McGUIRE NUCLEAR STATION

JUSTIFICATION FOR DEFERRAL

Section 6.0

Revision 27
March 1, 2004

5.4 VALVE SPECIFIC RELIEF REQUESTS

Relief Request	Applicability	Status
MC-SRV-CA-01	Aux. Feedwater Containment Isolation Check Valve	ADDED – Revision 27
MC-SRV-NS-01	Open and Closing - Containment Spray Header Check Valves	Revised-Revision 27
MC-SRV-RN-01	Deleted-Revision 21	
MC-SRV-VG-01	Deleted-Revision 21	
MC-SRV-WN-01	Deleted-Revision 27	DELETED-Revision 27

Specific Relief Request

Item Number: MC-SRV-CA-01
Valve: 1CA-42B
Flow Diagram: MCFD-1592-1.0
Code Category: B
ASME Class: 2
Function: Close to provide containment isolation for Aux. Feedwater system penetration.
Test Requirement: Stroke Time - Quarterly
Stroke time test in accordance with OMa-1988 Part 10, 4.2.2.1.

Basis for Relief: These valves are open normally to provide an open flowpath from the CA pumps to steam generator 1D to provide secondary cooling. Supplemental motor power monitoring testing performed since valve repair revealed that opening the valve following it's closure test subjects the valve to potential degradation due to pressure trapped in the valve when the valve is stroked closed. Thus testing the valve poses an equipment damage potential which could be reduced by only stroking the valves during refueling outage conditions.

During Unit 1 Cycle 16, the valve stem sheared into 2 sections and was later repaired to a modified design configuration. Suspected internal damage to the stem thread to carrier ring connection is not loaded in tensile during the closing stroke. The closing stroke creates a compressive load which does not challenge the connection. The opening stroke, especially under dP, creates a tensile load on the stem thread to carrier ring connection and thus could serve to further degrade this connection. Based on the above and on previous stroke time testing results since the modification, the closing function is not in question. However, the act of opening the valve to realign to normal operation may place stress on the internals unnecessarily.

Post maintenance testing as well as surveillance testing performed since the valve repair confirms that the valve's capability to perform it's safety function to close has not been compromised by the loading in the open direction seen during the most recent test. Although the valve can be tested quarterly, the testing involves a hardship as described above (and referenced in NUREG 1482 Section 3.1.1) which could subject the valve to undue stress or reduce it's life expectancy resulting in forced shutdown in the event the open stroke following testing were to result in a tensile failure.

Specific Relief Request

Item Number: MC-SRV-CA-01

Basis for Relief: (cont.) Such risk is considered to outweigh the benefit achieved by continued quarterly testing until the valve can be conveniently repaired during the next refueling outage.

This Relief Request evaluation concludes adequate justification without compromise to safety or quality exists to warrant the proposed test deferral. Quarterly stroke testing will therefore be discontinued to prevent unnecessary stroking of and thus maintain continued operability the valve for the balance of the current fuel cycle. During 1EOC16, the valve will be returned to design configuration, at which time quarterly testing will be resumed.

Test Alternative & Frequency: Valve will be full stroke exercised during refueling outages. Quarterly testing will be resumed following 1EOC16 after repairs are made to 1CA-42B.

Specific Relief Request

Item Number: MC-SRV-NS-01

Valve: 1NS-13, 1NS-16, 1NS-30, 1NS-33, 1NS-41, 1NS-46
2NS-13, 2NS-16, 2NS-30, 2NS-33, 2NS-41, 2NS-46

Flow Diagram: MCFD-1563-1.0
MCFD-2563-1.0

Code Category: C

ASME Class: 2

Function: Open and close on flow from containment spray pumps.

Test Requirement: Verify proper valve movement once per three months as required by OMB-2000, ISTC-3500.

Basis for Relief: Containment Spray valves 1(2)NS-13, 16, 30, 33, 41, and 46 are Aloyco/Walworth model D-49300 cover hung, swing check valves. They are normally closed providing Category C interior containment isolation for Containment Spray and Auxiliary Containment Spray (valves 1(2)NS-41 and 46). OMB-2000, ISTC-3510 requires quarterly exercising, deferrable to cold shutdowns or refueling outages. McGuire FSAR Table 6-112 identifies these valves as Leak Class 1A valves not requiring leak rate testing due their inability to release containment atmosphere during a LOCA.

Full stroke operation of the check valves shall be verified by disassembly/inspection of the valves as no operational method exists without actuating containment spray (reference MC-NS-02, NUREG-1482 Staff Position 2). As a supplement to the full stroke testing, part stroke and closed verification will be conducted upon reassembly and periodically by air test as described for the spray nozzle test in McGuire FSAR 6.5.4 (reference, NUREG-1482 Staff Position 2).

For valve disassembly/inspection, all six valves will be grouped into one group and inspected within a four cycle window (six year interval). All six valves are identical in manufacturer and installation. Operationally, the valves are identical with respect to operational readiness. During system actuation, supply originates from the Containment Spray system for valves 1(2)NS-13, 16, 30, and 33 and Residual Heat Removal system for 1(2)NS-41 and 46.

Specific Relief Request

Item Number: MC-SRV-NS-01

Basis for Relief: (cont.)

In spray modes both systems have similar hydraulic characteristics. At McGuire's discretion the valves may be disassembled/inspected sequentially, in sub-groups, or as one complete group every fourth outage (six years). Diversion from the sequential disassembly/inspection represents an extension from the Code required frequency.

The relief request does not represent a decrease in quality nor safety. The valve disassembly/inspection will demonstrate ability of the valve to full stroke and fully close. As the valves do not function except during testing and severe plant emergencies, no operating degradation mechanisms exist. Potential degradation mechanisms from the valves being in a static position will be identified by the part stroke test conducted each refueling outage on all valves.

Compliance with the Code requirements is impractical and would impose unnecessary hardship. The valves are located within the containment dome volume and are accessible by a temporary cantilevered scaffold attached to the Polar Crane Scissors Jack. This action, in accordance with the requirements of 29CFR 1910.28, 29CFR 1926.452, ANSI A10.8-1977, and McGuire's Scaffold program places personnel in unsafe positions during the erection/removal of the scaffold and valve testing. No additional assurance of valve function is gained. In fact, although unlikely, frequent intrusion into the valves' internals and the inability to verify exact seat alignment during reassemble may degrade the valves' condition.

Pursuant to NUREG-1482 Staff Position 2, extension of the valve disassembly/inspection interval will be considered in cases of extreme hardship. Response to Question 19 of same implies "extreme hardship" is proportional to the impact on plant safety. The hardship impact is one of undue personnel safety risk and refueling outage-extension. Yet the benefit from testing each refueling outage, as compared to the proposed scheme, is negligible at best. All valves will be disassembled/inspected once per four refueling outages (six years).

Specific Relief Request

Item Number: MC-SRV-NS-01

Basis for Relief: (cont.)

A review of McGuire's valves, similar industry valves, and the "EPRI Applications Guidelines for Check Valves in Nuclear Power Plants" was conducted.

A review of the past 6 Unit 1 refueling outages, 7 Unit 2, identified part stroke testing of all valves every outage through 1/2EOC 9. Since 1/2EOC 6 each Containment Spray check valve has been disassembled/inspected once and Auxiliary Containment Spray valves twice (due to the current grouping scheme). A comprehensive review of all valves identified no indication of wear, corrosion, or degradation.

A NPRDS search for Aloyco-Walworth and Walworth check valves provided a list of 34 Containment Spray check valve failures. A detailed review of the 34 failures identified 14 potentially related failures. Subsequent conversation with the respective plants' System Engineers resolved 11 of these potentially related failures as unrelated. Reasons for determining a valve failure was unrelated included the following; valves normally see flow during testing or other plant operation, and recent ISI disassembly/inspection of valves identified no degradation. The 3 remaining potentially related failures included 2 which could not be determined and 1 which was a result of valve disk misalignment. As stated earlier the potential for valve disk misalignment increases, although marginally, with repetitive disassemblies.

A review of the "EPRI Applications Guidelines for Check Valves in Nuclear Power Plants" primarily addressed degradation of check valves regularly in operation service. Design criteria for check valve application was also discussed. Comparison with the subject check valves did not reveal any design misapplication issues. The issue of valve sticking open/closed was discussed in section 6.5.4, identifying improperly assembly as a potential cause. This issue would be addressed by the proposed part flow testing.

This Relief Request evaluation concludes adequate justification without compromise to safety or quality exist to warrant the proposed test methodology.

Specific Relief Request

Item Number: MC-SRV-NS-01

Test Alternative & Frequency: Containment Spray valves 1(2)NS-13, 16, 30, 33, 41, and 46 will be grouped into a single test group. The valves may be disassembled/inspected sequentially, in sub-groups, or as one complete group every fourth outage (6 years). Each valve will be disassembled/inspected once per four refueling outages (6 years). Each Containment Spray valve will be part stroke tested during each refueling outage.

Specific Relief Request

Item Number: MC-SRV-RN-01
Valve: 1RN-994, 1RN-1006
2RN-994, 2RN-1006

Unit 1 - Deleted by Revision 21
Unit 2 - Deleted by Revision 16

Specific Relief Request

Item Number: MC-SRV-VG-01

Valve: 1VGSV5160, 1VGSV5161, 1VGSV5162, 1VGSV5163,
1VGSV5170, 1VGSV5171, 1VGSV5172, 1VGSV5173

2VGSV5160, 2VGSV5161, 2VGSV5162, 2VGSV5163,
2VGSV5170, 2VGSV5171, 2VGSV5172, 2VGSV5173

Unit 1 - Deleted by Revision 21
Unit 2 - Deleted by Revision 16

Specific Relief Request

Item Number: MC-SRV-WN-01
Valve: 1WN-3, 1WN-5, 1WN-7, 1WN-11, 1WN-13, 1WN-15
2WN-3, 2WN-5, 2WN-7, 2WN-11, 2WN-13, 2WN-15
Flow Diagram: MCFD-1609-7.0
MCFD-2609-7.0

DELETED BY REVISION 27
03/01/04

6.1 JUSTIFICATION FOR DEFERRAL

<u>Justification Number</u>	<u>Applicability</u>	<u>Status</u>
MC-BB-01	BB Containment Isolation	Revised-Revision 27
MC-CA-01	DELETED-Revision 27	DELETED-Revision 27
MC-CA-02	DELETED-Revision 27	DELETED-Revision 27
MC-CA-03	DELETED-Revision 25	
MC-CA-04	CA Pump Suction Isolation	Revised-Revision 27
MC-CF-01	Feedwater & Containment Isolation	Revised-Revision 27
MC-CF-02	Feedwater Control	Revised-Revision 27
MC-CF-03	Feedwater & Containment Isolation	Revised-Revision 27
MC-CF-04	S/G Feedwater Control By Pass	Revised-Revision 27
MC-CF-05	DELETED-Revision 25	
MC-CF-06	DELETED-Revision 27	DELETED-Revision 27
MC-FW-01	FWST to ND Pump Isolation	Revised-Revision 27
MC-FW-02	DELETED-Revision 27	DELETED-Revision 27
MC-FW-03	DELETED-Revision 27	DELETED-Revision 27
MC-IA-01	DELETED-Revision 27	DELETED-Revision 27
MC-KC-01	KC to NC Pump Containment Isolation	Revised-Revision 27
MC-KC-02	KC to NC Pump Containment Isolation	Revised-Revision 27
MC-KC-03	KC to NCDT Hx Isolation Valves	Revised-Revision 27
MC-KC-04	KC to NCDT Hx Isolation Valves	Revised-Revision 27
MC-KC-05	DELETED-Revision 26	
MC-KC-06	DELETED-Revision 27	DELETED-Revision 27
MC-KC-07	DELETED-Revision 26	
MC-KC-08	DELETED-Revision 27	DELETED-Revision 27
MC-KC-09	DELETED-Revision 26	
MC-NB-01	DELETED-Revision 27	DELETED-Revision 27
MC-NB-02	DELETED-Revision 26	
MC-NB-03	DELETED-Revision 27	DELETED-Revision 27
MC-NC-01	Reactor Coolant System PORV	Revised-Revision 27
MC-NC-02	Reactor Vessel Head Vents	Revised-Revision 27
MC-NC-03	DELETED-Revision 26	

6.1 JUSTIFICATION FOR DEFERRAL

<u>Justification Number</u>	<u>Applicability</u>	<u>Status</u>
MC-NC-04	DELETED-Revision 27	DELETED-Revision 27
MC-NC-05	DELETED-Revision 27	DELETED-Revision 27
MC-NC-06	Pressurizer PORV Isolation	Revised-Revision 27
MC-ND-01	ND Pump Suction from NC	Revised-Revision 27
MC-ND-02	ND Pump Supply to NV and NI Pumps	Revised-Revision 27
MC-ND-03	ND Hx Crossover Block Valve	Revised-Revision 27
MC-ND-04	DELETED-Revision 27	DELETED-Revision 27
MC-ND-05	DELETED-Revision 27	DELETED-Revision 27
MC-ND-06	DELETED-Revision 27	DELETED-Revision 27
MC-ND-07	ND Pump Suction From FWST	Revised-Revision 27
MC-NF-01	DELETED-Revision 27	DELETED-Revision 27
MC-NF-02	NF Containment Isolation Checks	Revised-Revision 27
MC-NI-01	NC Cold Leg Injection From NV	Revised-Revision 27
MC-NI-02	FWST To NI Pumps	Revised-Revision 27
MC-NI-03	NI Pumps Miniflow Isolation	Revised-Revision 27
MC-NI-04	Safety Injection to Hot Leg	Revised-Revision 27
MC-NI-05	Safety Injection to Cold Leg	Revised-Revision 27
MC-NI-06	Safety Injection Suction Flow FWST	Revised-Revision 27
MC-NI-07	Flow for ND to Cold Leg	Revised-Revision 27
MC-NI-08	NV & NT Pump Suction Crossover	Revised-Revision 27
MC-NI-09	ND to Hot Leg Isolation	Revised-Revision 27
MC-NI-10	RX Building Sump to ND & NS	Revised-Revision 27
MC-NI-11	NV & NI Pump Suction Crossover	Revised-Revision 27
MC-NI-12	DELETED-Revision 27	DELETED-Revision 27
MC-NI-13	DELETED-Revision 27	DELETED-Revision 27
MC-NI-14	DELETED-Revision 27	DELETED-Revision 27
MC-NI-15	DELETED-Revision 27	DELETED-Revision 27
MC-NI-16	DELETED-Revision 27	DELETED-Revision 27
MC-NI-17	DELETED-Revision 27	DELETED-Revision 27
MC-NI-18	DELETED-Revision 27	DELETED-Revision 27

6.1 JUSTIFICATION FOR DEFERRAL

<u>Justification Number</u>	<u>Applicability</u>	<u>Status</u>
MC-NI-19	DELETED-Revision 26	
MC-NI-20	NI Pump Section from ND	Revised-Revision 27
MC-NI-21	DELETED-Revision 27	DELETED-Revision 27
MC-NI-22	DELETED-Revision 27	DELETED-Revision 27
MC-NI-23	DELETED-Revision 27	DELETED-Revision 27
MC-NI-24	DELETED-Revision 27	DELETED-Revision 27
MC-NI-25	NI Pump Suction from FWST	Revised-Revision 27
MC-NM-01	DELETED-Revision 26	
MC-NM-02	NM Containment Isolation	Revised-Revision 27
MC-NS-01	ND to NS Containment Isolation	Revised-Revision 27
MC-NS-02	DELETED-Revision 25	
MC-NS-03	DELETED-Revision 27	DELETED-Revision 27
MC-NS-04	DELETED-Revision 27	DELETED-Revision 27
MC-NS-05	NS Pump Suction Isolation Valves	Revised-Revision 27
MC-NS-06	Containment Sump to NS Pump Suction Isolation	Revised-Revision 27
MC-NS-07	DELETED-Revision 27	DELETED-Revision 27
MC-NV-01	NC Containment Isolation	Revised-Revision 27
MC-NV-02	Letdown Containment Isolation	Revised-Revision 27
MC-NV-03	DELETED-Revision 26	
MC-NV-04	Volume Control Tank Isolation	Revised-Revision 27
MC-NV-05	NV Charging Line Containment Isolation	Revised-Revision 27
MC-NV-06	NV Pump Suction from FWST	Revised-Revision 27
MC-NV-07	DELETED-Revision 27	DELETED-Revision 27
MC-NV-08	NV Isolation to Volume Control Tank	Revised-Revision 27
MC-NV-09	BA to NV Pumps	Revised-Revision 27
MC-NV-10	DELETED-Revision 27	DELETED-Revision 27
MC-NV-11	DELETED-Revision 27	DELETED-Revision 27
MC-NV-12	DELETED-Revision 27	DELETED-Revision 27
MC-NV-13	DELETED-Revision 27	DELETED-Revision 27
MC-NV-14	DELETED-Revision 27	DELETED-Revision 27

6.1 JUSTIFICATION FOR DEFERRAL

<u>Justification Number</u>	<u>Applicability</u>	<u>Status</u>
MC-NV-15	DELETED-Revision 27	DELETED-Revision 27
MC-NV-16	DELETED-Revision 22	
MC-NV-17	DELETED-Revision 27	DELETED-Revision 27
MC-NV-18	DELETED-Revision 26	
MC-NV-19	Let down Orifice Outlet	Revised-Revision 27
MC-RF-01	DELETED-Revision 27	DELETED-Revision 27
MC-RF-02	Containment Isolation Outside	Revised-Revision 27
MC-RN-01	RX Bldg. Non-Essential Supply Containment Isolation	Revised-Revision 27
MC-RN-02	NC Pump Air Cooler Relief	Revised-Revision 27
MC-RN-03	DELETED-Revision 21	
MC-RN-04	DELETED-Revision 21	
MC-RN-05	DELETED-Revision 21	
MC-RN-06	DELETED-Revision 22	
MC-RV-01	Containment Discharge Isolation	Revised-Revision 27
MC-SA-01	DELETED-Revision 27	DELETED-Revision 27
MC-SA-02	DELETED-Revision 27	DELETED-Revision 27
MC-SM-01	Main Steam Isolation Valves	Revised-Revision 27
MC-VB-01	DELETED-Revision 27	DELETED-Revision 27
MC-VI-01	DELETED-Revision 27	DELETED-Revision 27
MC-VI-02	DELETED-Revision 27	DELETED-Revision 27
MC-VI-03	DELETED-Revision 27	DELETED-Revision 27
MC-VI-04	Lower Containment Non-Essential Header Outside	Revised-Revision 27
MC-VS-01	DELETED-Revision 27	DELETED-Revision 27
MC-VX-01	DELETED-Revision 27	DELETED-Revision 27
MC-WL-01	DELETED-Revision 26	
MC-WL-02	DELETED-Revision 26	
MC-YM-01	DELETED-Revision 27	DELETED-Revision 27

Justification for Deferral

Item Number: MC-BB-01

Valve: 1BB-1B, 1BB-2B, 1BB-3B, 1BB-4B, 1BB-5A, 1BB-6A, 1BB-7A, 1BB-8A
2BB-1B, 2BB-2B, 2BB-3B, 2BB-4B, 2BB-5A, 2BB-6A, 2BB-7A, 2BB-8A

Flow Diagram: MCFD-1580-1.0,
MCFD-2580-1.0

Code Category: B

ASME Class: 2

Function: Closed to provide containment isolation for Steam Generator Blowdown system penetrations.

Test Requirement: Stroke Time – Quarterly
Stroke time test in accordance with OMB-2000, ISTC-3520.

Basis for Deferral: These valves are open normally to provide continuous blowdown flow from the steam generator secondary side. Stroking the valves causes water hammer conditions when the blowdown flow is re-established. The water hammer poses an equipment damage potential and a personnel safety hazard which could be reduced by stroking the valves during cold shutdown conditions.

NUREG-1482 section 2.4.5 and ISTC-3500 gives general guidance on deferring inservice testing to cold shutdown valves which when cycled could subject a system to “undue stress or reduce the life expectancy of plant components.” Quarterly stroke testing will therefore be discontinued to prevent unnecessary stroking of and thus increase the life expectancy of the valves.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number:

MC-CA-01

Valve:

1CA-37, 1CA-41, 1CA-45, 1CA-49, 1CA-53, 1CA-57, 1CA-61,
1CA-65
2CA-37, 2CA-41, 2CA-45, 2CA-49, 2CA-53, 2CA-57, 2CA-61,
2CA-65

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-CA-02
Valve: 1CA-165, 1CA-166

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-CA-03
Valve: 1CA-8, 1CA-10, 1CA-12
2CA-8, 2CA-10, 2CA-12

DELETED BY REVISION 25
12/31/98

Justification for Deferral

Item Number: MC-CA-04

Valve: 1CA-7AC, 1CA-9B, 1CA-11A
2CA-7A, 2CA-9B, 2CA-11A

Flow Diagram: MCFD-1592-1.1,
MCFD-2592-1.1

Code Category: B

ASME Class: 3

Function: Closed to provide train separation between assured makeup source and non-safety piping after CA suction is aligned to RN.

Test Requirement: Full Stroke Exercise Closed - Quarterly
Verify proper valve movement once per three months as required by OMB-2000, ISTC-5120.

Basis for Deferral: Stroke testing the valves on a quarterly frequency requires that operators rack out the associated pump breaker or isolate and disable the steam supply isolation valve to the CA pump turbine. This action is considered necessary to protect the pump from damage in the event it receives a start signal during the period when the pump suction isolation valve is closed.

This is considered sufficient justification to defer testing to a shutdown frequency.

Test Alternative & Frequency: Valves will be full stroke exercised and timed at cold shutdown.

Justification for Deferral

Item Number: MC-CF-01

Valve: 1CF-26AB, 1CF-28AB, 1CF-30AB, 1CF-35AB
2CF-26AB, 2CF-28AB, 2CF-30AB, 2CF-35AB

Flow Diagram: MCFD-1591-1.1,
MCFD-2591-1.1

Code Category: B

ASME Class: 2

Function: Provide feedwater and containment isolation.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-3500.

Basis for Deferral: Closure of these valves would isolate the Steam Generator feedwater which could result in a severe transient in the Steam Generator, resulting in a Unit trip.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-CF-02

Valve: 1CF-17AB, 1CF-20AB, 1CF-23AB, 1CF-32AB
2CF-17AB, 2CF-20AB, 2CF-23AB, 2CF-32AB

Flow Diagram: MCFD-1591-1.1,
MCFD-2591-1.1

Code Category: B

ASME Class: NA

Function: Feedwater control.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-3500.

Basis for Deferral: Closure of these valves would isolate the Steam Generator feedwater which could result in a severe transient in the Steam Generator, resulting in a Unit trip.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-CF-03

Valve: 1CF-126B, 1CF-127B, 1CF-128B, 1CF-129B
2CF-126B, 2CF-127B, 2CF-128B, 2CF-129B

Flow Diagram: MCFD-1591-1.1,
MCFD-2591-1.1

Code Category: B

ASME Class: 2

Function: Provide feedwater and containment isolation.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-3500.

Basis for Deferral: Cycling valves during power operation could induce unwanted transients in the steam generators. This would result in an increase in flow to the main feedwater nozzles causing vibrations in the preheater section of the steam generators.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-CF-04

Valve: 1CF-104AB, 1CF-105AB, 1CF-106AB, 1CF-107AB
2CF-104AB, 2CF-105AB, 2CF-106AB, 2CF-107AB

Flow Diagram: MCFD-1591-1.1,
MCFD-2591-1.1

Code Category: B

ASME Class: NA

Function: Provides tempering flow to the steam generators.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-3500.

Basis for Deferral: Closing these valves during operation would result in a feedwater transient and could result in loss of Steam Generator level control, causing a Unit trip. These valves are normally open at power.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-CF-05
Valve: 1CF-152, 1CF-154, 1CF-156, 1CF-158
2CF-152, 2CF-154, 2CF-156, 2CF-158

DELETED BY REVISION 25
12/31/98

Justification for Deferral

Item Number: MC-CF-06
Valve: 1CF-118, 1CF-119, 1CF-120, 1CF-121
2CF-118, 2CF-119, 2CF-120, 2CF-121

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-FW-01

Valve: 1FW-27A
2FW-27A

Flow Diagram: MCFD-1571-1.0,
MCFD-2571-1.0

Code Category: B

ASME Class: 2

Function: Isolates low pressure injection from the Refueling Water Storage Tank.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Closure of this valve during normal power operation would render all low pressure injection inoperable. This valve is opened and power removed above Mode 4 per Technical Specification.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-FW-02

Valve: 1FW-28
2FW-28

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-FW-03

Valve: 1FW-74
2FW-74

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-IA-01

Valve: 11A-5260, 11A-5270, 11A-5280, 11A-5290, 11A-5300, 11A-5310,
11A-5320, 11A-5330, 11A-5340, 11A-5350, 11A-5360, 11A-5370,
11A-5380, 11A-5390
21A-5260, 21A-5270, 21A-5280, 21A-5290, 21A-5300, 21A-5310,
21A-5320, 21A-5330, 21A-5340, 21A-5350, 21A-5360, 21A-5370,
21A-5380, 21A-5390

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-KC-01

Valve: 1KC-424B, 1KC-425A
2KC-424B, 2KC-425A

Flow Diagram: MCFD-1573-3.1,
MCFD-2573-3.1

Code Category: A

ASME Class: 2

Function: Provide containment isolation for penetration M-320.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Failure of either of these valves in the closed position during testing would inhibit the normal flow path from the reactor coolant pump motor coolers. This action could result in damage to the NC pumps. Within 15 to 30 minutes, the NC Pumps would be tripped on high bearing temperature, and an abnormal shutdown (natural circulation) would be required.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-KC-02

Valve: 1KC-338B
2KC-338B

Flow Diagram: MCFD-1573-3.1,
MCFD-2573-3.1

Code Category: A

ASME Class: 2

Function: Provide containment isolation for penetration M-327.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Failure of this valve in the closed position during testing could result in damage to the NC pumps. Within 15 to 30 minutes, the NC Pumps would be tripped on high bearing temperature, and an abnormal shutdown (natural circulation) would be required.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-KC-03

Valve: 1KC-332B, 1KC-333A
2KC-332B, 2KC-333A

Flow Diagram: MCFD-1573-3.1,
MCFD-2573-3.1

Code Category: A

ASME Class: 2

Function: Provide containment isolation for penetration M-355.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with Omb-2000, ISTC-5130.

Basis for Deferral: Failure of one of these valves in the closed position during testing would inhibit flow through the reactor coolant drain tank heat exchanger. No alternate flowpath for cooling water to the heat exchanger exists. Without flow to the heat exchanger, the drain tank would become over pressurized and steam would be released. Such a test would not be conservative, since Reactor Coolant would be released. This test would challenge the overpressure protection of a Reactor Coolant System component. It is concluded therefore that per NUREG-1482 Section 3.1.1 that these valves should be excluded from quarterly testing.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-KC-04

Valve: 1KC-320A
2KC-320A

Flow Diagram: MCFD-1573-3.1,
MCFD-2573-3.1

Code Category: A

ASME Class: 2

Function: Provide containment isolation for penetration M-376.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-5130.

Basis for Deferral: Failure of this valve in the closed position during testing would inhibit flow through the reactor coolant drain tank heat exchanger. No alternate flowpath for cooling water to the heat exchanger exists. Without flow to the heat exchanger, the drain tank would become over pressurized and steam would be released. Such a release of Reactor Coolant makes this test nonconservative and would challenge the overpressure protection of a Reactor Coolant System component. It is concluded therefore that per NUREG-1482 Section 3.1.1 that this valve should be excluded from quarterly testing.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-KC-05

Valve: 1KC-280
2KC-280

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-KC-06

Valve: 1KC-322
2KC-322

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-KC-07

Valve: 1KC-279
2KC-279

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-KC-08

Valve: 1KC-340
2KC-340

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-KC-09

Valve: 1KC-47
2KC-47

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NB-01

Valve: 1NB-262
2NB-262

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NB-02

Valve: 2NB-438

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NB-03

Valve: 1NB-103

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NC-01

Valve: 1NC-32B, 1NC-34A, 1NC-36B
2NC-32B, 2NC-34A, 2NC-36B

Flow Diagram: MCFD-1553-2.0,
MCFD-2553-2.0

Code Category: B

ASME Class: 1

Function: Reactor Coolant System PORV. Opens to relieve pressure for the primary system.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5100.

Basis for Deferral: In the event that an NC PORV block is leaking, stroking the respective PORV is impractical because it would subject a system to pressure in excess of design pressure. This could quickly fill the NCDT and challenge relief protection.

Test Alternative & Frequency: Stroke time testing will be performed at cold shutdown and in all cases prior to entering LTOP conditions in accordance with Generic Letter 90-06. Testing will not be required more often than once per quarter as defined in Omb-2000, ISTC-5100.

Justification for Deferral

Item Number: MC-NC-02

Valve: 1NC-272AC, 1NC-273AC, 1NC-274B, 1NC-275B
2NC-272AC, 2NC-273AC, 2NC-274B, 2NC-275B

Flow Diagram: MCFD-1553-2.1,
MCFD-2553-2.1

Code Category: B

ASME Class: 1

Function: Reactor vessel head vent.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5100.

Basis for Deferral: Opening these valves at full pressure could cause damage to the valve seating surfaces. A reactor coolant leak could be caused.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NC-03
Valve: 1NC-259, 1NC-261
2NC-259, 2NC-261

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NC-04

Valve: 1NC-59

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NC-05

Valve: 1NC-284

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NC-06

Valve: 1NC-31B, 1NC-33A, 1NC-35B
2NC-31B, 2NC-33A, 2NC-35B

Flow Diagram: MCFD-1553-2.0,
MCFD-2553-2.0

Code Category: B

ASME Class: 1

Function: Must isolate PORVs.

Test Requirement: Stroke Time Closed-Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: In the event that an NC PORV is leaking, stroking the respective PORV block valve is impractical because it would subject a system to pressure in excess of design pressure. This could quickly fill the NCDT and challenge relief protection.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-ND-01

Valve: 1ND-1B, 1ND-2AC
2ND-1B, 2ND-2AC

Flow Diagram: MCFD-1561-1.0,
MCFD-2561-1.0

Code Category: A

ASME Class: 1

Function: Provides suction for Residual Heat Removal pumps during normal
cooldown.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak Test Per Tech Spec Requirements

- 1) Stroke time test in accordance with OMB-2000, ISTC-5120.
- 2) Leak test in accordance with OMB-2000, ISTC-3600.

Basis for Deferral: These valves have an interlock which prevents their opening when
the Reactor Coolant System pressure is greater than 385psig.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.
Valve will be leak tested in accordance with Technical
Specification.

Justification for Deferral

Item Number: MC-ND-02

Valve: 1ND-58A
2ND-58A

Flow Diagram: MCFD-1561-1.0,
MCFD-2561-1.0

Code Category: B

ASME Class: 2

Function: Provides suction to the Centrifugal Charging Pumps and Safety Injection Pumps from the Residual Heat Removal system.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Opening 1(2)ND-58A would seat check valve 1(2)NV-223 (FWST to Charging Pump suction) closed, so that if 1(2)ND-58A failed in the open position, both trains of NV would be inoperable.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-ND-03

Valve: 1ND-15B, 1ND-30A
2ND-15B, 2ND-30A

Flow Diagram: MCFD-1561-1.0,
MCFD-2561-1.0

Code Category: B

ASME Class: 2

Function: ND Heat Exchanger Outlet Crossover Block Valves.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: One of the ECCS safety analysis assumptions is that each train of ND can supply flow to all four cold legs. If either of these valves failed closed during testing then only two cold legs could be supplied by each train of ND. This would make both trains of ND inoperable.

Power cannot be removed from these valves, since at least one of them must be closed for cold leg recirc. If power was removed from one valve, a single failure on the opposite train would disable isolation of ND to the cold legs when needed (this isolation is needed for adequate cold leg recirc flow).

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-ND-04

Valve: 1ND-70
2ND-70

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-ND-05

Valve: 1ND-71
2ND-71

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-ND-06

Valve: 1ND-8, 1ND-23

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-ND-07

Valve: 1ND-4B, 1ND19A
2ND-4B, 2ND19A

Flow Diagram: MCFD-1561-1.0,
MCFD-2561-1.0

Code Category: B

ASME Class: 2

Function: ND Pump Suction Isolation Valve

Test Requirement: Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Operator action would be required to restore function if accident occurred during testing. Also relief protection is blocked. The only other option is racking open the pump breakers. These are all basis for deferral per NUREG 1482.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NF-01
Valve: 1NF-229
2NF-229

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NF-02

Valve: 1NF-228A, 1NF-233B, 1NF-234A
2NF-228A, 2NF-233B, 2NF-234A

Flow Diagram: MCFD-1558-4.0,
MCFD-2558-4.0

Code Category: A

ASME Class: 2

Function: Closed to provide containment isolation

Test Requirement: Stroke Time – Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-3500 and
ISTC-5130.

Basis for Deferral: Stroke time testing the valves on a quarterly frequency requires that operators shutdown the glycol pumps and chillers to prevent equipment damage. This is considered a hardship as described in NUREG-1482 Section 3.1.1 which is justification for deferring testing to Cold Shutdown.

Furthermore, if any of the three valves were to fail to open during stroke time testing, the ice condenser would begin to heat up, potentially compromising the safety function of the ice bed.

The NF system normally provides continuous ice condenser cooling so that the ice will be ready to perform it's required safety function if necessary in the event of a design basis accident. Interrupting this continuous function to perform quarterly stroke testing could jeopardize the ability of the ice condenser to perform it's safety function. This is considered sufficient justification to defer testing to a shutdown frequency per NUREG-1482 Section 3.1.1.

Test Alternative & Frequency: These valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-01

Valve: 1NI-9A, 1NI-10B
2NI-9A, 2NI-10B

Flow Diagram: MCFD-1562-1.0,
MCFD-2562-1.0

Code Category: B

ASME Class: 2

Function: Flowpath for Centrifugal Charging Pumps to Reactor Coolant System Cold Legs.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Opening either of these valves during operation would increase the charging flow into the Reactor Coolant System resulting in an increase of pressure and a rapid change in the primary system boron concentration. This could create a transient and possible unit shutdown.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-02

Valve: 1NI-100B
2NI-100B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Flowpath from the Refueling Water Storage Tank to the Safety Injection Pump suction.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Closing this valve during operation would render both trains of Safety Injection inoperable. This valve is opened and power removed above Mode 4 per Technical Specification.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-03

Valve: 1NI-147A, 1NI115B
2NI-147A, 2NI115B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: 1(2)NI-147A provides flowpath for both trains of Safety Injection recirculation line to the Refueling Water Storage Tank. 1(2)NI-115B provides flowpath for A train of Safety Injection recirculation line to the Refueling Water Storage Tank.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Closing either of these valve during power operation renders both trains of Safety Injection inoperable. 1(2)NI-147A is open with power removed above Mode 4 per Technical Specification.

In the event of a loss of offsite power with the loss of 1(2)B diesel generator as the single failure, 1(2)NI-115B would not open, rendering A Train NI inoperable (due to loss of miniflow path). B Train NI would already be inoperable due to the single failure.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-04

Valve: 1NI-121A, 1NI-152B
2NI-121A, 2NI-152B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Isolates Safety Injection flow to the hot legs.

Test Requirement: Measure Full Stroke Time – Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120

Basis for Deferral: Previous justification for deferring testing on these valves has been based on the valves being closed with power removed at all times above Mode 4. Although these valves are normally administratively closed with power removed above Mode 4, an acceptable method of stroking these valves after performing MOV PMs on-line has been considered (Ref. PIP M-99-5538). In order to maintain operability of the opposite train NI, this requires:

- a) isolating the associated cold leg isolation valve and
- b) racking in the breaker to allow stroking the hot leg isolation valve.

The annual PM generally does not require that the valve be stroked while the 5 year PM does require post maintenance testing.

While it would be possible to stroke time test these valves on a quarterly frequency, this would require similar valve isolation and breaker manipulation as the much less frequent PMs. Such requirements are considered a hardship as described in NUREG-1482 Section 3.1.1 which is justification for deferring testing to Cold Shutdown.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-05

Valve: 1NI-162A
2NI-162A

Flow Diagram: MCFD-1562-3.1,
MCFD-2562-3.1

Code Category: B

ASME Class: 2

Function: Isolates Safety Injection flow to the cold legs.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: This valve is opened and power removed above Mode 4 per
Technical Specification.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold
shutdown.

Justification for Deferral

Item Number: MC-NI-06

Valve: 1NI-103A
2NI-103A

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Provides A Train Safety Injection Pump suction flow from the Refueling Water Storage Tank. Also provides a flowpath for B Train Residual Heat Removal pump discharge to B Train Chemical and Volume Control pump suction.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Closing this valve during power operations degrades both trains of Chemical and Volume Control. In the event of a loss of offsite power with the loss of 1(2)A diesel generator as the single failure when the valve was closed, B Train NV would be lost for sump recirc mode. Since that could happen as fast as 30 minutes and would then be inaccessible due to dose rates, credit could not be taken for manually opening 1(2)NI-103A in this event. A Train NV would already be inoperable due to the single failure.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-07

Valve: 1NI-173A, 1NI-178B
2NI-173A, 2NI-178B

Flow Diagram: MCFD-1562-3.1,
MCFD-2562-3.1

Code Category: B

ASME Class: 2

Function: Provides flowpath for Residual Heat Removal to the cold legs.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: These valves are opened and power removed above Mode 4 per
Technical Specification.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-08

Valve: 1NI-334B
2NI-334B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Provides flowpath from B Train of Residual Heat Removal to B Train of Chemical and Volume Control, and from A Train of Residual Heat Removal to A Train of Safety Injection.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Closing this valve during power operation degrades both trains of Safety Injection. With the single failure of 1(2)B diesel generator, Train A of Safety Injection, which is provided suction from Residual Heat Removal via 1(2)NI-334B or 1(2)NI-136B, would be inoperable (since 1(2)NI-136B is normally closed). Train B of Safety Injection would already be inoperable due to the single failure.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-09

Valve: 1NI-183B
2NI-183B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Isolates Residual Heat Removal flow to the hot legs.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: This valve is closed and power removed above Mode 4 per
Technical Specification.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-10

Valve: 1NI-184B, 1NI-185A
2NI-184B, 2NI-185A

Flow Diagram: MCFD-1562-3.1,
MCFD-2562-3.1

Code Category: B

ASME Class: 2

Function: Provides flowpath from the Containment Sump to the Residual Heat Removal Pump and the Containment Spray Pump suction.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Opening these valves during power operation would allow water to enter lower containment. To prevent this, 1(2)FW-27A would have to be closed, rendering both trains of Residual Heat Removal inoperable. Voids in suction piping would be created requiring fill and vent operations to prevent ECCS pump damage.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-11

Valve: 1NI-332A, 1NI-333B
2NI-332A, 2NI-333B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Provides flowpath to Centrifugal Charging Pumps and Safety Injection Pumps from Residual Heat Removal Pumps during recirculation phase.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Opening these valves during power operations requires 1(2)NI-334B to be closed to prevent aligning FWST to the suction of the Centrifugal Charging Pumps. Injecting FWST boron concentrated water into the Reactor Coolant System would induce a transient. Closing 1(2)NI-334B degrades both trains of Safety Injection (With the single failure of 1(2)B diesel generator, Train A of Safety Injection, which is provided suction from Residual Heat Removal via 1(2)NI-334B or 1(2)NI-136B, would be inoperable (since 1(2)NI-136B is normally closed). Train B of Safety Injection would already be inoperable due to the single failure).

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-12

Valve: 1NI-15, 1NI-17, 1NI-19, 1NI-21,
1NI-347, 1NI-348, 1NI-349, 1NI-354
2NI-15, 2NI-17, 2NI-19, 2NI-21,
2NI-347, 2NI-348, 2NI-349, 2NI-354

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-13

Valve: 1NI-12
2NI-12

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-14
Valve: 1NI-101
2NI-101

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-15
Valve: 1NI-116, 1NI-148
2NI-116, 2NI-148

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number:

MC-NI-16

Valve:

1NI-124, 1NI-126, 1NI-128, 1NI-134, 1NI-156, 1NI-157, 1NI-159, 1NI-160
2NI-124, 2NI-126, 2NI-128, 2NI-134, 2NI-156, 2NI-157, 2NI-159, 2NI-160

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-17
Valve: 1NI-165, 1NI-167, 1NI-169, 1NI-171
2NI-165, 2NI-167, 2NI-169, 2NI-171

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-18
Valve: 1NI-175, 1NI-176, 1NI-180, 1NI-181

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-19
Valve: 1NI-125, 1NI-129
2NI-125, 2NI-129

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NI-20

Valve: 1NI-136B
2NI-136B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: Provides suction to the Centrifugal Charging Pumps and Safety Injection Pumps from the Residual Heat Removal System.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Opening 1(2)NI-136B would require closing 1(2)NI-135B. This would require Opening the 1(2)NI Pump B breaker. This is basis for deferral in accordance with NUREG-1482.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NI-21
Valve: 1NI-48
2NI-48

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-22

Valve: 1NI-59, 1NI-70, 1NI-81, 1NI-93

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-23
Valve: 1NI-436
2NI-436

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-24
Valve: 1NI-60, 1NI-71, 1NI-82, 1NI-94

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NI-25

Valve: 1NI-135B, 2NI-135B

Flow Diagram: MCFD-1562-3.0,
MCFD-2562-3.0

Code Category: B

ASME Class: 2

Function: NI Pump Suction Isolation Valve

Test Requirement: Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Operator action would be required to restore function if accident occurred during testing. Also relief protection is blocked. The only other option is racking open the pump breakers. These are all basis for deferral per NUREG 1482.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NM-01
Valve: 1NM-420, 1NM-421
2NM-420, 2NM-421

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NM-02

Valve: 1NM-3AC, 1NM-6AC, 1NM-7B, 1NM-22AC, 1NM-25AC, 1NM-26B
2NM-3AC, 2NM-6AC, 2NM-7B, 2NM-22AC, 2NM-25AC, 2NM-26B

Flow Diagram: MCFD-1572-1.0,
MCFD-2572-1.0

Code Category: A

ASME Class: 2

Function: Closed to provide containment isolation for NC system pressurizer and hot leg sample penetrations.

Test Requirement: Stroke Time – Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: These valves are either open or closed normally to provide continuous purge or sample flow from the pressurizer water or steam space or hot legs A or D and to isolate the alternate sample flow stream. Stroking the valves causes high loading on the valves close to their structural limit. There are several past examples of external leaks developing due to stroking these valves for testing purposes.

NUREG-1482 section 2.4.5 gives general guidance on deferring inservice testing to cold shutdown valves which when cycled could subject a system to “undue stress or reduce the life expectancy of plant components.” Quarterly stroke testing will therefore be discontinued to prevent unnecessary stroking of and thus increase the life expectancy of the valves.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NS-01

Valve: 1NS-38B, 1NS-43A
2NS-38B, 2NS-43A

Flow Diagram: MCFD-1563-1.0,
MCFD-2563-1.0

Code Category: B

ASME Class: 2

Function: Auxiliary Spray Nozzle header isolation.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: Opening either of these valves during power operation renders both trains on Residual Heat Removal inoperable. With cross-connected trains of ND, flow would be diverted from both trains through a failed-open 1(2)NS-38B or 1(2)NS-43A. To isolate one train of ND, it would be necessary to manually secure closed either 1(2)ND-14 or 1(2)ND-29, since these valves fail open on loss of air. This would be an impractical measure to perform the quarterly test.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number:

MC-NS-02

Valve:

1NS-13, 1NS-16, 1NS-30, 1NS-33, 1NS-41, 1NS-46
2NS-13, 2NS-16, 2NS-30, 2NS-33, 2NS-41, 2NS-46

DELETED BY REVISION 25
12/31/98

Justification for Deferral

Item Number: MC-NS-03

Valve: 1NS-4, 1NS-21
2NS-4, 2NS-21

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NS-04
Valve: 1NS-140, 1NS-141

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NS-05

Valve: 1NS-3B, 1NS-20A
2NS-3B, 2NS-20A

Flow Diagram: MCFD-1563-1.0,
MCFD-2563-1.0

Code Category: B

ASME Class: 2

Function: NS Pump Suction Isolation Valve

Test Requirement: Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: NS pump breakers must be racked out to stroke time test these valves. This is recognized as impractical for quarterly testing in NUREG-1482 (accident would require opening breaker).

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NS-06

Valve: 1NS-1B, 1NS-18A
2NS-1B, 2NS-18A

Flow Diagram: MCFD-1563-1.0,
MCFD-2563-1.0

Code Category: B

ASME Class: 2

Function: Open during swap-over to containment sump re-circulation to provide long-term borated water supply to NS pumps

Test Requirement: Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Stroke testing the valves on a quarterly frequency requires closure of the associated suction isolation valve (1/2NS-3B or 1/2NS-20A) from FWST to prevent aligning the FWST inventory to the containment sump. This requires racking out the breaker to protect the pump from damage in the event it receives a start signal during the period when the pump suction isolation valve is closed.

This is considered sufficient justification to defer testing to a shutdown frequency.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NS-07
Valve: 1NS-161, 1NS-163

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-01

Valve: 1NV-94AC, 1NV-95B
2NV-94AC, 2NV-95B

Flow Diagram: MCFD-1554-1.1,
MCFD-2554-1.1

Code Category: B

ASME Class: 2

Function: 1) Provides flowpath for Reactor Coolant Pump seal water discharge line.
2) Provides containment isolation for penetration M-256

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Closure of one of these valves during power operation would inhibit normal seal water flow across the reactor coolant pump number 1 seal. This action could result in damage to the reactor coolant pump seals or the pump itself. Failure of this seal with NC flow out the seal would be a loss of NV system function, and is justification for deferral in accordance with NUREG-1482 Section 3.1.1.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-02

Valve: 1NV-7B
2NV-7B

Flow Diagram: MCFD-1554-1.2,
MCFD-2554-1.2

Code Category: B

ASME Class: 2

Function: 1) Provides flowpath for normal letdown.
2) Provides containment isolation for penetration M-347.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Failure of this valve in a closed position would result in a significant event (letdown isolation), possibly resulting in loss of pressurizer level control, and possible Unit trip (not a normal shutdown).

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-03

Valve: 1NV-21A
2NV-21A

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NV-04

Valve: 1NV-141A, 1NV-142B
2NV-141A, 2NV-142B

Flow Diagram: MCFD-1554-2.0,
MCFD-2554-2.0

Code Category: B

ASME Class: 2

Function: Provides isolation for Volume Control Tank upon Safety Injection Signal.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Closure of one of these valves during power operation would isolate the suction for the Centrifugal Charging Pumps. This action could result in damage to the pumps. Seal water to the Reactor Coolant pumps would be interrupted causing damage to the seals.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-05

Valve: 1NV-244A, 1NV-245B
2NV-244A, 2NV-245B

Flow Diagram: MCFD-1554-3.0,
MCFD-2554-3.0

Code Category: B

ASME Class: 2

Function: Isolates charging to the Reactor Coolant System upon Safety Injection.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: If one of these valves were to fail in the closed position while testing during power operation, normal and alternate charging would be lost. Total loss of charging flow would be a significant event, resulting in a possible loss of Pressurizer control, and a likely Unit trip (not a normal shutdown), as well as loss of NC pump seal flow.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-06

Valve: 1NV-221A, 1NV-222B
2NV-221A, 2NV-222B

Flow Diagram: MCFD-1554-3.1,
MCFD-2554-3.1

Code Category: B

ASME Class: 2

Function: Flowpath for Refueling Water Storage Tank to the suction of the Centrifugal Charging Pumps.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Opening these valves during power operation allows the Charging Pumps to inject highly borated water into the Reactor Coolant System which could result in a unit shutdown.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-07

Valve: 1NV-264
2NV-264

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-08

Valve: 1NV-150B, 1NV-151A
2NV-150B, 2NV-151A

Flow Diagram: MCFD-1554-2.1,
MCFD-2554-2.1

Code Category: B
1

ASME Class: 2

Function: Provides isolation for Centrifugal Charging Pump miniflow line to Volume Control Tank.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5120.

Basis for Deferral: If either valve were to fail closed while testing, the Charging Pump miniflow protection line is isolated possibly causing damage to the pump. Closure of either of these valves would render both trains of NV inoperable, since on a spurious safety injection event (in which reactor coolant system pressure is increased above normal), this is a relief path back to the Volume Control Tank.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-09

Valve: 1NV-265B
2NV-265B

Flow Diagram: MCFD-1554-3.1,
MCFD-2554-3.1

Code Category: B

ASME Class: 2

Function: Provides isolation of the Boric Acid Tank suction from the suction of the Charging Pumps.

Test Requirement: Measure Full Stroke Time – Quarterly
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: Previous justification for deferring testing on these valves has been based on the assumption that the Boric Acid Pumps are not secured for in-service testing. Although the BAT pumps are normally operated, securing them has been considered an acceptable method of stroking these valves after performing MOV PMs on-line (Ref. PIP M-99-5538). The annual PM generally does not require that the valve be stroked while the 5 year PM does require post maintenance testing.

While it would be possible to stroke time test these valves on a quarterly frequency, this would require securing the BAT pump on a quarterly frequency in order to avoid a potential transient which could occur if the boric acid were injected into the Reactor Coolant System. Such requirements on a much more frequent frequency are considered a hardship as described in NUREG-1482 Section 3.1.1 which is justification for deferring testing to Cold Shutdown.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-NV-10
Valve: 1NV-225, 1NV-231
2NV-225, 2NV-231

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-11

Valve: 1NV-223
2NV-223

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-12

Valve: 1NV-1046
2NV-1046

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-13
Valve: 1NV-261, 1NV-263
2NV-261, 2NV-263

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-14

Valve: 1NV-1002
2NV-1002

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-15

Valve: 1NV-143
2NV-143

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-16

Valve: 1NV-164
2NV-164

Justification for 1NV-164 deleted by Revision 22
Justification for 2NV-164 deleted by Revision 17

Justification for Deferral

Item Number: MC-NV-17
Valve: 1NV-1007, 1NV-1008, 1NV-1009, 1NV-1010
2NV-1007, 2NV-1008, 2NV-1009, 2NV-1010

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-NV-18

Valve: 2NV-1034

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-NV-19

Valve: 1NV-0035A, 1NV-0457A, 1NV-0458A
2NV-0035A, 2NV-0457A, 2NV-0458A

Flow Diagram: MCFD-1554-1.02,
MCFD-2554-1.02

Code Category: B

ASME Class: 2

Function: These valves must automatically close to isolate containment on a Phase A signal, and to isolate letdown on a Pressurizer Low Level signal. They can be operated from the Auxiliary Shutdown Panel, and cannot be opened unless valves 1(2)NV-1A and 1(2)NV-2A are both open.

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test quarterly in accordance with OMB-2000, ISTC-5130.

Basis for Deferral: Letdown header relief valve 1(2)NV-6 has experienced lifting and subsequent seat leakage as a result of pressure transients during orifice swaps for stroke time testing of the above valves. Although the NV operating procedure specifically addresses the potential pressure increase that could occur when swapping from the 45 gpm to the 75 gpm orifice, the increase can occur so quickly that the operator and system controls cannot respond fast enough to prevent the pressure transient. The NV operating procedure currently provides for simultaneous opening/closure of the above orifice isolation valves, and for back pressure reduction using the downstream control valve, to prevent such a pressure transient; however, procedure effectiveness is problematic with respect to repeatability due to the inability to achieve perfect coordination each time.

It is concluded that testing of these valves is impractical and nonconservative during power operation, since it results in pressure transients which have caused relief valve leakage. This leakage is Reactor Coolant (NC) leakage, which is reflected in higher NC leakage values.

Finally, these valves have demonstrated a favorable test history.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-RF-01

Valve: 1RF-823
1RF-834

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-RF-02

Valve: 1RF-821A
1RF-832A

Flow Diagram: MCFD-1599-2.2,
MCFD-1599-2.2

Code Category: A

ASME Class: 2

Function: Provides containment isolation.

Test Requirement: Stroke Time Close - Quarterly

Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-3500 and
ISTC-5130.

Basis for Deferral: There is undue risk of spraying down containment with fire
protection water (opening these valves exposes the contain-
ment sprinkler header to RF header pressure). This is
impractical and is justified for deferral to cold shutdown in
accordance with NUREG-1482.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold
shutdown.

Justification for Deferral

Item Number: MC-RN-01

Valve: 1RN-252B, 1RN-253A
2RN-252B, 2RN-253A

Flow Diagram: MCFD-1574-4.0,
MCFD-2574-4.0

Code Category: A

ASME Class: 2

Function: 1) Provides containment isolation for penetration M-307.
2) Provides flowpath for cooling water to the Reactor Coolant Pump Motor Air Cooler.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with Omb-2000, ISTC-5130.

Basis for Deferral: If one of these valves were to fail closed during testing, isolation of cooling water to the motor coolers could result in damage to the pumps. Closure of these valves would result in a Unit trip from NC Pump motors being manually shut down due to high stator temperatures (within minutes). An abnormal (natural circulation) shutdown would be required.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-RN-02

Valve: 1RN-276A, 1RN-277B
2RN-276A, 2RN-277B

Flow Diagram: MCFD-1574-4.0,
MCFD-2574-4.0

Code Category: A

ASME Class: 2

Function: 1) Provides containment isolation for penetration M-315.
2) Provides flowpath for cooling water to the Reactor Coolant Pump Motor Air Cooler.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-5120.

Basis for Deferral: If one of these valves were to fail closed during testing, isolation of cooling water to the motor coolers could result in damage to the pumps. Closure of these valves would result in a Unit trip from NC Pump motors being manually shut down due to high stator temperatures (within minutes). An abnormal (natural circulation) shutdown would be required.

Test Alternative & Frequency: Valves will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-RN-03

Valve: 1RN-42A
2RN-42A

1RN-42A deleted by Revision 21
2RN-42A deleted by Revision 16

Justification for Deferral

Item Number: MC-RN-04
Valve: 1RN-63B, 1RN64A
2RN-63B, 2RN64A

1RN-63B, 1RN64A deleted by Revision 21
2RN-63B, 2RN64A deleted by Revision 16

Justification for Deferral

Item Number: MC-RN-05

Valve: 1RN-214
2RN-113

1RN-214 deleted by Revision 21
2RN-113 deleted by Revision 16

Justification for Deferral

Item Number: MC-RN-06
Valve: 1RN-891, 1RN892
2RN-891, 2RN892

1RN-891, 1RN892 deleted by Revision 22
2RN-891, 2RN892 deleted by Revision 17

Justification for Deferral

Item Number: MC-RV-01

Valve: 1RV-32A, 1RV-33B, 1RV-76A, 1RV-77B
2RV-32A, 2RV-33B, 2RV-76A, 2RV-77B

Flow Diagram: MCFD-1604-3.0,
MCFD-2604-3.0

Code Category: A

ASME Class: 2

Function: Provide containment isolation for penetration M-240 and M-279 respectively.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-5000.

Basis for Deferral: Failure of one of these valves in the closed position during testing would isolate cooling flow to the Lower Containment Ventilation Units causing an increase in lower containment temperature which could exceed Tech Spec limits. Although the exact time depends on outside temperature, the Tech Spec limit would be exceeded within minutes if cooling flow was isolated to these ventilation units.

Test Alternative & Frequency: Valve will be full stroke exercised and timed during cold shutdown.

Justification for Deferral

Item Number: MC-SA-01

Valve: 1SA-5, 1SA-6

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-SA-02
Valve: 1SA-1, 1SA-2, 1SA-77, 1SA-78
2SA-1, 2SA-2, 2SA-77, 2SA-78
Flow Diagram: MC-1593-01.02,
MC-2593-01.02

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-SM-01

Valve: 1SM-1AB, 1SM-3AB, 1SM-5AB, 1SM-7AB
2SM-1AB, 2SM-3AB, 2SM-5AB, 2SM-7AB

Flow Diagram: MCFD-1593-1.0, MCFD-1593-1.3,
MCFD-2593-1.0, MCFD-2593-1.3

Code Category: B

ASME Class: 2

Function: Main Steam Isolation Valves

Test Requirement: Measure Full Stroke Time - Quarterly
Stroke time test in accordance with Omb-2000, ISTC-5000.

Basis for Deferral: These valves cannot be fully cycled closed during power operation since a unit shutdown would result.

Test Alternative & Frequency: These valves will be full stroke exercised and timed during cold shutdown. They are no longer 90% open tested quarterly, as this only showed partial movement and increased the risk of unit trip.

Justification for Deferral

Item Number: MC-VB-01

Valve: 1VB-50
2VB-50

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VG-01
Valve: 1VG-17, 1VG-18, 1VG-19, 1VG-20
2VG-17, 2VG-18, 2VG-19, 2VG-20

DELETED PER REVISION 25
12/31/98

Justification for Deferral

Item Number:

MC-VG-02

Valve:

1VG-61, 1VG-62, 1VG-63, 1VG-64, 1VG-65, 1VG-66, 1VG-67,
1VG-68,
2VG-61, 2VG-62, 2VG-63, 2VG-64, 2VG-65, 2VG-66, 2VG-67,
2VG-68,

DELETED PER REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VI-01
Valve: 1VI-368, 1VI-372, 1VI-373, 1VI-374
2VI-368, 2VI-372, 2VI-373, 2VI-374

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VI-02

Valve: 1VI-124, 1VI-149
2VI-124, 2VI-149

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VI-03
Valve: 1VI-40, 1VI-161
2VI-40, 2VI-161

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VI-04

Valve: 1VI-129B, 1VI-150B, 1VI-160B
2VI-129B, 2VI-150B, 2VI-160B

Flow Diagram: MCFD-1605-1.14; MCFD-1605-1.17;
MCFD-2605-1.2; MCFD-2605-1.3

Code Category: A

ASME Class: 2

Function: Provides containment isolation on penetrations M-220, M-317 and M-359 respectively.

Test Requirement: Measure Full Stroke Time - Quarterly
Leak-Rate Test to Appendix J Requirements
Stroke time test in accordance with OMB-2000, ISTC-5000.

Basis for Deferral: These valves isolate instrument air headers to the reactor building. In the past, to perform stroke timing of these valves, the containment air compressor was started to maintain an uninterrupted air supply to components inside containment. Subsequently, the containment compressor was deleted. Should these valves be closed during power operation, components inside containment would experience a loss of instrument air, resulting in unwanted transients. During cold shutdowns, personnel entry into containment may be made to manually align instrument air headers together, allowing these valves to be tested. Since this is a manual alignment, it is not possible to enter containment to make this alignment for quarterly testing.

Test Alternative & Frequency: These valves will be full stroke exercised and timed during cold shutdown. Leak testing will be performed as per the requirements of 10CFR50, Appendix J.

Justification for Deferral

Item Number: MC-VS-01

Valve: 1VS-13
2VS-13

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-VX-01

Valve: 1VX-30
2VX-30

DELETED BY REVISION 27
03/01/04

Justification for Deferral

Item Number: MC-WL-01

Valve: 1WL-24
2WL-24

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-WL-02

Valve: 1WL-385
2WL-385

DELETED BY REVISION 26
08/01/02

Justification for Deferral

Item Number: MC-YM-01

Valve 1YM-116
2YM-116

DELETED BY REVISION 27
03/01/04

DUKE POWER

McGUIRE NUCLEAR STATION

SUPPLEMENTAL TEST PROGRAM

Section 7.0

Revision 27
March 1, 2004

MCGUIRE NUCLEAR STATION

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CA-161C	MCFD-1592-01.01	ML	Category B	GA	No	3			1CA-161C - Stroke Time (Cls to Opn)	No specified test frequency
									1CA-161C - Position Indicator (Open and Closed)	No specified test frequency
1CA-162C	MCFD-1592-01.01	ML	Category B	GA	No	3			1CA-162C - Stroke Time (Cls to Opn)	No specified test frequency
									1CA-162C - Position Indicator (Open and Closed)	No specified test frequency
1CA-250	MCFD-1592-01.01	MA	Category B	CV	No	3			1CA-250Leak Test - Section XI (Accident Dir)	No specified test frequency
1CA-251	MCFD-1592-01.01	MA	Category B	CV	No	3			1CA-251Leak Test - Section XI (Accident Dir)	No specified test frequency
1CA-252	MCFD-1592-01.01	MA	Category B	CV	No	3			1CA-252Leak Test - Section XI (Accident Dir)	No specified test frequency
2CA-161C	MCFD-2592-01.01	ML	Category B	GA	No	3			2CA-161C - Stroke Time (Cls to Opn)	No specified test frequency
									2CA-161C - Position Indicator (Open and Closed)	No specified test frequency
2CA-162C	MCFD-2592-01.01	ML	Category B	GA	No	3			2CA-162C - Stroke Time (Cls to Opn)	No specified test frequency
									2CA-162C - Position Indicator (Open and Closed)	No specified test frequency
2CA-250	MCFD-2592-01.01	MA	Category B	CV	No	3			2CA-250Leak Test - Section XI (Accident Dir)	No specified test frequency
2CA-251	MCFD-2592-01.01	MA	Category B	CV	No	3			2CA-251Leak Test - Section XI (Accident Dir)	No specified test frequency
2CA-252	MCFD-2592-01.01	MA	Category B	CV	No	3			2CA-252Leak Test - Section XI (Accident Dir)	No specified test frequency

MCGUIRE NUCLEAR STATION

FD - DIESEL GENERATOR ENGINE FUEL OIL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1FD-5	MCFD-1609-03.00	SA	Category C	RV	Yes	3			1FD-5 - Relief Valve Test (Closed to Open)	No specified test frequency
1FD-16	MCFD-1609-03.00	SA	Category C	SW	Yes	3			1FD-16 - Full Stroke (Both)	No specified test frequency
1FD-28	MCFD-1609-03.01	SA	Category C	RV	Yes	3			1FD-28 - Relief Valve Test (Closed to Open)	No specified test frequency
1FD-39	MCFD-1609-03.01	SA	Category C	SW	Yes	3			1FD-39 - Full Stroke (Both)	No specified test frequency
1FD-92	MCFD-1609-03.00	SA	Category C	SW	Yes	3			1FD-92 - Full Stroke (Both)	No specified test frequency
1FD-93	MCFD-1609-03.00	SA	Category C	SW	Yes	3			1FD-93 - Full Stroke (Both)	No specified test frequency
1FD-104	MCFD-1609-03.01	SA	Category C	SW	Yes	3			1FD-104 - Full Stroke (Both)	No specified test frequency
1FD-105	MCFD-1609-03.01	SA	Category C	SW	Yes	3			1FD-105 - Full Stroke (Both)	No specified test frequency
2FD-5	MCFD-2609-03.00	SA	Category C	RV	Yes	3			2FD-5 - Relief Valve Test (Closed to Open)	No specified test frequency
2FD-16	MCFD-2609-03.00	SA	Category C	SW	Yes	3			2FD-16 - Full Stroke (Both)	No specified test frequency
2FD-28	MCFD-2609-03.01	SA	Category C	RV	Yes	3			2FD-28 - Relief Valve Test (Cls to Opn)	No specified test frequency
2FD-39	MCFD-2609-03.01	SA	Category C	SW	Yes	3			2FD-39 - Full Stroke (Both)	No specified test frequency
2FD-92	MCFD-2609-03.00	SA	Category C	SW	Yes	3			2FD-92 - Full Stroke (Both)	No specified test frequency
2FD-93	MCFD-2609-03.00	SA	Category C	SW	Yes	3			2FD-93 - Full Stroke (Both)	No specified test frequency
2FD-104	MCFD-2609-03.01	SA	Category C	SW	Yes	3			2FD-104 - Full Stroke (Both)	No specified test frequency
2FD-105	MCFD-2609-03.01	SA	Category C	SW	Yes	3			2FD-105 - Full Stroke (Both)	No specified test frequency

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC-281	MCFD-1573-03.01	SA	Category C	RV	No	3			1KC-281 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-313	MCFD-1573-03.01	SA	Category C	RV	No	2			1KC-313 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-330	MCFD-1573-03.01	SA	Category C	RV	No	3			1KC-330 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-345A	MCFD-1573-03.00	MR	Category B	GL	No	2			1KC-345A - Stroke Time (Opn to Cls)	No specified test frequency
									1KC-345A - Position Indicator (Open and Closed)	No specified test frequency
1KC-349	MCFD-1573-03.00	SA	Category C	RV	No	2			1KC-349 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-364B	MCFD-1573-03.00	MR	Category B	GL	No	2			1KC-364B - Stroke Time (Opn to Cls)	No specified test frequency
									1KC-364B - Position Indicator (Open and Closed)	No specified test frequency
1KC-368	MCFD-1573-03.00	SA	Category C	RV	No	2			1KC-368 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-394A	MCFD-1573-03.00	MR	Category B	GL	No	2			1KC-394A - Stroke Time (Opn to Cls)	No specified test frequency
									1KC-394A - Position Indicator (Open and Closed)	No specified test frequency
1KC-398	MCFD-1573-03.00	SA	Category C	RV	No	2			1KC-398 - Relief Valve Test (Cls to Opn)	No specified test frequency
1KC-413B	MCFD-1573-03.00	MR	Category B	GL	No	2			1KC-413B - Stroke Time (Opn to Cls)	No specified test frequency
									1KC-413B - Position Indicator (Open and Closed)	No specified test frequency
1KC-417	MCFD-1573-03.00	SA	Category C	RV	No	2			1KC-417 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-281	MCFD-2573-03.01	SA	Category C	RV	No	3			2KC-281 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-313	MCFD-2573-03.01	SA	Category C	RV	No	2			2KC-313 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-330	MCFD-2573-03.01	SA	Category C	RV	No	3			2KC-330 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-345A	MCFD-2573-03.00	MR	Category B	GL	No	2			2KC-345A - Stroke Time (Opn to Cls)	No specified test frequency
									2KC-345A - Position Indicator (Open and Closed)	No specified test frequency
2KC-349	MCFD-2573-03.00	SA	Category C	RV	No	2			2KC-349 - Relief Valve	No specified test

MCGUIRE NUCLEAR STATION

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Test (Cls to Opn)	frequency
2KC-364B	MCFD-2573-03.00	MR	Category B	GL	No	2			2KC-364B - Stroke Time (Opn to CIs)	No specified test frequency
									2KC-364B - Position Indicator (Open and Closed)	No specified test frequency
2KC-368	MCFD-2573-03.00	SA	Category C	RV	No	2			2KC-368 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-394A	MCFD-2573-03.00	MR	Category B	GL	No	2			2KC-394A - Stroke Time (Opn to CIs)	No specified test frequency
									2KC-394A - Position Indicator (Open and Closed)	No specified test frequency
2KC-398	MCFD-2573-03.00	SA	Category C	RV	No	2			2KC-398 - Relief Valve Test (Cls to Opn)	No specified test frequency
2KC-413B	MCFD-2573-03.00	MR	Category B	GL	No	2			2KC-413B - Stroke Time (Opn to CIs)	No specified test frequency
									2KC-413B - Position Indicator (Open and Closed)	No specified test frequency
2KC-417	MCFD-2573-03.00	SA	Category C	RV	No	2			2KC-417 - Relief Valve Test (Cls to Opn)	No specified test frequency

MCGUIRE NUCLEAR STATION

KD - DIESEL GENERATOR ENGINE COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KD-9	MCFD-1609-01.00	AO	Category B	3W	Yes	3			1KD-9 Fail to Safe - Not Timed (Open)	No specified test frequency
1KD-16	MCFD-1609-01.00	SA	Category C	SW	Yes	3			1KD-16 - Full Stroke (Both)	No specified test frequency
1KD-18	MCFD-1609-01.00	SA	Category C	SW	Yes	3			1KD-18 - Full Stroke (Both)	No specified test frequency
1KD-29	MCFD-1609-01.01	AO	Category B	3W	Yes	3			1KD-29 Fail to Safe - Not Timed (Open)	No specified test frequency
1KD-36	MCFD-1609-01.01	SA	Category C	SW	Yes	3			1KD-36 - Full Stroke (Both)	No specified test frequency
1KD-38	MCFD-1609-01.01	SA	Category C	SW	Yes	3			1KD-38 - Full Stroke (Both)	No specified test frequency
2KD-9	MCFD-2609-01.00	AO	Category B	3W	Yes	3			2KD-9 Fail to Safe - Not Timed (Open)	No specified test frequency
2KD-16	MCFD-2609-01.00	SA	Category C	SW	Yes	3			2KD-16 - Full Stroke (Both)	No specified test frequency
2KD-18	MCFD-2609-01.00	SA	Category C	SW	Yes	3			2KD-18 - Full Stroke (Both)	No specified test frequency
2KD-29	MCFD-2609-01.01	AO	Category B	3W	Yes	3			2KD-29 Fail to Safe - Not Timed (Open)	No specified test frequency
2KD-36	MCFD-2609-01.01	SA	Category C	SW	Yes	3			2KD-36 - Full Stroke (Both)	No specified test frequency
2KD-38	MCFD-2609-01.01	SA	Category C	SW	Yes	3			2KD-38 - Full Stroke (Both)	No specified test frequency

MCGUIRE NUCLEAR STATION

LD - DIESEL GENERATOR ENGINE LUBE OIL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1LD-2	MCFD-1609-02.00	SA	Category C	SW	Yes	3			1LD-2 - Full Stroke (Both)	No specified test frequency
1LD-5	MCFD-1609-02.00	SA	Category C	SW	Yes	3			1LD-5 - Full Stroke (Both)	No specified test frequency
1LD-32	MCFD-1609-02.01	SA	Category C	SW	Yes	3			1LD-32 - Full Stroke (Both)	No specified test frequency
1LD-35	MCFD-1609-02.01	SA	Category C	SW	Yes	3			1LD-35 - Full Stroke (Both)	No specified test frequency
2LD-2	MCFD-2609-02.00	SA	Category C	SW	Yes	3			2LD-2 - Full Stroke (Both)	No specified test frequency
2LD-5	MCFD-2609-02.00	SA	Category C	SW	Yes	3			2LD-5 - Full Stroke (Both)	No specified test frequency
2LD-32	MCFD-2609-02.01	SA	Category C	SW	Yes	3			2LD-32 - Full Stroke (Both)	No specified test frequency
2LD-35	MCFD-2609-02.01	SA	Category C	SW	Yes	3			2LD-35 - Full Stroke (Both)	No specified test frequency

MCGUIRE NUCLEAR STATION

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NM-69	MCFD-1572-01.01	SA	Category A	RV	No	2			1NM-69 - Relief Valve Test (Cls to Opn)	No specified test frequency
2NM-69	MCFD-2572-01.01	SA	Category A	RV	No	2			2NM-69 - Relief Valve Test (Cls to Opn)	No specified test frequency

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV-20	MCFD-1554-01.02	SA	Category C	LC	No	2			1NV-20 - Sample Disassembly (Cls to Opn)	No specified test frequency
1NV-22	MCFD-1554-01.02	SA	Category C	LC	No	1			1NV-22 - Leak Test - Section XI (Accident Direct)	No specified test frequency
1NV-155	MCFD-1554-02.01	SA	Category C	RV	No	2			1NV-155 - Relief Valve Test (Cls to Opn)	No specified test frequency
1NV-156	MCFD-1554-02.00	SA	Category C	RV	No	2			1NV-156 - Relief Valve Test (Cls to Opn)	No specified test frequency
1NV-261	MCFD-1554-03.01	SA	Category C	LC	No	2			1NV-261 - Full Stroke (Closed)	No specified test frequency
1NV-482	MCFD-1554-02.00	SA	Category C	RV	No	2			1NV-482 - Relief Valve Test (Cls to Opn)	No specified test frequency
1NV-840	MCFD-1554-01.02	AO	Category B	GL	No	2			1NV-840 - Leak Test - Section XI (Accident Direct)	No specified test frequency
1NV-841	MCFD-1554-01.02	SA	Category C	SW	No	2			1NV-841 - Leak Test - Section XI (Accident Direct)	No specified test frequency
1NV-842AC	MCFD-1554-01.03	MR	Category B	GA	No	2			1NV-842AC - Stroke Time (Opn to Cls)	No specified test frequency
									1NV-842AC - Position Indicator (Open and Closed)	No specified test frequency
1NV-1007	MCFD-1554-01.03	SA	Category C	LC	No	2			1NV-1007 - Full Stroke (Open)	No specified test frequency
1NV-1008	MCFD-1554-01.03	SA	Category C	LC	No	2			1NV-1008 - Full Stroke (Open)	No specified test frequency
1NV-1009	MCFD-1554-01.03	SA	Category C	LC	No	2			1NV-1009 - Full Stroke (Open)	No specified test frequency
1NV-1010	MCFD-1554-01.03	SA	Category C	LC	No	2			1NV-1010 - Full Stroke (Open)	No specified test frequency
1NV-1012C	MCFD-1554-01.03	MR	Category B	GL	No	NA			1NV-1012C - Stroke Time (Opn to Cls)	No specified test frequency
									1NV-1012C - Position Indicator (Open and Closed)	No specified test frequency
1NV-1013C	MCFD-1554-01.03	MR	Category B	GL	No	NA			1NV-1013C - Stroke Time (Cls to Opn)	No specified test frequency
									1NV-1013C - Position Indicator (Open and Closed)	No specified test frequency
1NV-1046	MCFD-1554-03.00	SA	Category C	SW	No	2			1NV-1046 - Full Stroke (Closed)	No specified test frequency
2NV-20	MCFD-2554-01.02	SA	Category C	LC	No	2			2NV-20 - Sample Disassembly (Closed to Open)	No specified test frequency
2NV-22	MCFD-2554-01.02	SA	Category C	LC	No	1			2NV-22 - Leak Test -	No specified test

MCGUIRE NUCLEAR STATION

NV - CHEMICAL AND VOLUME CONTROL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Section XI (Accident Direct)	frequency
2NV-155	MCFD-2554-02.01	SA	Category C	RV	No	2			2NV-155 - Relief Valve Test (Cls to Opn)	No specified test frequency
2NV-156	MCFD-2554-02.00	SA	Category C	RV	No	2			2NV-156 - Relief Valve Test (Cls to Opn)	No specified test frequency
2NV-261	MCFD-2554-03.01	SA	Category C	LC	No	2			2NV-261 - Full Stroke (Closed)	No specified test frequency
2NV-482	MCFD-2554-02.00	SA	Category C	RV	No	2			2NV-482 - Relief Valve Test (Cls to Opn)	No specified test frequency
2NV-841	MCFD-2554-01.02	AO	Category B	SW	No	2			2NV-841 - Leak Test - Section XI (Accident Direct)	No specified test frequency
2NV-842AC	MCFD-2554-01.03	MR	Category B	GA	No	2			2NV-842AC - Stroke Time (Opn to Cls)	No specified test frequency
									2NV-842AC - Position Indicator (Open and Closed)	No specified test frequency
2NV-1007	MCFD-2554-01.03	SA	Category C	LC	No	2			2NV-1007 - Full Stroke (Open)	No specified test frequency
2NV-1008	MCFD-2554-01.03	SA	Category C	LC	No	2			2NV-1008 - Full Stroke (Open)	No specified test frequency
2NV-1009	MCFD-2554-01.03	SA	Category C	LC	No	2			2NV-1009 - Full Stroke (Open)	No specified test frequency
2NV-1010	MCFD-2554-01.03	SA	Category C	LC	No	2			2NV-1010 - Full Stroke (Open)	No specified test frequency
2NV-1012C	MCFD-2554-01.03	MR	Category B	GL	No	NA			2NV-1012C - Position Indicator (Open and Closed)	No specified test frequency
									2NV-1012C - Stroke Time (Opn to Cls)	No specified test frequency
2NV-1013C	MCFD-2554-01.03	MR	Category B	GL	No	NA			2NV-1013C - Stroke Time (Cls to Opn)	No specified test frequency
									2NV-1013C - Position Indicator (Open and Closed)	No specified test frequency
2NV-1046	MCFD-2554-03.00	SA	Category C	CK	No	2			2NV-1046 - Full Stroke (Closed)	No specified test frequency
2NV-1053	MCFD-2554-01.02	MA	Category B	GL	No	2			2NV-1053 - Leak Test - Section XI (Accident Direc)	No specified test frequency

MCGUIRE NUCLEAR STATION

RV - CONTAINMENT VENTILATION COOLING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1RV-445	MCFD-1604-03.00	SA	Category A	RV	No	2			1RV-445 - Relief Valve Test (Cls to Opn)	No specified test frequency
1RV-446	MCFD-1604-03.00	SA	Category A	RV	No	2			1RV-446 - Relief Valve Test (Cls to Opn)	No specified test frequency
2RV-445	MCFD-2604-03.00	SA	Category A	RV	No	2			2RV-445 - Relief Valve Test (Cls to Opn)	No specified test frequency
2RV-446	MCFD-2604-03.00	SA	Category A	RV	No	2			2RV-446 - Relief Valve Test (Cls to Opn)	No specified test frequency

MCGUIRE NUCLEAR STATION

SB - MAIN STEAM BYPASS TO CONDENSER

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SB-3	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-3 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-6	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-6 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-9	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-9 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-12	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-12 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-15	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-15 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-18	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-18 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-21	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-21 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-24	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-24 - Stroke Time (Cls to Opn)	No specified test frequency
1SB-27	MCFD-1593-02.01	AO	Category B	GA	No	NA			1SB-27 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-3	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-3 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-6	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-6 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-9	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-9 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-12	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-12 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-15	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-15 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-18	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-18 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-21	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-21 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-24	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-24 - Stroke Time (Cls to Opn)	No specified test frequency
2SB-27	MCFD-2593-02.01	AO	Category B	GA	No	NA			2SB-27 - Stroke Time (Cls to Opn)	No specified test frequency

MCGUIRE NUCLEAR STATION

VG - DIESEL GENERATOR ENGINE STARTING AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VG-33	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-33 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-34	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-34 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-35	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-35 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-36	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-36 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-61	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-61 - Full Stroke (Open)	No specified test frequency
1VG-62	MCFD-1609-04.00	SO	Category B	GA	Yes	3			1VG-62 - Full Stroke (Open)	No specified test frequency
1VG-63	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-63 - Full Stroke (Open)	No specified test frequency
1VG-64	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-64 - Full Stroke (Open)	No specified test frequency
1VG-65	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-65 - Full Stroke (Open)	No specified test frequency
1VG-66	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-66 - Full Stroke (Open)	No specified test frequency
1VG-67	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-67 - Full Stroke (Open)	No specified test frequency
1VG-68	MCFD-1609-04.00	SO	Category B	SV	Yes	3			1VG-68 - Full Stroke (Open)	No specified test frequency
1VG-79	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-79 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-80	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-80 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-83	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-83 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-84	MCFD-1609-04.00	SA	Category C	RV	Yes	3			1VG-84 - Relief Valve Test (Cls to Opn)	No specified test frequency
1VG-115	MCFD-1609-04.00	SA	Category C	SW	Yes	3			1VG-115 - Full Stroke (Both)	No specified test frequency
1VG-116	MCFD-1609-04.00	SA	Category C	SW	Yes	3			1VG-116 - Full Stroke (Both)	No specified test frequency
1VG-117	MCFD-1609-04.00	SA	Category C	SW	Yes	3			1VG-117 - Full Stroke (Both)	No specified test frequency
1VG-118	MCFD-1609-04.00	SA	Category C	SW	Yes	3			1VG-118 - Full Stroke (Both)	No specified test frequency
2VG-33	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-33 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-34	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-34 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-35	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-35 - Relief Valve	No specified test

MCGUIRE NUCLEAR STATION

VG - DIESEL GENERATOR ENGINE STARTING AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Test (Cls to Opn)	frequency
2VG-36	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-36 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-61	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-61 - Full Stroke (Open)	No specified test frequency
2VG-62	MCFD-2609-04.00	SO	Category B	GA	Yes	3			2VG-62 - Full Stroke (Open)	No specified test frequency
2VG-63	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-63 - Full Stroke (Open)	No specified test frequency
2VG-64	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-64 - Full Stroke (Open)	No specified test frequency
2VG-65	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-65 - Full Stroke (Open)	No specified test frequency
2VG-66	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-66 - Full Stroke (Open)	No specified test frequency
2VG-67	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-67 - Full Stroke (Open)	No specified test frequency
2VG-68	MCFD-2609-04.00	SO	Category B	SV	Yes	3			2VG-68 - Full Stroke (Open)	No specified test frequency
2VG-79	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-79 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-80	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-80 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-83	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-83 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-84	MCFD-2609-04.00	SA	Category C	RV	Yes	3			2VG-84 - Relief Valve Test (Cls to Opn)	No specified test frequency
2VG-115	MCFD-2609-04.00	SA	Category C	SW	Yes	3			2VG-115 - Full Stroke (Both)	No specified test frequency
2VG-116	MCFD-2609-04.00	SA	Category C	SW	Yes	3			2VG-116 - Full Stroke (Both)	No specified test frequency
2VG-117	MCFD-2609-04.00	SA	Category C	SW	Yes	3			2VG-117 - Full Stroke (Both)	No specified test frequency
2VG-118	MCFD-2609-04.00	SA	Category C	SW	Yes	3			2VG-118 - Full Stroke (Both)	No specified test frequency

MCGUIRE NUCLEAR STATION

WG - GASEOUS WASTE MANAGEMENT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WG-92	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-92 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-97	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-97 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-104	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-104 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-112	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-112 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-117	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-117 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-124	MCFD-1567-02.00	SA	Category C	RV	No	3			1WG-124 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-146	MCFD-1567-02.01	SA	Category C	RV	No	3			1WG-146 - Relief Valve Test (Cls to Opn)	No specified test frequency
1WG-153	MCFD-1567-02.01	SA	Category C	RV	No	3			1WG-153 - Relief Valve Test (Cls to Opn)	No specified test frequency

MCGUIRE NUCLEAR STATION

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WL-264	MCFD-1565-01.00	SA	Category A	RV	No	2			1WL-264 - Relief Valve Test (Cls to Opn)	No specified test frequency
2WL-264	MCFD-2565-01.00	SA	Category A	RV	No	2			2WL-264 - Relief Valve Test (Cls to Opn)	No specified test frequency

Equipment ID	Description	Flow Diagram	Pump Group	Pump Type	ASME Class	Test Type	Freq	Relief Request
FD - Diesel Generator Fuel Oil			SUPPLEMENTAL TEST PROGRAM					
1FDPU0054	Diesel Generator Fuel Oil Transfer Pump 1A	MC-1609-3.0	N/A	PDP	3	Vibration Test	6M	None
						Flow/Differential Pressure Test	6M	None
1FDPU0055	Diesel Generator Fuel Oil Transfer Pump 1B	MC-1609-3.1	N/A	PDP	3	Vibration Test	6M	None
						Flow/Differential Pressure Test	6M	None
2FDPU0054	Diesel Generator Fuel Oil Transfer Pump 1A	MC-2609-3.0	N/A	PDP	3	Vibration Test	6M	None
						Flow/Differential Pressure Test	6M	None
2FDPU0055	Diesel Generator Fuel Oil Transfer Pump 1B	MC-2609-3.1	N/A	PDP	3	Vibration Test	6M	None
						Flow/Differential Pressure Test	6M	None

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

Changes for McGuire Unit 1 and Unit 2 are listed below. The effective date for the changes as provided by this submittal is March 1, 2004. Modifications are designated by Revision 27 and applies to both units.

ABBREVIATION CHANGES - All codes have been reviewed to align with recommendations in publication "Guidelines for Inservice Testing at Nuclear Power Plant, NUREG 1482."

IN-SERVICE TESTING PROGRAM DOCUMENT - Revision 3 Added

TABLE OF ABBREVIATIONS -

Installation of a new data program "Olympus" required expanded abbreviations for the Inservice Testing Program. New abbreviation tables are designated in Section 3.0 of this revision.

COMPREHENSIVE CHANGES

VP valves Appendix J Leak Test has been changed from 6MO to RF.

The following valves currently stroke time tested in one direction, design basis requirement to stroke in other direction:

NC	1(2)NC31B, 1(2)NC33A, 1(2)NC35B	<u>ADDED</u> closed to open
NC	1(2)272AC, 1(2)273AC, 1(2)274B, 1(2)275B	open to closed
ND	1(2)ND58A	open to closed
NI	1(2)NI9A, 1(2)NI10B, 1(2)NI121A, 1(2)NI136B, 1(2)NI152B, 1(2)NI183B, 1(2)NI184B, 1(2)NI185A, 1(2)NI430A, 1(2)NI431B	open to closed
NI	1(2)NI173A, 1(2)NI178B	closed to open
NS	1(2)NS12B, 1(2)NS15B, 1(2)NS29A, 1(2)NS32A, 1(2)NS38B, 1(2)NS43A	open to closed
RN	ORN147AC	open to closed

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

JUSTIFICATION FOR DEFERRAL - CHANGES

DELETED - The following Justification for Deferrals are deleted - valves are included in the Condition Monitoring Program.

JFD Number	Valve Number(s)
MC-CA-01	1(2)CA37, 1(2)CA41, 1(2)CA45, 1(2)CA49, 1(2)CA53, 1(2)CA57, 1(2)CA61, 1(2)CA65
MC-CA-02	1CA165, 1CA166
MC-CF-06	1(2)CF118, 1(2)CF119, 1(2)CF120, 1(2)CF121
MC-FW-02	1(2)FW28
MC-FW-03	1(2)FW74
MC-IA-01	1(2)IA5260, 1(2)IA5270, 1(2)IA5280, 1(2)IA5290, 1(2)IA5300, 1(2)IA5310, 1(2)IA5320, 1(2)IA5330, 1(2)IA5340, 1(2)IA5350, 1(2)IA5360, 1(2)IA5370, 1(2)IA5380, 1(2)IA5390
MC-KC-06	1(2)KC322
MC-KC-08	1(2)KC340
MC-NB-01	1(2)NB262
MC-NB-03	1NB103
MC-NC-04	1NC59
MC-NC-05	1NC284
MC-ND-04	1(2)ND70
MC-ND-05	1(2)ND71
MC-ND-06	1ND8, 1ND23
MC-NF-01	1(2)NF229
MC-NI-12	1(2)NI15, 1(2)NI17, 1(2)NI19, 1(2)NI21, 1(2)NI347, 1(2)NI348, 1(2)NI349, 1(2)NI354
MC-NI-13	1(2)NI12
MC-NI-14	1NI101
MC-NI-15	1(2)NI116, 1(2)NI148
MC-NI-16	1(2)NI124, 1(2)NI126, 1(2)NI128, 1(2)NI134, 1(2)NI156, 1(2)NI157, 1(2)NI159, 1(2)NI160
MC-NI-17	1(2)NI165, 1(2)NI167, 1(2)NI169, 1(2)NI171
MC-NI-18	1NI175, 1NI176, 1NI180, 1NI181
MC-NI-21	1(2)NI48
MC-NI-22	1NI59, 1NI70, 1NI81, 1NI93
MC-NI-23	1(2)NI436
MC-NI-24	1NI60, 1NI71, 1NI82, 1NI94
MC-NS-03	1(2)NS4, 1(2)NS21
MC-NS-04	1NS140, 1NS141
MC-NS-07	1NS161, 1NS163
MC-NV-07	1(2)NV264
MC-NV-10	1(2)NV225, 1(2)NV231
MC-NV-11	1(2)NV223
MC-NV-12	1(2)NV1046
MC-NV-13	1(2)NV261, 1(2)NV263
MC-NV-14	1(2)NV1002
MC-NV-15	1(2)NV143
MC-NV-17	1(2)NV1007, 1(2)NV1008, 1(2)NV1009, 1(2)NV1010
MC-RF-01	1RF823, 1RF834
MC-SA-01	1SA5, 1SA6
MC-VB-01	1(2)VB50
MC-VI-01	1(2)VI368, 1(2)VI372, 1(2)VI373, 1(2)VI374
MC-VI-02	1(2)VI124, 1(2)VI149
MC-VI-03	1(2)VI40, 1(2)VI161
MC-VS-01	1(2)VS13
MC-VX-01	1(2)VX30
MC-YM-01	1(2)YM116

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

NOTE: Justification for Deferral for the following System has been deleted from publication. This system has no valves currently tested in the McGuire Inservice Testing Program.

MC-VG-01	Deleted from Publication
MC-VG-02	Deleted from Publication

REVISIONS - Justification for Deferral

JFD Number	Valve Number(s)	Change
MC-BB-01	1(2)BB1B, 1(2)BB2B, 1(2)BB3B, 1(2)BB4B, 1(2)BB5A, 1(2)BB6A, 1(2)BB7A, 1(2)BB8A	Editorial change to current code requirement.
MC-CA-04	1CA7AC, 2CA7A, 1(2)CA9B, 1(2)CA11A	Editorial change to current code requirement.
MC-CF-01	1(2)CF26AB, 1(2)CF28AB, 1(2)CF30AB, 1(2)CF35AB	Editorial change to current code requirement.
MC-CF-02	1(2)CF17AB, 1(2)CF20AB, 1(2)CF23AB, 1(2)CF32AB	Editorial change to current code requirement.
MC-CF-03	1(2)CF126B, 1(2)CF127B, 1(2)CF128B, 1(2)CF129B	Editorial change to current code requirement.
MC-CF-04	1(2)CF104AB, 1(2)CF105AB, 1(2)CF106AB, 1(2)CF107AB	Editorial change to current code requirement.
MC-FW-01	1(2)FW27A	Editorial change to current code requirement.
MC-KC-01	1(2)KC424B, 1(2)KC425A	Editorial change to current code requirement.
MC-KC-02	1(2)KC338B	Editorial change to current code requirement.
MC-KC-03	1(2)KC332B, 1(2)KC333A	Editorial change to current code requirement.
MC-KC-04	1(2)KC320A	Editorial change to current code requirement.
MC-NC-01	1(2)NC32B, 1(2)NC34A, 1(2)NC36B	Editorial change to current code requirement.
MC-NC-02	1(2)NC272AC, 1(2)NC273AC, 1(2)NC274AC, 1(2)NC275AC	Editorial change to current code requirement.
MC-NC-06	1(2)NC31B, 1(2)NC33A, 1(2)NC35B	Editorial change to current code requirement.
MC-ND-01	1(2)ND1B, 1(2)ND2AC	Editorial change to current code requirement.
MC-ND-02	1(2)ND58A	Editorial change to current code requirement.
MC-ND-03	1(2)ND15B, 1(2)ND30A	Editorial change to current code requirement.
MC-ND-07	1(2)ND4B, 1(2)ND19A	Editorial change to current code requirement.
MC-NF-02	1(2)NF228A, 1(2)NF233B, 1(2)NF234A	Editorial change to current code requirement.
MC-NI-01	1(2)NI9A, 1(2)NI10B	Editorial change to current code requirement.
MC-NI-02	1(2)NI100B	Editorial change to current code requirement.
MC-NI-03	1(2)NI147A, 1(2)NI115B	Editorial change to current code requirement.
MC-NI-04	1(2)NI121A, 1(2)NI152B	Editorial change to current code requirement.
MC-NI-05	1(2)NI162A	Editorial change to current code requirement.
MC-NI-06	1(2)NI103A	Editorial change to current code requirement.
MC-NI-07	1(2)NI173A, 1(2)NI178B	Editorial change to current code requirement.
MC-NI-08	1(2)NI334B	Editorial change to current code requirement.
MC-NI-09	1(2)NI183B	Editorial change to current code requirement.
MC-NI-10	1(2)NI184B, 1(2)NI185A	Editorial change to current code requirement.
MC-NI-11	1(2)NI332A, 1(2)NI333B	Editorial change to current code requirement.
MC-NI-20	1(2)NI136B	Editorial change to current code requirement.
MC-NI-25	1(2)NI135B	Editorial change to current code requirement.
MC-NM-02	1(2)NM3AC, 1(2)NM6AC, 1(2)NM7B, 1(2)NM22AC, 1(2)NM25AC, 1(2)NM26B	Editorial change to current code requirement.
MC-NS-01	1(2)NS38B, 1(2)NS43A	Editorial change to current code requirement.
MC-NS-05	1(2)NS3B, 1(2)NS20A	Editorial change to current code requirement.
MC-NS-06	1(2)NS1B, 1(2)NS18A	Editorial change to current code requirement.
MC-NV-01	1(2)NV94AC, 1(2)NV95B	Editorial change to current code requirement.
MC-NV-02	1(2)NV7B	Editorial change to current code requirement.
MC-NV-04	1(2)NV141A, 1(2)NV142B	Editorial change to current code requirement.
MC-NV-05	1(2)NV244A, 1(2)NV245B	Editorial change to current code requirement.
MC-NV-06	1(2)NV221A, 1(2)NV222B	Editorial change to current code requirement.
MC-NV-08	1(2)NV150B, 1(2)NV151A	Editorial change to current code requirement.
MC-NV-09	1(2)NV265B	Editorial change to current code requirement.

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

MC-NV-19	1(2)NV35A, 1(2)NV457A, 1(2)NV458A	Editorial change to current code requirement.
MC-RF-02	1RF821A, 1RF832A	Editorial change to current code requirement.
MC-RN-01	1(2)RN252B, 1(2)RN253A	Editorial change to current code requirement.
MC-RN-02	1(2)RN276A, 1(2)RN277B	Editorial change to current code requirement.
MC-RV-01	1(2)RV32A, 1(2)RV33B, 1(2)RV76A, 1(2)RV77B	Editorial change to current code requirement.
MC-SM-01	1(2)SM1AB, 1(2)SM3AB, 1(2)SM5AB, 1(2)SM7AB	Editorial change to current code requirement.
MC-VI-04	1(2)VI129B, 1(2)VI150B, 1(2)VI160B	Editorial change to current code requirement.

ADDED - Justification for Deferral

The following numbers have been added to the McGuire Inservice Testing Program: NONE

DELETED - Justification for Deferral

The following numbers have been deleted from the McGuire Inservice Testing Program:

JFD Number	Valves	
MC-SA-02	1(2)SA1, 1(2)SA2, 1(2)SA77, 1(2)SA78	Deleted -reference ISTC3540.

RELIEF REQUEST - CHANGES

PUMPS - SPECIFIC RELIEF REQUEST - CHANGES

The following numbers have been revised in the McGuire Inservice Testing Program:

MC-SRP-FD-01	Deleted - Revision 27
MC-SRP-KC-01	Revised - Revision 27
MC-SRP-ND-01	Revised - Revision 27
MC-SRP-NI-01	Deleted - Revision 27
MC-SRP-NS-01	Added - Revision 27
MC-SRP-NV-01	Deleted - Revision 27

PUMPS - GENERIC RELIEF REQUEST - CHANGES

The following number has been revised in the McGuire Inservice Testing Program:

MC-GRP-01	Revised - Revision 27
-----------	-----------------------

VALVES - SPECIFIC RELIEF REQUEST - REVISIONS

MC-SRV-CA-01	1CA-42B	Added - Revision 27
MC-SRV-NS-01	2NS13,2NS16,2NS30,2NS33,2NS41,2NS4	Revised - Revision 27
MC-SRV-WN-01	1(2)WN3,1(2)WN5,1(2)WN7,1(2)WN11, 1(2)WN13,1(2)WN15	Deleted - Revision 27

VALVES - GENERIC RELIEF REQUEST - REVISIONS

The following number has been revised in the McGuire Inservice Testing Program:

MC-GRV-01	Deleted - Revision 27
MC-GRV-02	Deleted - Revision 27
MC-GRV-03	Deleted - Revision 27
MC-GRV-04	Deleted - Revision 27

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

CHANGES - VALVES IN INSERVICE TESTING PROGRAM

VALVES - REMOVED FROM McGUIRE INSERVICE TESTING

The following valves have been deleted from the McGuire Inservice Testing Program:

System	Valves	
FD	1(2)FD18, 1(2)FD41	Deleted from Inservice Testing Program, valve type changed from relief to pressure regulator.
FD	1(2)FD5, 1(2)FD16, 1(2)FD28, 1(2)FD39, 1(2)FD92, 1(2)FD93, 1(2)FD104, 1(2)FD105	Moved to Supplemental Testing Program.
KD	1(2)KD9, 1(2)KD16, 1(2)KD18, 1(2)KD29, 1(2)KD36, 1(2)KD38	Moved to Supplemental Testing Program.
LD	1(2)LD2, 1(2)LD5, 1(2)LD32, 1(2)LD35	Moved to Supplemental Testing Program.
RN	1RN280	Deleted per PIP M-03-834.
NV	1(2)NV261, 1(2)NV482, 1(2)NV1007, 1(2)NV1008, 1(2)NV1009, 1(2)NV1010, 1(2)NV1046	Moved to Supplemental Testing Program.
VG	1(2)VG33, 1(2)VG34, 1(2)VG35, 1(2)VG36, 1(2)VG61, 1(2)VG62, 1(2)VG63, 1(2)VG64, 1(2)VG65, 1(2)VG66, 1(2)VG67, 1(2)VG68, 1(2)VG79, 1(2)VG80, 1(2)VG83, 1(2)VG84, 1(2)VG115, 1(2)VG116, 1(2)VG117, 1(2)VG118	Moved to Supplemental Testing Program. Moved to Supplemental Testing Program. Moved to Supplemental Testing Program. Moved to Supplemental Testing Program.

VALVES - CHANGES TO INSERVICE TESTING PROGRAM

1(2)IAE5260	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5270	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5280	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5290	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5300	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5310	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)IAE5320	Valve tests were changed from Appendix J Leak Tests to Section XI Leak Tests.
1(2)KC047	Valve Cat. Code changed from Category AC to Category A .
1(2)KC279	Valve Cat. Code changed from Category AC to Category A .
1(2)KC280	Valve Cat. Code changed from Category AC to Category A .
1(2)NB260B	Valve changed from Active to Passive.
1(2)NB262	Valve Cat. Code changed from Category AC to Category A and made passive.
1(2)NC259	Valve Cat. Code changed from Category AC to Category A .
1(2)NC261	Valve Cat. Code changed from Category AC to Category A .
1(2)NM069	Valve Cat. Code changed from Category AC to Category A .
1(2)NM420	Valve Cat. Code changed from Category AC to Category A .
1(2)NM421	Valve Cat. Code changed from Category AC to Category A .
1(2)RV445	Valve Cat. Code changed from Category AC to Category A .
1(2)RV446	Valve Cat. Code changed from Category AC to Category A .
1(2)SA1	Frequency changed from cold shutdown to every refueling outage
1(2)SA2	Frequency changed from cold shutdown to every refueling outage
1(2)SA77	Frequency changed from cold shutdown to every refueling outage
1(2)SA78	Frequency changed from cold shutdown to every refueling outage
1(2)VE11	Valve changed from Active to Passive.
1(2)VX30	Valve Cat. Code changed from Category AC to Category A and made passive.
1(2)WL24	Valve Cat. Code changed from Category AC to Category A .
1(2)WL264	Valve Cat. Code changed from Category AC to Category A .
1(2)WL385	Valve Cat. Code changed from Category AC to Category A .
2NS161	Valve Cat. Code changed from Category C to Category AC
2NS163	Valve Cat. Code changed from Category C to Category AC .

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

CONDITION MONITORING PROGRAM

All active check valves have been included in the Check Valve Condition Monitoring Program. Check valves with active safety functions in one direction are now exercise tested in both directions. Tests may be by full or partial stroke exercise, sample disassembly, leak tests, acoustic or radiograph tests as determined and documented in the McGuire Check Valve Condition Monitoring which allows extension of the test frequency. The following valves are included:

1(2)CA-008	1(2)IAECV5330	1(2)NI-114	1(2)NV-0029	1(2)WN-03
1(2)CA-010	1(2)IAECV5340	1(2)NI-116	1(2)NV-0031	1(2)WN-05
1(2)CA-012	1(2)IAECV5350	1(2)NI-124	1(2)NV-0045	1(2)WN-07
1(2)CA-037	1(2)IAECV5360	1(2)NI-125	1(2)NV-0047	1(2)WN-11
1(2)CA-041	1(2)IAECV5370	1(2)NI-126	1(2)NV-0061	1(2)WN-13
1(2)CA-045	1(2)IAECV5380	1(2)NI-128	1(2)NV-0063	1(2)WN-15
1(2)CA-049	1(2)IAECV5390	1(2)NI-129	1(2)NV-0077	1(2)YM-116
1(2)CA-053	1(2)KC-005	1(2)NI-134	1(2)NV-0079	1NB-103
1(2)CA-057	1(2)KC-008	1(2)NI-143	1(2)NV-0143	1NC-284
1(2)CA-061	1(2)KC-011	1(2)NI-148	1(2)NV-0218	1NS-140
1(2)CA-065	1(2)KC-014	1(2)NI-156	1(2)NV-0223	1NS-141
1(2)CA-165	1(2)KC-322	1(2)NI-157	1(2)NV-0225	1RF-823
1(2)CA-166	1(2)KC-340	1(2)NI-159	1(2)NV-0227	1RF-834
1(2)CA-232	1(2)NB-262	1(2)NI-160	1(2)NV-0231	1VI-1906
1(2)CA-235	1(2)NC-057	1(2)NI-165	1(2)NV-0233	1VI-1907
1(2)CA-238	1(2)NC-059	1(2)NI-167	1(2)NV-0263	1VI-1914
1(2)CF-118	1(2)ND-008	1(2)NI-169	1(2)NV-0264	1VI-1915
1(2)CF-119	1(2)ND-023	1(2)NI-171	1(2)NV-0383	1WZ-01
1(2)CF-120	1(2)ND-070	1(2)NI-175	1(2)NV-0386	1WZ-03
1(2)CF-121	1(2)ND-071	1(2)NI-176	1(2)NV-0810	1WZ-05
1(2)FW-028	1(2)NF-229	1(2)NI-180	1(2)NV-0811	1WZ-07
1(2)FW-052	1(2)NI-012	1(2)NI-181	1(2)NV-0812	1WZ-09
1(2)FW-074	1(2)NI-015	1(2)NI-347	1(2)NV-0813	1WZ-11
1(2)GN-173	1(2)NI-017	1(2)NI-348	1(2)NV-1002	1YC-013
1(2)GN-174	1(2)NI-019	1(2)NI-349	1(2)RN-028	1YC-014
1(2)GN-177	1(2)NI-021	1(2)NI-354	1(2)RN-030	1YC-094
1(2)GN-178	1(2)NI-048	1(2)NI-436	1(2)SA-05	1YC-095
1(2)GN-185	1(2)NI-059	1(2)NS-004	1(2)SA-06	
1(2)GN-186	1(2)NI-060	1(2)NS-013	1(2)VB-50	
1(2)GN-190	1(2)NI-070	1(2)NS-016	1(2)VI-0040	
1(2)GN-191	1(2)NI-071	1(2)NS-021	1(2)VI-0124	
1(2)IAECV5260	1(2)NI-081	1(2)NS-030	1(2)VI-0149	
1(2)IAECV5270	1(2)NI-082	1(2)NS-033	1(2)VI-0161	
1(2)IAECV5280	1(2)NI-093	1(2)NS-041	1(2)VI-0368	
1(2)IAECV5290	1(2)NI-094	1(2)NS-046	1(2)VI-0372	
1(2)IAECV5300	1(2)NI-101	1(2)NS-161	1(2)VI-0373	
1(2)IAECV5310		1(2)NS-163	1(2)VI-0374	
1(2)IAECV5320			1(2)VS-13	

McGuire Nuclear Station
Unit 1 and Unit 2
Revision 27 - DESCRIPTION OF CHANGES
March 1, 2004

SUPPLEMENTAL TESTING PROGRAM CHANGES

1(2)KC281	Valve changed from Active to Passive.
1(2)KC313	Valve changed from Active to Passive.
1(2)KC330	Valve changed from Active to Passive.
1(2)KC349	Valve changed from Active to Passive.
1(2)KC368	Valve changed from Active to Passive.
1(2)KC398	Valve changed from Active to Passive.
1(2)NM69	Valve changed from Active to Passive.
1(2)NV1007	Valve changed from Active to Passive.
1(2)NV1008	Valve changed from Active to Passive.
1(2)NV1009	Valve changed from Active to Passive.
1(2)NV1010	Valve changed from Active to Passive.
1(2)NV1046	Valve changed from Active to Passive.
1(2)NV155	Valve changed from Active to Passive.
1(2)NV156	Valve changed from Active to Passive.
1(2)NV20	Valve changed from Active to Passive.
1(2)NV261	Valve changed from Active to Passive.
1(2)NV6	Moved to McGuire Inservice Testing Program.
1(2)NV93	Moved to McGuire Inservice Testing Program.
1(2)RV445	Valve changed from Active to Passive.
1(2)RV446	Valve changed from Active to Passive.
1(2)WL264	Valve changed from Active to Passive.
1WG104	Valve changed from Active to Passive.
1WG112	Valve changed from Active to Passive.
1WG117	Valve changed from Active to Passive.
1WG124	Valve changed from Active to Passive.
1WG146	Valve changed from Active to Passive.
1WG153	Valve changed from Active to Passive.
1WG92	Valve changed from Active to Passive.
1WG97	Valve changed from Active to Passive.

OTHER CHANGES TO SUPPLEMENTAL TEST PROGRAM

The following changes were made regarding information previously described on the cover page which was deleted:

- 1) Deleted full-flow vibrations each refueling outage for ND and NI pumps.
- 2) Deleted leak rate testing of the Hydrogen Analyzer/Post Accident Gas Sample loops each refueling outage.
- 3) Entered leak test for valves 1(2)NV-22, 1NV-840, 1(2)-841 and 2NV-1053 in valve tables
- 4) Deleted gross diversion leak test of 1(2)NV-164 (hydrogen inlet to the VCT)